Kyrgyz Republic

Demographic and Health Survey

2012

KYRGYZ REPUBLIC
DEMOGRAPHIC AND HEALTH SURVEY

2012

National Statistical Committee of the Kyrgyz Republic
Bishkek, Kyrgyz Republic

Ministry of Health
Bishkek, Kyrgyz Republic

MEASURE DHS
ICF International
Calverton, Maryland, U.S.A.

December 2013

Cover motif: a fragment of traditional Kyrgyz embroidery

This report summarizes the findings of the 2012 Kyrgyz Republic Demographic and Health Survey (KgDHS) conducted by the National Statistical Committee of the Kyrgyz Republic in collaboration with the Ministry of Health. Support for the 2012 KgDHS was provided by the United States Agency for International Development (USAID) as part of the MEASURE DHS project. Additional funding and support for the 2012 KgDHS was received from the United Nations Population Fund (UNFPA). The KgDHS is part of the worldwide Demographic and Health Surveys program, which is designed to collect data on fertility, family planning, and maternal and child health. The opinions expressed in this report are those of the authors and do not necessarily reflect the views of USAID, the government of the Kyrgyz Republic, or donor organizations.

Additional information about the 2012 KgDHS may be obtained from the National Statistical Committee of the Kyrgyz Republic: 374, Frunze Street, Bishkek, 720033, Kyrgyz Republic; Telephone (996) 312-665-662; Fax: (996-312) 660-138; E-mail: nsc_mail@stat.kg.

Information about the MEASURE DHS project may be obtained from ICF International, 11785 Beltsville Drive, Suite 300, Calverton, Maryland 20705, USA; Telephone: 1-301-572-0200, Fax: 1-301-572-0999, E-mail: info@measuredhs.com, Internet: http://www.measuredhs.com.

Suggested citation:

National Statistical Committee of the Kyrgyz Republic (NSC), Ministry of Health [Kyrgyz Republic], and ICF International. 2013. *Kyrgyz Republic Demographic and Health Survey 2012*. Bishkek, Kyrgyz Republic, and Calverton, Maryland, USA: NSC, MOH, and ICF International.

CONTENTS

LIST OF TABLES AND FIGURES ix
ACKNOWLEDGMENTS xv
MILLENNIUM DEVELOPMENT GOAL INDICATORS xvii
MAP OF KYRGYZ REPUBLIC xviii

1 INTRODUCTION
1.1 Geography and Population 1
1.2 History of the Kyrgyz Republic 2
1.3 Economy 2
1.4 Health Care System 3
1.5 Health Policies and Programs 4
1.6 Demographic and Health Data Collection System in the Kyrgyz Republic 6
1.7 Objectives and Organization of the Survey 6
1.7.1 Sample Design and Implementation 7
1.7.2 Questionnaires 7
1.7.3 Training of Field Staff 8
1.7.4 Hemoglobin Testing 9
1.7.5 Fieldwork and Data Processing 9
1.8 Response Rates 10

2 HOUSING CHARACTERISTICS AND HOUSEHOLD POPULATION
2.1 Housing Characteristics 12
2.1.1 Drinking Water 12
2.1.2 Sanitation Facilities 14
2.1.3 Other Dwelling Characteristics 15
2.2 Household Possessions 18
2.3 Household Wealth 19
2.4 Hand Washing 21
2.5 Household Population by Age and Sex 22
2.6 Household Composition 23
2.7 Birth Registration 24
2.8 Children's Living Arrangements 25
2.9 Education of Household Members 27
2.9.1 Educational Attainment 27
2.9.2 School Attendance 30
2.9.3 Early Childhood Education 32
2.9.4 Distance from Home to School 33

3 BACKGROUND CHARACTERISTICS OF RESPONDENTS
3.1 Background Characteristics of Survey Respondents 36
3.2 Educational Attainment by Background Characteristics 37
3.3 Media Exposure 39
3.4 Computer and Internet Use 41
3.5 Employment 45
3.5.1 Employment Status 45
3.5.2 Occupation 48
3.5.3 Type of Employment 51
3.6 Health Insurance 52
3.7 Tobacco Use 54
3.8 Alcohol Consumption 56
3.8.1 Use of Alcohol 56

3.8.2 Quantity of Alcohol Consumed ... 56
3.8.3 Frequency of Alcohol Use ... 56
3.8.4 Age at First Alcoholic Drink ... 58
3.9 Tuberculosis ... 58
3.9.1 Knowledge and Attitudes about Tuberculosis ... 59
3.9.2 Knowledge of Tuberculosis Symptoms ... 61
3.10 High Blood Pressure ... 65
3.10.1 History and Treatment of High Blood Pressure ... 65
3.10.2 Prevalence of High Blood Pressure ... 67

4 MARRIAGE AND SEXUAL ACTIVITY
4.1 Current Marital Status ... 71
4.2 Age at First Marriage ... 72
4.3 Age at First Intercourse ... 74
4.4 Recent Sexual Activity ... 77

5 FERTILITY
5.1 Current Fertility ... 82
5.2 Fertility Differentials ... 84
5.3 Fertility Trends ... 86
5.4 Children Ever Born and Living ... 87
5.5 Birth Intervals ... 88
5.6 Postpartum Amenorrhea, Abstinence, and Insusceptibility ... 89
5.7 Menopause ... 91
5.8 Age at First Birth ... 92
5.9 Teenage Pregnancy and Motherhood ... 93

6 FERTILITY PREFERENCES
6.1 Desire for More Children ... 95
6.2 Desire to Limit Childbearing ... 97
6.3 Ideal Family Size ... 99
6.4 Fertility Planning ... 101
6.5 Wanted Fertility Rates ... 102

7 FAMILY PLANNING
7.1 Knowledge of Contraceptive Methods ... 106
7.2 Current Use of Contraception ... 107
7.3 Current Contraceptive Use by Background Characteristics ... 109
7.4 Trends in Current Contraceptive Use ... 111
7.5 Source of Modern Contraceptive Methods and Use of Social Marketing Brand Pills ... 112
7.6 Informed Choice ... 113
7.7 Contraceptive Discontinuation ... 115
7.8 Knowledge of the Fertile Period ... 117
7.9 Unmet Need for Family Planning ... 118
7.10 Future Use of Family Planning ... 120
7.11 Exposure to Family Planning Messages ... 120
7.12 Contact of Nonusers with Family Planning Providers ... 121
7.13 Men's Attitudes toward Use of Contraception by Women ... 123

8 ABORTION
8.1 Collection of Abortion Data ... 125
8.2 Pregnancies Ending in Induced Abortion ... 126
8.3 Lifetime Experience with Induced Abortion ... 127
8.4 Rates of Induced Abortion ... 128
8.4.1 Abortion Level ... 128
8.4.2 Abortion Differentials ... 130
8.4.3 Abortion Trends ... 131
8.5 Use of Contraception before Abortion ... 133

8.6 Reasons for Abortion ... 134
8.7 Method of Abortion ... 134
8.8 Cost of Abortion ... 135
8.9 Counseling on Post-Abortion Use of Family Planning ... 136

9 INFANT AND CHILD MORTALITY
9.1 Source and Assessment of Mortality Data ... 139
9.1.1 Source of the Data ... 139
9.1.2 Data Quality ... 140
9.2 Levels and Trends in Childhood Mortality ... 141
9.3 Socioeconomic Differentials in Childhood Mortality ... 143
9.4 Demographic Differentials in Childhood Mortality ... 144
9.5 Perinatal Mortality ... 145
9.6 High-risk Fertility Behavior ... 147
9.7 Registration of Child Deaths ... 148

10 MATERNAL HEALTH
10.1 ANTENATAL CARE ... 150
10.1.1 Antenatal Care Coverage ... 150
10.1.2 Number of Antenatal Care Visits and Timing of First Visit ... 151
10.1.3 Components of Antenatal Care ... 152
10.2 Delivery Care ... 154
10.2.1 Place of Delivery ... 154
10.2.2 Assistance at Delivery ... 155
10.3 Trends in Antenatal and Delivery Care Indicators ... 156
10.4 Postnatal Care for Mothers and Children ... 157
10.4.1 Postnatal Checkup for Mother ... 158
10.4.2 Postnatal Checkup for the Newborn ... 159
10.5 Problems in Accessing Health Care ... 161
10.6 Hospital Admissions ... 163

11 CHILD HEALTH
11.1 Child's Size at Birth ... 165
11.2 Vaccination of Children ... 167
11.2.1 Vaccination Coverage ... 167
11.2.2 Differentials in Vaccination Coverage ... 168
11.2.3 Trends in Vaccination Coverage ... 170
11.3 Childhood Illness and Treatment ... 172
11.3.1 Acute Respiratory Infections (ARI) ... 172
11.3.2 Fever ... 174
11.3.3 Diarrhea ... 175
11.3.4 Knowledge of ORS ... 177
11.4 Stool Disposal ... 179
11.5 Knowledge of Danger Signs of Childhood Illness ... 180

12 NUTRITION OF CHILDREN AND WOMEN
12.1 Nutritional Status of Children ... 184
12.1.1 Measurement of Nutritional Status among Young Children ... 184
12.1.2 Levels of Child Malnutrition ... 185
12.1.3 Trends in Children's Nutritional Status ... 188
12.2 Breastfeeding and Complementary Feeding ... 189
12.2.1 Initiation of Breastfeeding ... 189
12.2.2 Breastfeeding Status by Age ... 191
12.2.3 Duration of Breastfeeding ... 194
12.2.4 Types of Complementary Foods ... 194
12.2.5 Infant and Young Child Feeding Practices ... 196
12.3 Anemia in Children ... 199
12.4 Micronutrient Intake among Children ... 202

12.4.1 Consumption of Micronutrient-rich Foods 202
12.4.2 Micronutrient Supplementation 204
12.4.3 Deworming 204
12.5 Household Iodized Salt Consumption 205
12.6 Nutritional Status of Women 205
12.7 Anemia in Women 207
12.8 Micronutrient Intake among Mothers 209

13 HIV/AIDS-RELATED KNOWLEDGE, ATTITUDES, AND BEHAVIOR

13.1 Knowledge of HIV/AIDS and Transmission and Prevention Methods 214
13.1.1 Knowledge of AIDS 214
13.1.2 Sources of Knowledge about AIDS 215
13.1.3 Knowledge of HIV Prevention Methods 216
13.1.4 Comprehensive Knowledge about AIDS 218
13.2 Knowledge of Prevention of Mother-to-Child Transmission of HIV 221
13.3 Attitudes toward People Living with HIV 223
13.4 Attitudes toward Negotiating Safe Sexual Relations with Husbands 225
13.5 Attitudes toward Condom Education for Youth 226
13.6 Multiple Sexual Partners 227
13.7 Concurrent Sexual Partners 229
13.8 Paid Sex 230
13.9 Coverage of HIV Counseling and Testing 231
13.10 Male Circumcision 235
13.11 Self-reported Prevalence of Sexually Transmitted Infections and STI Symptoms 235
13.12 Prevalence of Medical Injections 237
13.13 HIV/AIDS Knowledge and Sexual Behavior among Youth 239
13.13.1 HIV/AIDS-Related Knowledge among Young Adults 239
13.13.2 Age at First Sexual Intercourse among Young Adults 240
13.13.3 Abstinence and Premarital Sex among Young Adults 241
13.13.4 Multiple Sexual Partners among Young Adults 242
13.13.5 Cross-Generational Sexual Partners 242
13.13.6 Voluntary HIV Counseling and Testing among Young Adults 243

14 DOMESTIC VIOLENCE

14.1 Measurement of Violence 245
14.1.1 Use of Valid Measures of Violence 245
14.1.2 Ethical Considerations in Measuring Violence 246
14.2 Experience of Physical Violence 247
14.3 Experience of Sexual Violence 249
14.4 Experience of Different Forms of Violence 251
14.5 Violence during Pregnancy 251
14.6 Marital Control by Husband 252
14.7 Forms of Spousal Violence 254
14.8 Differentials in Spousal Violence 257
14.9 Recent Experience of Spousal Violence 259
14.10 Onset of Spousal Violence 260
14.11 Physical Consequences of Spousal Violence 261
14.12 Violence by Women against Their Spouse 262
14.13 Help-seeking Behavior by Women Who Experience Violence 264

15 WOMEN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH OUTCOMES

15.1 Employment and Form of Earnings 268
15.2 Women's and Men's Control over Cash Earnings 269
15.2.1 Women's Control over Their Own Cash Earnings 269
15.2.2 Women's Control over Their Husband's Earnings 270
15.2.3 Control over How Earnings Are Used by Relative Magnitude of Earnings 272
15.3 Ownership of Assets 273

15.4 Women's Empowerment 275
15.5 Attitudes toward Wife Beating 279
15.6 Indicators of Women's Empowerment 282
15.7 Current Use of Contraception by Women's Empowerment 283
15.8 Ideal Family Size and Unmet Need by Women's Empowerment 283
15.9 Infant and Child Mortality and Women's Empowerment 284

REFERENCES 287

APPENDIX A **SAMPLE DESIGN**
A.1 Introduction 293
A.2 Sample Frame 293
A.3 Sample Design and Implementation 295
A.4 Sample Probabilities and Sample Weights 296
A.5 Survey Results 297

APPENDIX B **ESTIMATES OF SAMPLING ERRORS** 299

APPENDIX C **DATA QUALITY TABLES** 315

APPENDIX D **PERSONS INVOLVED IN THE 2012 KYRGYZ REPUBLIC DEMOGRAPHIC AND HEALTH SURVEY** 321

APPENDIX E **QUESTIONNAIRES** 325

LIST OF TABLES AND GRAPHICS

1 INTRODUCTION

Table 1.1 Results of the household and individual interviews 10

2 HOUSING CHARACTERISTICS AND HOUSEHOLD POPULATION

Table 2.1 Household drinking water 13
Table 2.2 Household sanitation facilities 15
Table 2.3 Household characteristics 16
Table 2.4 Household possessions 18
Table 2.5 Wealth quintiles 20
Table 2.6 Hand washing 21
Table 2.7 Household population by age, sex, and residence 22
Table 2.8 Household composition 23
Table 2.9 Birth registration of children under age 5 24
Table 2.10 Children's living arrangements and orphanhood 26
Table 2.11.1 Educational attainment of the female household population 28
Table 2.11.2 Educational attainment of the male household population 29
Table 2.12 School attendance ratios 31
Table 2.13 Early childhood education 33
Table 2.14 Distance from home to school 34

Figure 2.1 Trends in use of water piped to a dwelling, yard, or plot by household population, Kyrgyz Republic 1997, 2006, and 2012 14
Figure 2.2 Population pyramid 22
Figure 2.3 Age-specific attendance rates of the de facto population age 7 to 24 32

3 BACKGROUND CHARACTERISTICS OF RESPONDENTS

Table 3.1 Background characteristics of respondents 36
Table 3.2.1 Educational attainment: Women 38
Table 3.2.2 Educational attainment: Men 38
Table 3.3.1 Exposure to mass media: Women 40
Table 3.3.2 Exposure to mass media: Men 41
Table 3.4.1 Computer use: Women 42
Table 3.4.2 Computer use: Men 43
Table 3.5.1 Internet use: Women 44
Table 3.5.2 Internet use: Men 45
Table 3.6.1 Employment status: Women 47
Table 3.6.2 Employment status: Men 48
Table 3.7.1 Occupation: Women 49
Table 3.7.2 Occupation: Men 50
Table 3.8 Type of employment 51
Table 3.9.1 Health insurance coverage: Women 52
Table 3.9.2 Health insurance coverage: Men 53
Table 3.10.1 Use of tobacco: Women 54
Table 3.10.2 Use of tobacco: Men 55
Table 3.11 Use of alcohol among men 57
Table 3.12 Age at first alcoholic drink among men 58
Table 3.13.1 Knowledge and attitudes concerning tuberculosis: Women 59
Table 3.13.2 Knowledge and attitudes concerning tuberculosis: Men 60
Table 3.14.1 Knowledge of symptoms of tuberculosis: Women 62
Table 3.14.2 Knowledge of symptoms of tuberculosis: Men 63
Table 3.15.1 Misconceptions about tuberculosis transmission: Women 64
Table 3.15.2 Misconceptions about tuberculosis transmission: Men 65

Table 3.16.1 History of hypertension ... 66
Table 3.16.2 History of hypertension and actions taken to lower blood pressure ... 67
Table 3.17.1 Blood pressure status: Women ... 68
Table 3.17.2 Blood pressure status: Men ... 69

Figure 3.1 Women's and men's employment status in the past 12 months ... 46
Figure 3.2 Awareness of high blood pressure and treatment status among women and men age 15-49 with high blood pressure ... 70

4 MARRIAGE AND SEXUAL ACTIVITY
Table 4.1 Current marital status ... 72
Table 4.2 Age at first marriage ... 73
Table 4.3 Median age at first marriage by background characteristics ... 74
Table 4.4 Age at first sexual intercourse ... 75
Table 4.5 Median age at first sexual intercourse by background characteristics ... 76
Table 4.6.1 Recent sexual activity: Women ... 77
Table 4.6.2 Recent sexual activity: Men ... 78

5 FERTILITY
Table 5.1 Current fertility ... 82
Table 5.2 Fertility by background characteristics ... 85
Table 5.3.1 Trends in age-specific fertility rates ... 86
Table 5.3.2 Trends in age-specific and total fertility rates ... 86
Table 5.4 Children ever born and living ... 87
Table 5.5 Birth intervals ... 89
Table 5.6 Postpartum amenorrhea, abstinence, and insusceptibility ... 90
Table 5.7 Median duration of amenorrhea, postpartum abstinence, and postpartum insusceptibility ... 91
Table 5.8 Menopause ... 91
Table 5.9 Age at first birth ... 92
Table 5.10 Median age at first birth ... 93
Table 5.11 Teenage pregnancy and motherhood ... 94

Figure 5.1 Age-specific fertility rates by urban-rural residence ... 83
Figure 5.2 Comparison of the TFR in the Kyrgyz Republic with other countries in the region ... 83
Figure 5.3 Differentials in total fertility rate by background characteristics, Kyrgyz Republic 2012 ... 84
Figure 5.4 Trends in fertility ... 87

6 FERTILITY PREFERENCES
Table 6.1 Fertility preferences by number of living children ... 96
Table 6.2.1 Desire to limit childbearing: Women ... 98
Table 6.2.2 Desire to limit childbearing: Men ... 99
Table 6.3 Ideal number of children by number of living children ... 100
Table 6.4 Mean ideal number of children ... 101
Table 6.5 Fertility planning status ... 102
Table 6.6 Wanted fertility rates ... 103

Figure 6.1 Fertility preferences among married women ... 97

7 FAMILY PLANNING
Table 7.1 Knowledge of contraceptive methods ... 106
Table 7.2 Current use of contraception by age ... 108
Table 7.3 Current use of contraception by background characteristics ... 110
Table 7.4 Trends in the current use of contraception ... 111
Table 7.5 Source of modern contraception methods ... 113
Table 7.6 Informed choice ... 114

Table 7.7 Twelve-month contraceptive discontinuation rates ... 115
Table 7.8 Reasons for discontinuation ... 116
Table 7.9 Need and demand for family planning among currently married women ... 119
Table 7.10 Future use of contraception ... 120
Table 7.11 Exposure to family planning messages ... 121
Table 7.12 Contact of nonusers with family planning providers ... 122
Table 7.13 Men's attitudes toward use of contraception by women ... 123

Figure 7.1 Trends in contraceptive use among currently married women ... 111
Figure 7.2 Knowledge of fertile period among all women and men age 15-49 ... 117

8 ABORTION
Table 8.1 Pregnancy outcome by background characteristics ... 126
Table 8.2 Lifetime experience with induced abortion ... 128
Table 8.3 Induced abortion rates ... 129
Table 8.4 Induced abortion rates by background characteristics ... 130
Table 8.5 Trends in age-specific abortion rates ... 132
Table 8.6 Comparison of age-specific abortion rates during the 1993-1997 calendar year period ... 132
Table 8.7 Use of contraception before pregnancy ... 133
Table 8.8 Reason for abortion ... 134
Table 8.9 Method of abortion ... 135
Table 8.10 Cost of the last abortion ... 136

Figure 8.1 Age-specific rates of fertility (ASFR) and induced abortion (ASAR) ... 129
Figure 8.2 Trends in age-specific induced abortion rates ... 131
Figure 8.3 Counseling on post-abortion family planning at the facility where the most recent abortion was conducted ... 137

9 INFANT AND CHILD MORTALITY
Table 9.1 Early childhood mortality rates ... 141
Table 9.2 Early childhood mortality rates by socioeconomic characteristics ... 143
Table 9.3 Early childhood mortality rates by demographic characteristics ... 145
Table 9.4 Perinatal mortality ... 146
Table 9.5 High-risk fertility behavior ... 147

Figure 9.1 Mortality trends ... 142
Figure 9.2 Registration of deaths of children born in the five years prior to the 2012 Kyrgyz DHS ... 148

10 MATERNAL HEALTH
Table 10.1 Antenatal care ... 150
Table 10.2 Number of antenatal care visits and timing of first visit ... 151
Table 10.3 Components of antenatal care ... 152
Table 10.4 Place of delivery ... 154
Table 10.5 Assistance during delivery ... 155
Table 10.6 Timing of first postnatal checkup for the mother ... 158
Table 10.7 Type of provider of first postnatal checkup for the mother ... 159
Table 10.8 Timing of first postnatal checkup for the newborn ... 160
Table 10.9 Type of provider of first postnatal checkup for the newborn ... 161
Table 10.10 Problems in accessing health care ... 162
Table 10.11 Hospital admissions during the most recent pregnancy ... 163

Figure 10.1 Mother’s duration of stay in the health facility after giving birth, Kyrgyz Republic ... 156
Figure 10.2 Maternal care indicators among women age 15-49 who had a live birth in the three years preceding the survey ... 157

11 CHILD HEALTH
Table 11.1 Child's size and weight at birth ... 166
Table 11.2 Vaccinations by source of information ... 168
Table 11.3 Vaccinations by background characteristics ... 169
Table 11.4 Vaccinations in first 18 months of life ... 172
Table 11.5 Prevalence and treatment of symptoms of ARI ... 173
Table 11.6 Prevalence of fever ... 174
Table 11.7 Prevalence of diarrhea ... 175
Table 11.8 Diarrhea treatment ... 176
Table 11.9 Feeding practices during diarrhea ... 177
Table 11.10 Knowledge of ORS packets ... 178
Table 11.11 Disposal of children's stools ... 179

Figure 11.1 Differentials in vaccination coverage, Kyrgyz Republic 2012 ... 170
Figure 11.2 Trends in vaccination coverage among children age 18-29 months ... 171
Figure 11.3 Symptoms of illness in children that require immediate medical assistance, Kyrgyz Republic, 2012* ... 180

12 NUTRITION OF CHILDREN AND WOMEN
Table 12.1 Nutritional status of children ... 186
Table 12.2 Initial breastfeeding ... 191
Table 12.3 Breastfeeding status by age ... 192
Table 12.4 Median duration of breastfeeding ... 194
Table 12.5 Foods and liquids consumed by children in the day or night preceding the interview ... 195
Table 12.6 Infant and young child feeding (IYCF) practices ... 198
Table 12.7 Prevalence of anemia in children ... 201
Table 12.8 Micronutrient intake among children ... 203
Table 12.9 Presence of iodized salt in household ... 205
Table 12.10 Nutritional status of women ... 206
Table 12.11 Prevalence of anemia in women ... 208
Table 12.12 Micronutrient intake among mothers ... 211

Figure 12.1 Nutritional status of children by age ... 187
Figure 12.2 Trends in nutritional status of children under age 5, Kyrgyz Republic 2012 ... 189
Figure 12.3 Infant feeding practices by age, Kyrgyz Republic 2012 ... 192
Figure 12.4 Infant and young indicators on breastfeeding status, Kyrgyz Republic 2012 ... 193
Figure 12.5 IYCF indicators on minimum acceptable diet, Kyrgyz Republic 2012 ... 199

13 HIV/AIDS-RELATED KNOWLEDGE, ATTITUDES, AND BEHAVIOR
Table 13.1 Knowledge of AIDS ... 214
Table 13.2.1 Source of knowledge about AIDS: Women ... 215
Table 13.2.2 Source of knowledge about AIDS: Men ... 216
Table 13.3 Knowledge of HIV prevention methods ... 217
Table 13.4.1 Comprehensive knowledge about AIDS: Women ... 219
Table 13.4.2 Comprehensive knowledge about AIDS: Men ... 220
Table 13.5 Knowledge of prevention of mother to child transmission of HIV ... 222
Table 13.6.1 Accepting attitudes toward those living with HIV/AIDS: Women ... 223
Table 13.6.2 Accepting attitudes toward those living with HIV/AIDS: Men ... 224
Table 13.7 Attitudes toward negotiating safer sexual relations with husband ... 226
Table 13.8 Adult support of education about condom use to prevent AIDS ... 227
Table 13.9 Multiple sexual partners ... 228
Table 13.10 Point prevalence and cumulative prevalence of concurrent sexual partners ... 230
Table 13.11 Payment for sexual intercourse ... 231
Table 13.12.1 Coverage of prior HIV testing: Women ... 232
Table 13.12.2 Coverage of prior HIV testing: Men ... 233
Table 13.13 Pregnant women counseled and tested for HIV ... 234
Table 13.14 Male circumcision ... 235

Table 13.15 Self-reported prevalence of sexually-transmitted infections (STIs) and STIs symptoms ... 236
Table 13.16 Prevalence of medical injections ... 238
Table 13.17 Comprehensive knowledge about AIDS and of a source of condoms among youth ... 239
Table 13.18 Age at first sexual intercourse among young people ... 240
Table 13.19 Premarital sexual intercourse and condom use during premarital sexual intercourse among youth ... 241
Table 13.20 Multiple sexual partners in the past 12 months among young people ... 242
Table 13.21 Recent HIV tests among youth ... 243

Figure 13.1 Knowledge of AIDS and HIV prevention methods among women and men age 15-49, Kyrgyz Republic 2012 ... 218
Figure 13.2 Knowledge about AIDS transmission among women and men age 15-49, Kyrgyz Republic 2012 ... 221

14 DOMESTIC VIOLENCE
Table 14.1 Experience of physical violence ... 248
Table 14.2 Persons committing physical violence ... 249
Table 14.3 Experience of sexual violence ... 250
Table 14.4 Persons committing sexual violence ... 251
Table 14.5 Experience of different forms of violence ... 251
Table 14.6 Experience of violence during pregnancy ... 252
Table 14.7 Marital control exercised by husbands ... 253
Table 14.8 Forms of spousal violence ... 255
Table 14.9 Spousal violence by background characteristics ... 257
Table 14.10 Spousal violence by husband's characteristics and empowerment indicators ... 258
Table 14.11 Physical or sexual violence in the past 12 months by any husband/partner ... 260
Table 14.12 Experience of spousal violence by duration of marriage ... 261
Table 14.13 Injuries to women due to spousal violence ... 261
Table 14.14 Women's violence against their spouse ... 262
Table 14.15 Women's violence against their husband by husband's characteristics and empowerment indicators ... 263
Table 14.16 Help seeking to stop violence ... 264
Table 14.17 Sources for help to stop the violence ... 265

Figure 14.1 Percentage of ever-married women age 15-49 who have experienced specific types of violence from current or most recent husband, ever and in the last 12 months, Kyrgyz Republic 2012 ... 256

15 WOMEN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH OUTCOMES
Table 15.1 Employment and cash earnings of currently married women and men ... 268
Table 15.2.1 Control over women's cash earnings and relative magnitude of women's cash earnings ... 270
Table 15.2.2 Control over men's cash earnings ... 271
Table 15.3 Women's control over their own earnings and over those of their husbands ... 272
Table 15.4.1 Ownership of assets: Women ... 274
Table 15.4.2 Ownership of assets: Men ... 274
Table 15.5 Participation in decision making ... 275
Table 15.6.1 Women's participation in decision-making by background characteristics ... 277
Table 15.6.2 Men's participation in decision-making by background characteristics ... 278
Table 15.7.1 Attitude toward wife beating: Women ... 279
Table 15.7.2 Attitude toward wife beating: Men ... 281
Table 15.8 Indicators of women's empowerment ... 282
Table 15.9 Current use of contraception by women's empowerment ... 283
Table 15.10 Ideal number of children and unmet need for family planning by women's empowerment ... 284

Table 15.11 Early childhood mortality rates by women's status 285

Figure 15.1 Number of decisions in which currently married women participate, Kyrgyz Republic 2012 276

APPENDIX A SAMPLE DESIGN

Table A.1 Population 294
Table A.2 Enumeration areas 294
Table A.3 Average size of enumeration areas in population 294
Table A.4 Sample allocation of clusters and households 295
Table A.5 Sample allocation of completed interviews with women and men 296
Table A.6 Sample implementation: Women 298
Table A.7 Sample implementation: Men 299

APPENDIX B ESTIMATES OF SAMPLING ERRORS

Table B.1 List of selected indicators for sampling errors, Kyrgyz DHS 2012 301
Table B.2 Sampling errors: Total sample, Kyrgyz Republic 2012 302
Table B.3 Sampling errors: Urban sample, Kyrgyz Republic 2012 303
Table B.4 Sampling errors: Rural sample, Kyrgyz Republic 2012 304
Table B.5 Sampling errors: Issyk-Kul sample, Kyrgyz Republic 2012 305
Table B.6 Sampling errors: Djalal-Abad sample, Kyrgyz Republic 2012 306
Table B.7 Sampling errors: Naryn sample, Kyrgyz Republic 2012 307
Table B.8 Sampling errors: Batken sample, Kyrgyz Republic 2012 308
Table B.9 Sampling errors: Osh Oblast sample, Kyrgyz Republic 2012 309
Table B.10 Sampling errors: Talas sample, Kyrgyz Republic 2012 310
Table B.11 Sampling errors: Chui sample, Kyrgyz Republic 2012 311
Table B.12 Sampling errors: Bishkek City sample, Kyrgyz Republic 2012 312
Table B.13 Sampling errors: Osh City sample, Kyrgyz Republic 2012 313

APPENDIX C DATA QUALITY TABLES

Table C.1 Household age distribution 315
Table C.2.1 Age distribution of eligible and interviewed women 316
Table C.2.2 Age distribution of eligible and interviewed men 316
Table C.3 Completeness of reporting 317
Table C.4 Births by calendar years 317
Table C.5 Reporting of age at death in days 318
Table C.6 Reporting of age at death in months 318
Table C.7 Nutritional status of children based on the NCHS/CDC/WHO International Reference Population 319

ACKNOWLEDGMENTS

The National Statistical Committee of the Kyrgyz Republic and the Ministry of Health of the Kyrgyz Republic wish to express their appreciation to those involved in the implementation of the 2012 Kyrgyz Republic Demographic and Health Survey (KgDHS) and the preparation of this report.

Particular thanks go to the following:

- U.S. Agency for International Development/Kyrgyz Republic, for providing the funding for organizing and conducting the 2012 KgDHS.
- ICF International, for providing technical support, training of fieldwork staff, consultations, recommendations, and analyses of the data collected.
- United Nations Population Fund/Kyrgyz Republic, for providing additional funds.

The survey would not have been possible without the good work and dedication of hundreds of people. In particular, we wish to express our appreciation to the field coordinators and editors, interviewers, health technicians, and drivers for their active participation in and contribution to this work.

Above all, we appreciate the co-operation of all of the survey respondents who have made the 2012 KgDHS a success.

Akylbek Osmonaliev
Chairman of the National Statistical Committee of the Kyrgyz Republic

Dinara Saginbaeva
Minister of Health of the Kyrgyz Republic

MILLENNIUM DEVELOPMENT GOAL INDICATORS

Millennium Development Goal Indicators

Kyrgyz Republic, 2012

Indicator	Sex: Male	Sex: Female	Total
1. Eradicate extreme poverty and hunger			
1.8 Prevalence of underweight children under age 5	3.1	3.7	3.4
2. Achieve universal primary education			
2.1 Net attendance ratio in primary education[1]	90.9	93.0	92.0
3. Promote gender equality and empower women			
3.1 Ratio of girls to boys in primary, secondary, and tertiary education			
3.1a Ratio of girls to boys in primary education[2]	na	na	1.0
3.1b Ratio of girls to boys in secondary education[2]	na	na	1.0
3.1c Ratio of girls to boys in tertiary education[2]	na	na	1.2
4. Reduce child mortality			
4.1 Under-5 mortality rate[3]	32	34	31
4.2 Infant mortality rate[3]	28	27	27
4.3 Percentage of children age 18-24 months immunized against measles[4]	96.5	96.5	96.5
5. Improve maternal health			
5.2 Percentage of births attended by skilled health personnel[5]	na	na	99.1
5.3 Contraceptive prevalence rate[6]	na	36.3	na
5.4 Adolescent birth rate[7]	na	44.4	na
5.5 Antenatal care coverage			
5.5a At least one visit[8]	na	97.0	na
5.5b Four or more visits[9]	na	83.6	na
5.6 Unmet need for family planning	na	18.0	na
6. Combat HIV/AIDS, malaria, and other diseases			
6.2 Condom use at last high-risk sex[10]	83.8[a]	50.6	67.2[b]
6.3 Percentage of the population age 15-24 years with comprehensive correct knowledge of HIV/AIDS[11]	24.0[a]	19.5	21.8[b]
6.4 Ratio of school attendance of orphans to school attendance of non-orphans age 10-14 years	0.39	1.01	0.74
	Urban	**Rural**	**Total**
7. Ensure environmental sustainability			
7.8 Percentage of population using an improved water source[12]	94.4	81.9	85.9
7.9 Percentage of population using an improved sanitation facility[13]	91.9	96.6	95.1

na = Not applicable

[a] Restricted to men in sub-sample of households selected for the male interview.

[b] The total is calculated as the simple arithmetic mean of the percentages in the columns for males and females.

[1] The ratio is based on reported attendance, not enrollment, in primary education among primary school age children (age 7-10). The rate also includes children of primary school age enrolled in secondary education. This is a proxy for MDG indicator 2.1, net enrollment ratio.

[2] Based on reported net attendance, not gross enrollment, among 7-10 year-olds for primary, 11-17 year-olds for secondary, and 18-22 year-olds for tertiary education.

[3] Expressed in terms of deaths per 1,000 live births. Mortality by sex refers to a 10-year reference period preceding the survey. Mortality rates for males and females combined refer to the 5-year period preceding the survey.

[4] In Kyrgyzstan, measles vaccinations are given at age 12 months (unlike the standard 9 months in many countries). The values presented in the MDG table are for children age 18-29 months who have been vaccinated against measles or MMR at any time before the survey.

[5] Among births in the five years preceding the survey.

[6] Percentage of currently married women age 15-49 using any method of contraception.

[7] Equivalent to the age-specific fertility rate for women age 15-19 for the 3-year period preceding the survey, expressed in terms of births per 1,000 women age 15-19.

[8] With a skilled provider.

[9] With any healthcare provider.

[10] Higher-risk sex refers to sexual intercourse with a nonmarital, noncohabiting partner. Expressed as a percentage of men and women age 15-24 who had higher-risk sex in the past 12 months.

[11] Comprehensive knowledge means knowing that consistent use of a condom during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about transmission or prevention of the AIDS virus.

[12] Percentage of de jure population whose main source of drinking water is a household connection (piped), public tap or standpipe, tubewell or borehole, protected dug well, protected spring, rainwater collection, or bottled water.

[13] Percentage of de jure population whose household has a flush toilet, ventilated improved pit latrine, pit latrine with a slab, or composting toilet and does not share this facility with other households.

KYRGYZ REPUBLIC

INTRODUCTION 1

1.1 GEOGRAPHY AND POPULATION

The Kyrgyz Republic is located in Central Asia and shares borders with Kazakhstan, Uzbekistan, Tajikistan, and China. The Kyrgyz Republic is primarily mountainous with dry fertile valleys and deep gorges. The Victory Peak is the tallest mountain in Kyrgyzstan (7,439 meters). The two main areas that are the base of Kyrgyz agriculture are the Ferghana Valley, in the southwest, and the Chu Valley, in the north. Lake Issyk-Kul, located in northeastern Kyrgyzstan, is the second deepest mountain lake in the world. It is the main tourist and recreational spot in the country. Kyrgyzstan's climate is distinctly continental, with cold winters and hot summers, but varies according to altitude (National Statistical Committee [NSC], 2011).

Kyrgyzstan consists of nine administrative regions: the Issyk-Kul, Djalal-Abad, Naryn, Batken, Talas, Chui, and Osh Oblast regions and the cities of Bishkek and Osh. Each region is further broken down into district areas called rayons. There are 40 rayons, 25 towns and 28 urban settlements, and 440 local communities (aiyls) in Kyrgyzstan.

The Kyrgyz Republic is a sovereign, democratic, secular, and unitary state. Kyrgyzstan is a presidential democracy. The president is elected by the citizens of Kyrgyzstan on the basis of a universal, equal, and direct vote for a six-year term. The most recent election was held in November 2011. The president of the Kyrgyz Republic is the head of state and of the executive branch of the government.

The population of the Kyrgyz Republic is more than 5.6 million. Approximately two-thirds of the population resides in rural areas (66 percent). The country is characterized by a high rate of population growth, mainly due to the high birth rate (27.1 per 1,000 population in 2011) and relatively low death rate (6.5 per 1,000 population in 2011). Over the past two decades, the size of the population has increased 1.2-fold, by 1 million persons. As a result of high fertility and population growth rates, Kyrgyzstan has a young population: 32 percent of the county's residents are under age 15, while the population over age 65 is relatively small, at about 4 percent (NSC, 2012a).

As of 2011, life expectancy was 73.7 years for women and 65.7 years for men, a difference of eight years. The majority of deaths in Kyrgyzstan are due to cardiovascular diseases (50 percent of all causes); injuries, malignant neoplasms (cancers), and respiratory, digestive, infectious, and parasitic diseases are also prevalent. A rapid increase in multidrug-resistant tuberculosis and injection drug use is of particular concern.

The population density of Kyrgyzstan is 28 persons per square kilometer. The capital of Kyrgyzstan, Bishkek, with a population of more than 874,357, is the country's largest city.

Kyrgyzstan is a multinational country. According to the 2009 population census, people of more than 100 nationalities live in the Kyrgyz Republic. The majority are Kyrgyz, constituting more than 70 percent of the population. Other major ethnic groups are the Uzbek, Russians, Dungans, and Uigurs. The official state language is Kyrgyz. Russian is widely spoken as the language of "inter-ethnic" communication. The Kyrgyz language belongs to the Turkic group of languages.

There are many ancient and modern cultural values in the Kyrgyz Republic. The great epic "Manas" characterizes the Kyrgyz people's independence and courage and glorifies the legendary nobleman Manas. It is one of the longest epics in world literature and is passed on orally from generation

to generation. Estimated to be nearly 1 million lines long, it makes early observations of the Kyrgyz people on geography, medicine, and astronomy.

1.2 History of the Kyrgyz Republic

The Kyrgyz are believed to have emerged from various groups that settled in Central Asia over 2,000 years ago. In the 9th and 12th centuries, some of these tribes moved to the central and western Tien Shan and Pamir regions and eventually formed what is today the Kyrgyz ethnic community. The area that Kyrgyzstan now occupies has been a crossroads for centuries. Lying on one branch of the fabled Silk Road, armies and traders have left their marks on the land and history of Kyrgyzstan.

Many kaganats (kingdoms) have ruled the area in different centuries. During the 10th to 12th centuries, the Kara Khanid dynasty ruled from its capital Balasagun, not far from present-day Bishkek. The beginning of the 13th century brought Mongol rule and eventually Tamerlane's hordes.

In the middle of the 19th century, Central Asia and its people were incorporated into the Russian Empire. In 1924, seven years after the 1917 Bolshevik Revolution, the Soviet Union established the Kara-Kyrgyz autonomous region, later renamed the Kyrgyz Autonomous Republic. In 1936, its status was elevated to the Kyrgyz Soviet Socialist Republic of the USSR.

On August 31, 1991, after the collapse of the former Soviet Union, the Kyrgyz Republic officially declared itself an independent state.

1.3 Economy

After independence, the economy of the Kyrgyz Republic deteriorated rapidly, with the gross domestic product (GDP) decreasing by 45 percent from 1991 to 1995 (NCS, 2011). Subsequently the government initiated the development, adoption, and implementation of a comprehensive program of economic reforms, leading to gradual economic recovery. According to NSC estimates, economic growth averaged 4.7 percent annually during the 1996-2005 period (NSC, 2011). Economic growth during the 2006-2010 period was uneven due to weak economic governance and the negative consequences of the global economic crisis and the country's 2010 political crisis. As a result, the poverty rate increased from 32 percent in 2009 to 37 percent in 2011. After the 2010 political crisis, the government of Kyrgyzstan made efforts to restore economic and social stability, leading to economic growth of 6 percent in 2011; in 2012, however, the Kyrgyz economy declined by 0.9 percent. The decline was mainly attributable to significant reductions in gold production at the Kumtor mine (World Bank Group, 2013).

Kyrgyzstan remains a low-income country. The GDP structure has changed considerably during the past 20 years. Industry and agriculture are the two largest sectors of the economy, each contributing about 19 percent to the country's GDP. However, their input to the GDP has declined considerably since 1991, when industry contributed 28 percent to the GDP and the share of the agricultural sector was 35 percent. Conversely, the GDP share for trade increased from 4 percent in 1991 to 16 percent in 2010, and the share for transport and communication increased from 4 percent to 9 percent over the same period. The GDP contribution of small and medium enterprises increased from 5 percent to 40 percent between 1991 and 2010 (NSC, 2011).

The Kyrgyz Republic is a member of the United Nations, the Commonwealth of Independent States, the Shanghai Cooperation Organization, and the Eurasian Economic Community. Kyrgyzstan joined the World Trade Organization in 1998.

1.4 HEALTH CARE SYSTEM

The health care system in the Kyrgyz Republic, which developed as part of the Soviet-planned system, was designed to provide adequate access to health services for all citizens and to emphasize preventive care.

Unfortunately, maintaining such a system requires substantial and continuous budgetary support, enormous human resources, and appropriate management. The socioeconomic changes in the Kyrgyz Republic since the collapse of the Soviet Union have influenced the health sector. The reduction in financial resources has become the main obstacle to ensuring medical care and services.

The epidemiological situation in the Kyrgyz Republic continues to be challenging with regard to infectious diseases such as tuberculosis, brucellosis, sexually transmitted diseases, respiratory infections, and diarrhea, as well as noncommunicable diseases such as ischemic heart disease, hypertensive disorders, stroke, chronic obstructive pulmonary disease, and cancer.

These factors prompted the Ministry of Health to take action and initiate a variety of activities. Den Sooluk (2012-2016), the national health care reform program, is currently being implemented in the government health sector. This program, an extension of the previous state programs Manas (1996-2005) and Manas Taalimi (2006-2011), focuses on the development of appropriate health care reform policies and strategies to improve the health of the country's population.

The main health care reform principles are (1) improvement of the health status of the population, (2) achievement of health equity by reducing and eliminating differences in health indicators between regions and between urban and rural areas, (3) provision of guaranteed access to existing health services, and (4) assurance of protection of patients' rights. These goals can be accomplished through a restructuring of the health care system, prioritization of services, and changes in the health finance system (Government of the Kyrgyz Republic, 2012).

The health reform program established the following priorities:

- Improvement of mother and child health
- Control of tuberculosis, HIV/AIDS, and other sexually transmitted diseases
- Prevention of cardiovascular diseases
- Introduction and implementation of family doctor practices
- Restructuring of inpatient care services
- Introduction of a mandatory health insurance system
- Transition to per capita and per treated case financing

Primary health care in the Kyrgyz Republic is provided through feldsher-accoucher (physician's assistant/midwife) posts, groups of family doctors, family medicine centers, and general practice centers. These providers focus primarily on disease prevention, immunization against infectious diseases, antenatal care services, delivery assistance, family planning services, health strengthening, and provision of specialized outpatient (ambulatory) care.

At the secondary level, health services are provided through regional (oblast), city, and district (rayon) hospitals; general practice centers; and specialized dispensaries where screening programs are carried out to identify individuals with early manifestations of disease and treatment programs are implemented to halt the progress of the disease.

Tertiary health services in the Kyrgyz Republic are provided through national-level hospitals, specialized hospitals and dispensaries, and research institutes. The high-quality and specialized medical treatment offered at these facilities is aimed at minimizing the effects of disease and disability.

Almost all deliveries occur at health facilities. At the district (rayon) level, delivery wards function as part of rayon territorial hospitals. In the health care reform process, regional (oblast) delivery hospitals were merged with regional (oblast) general hospitals, which has improved the quality of care offered to gynecological patients, pregnant women, and women in labor or delivery. The delivery hospital of the recently established National Center of Motherhood and Childhood Protection has been designated as a tertiary-level health facility.

Child health services in the Kyrgyz Republic include neonatal care, which is usually provided in the first three days after delivery, when a woman and her newborn are still in the delivery hospital; other pediatric services are provided at older ages. After discharge from the delivery hospital, a child is visited by a doctor and a nurse, who provide the mother with general counseling on child care and conduct a physical examination of the child. A mother is required to bring her child in for a regular checkup and vaccination at the family medicine center or family doctor practice several times during the first two years of life. A doctor can refer the child to a pediatrician if the child develops a disease or other conditions that require special care or hospitalization.

Currently, mandatory childhood vaccinations in the Kyrgyz Republic include immunization against hepatitis B, poliomyelitis, tuberculosis, diphtheria, pertussis, tetanus, *Haemophilus influenzae* type b, measles, mumps, and rubella. In addition, the vaccination schedule requires that BCG (Bacillus Calmette-Guérin), hepatitis B, and oral polio vaccines be given at birth.

1.5 Health Policies and Programs

Based on the country's epidemiological situation and demographic and health indicator analyses, the government of the Kyrgyz Republic has identified maternal health and child health as priority areas and has committed to achieving the Millennium Development Goals, three of which relate to the health of women and children.

The Ministry of Health has developed and implemented a number of evidence-based health care programs. Delivery wards and delivery hospitals are implementing new approaches to care based on international standards of care and on strategies recommended by the World Health Organization (WHO) with respect to safe pregnancy, childbirth, and postpartum care; breastfeeding; and essential newborn care. These approaches are also based on the WHO definitions of live births and infant deaths.

The government has adopted a program to improve perinatal care in the Kyrgyz Republic during the period 2008 through 2017. The key strategies to reduce maternal and childhood mortality are expansion of effective perinatal care and adoption of evidence-based protocols and guidelines on obstetric and neonatal care. The parliament is currently reviewing a health results–based financing project proposed by the World Bank. The project's objectives are to pilot performance-based payments and/or enhanced supervision of maternal and neonatal care quality in randomly selected hospitals and to strengthen the government's and providers' capacity with respect to performance-based contracting as well as monitoring and evaluation (World Bank, 2013b).

The government has also established a program to improve the quality of inpatient care in health facilities managing the most common childhood illnesses. This new program will introduce the WHO recommendations on management of childhood illnesses in resource-limited settings in district and regional hospitals, revise standards of care depending on level of care, and revise the curricula for undergraduate and postgraduate medical training.

The importance and necessity of breastfeeding has been well recognized in the Kyrgyz Republic. Since 1999, with technical support from the United Nations Children's Fund (UNICEF), reforms have been instituted in delivery hospitals as part of the Baby Friendly Hospital Initiative (BFHI). Examples of these reforms include establishing immediate contact between mother and newborn after delivery, initiating early breastfeeding, allowing the mother and newborn to stay in the same hospital room, and

breastfeeding the baby on demand. The BFHI program has expanded since 1999; currently, 46 health facilities offer delivery services as part of the program, and approximately half of all deliveries occur in these facilities.

The Ministry of Health, in collaboration with UNICEF and other donors, has developed and implemented a program to improve the nutritional status of children under age 5. One of the components of the program is fortification of semisolid foods given to children age 6-23 months at home with Gulazyk, a micronutrient supplement containing iron, zinc, folic acid, and vitamins A and C.

In the Kyrgyz Republic, multisectoral HIV/AIDS response strategies are detailed in the 2012-2016 national program to stabilize the HIV/AIDS epidemic. This program aims to continue and improve activities initiated by the three previous HIV/AIDS national programs implemented in the Kyrgyz Republic. The 2012-2016 government program includes the following primary activity areas: reducing the vulnerability of injection drug users to HIV; preventing the transmission of HIV through sexual intercourse; providing access to treatment, care, and support among people living with HIV; strengthening and ensuring the sustainability of the health care system response to HIV; and improving the strategic coordination and management of the national policy on HIV/AIDS. Implementation of these strategies is ensured by a multisectoral approach involving government sectors, civil society, private organizations, and multiple donors.

The government of the Kyrgyz Republic realizes the importance of tobacco control. The WHO Framework Convention on Tobacco Control was first introduced by the government in 2003 and then ratified in 2006. The government adopted a law designed to protect the country's citizens from harmful tobacco impacts in August 2006. The national program on tobacco control (2008-2015) and a short-term plan of action were adopted by the government in April 2008.

To combat the most common and socially significant diseases (cardiovascular diseases and tuberculosis), the Kyrgyz Republic is implementing the 2009-2013 complex cardiovascular disease control program and the Tuberculosis IV Program (2013-2016). In 1996, to stabilize the epidemiological situation, the government adopted the National Tuberculosis Control Program, which was based on the directly observed treatment, short-course (DOTS) approach. Since 1998, the DOTS approach has been used in all regions of the country. The 1998 law on protection of the population from tuberculosis (amended in 2002 and 2005) established the basis for a state-regulated policy on combating tuberculosis. In 2000, the National Tuberculosis Control Program II introduced treatments for multidrug-resistant forms of tuberculosis. The Tuberculosis IV Program has the following goals: to ensure universal access to effective diagnosis, treatment, and rehabilitation for all patients with tuberculosis; to reduce tuberculosis transmission; to reduce the social and economic burden of tuberculosis; and to implement new diagnostic and treatment methods and strategies for tuberculosis prevention. Kyrgyzstan without tuberculosis is the ultimate vision of the program.

Implementation of these programs is supported by many international organizations such as the United States Agency for International Development (USAID), the United Nations Population Fund (UNFPA), UNICEF, WHO, the World Bank, and other donors.

The Ministry of Health is responsible for providing family planning services throughout the country. The main goals of the family planning policy are to ensure low-risk pregnancies and safe motherhood, to reduce complications due to inadequately spaced pregnancies, and to reduce the incidence and prevalence of pregnancy complications and extragenital diseases among women of reproductive age.

The Ministry of Health manages a broad spectrum of activities, including providing intensive family planning education and supplying contraceptives throughout the country. The private sector is also involved in marketing contraceptives. In addition to promoting awareness of family planning and women's access to a variety of contraceptives, the ministry is concerned with the quality, safety, and effectiveness of

contraceptive methods. In order to control family planning services, the Ministry of Health categorizes them under maternal and child protection.

In the Kyrgyz Republic, induced abortion unfortunately remains one of the primary methods of birth control. Induced abortions are usually done at the outpatient departments of general hospitals or at delivery hospitals. Induced abortions are legal in the Kyrgyz Republic if they are performed during the first 12 weeks of pregnancy, and abortions can be done free of charge. In some instances, induced abortions can be performed after 12 weeks if certain medical or social indications exist. These cases require strong supervision of qualified medical personnel in a hospital setting. Despite some indications that the number of induced abortions has declined in recent years, the abortion issue remains a public health concern in the Kyrgyz Republic because of the prevalence of complications and the overall adverse effects on women's health.

As a result of the policy promoting the use of safe family planning methods, contraception has been used widely in the Kyrgyz Republic during the last several years. Among the most popular methods of contraception is the intrauterine device, which many women continue to rely on as a convenient and safe method. Women in the Kyrgyz Republic now have broad access to a variety of other methods of contraception, including oral contraceptives and injectables.

1.6 Demographic and Health Data Collection System in the Kyrgyz Republic

The National Statistical Committee is the government agency responsible for collection, processing, analysis, aggregation, dissemination, accumulation, storage, and maintenance of official statistical information. The committee also conducts censuses. Births, deaths, marriages, and divorces are registered in the civil registry offices (so-called ZAGS) of the State Registration Service under the Government of the Kyrgyz Republic and in local administrations of rural settlments, where the records are made and certificates of birth, death, marriage and divorce are issued. Second copies of these records are forwarded on a monthly basis to the rayon (district) statistical offices for processing and entry to the electronic database. These data are then forwarded up the reporting hierarchy to the regional and national levels. The last census in the Kyrgyz Republic was conducted in 2009, and the census results were published in 2010. In addition, the National Statistical Committee is responsible for tabulating and publishing an annual report on demographic data generated by the registration system.

Collection of health data is a primary responsibility of the Republican Medical Information Center (RMIC) of the Ministry of Health. Health information is generated by staff at the facilities delivering services and then sent to the RMIC through the district- and regional-level medical statistical departments. The RMIC compiles and analyzes these data and issues an annual report titled *Health of the Population of the Republic of the Kyrgyz Republic and Health Resources.*

The health data collected and published by the Republican Medical Information Center consist of the following major categories: (1) morbidity specified by type of disease (infectious or non-infectious); (2) mortality specified by cause of death; (3) infant deaths (including antenatal, perinatal, and early neonatal deaths); (4) maternal mortality specified by cause of death; (5) maternal and child health, including data on antenatal care and delivery assistance, contraceptive use, abortion, and pediatric services; (6) number of health facilities, medical personnel, and hospital beds and length of average hospital stay; and (7) health information specified by type of medical service, including medical care for patients with cancer, tuberculosis, mental disorders, drug abuse problems, and sexually transmitted diseases.

1.7 Objectives and Organization of the Survey

The 2012 Kyrgyz Demographic and Health Survey (KgDHS) is a nationally representative sample survey designed to provide information on population and health issues in the Kyrgyz Republic. The 2012 KgDHS, the country's second DHS survey, was conducted by the National Statistical Committee (NSC) and the Ministry of Health of the Kyrgyz Republic from August through December 2012. Support for the

2012 KgDHS was provided by the United States Agency for International Development as part of the MEASURE DHS project. MEASURE DHS is a USAID-funded program through which ICF International provides funding and technical assistance in the implementation of population and health surveys in countries worldwide. UNFPA's Kyrgyz Republic office provided additional funds for the survey.

The purpose of the 2012 KgDHS was to collect national and regional data on fertility and contraceptive use, maternal and child health and nutrition, childhood mortality, domestic violence against women, and knowledge and behavior regarding tuberculosis, HIV infection, and other sexually transmitted infections. The survey obtained detailed information on these issues from women and men of reproductive age. Data are presented by region (oblast) when sample sizes permit such calculations.

The 2012 KgDHS results are intended to provide the information needed to evaluate existing social programs and to design new strategies for improving the health status of the country's women and children and enhancing their access to health services. The survey also contributes to the growing international database on demographic and health-related indicators.

1.7.1 Sample Design and Implementation

The 2012 KgDHS sample was designed to permit detailed analyses, including estimation of fertility, infant/child mortality, and abortion rates, at the national level and separately for urban and rural areas. Many indicators can also be estimated at the regional (oblast) level. A representative probability sample of 8,216 households was selected for the 2012 KgDHS. The sample was selected in two stages. In the first stage, 316 clusters were selected from the sampling frame, which is a complete list of enumeration areas created for the 2009 Population and Housing Census. In the second stage, before the main survey, a household listing operation was conducted in each of the selected clusters. Households were then randomly selected from the newly updated listing for participation in the survey.

All women age 15-49 who either were permanent residents of the households in the 2012 KgDHS sample or were visitors present in the household on the night before the survey were eligible to be interviewed. Interviews were completed with 8,208 women. In addition, in a subsample of one-third of the households selected for the survey, all men age 15-49 were eligible to be interviewed if they were either permanent residents or visitors present in the household on the night before the survey. Interviews were completed with 2,413 men.

Appendix A provides additional information on the 2012 KgDHS sample design.

1.7.2 Questionnaires

Three questionnaires were used in the 2012 KgDHS: the Household Questionnaire, the Woman's Questionnaire, and the Man's Questionnaire. The questionnaires were based on model survey instruments developed in the MEASURE DHS program. The DHS model questionnaires were adapted for use in the Kyrgyz Republic by experts from the National Statistical Committee and the Ministry of Health of the Kyrgyz Republic. Suggestions were also sought from USAID; a number of UN agencies, including the United Nations Development Program (UNDP), UNICEF, and UNFPA; and other international and nongovernmental organizations. All three questionnaires were developed in English and translated into Russian and Kyrgyz. The questionnaires were pretested in May 2012.

The Household Questionnaire was used to list all usual members of and visitors to the selected households and to collect information on household socioeconomic status. The first part of the Household Questionnaire collected, for each household member or visitor, information on age, sex, educational attainment, and relationship to the head of the household. This information provided basic demographic data for Kyrgyz households. It also was used to identify the respondents who were eligible for individual interviews (i.e., women and men age 15-49). The first section of the Household Questionnaire obtained information on other characteristics of household members as well, including information on each child's

birth registration. Questions in the second part of the Household Questionnaire addressed housing characteristics (e.g., flooring material, source of water, and types of toilet facilities), ownership of consumer goods, and other aspects of the socioeconomic status of the household. The Household Questionnaire also recorded results obtained from testing household salt for the presence of iodine as well as the results of height and weight measurements and anemia tests among children under age 5 and women age 15-49.

The Woman's Questionnaire obtained information from women age 15-49 on the following topics:

- Background characteristics
- Pregnancy history
- Antenatal, delivery, and postnatal care
- Knowledge and use of contraception
- Reproductive and adult health
- Childhood mortality
- Health status and health care utilization
- Vaccinations of children under age 5
- Episodes of diarrhea and respiratory illness among children under age 5
- Breastfeeding and weaning practices
- Marriage and recent sexual activity
- Fertility preferences
- Knowledge of and attitudes toward AIDS and other sexually transmitted diseases
- Knowledge of and attitudes toward tuberculosis
- Women's work and husbands' background characteristics
- Other women's health issues
- Domestic violence

The Man's Questionnaire, administered to men age 15-49, focused on the following topics:

- Background characteristics
- Health status and health care utilization
- Marriage and recent sexual activity
- Attitudes toward and use of condoms
- Knowledge of and attitudes toward AIDS and other sexually transmitted diseases
- Attitudes toward women's status

Blood pressure measurements of women and men were recorded in their individual questionnaires.

1.7.3 Training of Field Staff

The main survey training, which was conducted by NSC, Ministry of Health, and ICF International staff, was held during a three-week period in July 2012. A total of 92 people (68 women and 24 men) took part, including supervisors, field editors, interviewers, and quality control personnel. The training included lectures, demonstrations, practice interviews, and examinations. All field staff received summary training in blood pressure and anthropometric measurements and participated in three days of field practice.

Medical technicians were trained separately. Eighteen medical technicians (16 women and 2 men) were provided by the Ministry of Health, all of whom were skilled health professionals (medical doctors, feldshers, or nurses). ICF staff trained the 18 health technicians on anthropometric measurements (height and weight) and anemia testing (hemoglobin). Anthropometry was conducted using the SECA 874 digital scale (weight) and the Shorr board (height), and hemoglobin testing was conducted using the HemoCue

photometer system (Hb 201+). Training consisted of seven days of classroom instruction, one day of practice in a health facility, and three days of field practice together with all field staff.

1.7.4 Hemoglobin Testing

Hemoglobin testing is the primary method of anemia diagnosis. In all households selected for the 2012 KgDHS survey, women age 15-49 and children age 6-59 months were tested for anemia using the HemoCue system. A consent statement was read to all eligible respondents or to the parent or responsible adult for children and young women age 15-17. This statement explained the purpose of the test, informed them that the results would be made available as soon as the test was completed, and requested permission for the test to be carried out.

Before taking any blood, the finger was wiped with an alcohol swab and allowed to air dry. Then the palm side of the end of a finger was punctured with a sterile, nonreusable, self-retractable lancet. A sterile gauze pad was used to wipe away the first two blood drops from the finger (heel) prick, and the third drop of blood was collected in a HemoCue microcuvette (which also serves as a measuring device) and placed in a photometer where the results were displayed. An informative brochure was given to each household explaining what anemia is, the symptoms of anemia, and the measures people can take to prevent its occurrence. Each person whose hemoglobin level was lower than the recommended cut-off point was given a written referral recommending immediate follow-up with a health professional.

The lancets and all other supplies and equipment used in the collection of blood specimens (HemoCue microcuvette, gloves, gauze, alcohol swab, bandage packaging, and waste collection bag) were disposed of in a safe manner, usually by taking the materials to a nearby health facility with proper protocols for the disposal of biohazardous waste, or occasionally (when there was no nearby health facility) through disinfection, burning, and burial of the material in the field in accordance with the protocol taught during training.

1.7.5 Fieldwork and Data Processing

Nine teams collected the survey data; each team consisted of four female interviewers, one male interviewer, a field editor, and a team supervisor. Fieldwork began in early August 2012 and concluded in December 2012. Senior KgDHS technical staff members visited teams regularly to review their work and monitor data quality. MEASURE DHS staff also assisted with field supervision.

The processing of the KgDHS results began shortly after fieldwork commenced. Completed questionnaires were returned regularly from the field to NSC headquarters in Bishkek, where they were entered and edited by data processing personnel specially trained for this task. The data processing personnel included a supervisor, a questionnaire administrator (who ensured that the expected number of questionnaires from all clusters was received), several office editors, 13 data entry operators, and a secondary editor. The concurrent processing of the data was an advantage because the senior DHS technical staff could advise field teams of problems detected during data entry. In particular, tables were generated to check various data quality parameters, and the results were used to provide specific feedback to the teams to improve performance. The data entry and editing phase of the survey was completed in February 2013.

1.8 RESPONSE RATES

Table 1.1 presents household and individual response rates for the 2012 KgDHS. A total of 8,208 households were selected for the sample, of which 8,083 were occupied at the time of the fieldwork and 8,040, or over 99 percent, were successfully interviewed. In these households, 8,286 women age 15-49 were identified. Interviews were completed with 99 percent of these women. Of the 2,495 eligible men identified, 97 percent were successfully interviewed.

Table 1.1 Results of the household and individual interviews

Number of households, number of interviews, and response rates, according to residence (unweighted), Kyrgyz Republic 2012

	Residence		
Result	Urban	Rural	Total
Household interviews			
Households selected	2,886	5,322	8,208
Households occupied	2,833	5,250	8,083
Households interviewed	2,820	5,220	8,040
Household response rate[1]	99.5	99.4	99.5
Interviews with women age 15-49			
Number of eligible women	2,757	5,529	8,286
Number of eligible women interviewed	2,732	5,476	8,208
Eligible women response rate[2]	99.1	99.0	99.1
Interviews with men age 15-49			
Number of eligible men	706	1,789	2,495
Number of eligible men interviewed	690	1,723	2,413
Eligible men response rate[2]	97.7	96.3	96.7

[1] Households interviewed/households occupied.
[2] Respondents interviewed/eligible respondents.

HOUSING CHARACTERISTICS AND HOUSEHOLD POPULATION

2

Key Findings

- The average Kyrgyz household has 4.2 members.
- Nearly all households (95 percent) use improved, not shared sanitation facilities.
- Nearly 9 in 10 households obtain drinking water from an improved source. Access of the household population to improved drinking water sources has not changed since 2006 (88 percent in the 2006 Multiple Indicator Cluster Survey and 86 percent in the 2012 KgDHS).
- Almost 9 in 10 households have soap and water available at the place household members use for hand washing.
- Most dwellings have some type of flooring, mostly parquet or polished wood, vinyl or linoleum, or wood/planks. Four percent of households, mainly in rural areas, reside in dwellings with earth or sand floors.
- Thirty-three percent of rural households use solid fuels for cooking, as compared with 5 percent of urban households.
- Possession of a television has increased from 85 percent of households in 1997 to 99 percent in 2012. Refrigerator ownership also has expanded, from 67 percent in 1997 to 80 percent in 2012. The vast majority of households have a mobile telephone (97 percent), and one-quarter have a non-mobile telephone. Twenty-seven percent of urban households have a computer, as compared with 12 percent of rural households.
- Median completed years of schooling is 9.8 years among females and 9.7 years among males.
- Attendance among the school age population is widespread but not universal; 87 percent of the primary school age population and 86 percent of the secondary school age population are attending school.
- There is almost no gender gap in primary and secondary school attendance, but females are slightly more likely to attend school than males.
- Most young children are not involved in an early childhood education program; only 5 percent of children age 5-6 attend preschool.

This chapter presents information on housing facilities (sources of water supply, sanitation facilities, and dwelling characteristics), household possessions, and household arrangements (headship and size). The data on dwelling and household characteristics and assets are used to produce the wealth index, an indicator of a household's economic status. The chapter also provides information on general characteristics of the population such as age-sex structure, literacy, and education. The description of the household environment and survey population provided in this chapter is useful for understanding the social and demographic data presented later in the report.

In reviewing this chapter, it is helpful to understand the definitions of a household and of the de jure and de facto populations used in the 2012 KgDHS. A household consists of a person or group of persons, related or unrelated, who live together in the same dwelling unit, acknowledge one adult male or female as the head of the household, share the same living arrangements, and are considered as one unit. For each household, information was obtained on usual household members as well as visitors present in

the household on the night before the survey. The de jure population includes all usual household residents whether or not they were present at the time of the KgDHS interview. The de facto population includes household members and visitors who were present in the household on the night before the survey. The difference between the de jure and de facto populations is small, and most results are presented for the de facto population unless otherwise noted.

As a result of the way the sample was designed, the number of cases in some regions may appear small because they are weighted to make the regional distribution nationally representative. Throughout this report, numbers in the tables reflect weighted numbers. To ensure statistical reliability, percentages based on 25 to 49 unweighted cases are shown within parentheses, and percentages based on fewer than 25 unweighted cases are suppressed. In some tables and figures, percentages may not sum to 100 due to rounding.

2.1 HOUSING CHARACTERISTICS

The 2012 KgDHS collected data on a range of housing characteristics that affect the health of household residents and also reflect the household's socioeconomic status. Housing characteristics include sources of drinking water, type of sanitation facilities, dwelling materials (roof, walls, and floor), access to electricity, and cooking arrangements. These results are presented for households and for the de jure household population by urban-rural residence.

2.1.1 Drinking Water

The source of drinking water is an indicator of whether it is suitable for drinking. Table 2.1 uses the categorization of improved and non-improved sources proposed by the WHO/UNICEF Joint Monitoring Program for Water Supply and Sanitation (UNICEF and WHO, 2012) in presenting drinking water information. The table also shows the time spent in obtaining drinking water and the practices that Kyrgyz households employ in treating the water they use for drinking.

Nearly 9 in 10 households in the Kyrgyz Republic obtain drinking water from an improved source. Most of these households either have piped water available in their dwelling, yard, or plot (61 percent) or obtain water from a public tap or standpipe (21 percent). The most common non-improved source is surface water (8 percent), that is, water from rivers, dams, lakes, ponds, or similar sources. Sixty-eight percent of households obtain drinking water from a source on premises, and 28 percent spend less than 30 minutes obtaining water. Slightly under half of households (45 percent) use an appropriate water treatment method, of which almost all boil the water used for drinking.

Urban households are much more likely than rural households to have access to an improved drinking water source (96 percent versus 83 percent), and they are nearly twice as likely to have the drinking water source on the premises (91 percent versus 54 percent). On the other hand, the proportion using an appropriate water treatment method is slightly lower among urban households (40 percent) than rural households (48 percent).

Table 2.1 Household drinking water

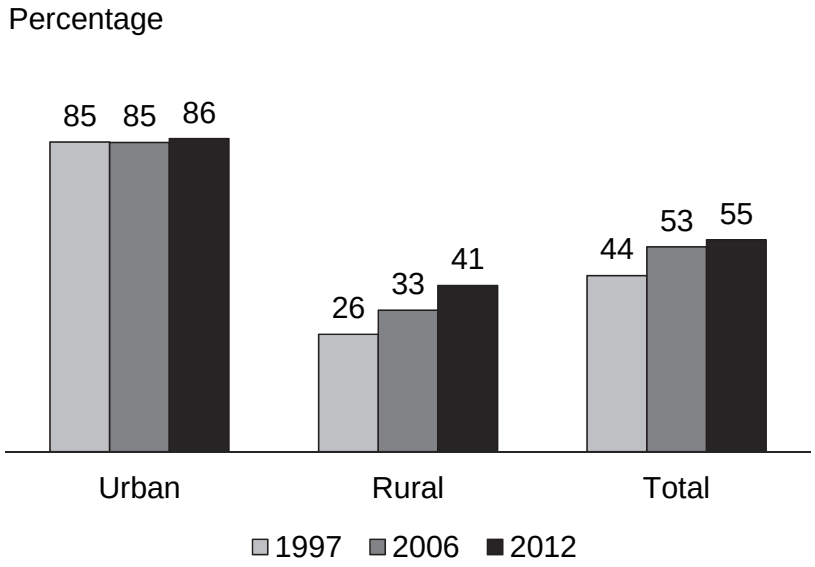
Percent distribution of households and de jure population by source of drinking water, time to obtain drinking water, and treatment of drinking water, according to residence, Kyrgyz Republic 2012

	Households			Population		
Characteristic	Urban	Rural	Total	Urban	Rural	Total
Source of drinking water						
Improved source	95.9	83.4	88.2	94.4	81.9	85.9
Piped into dwelling	60.6	12.3	30.9	54.3	12.0	25.5
Piped to yard/plot	27.9	31.9	30.4	31.3	29.0	29.7
Public tap/standpipe	5.4	30.5	20.8	6.4	31.8	23.7
Tube well or borehole	1.4	2.2	1.9	1.6	2.3	2.1
Protected well	0.5	3.3	2.2	0.6	3.4	2.5
Protected spring	0.1	3.2	2.0	0.2	3.3	2.3
Non-improved source	4.1	16.4	11.6	5.5	17.9	13.9
Unprotected well	0.7	0.7	0.7	0.9	0.8	0.8
Unprotected spring	0.3	2.4	1.6	0.4	2.6	1.9
Tanker truck/cart with tank	1.1	0.9	1.0	1.5	1.0	1.1
Surface water	2.0	12.3	8.3	2.8	13.5	10.1
Other source	0.0	0.2	0.1	0.0	0.2	0.1
Missing	0.0	0.1	0.1	0.1	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Time to obtain drinking water (round trip)						
Water on premises	91.4	53.6	68.2	89.1	51.2	63.3
Less than 30 minutes	7.1	40.7	27.7	8.9	42.3	31.6
30 minutes or longer	0.6	5.1	3.4	0.7	5.8	4.2
Don't know/missing	0.9	0.6	0.7	1.2	0.6	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Water treatment prior to drinking[1]						
Boiled	38.9	47.5	44.2	43.3	50.3	48.1
Bleach/chlorine added	0.0	0.5	0.3	0.0	0.6	0.4
Strained through cloth	0.1	0.2	0.1	0.1	0.1	0.1
Ceramic, sand, or other filter	2.0	0.3	1.0	1.9	0.3	0.8
Solar disinfection	0.1	2.4	1.5	0.2	3.0	2.1
Other	9.4	8.7	9.0	10.0	9.1	9.4
No treatment	57.3	49.3	52.4	53.0	46.8	48.8
Percentage using an appropriate treatment method[2]	40.4	48.4	45.3	44.9	51.1	49.1
Number	3,105	4,935	8,040	10,789	22,916	33,704

[1] Respondents may report multiple treatment methods, so the sum of treatment may exceed 100 percent.
[2] Appropriate water treatment methods include boiling, bleaching, straining, filtering, and solar disinfecting.

The Multiple Indicator Cluster Survey (MICS) conducted in the Kyrgyz Republic in 2006 also collected information on sources of drinking water, but only among the household population. There has been no change in the household population's access to an improved drinking water source during the six years between the 2006 MICS (88 percent) and the 2012 KgDHS (86 percent) (National Statistical Committee [NSC], 2007). Because the 2012 KgDHS questionnaire categorized drinking water sources differently from the questionnaire used in the 1997 KgDHS (Research Institute of Obstetrics and Pediatrics [RIOP] and Macro International Inc., 1998), it is difficult to compare data from these two surveys. Therefore, to present trends in drinking water sources since 1997, Figure 2.1 compares the results of the 1997 KgDHS, 2006 MICS, and 2012 KgDHS only with respect to use of water piped to a dwelling, yard, or plot. The 1997 KgDHS data were recalculated for the de jure household population in order to make them comparable with the 2006 and 2012 data. Access to water piped directly to a dwelling, yard, or plot increased from 44 percent in 1997 to 55 percent in 2012. This increase was largely concentrated in rural areas. The percentage of the rural population with access to drinking water piped to a dwelling, yard, or plot rose from 26 percent in 1997 to 41 percent in 2012, while the percentage increased from 85 percent to 86 percent in urban areas, where access to piped water was already widespread in 1997.

Figure 2.1
Trends in use of water piped to a dwelling, yard, or plot by household population, Kyrgyz Republic 1997, 2006, and 2012



KgDHS 2012

2.1.2 Sanitation Facilities

The availability of hygienic sanitation facilities is important in reducing the risk of transmitting diarrhea and other diseases within a household. According to the standards set by the WHO/UNICEF Joint Monitoring Program for Water Supply and Sanitation, the hygienic status of sanitation facilities is determined on the basis of the type of facility used and whether or not it is a shared facility (UNICEF and WHO, 2012). A household's toilet/latrine facility is classified as hygienic if it is used only by household members (i.e., not shared) and if the type of facility effectively separates human waste from human contact. The types of facilities that are most likely to accomplish this are flush or pour flush toilets emptying into a piped sewer system, septic tank, or pit latrine; ventilated improved pit (VIP) latrines; pit latrines with a slab; and composting toilets.

Table 2.2 shows that 99 percent of KgDHS households and the de jure household population use improved sanitation facilities, as compared with 96 percent in the 2006 MICS (NSC, 2007). Most households using an improved facility do not share the facility; only 4 percent of Kyrgyz households use an improved facility that is shared with other households. It should be noted that the 2012 KgDHS questionnaire categorized sanitation facilities differently than the 1997 KgDHS questionnaire, and thus it is difficult to compare data from the two surveys.

Pit latrines with a slab (74 percent) are the most common type of toilet. One in six households use a toilet connected to a piped sewer system, and 4 percent use VIP latrines. About two-fifths of urban households have flush toilets, while they are extremely rare in rural areas (2 percent).

Table 2.2 Household sanitation facilities

Percent distribution of households and de jure population by type of toilet/latrine facilities, according to residence, Kyrgyz Republic 2012

	Households			Population		
Type of toilet/latrine facility	Urban	Rural	Total	Urban	Rural	Total
Improved, not shared facility	**91.6**	**96.7**	**94.7**	**91.9**	**96.6**	**95.1**
Flush/pour flush to piped sewer system	37.9	2.2	16.0	32.1	1.8	11.5
Flush/pour flush to septic tank	0.7	0.0	0.3	0.9	0.0	0.3
Flush/pour flush to pit latrine	0.5	0.2	0.3	0.7	0.1	0.3
Ventilated improved pit (VIP) latrine	2.9	5.1	4.2	3.0	4.8	4.2
Pit latrine with slab	49.5	89.2	73.9	55.2	89.9	78.8
Shared facility[1]	**7.3**	**1.9**	**4.0**	**6.8**	**1.9**	**3.5**
Flush/pour flush to piped sewer system	4.1	0.0	1.6	3.5	0.0	1.1
Flush/pour flush to pit latrine	0.0	0.0	0.0	0.0	0.0	0.0
Ventilated improved pit (VIP) latrine	0.0	0.1	0.1	0.0	0.1	0.1
Pit latrine with slab	3.1	1.8	2.3	3.3	1.8	2.3
Non-improved facility	**1.1**	**1.5**	**1.3**	**1.3**	**1.5**	**1.5**
Flush/pour flush not to sewer/septic tank/pit latrine	0.0	0.0	0.0	0.0	0.0	0.0
Pit latrine without slab/open pit	1.0	1.4	1.3	1.3	1.5	1.4
Bucket	0.0	0.0	0.0	0.0	0.0	0.0
No facility/bush/field	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	3,105	4,935	8,040	10,789	22,916	33,704

[1] Facilities that would be considered improved if they were not shared by two or more households.

2.1.3 Other Dwelling Characteristics

Table 2.3 shows the distribution of households and the de jure population by other dwelling characteristics that reflect socioeconomic status and also may directly affect the health of household members.

Table 2.3 Household characteristics

Percent distribution of households by housing characteristics, percentage using solid fuel for cooking, and percent distribution by frequency of smoking in the home, according to residence, Kyrgyz Republic 2012

	Residence		
Housing characteristic	Urban	Rural	Total
Electricity			
Yes	99.8	99.8	99.8
No	0.2	0.2	0.2
Missing	0.1	0.0	0.0
Total	100.0	100.0	100.0
Flooring material			
Earth, sand	1.3	4.9	3.5
Dung	0.0	0.2	0.1
Wood/planks	15.5	26.6	22.3
Reed	0.2	0.3	0.3
Parquet or polished wood	44.0	55.0	50.8
Vinyl or linoleum	36.9	10.6	20.8
Ceramic tiles	0.3	0.1	0.2
Cement	1.1	1.6	1.4
Carpet	0.4	0.2	0.3
Other	0.3	0.5	0.4
Total	100.0	100.0	100.0
Wall material			
Dirt	4.6	13.0	9.7
Tree trunks	0.2	2.9	1.8
Straw with mud	17.0	31.7	26.0
Stone with mud	0.7	1.1	0.9
Uncovered adobe	0.3	0.1	0.2
Reused wood	1.2	1.8	1.6
Cement	3.3	4.5	4.0
Stone with lime or cement	0.2	0.3	0.3
Bricks	40.9	39.6	40.1
Cement blocks	3.4	2.5	2.8
Covered adobe	0.7	1.0	0.9
Wood planks/shingles	0.2	0.3	0.3
Slag/breeze block	2.1	0.6	1.2
Polymer cover	0.1	0.0	0.0
Concrete/reinforced concrete/ monolith panel	25.1	0.3	9.9
Other	0.0	0.1	0.1
Missing	0.0	0.1	0.1
Total	100.0	100.0	100.0
Roof material			
Rustic mat	0.2	0.2	0.2
Wood planks	0.2	0.1	0.1
Tar	4.1	0.2	1.7
Metal	4.8	6.7	6.0
Wood	0.5	0.9	0.7
Calamine/cement fiber	63.4	89.4	79.3
Ceramic tiles	2.6	2.3	2.4
Cement/concrete blocks	24.1	0.1	9.4
Other	0.1	0.0	0.1
Total	100.0	100.0	100.0
Rooms used for sleeping			
One	37.8	17.3	25.2
Two	42.3	48.5	46.1
Three or more	19.2	33.6	28.0
Missing	0.7	0.6	0.6
Total	100.0	100.0	100.0
Place for cooking			
In the house	79.2	45.3	58.4
In a separate building	19.8	50.4	38.6
Outdoors	0.9	4.2	2.9
Missing	0.1	0.2	0.1
Total	100.0	100.0	100.0

Continued…

Table 2.3—*Continued*

Percent distribution of households by housing characteristics, percentage using solid fuel for cooking, and percent distribution by frequency of smoking in the home, according to residence, Kyrgyz Republic 2012

Housing characteristic	Residence		Total
	Urban	Rural	
Cooking fuel			
Electricity	41.3	60.4	53.0
LPG/natural gas/biogas	54.2	6.1	24.7
Coal/lignite	0.4	0.3	0.4
Charcoal	0.0	0.9	0.6
Wood	2.0	12.0	8.2
Straw/shrubs/grass	1.1	4.2	3.0
Agricultural crop	0.3	6.3	4.0
Animal dung	0.7	9.6	6.2
Total	100.0	100.0	100.0
Percentage using solid fuel for cooking[1]	4.5	33.4	22.2
Frequency of smoking in the home			
Daily	22.7	36.4	31.1
Weekly	1.6	3.6	2.8
Monthly	0.3	0.5	0.4
Less than monthly	0.5	0.5	0.5
Never	74.9	59.0	65.1
Missing	0.1	0.0	0.0
Total	100.0	100.0	100.0
Number	3,105	4,935	8,040

LPG = Liquid petroleum gas

[1] Includes coal/lignite, charcoal, wood, straw/shrubs/grass, agricultural crops, and animal dung.

Almost all households in the Kyrgyz Republic have electricity. While most dwellings have some type of flooring, 4 percent of households reside in dwellings with earth or sand floors. Earth/sand floors are more common in rural than in urban areas (5 percent versus 1 percent). Urban and rural households show a similar preference for brick walls (41 and 40 percent, respectively). While rural dwellings are often built with straw and mud (32 percent), this material is less common in urban dwellings (17 percent). Calamine/cement fiber is the preferred roofing material in both urban and rural areas (63 percent and 89 percent, respectively); 24 percent of urban households use cement/concrete blocks.

About three-quarters of Kyrgyz households have at least two rooms in the dwelling used for sleeping, and 28 percent have three or more rooms. Urban households are more than twice as likely as rural households to have only one room for sleeping (38 percent versus 17 percent).

Indoor air pollution from the use of solid (biomass) fuels is related to increased morbidity and mortality (WHO, 2006b). Table 2.3 shows that while the majority of Kyrgyz households use electricity (53 percent) or liquid petroleum gas (LPG)/natural gas/biogas (25 percent) for cooking, approximately 2 in 10 households burn solid fuels (e.g., wood, coal, charcoal, straw, shrubs, grass, agricultural crops, or animal dung). Rural households are much more likely than urban households to cook with solid fuels (33 percent and 5 percent, respectively). Among rural households, the practice of cooking in a building separate from the dwelling or outdoors may reduce the exposure to pollutants generated by the burning of solid fuels; over half of rural households report that cooking takes place in a separate building or outside. There is also evidence that the use of solid fuels for cooking is declining in the Kyrgyz Republic; overall, 37 percent of households reported use of solid fuels for cooking in the 2006 MICS (NSC, 2007), as compared with 22 percent in the 2012 KgDHS. The percentage of households using solid fuels for cooking declined from 12 percent in 2006 to 5 percent in 2012 in urban areas and from 56 percent to 33 percent in rural areas. Data on cooking fuels were not collected in the 1997 KgDHS.

Information on smoking inside the home is included in Table 2.3 to assess the percentage of households in which there is exposure to secondhand smoke (SHS). Secondhand smoke is a risk factor for children and adults who do not smoke. For example, research has shown that children who are exposed to SHS are at increased risk of respiratory and ear infections and poor lung development (U.S. Department of Health and Human Services, 2006) and that pregnant women exposed to SHS have a higher risk of delivering a low birth weight baby (Windham et al., 1999). Overall, around one in three Kyrgyz households report that smoking occurs in the home, with 31 percent saying that smoking takes place in the home on a daily basis and 3 percent saying that it occurs on a weekly basis. Smoking in the home is more frequent in rural households than urban households (41 percent versus 25 percent).

2.2 HOUSEHOLD POSSESSIONS

The availability of durable consumer goods is a useful indicator of household socioeconomic level. Moreover, particular goods have specific benefits. Having access to a radio or a television exposes household members to innovative ideas, a refrigerator prolongs the wholesomeness of foods, and a means of transport allows greater access to services located away from the local area. Table 2.4 shows the availability of selected household possessions by residence.

Table 2.4 Household possessions

Percentage of households possessing various household effects, means of transportation, agricultural land, livestock/farm animals, watch, or bank account by residence, Kyrgyz Republic 2012

	Residence		
Possession	Urban	Rural	Total
Household effects			
Radio	28.9	42.7	37.4
Any television	99.1	98.2	98.5
Black and white television	5.6	7.2	6.6
Color television	97.2	96.9	97.0
DVD player	79.5	82.2	81.1
Satellite antenna	29.3	29.3	29.3
Computer	26.9	11.7	17.6
Internet connection	10.0	5.4	7.2
Any telephone	97.9	97.4	97.6
Mobile telephone	95.3	97.2	96.5
Non-mobile telephone	50.1	9.9	25.4
Intercom	2.6	2.2	2.3
Digital camera	32.8	22.1	26.2
Video camera	12.2	7.0	9.0
Carpet	98.4	98.2	98.3
Table	94.1	87.0	89.8
Chair	73.5	64.8	68.2
Sofa	82.1	75.2	77.9
Bed	71.0	78.3	75.5
Buffet/curio/wall unit	85.0	86.7	86.0
Refrigerator	85.4	75.8	79.5
Freezer	3.2	3.8	3.6
Electric fan	25.6	22.6	23.7
Air conditioner	7.8	3.8	5.3
Washing machine	72.8	61.9	66.1
Vacuum cleaner	63.9	37.2	47.5
Sewing machine	38.1	63.3	53.6
Means of transport			
Bicycle	16.8	29.2	24.4
Animal-drawn cart	1.9	13.3	8.9
Motorcycle/scooter	1.0	1.3	1.2
Car	44.1	47.5	46.2
Truck	2.1	6.2	4.6
Boat with a motor	0.0	0.1	0.1
Tractor/combine	0.4	4.2	2.7
Ownership of agricultural land	22.1	78.4	56.6
Ownership of farm animals[1]	14.8	71.8	49.7
Watch	38.8	35.3	36.7
Bank account	6.3	3.2	4.4
Number	3,105	4,935	8,040

[1] Livestock, herds, other farm animals, beehives, or poultry.

Almost all Kyrgyz households (99 percent) own some type of television, 8 in 10 have a DVD player, and 3 in 10 own a satellite dish. The vast majority of households (98 percent) have a telephone, with mobile phones much more common than fixed phones. Seven percent of KgDHS households reported that they could access the Internet in the home. There is considerable variability in the percentages of households possessing other household items, with households least likely to have an intercom (2 percent) and most likely to have a carpet (98 percent), a table (90 percent), a buffet or wall unit (86 percent), and a refrigerator (80 percent). A comparison of the 2012 KgDHS and 1997 KgDHS (RIOP and Macro International Inc., 1998) results shows increases in television ownership (from 85 percent to 99 percent) as well as refrigerator (from 67 percent to 80 percent) and phone (from 30 percent to 98 percent) ownership.

A comparison of the 2012 KgDHS and 2006 MICS (NSC, 2007) findings reveals both a very rapid expansion of mobile phone ownership, from 27 percent of households in 2006 (data not published) to 97 percent in 2012, and a decline in fixed phone use, from 40 percent in 2006 (data not published) to 25 percent in 2012. Although the change was not as rapid as the increase in cell phone ownership, computer ownership also expanded, from 6 percent of households in 2006 (data not published) to 18 percent in 2012. Radio ownership declined during the same period, from 51 percent in 2006 (data not published) to 37 percent in 2012.

Urban households are more likely to have most but not all of the household items listed in Table 2.4. Three of the most notable differences are in the percentages owning a non-mobile telephone (50 percent of urban households versus 10 percent of rural households), a vacuum cleaner (64 percent versus 37 percent), and a computer (27 percent versus 12 percent). On the other hand, rural households are more likely than urban households to have a sewing machine and to own a radio.

Table 2.4 also presents information on household ownership of a means of transport. Twenty-four percent of Kyrgyz households report owning a bicycle, 46 percent have a car, 5 percent have a truck, and 3 percent own a tractor. Rural households are more likely to have a car or truck than urban households; they are also more likely to own a bicycle (29 percent versus 17 percent) or a tractor (4 percent versus less than 1 percent).

Household ownership of cars has more than doubled since the 1997 KgDHS survey (22 percent versus 46 percent), as has household ownership of bicycles (10 percent versus 24 percent).

More than half (57 percent) of Kyrgyz households own agricultural land,[1] and 50 percent own farm animals. As expected, rural households are much more likely than urban households to own agricultural land (78 percent versus 22 percent) or farm animals (72 percent versus 15 percent).

Few Kyrgyz households have a bank account. Six percent of urban households and 3 percent of rural households report that they have an account.

2.3 HOUSEHOLD WEALTH

The KgDHS survey did not include direct questions on household consumption or income. However, the detailed data on dwelling and household characteristics and household assets obtained in the survey have been used to construct the wealth index presented in Table 2.5. The wealth index has been shown to be consistent with other expenditure and income measures and to provide a useful measure in assessing inequalities in the use of health and other services and in health outcomes (Rutstein and Johnson, 2004).

[1] According to the Constitution and Land Code of the Kyrgyz Republic, a land plot can be allocated for perpetual use to citizens and legal entities of the Kyrgyz Republic. In addition, land suitable for agricultural needs can be allocated to persons and legal entities for agricultural production (Government of the Kyrgyz Republic [GKR], 2010; GKR, 2012b).

The process of constructing the wealth index, which takes into account urban-rural differences in household characteristics, involved three steps. In the first step, a subset of indicators common to both urban and rural areas was used to create wealth scores for households in each area. To create the scores, categorical variables were transformed into separate dichotomous (0-1) indicators. These variables and other continuous measures were then analyzed using a principal components analysis to produce a common factor score for each household. In a second step, separate factor scores were produced for households in urban areas and rural areas using area-specific indicators (Rutstein, 2008). The third step combined the separate area-specific factor scores to produce a nationally applicable combined wealth index by adjusting the area-specific score through regression on the common factor scores. The resulting combined wealth index has a mean of zero and a standard deviation of one. Once the index was computed, national-level wealth quintiles were formed by assigning the household score to each de jure household member, ranking all individuals in the population according to their score, and then dividing the ranking into five equal categories, each including approximately 20 percent of the population.

Table 2.5 shows the distribution of the population across the five wealth quintiles according to urban-rural residence and region. These distributions indicate the degree to which wealth is evenly (or unevenly) dispersed by geographic areas.

Table 2.5 Wealth quintiles

Percent distribution of the de jure population by wealth quintiles and the Gini coefficient, according to residence and region, Kyrgyz Republic 2012

	Wealth quintile							
Residence/region	Lowest	Second	Middle	Fourth	Highest	Total	Number of persons	Gini coefficient
Residence								
Urban	8.3	1.0	0.9	27.4	62.4	100.0	10,789	0.18
Rural	25.5	28.9	29.0	16.5	0.0	100.0	22,916	0.18
Region								
Issyk-Kul	37.4	22.6	14.3	19.7	6.0	100.0	2,946	0.25
Djalal-Abad	22.0	30.0	26.3	14.5	7.2	100.0	5,903	0.23
Naryn	49.1	21.7	12.1	12.8	4.3	100.0	1,568	0.12
Batken	8.3	25.5	41.7	21.3	3.2	100.0	2,601	0.23
Osh Oblast	31.9	25.9	23.8	17.3	1.0	100.0	7,064	0.08
Talas	31.6	27.9	21.9	17.6	1.0	100.0	1,649	0.19
Chui	9.3	17.0	24.3	38.1	11.4	100.0	5,805	0.17
Bishkek City	0.5	0.4	0.1	12.1	86.9	100.0	4,855	0.02
Osh City	1.2	1.0	2.4	18.4	77.1	100.0	1,313	0.07
Total	20.0	20.0	20.0	20.0	20.0	100.0	33,704	0.21

The results in Table 2.5 show that wealth is not evenly distributed by residence or region. For example, 90 percent of the urban population falls in the two highest quintiles. In contrast, 54 percent of the rural population is found in the two lowest quintiles. Similar disparities are observed across regions. For example, 99 percent of Bishkek's population falls in the two highest wealth quintiles, while 71 percent of the population in Naryn and about three-fifths of the population in Issyk-Kul, Osh Oblast, and Talas (60, 58, and 60 percent, respectively) fall in the two lowest quintiles.

Table 2.5 also presents the Gini coefficient, which indicates the level of concentration of wealth (0 being an equal distribution and 1 a totally unequal distribution). The Gini coefficient is 0.21 at the national level and is the same in urban and rural areas (0.18), indicating that wealth is fairly evenly distributed across the population. Regional differences in Gini coefficients are generally not large; the highest coefficients are observed in the Issyk-Kul (0.25), Djalal-Abad (0.23), and Batken (0.23) regions, indicating that these regions have the most inequitable wealth distributions.

2.4 HAND WASHING

Washing hands with soap and water is the ideal hygienic practice. Research shows the substantial potential that hand washing with water and soap (or a non-soap cleansing agent such as ash or sand) has for reducing the transmission of diarrhea, respiratory infections, and other illnesses (Ensink, 2008; Luby et al., 2005). To obtain information on hand washing, KgDHS interviewers asked to see the place where household members most often washed their hands and recorded information on the availability of water and soap and/or other cleansing agents at that place.

Table 2.6 shows that a place for hand washing was observed in 98 percent of households. The main reason that interviewers were not able to observe the place where household members washed their hands was that the place was not in the dwelling (data not shown).

Table 2.6 Hand washing

Percentage of households in which the place most often used for washing hands was observed, and among households in which the place for hand washing was observed, percent distribution by availability of water, soap, and other cleansing agents, Kyrgyz Republic 2012

Background characteristic	Percentage of households where place for washing hands was observed	Number of house-holds	Among households where place for hand washing was observed, percentage with:								Number of households with place for hand washing observed
			Soap and water[1]	Water and cleansing agent[2] other than soap only	Water only	Soap but no water[3]	Cleansing agent other than soap only[2]	No water, no soap, no other cleansing agent	Missing	Total	
Residence											
Urban	99.0	3,105	91.5	0.1	7.4	0.5	0.0	0.5	0.0	100.0	3,075
Rural	97.7	4,935	83.8	0.5	11.3	1.7	0.0	2.5	0.2	100.0	4,819
Region											
Issyk-Kul	97.0	756	97.7	0.0	0.4	1.6	0.0	0.2	0.1	100.0	733
Djalal-Abad	99.8	1,221	64.7	0.7	27.9	1.6	0.0	5.1	0.1	100.0	1,218
Naryn	99.9	363	92.1	0.0	3.9	2.4	0.0	1.6	0.0	100.0	363
Batken	99.3	549	90.5	0.0	2.5	4.0	0.0	2.2	0.7	100.0	545
Osh Oblast	93.5	1,320	78.1	0.1	17.8	2.1	0.1	1.9	0.0	100.0	1,234
Talas	98.8	332	92.6	0.2	2.3	2.2	0.0	2.6	0.1	100.0	328
Chui	99.1	1,649	96.3	0.8	1.5	0.2	0.0	1.1	0.1	100.0	1,635
Bishkek City	99.1	1,478	89.5	0.2	10.1	0.0	0.0	0.2	0.0	100.0	1,465
Osh City	100.0	373	98.2	0.0	1.5	0.0	0.0	0.0	0.3	100.0	373
Wealth quintile											
Lowest	95.1	1,276	87.2	0.3	10.7	0.8	0.0	1.0	0.0	100.0	1,214
Second	97.4	1,368	81.5	0.5	14.1	1.8	0.1	1.8	0.2	100.0	1,332
Middle	98.7	1,504	81.6	0.4	12.1	2.4	0.0	3.2	0.2	100.0	1,485
Fourth	98.8	1,750	88.4	0.4	7.3	1.4	0.0	2.4	0.1	100.0	1,729
Highest	99.6	2,142	92.3	0.1	7.1	0.2	0.0	0.3	0.0	100.0	2,133
Total	98.2	8,040	86.8	0.3	9.8	1.2	0.0	1.7	0.1	100.0	7,893

[1] Soap includes soap or detergent in bar, liquid, powder, or paste form. This column includes households with soap and water only as well as those that had soap and water and another cleansing agent.
[2] Cleansing agents other than soap include locally available materials such as ash, mud, or sand.
[3] Includes households with soap only as well as those with soap and another cleansing agent.

Among households where the hand washing place was observed, 87 percent had soap and water available. In most other households, only water was available. Only 2 percent of households had no water, soap, or other cleaning agent available.

Urban households were more likely to have soap and water available at the usual hand washing place than rural households (92 percent versus 84 percent). The likelihood of having soap and water available was highest in Osh and the Issyk-Kul region (98 percent each) and lowest in the Djalal-Abad region (65 percent). Households in the Djalal-Abad and Osh Oblast regions were more likely to have only water available (28 percent and 18 percent, respectively) than households in other regions. Households in the highest, fourth, and lowest wealth quintiles were more likely to have soap and water available than those in the second and middle wealth quintiles.

2.5 HOUSEHOLD POPULATION BY AGE AND SEX

Table 2.7 presents the distribution of the 2012 KgDHS de facto household population by age, according to sex and residence. A total of 34,131 persons were identified in the 8,040 households interviewed for the KgDHS.

Table 2.7 Household population by age, sex, and residence

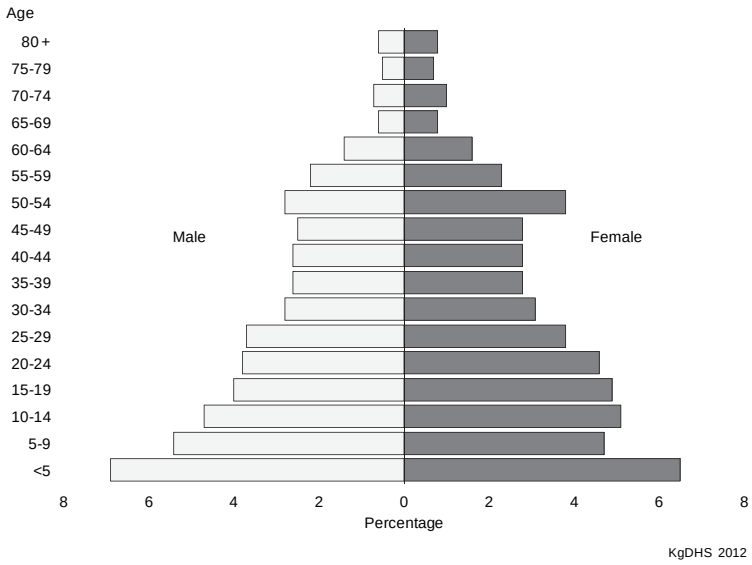
Percent distribution of the de facto household population by five-year age groups, according to sex and residence, Kyrgyz Republic 2012

	Urban			Rural			Total		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	13.3	9.9	11.4	15.0	13.8	14.4	14.5	12.5	13.5
5-9	10.5	8.0	9.1	11.6	9.6	10.5	11.2	9.0	10.1
10-14	8.5	7.5	8.0	10.4	10.8	10.6	9.8	9.7	9.8
15-19	8.5	10.0	9.3	8.4	9.2	8.8	8.4	9.5	9.0
20-24	8.5	10.8	9.7	7.7	7.9	7.8	7.9	8.9	8.4
25-29	8.4	8.1	8.2	7.3	6.8	7.1	7.7	7.2	7.4
30-34	6.6	6.2	6.4	5.5	5.8	5.7	5.9	6.0	5.9
35-39	5.4	5.6	5.5	5.6	5.2	5.4	5.5	5.3	5.4
40-44	5.8	6.0	5.9	5.2	5.1	5.1	5.4	5.4	5.4
45-49	5.3	5.8	5.6	5.2	5.0	5.1	5.3	5.3	5.3
50-54	6.9	8.1	7.5	5.3	6.9	6.1	5.8	7.3	6.6
55-59	4.6	4.6	4.6	4.6	4.3	4.5	4.6	4.4	4.5
60-64	3.2	3.2	3.2	2.9	2.9	2.9	3.0	3.0	3.0
65-69	1.2	1.5	1.4	1.2	1.6	1.4	1.2	1.6	1.4
70-74	1.5	2.2	1.9	1.4	1.9	1.7	1.5	2.0	1.7
75-79	0.8	1.0	0.9	1.2	1.4	1.3	1.1	1.3	1.2
80 +	0.8	1.6	1.2	1.4	1.6	1.5	1.2	1.6	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	4,992	6,046	11,038	11,314	11,779	23,093	16,306	17,825	34,131

The age structure of the household population shows the effects of past demographic trends in the Kyrgyz Republic, particularly the country's moderately high fertility. More than half of the household population is under age 25 (51 percent), and 33 percent is less than age 15. The proportion of the population under age 25 is higher in rural areas (52 percent) than in urban areas (48 percent).

The population pyramid shown in Figure 2.2 was constructed using the age and sex distribution of the KgDHS household population. The pyramid has a wide base, which is typical of populations that have experienced high fertility in the recent past. The unusually large proportion of women age 50-54 is probably due to interviewers deliberately transferring women out of the age range of eligibility for individual interviews in order to reduce their workload.

Figure 2.2
Population pyramid



2.6 HOUSEHOLD COMPOSITION

Table 2.8 looks at aspects of the composition of households that may affect the allocation of resources (financial, emotional, etc.) available to household members. For example, in cases where women are heads of households, financial resources are often limited. Similarly, the size of the household affects the well-being of its members. When the size of the household is large, crowding can lead to health problems. The presence of orphans and foster children may also strain household resources.

Table 2.8 shows that the head of most Kyrgyz households is male; only 27 percent of households are headed by a female, with the proportion of female-headed households not having changed since the 1997 KgDHS (26 percent). However, there has been a slight increase over time in the proportion of female-headed households in rural areas, from 18 percent in 1997 to 21 percent in 2012, and a decrease in urban areas, from 39 percent to 36 percent.

Table 2.8 Household composition

Percent distribution of households by sex of head of household and by household size, mean size of household, and percentage of households with orphans and foster children under age 18, according to residence, Kyrgyz Republic 2012

	Residence		
Characteristic	Urban	Rural	Total
Household headship			
Male	63.7	78.9	73.1
Female	36.3	21.1	26.9
Total	100.0	100.0	100.0
Number of usual members			
0	0.2	0.0	0.1
1	13.0	5.0	8.1
2	19.4	10.3	13.8
3	21.3	14.5	17.1
4	19.6	18.6	19.0
5	14.2	20.0	17.7
6	7.3	15.0	12.0
7	2.9	8.6	6.4
8	1.4	4.0	3.0
9+	0.7	4.0	2.7
Total	100.0	100.0	100.0
Mean size of households	3.5	4.6	4.2
Percentage of households with orphans and foster children under age 18			
Foster children[1]	9.0	15.7	13.1
Double orphans	0.4	0.6	0.5
Single orphans[2]	3.4	3.8	3.7
Foster and/or orphan children	11.8	18.3	15.8
Number of households	3,105	4,935	8,040

Note: Table is based on de jure household members (i.e., usual residents).
[1] Foster children are those under age 18 living in households with neither their mother nor their father present.
[2] Includes children with one dead parent and an unknown survival status of the other parent.

The average household has 4.2 members, as compared with 4.6 in 1997. More than half of households have three to five members, while 22 percent have one or two members and about one-quarter (24 percent) have six or more members. Residence is strongly related to household size; on average, rural households have 4.6 members, one more than the average urban household (3.5 members). The decrease in household size over time is especially noticeable in rural areas, with a decline from 5.4 persons in 1997 to 4.6 in 2012. The average household size in urban areas has not changed since the 1997 KgDHS (RIOP and Macro International Inc., 1998).

The 2012 KgDHS collected information on the living arrangements and survival status of parents of children under age 18. This information is used in Table 2.8 to identify the percentage of households that include foster children (children whose parents are both alive but not living in the household with the child) and orphans (children whose father or mother, or both, are dead). Sixteen percent of Kyrgyz households are caring for foster children and/or orphans. Additional details on the prevalence of fosterhood and orphanhood among children under age 18 are presented below.

2.7 BIRTH REGISTRATION

The registration of a child's birth is a critical step to ensuring that the child can claim full legal rights and protections in a society (UNICEF, 2012). Table 2.9 provides information collected in the KgDHS Household Questionnaire on birth registration and possession of a birth certificate among de jure children under age 5. Birth registration is the inscription of the facts of the birth into an official log kept at the registrar's office. A birth certificate is typically issued at the time of registration or later as proof of the registration of the birth. Not all children who are registered have a birth certificate, because some certificates may have been lost or were never issued. However, all children with a certificate have been registered.

Table 2.9 Birth registration of children under age 5

Percentage of de jure children under age 5 whose births are registered with the civil authorities, according to background characteristics, Kyrgyz Republic 2012

	Children whose births are registered			
Background characteristic	Percentage who had birth certificate	Percentage who did not have birth certificate	Percentage registered	Number of children
Age				
<2	95.4	2.5	97.8	1,881
2-4	97.6	1.1	98.7	2,558
Sex				
Male	96.4	1.8	98.2	2,300
Female	97.0	1.5	98.5	2,140
Residence				
Urban	96.2	2.7	98.9	1,213
Rural	96.8	1.3	98.1	3,226
Region				
Issyk-Kul	96.6	1.6	98.2	408
Djalal-Abad	97.0	1.5	98.5	788
Naryn	98.4	1.3	99.8	205
Batken	97.0	1.9	98.9	386
Osh Oblast	98.2	1.2	99.5	1,029
Talas	93.5	2.3	95.8	268
Chui	95.2	0.4	95.7	701
Bishkek City	95.8	4.0	99.8	528
Osh City	96.4	2.0	98.3	128
Wealth quintile				
Lowest	98.0	1.4	99.4	931
Second	96.6	1.4	98.0	908
Middle	97.0	1.4	98.4	942
Fourth	95.1	1.8	96.9	960
Highest	96.8	2.5	99.3	699
Total	96.7	1.7	98.3	4,439

Birth registration is nearly universal in the Kyrgyz Republic, with 98 percent of births in the five years preceding the survey registered and practically all of these children having a certificate. Small variations are found across subgroups of children; in particular, children in the Talas region are somewhat less likely to have a birth certificate (94 percent) than children from other regions.

If the child's birth was not registered, the respondent was asked to give a reason. Among the small group of children age 0-59 months whose birth was not registered (2 percent), the main reasons given for non-registration were that a parent had no passport (21 percent) or the marriage was not registered (12 percent); 61 percent of respondents did not know the reason (data not shown separately).

2.8 CHILDREN'S LIVING ARRANGEMENTS

The 2012 KgDHS included a series of questions on the living arrangements and survival status of the biological parents of all children under age 18. These data were used above to show the percentage of households in the Kyrgyz Republic that are caring for foster children or orphans. Table 2.10 uses that information to look at the living arrangements among children under age 18 and to assess the extent of fosterhood and orphanhood among children in the Kyrgyz Republic. The table shows that 74 percent of de jure children under age 18 live with both parents; 11 percent are living with their mother only, 2 percent are living with their father only, and 12 percent are not living with either parent.

Eleven percent of children under age 18 are defined as foster children (i.e., their parents are both alive but are not living in the same household as the child). Four percent of children under age 18 are orphans (i.e., one or both parents are dead). Among orphaned children, most have lost their fathers; less than 1 percent have lost their mothers, and very few have lost both parents (0.3 percent). Children who are not living with a biological parent include foster children and double orphans (children who have lost both parents); 12 percent of Kyrgyz children fall into this category.

The prevalence of orphanhood among children under age 15 can be compared with national-level data from the 1997 KgDHS. Overall, the proportion of children under age 15 living with both parents has declined, from 83 percent in 1997 to 76 percent in 2012. This is due to a substantial increase in the proportion of children not living with a biological parent (from 5 percent in 1997 to 12 percent in 2012).

Table 2.10 shows that, as expected, the percentage of orphaned children rises with age, from 1 percent among children age 0-4 to 9 percent among children age 15-17. Similarly, the proportion of children who are not living with a biological parent increases with age, from 11 percent among children age 0-4 to 16 percent among children age 15-17. The proportions of children who are not living with a biological parent are 20 percent in the Osh Oblast region and 15 percent in Naryn, as compared with 5 percent in Bishkek. Table 2.10 shows that children from the two lowest wealth quintiles are most likely not to live with a biological parent.

Table 2.10 Children's living arrangements and orphanhood

Percent distribution of de jure children under age 18 by living arrangements and survival status of parents, the percentage of children not living with a biological parent, and the percentage of children with one or both parents dead, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Living with both parents	Living with mother but not with father		Living with father but not with mother		Not living with either parent					Total	Percentage not living with a biological parent	Percentage with one or both parents dead[1]	Number of children
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Only father alive	Only mother alive	Both dead	Missing information on father/ mother				
Age														
0-4	78.1	9.7	0.6	0.6	0.0	10.2	0.0	0.3	0.0	0.4	100.0	10.5	1.0	4,439
<2	82.1	10.7	0.2	0.4	0.1	6.0	0.0	0.0	0.1	0.5	100.0	6.1	0.3	1,881
2-4	75.3	8.9	1.0	0.8	0.0	13.2	0.0	0.5	0.0	0.3	100.0	13.8	1.6	2,558
5-9	75.7	7.5	2.4	2.1	0.2	11.1	0.1	0.4	0.2	0.4	100.0	11.8	3.2	3,376
10-14	71.9	7.8	4.0	2.1	0.8	12.1	0.2	0.8	0.2	0.2	100.0	13.2	5.9	3,291
15-17	65.7	8.8	5.2	1.9	1.2	13.8	0.1	0.8	1.5	1.0	100.0	16.3	8.9	1,978
Sex														
Male	74.7	8.2	2.6	1.7	0.4	11.1	0.1	0.6	0.3	0.3	100.0	12.0	3.9	6,615
Female	73.4	8.8	2.6	1.4	0.5	11.8	0.1	0.5	0.4	0.5	100.0	12.8	4.0	6,470
Residence														
Urban	72.5	11.3	3.7	1.3	0.4	9.4	0.0	0.6	0.3	0.6	100.0	10.4	4.9	3,673
Rural	74.7	7.4	2.2	1.7	0.5	12.2	0.1	0.5	0.3	0.4	100.0	13.2	3.6	9,412
Region														
Issyk-Kul	76.6	5.6	3.3	0.9	0.4	10.9	0.3	0.9	0.4	0.9	100.0	12.5	5.2	1,169
Djalal-Abad	78.2	5.8	2.0	1.8	0.4	10.5	0.1	0.6	0.5	0.1	100.0	11.7	3.6	2,421
Naryn	75.7	3.7	3.2	1.4	0.5	13.7	0.1	1.2	0.3	0.2	100.0	15.3	5.4	659
Batken	73.8	12.8	1.9	2.3	0.2	8.1	0.2	0.1	0.2	0.5	100.0	8.5	2.5	1,073
Osh Oblast	65.4	11.0	1.6	1.6	0.5	18.5	0.0	0.4	0.5	0.4	100.0	19.5	3.1	3,102
Talas	81.6	3.5	2.5	1.3	0.4	8.7	0.2	0.7	0.5	0.7	100.0	10.0	4.2	719
Chui	77.1	7.3	3.4	1.8	0.7	8.3	0.0	0.5	0.1	0.7	100.0	9.0	4.7	1,989
Bishkek City	77.3	12.2	3.9	1.1	0.1	5.0	0.0	0.1	0.0	0.4	100.0	5.1	4.1	1,491
Osh City	66.6	11.2	4.6	1.4	0.2	13.9	0.0	1.7	0.2	0.2	100.0	15.8	6.8	460
Wealth quintile														
Lowest	74.1	6.5	1.2	1.1	0.1	15.2	0.2	0.6	0.7	0.3	100.0	16.7	2.8	2,839
Second	75.4	5.5	2.0	2.1	0.3	13.8	0.1	0.4	0.2	0.2	100.0	14.5	3.1	2,795
Middle	75.4	8.3	2.4	1.7	0.7	10.2	0.1	0.6	0.2	0.4	100.0	11.1	4.0	2,750
Fourth	72.7	10.7	3.6	1.8	0.5	9.1	0.1	0.3	0.5	0.7	100.0	10.0	5.0	2,596
Highest	72.2	12.8	4.3	1.1	0.5	7.7	0.0	0.8	0.1	0.5	100.0	8.5	5.6	2,105
Total <15	75.5	8.5	2.2	1.5	0.3	11.0	0.1	0.5	0.1	0.3	100.0	11.7	3.1	11,107
Total <18	74.1	8.5	2.6	1.6	0.4	11.4	0.1	0.5	0.3	0.4	100.0	12.4	4.0	13,085

Note: Table is based on de jure household members (i.e., usual residents).

[1] Includes children with father dead, mother dead, both dead, and one parent dead but missing information on survival status of the other parent.

2.9 EDUCATION OF HOUSEHOLD MEMBERS

Many behaviors, including those in the areas of reproduction, use of contraception, child health, and proper hygienic habits, are affected by the education of household members. In the 2012 KgDHS, all household members and visitors age 5 and over were asked questions about the highest level of schooling completed, and persons age 5-24 were asked about recent school attendance. This information is used to examine several aspects of the educational experience of the KgDHS household population, including the overall educational attainment of household members, school attendance among the primary and secondary school age populations, and participation in early childhood education programs.

2.9.1 Educational Attainment

Tables 2.11.1 and 2.11.2 present information on the educational attainment of members of the de facto female and male household populations age 6 and over, respectively. Within the Kyrgyz Republic system, educational levels are as follows: primary (grades 1-4); basic general, also known as stage 1 of secondary education (grades 5-9[2]); secondary general, also known as stage 2 of secondary education (grades 10-11); professional primary/middle (specialized technical or vocational school programs involving two or three grades each); and higher (university or postgraduate programs). Individuals who attended or completed the basic general level (grades 5-9) and those who attended but did not complete the secondary general level (grades 10-11) are combined in the "some secondary" category. The "completed secondary" category includes individuals who completed grade 11 and those who completed grade 10 and were awarded a secondary education school diploma ("attestat" in the older Soviet education system terminology).

Overall, most of the female population age 6 and older has attained at least some secondary education; only one in seven never attended school (4 percent) or attended only the primary level (10 percent). Three in 10 women completed secondary school only, and 5 percent attended or completed professional primary education only. Nine percent of women attended or completed professional middle education, and 19 percent have a university or higher education. Females have completed a median of 9.8 years of schooling.

Similar to the female population, only one in six males age 6 and over never attended school or attained only the primary level. Three in 10 men completed secondary school only, and 16 percent have a higher education. Males have completed a median of 9.7 years of schooling.

[2] It should be noted that Kyrgyz's educational system has undergone several stages of restructuring over the past few decades. The current system of formal education was introduced in September 1990. In the new system, primary education consists of grades 1-4; basic general education consists of grades 5-9, instead of grades 5-8 as in the previous system; and secondary general (high school) consists of grades 10-11 instead of grades 9-10. For the purposes of categorizing educational level in the 2012 KgDHS, individuals who were age 15 or older in 1990 and reported attending or completing grade 9 were included in the secondary education category because they had attained grade 9 before the current educational system change took effect. Individuals who reported at the time of the interview that they had attended or completed grade 9 and were age 14 or younger in 1990 were included in the basic general education category, in accordance with the new system.

Table 2.11.1 Educational attainment of the female household population

Percent distribution of the de facto female household population age 6 and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	No education	Some primary	Completed primary[1]	Some secondary[2]	Completed secondary[3]	Professional primary	Professional middle	Higher	Don't know/ missing	Total	Number	Median years completed
Age												
6-9	31.6	65.8	2.1	0.3	0.0	0.0	0.0	0.0	0.1	100.0	1,305	0.6
10-14	0.1	12.2	16.2	71.4	0.0	0.0	0.0	0.0	0.0	100.0	1,727	5.2
15-19	0.3	0.3	0.2	54.3	27.1	3.2	5.0	9.6	0.0	100.0	1,688	9.4
20-24	0.4	0.2	0.3	11.5	33.5	4.2	10.6	39.4	0.0	100.0	1,582	11.4
25-29	0.2	0.4	0.1	8.7	40.4	3.7	8.3	38.3	0.0	100.0	1,291	11.1
30-34	0.5	0.6	0.0	13.4	40.9	4.6	9.4	30.5	0.0	100.0	1,063	10.8
35-39	0.1	0.0	0.0	6.9	50.3	7.1	13.7	21.9	0.0	100.0	948	10.6
40-44	0.2	0.1	0.0	5.0	44.3	12.8	15.0	22.5	0.0	100.0	958	10.3
45-49	0.1	0.2	0.0	3.9	42.5	11.0	17.8	24.5	0.0	100.0	940	10.6
50-54	0.3	0.3	0.0	10.2	47.3	6.9	15.2	19.7	0.0	100.0	1,304	9.8
55-59	0.3	0.3	0.6	12.3	42.5	7.0	13.7	23.0	0.3	100.0	788	9.9
60-64	1.8	0.5	0.3	17.4	40.1	5.1	15.2	19.4	0.1	100.0	539	9.8
65+	12.2	6.8	6.9	41.6	16.0	2.0	7.2	7.2	0.1	100.0	1,155	7.3
Residence												
Urban	3.4	6.5	1.8	17.5	22.5	4.2	12.1	31.9	0.0	100.0	5,369	10.6
Rural	4.1	8.4	3.1	26.2	34.2	4.8	7.3	11.8	0.1	100.0	9,922	9.5
Region												
Issyk-Kul	4.4	7.5	3.2	18.7	27.4	9.6	11.2	18.0	0.0	100.0	1,302	10.1
Djalal-Abad	5.6	9.1	3.6	28.1	31.1	4.0	7.2	11.1	0.1	100.0	2,622	9.3
Naryn	5.4	8.9	3.9	20.8	29.7	2.6	12.9	16.0	0.0	100.0	654	9.7
Batken	4.3	7.3	2.0	18.9	45.9	1.2	8.9	11.3	0.2	100.0	1,104	9.7
Osh Oblast	3.8	7.8	2.6	31.1	39.1	2.3	4.5	8.6	0.1	100.0	3,130	9.3
Talas	3.0	11.1	3.5	20.0	29.2	5.8	12.8	14.4	0.1	100.0	680	9.8
Chui	2.6	7.3	2.7	24.2	26.0	8.7	8.6	19.7	0.0	100.0	2,677	9.8
Bishkek City	3.0	5.9	1.0	12.2	16.5	3.6	14.2	43.5	0.0	100.0	2,490	12.1
Osh City	3.3	6.9	2.4	24.8	30.4	1.5	6.5	24.2	0.0	100.0	632	9.7
Wealth quintile												
Lowest	3.8	8.9	3.2	23.3	35.1	3.9	8.5	13.2	0.0	100.0	2,874	9.6
Second	4.2	8.7	3.0	26.7	35.2	5.0	6.6	10.6	0.1	100.0	2,909	9.4
Middle	4.0	8.9	3.2	27.3	34.5	4.2	7.1	10.6	0.1	100.0	2,941	9.4
Fourth	4.3	6.5	2.5	24.4	29.2	6.2	9.5	17.3	0.0	100.0	3,065	9.7
Highest	3.2	6.0	1.5	15.6	18.7	3.9	12.4	38.7	0.0	100.0	3,503	11.4
Total[4]	3.9	7.7	2.6	23.2	30.1	4.6	9.0	18.9	0.0	100.0	15,292	9.8

[1] Completed grade 4 at the primary level.
[2] Attended or completed the basic general level (grades 5-9) and attended but did not complete the secondary level (grades 10-11).
[3] Completed grade 11 at the secondary level or completed grade 10 at the secondary level and has a general education school diploma ("attestat" as in older Soviet educational system terminology).
[4] Total includes 3 persons who are missing information on age.

Table 2.11.2 Educational attainment of the male household population

Percent distribution of the de facto male household population age 6 and over by highest level of schooling attended or completed and median years completed, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	No education	Some primary	Completed primary[1]	Some secondary[2]	Completed secondary[3]	Professional primary	Professional middle	Higher	Don't know/ missing	Total	Number	Median years completed
Age												
6-9	30.8	66.5	2.2	0.3	0.0	0.1	0.0	0.0	0.1	100.0	1,461	0.6
10-14	0.5	12.0	18.3	69.2	0.0	0.0	0.0	0.0	0.0	100.0	1,602	5.1
15-19	0.6	0.2	0.0	54.6	27.8	4.1	5.0	7.7	0.0	100.0	1,377	9.3
20-24	0.5	0.4	0.1	13.7	43.9	5.2	7.7	28.5	0.0	100.0	1,295	10.8
25-29	0.2	0.6	0.6	11.6	43.8	6.1	5.5	31.6	0.0	100.0	1,248	10.8
30-34	0.2	0.2	0.1	13.7	47.9	4.8	5.0	28.2	0.0	100.0	954	10.6
35-39	0.6	0.1	0.0	10.5	51.9	11.1	8.2	17.5	0.0	100.0	901	10.4
40-44	0.2	0.3	0.0	7.6	51.8	10.6	12.3	17.3	0.0	100.0	882	9.9
45-49	0.2	0.0	0.0	4.0	46.3	13.9	15.8	19.7	0.0	100.0	858	10.1
50-54	0.4	0.1	0.0	7.9	44.7	10.7	14.6	21.6	0.1	100.0	943	9.9
55-59	0.2	0.3	0.3	13.8	42.4	6.4	14.5	22.1	0.0	100.0	749	9.9
60-64	0.6	0.0	0.8	17.4	38.5	8.4	14.3	20.0	0.0	100.0	493	9.8
65+	5.9	5.3	5.2	35.1	23.8	4.0	7.2	13.3	0.2	100.0	804	8.6
Residence												
Urban	3.8	8.2	2.3	17.6	24.4	5.4	10.9	27.4	0.0	100.0	4,233	10.3
Rural	4.1	9.5	3.1	24.8	36.0	5.9	5.6	11.1	0.0	100.0	9,336	9.5
Region												
Issyk-Kul	4.7	9.8	3.0	19.7	32.8	7.2	6.8	16.1	0.0	100.0	1,216	9.7
Djalal-Abad	4.7	10.4	3.3	26.0	35.4	5.7	5.7	8.9	0.0	100.0	2,439	9.4
Naryn	6.6	9.3	2.6	20.2	37.4	3.8	8.4	11.7	0.0	100.0	675	9.6
Batken	3.7	8.1	4.5	22.0	40.8	2.0	6.9	11.7	0.3	100.0	1,013	9.6
Osh Oblast	3.8	9.6	3.8	26.7	40.8	3.2	4.4	7.8	0.0	100.0	2,748	9.3
Talas	2.6	11.1	2.7	21.6	36.3	5.2	9.1	11.3	0.1	100.0	655	9.7
Chui	3.5	7.9	1.3	23.6	25.7	12.5	6.7	18.9	0.0	100.0	2,422	9.9
Bishkek City	3.9	7.0	2.1	13.1	17.8	4.3	14.2	37.6	0.0	100.0	1,859	11.2
Osh City	2.4	10.3	2.5	25.2	28.7	1.1	4.0	25.7	0.0	100.0	543	9.7
Wealth quintile												
Lowest	3.8	9.1	3.1	23.4	37.8	4.0	6.0	12.9	0.0	100.0	2,828	9.6
Second	3.9	9.6	3.3	25.3	36.3	5.4	5.6	10.6	0.1	100.0	2,831	9.5
Middle	4.6	9.5	3.1	25.5	36.3	6.2	5.5	9.3	0.0	100.0	2,689	9.4
Fourth	4.1	8.6	2.8	22.4	30.9	8.7	7.5	15.1	0.0	100.0	2,632	9.7
Highest	3.7	8.4	1.9	15.6	19.7	4.6	11.9	34.1	0.0	100.0	2,589	10.7
Total[4]	4.0	9.1	2.8	22.5	32.4	5.8	7.2	16.2	0.0	100.0	13,569	9.7

[1] Completed grade 4 at the primary level.
[2] Attended or completed the basic general level (grades 5-9) and attended but did not complete the secondary level (grades 10-11).
[3] Completed grade 11 at the secondary level or completed grade 10 at the secondary level and has a general education school diploma ("attestat" as in older Soviet educational system terminology).
[4] Total includes 1 person with missing information on age.

Tables 2.11.1 and 2.11.2 also show differentials in educational attainment by age, residence, region, and wealth quintile. The majority of both females and males in every subgroup have at least some secondary education with the exception of children age 6-9, who are, as expected, concentrated at the primary level or have not yet entered school. Median completed years of schooling is higher in urban areas than in rural areas among both females (10.6 years versus 9.5 years) and males (10.3 years versus 9.5 years). On average, educational attainment is highest in Bishkek and lowest in the Osh Oblast and Djalal-Abad regions. Among females, there is a difference of 2.8 years in median years of schooling between Bishkek and the Osh Oblast region, while the difference among males is 1.9 years. Bishkek residents have a clear educational advantage over the rest of the country: nearly half of the women in Bishkek (44 percent) and 38 percent of men have some university education, as compared with 9 percent of the women and 8 percent of the men in the Osh Oblast region. Wealth has a positive relationship with education. Among females median years of schooling varies from 9.6 in the lowest quintile to 11.4 in the highest quintile, and among males the median ranges from 9.6 years in the lowest quintile to 10.7 years in the highest quintile.

2.9.2 School Attendance

Table 2.12 provides information on net and gross attendance ratios and the gender parity index by school level, sex, residence, and region, and Figure 2.3 presents age-specific attendance rates. For purposes of calculating these indicators, children were considered to be currently attending if they had attended school at the given level at any time during the current school year.

The net attendance ratio (NAR) is an indicator of participation in schooling among those of official school age, that is, children age 7-10 for the primary level and children age 11-17 for the secondary level. An NAR of 100 would indicate that all children in the official age range are attending school at that level. The gross attendance ratio (GAR) is an indicator of participation in schooling among those of any age between 5 and 24 years, expressed as a percentage of the official school age population. The GAR can exceed 100 percent if children who are overage or underage for a given level are attending school at that level.[3]

The results in Table 2.12 show that school attendance among the school age population is high but not universal. Among children age 7-10 who should be attending the primary level, 87 percent are doing so. A comparison of the primary-level NAR and GAR indicates that 19 percent of students attending primary school are underage or overage for that level. Differentials in the NAR and GAR at the primary level are generally minor with the exception of Osh, where the NAR among males is 95 percent. In the past six years, the NAR has decreased by 5 percentage points; according to the MICS, 92 percent of children who should have been attending primary education in 2006 were doing so (NSC, 2007).

The secondary school NAR indicates that 86 percent of children who should be attending the secondary level are doing so. A comparison of the secondary-level NAR and GAR shows that 8 percent of secondary school students are outside of the official school age for that level. There are only minor differences in the NAR and GAR across subgroups with the exception of Bishkek, where the NAR is lowest (76 percent) and 14 percent of students attending secondary school are underage or overage for that level. The NAR has decreased by 3 percentage points in the past six years; 89 percent of children who should have been attending secondary education in 2006 were doing so (NSC, 2007).

[3] Students who are overage for a given level of schooling may have started school overage, may have repeated one or more grades, or may have dropped out of school and later returned. Children who are underage for a given level may have started school underage or skipped one or more grades.

Table 2.12 School attendance ratios

Net attendance ratios (NAR) and gross attendance ratios (GAR) for the de facto household population by sex and level of schooling, and the gender parity index (GPI), according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Net attendance ratio[1]				Gross attendance ratio[2]			
	Male	Female	Total	Gender parity index[3]	Male	Female	Total	Gender parity index[3]
PRIMARY SCHOOL								
Residence								
Urban	85.2	85.5	85.3	1.00	107.2	103.2	105.3	0.96
Rural	86.8	87.4	87.1	1.01	106.4	104.6	105.5	0.98
Region								
Issyk-Kul	83.0	86.7	84.6	1.05	95.5	98.5	96.9	1.03
Djalal-Abad	88.8	89.9	89.3	1.01	115.7	109.7	112.7	0.95
Naryn	85.7	83.4	84.5	0.97	100.7	99.4	100.1	0.99
Batken	89.4	83.8	86.8	0.94	116.1	98.5	107.9	0.85
Osh Oblast	89.8	87.5	88.7	0.97	109.4	107.4	108.5	0.98
Talas	83.1	88.1	85.7	1.06	95.7	106.1	101.0	1.11
Chui	80.4	82.4	81.4	1.02	99.8	97.7	98.7	0.98
Bishkek City	82.7	89.6	86.1	1.08	106.0	104.8	105.4	0.99
Osh City	95.4	87.4	91.8	0.92	110.7	110.1	110.4	1.00
Wealth quintile								
Lowest	90.2	89.4	89.8	0.99	105.3	106.9	106.1	1.02
Second	83.8	86.1	84.9	1.03	103.9	100.9	102.4	0.97
Middle	85.2	90.0	87.5	1.06	106.5	111.3	108.8	1.05
Fourth	87.1	81.8	84.5	0.94	112.0	99.5	105.9	0.89
Highest	85.2	86.2	85.7	1.01	106.6	101.4	104.2	0.95
Total	86.3	86.8	86.6	1.01	106.7	104.2	105.5	0.98
SECONDARY SCHOOL								
Residence								
Urban	81.0	82.0	81.5	1.01	85.7	94.3	90.3	1.10
Rural	86.6	88.5	87.6	1.02	94.5	95.7	95.1	1.01
Region								
Issyk-Kul	87.9	91.8	89.9	1.04	92.5	94.4	93.5	1.02
Djalal-Abad	82.5	85.1	83.8	1.03	89.7	89.8	89.7	1.00
Naryn	87.6	89.5	88.5	1.02	92.6	94.6	93.5	1.02
Batken	87.3	90.0	88.6	1.03	92.7	98.2	95.3	1.06
Osh Oblast	88.9	90.2	89.6	1.02	100.7	99.4	99.9	0.99
Talas	89.1	84.6	86.9	0.95	93.1	88.8	91.0	0.95
Chui	83.7	84.7	84.3	1.01	89.1	95.4	92.5	1.07
Bishkek City	74.4	77.3	76.0	1.04	80.4	97.3	89.5	1.21
Osh City	89.2	84.8	87.1	0.95	92.4	89.9	91.2	0.97
Wealth quintile								
Lowest	89.5	89.7	89.6	1.00	94.4	95.2	94.8	1.01
Second	85.7	91.6	88.8	1.07	95.8	99.8	97.9	1.04
Middle	87.3	86.0	86.6	0.99	95.6	92.3	93.8	0.97
Fourth	79.0	82.9	81.1	1.05	86.1	90.6	88.6	1.05
Highest	81.6	81.1	81.3	0.99	85.6	98.3	92.4	1.15
Total	85.0	86.6	85.9	1.02	92.0	95.3	93.7	1.04

[1] The NAR for primary school is the percentage of the primary school age (7-10 years) population that is attending primary school. The NAR for secondary school is the percentage of the secondary school age (11-17 years) population that is attending secondary school. By definition, the NAR cannot exceed 100 percent.

[2] The GAR for primary school is the total number of primary school students expressed as a percentage of the official primary school age population. The GAR for secondary school is the total number of secondary school students expressed as a percentage of the official secondary school age population. If there are significant numbers of overage and underage students at a given level of schooling, the GAR can exceed 100 percent.

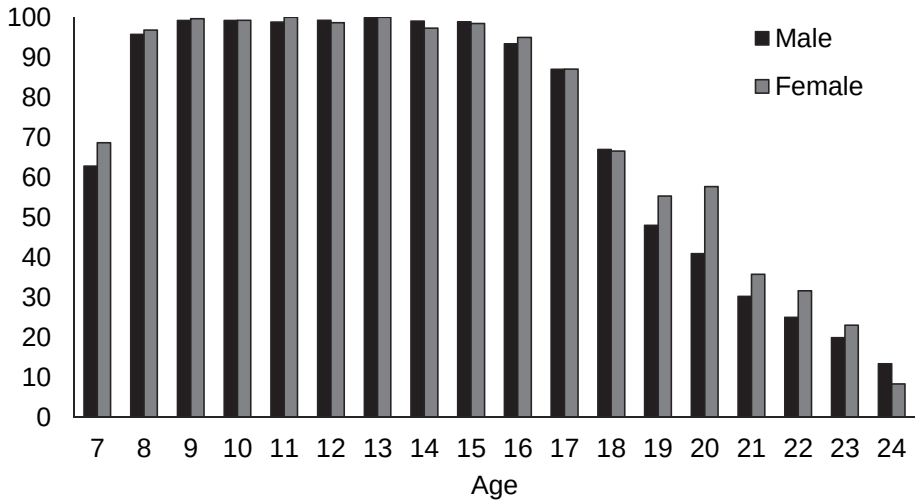
[3] The gender parity index for primary school is the ratio of the primary school NAR (GAR) for females to the NAR (GAR) for males. The gender parity index for secondary school is the ratio of the secondary school NAR (GAR) for females to the NAR (GAR) for males.

Table 2.12 also includes the gender parity index (GPI), or the ratio of the female to male GAR at the primary and secondary levels. The GPI indicates the magnitude of the gender gap in attendance ratios. If there is no gender difference, the GPI is 1.00. The wider the disparity in favor of males, the closer the GPI will be to zero; the GPI will exceed 1.00 if the gender gap favors females. Table 2.12 shows that, at the primary level, the NAR GPI is 1.01 and the GAR GPI is 0.98, indicating that there is almost no gender gap in primary school attendance at the national level; however, there are some differences by region and wealth. In Batken and Osh and in the fourth wealth quintile, the disparity is in favor of males: the

respective NAR GPIs at the primary school level are 0.94, 0.92, and 0.94, and the GAR GPIs are 0.85 in Batken and 0.89 in the fourth wealth quintile. At the secondary level, the NAR and GAR GPIs are almost identical at 1.02 and 1.04, evidence of a modest gender gap in secondary attendance favoring females. Secondary school NAR and GAR GPIs are lowest in Talas and Osh and in the middle wealth quintile, indicating that males have a modest advantage over females in secondary school attendance in these subgroups.

Figure 2.3 presents information on age-specific school attendance rates for the population age 7-24. Attendance levels are low among children under age 7, and only about two-thirds of children age 7 (the age at which children are expected to enter school) are currently attending school. The low attendance rate may in part reflect the fact that some of the children were not age 7 at the start of the school year and, thus, were not eligible to start school. Among children age 8-14, attendance rates exceed 96 percent. In general, rates are slightly higher among girls than boys. Among the population age 15-24, attendance rates decline rapidly, and the gender gap increases with age. For example, 41 percent of males are attending school at age 20, as compared with 58 percent of females.

Figure 2.3
Age-specific attendance rates of the de facto population age 7 to 24



KgDHS 2012

2.9.3 Early Childhood Education

Participation in preschool is important in preparing children to attend school. Table 2.13 shows the percentage of children age 5-6 who were reported to be currently attending preschool. Interviewers were instructed to record a child as attending preschool if she or he was enrolled in a nursery school, a kindergarten, or any other type of separate structured session conducted by an educational center on a regular basis.

Most young children in the Kyrgyz Republic are not involved in any type of early childhood educational program; only 5 percent of children age 5-6 are attending preschool. The highest rates of preschool attendance are observed among children in Bishkek (23 percent) and children in the highest wealth quintile (19 percent). Urban residence is strongly related to preschool attendance; 14 percent of children in urban areas are attending preschool, as compared with 2 percent in rural areas. Preschool attendance is markedly higher among children whose mothers have a higher education (12 percent) than among children born to mothers with other levels of education (4 percent or less).

Table 2.13 Early childhood education

Percentage of children age 60-83 months attending a preschool education program, a kindergarten, or any other organized early child education program, Kyrgyz Republic 2012

Background characteristic	Percentage of children attending early child educational program	Number of children
Age		
60-71 months	3.9	660
72-83 months	6.8	737
Sex		
Male	4.5	741
Female	6.5	656
Residence		
Urban	13.8	398
Rural	2.1	999
Region		
Issyk-Kul	0.0	131
Djalal-Abad	5.1	266
Naryn	4.7	80
Batken	0.0	109
Osh Oblast	4.3	329
Talas	0.0	84
Chui	2.0	195
Bishkek City	23.1	161
Osh City	7.9	42
Mother's education		
None/primary	*	7
Basic general	0.0	22
Secondary	3.9	659
Professional primary/middle	4.3	201
Higher	12.3	298
Mother not in household	2.5	210
Wealth quintile		
Lowest	2.4	312
Second	2.3	256
Middle	3.0	322
Fourth	3.6	287
Highest	19.3	220
Total	5.4	1,397

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

2.9.4 Distance from Home to School

In households with a child age 6-17 attending school during the current or previous academic school years, the 2012 KgDHS collected information on the location of the school attended by the youngest child age 6-17. This information is presented in Table 2.14.

Nine in 10 households reported that the school attended by the youngest child is located either closer than 1 kilometer from their residence (63 percent) or within 1 to 3 kilometers (27 percent). Only 3 percent of households have children attending a school that is more than 3 kilometers from home, and 2 percent of households reported that the school is located in a different settlement. There are considerable urban-rural and regional differences in reported distance from home to school. Rural children are more likely to attend schools closer to home than urban children. Children in Batken and Bishkek are more likely to attend schools located between 1 and 3 kilometers from home than children from other regions. Seven percent of households with children age 6-17 in Chui and Bishkek send their children to schools located more than 3 kilometers from their homes. An additional 7 percent of households in Chui reported that children are attending schools located in settlements other than their own.

Table 2.14 Distance from home to school

Among households with children age 6-17 attending school during the current or previous school years, the percent distribution of households by the distance from home to school attended by the youngest child, according to selected background characteristics, Kyrgyz Republic 2012

Background characteristic	Distance from school						Total	Number of households
	< 1 kilometer	1-3 kilometers	> 3 kilometers	School is in different city/village	Other	Don't know/ missing		
Residence								
Urban	55.3	31.3	5.0	0.5	0.0	7.9	100.0	1,329
Rural	66.2	25.2	2.4	2.1	0.0	4.1	100.0	2,808
Region								
Issyk-Kul	69.6	24.3	1.8	1.0	0.0	3.3	100.0	356
Djalal-Abad	69.5	23.4	1.8	1.3	0.0	4.1	100.0	717
Naryn	70.1	26.6	1.5	0.4	0.0	1.4	100.0	217
Batken	55.1	39.2	1.6	0.2	0.2	3.8	100.0	326
Osh Oblast	69.1	24.3	1.3	0.2	0.0	5.1	100.0	924
Talas	75.3	20.5	2.4	0.0	0.0	1.8	100.0	194
Chui	51.7	26.6	6.7	7.1	0.0	7.9	100.0	670
Bishkek City	45.2	37.2	7.4	0.5	0.0	9.8	100.0	562
Osh City	76.3	18.9	1.0	0.5	0.0	3.3	100.0	171
Wealth quintile								
Lowest	69.8	24.6	1.8	0.7	0.0	3.1	100.0	832
Second	65.9	27.4	1.7	1.9	0.0	3.1	100.0	863
Middle	62.0	27.6	3.5	2.3	0.1	4.4	100.0	815
Fourth	59.5	26.6	4.0	2.7	0.0	7.3	100.0	817
Highest	55.8	29.6	5.2	0.4	0.0	9.0	100.0	810
Total	62.7	27.2	3.2	1.6	0.0	5.3	100.0	4,137

Note: Table is based only on households with children age 6-17 who usually live in the household.

BACKGROUND CHARACTERISTICS OF RESPONDENTS

3

Key Findings

- Approximately two-thirds of Kyrgyz women and men age 15-49 live in rural areas (63 percent of women and 68 percent of men).
- Education has been almost universal in the Kyrgyz Republic for some time; the median number of years of schooling completed is 10.6 for women and 10.5 for men.
- The majority of Kyrgyz women and men age 15-49 are exposed to some form of media at least once per week; television reaches the largest number of respondents (92 percent of women and 94 percent of men).
- Three in 10 women and men report having used a computer in the last 12 months, and about one-quarter of respondents report having used the Internet in the last 12 months.
- Three in 10 women and 8 in 10 men are currently working or were employed during the past 12 months. Eight percent of working women and men are not paid for their work, the majority of whom work in agriculture.
- Approximately 9 in 10 women and men are covered by mandatory health insurance.
- Three percent of women and 44 percent of men currently smoke cigarettes, and 11 percent of men using chewing tobacco.
- More than one-third of men had at least one alcoholic drink in the month preceding the survey.
- The majority of Kyrgyz women and men have heard about tuberculosis (94 and 96 percent, respectively); more than 8 in 10 respondents who know about tuberculosis correctly believe that the disease is spread through the air when a person with tuberculosis coughs or sneezes.
- Ten percent of women and 7 percent of men age 15-49 had hypertension at the time of the survey.
- Rates of hypertension increase with age: among respondents age 45-49, 28 percent of women and 16 percent of men have elevated blood pressure.
- Rates of hypertension are about three times the national average among obese women (27 percent).
- Among respondents with hypertension, a much higher percentage of men (85 percent) are unaware of their condition than women (55 percent).

This chapter presents distributions of KgDHS respondents by basic demographic and socioeconomic characteristics, including age at the time of the survey, marital status, broad educational levels, urban/rural residence, region, and wealth quintile. A number of these characteristics are used in tables throughout the report to provide insights into demographic and social factors influencing the health situation of women, men, and children in the Kyrgyz Republic.

The chapter also provides information on respondents' exposure to mass media and their employment status and earnings. In addition, the chapter covers several important health issues, including respondents' knowledge of tuberculosis, history of high blood pressure and prevalence of hypertension, and use of tobacco and alcohol.

3.1 BACKGROUND CHARACTERISTICS OF SURVEY RESPONDENTS

Table 3.1 shows the distribution of the 8,208 women and 2,413 men age 15-49 interviewed in the 2012 KgDHS by various demographic and socioeconomic characteristics. Reflecting the relatively high fertility in the Kyrgyz Republic in the past, 39 percent of women and 35 percent of men in the 15-49 age group are under age 25, and over half of the women and men in this age group (54 percent and 52 percent, respectively) are under age 30. On the other hand, 22 percent of women and 24 percent of men are age 40 or older.

Table 3.1 Background characteristics of respondents

Percent distribution of women and men age 15-49 by selected background characteristics, Kyrgyz Republic 2012

	Women			Men		
Background characteristic	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
Age						
15-19	19.9	1,637	1,600	17.9	432	432
20-24	18.6	1,527	1,505	16.7	404	390
25-29	15.4	1,265	1,303	16.9	409	395
30-34	12.5	1,028	1,025	12.6	305	315
35-39	11.1	915	950	12.1	292	312
40-44	11.3	928	924	12.3	297	305
45-49	11.1	908	901	11.4	275	264
Marital status						
Never married	27.4	2,245	2,101	36.3	875	853
Married	63.8	5,233	5,452	59.6	1,438	1,465
Living together	0.3	23	26	0.2	5	5
Divorced/separated	6.1	497	428	3.6	87	83
Widowed	2.6	210	201	0.3	8	7
Residence						
Urban	37.4	3,070	2,732	32.4	781	690
Rural	62.6	5,138	5,476	67.6	1,632	1,723
Region						
Issyk-Kul	7.9	650	787	8.6	207	232
Djalal-Abad	16.2	1,332	1,012	16.7	402	300
Naryn	3.4	281	666	4.1	98	228
Batken	7.5	616	970	7.7	186	288
Osh Oblast	19.8	1,627	1,248	21.8	526	388
Talas	4.4	360	921	5.2	126	312
Chui	17.9	1,465	859	16.9	407	240
Bishkek City	19.1	1,566	1,017	15.9	383	245
Osh City	3.8	311	728	3.2	78	180
Education						
None	0.1	4	7	0.0	1	1
Primary	0.4	35	29	0.3	6	7
Basic general	13.9	1,139	1,103	14.0	338	355
Secondary	42.2	3,468	3,632	48.0	1,158	1,202
Professional primary	6.1	499	471	8.0	193	173
Professional middle	10.5	866	919	8.1	195	201
Higher	26.8	2,198	2,047	21.6	522	474
Wealth quintile						
Lowest	17.8	1,459	1,666	20.8	502	562
Second	17.9	1,473	1,653	20.5	496	550
Middle	18.7	1,538	1,641	18.7	451	475
Fourth	20.3	1,667	1,570	18.6	449	411
Highest	25.2	2,071	1,678	21.4	515	415
Total	100.0	8,208	8,208	100.0	2,413	2,413

Note: Education categories refer to the highest level of education attended, whether or not that level was completed. Education categories are described in Chapter 2, Section 2.9.1.

Sixty-four percent of women and 60 percent of men are currently married or living together with a partner, with almost all being in formal unions. Less than 1 percent of respondents report living together with a partner in an informal union. Because men tend to marry later in life than women, more men (36 percent) than women (27 percent) age 15-49 have never been married. Nine percent of women and 4 percent of men are divorced, separated, or widowed. The proportion of women who are married or

cohabiting has decreased since the 1997 KgDHS (from 70 percent to 64 percent), while the proportion who have never been married has increased (from 22 percent to 27 percent) (Research Institute of Obstetrics and Pediatrics [RIOP] and Macro International Inc., 1998).

Approximately two-thirds of the respondents (63 percent of women and 68 percent of men) live in rural areas. Only one-third of the survey population lives in urban areas, and about half of the urban residents live in Bishkek (19 percent of women and 16 percent of men). The most populated region is Osh Oblast, where 2 in 10 respondents reside. Other regions with relatively large populations are Bishkek, Chui, and Djalal-Abad. The lowest proportions of survey respondents live in Osh and Naryn (3 to 4 percent).

Women and men in the Kyrgyz Republic are generally well educated, with 86 percent of women and men having at least some secondary education. Twenty-seven percent of women and 22 percent of men have some higher education. A negligible percentage of women and men (less than 1 percent) have never attended school.

The proportion of women age 15-49 with a higher education has increased considerably over the past 15 years, from 17 percent in 1997 to 27 percent in 2012 (RIOP and Macro International Inc., 1998).

3.2 EDUCATIONAL ATTAINMENT BY BACKGROUND CHARACTERISTICS

Education is a key determinant of health care knowledge, attitudes, and behavior. To gain further insight into how educational attainment varies among KgDHS respondents, Tables 3.2.1 and 3.2.2 present the distribution of women and men, respectively, by educational level,[1] according to background characteristics.

Education has been almost universal in the Kyrgyz Republic for some time. Women have completed a median of 10.6 years of schooling (Table 3.2.1) and men a median of 10.5 years (Table 3.2.2).

Table 3.2.1 shows that median years of schooling exceed the national average among women age 20-29 and fall below the average among women age 15-19. The lower educational attainment among women age 15-19 is mainly due to the fact that some women in that age group are still in school. Women in rural areas have less education than urban women (10.3 years versus 11.9 years). Women in Bishkek are better educated than women in other regions; for example, women in Bishkek have completed a median of 12.7 years of schooling, as compared with 10.0 years among women in Osh Oblast. Women from the wealthiest households have, on average, completed two more years of schooling than women from the poorest households (12.5 years versus 10.5 years).

Although virtually all female respondents have attended secondary school, there are differences in higher education attendance. Urban women are notably more likely to have attended or completed professional/middle or higher levels of education than rural women. For example, 43 percent of urban women have some higher education, as compared with only 17 percent of rural women. There also is considerable variation by region: Bishkek has the largest proportion of highly educated women (53 percent), and Osh Oblast has the smallest proportion (12 percent). Attainment of higher education is closely related to wealth status; half of the women in the highest wealth quintile have some university education, as compared with one in five women in the lowest quintile.

[1] For details on current educational categories, see Chapter 2, Section 2.9.1.

Table 3.2.1 Educational attainment: Women

Percent distribution of women age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Highest level of schooling								Total	Median years completed	Number of women
	No education	Some primary	Completed primary[1]	Some secondary[2]	Completed secondary[3]	Professional primary	Professional middle	Higher			
Age											
15-24	0.0	0.5	0.1	35.2	28.6	3.7	7.7	24.1	100.0	10.4	3,164
15-19	0.0	0.6	0.0	57.3	24.1	3.4	5.0	9.5	100.0	9.4	1,637
20-24	0.1	0.4	0.3	11.4	33.3	4.1	10.5	39.8	100.0	11.4	1,527
25-29	0.1	0.3	0.1	8.4	40.4	3.8	8.0	38.9	100.0	11.1	1,265
30-34	0.1	0.4	0.0	13.5	41.9	4.5	9.5	30.2	100.0	10.8	1,028
35-39	0.0	0.2	0.0	6.9	50.7	7.1	13.6	21.5	100.0	10.6	915
40-44	0.1	0.0	0.0	4.3	44.5	13.1	15.4	22.7	100.0	10.4	928
45-49	0.0	0.1	0.2	3.5	43.2	11.0	17.2	24.7	100.0	10.6	908
Residence											
Urban	0.1	0.1	0.1	12.8	26.2	5.6	12.6	42.5	100.0	11.9	3,070
Rural	0.0	0.5	0.1	21.4	45.0	6.4	9.3	17.4	100.0	10.3	5,138
Region											
Issyk-Kul	0.1	0.5	0.0	13.7	36.4	13.0	13.0	23.3	100.0	10.8	650
Djalal-Abad	0.0	0.6	0.3	24.5	40.9	5.5	10.4	17.8	100.0	10.4	1,332
Naryn	0.0	0.2	0.0	13.0	39.2	4.4	17.2	26.1	100.0	10.8	281
Batken	0.3	0.3	0.0	12.0	56.2	2.1	11.4	17.7	100.0	10.4	616
Osh Oblast	0.1	0.0	0.0	25.9	52.0	3.4	6.2	12.4	100.0	10.0	1,627
Talas	0.1	0.0	0.2	17.0	37.0	7.6	16.7	21.4	100.0	10.7	360
Chui	0.0	0.8	0.2	18.4	32.3	10.6	10.0	27.7	100.0	10.8	1,465
Bishkek City	0.0	0.1	0.0	9.7	20.2	4.7	12.3	53.0	100.0	12.7	1,566
Osh City	0.1	0.1	0.0	19.5	34.8	1.2	7.9	36.5	100.0	10.8	311
Wealth quintile											
Lowest	0.0	0.3	0.0	16.6	46.2	5.0	11.4	20.5	100.0	10.5	1,459
Second	0.0	0.4	0.1	21.7	46.5	6.8	8.7	15.8	100.0	10.3	1,473
Middle	0.1	0.4	0.2	24.5	45.1	5.0	9.5	15.3	100.0	10.3	1,538
Fourth	0.1	0.6	0.3	19.1	36.9	8.4	10.7	24.0	100.0	10.6	1,667
Highest	0.0	0.1	0.0	11.3	21.5	5.3	12.0	49.8	100.0	12.5	2,071
Total	0.1	0.3	0.1	18.2	38.0	6.1	10.5	26.8	100.0	10.6	8,208

Note: Education categories are described in Chapter 2, Section 2.9.1.
[1] Completed grade 4 at the primary level
[2] Attended or completed the basic general level, also known as stage 1 of secondary education (grades 5-9), and attended but did not complete the secondary level, also known as stage 2 of secondary education (grades 10-11)
[3] Completed grade 11 at the secondary level or completed grade 10 at the secondary level and has a general education school diploma ("attestat" in the old Soviet educational system terminology).

Table 3.2.2 Educational attainment: Men

Percent distribution of men age 15-49 by highest level of schooling attended or completed, and median years completed, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Highest level of schooling								Total	Median years completed	Number of men
	No education	Some primary	Completed primary[1]	Some secondary[2]	Completed secondary[3]	Professional primary	Professional middle	Higher			
Age											
15-24	0.0	0.0	0.2	35.1	33.9	5.9	6.6	18.3	100.0	10.3	836
15-19	0.0	0.0	0.0	57.7	22.4	5.6	4.8	9.5	100.0	9.5	432
20-24	0.0	0.1	0.4	10.9	46.1	6.3	8.6	27.6	100.0	10.8	404
25-29	0.2	0.8	0.0	11.2	42.9	5.0	4.6	35.3	100.0	10.9	409
30-34	0.0	0.0	0.0	19.0	47.6	4.1	4.3	25.0	100.0	10.5	305
35-39	0.0	0.3	0.0	8.0	51.1	13.3	10.8	16.5	100.0	10.5	292
40-44	0.0	0.0	0.0	8.6	52.1	12.7	11.6	15.0	100.0	9.9	297
45-49	0.0	0.0	0.0	4.4	47.4	12.3	15.4	20.5	100.0	10.2	275
Residence											
Urban	0.0	0.2	0.2	12.4	29.0	8.8	12.9	36.5	100.0	11.0	781
Rural	0.0	0.2	0.0	22.1	49.7	7.6	5.8	14.6	100.0	10.3	1,632
Region											
Issyk-Kul	0.3	0.4	0.0	19.1	32.6	10.7	13.3	23.6	100.0	10.7	207
Djalal-Abad	0.0	0.5	0.4	26.5	47.7	8.1	7.6	9.2	100.0	10.2	402
Naryn	0.0	0.0	0.0	14.6	53.7	8.3	10.2	13.3	100.0	10.4	98
Batken	0.0	0.5	0.0	18.1	57.5	3.1	6.9	14.0	100.0	10.2	186
Osh Oblast	0.0	0.0	0.0	22.5	59.7	4.2	4.1	9.5	100.0	10.0	526
Talas	0.0	0.2	0.2	22.2	43.4	9.5	8.9	15.6	100.0	10.4	126
Chui	0.0	0.0	0.0	17.2	35.4	16.9	4.7	25.9	100.0	10.7	407
Bishkek City	0.0	0.0	0.0	8.6	20.7	5.4	15.2	50.0	100.0	12.2	383
Osh City	0.0	0.4	0.0	19.1	34.7	1.0	5.5	39.3	100.0	10.8	78
Wealth quintile											
Lowest	0.0	0.0	0.0	15.5	54.4	6.5	8.4	15.2	100.0	10.4	502
Second	0.1	0.1	0.0	25.5	47.9	6.5	5.5	14.5	100.0	10.2	496
Middle	0.0	0.6	0.1	24.3	51.0	6.5	5.0	12.5	100.0	10.2	451
Fourth	0.0	0.2	0.3	20.4	38.9	13.6	8.4	18.1	100.0	10.4	449
Highest	0.0	0.1	0.0	10.3	23.9	7.3	12.7	45.8	100.0	11.9	515
Total	0.0	0.2	0.1	19.0	43.0	8.0	8.1	21.6	100.0	10.5	2,413

Note: Education categories are described in Chapter 2, Section 2.9.1.
[1] Completed grade 4 at the primary level.
[2] Attended or completed the basic general level, also known as stage 1 of secondary education (grades 5-9), and attended but did not complete the secondary level, also known as stage 2 of secondary education (grades 10-11).
[3] Completed grade 11 at the secondary level or completed grade 10 at the secondary level and has a general education school diploma ("attestat" in the old Soviet educational system terminology).

The pattern of educational attainment among men is similar to that of women (Table 3.2.2). Younger men and men in rural areas generally have lower levels of education than their urban counterparts. Thirty-seven percent of urban men have some higher education, as compared with 15 percent of rural men. As with women, Bishkek residents have a clear educational advantage over the rest of the country: half of the men in Bishkek (50 percent) have some university education, as compared with 10 percent or less of the men in Osh Oblast and Djalal-Abad. Wealth status is positively associated with education; 46 percent of men in the highest wealth quintile and only 15 percent of those in the lowest quintile have some higher education.

3.3 MEDIA EXPOSURE

Access to information is essential to increase people's knowledge and awareness of what is taking place around them. In the 2012 KgDHS, data were collected on respondents' exposure to both broadcast and print media. These data are important because they can help program managers effectively disseminate information on health, family planning, nutrition, and other programs. In the survey, exposure to media was assessed by asking how often a respondent reads a newspaper, watches television, or listens to the radio.

Tables 3.3.1 and 3.3.2, respectively, show the percentages of women and men age 15-49 who are exposed to three specific media (newspapers/magazines, radio, and television) at least once per week. These tables also include information on the percentage of respondents who are exposed to all three media at least once per week and the percentage not regularly exposed to any of the media.

Overall, television reaches the largest number of women. At least once a week, 92 percent of Kyrgyz women watch television, 40 percent read a newspaper, and one-third (33 percent) listen to the radio (Table 3.3.1). Twenty-three percent of women access all three media at least once a week, while 7 percent are not regularly exposed to any mass media. Younger women are more likely than older women to listen to the radio and access the three types of media at least once a week. Urban women are more likely to be exposed to all three types of media than their rural counterparts (29 percent versus 20 percent). With respect to regions, women from Naryn and Batken are most likely to be exposed to all three media at least once a week (41 percent and 37 percent, respectively), while Djalal-Abad and Osh Oblast have the lowest proportions of women who access all three media at least once a week (7 percent and 11 percent). Exposure to media has a strong positive association with education and wealth. For example, while 30 percent of women in the highest wealth quintile access all three media at least once a week, the corresponding proportion among women in the lowest wealth quintile is 22 percent.

There has been a noticeable decrease since the 1997 KgDHS in the proportion of women who read a newspaper at least once a week (from 69 percent to 40 percent). Increases in ownership of home computers and Internet access over the past 15 years may have contributed to this decline, especially in urban areas.

In general, men report a lower level of exposure to all three types of media than women, mostly attributable to lower percentages of men reading a newspaper at least once a week (Table 3.3.2). Almost all men (94 percent) watch television, 30 percent read a newspaper, and 38 percent listen to the radio at least once a week. Sixteen percent are exposed to all three types of media on a weekly basis. Three percent of men are not regularly exposed to any of the three media types.

Table 3.3.1 Exposure to mass media: Women

Percentage of women age 15-49 who are exposed to specific media on a weekly basis by background characteristics, Kyrgyz Republic 2012

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women
Age						
15-19	41.3	94.0	45.5	27.1	4.4	1,637
20-24	41.6	91.9	37.9	26.1	6.4	1,527
25-29	38.6	89.0	28.6	21.6	9.9	1,265
30-34	36.5	90.1	25.6	19.2	8.1	1,028
35-39	38.4	92.5	24.8	20.8	5.9	915
40-44	42.9	92.8	28.4	23.8	6.0	928
45-49	39.7	92.9	26.7	20.2	5.7	908
Residence						
Urban	49.8	95.1	37.4	29.4	3.6	3,070
Rural	34.2	90.1	29.8	19.5	8.4	5,138
Region						
Issyk-Kul	55.5	95.6	31.5	24.3	2.5	650
Djalal-Abad	16.1	91.0	12.3	7.2	7.8	1,332
Naryn	70.0	75.1	45.9	40.7	18.3	281
Batken	57.2	95.3	47.9	37.4	2.0	616
Osh Oblast	18.5	85.7	28.4	10.9	13.0	1,627
Talas	75.8	98.3	37.5	32.0	0.8	360
Chui	40.8	93.0	38.0	29.1	5.8	1,465
Bishkek City	56.4	96.3	41.3	33.5	2.9	1,566
Osh City	34.1	95.5	28.2	20.6	3.2	311
Education						
None/primary	(29.3)	(50.5)	(17.3)	(15.4)	(36.6)	39
Basic general	26.6	87.4	29.8	15.8	10.7	1,139
Secondary	31.8	90.5	27.6	18.0	8.0	3,468
Professional primary/middle	47.1	94.4	34.5	25.9	4.1	1,364
Higher	55.6	95.7	41.2	33.8	3.3	2,198
Wealth quintile						
Lowest	38.0	91.4	32.2	22.1	7.1	1,459
Second	30.7	90.8	27.7	16.2	7.7	1,473
Middle	34.7	88.9	28.4	19.5	9.2	1,538
Fourth	41.1	91.3	34.5	25.5	7.4	1,667
Highest	51.1	95.9	38.2	29.9	2.7	2,071
Total	40.0	91.9	32.7	23.2	6.6	8,208

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 3.3.2 shows that, for men, the relationships between exposure to mass media and background characteristics are generally similar to those observed among women. However, media exposure by age differs among men; younger men are less likely than older men to be exposed to all three media at least once a week. At the regional level, exposure to the three media at least once a week ranges from 50 percent in Batken to 8 percent or less in Osh Oblast, Chui, Djalal-Abad, and Osh.

Table 3.3.2 Exposure to mass media: Men

Percentage of men age 15-49 who are exposed to specific media on a weekly basis by background characteristics, Kyrgyz Republic 2012

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of men
Age						
15-19	20.4	95.8	39.3	10.2	2.3	432
20-24	23.5	96.9	44.6	13.3	1.6	404
25-29	30.7	93.6	35.7	16.5	2.6	409
30-34	28.6	93.9	34.5	14.7	4.1	305
35-39	33.4	97.4	34.3	20.3	1.8	292
40-44	40.2	91.8	39.2	19.9	3.1	297
45-49	43.7	90.4	37.7	23.0	5.0	275
Residence						
Urban	37.0	94.3	40.6	23.0	2.9	781
Rural	27.2	94.5	37.0	13.0	2.7	1,632
Region						
Issyk-Kul	26.3	97.5	41.5	16.9	1.1	207
Djalal-Abad	8.1	93.6	15.8	3.4	6.4	402
Naryn	54.7	95.5	54.6	30.7	1.5	98
Batken	70.4	89.5	76.5	50.0	2.2	186
Osh Oblast	18.8	98.8	40.9	7.5	1.0	526
Talas	41.8	98.2	48.1	28.7	0.8	126
Chui	32.0	88.3	22.9	5.5	3.9	407
Bishkek City	43.6	97.5	49.6	31.2	1.4	383
Osh City	15.6	82.6	21.7	3.0	8.5	78
Education						
None/primary	*	*	*	*	*	7
Basic general	18.4	95.1	32.6	8.3	3.2	338
Secondary	26.0	95.4	35.9	13.7	2.5	1,158
Professional primary/middle	37.5	94.5	38.3	18.8	4.0	388
Higher	42.7	92.4	47.1	25.2	1.9	522
Wealth quintile						
Lowest	28.2	96.5	38.4	14.4	1.5	502
Second	30.1	95.3	37.1	14.0	1.8	496
Middle	26.9	94.1	37.0	13.3	3.0	451
Fourth	28.3	90.8	35.8	14.3	5.5	449
Highest	37.4	95.1	42.1	24.4	2.5	515
Total	30.4	94.4	38.2	16.2	2.8	2,413

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

3.4 COMPUTER AND INTERNET USE

Having access to a computer or the Internet exposes people to an infinite amount of information ranging from local and international news to more practical issues such as innovative ideas about health and nutrition and information about employment opportunities or the local environment. In addition, it allows greater access to educational resources and services located away from the local area.

Access to information in the modern Kyrgyz environment is no longer limited to broadcast and print media; use of alternative sources of information such as computers and the Internet has expanded in recent years. A comparison of the results of the 2012 KgDHS and the 2006 Multiple Indicator Cluster Survey (MICS) (National Statistical Committee [NSC], 2007) shows both a rapid expansion of household computer ownership, from 6 percent in 2006 (data not published) to 18 percent in 2012, and a decline in radio ownership, from 51 percent in 2006 (data not published) to 37 percent in 2012. Urban households are more likely to have computers than rural households (27 percent versus 12 percent). Seven percent of KgDHS households reported that they had Internet access (10 percent in urban areas and 5 percent in rural areas) (see Chapter 2, Table 2.4).

The 2012 KgDHS survey asked respondents about their computer and Internet use in the 12 months prior to the survey, as well as about frequency of use in the preceding month.

Tables 3.4.1 and 3.4.2 present the results on computer use among women and men age 15-49, respectively. The data show that about 3 in 10 women and men report having used a computer in the last 12 months (29 percent of women and 32 percent of men). Computer use generally decreases with age, and it is highest among respondents age 15-19 (50 percent among women and 58 percent among men). As expected, urban respondents are substantially more likely to use a computer than their rural counterparts. In urban areas, 43 percent of women and 47 percent of men have used a computer in the last 12 months, as compared with 21 percent of women and 25 percent of men in rural areas. Overall, women and men in Bishkek (49 percent each), men in Chui and Osh (49 to 51 percent), respondents with a higher education (54 percent of women and 60 percent of men), and those in the highest wealth quintile (47 percent of women and 54 percent of men) are more likely to use a computer than other subgroups.

Among computer users, two-thirds of women and 59 percent of men used a computer daily or at least once a week during the preceding month, and 29 percent of women and over one-third of men used a computer less than once a week during the past month. Only a small percentage of respondents who had used a computer in the 12 months before the survey (3 percent of women and 5 percent of men) did not use a computer at all in the preceding month.

Table 3.4.1 Computer use: Women

Percentage of women age 15-49 who report having used a computer in the last 12 months, and the percent distribution of female computer users by frequency of use in the preceding month, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Among all women: Percentage who report having used a computer in the last 12 months	Among all women: Number of women	Frequency of use of a computer in the preceding month: Every day	At least once a week	Less than once a week	Not at all	Missing	Total	Number of women who used a computer in the last 12 months
Age									
15-19	50.2	1,637	22.0	43.9	30.3	2.0	1.8	100.0	823
20-24	35.4	1,527	28.5	35.9	30.7	3.2	1.7	100.0	540
25-29	25.5	1,265	38.0	29.2	26.1	4.4	2.4	100.0	323
30-34	20.7	1,028	35.4	32.2	27.9	1.5	3.1	100.0	212
35-39	17.9	915	35.5	29.8	26.1	6.1	2.4	100.0	163
40-44	18.0	928	26.3	39.5	30.0	2.6	1.6	100.0	168
45-49	15.9	908	28.6	39.8	26.4	4.7	0.5	100.0	144
Residence									
Urban	42.9	3,070	34.5	38.7	23.8	1.6	1.4	100.0	1,317
Rural	20.5	5,138	21.0	36.0	35.6	4.9	2.5	100.0	1,056
Region									
Issyk-Kul	23.0	650	23.9	35.5	17.9	16.7	6.1	100.0	150
Djalal-Abad	21.2	1,332	15.4	31.5	51.4	1.8	0.0	100.0	282
Naryn	27.1	281	21.8	49.2	17.1	10.9	1.0	100.0	76
Batken	19.5	616	49.6	33.4	3.4	0.5	13.1	100.0	120
Osh Oblast	18.0	1,627	14.1	38.1	45.4	0.3	2.0	100.0	293
Talas	18.7	360	22.8	37.8	27.3	5.9	6.2	100.0	67
Chui	35.3	1,465	27.6	36.2	32.5	3.7	0.0	100.0	517
Bishkek City	49.3	1,566	37.5	39.5	20.7	1.1	1.2	100.0	772
Osh City	30.8	311	34.3	42.7	22.0	0.5	0.4	100.0	96
Education									
None/primary	(14.6)	39	*	*	*	*	*	100.0	6
Basic general	30.3	1,139	16.9	45.0	34.3	2.2	1.6	100.0	345
Secondary	13.9	3,468	20.5	39.3	33.6	3.0	3.6	100.0	482
Professional primary/ middle	25.6	1,364	25.7	38.1	29.6	5.2	1.5	100.0	350
Higher	54.2	2,198	36.1	34.1	25.7	2.7	1.5	100.0	1,190
Wealth quintile									
Lowest	23.5	1,459	16.4	37.6	38.3	5.7	2.0	100.0	343
Second	20.0	1,473	14.5	35.4	42.9	4.9	2.4	100.0	295
Middle	18.2	1,538	23.2	39.3	29.4	3.5	4.6	100.0	280
Fourth	29.0	1,667	32.3	36.7	26.6	3.1	1.2	100.0	484
Highest	46.8	2,071	36.7	38.0	22.7	1.4	1.3	100.0	970
Total	28.9	8,208	28.5	37.5	29.0	3.0	1.9	100.0	2,373

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.

Table 3.4.2 Computer use: Men

Percentage of men age 15-49 who report having used a computer in the last 12 months, and the percent distribution of male computer users by frequency of use in the preceding month, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Among all men: Percentage who report having used a computer in the last 12 months	Among all men: Number of men	Frequency of use of a computer in the preceding month: Every day	At least once a week	Less than once a week	Not at all	Missing	Total	Number of men who used a computer in the last 12 months
Age									
15-19	57.6	432	14.7	44.2	38.1	3.0	0.0	100.0	249
20-24	50.9	404	22.2	42.9	30.9	3.9	0.0	100.0	206
25-29	34.9	409	28.0	29.4	37.5	4.4	0.7	100.0	143
30-34	20.3	305	35.7	15.3	45.1	2.9	1.0	100.0	62
35-39	17.3	292	(21.0)	(23.1)	(45.0)	(7.2)	(3.7)	100.0	50
40-44	10.1	297	(25.4)	(39.4)	(24.2)	(11.0)	(0.0)	100.0	30
45-49	14.6	275	(29.1)	(29.5)	(30.8)	(10.6)	(0.0)	100.0	40
Residence									
Urban	47.2	781	29.4	35.6	30.8	3.9	0.3	100.0	368
Rural	25.2	1,632	16.0	37.4	41.0	5.0	0.6	100.0	411
Region									
Issyk-Kul	24.3	207	16.8	35.4	36.8	10.9	0.0	100.0	50
Djalal-Abad	31.3	402	16.5	31.0	51.0	0.0	1.5	100.0	126
Naryn	34.7	98	29.9	42.0	17.2	11.0	0.0	100.0	34
Batken	18.4	186	20.1	32.7	42.6	0.0	4.6	100.0	34
Osh Oblast	15.5	526	17.5	47.5	26.2	8.8	0.0	100.0	82
Talas	22.8	126	35.0	21.9	28.1	15.0	0.0	100.0	29
Chui	48.7	407	12.0	41.3	44.0	2.7	0.0	100.0	198
Bishkek City	48.7	383	37.6	28.6	29.1	4.7	0.0	100.0	187
Osh City	50.9	78	24.2	56.6	19.2	0.0	0.0	100.0	40
Education									
None/primary	*	7	*	*	*	*	*	100.0	1
Basic general	29.8	338	7.3	46.3	42.9	3.5	0.0	100.0	101
Secondary	20.2	1,158	14.8	37.9	40.5	5.7	1.2	100.0	234
Professional primary/ middle	33.4	388	19.7	31.9	44.7	3.7	0.0	100.0	130
Higher	60.1	522	34.0	34.3	27.4	4.2	0.2	100.0	314
Wealth quintile									
Lowest	23.5	502	18.7	35.9	35.8	7.9	1.6	100.0	118
Second	23.5	496	11.6	41.1	44.9	2.5	0.0	100.0	116
Middle	20.0	451	23.1	29.7	41.0	5.5	0.7	100.0	90
Fourth	39.1	449	16.6	38.8	41.6	3.1	0.0	100.0	176
Highest	54.2	515	31.8	35.8	27.7	4.4	0.3	100.0	279
Total	32.3	2,413	22.3	36.6	36.2	4.5	0.4	100.0	779

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.

Tables 3.5.1 and 3.5.2 show that about one-quarter of respondents (23 percent of women and 27 percent of men) report having used the Internet in the last 12 months. Similar to computer use, Internet use decreases notably with age, and it is substantially higher among urban than rural respondents. For example, more than twice as many urban as rural respondents have used the Internet in the last 12 months (36 percent versus 15 percent among women and 43 percent versus 19 percent among men). Women and men in Bishkek, those with a higher education, and those in the highest wealth quintile are most likely to have used the Internet in the last 12 months.

Nearly three-quarters of women (73 percent) and about two-thirds of men (65 percent) who used the Internet in the last 12 months did so daily or at least once a week in the preceding month, and 25 percent of women and 31 percent of men used it less than once a week during the last month. Among Internet users, 1 percent of women and 4 percent of men did not use it at all in the preceding month.

Table 3.5.1 Internet use: Women

Percentage of women age 15-49 who report having used the Internet in the past 12 months, and the percent distribution of female Internet users by frequency of use in the preceding month, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Among all women: Percentage who report having used the Internet in the last 12 months	Among all women: Number of women	Frequency of use of the Internet in the preceding month: Every day	At least once a week	Less than once a week	Not at all	Missing	Total	Number of women who used the Internet in the last 12 months
Age									
15-19	44.6	1,637	35.7	40.0	22.9	0.8	0.6	100.0	731
20-24	32.2	1,527	40.9	35.1	22.7	0.9	0.4	100.0	492
25-29	20.2	1,265	37.0	33.7	24.2	2.3	2.8	100.0	255
30-34	14.1	1,028	38.1	29.5	30.2	1.1	1.1	100.0	144
35-39	11.0	915	30.0	35.5	32.5	0.3	1.7	100.0	101
40-44	10.8	928	30.5	39.9	27.7	1.9	0.0	100.0	101
45-49	8.2	908	25.4	40.7	33.9	0.0	0.0	100.0	75
Residence									
Urban	36.3	3,070	38.9	38.6	21.1	0.5	1.0	100.0	1,115
Rural	15.3	5,138	32.9	34.5	30.1	1.9	0.7	100.0	784
Region									
Issyk-Kul	12.9	650	33.4	36.6	22.0	6.0	2.1	100.0	84
Djalal-Abad	17.8	1,332	41.0	24.9	33.3	0.7	0.0	100.0	238
Naryn	15.3	281	50.6	35.7	9.1	4.5	0.0	100.0	43
Batken	12.7	616	60.1	25.1	8.2	1.6	4.9	100.0	78
Osh Oblast	13.8	1,627	13.1	46.4	40.0	0.4	0.0	100.0	224
Talas	11.6	360	23.2	40.0	28.9	4.4	3.3	100.0	42
Chui	28.7	1,465	37.7	31.0	30.1	1.2	0.0	100.0	420
Bishkek City	43.5	1,566	38.2	42.7	17.4	0.3	1.4	100.0	681
Osh City	28.8	311	44.4	37.1	17.9	0.6	0.0	100.0	89
Education									
None/primary	(0.0)	39	*	*	*	*	*	100.0	0
Basic general	22.6	1,139	30.9	41.3	27.0	0.4	0.4	100.0	258
Secondary	11.9	3,468	34.0	39.6	24.0	1.9	0.6	100.0	411
Professional primary/ middle	18.5	1,364	30.7	41.1	26.9	0.6	0.8	100.0	252
Higher	44.5	2,198	40.4	33.5	24.0	1.0	1.1	100.0	978
Wealth quintile									
Lowest	16.3	1,459	29.6	28.4	39.4	2.7	0.0	100.0	238
Second	15.0	1,473	23.2	41.2	32.8	1.6	1.2	100.0	220
Middle	13.5	1,538	38.2	40.1	19.5	1.1	1.2	100.0	207
Fourth	23.2	1,667	38.3	33.1	26.8	1.5	0.2	100.0	387
Highest	40.9	2,071	40.5	39.1	19.0	0.2	1.2	100.0	846
Total	23.1	8,208	36.4	36.9	24.8	1.1	0.9	100.0	1,899

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.

Table 3.5.2 Internet use: Men

Percentage of men age 15-49 who report having used the Internet in the past 12 months, and the percent distribution of male Internet users by frequency of use in the preceding month, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Among all men: Percentage who report having used the Internet in the last 12 months	Among all men: Number of men	Frequency of use of the Internet in the preceding month: Every day	At least once a week	Less than once a week	Not at all	Total	Number of men who used the Internet in the last 12 months
Age								
15-19	49.4	432	34.8	34.6	28.9	1.7	100.0	214
20-24	45.6	404	33.9	39.7	24.6	1.8	100.0	184
25-29	30.3	409	28.3	30.6	33.7	7.4	100.0	124
30-34	17.8	305	(21.7)	(21.6)	(49.8)	(6.8)	100.0	54
35-39	9.0	292	(12.2)	(42.4)	(39.3)	(6.1)	100.0	26
40-44	7.2	297	*	*	*	*	100.0	21
45-49	8.9	275	*	*	*	*	100.0	25
Residence								
Urban	42.8	781	27.8	33.0	35.8	3.4	100.0	334
Rural	19.2	1,632	31.5	38.2	25.8	4.5	100.0	314
Region								
Issyk-Kul	19.4	207	(18.2)	(32.2)	(36.0)	(13.5)	100.0	40
Djalal-Abad	28.8	402	59.3	25.5	15.2	0.0	100.0	116
Naryn	21.0	98	(30.1)	(40.1)	(17.6)	(12.1)	100.0	21
Batken	15.8	186	(29.3)	(23.0)	(47.7)	(0.0)	100.0	29
Osh Oblast	8.0	526	(8.9)	(44.4)	(34.4)	(12.3)	100.0	42
Talas	21.3	126	29.8	40.2	24.2	5.8	100.0	27
Chui	39.0	407	15.8	44.3	39.9	0.0	100.0	159
Bishkek City	46.9	383	33.0	30.7	30.3	6.0	100.0	180
Osh City	44.1	78	12.7	52.0	35.3	0.0	100.0	34
Education								
None/primary	*	7	*	*	*	*	100.0	0
Basic general	21.2	338	31.8	35.6	30.3	2.3	100.0	72
Secondary	16.5	1,158	28.8	35.0	33.2	3.0	100.0	191
Professional primary/middle	28.3	388	24.6	40.3	32.9	2.2	100.0	110
Higher	52.8	522	31.5	34.0	28.9	5.7	100.0	276
Wealth quintile								
Lowest	19.0	502	44.2	25.0	25.4	5.4	100.0	95
Second	19.1	496	20.9	47.5	27.2	4.3	100.0	95
Middle	15.9	451	35.5	32.3	26.6	5.6	100.0	72
Fourth	28.9	449	25.6	43.7	29.6	1.1	100.0	130
Highest	49.8	515	27.6	31.9	36.4	4.2	100.0	257
Total	26.8	2,413	29.5	35.5	31.0	3.9	100.0	648

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.

3.5 EMPLOYMENT

Like education, employment can be a source of empowerment. This is especially important for women if it puts them in control of income. However, measurement of women's employment is difficult. The difficulty arises largely because some of the work that women do, especially work on family farms, in family businesses, or in the informal sector, is often not perceived by women themselves as employment and hence not reported as such. This is also true for men, although to a lesser extent.

To avoid underestimating employment, the KgDHS asked respondents several questions to probe for their employment status and to ensure complete coverage of employment in both the formal and informal sectors. Additional information was obtained from employed respondents on the type of work they were doing, whether they worked continuously throughout the year, whom they worked for, and whether they received their earnings in cash or in-kind.

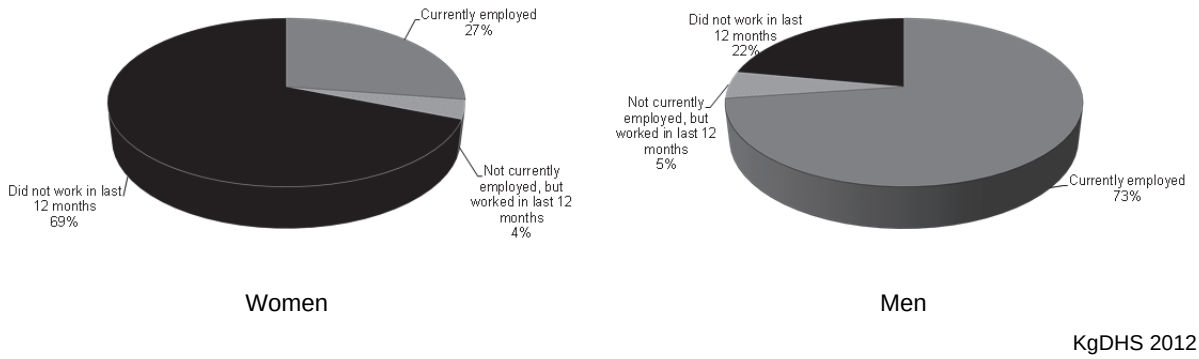
3.5.1 Employment Status

Tables 3.6.1 and 3.6.2 show the percent distributions of the KgDHS respondents by current employment status, according to background characteristics. Respondents are defined as employed if they were working at the time of the survey or had worked at any time in the 12 months prior to the survey. They were considered to be currently employed if they had done any work in the seven days before the

KgDHS interview or if they were regularly employed but had been absent from work during the week before the survey because they were ill, were on vacation, or had taken leave for some other reason.

Table 3.6.1 and Figure 3.1 show that, overall, more than one-quarter of women age 15-49 in the Kyrgyz Republic are currently employed (27 percent) and 4 percent are not currently employed but have worked in the past 12 months. Men are more than twice as likely to be currently employed as women (73 percent). Five percent of men are not currently employed but have worked in the past 12 months.

Figure 3.1
Women's and men's employment status in the past 12 months



KgDHS 2012

Current employment among women generally increases with age, education, and wealth quintile. Among men, however, current employment reaches 91 percent at age 25-29, peaks at 92 percent at age 35-39, and then declines to 88 to 89 percent among those age 40 and older (Table 3.6.2). Divorced, separated, or widowed women were substantially more likely than other women to be employed at the time of the survey. Among men, those who were formerly or currently married were more likely to be employed than those who had never been married. Urban women are twice as likely as rural women to be currently employed (40 percent versus 20 percent). However, men residing in urban and rural areas are equally likely to be currently employed (73 percent each). Current employment among women is highest in Bishkek and Chui (43 and 36 percent, respectively), while in Osh Oblast the proportion is only 13 percent. Among men, current employment rates range from 86 percent in the Talas region to 53 percent in the Naryn region. Men in Naryn are substantially more likely than men from other regions not to be currently employed but to have worked in the 12 months preceding the survey. Men with only a basic general education and men living in households in the lowest wealth quintile are far less likely to be currently employed than more educated or wealthier men.

Trends in current employment among women were examined by comparing data from the 1997 and 2012 KgDHS surveys. The percentage of women who are currently employed has decreased over the past 15 years, from 43 percent in 1997 to 27 percent in 2012. The difference in the percentage of women not employed in the 12 months preceding the survey is even larger (48 percent in 1997 and 69 percent in 2012). It should be noted that slight changes in the wording of the questions, additional questions clarifying recent employment, and changes in the definition of "currently employed" between the 1997 and 2012 KgDHS surveys may account for some of the trends observed. In the 1997 KgDHS, women were asked "Aside from your own housework, are you currently working?" In 2012, however, women were asked "Aside from your own housework, have you done any work in the last seven days?" Thus, for women, being "currently employed" in 2012 was defined as having done work in the past seven days, while in 1997 it was defined as currently working. In the 2012 KgDHS, all other questions on current employment were also modified to focus on work in the week preceding the survey. The question

clarifying current employment in the 2012 KgDHS ("Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, maternity leave, or any other such reason?") was not included in the 1997 KgDHS. Thus, in 2012, "current employment" included women who reported that they had worked in the week before the interview, while in 1997 it included women who reported themselves as currently working without a specified time frame. The question about employment in the last 12 months was identical in the two surveys.

Table 3.6.1 Employment status: Women

Percent distribution of women age 15-49 by employment status, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Total	Number of women
	Currently employed[1]	Not currently employed			
Age					
15-19	6.0	1.7	92.3	100.0	1,637
20-24	20.7	4.2	75.1	100.0	1,527
25-29	32.3	5.1	62.6	100.0	1,265
30-34	32.2	4.0	63.8	100.0	1,028
35-39	36.4	4.2	59.4	100.0	915
40-44	42.9	3.6	53.5	100.0	928
45-49	40.1	3.4	56.5	100.0	908
Marital status					
Never married	17.6	2.8	79.6	100.0	2,245
Married or living together	27.5	4.0	68.5	100.0	5,256
Divorced/separated/widowed	57.7	3.9	38.4	100.0	707
Number of living children					
0	19.7	3.0	77.4	100.0	2,780
1-2	36.4	4.2	59.4	100.0	2,683
3-4	28.4	4.2	67.4	100.0	2,183
5+	18.5	2.5	79.0	100.0	562
Residence					
Urban	39.7	3.2	57.1	100.0	3,070
Rural	20.1	3.9	76.0	100.0	5,138
Region					
Issyk-Kul	28.8	6.7	64.5	100.0	650
Djalal-Abad	20.6	2.0	77.4	100.0	1,332
Naryn	22.2	8.7	69.1	100.0	281
Batken	19.0	5.1	75.9	100.0	616
Osh Oblast	13.0	2.9	84.1	100.0	1,627
Talas	28.5	9.3	62.2	100.0	360
Chui	35.8	2.5	61.7	100.0	1,465
Bishkek City	43.1	3.2	53.7	100.0	1,566
Osh City	30.1	2.2	67.8	100.0	311
Education					
None/primary	(14.5)	(7.3)	(78.1)	100.0	39
Basic general	7.3	3.1	89.6	100.0	1,139
Secondary	16.3	2.5	81.3	100.0	3,468
Professional primary/middle	37.5	5.1	57.3	100.0	1,364
Higher	49.3	4.9	45.8	100.0	2,198
Wealth quintile					
Lowest	21.3	4.1	74.7	100.0	1,459
Second	18.0	3.9	78.1	100.0	1,473
Middle	18.1	3.8	78.1	100.0	1,538
Fourth	30.1	4.1	65.8	100.0	1,667
Highest	43.1	2.8	54.1	100.0	2,071
Total	27.4	3.7	68.9	100.0	8,208

Note: Figures in parentheses are based on 25-49 unweighted cases.

[1] "Currently employed" is defined as having done work in the past 7 days. Includes persons who did not work in the past 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

Table 3.6.2 Employment status: Men

Percent distribution of men age 15-49 by employment status, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Employed in the 12 months preceding the survey		Not employed in the 12 months preceding the survey	Total	Number of men
	Currently employed[1]	Not currently employed			
Age					
15-19	17.4	4.7	77.9	100.0	432
20-24	64.7	6.9	28.4	100.0	404
25-29	90.9	3.6	5.5	100.0	409
30-34	90.7	5.6	3.7	100.0	305
35-39	91.8	5.3	2.9	100.0	292
40-44	88.0	6.4	5.6	100.0	297
45-49	88.7	4.0	7.3	100.0	275
Marital status					
Never married	41.1	5.5	53.5	100.0	875
Married or living together	91.2	5.2	3.6	100.0	1,443
Divorced/separated/widowed	85.7	2.8	11.5	100.0	95
Number of living children					
0	47.5	5.4	47.1	100.0	1,007
1-2	91.4	5.0	3.6	100.0	682
3-4	90.5	5.1	4.4	100.0	590
5+	90.8	5.5	3.7	100.0	134
Residence					
Urban	72.6	4.6	22.8	100.0	781
Rural	72.9	5.5	21.6	100.0	1,632
Region					
Issyk-Kul	80.1	3.3	16.6	100.0	207
Djalal-Abad	72.2	5.9	21.9	100.0	402
Naryn	53.4	11.4	35.3	100.0	98
Batken	77.3	1.2	21.5	100.0	186
Osh Oblast	65.9	3.3	30.8	100.0	526
Talas	86.0	8.9	5.1	100.0	126
Chui	76.4	8.4	15.2	100.0	407
Bishkek City	74.4	4.8	20.8	100.0	383
Osh City	69.0	1.2	29.8	100.0	78
Education					
None/primary	*	*	*	100.0	7
Basic general	53.2	5.9	40.9	100.0	338
Secondary	75.0	5.6	19.3	100.0	1,158
Professional primary/middle	78.1	5.6	16.2	100.0	388
Higher	76.5	3.5	20.0	100.0	522
Wealth quintile					
Lowest	67.2	5.5	27.2	100.0	502
Second	70.9	5.8	23.3	100.0	496
Middle	79.3	4.1	16.7	100.0	451
Fourth	71.1	8.8	20.1	100.0	449
Highest	75.9	2.3	21.8	100.0	515
Total	72.8	5.2	22.0	100.0	2,413

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] "Currently employed" is defined as having done work in the past 7 days. Includes persons who did not work in the past 7 days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

3.5.2 Occupation

KgDHS respondents who reported that they were currently employed or had worked in the past 12 months were asked about their occupation. Their responses were recorded verbatim and then coded into major occupation groups after the questionnaires were sent to the central office.

Table 3.7.1 shows the distribution of employed women by occupation group, according to background characteristics. The largest group is employed in professional, technical, or managerial positions (46 percent); 31 percent work in sales and services, 13 percent are in skilled manual jobs, and only 2 percent work in agriculture. Employment in professional, technical, or managerial positions generally increases with age, but employment in sales and services and in skilled manual jobs is higher

among younger women. For example, nearly half (48 percent) of employed women age 15-19 work in sales and services, as compared with 30 percent of women age 45-49, and more than one-quarter (26 percent) of women in the youngest age group work in skilled manual jobs, as compared with less than half of women age 45 and older (11 percent). There is no noticeable urban-rural difference for professional, technical, or managerial positions; however, urban women are more likely than rural women to be employed in sales and services and in skilled manual labor occupations. Employed women in Naryn, Osh Oblast, and Batken; women with a professional or higher education; and those in the lowest three wealth quintiles are most likely to be employed in professional, technical, or managerial occupations. On the other hand, women with only a basic general or secondary education and those in the highest two wealth quintiles are more likely to be employed in sales and services and skilled manual occupations.[2] Nearly one-quarter of employed women in the Talas region and one in six employed women with only a basic secondary education work in domestic service (24 percent and 16 percent, respectively).

Table 3.7.1 Occupation: Women

Percent distribution of women age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agriculture	Missing	Total	Number of women
Age										
15-19	3.5	1.3	48.0	26.3	5.6	10.1	2.9	2.3	100.0	126
20-24	37.4	1.1	36.4	17.9	1.8	3.5	0.2	1.7	100.0	381
25-29	54.5	1.7	27.2	8.8	1.9	2.8	0.3	2.7	100.0	473
30-34	49.8	0.0	28.8	11.0	1.9	4.6	1.4	2.6	100.0	373
35-39	49.3	0.1	29.0	11.4	3.6	3.2	2.6	0.8	100.0	371
40-44	48.6	1.0	28.2	12.4	4.1	2.6	2.3	0.9	100.0	432
45-49	46.0	1.4	29.7	11.1	3.9	2.8	2.9	2.1	100.0	395
Marital status										
Never married	30.1	1.2	41.5	19.4	2.2	3.0	0.8	1.8	100.0	458
Married or living together	51.0	0.7	26.4	10.4	3.1	4.3	2.1	2.0	100.0	1,656
Divorced/separated/widowed	41.6	1.4	35.3	14.5	3.2	1.5	1.2	1.3	100.0	436
Number of living children										
0	37.5	1.0	38.5	15.9	2.3	2.4	0.8	1.6	100.0	630
1-2	49.9	1.1	29.6	12.2	2.0	2.4	0.8	2.0	100.0	1,090
3-4	46.8	0.8	26.7	11.0	3.9	5.5	3.5	1.9	100.0	712
5+	42.9	0.0	23.1	10.0	10.2	9.0	4.0	0.8	100.0	118
Residence										
Urban	44.6	1.5	33.8	14.9	1.5	1.9	0.2	1.5	100.0	1,317
Rural	46.8	0.4	27.3	10.3	4.5	5.3	3.2	2.1	100.0	1,233
Region										
Issyk-Kul	42.1	1.3	38.6	8.0	3.6	2.8	1.8	1.8	100.0	231
Djalal-Abad	45.3	1.0	29.4	8.9	2.5	4.8	4.9	3.2	100.0	301
Naryn	65.0	0.0	22.3	5.6	3.4	2.5	0.4	0.8	100.0	87
Batken	55.8	0.0	23.9	7.1	8.8	3.6	0.0	0.8	100.0	148
Osh Oblast	57.3	0.0	22.4	8.7	5.9	2.3	0.0	3.4	100.0	260
Talas	36.2	0.2	22.3	5.2	2.9	23.5	7.4	2.1	100.0	136
Chui	42.8	1.0	34.7	13.2	2.2	2.4	2.4	1.4	100.0	561
Bishkek City	42.2	1.6	32.0	20.0	1.5	1.4	0.0	1.3	100.0	725
Osh City	47.6	0.3	33.6	14.0	1.7	0.8	0.0	2.0	100.0	100
Education										
None/primary	*	*	*	*	*	*	*	*	100.0	9
Basic general	7.3	0.0	45.3	17.7	7.7	16.1	5.9	0.0	100.0	118
Secondary	11.0	0.3	47.0	21.9	7.6	6.3	4.0	1.9	100.0	649
Professional primary/middle	48.6	0.8	27.4	15.4	2.2	2.5	1.1	2.1	100.0	582
Higher	67.2	1.5	21.7	5.9	0.4	1.2	0.3	1.7	100.0	1,191
Wealth quintile										
Lowest	50.1	0.3	24.9	8.0	3.5	6.4	4.4	2.3	100.0	369
Second	48.0	0.3	28.0	6.8	5.7	5.9	3.5	1.7	100.0	322
Middle	48.8	0.9	25.0	8.0	5.5	5.7	3.7	2.5	100.0	337
Fourth	42.1	0.7	33.3	16.4	3.0	2.4	0.4	1.7	100.0	570
Highest	44.2	1.6	34.2	16.0	0.9	1.6	0.0	1.5	100.0	951
Total	45.7	1.0	30.7	12.7	3.0	3.6	1.7	1.8	100.0	2,550

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[2] The average monthly salaries for professional jobs in education or health care, traditionally popular among women, are generally lower than the wages in services and skilled manual occupations. For example, in 2011, the average monthly salary for employees working in education was 6,682 Kyrgyz Som (KGS), the average for employees working in manufacturing was 14,462 KGS, and the overall workforce average was 9,311 KGS (NSC, 2012b). As of January 31, 2011, 1 U.S. dollar was equivalent to 47.42 KGS.

Table 3.7.2 shows that the largest proportion of men are employed in skilled manual labor jobs (38 percent), followed by jobs in professional, technical, or managerial positions (17 percent); agriculture (16 percent); sales and services (14 percent); and domestic service (12 percent). Men in urban areas are more likely to be working in jobs that require skills (i.e., skilled manual labor, professional/technical/managerial occupations, and sales and services) than men in rural areas. In contrast, men in rural areas are substantially more likely to be working in agriculture (23 percent) and domestic service (17 percent) than urban men (2 percent and 1 percent, respectively). Men age 15-19 and those age 40-44 are more likely than men in other age groups to work in agriculture. Agricultural employment is especially high in the Djalal-Abad region. Men in Djalal-Abad are four times as likely as men in Issyk-Kul, Osh Oblast, or Chui to work in agriculture (42 percent and 10-11 percent, respectively). Men with a higher education are more likely to be employed in professional, technical, or managerial occupations or in sales and services and less likely to work in skilled manual occupations. Employed men with only a basic general or secondary education are more likely than better educated men to be employed in domestic service or agriculture. Men's employment in professional/technical/managerial positions, sales and services, and skilled manual labor occupations generally increases with increasing wealth, while employment in domestic service and agriculture generally decreases with increasing wealth.

Table 3.7.2 Occupation: Men

Percent distribution of men age 15-49 employed in the 12 months preceding the survey by occupation, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Unskilled manual	Domestic service	Agriculture	Missing	Total	Number of men
Age										
15-19	5.2	0.0	18.0	35.1	0.0	16.5	22.5	2.6	100.0	96
20-24	14.9	0.6	21.9	36.0	0.0	7.2	15.6	3.8	100.0	289
25-29	19.5	0.5	15.9	37.2	0.9	10.3	12.7	3.0	100.0	386
30-34	18.4	0.5	13.4	42.1	0.0	10.4	13.9	1.3	100.0	293
35-39	17.2	0.5	9.2	39.1	0.2	15.0	16.1	2.8	100.0	283
40-44	15.0	0.7	8.0	37.5	0.2	14.7	21.2	2.8	100.0	281
45-49	19.2	0.3	14.6	36.2	0.0	10.3	15.5	3.9	100.0	255
Marital status										
Never married	14.7	0.6	19.6	35.6	0.3	8.4	15.1	5.6	100.0	407
Married or living together	17.6	0.4	13.1	38.3	0.3	12.5	15.8	2.0	100.0	1,391
Divorced/separated/widowed	15.7	1.1	6.0	40.8	0.0	9.7	22.6	4.1	100.0	84
Number of living children										
0	14.9	0.6	19.2	36.5	0.2	9.1	14.7	4.9	100.0	532
1-2	20.7	0.4	15.4	36.6	0.5	9.6	15.3	1.5	100.0	658
3-4	16.0	0.3	10.4	42.2	0.1	12.4	15.7	2.9	100.0	564
5+	9.0	1.2	3.8	30.8	0.0	27.3	26.1	1.9	100.0	129
Residence										
Urban	28.8	0.5	22.0	43.7	0.0	1.0	2.0	2.0	100.0	603
Rural	11.2	0.5	10.5	35.1	0.4	16.5	22.6	3.3	100.0	1,280
Region										
Issyk-Kul	15.4	1.4	12.2	36.2	0.0	19.9	9.5	5.4	100.0	172
Djalal-Abad	10.1	0.0	6.0	32.3	0.0	7.7	42.0	1.9	100.0	314
Naryn	23.4	0.5	8.6	30.1	0.8	8.0	26.9	1.7	100.0	63
Batken	11.4	0.5	11.8	30.8	0.5	20.0	23.7	1.3	100.0	146
Osh Oblast	13.1	0.0	13.3	39.8	0.9	20.1	9.6	3.3	100.0	364
Talas	8.9	0.8	7.4	28.7	0.3	29.4	23.0	1.3	100.0	119
Chui	14.4	0.4	19.1	45.1	0.0	4.5	11.1	5.4	100.0	345
Bishkek City	33.1	1.1	23.7	41.1	0.0	0.0	0.0	1.1	100.0	304
Osh City	34.5	0.0	17.2	46.7	0.0	0.0	0.0	1.6	100.0	55
Education										
None/primary	*	*	*	*	*	*	*	*	100.0	6
Basic general	6.1	0.4	14.1	41.1	0.2	13.5	19.9	4.8	100.0	200
Secondary	6.0	0.2	11.1	41.4	0.4	15.2	22.9	2.9	100.0	934
Professional primary/middle	14.9	0.2	15.5	49.9	0.0	8.0	7.5	4.0	100.0	325
Higher	48.1	1.3	20.1	19.0	0.2	5.0	5.1	1.2	100.0	418
Wealth quintile										
Lowest	15.6	0.3	6.2	31.2	0.7	18.2	26.4	1.4	100.0	365
Second	11.6	0.7	9.5	29.5	0.2	19.1	27.6	1.7	100.0	380
Middle	8.7	0.5	12.4	41.4	0.4	13.2	20.6	2.7	100.0	376
Fourth	15.0	0.0	17.9	46.8	0.0	7.4	6.1	6.9	100.0	359
Highest	32.2	0.8	24.1	40.5	0.0	0.3	0.0	2.1	100.0	403
Total	16.8	0.5	14.2	37.9	0.3	11.5	16.0	2.9	100.0	1,883

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

3.5.3 Type of Employment

Table 3.8 shows the percent distribution of women and men who worked at any time during the 12 months preceding the survey by the type of earnings they received (cash, in-kind, or both), type of employer (for women), and continuity of employment, according to type of work (agricultural or nonagricultural).

About 9 in 10 employed women (89 percent) and 8 in 10 employed men (80 percent) are paid in cash only, and 3 percent and 12 percent, respectively, are paid in cash and in-kind. Eight percent of both women and men are not paid at all for their work. As expected, women and men employed in nonagricultural jobs are much more likely to be paid in cash for the work they do than those employed in the agricultural sector. More than half of women (53 percent) and nearly one-quarter of men (24 percent) working in agriculture are not paid for their work.

Around three-quarters of women (76 percent) are employed by a nonrelative, 15 percent work for a family member, and 9 percent are self-employed. Women who work in agriculture are mainly employed by family members (77 percent), which is likely the reason a large proportion are not paid. Women in nonagricultural jobs are more likely to be employed by a non-family member (77 percent) than to work for a relative (14 percent) or to be self-employed (9 percent).

Table 3.8 Type of employment

Percent distribution of women and men age 15-49 employed in the 12 months preceding the survey by type of earnings, type of employer for women, and continuity of employment for women and men, according to type of employment (agricultural or nonagricultural), Kyrgyz Republic 2012

	Women			Men		
Employment characteristic	Agricultural work	Non-agricultural work	Total	Agricultural work	Non-agricultural work	Total
Type of earnings						
Cash only	31.7	89.9	89.0	29.6	89.0	79.7
Cash and in-kind	15.0	2.8	3.0	45.9	5.1	11.6
In-kind only	0.8	0.2	0.2	0.4	0.5	0.5
Not paid	52.5	7.0	7.7	24.1	5.1	8.0
Missing	0.0	0.1	0.1	0.1	0.2	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Type of employer						
Employed by family member	77.4	14.0	14.9	na	na	na
Employed by non-family member	11.7	77.1	76.2	na	na	na
Self-employed	10.9	8.8	8.8	na	na	na
Missing	0.0	0.1	0.1	na	na	na
Total	100.0	100.0	100.0	na	na	na
Continuity of employment						
All year	26.3	85.5	84.3	36.5	67.6	61.9
Seasonal	66.6	11.7	12.8	63.1	28.0	34.1
Occasional	7.1	2.7	2.8	0.2	4.4	3.9
Missing	0.0	0.1	0.1	0.1	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of respondents employed during the last 12 months	43	2,461	2,550	301	1,527	1,883

Note: Total includes respondents with missing information on type of employment who are not shown separately.
na = Not applicable

Women's and men's employment is more often year-round (84 percent of women and 62 percent of men) or seasonal (13 percent of women and 34 percent of men) rather than occasional (3 percent of women and 4 percent of men). Respondents in nonagricultural jobs are much more likely to be employed throughout the year, while those who work in agriculture are more likely to work seasonally.

3.6 HEALTH INSURANCE

The government of the Kyrgyz Republic introduced mandatory health insurance (MHI) in 1997. The law on health insurance was adopted in 1999 and subsequently amended in 2003 to include military personnel. Refugees are also covered for services provided within the state-guaranteed benefit package (Ibraimova et al., 2011).

The Mandatory Health Insurance Fund is the "single payer" agency in the health sector, with responsibility for pooling health funds and purchasing health services (Ibraimova et al., 2011). It is separated from the Ministry of Health and directly subordinate to the Kyrgyz government and is accountable to the Ministry of Finance and local administrations. The fund finances individual health services provided under the state-guaranteed benefit package and additional programs financed by mandatory health insurance, although primary health care is free irrespective of insurance status (Ibraimova et al., 2011).

The Mandatory Health Insurance Fund is based on payroll-tax revenues and there is no means of opting out, although in some cases voluntary health insurance is provided through an employer or may be purchased independently (Ibraimova et al., 2011).

The 2012 KgDHS obtained information from all respondents regarding whether or not they are covered by an insurance plan. Respondents were asked whether they have any health insurance and, if so, what type they have. Results are shown in Tables 3.9.1 and 3.9.2.

Table 3.9.1 Health insurance coverage: Women

Percentage of women age 15-49 with specific types of health insurance coverage, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Social security	Other employer-based insurance	Mandatory health insurance (MHI)	Privately purchased commercial insurance	Other	None	Number of women
Age							
15-19	0.3	0.1	64.8	0.0	0.0	34.8	1,637
20-24	0.7	0.1	87.4	0.1	0.1	11.9	1,527
25-29	0.9	0.3	89.9	0.1	0.0	9.1	1,265
30-34	0.8	0.1	90.2	0.3	0.3	8.9	1,028
35-39	1.3	0.2	91.6	0.0	0.0	7.0	915
40-44	1.2	0.5	92.8	0.0	0.0	6.2	928
45-49	1.3	0.4	93.8	0.0	0.0	5.3	908
Residence							
Urban	0.7	0.2	84.0	0.0	0.1	15.3	3,070
Rural	1.0	0.2	86.3	0.1	0.1	12.8	5,138
Region							
Issyk-Kul	0.2	0.6	93.2	0.1	0.1	6.5	650
Djalal-Abad	4.4	0.1	86.4	0.0	0.1	9.5	1,332
Naryn	0.0	0.4	90.3	0.4	0.0	9.3	281
Batken	0.0	0.0	95.9	0.0	0.0	4.1	616
Osh Oblast	0.2	0.1	79.7	0.0	0.0	20.3	1,627
Talas	0.0	0.0	94.7	0.0	0.1	5.2	360
Chui	0.3	0.7	86.1	0.3	0.1	13.3	1,465
Bishkek City	0.1	0.0	79.3	0.0	0.0	20.6	1,566
Osh City	0.8	0.1	86.2	0.0	0.0	12.9	311
Education							
None/primary	(0.0)	(0.0)	(56.5)	(0.0)	(0.0)	(43.5)	39
Basic general	0.5	0.0	66.3	0.0	0.1	33.3	1,139
Secondary	1.0	0.1	86.7	0.1	0.0	12.4	3,468
Professional primary/middle	0.9	0.4	90.2	0.2	0.1	8.7	1,364
Higher	0.9	0.4	90.8	0.1	0.1	8.2	2,198
Wealth quintile							
Lowest	1.3	0.2	87.5	0.0	0.0	11.6	1,459
Second	1.1	0.1	87.1	0.2	0.0	11.8	1,473
Middle	0.7	0.2	85.9	0.2	0.1	13.4	1,538
Fourth	0.8	0.4	84.4	0.0	0.2	14.6	1,667
Highest	0.6	0.1	83.2	0.1	0.0	16.2	2,071
Total	0.9	0.2	85.4	0.1	0.1	13.7	8,208

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 3.9.2 Health insurance coverage: Men

Percentage of men age 15-49 with specific types of health insurance coverage, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Social security	Other employer-based insurance	Mandatory health insurance (MHI)	Privately purchased commercial insurance	None	Number of men
Age						
15-19	0.8	0.0	77.1	0.0	22.2	432
20-24	0.4	0.0	93.1	0.2	6.4	404
25-29	0.4	0.0	90.3	0.0	9.3	409
30-34	0.6	3.7	91.1	0.0	8.3	305
35-39	0.6	1.4	92.0	0.0	7.3	292
40-44	0.6	0.9	94.3	0.8	5.1	297
45-49	0.6	0.8	94.0	1.1	4.6	275
Residence						
Urban	1.5	2.3	82.6	0.4	15.9	781
Rural	0.1	0.2	93.0	0.2	6.7	1,632
Region						
Issyk-Kul	0.0	0.3	91.9	0.4	8.1	207
Djalal-Abad	3.4	0.0	94.2	0.0	2.4	402
Naryn	0.0	0.0	98.3	0.0	1.7	98
Batken	0.0	0.0	98.8	0.0	1.2	186
Osh Oblast	0.0	0.0	95.3	0.0	4.7	526
Talas	0.0	0.0	93.9	0.0	6.1	126
Chui	0.0	0.5	82.0	0.5	17.5	407
Bishkek City	0.0	4.6	76.1	0.9	23.9	383
Osh City	0.0	0.0	88.6	0.0	11.4	78
Education						
None/primary	*	*	*	*	*	7
Basic general	1.0	0.6	78.9	0.0	20.1	338
Secondary	0.1	0.0	92.6	0.3	7.2	1,158
Professional primary/middle	1.4	0.7	87.3	0.2	11.3	388
Higher	0.7	2.9	91.7	0.4	7.3	522
Wealth quintile						
Lowest	0.0	0.1	95.9	0.0	4.1	502
Second	0.0	0.0	95.3	0.0	4.7	496
Middle	0.0	0.0	93.9	0.0	6.1	451
Fourth	0.8	0.9	83.8	1.4	15.0	449
Highest	2.0	3.0	79.5	0.0	18.5	515
Total	0.6	0.8	89.6	0.3	9.7	2,413

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

As expected, the results confirm that the majority of the KgDHS respondents (85 percent of women and 90 percent of men) are covered by MHI. Only 1 percent or less are covered by social security or privately purchased commercial insurance.

Women and men age 15-19 and those with only a basic general education are least likely to be covered by MHI. MHI coverage is higher among rural than urban men (93 percent and 83 percent, respectively); however, the difference in coverage between urban and rural women is negligible. MHI coverage generally decreases with increasing wealth, although this pattern is more pronounced among men.

Fourteen percent of women and 10 percent of men are not covered by any type of health insurance. The percentage of respondents without coverage is higher in the younger age groups and decreases with age. It is higher among urban women (15 percent) and men (16 percent) than their rural counterparts (13 percent and 7 percent, respectively). Residents of Bishkek (21 percent of women and 24 percent of men) and respondents in the highest wealth quintile (16 percent of women and 19 percent of men) are most likely not to be covered by any health insurance. Respondents with only a basic general education (20 percent of men and 33 percent of women) are two to three times more likely to have no insurance than respondents with more education (12 percent or less). The low coverage of youth and respondents with lower levels of education may be partly explained by the fact that some young people, after completing basic general or secondary levels of education, do not pursue higher levels of education and are not yet employed (6 percent of women age 15-19 and 17 percent of men age 15-19 are currently employed; see Tables 3.6.1 and 3.6.2). In general, MHI is paid from the government budget for students under age 16. For students enrolled in secondary school, MHI is paid until age 18, and for students of professional and higher levels of education, it is paid until age 21.

3.7 TOBACCO USE

Tobacco use is associated with increased risks of lung cancer and respiratory, cardiovascular, and other diseases among adults who smoke, and secondhand smoke increases the risk of morbidity and mortality among adults and children who do not use tobacco (WHO, 2012a). Because smoking is a conscious choice made by an individual, it follows that morbidity and mortality caused by the use of tobacco products can be prevented.The 2012 KgDHS included questions designed to assess tobacco use among the survey respondents.

The results in Table 3.10.1 show that tobacco use is rare among Kyrgyz women. Overall, 3 percent of women age 15-49 reported that they currently smoke cigarettes, and less than 1 percent use other types of tobacco. It is possible that some female respondents were reluctant to report that they smoke cigarettes because of the traditional disapproval of women smoking. Smoking among women is somewhat more common in urban areas (5 percent) than rural areas (1 percent). Women age 20-24 and 45-49 are more likely to smoke (4 percent each) than women in other age groups. The prevalence of smoking among women is highest in Bishkek (6 percent) and Chui (5 percent), with a prevalence of 2 percent or less in other regions. Women with a higher education are more likely to smoke cigarettes (5 percent) than those with lower levels of education (1 to 2 percent). Less than 1 percent of women in the poorest households smoke cigarettes, as compared with 6 percent of women in the wealthiest households. Among females who smoke, 18 percent smoke 6-9 cigarettes per day and 41 percent smoke 10 or more cigarettes per day (data not shown). While few women themselves smoke, a substantial number of women are regularly exposed to the harmful effects of secondhand smoke. As reported in Chapter 2, 3 in 10 Kyrgyz households report that smoking occurs in the home daily.

Table 3.10.1 Use of tobacco: Women

Percentage of women age 15-49 who smoke cigarettes or a pipe or use other tobacco products, according to background characteristics and maternity status, Kyrgyz Republic 2012

Background characteristic	Uses tobacco			Does not use tobacco	Number of women
	Cigarettes	Pipe	Other tobacco		
Age					
15-19	1.3	0.0	1.1	98.2	1,637
20-24	3.6	0.0	0.6	96.2	1,527
25-29	1.9	0.0	0.7	97.9	1,265
30-34	2.7	0.1	0.8	97.3	1,028
35-39	3.0	0.0	0.2	97.0	915
40-44	2.3	0.0	0.1	97.7	928
45-49	3.8	0.0	0.4	96.0	908
Maternity status					
Pregnant	0.8	0.0	0.3	99.2	551
Breastfeeding (not pregnant)	0.1	0.0	0.0	99.9	1,318
Neither	3.2	0.0	0.8	96.5	6,339
Residence					
Urban	5.0	0.0	1.0	94.7	3,070
Rural	1.1	0.0	0.4	98.7	5,138
Region					
Issyk-Kul	2.1	0.0	0.1	97.8	650
Djalal-Abad	0.4	0.1	0.0	99.6	1,332
Naryn	0.0	0.0	0.0	100.0	281
Batken	0.1	0.0	0.1	99.8	616
Osh Oblast	0.7	0.0	0.5	99.3	1,627
Talas	0.9	0.0	0.0	99.1	360
Chui	5.1	0.0	1.4	94.1	1,465
Bishkek City	6.3	0.0	1.3	93.4	1,566
Osh City	1.2	0.0	0.0	98.8	311
Education					
None/primary	(0.0)	(0.0)	(0.0)	100.0	39
Basic general	1.4	0.0	0.2	98.5	1,139
Secondary	1.6	0.0	0.5	98.2	3,468
Professional primary/middle	2.2	0.0	0.0	97.8	1,364
Higher	5.1	0.1	1.3	94.6	2,198
Wealth quintile					
Lowest	0.6	0.0	0.1	99.3	1,459
Second	0.6	0.0	0.3	99.3	1,473
Middle	1.3	0.0	0.7	98.6	1,538
Fourth	3.0	0.1	0.8	96.6	1,667
Highest	5.9	0.0	1.1	93.8	2,071
Total	2.6	0.0	0.6	97.2	8,208

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 3.10.2 shows that tobacco use is considerably more common among men. Forty-four percent of Kyrgyz men age 15-49 smoke cigarettes, 11 percent chew tobacco, and 3 percent each use a water pipe or use a pipe and other tobacco.

Table 3.10.2 Use of tobacco: Men

Percentage of men age 15-49 who smoke cigarettes or a pipe or use other tobacco products and the percent distribution of cigarette smokers by number of cigarettes smoked in the preceding 24 hours, according to background characteristics, Kyrgyz Republic 2012

	Uses tobacco						Percent distribution of men who smoke cigarettes by number of cigarettes smoked in the past 24 hours							
Background characteristic	Cigarettes	Chewing tobacco	Water pipe	Pipe and other tobacco	Does not use tobacco	Number of men	0	1-2	3-5	6-9	10+	Don't know/ missing	Total	Number of cigarette smokers
Age														
15-19	5.7	5.2	2.1	2.1	89.3	432	*	*	*	*	*	*	100.0	24
20-24	26.4	17.4	5.0	5.0	56.8	404	0.0	5.2	24.2	11.0	59.1	0.6	100.0	107
25-29	42.6	16.6	3.6	4.5	41.7	409	0.0	4.3	11.1	14.8	69.8	0.0	100.0	174
30-34	57.4	10.4	0.3	0.3	34.6	305	0.0	2.9	8.4	10.8	77.9	0.0	100.0	175
35-39	65.6	9.2	1.4	1.4	26.9	292	0.0	1.8	8.0	10.3	79.8	0.1	100.0	191
40-44	67.3	7.6	2.3	2.3	28.4	297	0.1	1.6	8.0	5.5	83.1	1.7	100.0	200
45-49	67.5	4.6	1.8	1.8	29.3	275	0.0	2.0	5.1	6.7	86.2	0.0	100.0	185
Residence														
Urban	51.8	8.1	4.2	4.2	41.1	781	0.0	2.2	12.9	8.8	75.3	0.8	100.0	405
Rural	40.0	11.7	1.7	1.9	49.8	1,632	0.0	3.2	9.0	9.8	77.5	0.4	100.0	652
Region														
Issyk-Kul	47.9	2.8	0.0	0.0	50.0	207	0.0	7.1	13.9	12.1	67.0	0.0	100.0	99
Djalal-Abad	36.7	18.5	0.0	0.0	45.3	402	0.0	7.4	6.6	10.9	75.2	0.0	100.0	148
Naryn	41.8	8.7	0.0	0.4	50.0	98	0.0	0.0	27.3	7.0	65.7	0.0	100.0	41
Batken	9.8	6.5	0.0	0.0	84.1	186	(0.0)	(11.5)	(17.4)	(12.0)	(59.1)	(0.0)	100.0	18
Osh Oblast	39.6	10.6	0.0	0.0	51.5	526	0.0	2.3	9.6	3.1	85.0	0.0	100.0	208
Talas	45.3	5.2	0.0	0.0	52.5	126	0.0	4.9	19.1	6.1	69.0	0.9	100.0	57
Chui	54.0	14.4	14.3	15.0	33.2	407	0.0	0.0	1.7	15.2	81.1	1.9	100.0	220
Bishkek City	57.1	6.4	0.8	0.8	38.0	383	0.0	1.2	16.5	10.2	72.2	0.0	100.0	219
Osh City	60.0	10.0	0.0	0.0	32.7	78	0.4	0.0	4.6	1.5	90.8	2.6	100.0	47
Education														
None/primary	*	*	*	*	57.5	7	*	*	*	*	*	*	100.0	1
Basic general	26.0	10.3	0.8	0.8	65.7	338	0.0	3.8	16.0	18.4	59.6	2.2	100.0	88
Secondary	44.2	13.2	1.9	2.1	44.6	1,158	0.0	1.6	9.1	6.9	81.9	0.4	100.0	512
Professional primary/ middle	59.5	6.8	4.7	4.7	35.6	388	0.0	4.2	7.1	7.2	80.7	0.8	100.0	231
Higher	43.2	7.4	3.5	3.5	48.7	522	0.0	3.9	14.6	14.0	67.5	0.0	100.0	225
Wealth quintile														
Lowest	38.3	13.0	1.8	1.8	49.7	502	0.0	2.4	15.4	7.2	74.9	0.0	100.0	193
Second	32.8	10.4	1.2	1.2	57.5	496	0.0	1.8	6.1	9.2	82.9	0.0	100.0	163
Middle	41.9	10.7	0.8	0.8	49.6	451	0.1	6.7	8.0	7.2	77.4	0.6	100.0	189
Fourth	48.7	10.7	4.6	5.3	42.7	449	0.0	3.3	6.8	13.9	74.4	1.6	100.0	219
Highest	57.1	8.0	4.2	4.2	35.8	515	0.0	0.9	14.0	9.1	75.6	0.4	100.0	295
Total	43.8	10.5	2.5	2.7	47.0	2,413	0.0	2.8	10.5	9.4	76.7	0.6	100.0	1,057

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.

Cigarette smoking is much more common among older than younger men. For example, only 6 percent of men age 15-19 smoke cigarettes, as compared with 66-68 percent of men age 35 and older. With respect to other background characteristics, smoking is highest among men in urban areas (52 percent), men in Osh (60 percent), those with a professional education (60 percent), and those in the highest wealth quintile (57 percent).

The majority of men who are cigarette smokers (77 percent) reported smoking 10 or more cigarettes in the past 24 hours. This proportion is notably higher among men age 45-49 (86 percent), men in Osh (91 percent), those with a secondary or professional education (81 to 82 percent), and men in the second wealth quintile (83 percent).

3.8 ALCOHOL CONSUMPTION

Alcohol abuse is a serious problem in many European countries.[3] Europe has the highest level of alcohol consumption in the world, and consumption of alcohol is considered to be the third highest risk factor for death and disability, after tobacco use and hypertension (WHO, 2009). Potential consequences of alcohol abuse include increased risk of cirrhosis of the liver, hypertension, psychological illnesses, and congenital malformations. Moreover, excessive alcohol consumption contributes to family problems such as domestic violence as well as social and employment problems such as alcohol addiction, accidents, criminal behavior, violence, homicide, and suicide.

In the 2012 KgDHS, male respondents were asked a series of questions related to alcohol consumption: whether they ever drank alcohol, the age they had their first alcoholic drink, and how many alcoholic beverages they had consumed during the past month on days when they had consumed alcohol. A bottle or a can of beer (330-500 ml), a glass of wine (50-200 ml), and a shot of liqueur, vodka, or whiskey (50 ml) are considered standard beverages or standard drinks.

3.8.1 Use of Alcohol

Table 3.11 shows that 37 percent of men consumed at least one alcoholic beverage in the month prior to the interview. Recent alcohol consumption increases rapidly from 7 percent among men age 15-19 to 31 percent at age 20-24 and peaks at 52 percent among men age 45-49. A higher percentage of men in urban areas reported consuming alcohol at least once in the past month than those in rural areas (42 percent and 35 percent, respectively). The highest alcohol consumption is in the Chui region (62 percent) and the lowest is in the Batken region (9 percent). Level of alcohol consumption tends to increase with increasing education and wealth, although the relationship is not linear.

Alcohol consumption (measured as the proportion of men consuming at least one alcoholic drink in the past month) among men in the Kyrgyz Republic (37 percent) is about the same as that for men in Azerbaijan (39 percent) but is considerably lower than that for men in Ukraine (77 percent) and Moldova (80 percent) (SSC [Azerbaijan] and Macro International, 2008; UCSR [Ukraine] et al., 2008; NCPM [Moldova] and ORC Macro, 2006).

3.8.2 Quantity of Alcohol Consumed

Among men who consumed alcohol in the month prior to the survey, the average number of drinks consumed on a typical “drinking occasion” is about four, with no substantial difference by urban-rural residence (five drinks versus four drinks). However, the average number of drinks varies by region, from two in Talas and Chui to seven in Issyk-Kul and Bishkek. The median number of drinks is three (Table 3.11).

3.8.3 Frequency of Alcohol Use

In general, Kyrgyz men do not consume alcohol frequently. Among the 37 percent of men that had an alcoholic drink in the month preceding the survey, practically none report consuming alcohol daily, 7 percent consume alcohol one to two times per week, 16 percent consume alcohol two to three times per month, and 13 percent consume alcohol once a month (Table 3.11). However, a relatively higher percentage of men age 40-49 (10 to 12 percent); men residing in Osh (18 percent), Chui (14 percent), and Djalal-Abad (13 percent); and men with a professional education (11 percent) reported usually drinking alcohol one to two times a week during the month preceding the survey.

[3] The Kyrgyz Republic is listed under low- and middle-income countries in the European Region of the World Health Organization.

Table 3.11 Use of alcohol among men

Percentage of men age 15-49 who have had at least one alcoholic drink in the month preceding the survey and the usual frequency of drinking alcohol in a month, and among men who had at least one drink in the past month, the mean number and the median number of alcoholic beverages consumed on a typical drinking occasion, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Has had at least one drink in the past month	Frequency of drinking							Number of men	Among men who had at least one alcoholic drink in the past month		Number of men who had at least one alcoholic drink in the past month
		Every day	Almost every day	1-2 times per week	2-3 times per month	Once a month	Less than once a month	Missing		Mean number of drinks per day	Median number of drinks per day	
Age												
15-19	7.1	0.0	0.0	1.3	3.6	2.3	92.9	0.0	432	(3.3)	(1.4)	31
20-24	31.1	0.0	0.2	7.0	11.7	12.2	68.9	0.0	404	3.1	2.2	125
25-29	41.4	0.4	0.2	7.6	19.6	13.7	58.6	0.0	409	4.6	2.8	169
30-34	46.1	0.4	0.8	7.6	17.9	18.7	53.9	0.5	305	4.0	2.5	140
35-39	47.2	0.1	0.6	9.1	19.0	18.3	52.8	0.0	292	4.5	2.5	138
40-44	49.3	1.4	1.2	10.0	18.6	18.1	50.7	0.0	297	5.1	2.5	147
45-49	51.6	1.2	1.4	12.1	24.7	12.2	48.4	0.0	275	4.7	3.9	142
Residence												
Urban	41.7	0.7	0.3	7.9	16.5	16.2	58.3	0.2	781	5.3	4.2	326
Rural	34.7	0.3	0.7	7.1	15.2	11.4	65.3	0.0	1,632	3.8	2.0	566
Region												
Issyk-Kul	16.5	0.3	0.4	1.6	7.3	6.9	83.5	0.0	207	(7.4)	(2.1)	34
Djalal-Abad	37.6	0.0	0.7	12.7	21.3	2.6	62.4	0.4	402	5.3	3.8	151
Naryn	49.0	0.6	0.6	1.3	15.0	31.4	51.0	0.0	98	4.7	3.6	48
Batken	8.8	0.4	0.9	2.2	3.9	1.4	91.2	0.0	186	(5.5)	(2.3)	16
Osh Oblast	26.8	0.7	0.6	6.5	14.4	4.6	73.2	0.0	526	3.3	2.4	141
Talas	39.2	0.3	0.0	2.4	8.6	27.8	60.8	0.0	126	2.4	1.8	49
Chui	62.4	0.7	0.9	13.7	21.5	25.7	37.6	0.0	407	2.3	a	254
Bishkek City	40.9	0.5	0.2	2.8	14.4	22.9	59.1	0.0	383	7.0	5.7	157
Osh City	53.0	0.0	0.0	17.9	31.1	4.0	47.0	0.0	78	5.3	3.9	41
Education												
None/primary	13.0	0.0	0.0	0.0	4.1	8.9	87.0	0.0	7	*	*	1
Basic general	21.0	0.0	0.5	4.4	8.2	7.5	79.0	0.5	338	4.8	1.9	71
Secondary	37.0	0.7	1.0	8.4	16.3	10.6	63.0	0.0	1,158	4.2	2.7	429
Professional primary/middle	47.6	0.7	0.0	11.3	20.3	15.4	52.4	0.0	388	4.4	2.2	185
Higher	39.5	0.0	0.2	4.1	15.4	19.8	60.5	0.0	522	4.2	2.8	206
Wealth quintile												
Lowest	34.6	0.5	0.8	8.9	15.2	9.1	65.4	0.0	502	3.7	2.5	174
Second	28.8	0.0	0.3	6.8	12.3	9.4	71.2	0.0	496	3.5	1.9	143
Middle	34.8	0.1	0.6	6.9	15.6	11.3	65.2	0.3	451	3.6	2.0	157
Fourth	42.6	1.7	1.0	8.0	17.4	14.5	57.4	0.0	449	4.6	2.0	191
Highest	44.1	0.1	0.1	6.2	17.5	20.2	55.9	0.0	515	5.6	4.5	227
Total	37.0	0.4	0.6	7.3	15.6	13.0	63.0	0.1	2,413	4.3	2.6	892

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.
a = Omitted because less than 50 percent of the men who had at least one drink in the past month had two or more alcoholic drinks per day.

Male respondents who had an alcoholic drink in the month preceding the survey were also asked whether there had been any occasions in the three months preceding the survey when they had consumed more alcohol than usual and, if yes, how frequently they had consumed greater than usual quantities. Among men who had an alcoholic drink in the month preceding the survey, 21 percent (184 cases) said that they had consumed more alcohol than usual on different occasions in the past three months (data not shown).

3.8.4 Age at First Alcoholic Drink

The KgDHS male respondents were also asked about the age at which they started to consume alcohol. Table 3.12 shows the percentage of men who have started drinking by specific ages, according to current age.

Almost 8 in 10 men age 15-19 (78 percent) have never drunk alcohol. However, there is an increasing trend among men to start drinking at younger ages: among men age 20-24, 36 percent started alcohol consumption by age 18 and 62 percent had begun by age 20. By comparison, among men age 45-49, 25 percent started drinking by age 18 and 56 percent by age 20, indicating that the number of men who started using alcohol by age 18 has increased somewhat in recent years. Use of alcohol by age 20 does not fall below 56 percent among men in any age group. By age 25, more than three-quarters of men have used alcohol (78-86 percent). Early use of alcohol is highest among men in their 30s.

Table 3.12 Age at first alcoholic drink among men

Percentage of men age 15-49 who had their first alcoholic drink by specific exact ages, according to current age, Kyrgyz Republic 2012

	Percentage who drank by exact age				Percentage who never drank alcohol	
Current age	15	18	20	25		Number
15-19	2.5	na	na	na	77.5	432
20-24	2.1	36.1	61.9	na	28.0	404
25-29	1.2	36.9	62.8	78.1	20.6	409
30-34	3.8	37.4	67.8	80.8	16.6	305
35-39	1.3	27.9	65.1	85.7	12.4	292
40-44	2.7	26.2	58.6	82.1	14.3	297
45-49	2.1	24.6	56.4	78.6	14.9	275

na = Not applicable due to censoring

3.9 TUBERCULOSIS

Tuberculosis is a serious health concern in the Kyrgyz Republic, which is among 27 nations worldwide identified by WHO as countries with high rates of multidrug-resistant tuberculosis (WHO, 2012b). In 2010, the prevalence of tuberculosis in the Kyrgyz Republic was estimated at 243 cases per 100,000 population, and the incidence rate was 159 per 100,000, with 14 percent of new cases being multidrug-resistant tuberculosis (WHO/EURO, 2012).

KgDHS respondents were asked a series of questions to assess their level of tuberculosis awareness, attitudes about the disease, and knowledge about modes of transmission and symptoms. This information is useful in designing communications strategies to improve awareness of the disease.

3.9.1 Knowledge and Attitudes about Tuberculosis

Tables 3.13.1 and 3.13.2 show the percentages of women and men age 15-49, respectively, who have heard about tuberculosis and, among those who know about tuberculosis, the percentages who are aware that tuberculosis is spread through the air by coughing or sneezing, who believe that tuberculosis can be cured, and who would want to keep it a secret if a family member had tuberculosis.

As shown in Tables 3.13.1 and 3.13.2, there is a high degree of awareness of tuberculosis among the Kyrgyz Republic population: 94 percent of women and 96 percent of men have heard of tuberculosis. Among both women and men, the level of awareness of tuberculosis exceeds 90 percent in most subgroups. The lowest awareness rates are observed among women and men in the 15-19 age group, men living in the Osh Oblast region, and respondents with a basic general education or less.

Table 3.13.1 Knowledge and attitudes concerning tuberculosis: Women

Percentage of women age 15-49 who have heard of tuberculosis (TB), and among women who have heard of TB, the percentages who report that TB is spread through the air when an infected person coughs or sneezes, the percentage who believe that TB can be cured, and the percentage who would want to keep secret that a family member has TB, by background characteristics, Kyrgyz Republic 2012

			Among women who have heard of TB, the percentage who:			
Background characteristic	Percentage of women who have heard of TB	Number of women	Report that TB is spread through the air when an infected person coughs or sneezes	Believe that TB can be cured	Would want a family member's TB kept secret	Number of women who have heard of tuberculosis
Age						
15-19	87.0	1,637	76.7	72.3	40.7	1,425
20-24	94.7	1,527	81.1	78.8	39.7	1,446
25-29	95.1	1,265	84.8	79.1	40.1	1,203
30-34	94.0	1,028	82.4	80.9	40.8	967
35-39	97.0	915	86.4	81.9	37.2	887
40-44	98.4	928	84.3	84.8	38.4	914
45-49	97.3	908	84.1	86.3	36.0	883
Residence						
Urban	93.8	3,070	86.4	80.1	37.2	2,879
Rural	94.3	5,138	80.0	79.7	40.4	4,846
Region						
Issyk-Kul	98.4	650	96.6	86.7	12.7	639
Djalal-Abad	94.8	1,332	87.7	79.2	48.1	1,263
Naryn	96.1	281	91.8	70.8	33.4	270
Batken	92.7	616	80.9	70.2	11.4	571
Osh Oblast	91.1	1,627	64.8	77.3	53.9	1,483
Talas	94.2	360	88.5	78.9	13.6	339
Chui	97.9	1,465	81.4	86.9	42.9	1,434
Bishkek City	91.5	1,566	87.3	78.8	44.1	1,433
Osh City	93.8	311	84.7	79.9	31.9	291
Education						
None/primary	(76.0)	39	(83.8)	(73.0)	(20.1)	30
Basic general	86.2	1,139	76.5	73.9	42.1	982
Secondary	93.8	3,468	78.2	77.0	39.9	3,254
Professional primary/middle	97.4	1,364	86.9	84.3	33.9	1,329
Higher	96.9	2,198	88.6	84.3	40.4	2,130
Wealth quintile						
Lowest	95.6	1,459	79.2	81.7	35.0	1,394
Second	95.3	1,473	79.2	79.5	39.7	1,403
Middle	92.8	1,538	80.6	75.2	39.5	1,427
Fourth	94.1	1,667	83.2	82.2	40.4	1,569
Highest	93.2	2,071	87.5	80.3	40.7	1,931
Total	94.1	8,208	82.3	79.9	39.2	7,724

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 3.13.2 Knowledge and attitudes concerning tuberculosis: Men

Percentage of men age 15-49 who have heard of tuberculosis (TB), and among men who have heard of TB, the percentages who report that TB is spread through the air when an infected person coughs or sneezes, the percentage who believe that TB can be cured, and the percentage who would want to keep secret that a family member has TB, by background characteristics, Kyrgyz Republic 2012

			Among men who have heard of TB, the percentage who:			
Background characteristic	Percentage of men who have heard of TB	Number of men	Report that TB is spread through the air when an infected person coughs or sneezes	Believe that TB can be cured	Would want a family member's TB kept secret	Number of men who have heard of tuberculosis
Age						
15-19	83.8	432	76.2	70.7	13.0	362
20-24	97.6	404	85.6	80.4	17.2	394
25-29	98.9	409	88.3	87.2	15.9	404
30-34	97.8	305	87.3	85.9	13.7	298
35-39	99.5	292	84.2	84.6	13.1	290
40-44	99.7	297	90.0	85.3	11.1	296
45-49	98.7	275	87.4	87.1	12.1	271
Residence						
Urban	98.2	781	85.2	87.1	23.0	767
Rural	94.9	1,632	85.6	80.5	9.5	1,549
Region						
Issyk-Kul	98.3	207	93.7	84.7	6.7	203
Djalal-Abad	99.2	402	84.6	74.2	4.8	399
Naryn	99.8	98	95.9	83.0	3.3	98
Batken	99.7	186	67.9	54.9	1.3	186
Osh Oblast	85.7	526	91.5	83.2	24.6	451
Talas	96.8	126	66.6	73.4	5.2	122
Chui	100.0	407	84.4	99.2	4.3	407
Bishkek City	98.9	383	89.1	88.0	38.4	379
Osh City	93.1	78	78.6	87.3	7.1	72
Education						
None/primary	*	7	*	*	*	6
Basic general	88.2	338	75.8	67.9	11.4	298
Secondary	96.0	1,158	85.5	80.5	12.0	1,112
Professional primary/middle	98.6	388	85.8	88.1	13.1	383
Higher	99.1	522	90.7	92.6	20.4	518
Wealth quintile						
Lowest	94.0	502	85.7	80.5	8.7	472
Second	94.1	496	84.0	79.5	8.6	467
Middle	96.1	451	84.8	78.8	10.1	433
Fourth	97.6	449	84.9	85.9	10.3	438
Highest	98.3	515	87.4	88.4	30.2	506
Total	96.0	2,413	85.4	82.7	14.0	2,316

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

More than 8 in 10 women and men who have heard about tuberculosis correctly believe that the disease is spread through the air when an infected individual coughs or sneezes. Respondents age 15-19 and those with only a basic general education are somewhat less aware of modes of transmission than respondents from other subgroups. The percentage of women identifying coughing and sneezing as a way in which the disease may be transmitted is lowest in Osh Oblast (65 percent) and highest in Issyk-Kul (97 percent). Among men, this knowledge is lowest in Talas and Batken (67-68 percent).

Respondents were also asked if they knew that tuberculosis can be completely cured. The majority of women (80 percent) and men (83 percent) who know about tuberculosis believe that the disease can be cured. The percentage who are aware that tuberculosis can be cured varies widely by region. Almost all men (99 percent) and 87 percent of women in the Chui region are aware that tuberculosis is treatable. At the opposite extreme, female respondents in Naryn (71 percent) and Batken (70 percent) and, especially, male respondents in Batken (55 percent) are substantially less likely than respondents from other regions to be aware that tuberculosis is curable. Overall, older women and men, urban men, more educated

respondents, and those from the highest wealth quintiles are more likely to know that tuberculosis is curable.

In order to evaluate the degree to which a person infected with tuberculosis might experience social stigma, respondents were also asked whether they would prefer to keep it a secret that a member of their family is infected with tuberculosis. Results bring to light the population's stigmatized perception of tuberculosis: 39 percent of females and 14 percent of males would prefer to keep it a secret that a member of their family is infected with tuberculosis. The stigma generally is more acute among the urban male population, men with a higher level of education, and men in the wealthier quintiles. The stigma is highest in Osh Oblast among women (54 percent) and in Bishkek among men (38 percent).

3.9.2 Knowledge of Tuberculosis Symptoms

Tables 3.14.1 and 3.14.2 present information on the level of awareness of tuberculosis symptoms among women and men, respectively, who report knowing about the disease. More than 9 in 10 women who have heard of tuberculosis (91 percent) identified some form of coughing as a symptom that would lead them to think a person has tuberculosis; 68 percent cited coughing alone, 41 percent mentioned coughing with sputum, and 16 percent cited coughing that lasted for several weeks. Weight loss and blood in sputum were each mentioned by 22 percent as a tuberculosis symptom, and 19 percent said fever was a symptom. Fewer women (12 percent or less) mentioned other symptoms including loss of appetite, tiredness/fatigue, night sweating, pain in the chest, and lethargy. Only 2 percent of women who had heard about tuberculosis were not able to name any symptom that would lead them to think a person had the disease. There are no clear patterns in the relationship between the percentage of women able to identify the various symptoms of tuberculosis and various background characteristics.

Similarly, about 9 in 10 men (87 percent) identified coughing as a symptom that would lead them to think a person has tuberculosis. The majority (69 percent) cited coughing alone, 16 percent mentioned coughing with sputum, and 13 percent cited coughing that lasted for several weeks. More than one in five men (21 percent) mentioned fever as a symptom, 18 percent cited weight loss, 16 percent cited tiredness/fatigue, 15 percent mentioned blood in sputum, 11 percent cited pain in the chest, and 10 percent identified loss of appetite. Six percent of men who have heard about tuberculosis did not name any symptom that would lead them to think a person had the disease.

3.9.3 Misconceptions about How Tuberculosis Is Spread

Women and men who had heard about tuberculosis were asked to identify ways in which the disease is spread from one person to another; all of the modes of transmission that women or men mentioned in response to the question were recorded. Results are shown in Tables 3.15.1 and 3.15.2 for women and men, respectively.

As shown in Tables 3.13.1 and 3.13.2, the majority of Kyrgyz women and men who have heard about tuberculosis correctly identified that the disease is spread through the air when an individual with the disease coughs or sneezes. Although the majority of respondents know the correct mode by which tuberculosis is spread, Tables 3.15.1 and 3.15.2 show that substantial percentages share misconceptions about other ways the disease may be spread. For example, more than 6 in 10 women (63 percent) and more than 4 in 10 men (44 percent) falsely think that the disease can be spread by sharing utensils with a person with tuberculosis, and 32 percent of women and 39 percent of men believe that it is spread through food. Smaller percentages incorrectly believe that tuberculosis can be spread by touching a person who has the disease (13 percent of women and 9 percent of men) or through sexual contact with a person who has tuberculosis (5 percent of women and 8 percent of men). Only 2 percent of women and 1 percent of men think tuberculosis is spread through mosquito bites.

Table 3.14.1 Knowledge of symptoms of tuberculosis: Women

Among women age 15-49 who have heard of tuberculosis (TB), the percentage identifying specific symptoms as signs that would lead them to think a person has tuberculosis, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Non-specific coughing	Coughing with sputum	Coughing for several weeks	Any coughing	Fever	Blood in sputum	Loss of appetite	Night sweating	Pain in chest	Tiredness/ fatigue	Weight loss	Lethargy	Other	Don't know	Number of women who heard of TB
Age															
15-19	68.2	39.8	16.3	90.5	16.7	17.1	8.9	6.1	6.7	8.5	18.9	0.9	0.7	2.9	1,425
20-24	67.7	42.6	15.9	89.7	18.1	20.0	10.8	6.7	6.0	8.8	20.7	0.6	0.3	4.6	1,446
25-29	69.7	37.7	14.6	90.3	18.5	21.5	11.6	10.4	8.1	12.4	22.5	1.4	0.3	2.5	1,203
30-34	68.3	40.0	17.3	92.2	18.5	23.4	14.7	9.8	5.3	12.5	21.0	0.6	0.7	1.7	967
35-39	68.7	39.3	15.8	92.7	20.4	25.7	14.3	10.7	5.5	13.4	25.5	0.6	1.2	1.1	887
40-44	65.2	45.0	17.5	92.3	20.2	23.8	15.0	9.0	8.1	12.4	24.1	0.2	0.3	1.1	914
45-49	66.4	41.1	16.5	91.1	21.5	25.5	11.7	13.4	7.4	16.4	27.2	0.9	0.5	1.8	883
Residence															
Urban	67.8	37.8	17.4	89.8	17.5	28.4	11.1	9.1	7.7	10.9	30.0	1.0	0.8	3.7	2,879
Rural	67.9	42.5	15.5	91.8	19.7	18.0	12.6	9.0	6.2	12.0	17.8	0.6	0.4	1.7	4,846
Region															
Issyk-Kul	71.0	35.4	24.1	97.6	21.1	29.3	18.2	23.2	11.9	31.3	37.5	0.1	0.1	0.0	639
Djalal-Abad	81.0	19.0	9.8	90.9	21.0	21.1	18.2	3.9	1.1	14.6	24.6	0.0	0.0	0.3	1,263
Naryn	82.7	32.7	15.3	98.9	17.7	11.1	12.7	10.4	8.1	10.4	26.1	0.2	0.0	0.0	270
Batken	42.9	55.2	6.0	78.3	36.8	33.8	17.6	9.5	11.3	14.5	20.7	0.6	2.0	8.6	571
Osh Oblast	77.9	64.4	13.0	97.4	7.4	6.6	4.9	3.3	3.2	2.4	1.9	0.3	0.0	0.2	1,483
Talas	62.0	32.3	19.5	92.6	15.5	6.7	7.2	7.0	2.3	12.9	39.7	0.0	1.8	4.9	339
Chui	49.1	43.6	21.4	86.9	24.2	29.3	14.9	15.1	10.3	10.4	16.3	2.0	0.2	1.9	1,434
Bishkek City	70.7	34.6	22.4	90.0	16.8	32.2	8.6	8.2	5.7	10.5	35.9	1.3	1.5	4.3	1,433
Osh City	72.9	31.0	3.7	87.5	16.6	3.2	6.0	3.8	20.3	7.0	26.7	0.5	0.0	9.5	291
Education															
None/primary	(53.7)	(30.9)	(14.9)	(77.6)	(17.2)	(23.5)	(17.0)	(7.2)	(6.0)	(21.8)	(26.4)	(0.0)	(0.0)	(5.6)	30
Basic general	70.7	40.0	15.0	92.9	16.1	11.5	10.6	5.3	6.1	8.9	14.6	0.8	0.4	2.7	982
Secondary	68.4	41.6	14.2	90.4	17.0	19.4	11.1	8.0	6.7	10.9	18.3	0.7	0.3	2.6	3,254
Professional primary/ middle	65.8	42.1	18.6	92.4	23.2	24.8	14.1	11.8	6.9	14.4	26.6	1.0	0.9	1.7	1,329
Higher	67.2	39.1	18.3	90.6	20.2	28.6	13.0	10.5	6.9	12.1	29.5	0.8	0.8	2.5	2,130
Wealth quintile															
Lowest	71.3	42.5	16.6	94.1	18.7	15.5	13.8	8.5	6.4	12.9	19.4	0.6	0.2	1.2	1,394
Second	68.8	39.8	13.5	91.0	19.9	18.2	12.7	8.9	6.7	13.9	20.9	0.5	0.4	1.4	1,403
Middle	65.5	45.1	14.6	90.1	20.4	19.1	12.3	8.9	5.4	11.4	17.3	0.8	0.5	2.4	1,427
Fourth	64.1	41.9	16.7	90.9	18.7	24.2	12.6	9.8	7.0	10.5	19.2	0.8	0.7	2.6	1,569
Highest	69.3	35.9	18.7	89.7	17.2	29.3	9.7	9.0	7.8	10.0	31.9	1.1	0.8	4.0	1,931
Total	67.8	40.7	16.2	91.1	18.9	21.9	12.1	9.0	6.7	11.6	22.4	0.8	0.5	2.4	7,724

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 3.14.2 Knowledge of symptoms of tuberculosis: Men

Among men age 15-49 who have heard of tuberculosis (TB), the percentage identifying specific symptoms as signs that would lead them to think a person has tuberculosis, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Non-specific coughing	Coughing with sputum	Coughing for several weeks	Any coughing	Fever	Blood in sputum	Loss of appetite	Night sweating	Pain in chest	Tiredness/ fatigue	Weight loss	Lethargy	Other	Don't know	Number of men who heard of TB
Age															
15-19	67.9	13.9	9.4	80.3	16.6	10.7	7.7	4.2	10.8	15.7	10.7	0.2	0.0	12.1	362
20-24	67.0	15.7	14.0	86.7	16.2	15.4	6.7	7.4	8.4	12.6	16.1	0.2	0.0	8.0	394
25-29	68.2	16.4	14.6	89.1	22.9	13.9	10.0	6.2	9.7	14.6	19.6	1.1	0.4	4.4	404
30-34	73.3	17.3	11.2	88.8	24.2	16.0	12.5	9.1	12.1	17.6	15.7	0.0	0.0	4.7	298
35-39	68.3	16.3	16.1	87.9	21.5	17.7	12.8	6.9	9.7	23.1	22.8	0.8	0.0	5.9	290
40-44	69.6	17.8	12.1	89.7	29.5	15.0	11.2	5.4	13.4	17.6	20.0	0.2	0.0	3.7	296
45-49	72.2	17.3	11.0	90.2	19.3	15.5	9.6	7.0	11.0	15.6	19.5	0.0	0.0	3.1	271
Residence															
Urban	56.2	19.4	25.1	88.7	25.5	28.9	9.0	7.8	7.9	17.5	15.6	0.6	0.0	1.6	767
Rural	75.7	14.7	6.6	86.6	19.1	7.7	10.3	5.9	11.9	15.8	18.5	0.3	0.1	8.5	1,549
Region															
Issyk-Kul	68.3	33.0	3.6	92.1	51.5	2.7	14.5	6.8	3.6	15.7	19.6	0.0	0.0	5.4	203
Djalal-Abad	83.6	4.3	1.9	85.8	9.3	6.3	13.1	5.2	7.4	24.1	18.9	0.0	0.0	13.5	399
Naryn	90.0	16.6	22.4	96.5	17.5	23.5	9.4	2.1	19.6	3.6	33.2	5.4	0.0	1.7	98
Batken	61.1	28.1	29.0	90.2	52.4	20.8	23.8	22.1	50.4	1.6	2.1	0.0	0.0	0.0	186
Osh Oblast	79.0	16.5	0.2	88.3	6.6	6.0	6.1	5.2	10.3	12.4	33.0	0.0	0.0	11.5	451
Talas	73.5	14.5	0.4	74.6	3.3	1.2	0.0	0.0	0.3	4.8	19.5	0.0	0.0	19.5	122
Chui	72.4	9.8	7.1	85.3	19.6	5.5	6.0	4.0	4.0	31.3	8.7	0.0	0.4	0.4	407
Bishkek City	42.2	13.5	44.5	86.5	29.1	48.4	7.3	7.7	6.0	11.7	11.9	0.9	0.0	0.0	379
Osh City	41.7	57.3	6.2	93.9	14.5	20.8	18.7	6.8	13.9	16.0	2.1	0.0	0.0	0.0	72
Education															
None/primary	*	*	*	*	*	*	*	*	*	*	*	*	*	*	6
Basic general	68.1	11.8	8.3	78.8	18.5	11.8	8.0	5.0	11.0	13.4	14.2	0.0	0.0	11.5	298
Secondary	74.5	15.7	9.6	89.2	18.4	11.9	10.1	7.0	12.8	16.0	17.9	0.2	0.1	7.3	1,112
Professional primary/ middle	65.1	18.5	10.8	84.9	23.8	17.9	9.5	5.4	6.8	20.9	18.5	0.1	0.0	5.4	383
Higher	62.1	18.4	23.2	90.1	26.9	20.3	10.5	7.3	8.7	15.8	18.2	1.2	0.0	1.2	518
Wealth quintile															
Lowest	75.7	16.8	5.7	86.4	18.8	9.0	10.1	4.8	10.1	12.3	22.3	0.5	0.0	10.2	472
Second	70.2	14.7	7.5	83.3	19.0	6.0	9.7	6.7	11.9	15.2	17.5	0.3	0.0	11.5	467
Middle	79.0	14.0	8.6	89.1	18.5	8.3	11.4	6.2	13.9	16.7	15.7	0.1	0.0	5.9	433
Fourth	75.2	16.4	8.0	89.5	23.6	12.8	9.5	8.4	10.7	23.5	19.2	0.3	0.4	3.7	438
Highest	49.0	19.1	31.6	88.6	25.7	35.3	8.8	6.7	7.0	14.8	13.2	0.7	0.0	0.1	506
Total	69.3	16.3	12.7	87.3	21.2	14.7	9.9	6.5	10.6	16.4	17.5	0.4	0.1	6.2	2,316

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 3.15.1 Misconceptions about tuberculosis transmission: Women

Among women who have heard of tuberculosis (TB), the percentage who report various misconceptions about ways tuberculosis is spread, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Through sharing utensils	Through touching a person with TB	Through food	Through sexual contact	Through mosquito bites	Other	Don't know	Number of women who heard of TB
Age								
15-19	56.8	14.5	27.4	4.5	1.5	0.1	4.6	1,425
20-24	61.2	12.6	32.2	4.8	1.8	0.2	4.6	1,446
25-29	65.1	12.5	30.9	5.2	1.2	0.5	3.0	1,203
30-34	67.0	11.7	31.3	4.0	1.6	0.4	2.1	967
35-39	63.9	11.8	33.6	3.8	2.0	0.9	0.7	887
40-44	65.1	15.1	33.5	4.6	1.3	0.7	0.7	914
45-49	67.4	10.6	36.9	6.1	1.5	0.3	1.5	883
Residence								
Urban	65.5	6.8	37.8	4.6	1.1	0.7	3.9	2,879
Rural	61.8	16.4	28.3	4.8	1.9	0.2	2.1	4,846
Region								
Issyk-Kul	79.3	2.6	22.7	0.4	1.0	0.0	0.5	639
Djalal-Abad	65.3	2.6	28.3	1.8	0.3	0.1	0.4	1,263
Naryn	49.1	8.4	29.4	7.3	0.8	0.0	0.6	270
Batken	62.3	16.4	26.9	17.7	4.7	0.1	8.4	571
Osh Oblast	67.9	35.1	18.3	2.5	1.4	0.0	1.5	1,483
Talas	62.1	4.5	43.7	1.0	0.5	2.4	3.3	339
Chui	52.2	15.2	31.9	7.7	3.4	0.2	2.2	1,434
Bishkek City	68.1	4.4	54.8	3.6	0.6	1.2	4.4	1,433
Osh City	41.1	2.0	21.4	5.3	0.4	0.2	9.0	291
Education								
None/primary	(31.0)	(2.0)	(36.6)	(0.0)	(0.0)	(0.0)	(13.2)	30
Basic general	56.3	13.2	27.6	4.2	2.1	0.0	4.7	982
Secondary	62.1	16.0	28.3	4.7	1.6	0.2	2.7	3,254
Professional primary/middle	65.3	9.9	33.5	4.2	1.9	0.3	1.5	1,329
Higher	67.2	9.7	38.2	5.4	1.1	0.9	2.6	2,130
Wealth quintile								
Lowest	64.6	18.3	26.3	3.7	1.4	0.2	1.9	1,394
Second	63.5	17.6	29.4	4.8	1.6	0.3	1.8	1,403
Middle	61.3	13.9	27.7	5.7	2.7	0.2	2.6	1,427
Fourth	61.8	11.3	28.5	5.2	1.2	0.3	2.9	1,569
Highest	64.5	5.8	43.4	4.4	1.1	0.9	4.2	1,931
Total	63.2	12.8	31.9	4.7	1.6	0.4	2.8	7,724

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 3.15.2 Misconceptions about tuberculosis transmission: Men

Among men who have heard of tuberculosis (TB), the percentage who report various misconceptions about ways tuberculosis is spread, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Through sharing utensils	Through touching a person with TB	Through food	Through sexual contact	Through mosquito bites	Other	Don't know	Number of men who heard of TB
Age								
15-19	29.9	11.3	37.7	8.0	2.7	0.5	8.6	362
20-24	40.4	7.4	36.0	6.8	0.9	0.3	6.9	394
25-29	50.5	7.1	35.2	8.1	0.3	0.2	2.7	404
30-34	45.6	10.1	45.5	8.9	0.4	0.4	2.4	298
35-39	49.1	9.4	46.6	8.4	0.4	0.4	5.1	290
40-44	46.7	7.3	40.3	9.9	0.6	1.0	3.2	296
45-49	48.8	9.2	37.4	8.3	0.7	0.4	3.0	271
Residence								
Urban	55.3	5.9	39.6	5.5	1.4	0.4	1.5	767
Rural	38.5	10.2	39.3	9.6	0.7	0.5	6.3	1,549
Region								
Issyk-Kul	37.4	4.5	67.5	7.8	0.5	0.0	4.5	203
Djalal-Abad	29.6	1.8	69.0	1.2	0.4	1.1	12.1	399
Naryn	51.8	30.2	47.6	7.5	1.9	5.0	0.5	98
Batken	45.7	55.9	27.2	62.2	7.5	0.4	0.3	186
Osh Oblast	53.8	0.0	14.2	6.9	0.2	0.0	7.3	451
Talas	69.5	0.0	29.8	2.3	0.3	0.4	13.7	122
Chui	12.8	12.4	39.6	1.5	0.3	0.0	0.0	407
Bishkek City	71.3	0.7	29.1	2.1	0.0	0.0	0.0	379
Osh City	57.6	0.0	44.0	0.0	0.0	0.0	1.4	72
Education								
None/primary	*	*	*	*	*	*	*	6
Basic general	33.0	10.1	37.9	8.2	2.0	0.0	8.8	298
Secondary	43.8	9.7	39.3	10.0	0.8	0.6	5.3	1,112
Professional primary/middle	44.0	7.2	43.7	6.2	1.1	0.6	4.8	383
Higher	51.3	7.0	37.4	6.0	0.4	0.2	0.8	518
Wealth quintile								
Lowest	43.9	7.9	38.3	7.7	0.4	0.9	8.2	472
Second	40.1	9.7	38.8	10.3	1.4	0.3	6.5	467
Middle	37.1	13.6	40.8	12.3	0.7	0.4	5.6	433
Fourth	39.6	11.0	45.3	9.4	1.7	0.8	2.4	438
Highest	57.7	2.6	34.7	2.5	0.4	0.0	1.0	506
Total	44.1	8.7	39.4	8.3	0.9	0.4	4.7	2,316

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

3.10 HIGH BLOOD PRESSURE

As in many countries throughout the world, cardiovascular diseases, including heart attacks and strokes, are the leading cause of death in Kyrgyzstan, accounting for 48 percent of all deaths (WHO, 2011). High blood pressure, or hypertension, is among the major risk factors for cardiovascular disease. One of the objectives of the 2012 KgDHS was to provide population-based data on cardiovascular risk factors (e.g., hypertension and smoking) to complement data available from other sources.

The KgDHS respondents were asked several questions to determine their history of hypertension, including whether they had ever been told by a doctor or other health worker that they had high blood pressure and, if so, whether they had been told that on two or more occasions. If they reported being told one or more times that they had high blood pressure, they were asked additional questions about specific actions they were taking at the time of the survey to lower their blood pressure.

3.10.1 History and Treatment of High Blood Pressure

Tables 3.16.1 and 3.16.2 summarize the results of the questions relating to history of hypertension and specific actions taken to lower high blood pressure. In reviewing the findings, it is important to remember that they apply only to respondents who were advised by a health care provider that they had high blood pressure. Many Kyrgyz women and men may suffer from hypertension but do not know it (see

Figure 3.2); hypertension is often termed the "silent killer" because of the lack of warning signs or symptoms.

Overall, the KgDHS results indicate that 5 percent of women and 2 percent of men age 15-49 report having ever been told by a doctor or other health professional that their blood pressure was high. A diagnosis of hypertension is usually made only after blood pressure readings are found to be high on several occasions. Table 3.16.2 shows that about two-thirds of women and men told they had high blood pressure were advised they were hypertensive on two or more occasions (69 percent of women and 62 percent of men). It is encouraging that 7 in 10 women who were told they had high blood pressure were taking medication to control their blood pressure. However, this percentage is much smaller among men (45 percent). Respondents who were told they had high blood pressure were much less likely to be taking other specific measures to lower their hypertension. For example, approximately one-third of women and men were controlling or losing weight, 38 percent of women and 33 percent of men were cutting back on salt in their diet, and 21 percent of women and 37 percent of men were exercising. A higher percentage of men than women were cutting down their alcohol intake (62 percent versus 26 percent) or had stopped smoking (45 percent versus 20 percent).

Table 3.16.1 History of hypertension

Percentage of women and men age 15-49 who were ever told by a health professional that they have hypertension or high blood pressure, by background characteristics, Kyrgyz Republic 2012

	Women		Men	
Background characteristic	Percentage of women ever told by a health professional they had hypertension or high blood pressure	Number of women	Percentage of men ever told by a health professional they had hypertension or high blood pressure	Number of men
Age				
15-19	0.5	1,637	0.5	432
20-24	1.2	1,527	1.0	404
25-29	3.4	1,265	1.0	409
30-34	4.5	1,028	3.4	305
35-39	7.2	915	2.1	292
40-44	11.1	928	2.7	297
45-49	16.9	908	3.5	275
Body mass index[1]				
<18.5 (thin)	1.2	566	na	na
18.5-24.9 (normal)	2.7	4,595	na	na
25.0-29.9 (overweight)	7.3	1,970	na	na
≥30 (obese)	16.6	939	na	na
Residence				
Urban	4.4	3,070	2.1	781
Rural	5.9	5,138	1.7	1,632
Region				
Issyk-Kul	5.6	650	2.1	207
Djalal-Abad	5.5	1,332	1.3	402
Naryn	4.3	281	1.0	98
Batken	5.9	616	2.1	186
Osh Oblast	5.4	1,627	1.2	526
Talas	9.9	360	8.4	126
Chui	4.6	1,465	0.5	407
Bishkek City	4.4	1,566	1.2	383
Osh City	6.3	311	8.4	78
Education				
None/primary	(3.1)	39	*	7
Basic general	3.0	1,139	1.4	338
Secondary	5.1	3,468	1.8	1,158
Professional primary/middle	8.6	1,364	1.8	388
Higher	4.8	2,198	2.3	522
Wealth quintile				
Lowest	6.0	1,459	3.3	502
Second	6.8	1,473	1.2	496
Middle	4.6	1,538	1.4	451
Fourth	5.8	1,667	1.7	449
Highest	4.0	2,071	1.6	515
Total	5.3	8,208	1.9	2,413

Note: Total includes women with missing information on body mass index who are not shown separately. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.

[1] Body mass index is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m^2).

Table 3.16.2 History of hypertension and actions taken to lower blood pressure

Among respondents who were ever told that they have hypertension, the percentage who were told on two or more different occasions by a health professional that they have hypertension, and the percentage taking specific actions to lower blood pressure, Kyrgyz Republic 2012

History of hypertension and actions taken to treat hypertension	Women	Men
History of hypertension		
Told on two or more different occasions that they had high blood pressure	68.8	61.8
Actions taken to lower blood pressure		
Taking prescribed medication	70.8	44.8
Controlling or losing weight	34.4	31.8
Cutting down salt in their diet	37.8	33.4
Exercising to control hypertension	20.6	37.3
Cutting down on alcohol intake	25.9	61.8
Stopped smoking	19.5	45.4
Number with history of high blood pressure	438	45

3.10.2 Prevalence of High Blood Pressure

The 2012 KgDHS Women's and Men's Questionnaires included questions to determine if respondents had been diagnosed as hypertensive and if they were taking medication to control blood pressure. Respondents were also asked if their blood pressure could be measured as part of the survey. Approximately 99 percent of women and 97 percent of men had valid blood pressure measurements taken as part of the survey. It should be noted that the blood pressure measurements taken in the survey are not intended to provide a medical diagnosis of the disease and are regarded only as a statistical description of the survey population.

To measure blood pressure, the survey interviewers were provided with a fully automatic, digital device with automatic upper-arm inflation and automatic pressure release. Interviewers were trained in the use of this device according to the manufacturer's recommended protocol. Three measurements of systolic and diastolic blood pressure (measured in millimeters of mercury [mmHg]) were taken during the survey interview, with an interval of at least 10 minutes between measurements. The average of the second and third measurements was used to classify individuals with respect to hypertension, following internationally recommended categories (WHO, 1999). Individuals were classified as hypertensive if their systolic blood pressure exceeded 140 mmHg or if their diastolic blood pressure exceeded 90 mmHg. Elevated blood pressure was classified as mild, moderate, or severe according to the cut-off points recommended by the World Health Organization and the National Institutes of Health (WHO, 1999; NIH, 1997).

Blood pressure status	Systolic (mmHg)	Diastolic (mmHg)
Optimal	<120	<80
Normal	120-129	80-84
High normal	130-139	85-89
Level of hypertension		
Stage 1, mild	140-159	90-99
Stage 2, moderate	160-179	100-109
Stage 3, severe	180+	110+

Following internationally recommended guidelines, individuals were considered hypertensive if they had a normal average blood pressure reading but were taking antihypertensive medication.

Tables 3.17.1 and 3.17.2 show the prevalence of hypertension among survey respondents. Ten percent of women age 15-49 are classified as hypertensive: 2 percent with hypertension controlled by medication, 6 percent with stage 1 hypertension, 1 percent with stage 2 hypertension, and less than 1 percent with stage 3 hypertension (severely elevated blood pressure).

Levels of hypertension among men 15-49 are slightly lower, with 7 percent classified as hypertensive. Less than 1 percent of men are classified as having hypertension controlled by medication, 6 percent have stage 1 hypertension, 1 percent have stage 2 hypertension, and 0.2 percent have stage 3 hypertension (severely elevated blood pressure).

A comparison with estimates from recent DHS surveys conducted in other countries shows that rates of hypertension among women and men in the Kyrgyz Republic (10 percent and 7 percent) are markedly lower than those in Ukraine (in 2007; 25 and 32 percent, respectively), Armenia (in 2005; 22 and 27 percent, respectively), and Azerbaijan (in 2006; 16 and 17 percent, respectively). The rates are similar to those in Uzbekistan (in 2002; 8 and 7 percent, respectively).

Table 3.17.1 Blood pressure status: Women

Prevalence of hypertension among women age 15-49 and the percent distribution of women by blood pressure status, according to background characteristics, Kyrgyz Republic 2012

		Classification of blood pressure								
		Normal			Elevated					
Background characteristics	Prevalence of hyper-tension[1]	Optimal < 120/ 80 mmHg	Normal 120-129/ 80-84 mmHg	High normal 130-139/ 85-89 mmHg	Mildly elevated (stage 1) 140-159/ 90-99 mmHg	Moderately elevated (stage 2) 160-179/ 100-109 mmHg	Severely elevated (stage 3) 180+/110+ mmHg	Normal blood pressure and taking medication	Total	Number of women
Age										
15-19	1.0	82.6	13.5	2.8	0.9	0.0	0.0	0.1	100.0	1,615
20-24	3.6	77.5	15.7	3.2	2.4	0.3	0.0	0.9	100.0	1,506
25-29	5.0	69.9	18.2	6.9	3.0	0.3	0.0	1.7	100.0	1,249
30-34	8.8	62.4	22.2	6.6	5.5	1.1	0.3	1.9	100.0	1,020
35-39	12.6	48.9	28.3	10.3	7.2	1.8	0.2	3.3	100.0	906
40-44	20.1	42.3	23.9	13.7	11.6	3.4	1.0	4.1	100.0	919
45-49	27.8	30.4	27.4	14.4	15.2	5.4	1.9	5.2	100.0	895
Marital status										
Never married	2.0	81.0	14.5	2.5	1.4	0.2	0.1	0.2	100.0	2,210
Married or living together	12.2	57.6	21.4	8.8	6.9	1.9	0.5	2.9	100.0	5,204
Divorced/separated/widowed	13.4	47.4	27.6	11.6	8.7	2.1	0.4	2.1	100.0	696
Body mass index[2]										
<18.5 (thin)	1.9	84.5	10.7	2.8	0.7	0.2	0.0	1.0	100.0	557
18.5-24.9 (normal)	5.2	71.8	17.7	5.3	3.1	0.5	0.1	1.5	100.0	4,536
25.0-29.9 (overweight)	13.4	51.0	26.4	9.2	8.6	1.9	0.5	2.4	100.0	1,955
≥30 (obese)	27.2	34.6	22.7	15.5	14.3	5.6	2.0	5.3	100.0	930
Smoking										
Yes	5.0	58.8	24.4	11.8	3.4	0.7	0.0	1.0	100.0	224
No	9.6	63.2	20.0	7.2	5.6	1.5	0.4	2.1	100.0	7,885
Residence										
Urban	6.8	66.3	19.3	7.6	3.6	1.0	0.4	1.7	100.0	3,011
Rural	11.1	61.1	20.5	7.2	6.7	1.7	0.4	2.3	100.0	5,098
Region										
Issyk-Kul	11.0	65.5	16.0	7.5	7.6	1.6	0.7	1.1	100.0	648
Djalal-Abad	8.1	73.9	12.7	5.3	4.2	0.9	0.6	2.4	100.0	1,332
Naryn	14.2	46.3	27.2	12.3	9.3	3.8	0.6	0.6	100.0	275
Batken	8.5	62.4	22.0	7.2	5.4	1.7	0.1	1.2	100.0	613
Osh Oblast	12.0	57.3	23.4	7.3	6.6	1.7	0.2	3.4	100.0	1,621
Talas	12.6	68.2	12.7	6.5	6.5	2.1	0.7	3.3	100.0	358
Chui	10.0	54.7	26.7	8.6	6.8	1.6	0.4	1.2	100.0	1,442
Bishkek City	5.7	67.1	19.7	7.5	2.8	0.7	0.3	1.9	100.0	1,513
Osh City	10.1	71.1	12.7	6.1	5.7	1.2	0.4	2.7	100.0	307
Education										
None/primary	(2.3)	(79.4)	(16.7)	(1.5)	(1.4)	(0.9)	(0.0)	(0.0)	100.0	39
Basic general	5.3	73.4	17.3	4.1	3.0	0.3	0.2	1.7	100.0	1,127
Secondary	10.8	60.5	20.5	8.2	6.7	1.6	0.4	2.1	100.0	3,440
Professional primary/middle	12.8	55.3	22.6	9.3	7.5	2.1	0.8	2.4	100.0	1,343
Higher	7.7	66.3	19.4	6.6	4.1	1.3	0.2	2.1	100.0	2,161
Wealth quintile										
Lowest	11.1	60.7	20.6	7.6	6.3	1.7	0.3	2.9	100.0	1,449
Second	11.1	61.7	19.4	7.9	5.7	2.0	0.7	2.7	100.0	1,470
Middle	9.6	63.5	20.1	6.8	6.6	1.0	0.3	1.7	100.0	1,523
Fourth	10.8	61.1	21.3	6.9	6.9	1.8	0.4	1.7	100.0	1,647
Highest	6.1	67.1	19.3	7.5	3.2	0.9	0.3	1.7	100.0	2,021
Total	9.5	63.1	20.1	7.3	5.6	1.4	0.4	2.1	100.0	8,110

Note: Total includes women with missing information on body mass index who are not shown separately. These measurements should not be considered a medical diagnosis of disease, but only as a statistical description of the survey population. Figures in parentheses are based on 25-49 unweighted cases.
[1] Blood pressure ≥140/90 mmHg or currently taking antihypertensive medication
[2] Body mass index is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m2).

Table 3.17.2 Blood pressure status: Men

Prevalence of hypertension among men age 15-49 and the percent distribution of men by blood pressure status, according to background characteristics, Kyrgyz Republic 2012

		Classification of blood pressure								
		Normal			Elevated					
Background characteristics	Prevalence of hyper-tension[1]	Optimal < 120/< 80 mmHg	Normal 120-129/ 80-84 mmHg	High normal 130-139/ 85-89 mmHg	Mildly elevated (stage 1) 140-159/ 90-99 mmHg	Moderately elevated (stage 2) 160-179/ 100-109 mmHg	Severely elevated (stage 3) 180+/110+ mmHg	Normal blood pressure and taking medication	Total	Number of men
Age										
15-19	1.9	67.8	25.7	4.6	1.6	0.1	0.2	0.0	100.0	408
20-24	5.6	43.2	44.2	7.0	5.0	0.3	0.0	0.3	100.0	396
25-29	4.5	37.4	46.7	11.4	4.3	0.1	0.0	0.1	100.0	400
30-34	4.9	36.5	38.8	19.8	3.8	0.4	0.0	0.6	100.0	301
35-39	9.2	34.1	34.6	22.1	7.9	1.1	0.0	0.2	100.0	287
40-44	10.7	28.5	39.9	20.9	8.9	0.8	0.4	0.6	100.0	289
45-49	15.9	29.6	30.4	24.0	10.6	3.0	0.6	1.7	100.0	265
Marital status										
Never married	3.9	53.7	35.4	6.9	3.5	0.2	0.1	0.1	100.0	840
Married or living together	8.0	34.5	39.1	18.4	6.3	0.9	0.2	0.6	100.0	1,411
Divorced/separated/widowed	16.2	29.8	30.4	23.6	13.6	1.7	0.0	1.0	100.0	95
Smoking										
Yes	8.2	33.6	41.3	16.9	6.4	1.1	0.1	0.5	100.0	1,237
No	5.4	49.6	33.2	11.7	4.7	0.2	0.2	0.4	100.0	1,109
Residence										
Urban	6.1	44.7	33.4	15.8	4.6	0.7	0.0	0.8	100.0	738
Rural	7.3	39.6	39.3	13.9	6.0	0.7	0.2	0.3	100.0	1,609
Region										
Issyk-Kul	10.5	55.2	21.7	12.6	5.7	4.2	0.3	0.3	100.0	206
Djalal-Abad	1.7	30.7	48.5	19.1	1.2	0.4	0.0	0.0	100.0	382
Naryn	15.7	31.4	35.3	17.6	14.8	0.4	0.0	0.4	100.0	98
Batken	16.6	37.6	28.1	17.7	14.5	1.1	0.3	0.6	100.0	186
Osh Oblast	6.0	28.4	49.9	15.7	5.6	0.0	0.4	0.0	100.0	526
Talas	16.9	40.7	26.7	15.7	11.7	2.4	0.3	2.4	100.0	122
Chui	3.7	62.6	27.8	5.9	3.5	0.0	0.0	0.2	100.0	396
Bishkek City	3.1	47.0	35.7	14.2	2.3	0.3	0.0	0.5	100.0	352
Osh City	12.4	27.8	40.0	19.8	9.1	0.0	0.0	3.3	100.0	78
Education										
None/primary	*	*	*	*	*	*	*	*	100.0	7
Basic general	3.6	53.1	33.8	9.6	2.8	0.5	0.0	0.2	100.0	326
Secondary	8.0	35.1	40.9	16.0	6.6	0.6	0.3	0.5	100.0	1,141
Professional primary/middle	8.1	42.7	32.9	16.3	5.6	2.1	0.2	0.2	100.0	377
Higher	5.6	46.7	35.1	12.5	5.0	0.1	0.0	0.6	100.0	496
Wealth quintile										
Lowest	7.0	36.7	38.1	18.3	5.6	0.5	0.1	0.8	100.0	494
Second	6.1	43.6	37.6	12.7	4.9	0.8	0.3	0.2	100.0	493
Middle	8.8	35.9	41.8	13.6	7.5	0.8	0.1	0.2	100.0	445
Fourth	7.6	45.2	33.3	13.9	6.1	0.8	0.3	0.5	100.0	431
Highest	5.3	44.6	36.4	13.8	4.1	0.7	0.0	0.6	100.0	484
Total	6.9	41.2	37.4	14.5	5.6	0.7	0.2	0.5	100.0	2,346

Note: These measurements should not be considered a medical diagnosis of disease, but only as a statistical description of the survey population. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Blood pressure ≥140/90 mmHg or currently taking antihypertensive medication.

The 2012 KgDHS survey results corroborate other epidemiological studies showing that hypertension is positively associated with age. Among women, hypertension levels increase from 1 percent at age 15-19 to 20 percent at age 40-44 and 28 percent at age 45-49. The same pattern is observed for men. The prevalence of hypertension is three times higher among men age 45-59 (16 percent) than among men age 25-29 (5 percent).

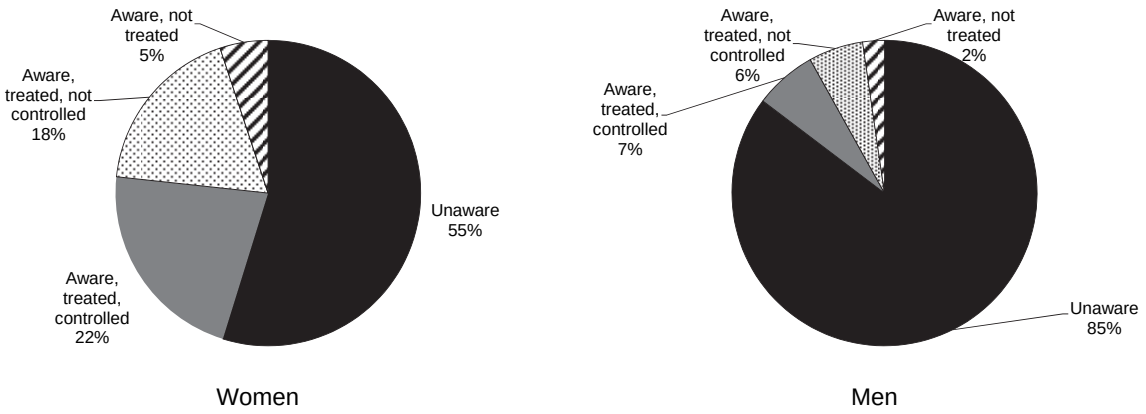
Significant differences in the prevalence of hypertension are found among women according to their body mass index (BMI). As expected, hypertension levels are higher among overweight/obese women than among those of normal weight. The rate of hypertension among obese women (BMI of 30 or above) is 27 percent, as compared with 2 percent in women who are thin (BMI below 18.5) and 5 percent in women of normal weight (BMI between 18.5 and 24.9).

Differentials in hypertension rates by urban-rural residence are negligible for men. However, the proportion of women with high blood pressure is slightly higher among rural women (11 percent) than urban women (7 percent). By region, the prevalence of hypertension among women ranges from 6 percent in Bishkek to 14 percent in Naryn; among men, it ranges from 2 percent in Djalal Abad to 16-17 percent in Naryn, Talas, and Batken. Respondents with a secondary or professional education are somewhat more likely to have hypertension than other respondents. While hypertension rates tend to be negatively associated with wealth quintile among women, the pattern among men is not clear.

Although overall rates of hypertension among adults in the Kyrgyz Republic are relatively low, hypertension is a serious health problem among adults age 45 and older and those who are obese. A first step toward bringing hypertension under control is awareness by individuals of their condition and its implications in terms of premature disability and death. Educating the population about the adverse effects of hypertension and promoting blood pressure screening, particularly for older individuals, should be an important focus of health programs.

Figure 3.2 shows the level of awareness and treatment status of hypertensive women and men. Less than half of women with high blood pressure reported that they are aware of their condition (45 percent). Twenty-two percent of hypertensive women are being treated and have brought their blood pressure under control, and 18 percent are being treated but still have elevated blood pressure. Five percent of hypertensive women are aware that they have elevated blood pressure but are not being treated, and 55 percent are unaware of their condition.

Figure 3.2
Awareness of high blood pressure and treatment status among women and men age 15-49 with high blood pressure



KgDHS 2012

Hypertensive men are much less aware of their condition than women; only 15 percent of hypertensive men are aware of their status (as compared with 45 percent of women). Seven percent of hypertensive men are being treated and have brought their blood pressure under control, and another 6 percent are being treated for hypertension but still have elevated blood pressure. Two percent are aware that they have elevated blood pressure but are not being treated (as compared with 5 percent of women). Most significant is the finding that the majority of hypertensive men (85 percent) are unaware of their condition.

MARRIAGE AND SEXUAL ACTIVITY 4

Key Findings

- Approximately two-thirds of Kyrgyz women age 15-49 (64 percent) and three-fifths of men age 15-49 (60 percent) are currently married. Just over one-quarter of women and more than one-third of men have never been married, while 9 percent of women and 4 percent of men are divorced, separated, or widowed.
- Most Kyrgyz women and men marry at least once during their lifetime; the proportion who have never married decreases rapidly with age, to less than 2 percent among women age 45-49 and less than 1 percent among men age 45-49.
- Less than 1 percent of women age 25-49 married for the first time before age 15, and only 14 percent married before age 18.
- The percentage of women age 25-49 who were married by age 18 decreases from 21 percent among those age 35-39 to 8 percent among those age 20-24.
- Kyrgyz men marry four years later than women. The median age at first marriage among women age 25-49 is 20.6 years, as compared with 24.5 years among men in the same age group.
- Kyrgyz women generally initiate sexual intercourse around the time of their first marriage. In contrast, men initiate intercourse 4.6 years before their first marriage.
- Fifty-seven percent of women were sexually active within the four weeks before the survey, and an additional 9 percent were active within the 12 months before the survey but not in the month before the survey; corresponding figures for men are 65 percent and 14 percent.

This chapter addresses marriage patterns and age at first marriage. Marriage is a primary indication of the exposure of women to the risk of pregnancy and, therefore, is important for an understanding of fertility. Populations in which age at marriage is young tend to have early childbearing and high fertility. For this reason, there is an interest in trends in age at marriage. The chapter also includes information on two other direct measures of exposure to pregnancy: age at first sexual intercourse and frequency of intercourse.

4.1 CURRENT MARITAL STATUS

Table 4.1 presents the distribution of all 2012 KgDHS respondents by current marital status and age. The term “married” in the table refers to legal or formal unions, while “living together” refers to informal unions. In subsequent tables, the two categories are combined into the proportion currently in either type of union, and the new category is referred to as “currently married.” Persons who are widowed, divorced, or separated are considered to be “formerly married.”

Table 4.1 shows that nearly two-thirds of women age 15-49 (64 percent) and three-fifths of men age 15-49 (60 percent) are married or living together. Reflecting the conservative character of Kyrgyz society, almost all of these women and men are in formal unions; less than 1 percent report that they are living together with a partner. Six percent of women and 4 percent of men are either divorced or separated, while nearly 3 percent of women are widowed.

Table 4.1 Current marital status

Percent distribution of women and men age 15-49 by current marital status, according to age, Kyrgyz Republic 2012

Age	Marital status						Total	Percentage of respondents currently in union	Number of respondents
	Never married	Married	Living together	Divorced	Separated	Widowed			
				WOMEN					
15-19	90.0	9.6	0.1	0.4	0.0	0.0	100.0	9.6	1,637
20-24	37.7	58.6	0.1	3.2	0.1	0.4	100.0	58.7	1,527
25-29	8.7	83.6	0.3	6.8	0.3	0.4	100.0	83.9	1,265
30-34	4.8	83.9	0.4	8.7	0.4	1.8	100.0	84.3	1,028
35-39	0.8	87.2	0.3	7.6	0.0	4.1	100.0	87.5	915
40-44	1.7	81.1	0.6	10.2	0.0	6.4	100.0	81.6	928
45-49	1.6	78.4	0.5	10.3	0.1	9.2	100.0	78.8	908
Total	27.4	63.8	0.3	5.9	0.1	2.6	100.0	64.0	8,208
				MEN					
15-19	99.5	0.2	0.4	0.0	0.0	0.0	100.0	0.5	432
20-24	75.7	23.9	0.0	0.4	0.0	0.0	100.0	23.9	404
25-29	26.1	67.5	0.1	6.3	0.0	0.0	100.0	67.6	409
30-34	6.5	87.0	0.0	6.5	0.0	0.0	100.0	87.0	305
35-39	2.2	91.4	0.0	5.4	0.5	0.5	100.0	91.4	292
40-44	1.9	90.8	1.0	4.2	0.4	1.7	100.0	91.8	297
45-49	0.4	95.6	0.1	3.1	0.0	0.8	100.0	95.8	275
Total	36.3	59.6	0.2	3.5	0.1	0.3	100.0	59.8	2,413

The results in Table 4.1 also suggest that most Kyrgyz women and men marry at least once during their lifetime, with the proportion who have never been married decreasing rapidly with age. The proportion of women currently married increases with age up to age 35-39 and then declines among the oldest women. Among women age 45-49, only 2 percent have never been married, 79 percent are married or cohabiting with a man, and 19 percent are formerly married. The main reasons for marital disruption in this age group are divorce (10 percent) and widowhood (9 percent).

Men are more likely than women to have never been married (36 percent versus 27 percent). This difference is largely explained by the tendency of men to marry at later ages. For example, 59 percent of women age 20 to 24 are married, as compared with 24 percent of men in the same age group.

The proportion of married women has decreased over the past 15 years, from 70 percent in the 1997 KgDHS (Research Institute of Obstetrics and Pediatrics [RIOP] and Macro International, 1998) to 64 percent in the 2012 KgDHS; conversely, the proportion of never-married women has increased (from 22 percent to 27 percent). There are few, if any, differences among formerly married women between the 1997 and 2012 KgDHS surveys.

4.2 AGE AT FIRST MARRIAGE

Marriage is an important social and demographic indicator since, in most societies, it represents the point in life when childbearing first becomes welcome. The information presented in Table 4.2 on the age at which women and men first marry was obtained by asking all ever-married KgDHS respondents about the month and year in which they married their first partner. Respondents who were not able to provide the date of their first marriage were asked about their age when they first married.

Trends in age at marriage in the Kyrgyz Republic can be examined in Table 4.2 by comparing changes in the proportions married at specific exact ages across age groups. In addition, median age at marriage is presented to provide a measure of the average age at which respondents married. The median is defined as the age by which half of the cohort has married. In drawing conclusions concerning trends in age at first marriage, the data for the oldest age cohorts should be interpreted cautiously since respondents may not recall dates or ages at marriage with accuracy.

Table 4.2 Age at first marriage

Percentage of women and men age 15-49 who were first married by specific exact ages, and median age at first marriage, according to current age, Kyrgyz Republic 2012

Current age	Percentage first married by exact age:					Percentage never married	Number of respondents	Median age at first marriage
	15	18	20	22	25			
				WOMEN				
15-19	0.1	na	na	na	na	90.0	1,637	a
20-24	0.1	7.8	33.3	na	na	37.7	1,527	a
25-29	0.3	10.4	34.7	60.8	83.8	8.7	1,265	21.2
30-34	0.9	15.9	42.9	65.1	83.6	4.8	1,028	20.6
35-39	1.3	21.3	55.1	71.0	85.8	0.8	915	19.7
40-44	0.1	9.6	43.5	71.1	88.5	1.7	928	20.4
45-49	0.1	12.1	39.9	67.2	86.0	1.6	908	20.7
25-49	0.5	13.6	42.6	66.6	85.4	3.9	5,044	20.6
				MEN				
15-19	0.0	na	na	na	na	99.5	432	a
20-24	0.0	0.4	5.6	na	na	75.7	404	a
25-29	0.0	2.0	7.2	18.7	52.1	26.1	409	24.8
30-34	0.0	1.6	10.2	21.2	45.8	6.5	305	25.3
35-39	0.0	1.6	7.5	22.8	52.1	2.2	292	24.8
40-44	0.0	0.4	3.4	25.3	63.8	1.9	297	23.8
45-49	0.0	0.7	2.3	25.1	64.3	0.4	275	24.0
25-49	0.0	1.3	6.3	22.3	55.2	8.8	1,577	24.5

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner.
na = Not applicable due to censoring
a = Omitted because less than 50 percent of the women or men began living with their spouse or partner for the first time before reaching the beginning of the age group.

Table 4.2 shows that, among women age 25-49, the median age at first marriage was 20.6 years. Less than 1 percent of women age 25-49 married for the first time before age 15, and only 14 percent married before age 18. The rate at which women marry clearly accelerates after age 18, with 43 percent of women reporting they married for the first time by age 20 and 85 percent by age 25. An examination of the trend in median age at marriage indicates that women age 25-29 married for the first time more than one year later on average than women age 35-39 and 10 months later than women age 40-44.

Unlike women, very few men are married by age 20 (6 percent of men age 25-49), while 55 percent are married by age 25. As with women, the median age at first marriage is increasing among younger men: the median is 24.8 years among men age 25-29, as compared with 23.8 years among men age 40-44 and 24.0 years among men age 45-49. Among all men age 25-49, median age at first marriage is 24.5 years.

Table 4.3 presents differentials in median age at first marriage by background characteristics. In general, differences in age at first marriage among women age 25-49 are not large, with the median age at marriage for most subgroups falling within a year of the national median for women (20.6 years). Median age at first marriage is lower among women in rural areas than among those in urban areas. The median age is highest among women in Bishkek (22.1 years) and women with a higher education (22.2 years). Women in households in the highest wealth quintile marry somewhat later than women in the lower wealth quintiles.

Among men age 25-49, median age at first marriage is highest among those in the Issyk-Kul region (24.8 years) and those in the fourth wealth quintile (24.6 years). Medians do not vary substantially according to other background characteristics.

There has been little change in age at first marriage among women age 25-49 over the past 15 years (20.6 years in 2012 versus 20.4 years in 1997) (RIOP and Macro International, 1998).

Table 4.3 Median age at first marriage by background characteristics

Median age at first marriage among women and men age 25-49, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Women age 25-49	Men age 25-49
Residence		
Urban	21.3	a
Rural	20.2	24.2
Region		
Issyk-Kul	20.7	24.8
Djalal-Abad	20.4	24.5
Naryn	20.5	24.5
Batken	20.1	23.8
Osh Oblast	20.1	23.9
Talas	19.9	24.0
Chui	20.6	24.3
Bishkek City	22.1	a
Osh City	20.8	a
Education		
None/primary	*	*
Basic general	20.0	a
Secondary	19.7	24.2
Professional primary/middle	20.6	24.0
Higher	22.2	a
Wealth quintile		
Lowest	20.1	24.2
Second	20.2	24.3
Middle	20.2	23.8
Fourth	20.5	24.6
Highest	21.8	a
Total	20.6	24.5

Note: The age at first marriage is defined as the age at which the respondent began living with her/his first spouse/partner. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
a = Omitted because less than 50 percent of the respondents began living with their spouse or partner for the first time before reaching the beginning of the age group.

4.3 AGE AT FIRST INTERCOURSE

Age at first marriage has long been used as a proxy for a woman's first exposure to sexual intercourse and, thus, to the risk of pregnancy. However, a woman or a man may initiate sexual intercourse before marriage. In the 2012 KgDHS, women and men were asked how old they were when they first had intercourse. Table 4.4 shows the ages at which women and men start having sexual intercourse and the trend in this indicator across age cohorts. Table 4.5 shows variations in median age at first intercourse among women and men age 25-49 by background characteristics.

Table 4.4 Age at first sexual intercourse

Percentage of women and men age 15-49 who had first sexual intercourse by specific exact ages, percentage who never had sexual intercourse, and median age at first sexual intercourse, according to current age, Kyrgyz Republic 2012

Current age	Percentage who had first sexual intercourse by exact age:					Percentage who never had intercourse	Number	Median age at first intercourse
	15	18	20	22	25			
				WOMEN				
15-19	0.0	na	na	na	na	89.8	1,637	a
20-24	0.1	7.8	33.5	na	na	35.6	1,527	a
25-29	0.3	10.6	35.5	60.3	81.8	7.2	1,265	21.2
30-34	0.9	17.0	43.9	65.9	82.4	2.8	1,028	20.5
35-39	1.3	21.0	56.9	71.4	85.6	0.4	915	19.6
40-44	0.1	10.2	44.8	70.7	86.6	1.0	928	20.3
45-49	0.1	12.5	41.2	68.4	85.7	0.5	908	20.5
25-49	0.5	14.1	43.8	66.8	84.2	2.7	5,044	20.5
				MEN				
15-19	2.2	na	na	na	na	74.5	432	a
20-24	2.0	32.2	68.2	na	na	15.5	404	18.9
25-29	4.0	26.6	57.8	80.3	91.9	4.3	409	19.6
30-34	0.6	23.0	60.4	78.1	88.8	0.9	305	19.6
35-39	0.2	11.5	49.0	76.6	91.4	0.3	292	20.1
40-44	0.0	14.1	44.0	76.1	91.8	0.6	297	20.4
45-49	0.0	14.2	40.2	74.5	90.8	0.0	275	20.4
25-49	1.2	18.6	51.0	77.4	91.0	1.5	1,577	19.9

na = Not applicable due to censoring
a = Omitted because less than 50 percent of the respondents had sexual intercourse for the first time before reaching the beginning of the age group.

Overall, 14 percent of women age 25-49 in the Kyrgyz Republic report that they had sexual intercourse by age 18, 44 percent by age 20, and 67 percent by age 22 (Table 4.4). By age 25, 84 percent of women have had sexual intercourse. Median age at first intercourse is increasing among younger women (age 25-29), the same pattern seen with median age at first marriage. Women age 45-49 report a median age at first intercourse of 20.5 years, as compared with 21.2 years among women age 25-29. Among all women age 25-49, median age at first intercourse is 20.5 years.

Unlike women, it is common for Kyrgyz men to report having sexual intercourse before marriage. For example, although very few men age 25-49 are married by age 20 (only 6 percent), more than half (51 percent) have had sexual intercourse by the same age. The median age at first intercourse among men age 25-49 is four and a half years younger than the median age at first marriage in the same age group (19.9 years versus 24.5 years, respectively).

There has been no change in age at first intercourse among women age 25-49 over the past 15 years (20.5 years in 2012 versus 20.4 years in 1997).

The Kyrgyz Republic is a traditional society. In such settings, women are unlikely to have many opportunities to engage in sexual intercourse before marriage. Moreover, those women who initiated intercourse before marriage may be very reluctant to admit that in a survey interview. Thus, it is not surprising that the findings with respect to age at first intercourse in Table 4.4 correspond almost exactly with the results presented for age at first marriage in Table 4.2. The median age at first intercourse among women age 25-49 is slightly lower than the age at first marriage (20.5 years versus 20.6 years). However, in a few age groups, the percentages of women reporting that they initiated sexual intercourse by exact ages 18, 22, and 25 years are in fact slightly lower than the percentages reporting that they were first married at those exact ages. For example, the percentage of women age 35-39 reporting that they initiated sexual intercourse by exact age 18 (21.0 percent) is lower than the percentage reporting that they were first married by age 18 (21.3 percent). Similarly, the percentages of women age 25-29 and 40-44 reporting that they initiated sexual intercourse by exact age 22 (60.3 and 70.7 percent, respectively) are lower than the percentages reporting that they were first married at age 22 (60.8 and 71.1 percent, respectively). The

percentages reporting that they initiated sexual intercourse by exact age 25 are generally slightly lower in all age groups than the percentages reporting that they were first married by age 25.

A comparison of Table 4.3 and Table 4.5 indicates that the pattern of a slightly later median age at intercourse than at first marriage is apparent among women residing in rural areas; women in Issyk-Kul, Batken, Osh Oblast, and Osh; and women from households in the lowest and middle wealth quintiles. This pattern, however, does not hold true for men in the Kyrgyz Republic.

The pattern of a slightly later age at first intercourse than first marriage among women may reflect a tendency for some couples in the Kyrgyz Republic to delay cohabitation and the initiation of sexual intercourse for a period after they formally marry. However, much of the pattern is likely due to errors in reporting of age at first marriage and, particularly, age at first intercourse. KgDHS respondents were asked to provide the exact month and year they first married; if they could not provide the date, they were asked only to provide the age at which they married. In contrast, respondents were asked to provide information only on their age at first intercourse, which may have resulted in a greater number of reporting errors.

It can be seen in Table 4.5 that median age at first intercourse is slightly higher among urban women than rural women. There is an apparent relationship between levels of education and wealth and age at first intercourse; for example, median age at first sex increases with increasing education, from 19.7 years among women with a secondary education to 22.0 years among women with a higher education. In addition, median age at first intercourse varies by region. The highest median age among women is in Bishkek city (21.4 years), and the lowest is in Talas (19.8 years).

Table 4.5 Median age at first sexual intercourse by background characteristics

Median age at first sexual intercourse among women and men age 25-49, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Women age 25-49	Men age 25-49
Residence		
Urban	20.9	19.8
Rural	20.3	20.0
Region		
Issyk-Kul	20.9	23.4
Djalal-Abad	20.4	19.0
Naryn	20.5	21.1
Batken	20.2	23.9
Osh Oblast	20.2	19.7
Talas	19.8	21.1
Chui	20.3	19.5
Bishkek City	21.4	19.5
Osh City	21.0	19.7
Education		
None/primary	*	*
Basic general	20.0	19.7
Secondary	19.7	20.1
Professional primary/middle	20.6	20.0
Higher	22.0	19.5
Wealth quintile		
Lowest	20.3	20.5
Second	20.2	20.0
Middle	20.3	20.1
Fourth	20.4	19.7
Highest	21.2	19.6
Total	20.5	19.9

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

In contrast with women, median age at first intercourse is slightly lower among men in urban areas than among those in rural areas and generally decreases with increasing wealth, although the differences are small. There are also regional differences. For example, the median age at first intercourse among men in Djalal-Abad is more than four years younger than the median age among men in Batken and Issyk-Kul.

4.4 RECENT SEXUAL ACTIVITY

In the absence of contraception, the probability of pregnancy is related to the regularity of sexual intercourse. Thus, information on intercourse is important for refinement of the measurement of exposure to pregnancy. Tables 4.6.1 and 4.6.2 are based on responses to a question on time since last intercourse; considered together with information on whether the respondent has ever had sex, these tables allow an assessment of the overall level of sexual activity among all women and men age 15-49 in the Kyrgyz Republic. Respondents were considered to be sexually active if they had sexual intercourse at least once in the four weeks prior to the survey.

Table 4.6.1 Recent sexual activity: Women

Percent distribution of women age 15-49 by timing of last sexual intercourse, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Timing of last sexual intercourse				Never had sexual intercourse	Total	Number of women
	Within the past 4 weeks	Within 1 year[1]	One or more years	Missing			
Age							
15-19	8.4	1.6	0.2	0.0	89.8	100.0	1,637
20-24	51.1	9.6	3.7	0.0	35.6	100.0	1,527
25-29	74.2	12.1	6.5	0.0	7.2	100.0	1,265
30-34	77.7	9.4	9.8	0.2	2.8	100.0	1,028
35-39	79.6	9.5	10.5	0.0	0.4	100.0	915
40-44	75.0	7.4	16.6	0.0	1.0	100.0	928
45-49	67.7	13.4	18.3	0.1	0.5	100.0	908
Marital status							
Never married	1.9	1.0	1.2	0.0	95.9	100.0	2,245
Married or living together	87.4	10.4	2.1	0.0	0.0	100.0	5,256
Divorced/separated/widowed	8.1	18.1	73.6	0.2	0.0	100.0	707
Marital duration[2]							
0-4 years	85.8	12.4	1.8	0.0	0.0	100.0	1,358
5-9 years	84.8	12.0	3.2	0.0	0.0	100.0	889
10-14 years	91.6	6.4	1.8	0.2	0.0	100.0	723
15-19 years	91.5	6.8	1.7	0.0	0.0	100.0	685
20-24 years	88.3	8.9	2.8	0.0	0.0	100.0	786
25+ years	84.5	13.9	1.7	0.0	0.0	100.0	549
Married more than once	85.6	13.3	1.2	0.0	0.0	100.0	265
Residence							
Urban	49.5	9.1	10.3	0.0	31.0	100.0	3,070
Rural	61.8	8.2	6.7	0.0	23.4	100.0	5,138
Region							
Issyk-Kul	64.8	8.6	8.9	0.0	17.8	100.0	650
Djalal-Abad	61.7	8.3	6.0	0.0	24.1	100.0	1,332
Naryn	69.7	5.3	6.6	0.0	18.4	100.0	281
Batken	56.0	13.8	8.8	0.0	21.4	100.0	616
Osh Oblast	55.2	8.1	7.4	0.0	29.4	100.0	1,627
Talas	69.8	7.9	4.7	0.0	17.7	100.0	360
Chui	60.3	9.4	7.1	0.1	23.0	100.0	1,465
Bishkek City	45.8	7.4	11.3	0.0	35.6	100.0	1,566
Osh City	51.4	6.5	10.0	0.4	31.7	100.0	311
Education							
None/primary	(29.1)	(17.3)	(8.4)	(0.0)	(45.2)	100.0	39
Basic general	34.6	6.9	3.6	0.0	54.9	100.0	1,139
Secondary	62.0	8.7	7.6	0.0	21.6	100.0	3,468
Professional primary/middle	63.8	9.5	10.7	0.1	15.9	100.0	1,364
Higher	57.6	8.2	9.4	0.1	24.7	100.0	2,198
Wealth quintile							
Lowest	63.7	6.2	5.6	0.0	24.5	100.0	1,459
Second	62.4	8.4	5.0	0.0	24.2	100.0	1,473
Middle	62.0	8.4	7.3	0.1	22.2	100.0	1,538
Fourth	56.5	11.8	8.4	0.0	23.3	100.0	1,667
Highest	45.9	7.7	12.1	0.1	34.3	100.0	2,071
Total	57.2	8.5	8.0	0.0	26.2	100.0	8,208

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Excludes women who had sexual intercourse within the last 4 weeks.
[2] Excludes women who are not currently married.

More than 7 in 10 women reported having had sexual intercourse, and 57 percent were recently sexually active (i.e., they had sex during the four weeks before the survey). Nine percent of women had sexual intercourse within the year before the survey but not during the four weeks immediately before the survey, and 8 percent reported they last had intercourse a year or more ago.

The percentage of women who have been recently sexually active increases with age, peaking at 80 percent among those age 35-39. Between 85 percent and 92 percent of currently married women report having recently had intercourse, regardless of the length of time they have been married. On the other hand, sexual activity is nonexistent (or underreported) among never-married women. Not unexpectedly, 7 in 10 women who are divorced, separated, or widowed reported that it had been one year or more since they last had intercourse.

Table 4.6.2 Recent sexual activity: Men

Percent distribution of men age 15-49 by timing of last sexual intercourse, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Timing of last sexual intercourse				Never had sexual intercourse	Total	Number of men
	Within the past 4 weeks	Within 1 year[1]	One or more years	Missing			
Age							
15-19	4.6	16.5	3.5	1.0	74.5	100.0	432
20-24	45.5	29.9	8.7	0.3	15.5	100.0	404
25-29	79.5	12.1	3.6	0.5	4.3	100.0	409
30-34	89.5	8.2	1.4	0.0	0.9	100.0	305
35-39	90.3	7.4	2.0	0.0	0.3	100.0	292
40-44	86.6	7.6	4.5	0.8	0.6	100.0	297
45-49	87.8	8.2	4.0	0.0	0.0	100.0	275
Marital status							
Never married	20.1	25.3	7.4	0.6	46.6	100.0	875
Married or living together	93.3	5.6	0.8	0.3	0.0	100.0	1,443
Divorced/separated/widowed	42.7	32.2	25.1	0.0	0.0	100.0	95
Marital duration[2]							
0-4 years	95.5	4.4	0.2	0.0	0.0	100.0	355
5-9 years	91.9	6.8	0.6	0.7	0.0	100.0	269
10-14 years	94.7	5.3	0.0	0.0	0.0	100.0	215
15-19 years	95.6	2.8	1.6	0.0	0.0	100.0	229
20-24 years	88.7	9.5	0.7	1.0	0.0	100.0	223
25+ years	92.2	2.9	4.9	0.0	0.0	100.0	75
Married more than once	92.5	7.5	0.0	0.0	0.0	100.0	78
Residence							
Urban	68.3	12.2	4.7	0.4	14.4	100.0	781
Rural	63.1	14.6	3.8	0.4	18.1	100.0	1,632
Region							
Issyk-Kul	60.7	9.5	2.1	0.0	27.7	100.0	207
Djalal-Abad	71.3	10.9	5.9	0.0	12.0	100.0	402
Naryn	71.1	7.6	0.4	0.0	20.9	100.0	98
Batken	57.1	4.0	3.1	2.8	32.9	100.0	186
Osh Oblast	55.2	18.8	5.5	0.0	20.4	100.0	526
Talas	68.0	7.5	2.3	0.2	21.9	100.0	126
Chui	65.7	25.6	1.3	0.5	6.9	100.0	407
Bishkek City	72.9	7.2	7.3	0.6	12.0	100.0	383
Osh City	67.3	18.3	0.0	0.0	14.4	100.0	78
Education							
None/primary	*	*	*	*	*	100.0	7
Basic general	38.1	11.9	2.4	0.5	47.1	100.0	338
Secondary	67.1	14.0	4.0	0.3	14.6	100.0	1,158
Professional primary/middle	73.7	11.9	4.4	1.1	8.9	100.0	388
Higher	70.3	16.0	5.0	0.1	8.5	100.0	522
Wealth quintile							
Lowest	59.7	14.9	4.3	0.0	21.1	100.0	502
Second	61.7	14.5	2.5	0.3	21.0	100.0	496
Middle	65.6	12.0	5.1	0.7	16.6	100.0	451
Fourth	67.8	14.7	2.8	1.1	13.6	100.0	449
Highest	69.4	12.8	5.8	0.0	12.0	100.0	515
Total	64.8	13.8	4.1	0.4	16.9	100.0	2,413

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Excludes men who had sexual intercourse within the last 4 weeks.
[2] Excludes men who are not currently married.

There are some variations in recent sexual activity by other background characteristics. Women in urban areas and those from wealthier households are less likely to be recently sexually active than women in rural areas and from poorer households. Less than half of women in Bishkek had sexual intercourse during the four weeks preceding the survey, as compared with 70 percent of women in Talas and Naryn. Women with only a basic general education are less likely to be sexually active (35 percent) than women with a secondary or professional primary/middle education (62 percent and 64 percent, respectively).

Overall, men are more likely to have had recent sexual intercourse than women (Table 4.6.2). Sixty-five percent had sexual intercourse in the four weeks preceding the survey, 14 percent had sexual intercourse in the past year but not in the previous four weeks, 4 percent had sex one or more years ago, and 17 percent have never had sexual intercourse. Men's sexual activity increases with age. Approximately 9 in 10 men age 30 and older had sex in the month preceding the interview, as compared with 5 percent of men age 15-19 and 46 percent of men age 20-24.

As is the case with women, men who are currently married or living with a woman are most likely to have had recent sexual intercourse (93 percent versus 43 percent of formerly married men). Approximately one-third of the men who are divorced, separated, or widowed reported having sexual intercourse in the past year but not in the previous four weeks, and one in four formerly married men had sex one or more years ago. Unlike never-married women, one in five never-married men (20 percent) reported having recently had intercourse. Recent sexual activity is more prevalent among men living in urban areas and those with more education and wealth. There are variations in sexual activity at the regional level. The proportion of men who had sex in the past four weeks ranges from 55 percent in Osh Oblast to 73 percent in Bishkek. Interestingly, in Bishkek, the proportions of respondents who were recently sexually active are the lowest among women (46 percent) and the highest among men (73 percent).

FERTILITY 5

Key Findings

- The total fertility rate in the Kyrgyz Republic is 3.6 births per woman.
- Rural women have higher fertility than urban women (4.0 versus 3.0 births per woman).
- The total fertility rate is highest in Talas.
- Childbearing begins relatively late in the Kyrgyz Republic, with less than one-quarter of women giving birth by age 20. The median age at first birth is 22.
- The overall fertility rate in the Kyrgyz Republic has remained relatively stable over the past 15 years. The 2012 KgDHS rate of 3.6 is slightly higher than the rate estimated in the 1997 KgDHS (3.4).
- Trends in fertility over time, examined by comparing age-specific fertility rates from the 2012 KgDHS for successive five-year periods preceding the survey, indicate a decline in fertility over the past two decades and a rapid increase in fertility among all age groups during the most recent period before the survey.

A major objective of the 2012 KgDHS was to examine fertility levels, trends, and differentials in the Kyrgyz Republic. This chapter describes current and past fertility, birth intervals, age at first birth, and the reproductive behavior of adolescents. The data on birth intervals are important because short intervals are strongly associated with childhood mortality. The age at which childbearing begins can also have a major impact on the health and well-being of both the mother and the child.

All women who were interviewed in the 2012 KgDHS were asked to provide a complete reproductive history. To encourage complete reporting, each woman was asked about the number of sons and daughters living with her, the number living elsewhere, and the number who had died. In addition to information on live births, women were then asked questions on all pregnancies that did not result in a live birth to obtain the number of induced abortions, the number of miscarriages, and the number of stillbirths that women had experienced in their lifetime.

After obtaining these aggregate data, an event-by-event pregnancy history was collected. Information was collected about all of the pregnancies the respondent had in the order in which they occurred, starting with her first pregnancy. For each pregnancy that resulted in a live birth, information was collected on the child's sex, survival status, and current age (for surviving children) or age at death (for deceased children). In the case of all pregnancies that did not result in a live birth, information was collected on the month and year the pregnancy ended. For births and terminations that occurred during the five years preceding the survey (i.e., in January 2007 or later), pregnancy duration was recorded in the five-year calendar of events.[1] Women were also asked questions about current pregnancies.

[1] The calendar, which is included at the end of the Woman's Questionnaire, provides a record of the timing of all live births, pregnancies, and periods of contraceptive use. The calendar covers the survey year up to the last month of fieldwork in addition to the full five years prior to the survey year.

5.1 CURRENT FERTILITY

Several measures of current fertility are derived from the pregnancy history data. Age-specific fertility rates (ASFRs) refer to the average number of live births per 1,000 women in a certain age group.[2] They are a valuable measure to assess the current age pattern of childbearing. The total fertility rate (TFR) is defined as the total number of births a woman would have by the end of her childbearing period if she were to pass through those years bearing children at the currently observed ASFRs. The TFR is obtained by summing the ASFRs and multiplying by five. The general fertility rate (GFR) is expressed as the annual number of live births per 1,000 women age 15-44, and the crude birth rate (CBR) is expressed as the annual number of live births per 1,000 population.

The various measures of current fertility are calculated for the three-year period preceding the survey, which roughly corresponds to August-December 2009 to August-December 2012. A three-year period was chosen because it reflects the current situation without unduly increasing sampling errors.

Birth data from the KgDHS are subject to the same types of errors that are inherent in all retrospective sample surveys: the possibility of omitting some births (especially births of children who died at a very young age) and the difficulty in accurately determining each child's date of birth. These errors can bias estimates of fertility trends, which therefore must be interpreted within the context of data quality and sample sizes. A summary of the quality of the KgDHS birth history data appears in Appendix Table C.4. It shows that there might have been some transference of births from 2007 to 2006; however, the differences are small and could also be due to real fluctuations in fertility. Both month and year of birth were provided for all but a tiny fraction of births, and sex ratios at birth—while fluctuating considerably across time—do not show any evidence of omission by sex of the birth.

Table 5.1 shows that the TFR for the three-year period before the survey is 3.6 children per woman. The TFR for rural areas (4.0 births per woman) is one child higher than that for urban areas (3.0 births).

Table 5.1 Current fertility

Age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the three years preceding the survey, by residence, Kyrgyz Republic 2012

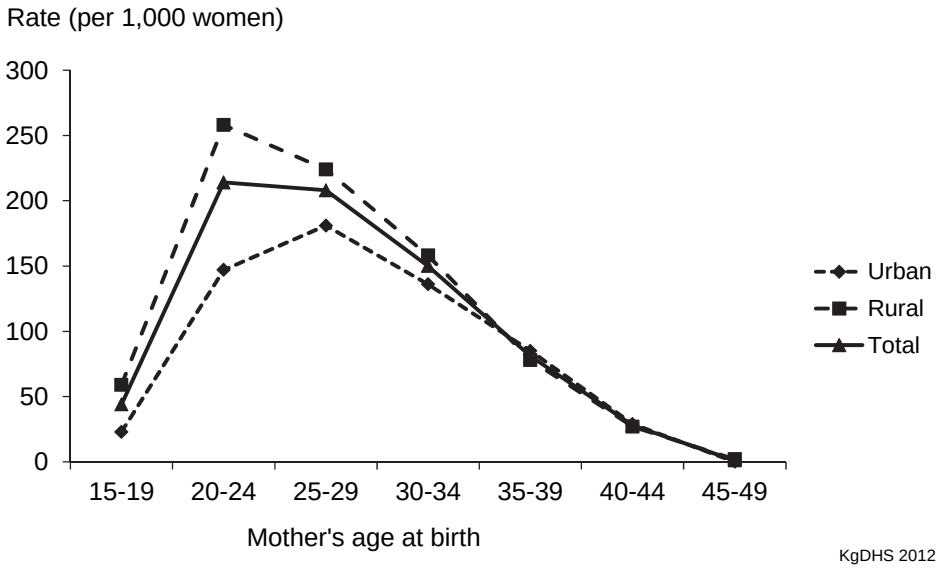
	Residence		
Age group	Urban	Rural	Total
15-19	23	59	44
20-24	147	258	214
25-29	181	224	208
30-34	136	158	150
35-39	85	78	81
40-44	29	27	28
45-49	0	2	1
TFR (15-49)	3.0	4.0	3.6
GFR	99	141	125
CBR	26.1	28.5	27.7

Notes: Age-specific fertility rates are per 1,000 women. Rates for the 45-49 age group may be slightly biased due to truncation. Rates are for the period 1-36 months prior to the interview.
TFR: Total fertility rate, expressed per woman
GFR: General fertility rate, expressed per 1,000 women age 15-44
CBR: Crude birth rate, expressed per 1,000 population

Table 5.1 and Figure 5.1 show that age-specific fertility rates are low among women age 15-19 (44 per 1,000 at the national level), rise to a peak among women age 20-24 (214 per 1,000), remain high for women 25-29 (208 per 1,000), and decline rapidly at older ages. Age-specific fertility rates are higher among rural than urban women throughout the childbearing years with the exception of the 35-39 and 40-44 age groups, where rates are slightly higher among urban women. The greatest absolute urban-rural difference in age-specific fertility rates occurs in the 20-24 age group (258 births per 1,000 women in rural areas versus 147 in urban areas).

[2] Numerators for age-specific fertility rates are calculated by summing the number of live births that occurred in the period 1-36 months preceding the survey (determined by the date of the interview and the date of birth of the child) and classifying them by the age of the mother (in five-year groups) at the time of birth (determined by the mother's date of birth). The denominators for the rates are the number of woman-years lived in each specific five-year age group during the period 1 to 36 months preceding the survey.

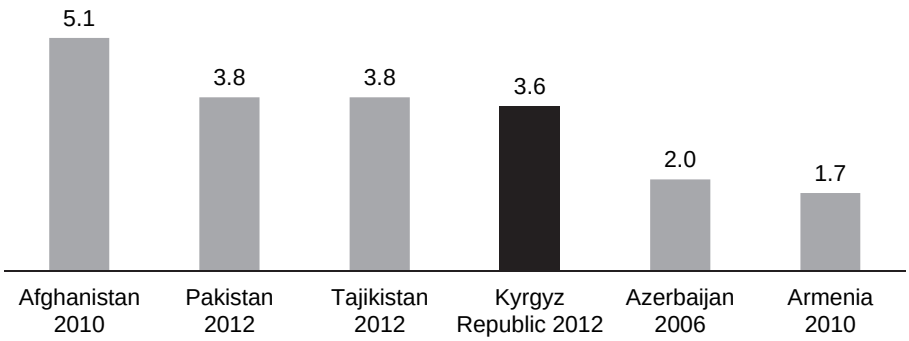
Figure 5.1
Age-specific fertility rates by urban-rural residence



The overall fertility rate in the Kyrgyz Republic has remained relatively stable over the past 15 years. The 2012 KgDHS rate of 3.6 is slightly higher than the rate estimated in the 1997 KgDHS (3.4) (Research Institute of Obstetrics and Pediatrics [RIOP] and Macro International Inc., 1998).

As can be seen in Figure 5.2, comparisons with recent fertility estimates from DHS surveys conducted in other countries show that the TFR of 3.6 births per woman in the Kyrgyz Republic is similar to the rates reported in the 2012 Tajikistan DHS (3.8 births) and the 2012-13 Pakistan DHS (3.8 births), lower than the rates reported in the 2010 Afghanistan Mortality Survey (5.1 births), and higher than the rates reported in the 2006 Azerbaijan DHS (2.0 births) and the 2010 Armenia DHS (1.7 births) (SA/MoH [Tajikistan] and ICF International, 2012; APHI/MoPH [Afghanistan] et al., 2011; NIPS [Pakistan] and Macro International Inc., 2008; SSC [Azerbaijan] and Macro International Inc., 2008; NSS [Armenia] et al., 2012).

Figure 5.2
Comparison of the TFR in the Kyrgyz Republic with other countries in the region



Source: Afghan Public Health Institute et al., 2011; National Institute of Population Studies and ICF International Inc., 2013; Statistical Agency under the President of the Republic of Tajikistan et al., 2013; State Statistical Committee and Macro International Inc., 2008; National Statistical Service et al., 2012.

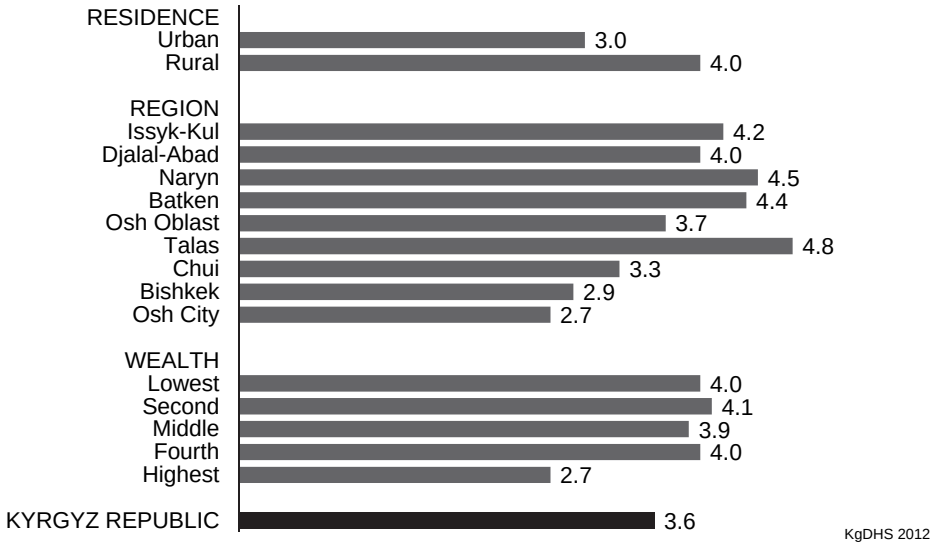
KgDHS 2012

5.2 FERTILITY DIFFERENTIALS

In addition to urban-rural residence, fertility also varies by region (Table 5.2 and Figure 5.3). The TFR is lowest in Osh (2.7 births per woman), closely followed by Bishkek (2.9 births per woman), and highest in the Talas (4.8 births per woman), Naryn (4.5 births per woman), and Batken (4.4 births per woman) regions.

The relationship between fertility and education is not uniform, but the TFR is lower among women with a higher education (3.2 births per woman) than among women at other educational levels (3.7-4.0 births per woman). Fertility is negatively associated with wealth; the difference in fertility between women in the highest quintile and all other wealth quintiles is more than one child per woman.

Figure 5.3
Differentials in total fertility rate by background characteristics, Kyrgyz Republic 2012



The percentage of women who reported being pregnant at the time of the survey is also presented in Table 5.2. This percentage may be underreported because some women may not be aware of a pregnancy, especially at the early stages, and some women who are early in their pregnancy may not want to reveal that they are pregnant. At the time of the survey, 7 percent of women age 15-49 reportedly were pregnant. Rural women are slightly more likely to be currently pregnant than urban women (7 percent and 6 percent, respectively).

Among the regions, the proportion of women who are currently pregnant is highest in Osh (10 percent) and Talas (9 percent) and lowest in Chui and Bishkek (5 percent each). The relationship between current pregnancy and education is somewhat erratic. Women with no education, only primary schooling, or a secondary education or higher were more likely to be pregnant at the time of the survey than women with a basic general or professional primary/middle education. Women in the fourth and highest wealth quintiles are somewhat less likely to be currently pregnant (6 percent each) than women in other quintiles (7 to 8 percent), but the differences are very small.

Table 5.2 Fertility by background characteristics

Total fertility rate for the three years preceding the survey, percentage of women age 15-49 currently pregnant, and mean number of children ever born to women age 40-49, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Total fertility rate	Percentage of women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49
Residence			
Urban	3.0	6.1	2.7
Rural	4.0	7.1	3.8
Region			
Issyk-Kul	4.2	7.5	3.4
Djalal-Abad	4.0	6.1	3.8
Naryn	4.5	7.4	3.9
Batken	4.4	7.9	4.2
Osh Oblast	3.7	8.3	4.3
Talas	4.8	9.0	4.2
Chui	3.3	5.1	2.7
Bishkek City	2.9	5.1	2.4
Osh City	2.7	9.6	2.7
Education			
None/primary	*	(15)	*
Basic general	3.7	5.8	(3.9)
Secondary	4.0	7.0	3.9
Professional primary/middle	4.0	5.4	3.2
Higher	3.2	7.5	2.6
Wealth quintile			
Lowest	4.0	8.4	4.2
Second	4.1	6.8	3.9
Middle	3.9	7.6	3.8
Fourth	4.0	5.9	3.1
Highest	2.7	5.5	2.4
Total	3.6	6.7	3.4

Note: Total fertility rates are for the period 1-36 months prior to the interview. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases. For total fertility rates, an asterisk indicates a rate based on fewer than 125 woman-years of exposure.

Table 5.2 also presents data on the mean number of children ever born to women age 40-49, which allows for a crude assessment of trends in fertility. The TFR is a measure of current fertility, while the mean number of children ever born is a measure of past or completed fertility. Although comparing completed fertility among women age 40-49 with the TFR can provide an indication of fertility changes, these changes are subject to bias resulting from understatement of parity by older women. Unless there is evidence of increased age at marriage and/or increased use of contraception, it is unlikely that fertility would decline. The findings show that the mean number of children ever born to women age 40-49 (3.4 children per woman) is slightly lower than the TFR for the three years preceding the survey (3.6 children per woman), indicating a slight increase in fertility over the past 30 years. This increase appears to have been shared by all subgroups except women from Osh Oblast, but it is particularly evident among residents of Issyk-Kul, Naryn, Talas, Chui, and Bishkek; those with professional primary/middle and higher educational attainment; and those in the fourth wealth quintile. Among these women, the difference between the TFR and completed fertility is 0.6 to 0.9 children per woman. The comparison of past and current fertility indicators in Osh Oblast suggests a decline of 0.6 children per woman (from 4.3 to 3.7).

5.3 FERTILITY TRENDS

In addition to comparisons of current and completed fertility, trends in fertility can be assessed in two other ways. First, fertility trends can be investigated using retrospective data from birth histories collected in the 2012 KgDHS. Second, the TFR from the 2012 KgDHS can be compared with estimates obtained in earlier surveys.

Trends in fertility over time can be examined by comparing age-specific fertility rates from the 2012 KgDHS for successive five-year periods preceding the survey, as presented in Table 5.3.1. The rates in older age groups become progressively more truncated for periods more distant from the survey date, because women age 50 and older were not interviewed in the survey. For example, rates cannot be calculated for women age 35-39 during the period of 15-19 years before the survey because these women would have been over age 50 at the time of the survey and therefore not eligible to be interviewed. Nonetheless, the results in Table 5.3.1 show that fertility has dropped among all age groups over the past two decades, with most of the decline during the late 1990s, 10-14 years before the survey. The decline is particularly evident among women in the 15-19 and 30-34 age groups. The decline is steepest among the 15-19 age cohort, with a 53 percent decrease between the period 15-19 years before the survey and the period 5-9 years before the survey. During the most recent period before the survey, fertility rises rapidly in all age groups, but this increase is particularly evident among women age 30-34: age-specific fertility rates among women age 30-34 grew from 104 births per 1,000 women in the period 5-9 years before the survey to 145 births per 1,000 women in the period 0-4 years before the survey, an increase of 39 percent.

Table 5.3.1 Trends in age-specific fertility rates

Age-specific fertility rates for five-year periods preceding the survey, by mother's age at the time of the birth, Kyrgyz Republic 2012

Mother's age at birth	Number of years preceding survey			
	0-4	5-9	10-14	15-19
15-19	38	34	46	73
20-24	215	204	213	237
25-29	201	182	167	197
30-34	145	104	102	[136]
35-39	74	61	[61]	
40-44	26	[19]		
45-49	[1]			

Note: Age-specific fertility rates are per 1,000 women. Estimates in brackets are truncated. Rates exclude the month of the interview.

A comparison of the 2012 KgDHS data with official statistics corroborates the decline in fertility over the past two decades and the rapid increase in fertility in the recent past. According to the National Statistical Committee, the TFR in the Kyrgyz Republic declined from 3.6 children per woman in 1990 to 2.7 children per woman in 2007 and then increased to 3.15 children per woman in 2012 (NSC, 2013b; NSC, 2013a). At the national level, the 2012 KgDHS total fertility rate of 3.6 is slightly higher than the official government rate of 3.1 for 2011. There is an important difference in computation of these rates. Whereas the KgDHS rates are based on information on live births collected from the complete pregnancy history of the de facto population of women (those who stayed the night before the interview in the household) for the three years preceding the survey (roughly equivalent to calendar years 2010-2012), the official government annual rates are based on registered births of the de jure population of women (those who usually live in the household). Other factors that could contribute to the difference between fertility rates include sampling variability of the KgDHS estimates and underreporting of births to the government registration system.

Table 5.3.2 Trends in age-specific and total fertility rates

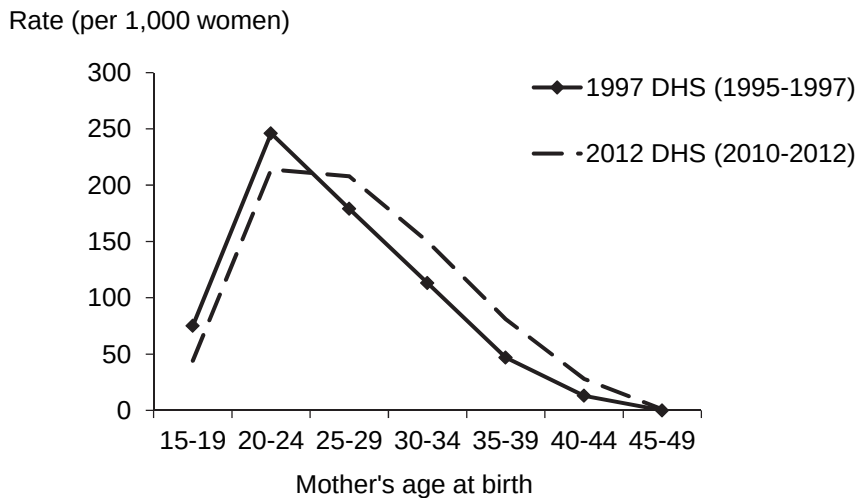
Age-specific and total fertility rates (TFR) for the three-year period preceding the 1997 and 2012 DHS surveys, Kyrgyz Republic 2012

Mother's age at birth	1997 KgDHS	2012 KgDHS
15-19	75	44
20-24	246	214
25-29	179	208
30-34	113	150
35-39	47	81
40-44	13	28
45-49	0	1
TFR 15-49	3.4	3.6

Note: Age-specific fertility rates are per 1,000 women.

Trends in fertility over time can also be examined by comparing the TFR and age-specific fertility rates from the 2012 and 1997 KgDHS surveys for the three-year periods preceding the two surveys. The results in Table 5.3.2 and Figure 5.4 show that over the 15 years between the surveys, fertility declined among women age 15-19 and age 20-24 by 41 percent and 13 percent, respectively, while fertility increased in all other age groups. The overall fertility rate of 3.6 children per woman in the 2012 KgDHS is only slightly higher than the rate of 3.4 children per woman estimated in the 1997 KgDHS.

Figure 5.4
Trends in fertility



5.4 CHILDREN EVER BORN AND LIVING

Table 5.4 shows the distribution of all women and currently married women by age and number of children ever born. It also shows the mean number of children ever born to women in each five-year age group, an indicator of trends in childbearing, as well as the mean number of living children.

Overall, one-third of women age 15-49 in the Kyrgyz Republic have never given birth. This proportion is far higher among younger women; 96 percent of women age 15-19 and 51 percent of those age 20-24 have never given birth. However, the proportion rapidly decreases with age. The percentage of women age 45-49 who have never given birth is quite low (3 percent), indicating that childbearing among Kyrgyz women is nearly universal. The percentage of married women in their 40s who have never had children is a crude indicator of the level of primary infertility, that is, the proportion of women who are unable to bear children at all. Because voluntary childlessness is rare in the Kyrgyz Republic, it is likely that married women with no births are unable to have children. Primary infertility is relatively low in the Kyrgyz Republic at less than 1 percent.

Table 5.4 Children ever born and living

Percent distribution of all women and currently married women age 15-49 by number of children ever born, mean number of children ever born, and mean number of living children, according to age group, Kyrgyz Republic 2012

	Number of children ever born														
Age	0	1	2	3	4	5	6	7	8	9	10+	Total	Number of women	Mean number of children ever born	Mean number of living children
ALL WOMEN															
15-19	96.0	3.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,637	0.04	0.04
20-24	50.6	30.5	16.8	2.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1,527	0.71	0.68
25-29	17.3	22.5	35.8	17.9	5.9	0.6	0.0	0.0	0.0	0.0	0.0	100.0	1,265	1.74	1.69
30-34	8.7	11.6	20.8	33.4	18.4	5.8	1.1	0.3	0.0	0.0	0.0	100.0	1,028	2.64	2.55
35-39	4.1	10.1	16.8	26.0	23.1	14.3	3.8	1.3	0.5	0.0	0.0	100.0	915	3.21	3.10
40-44	4.4	9.8	18.9	22.9	24.2	12.7	5.0	1.3	0.3	0.4	0.1	100.0	928	3.22	3.05
45-49	2.7	9.2	15.9	21.0	22.6	16.2	8.2	2.5	1.2	0.2	0.2	100.0	908	3.56	3.35
Total	33.6	14.6	17.0	15.1	11.0	5.6	2.0	0.6	0.2	0.1	0.0	100.0	8,208	1.86	1.78
CURRENTLY MARRIED WOMEN															
15-19	60.5	38.3	0.8	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	158	0.41	0.39
20-24	20.7	47.6	28.0	3.4	0.3	0.1	0.0	0.0	0.0	0.0	0.0	100.0	896	1.15	1.11
25-29	8.0	22.3	41.1	20.8	7.1	0.7	0.0	0.0	0.0	0.0	0.0	100.0	1,061	1.98	1.93
30-34	3.0	9.0	20.6	37.9	21.2	6.6	1.3	0.3	0.0	0.0	0.0	100.0	867	2.92	2.82
35-39	2.6	6.0	16.5	28.0	25.1	15.5	4.2	1.4	0.6	0.0	0.0	100.0	801	3.41	3.29
40-44	1.5	6.0	16.2	25.2	27.5	15.1	6.0	1.5	0.4	0.4	0.1	100.0	758	3.54	3.35
45-49	0.7	5.2	14.6	22.1	24.7	18.9	9.1	2.9	1.3	0.3	0.2	100.0	716	3.83	3.63
Total	8.2	17.7	23.3	21.9	16.1	8.4	3.0	0.9	0.3	0.1	0.0	100.0	5,256	2.64	2.54

As expected, older women have much higher parities than younger women. For example, over half (51 percent) of all women age 45-49 have given birth to four or more children. The mean number of children ever born increases with age, from almost zero among women age 15-19 to 3.6 among women age 45-49.

Patterns are similar for currently married women, except that only 8 percent of currently married women age 15-49 have never given birth. These differences in childbearing can be explained by the presence of many young and unmarried women, who are less exposed than married women to the risk of conception, in the category that included all women.

5.5 BIRTH INTERVALS

Birth interval is the length of time between two successive live births. Information on birth intervals provides insight into birth spacing patterns, which affect fertility as well as maternal, infant, and childhood mortality. Studies have shown that short birth intervals are associated with an increased risk of death for mother and baby, particularly when the interval is less than 24 months. Longer birth intervals, on the other hand, contribute to improved health status of both mother and child. Children born 24 to 35 months after a preceding birth are at increased risk of dying compared with children born 36 or more months after a preceding birth (Rutstein, 2005; WHO, 2006a; Conde-Agudelo et al., 2006). Table 5.5 shows the percent distribution of non-first births that occurred in the five years preceding the survey by the number of months since the previous birth, according to background characteristics.

Birth intervals are generally moderately long in the Kyrgyz Republic, with a median interval of 36 months, indicating that over half of all births follow the recommended birth interval of at least 36 months. Nevertheless, more than one-quarter of births (26 percent) take place less than 24 months after a previous birth. Both of these figures represent a slight improvement since 1997, when the corresponding figures were 32 months and 30 percent. Regional-level data from the 1997 KgDHS are not available except for Bishkek, where 28 percent of births in 1997 were spaced less than 24 months apart, as compared with 24 percent in 2012 (RIOP and Macro International Inc., 1998).

The length of the birth interval is closely associated with the survival status of the previous sibling. The median birth interval is more than 12 months shorter when the previous sibling has died than when the previous sibling is still alive (24 and 37 months, respectively). The percentage of births occurring within a very short interval (less than 18 months) is three times higher for children whose previous sibling died than for children whose previous sibling survived (31 and 9 percent, respectively). The shorter interval following the death of a child is partly due to a shortened period of breastfeeding (or no breastfeeding) for the preceding child, which leads to an earlier return of ovulation and hence an increased chance of pregnancy. Minimal use of contraception, presumably because of a desire to have another child as soon as possible, could also be partly responsible for the shorter birth interval in these cases.

The median number of months since a preceding birth increases considerably with age, from 27 months among mothers age 20-29 to 96 months among mothers age 40-49. Similarly, the median birth interval for second- and third-order births is 33 months, as compared with 45 months for fourth- to sixth-order births; however, the median birth interval declines with higher order births. There is no difference in the length of the median birth interval by sex of the preceding birth. Birth intervals are slightly longer in urban (40 months) than in rural (35 months) areas. The median birth interval is longest in Bishkek (44 months) and Chui (39 months) and shortest in Talas (28 months). Median number of months since the preceding birth generally increases with increasing education and wealth quintile.

Table 5.5 Birth intervals

Percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Months since preceding birth						Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48-59	60+			
Age									
15-19	*	*	*	*	*	*	100.0	3	*
20-29	14.4	25.4	31.8	13.7	8.7	6.0	100.0	1,211	26.7
30-39	5.9	9.8	19.4	14.4	12.3	38.2	100.0	1,247	48.4
40-49	2.7	5.3	8.1	6.4	7.9	69.7	100.0	234	96.2
Sex of preceding birth									
Male	9.1	17.7	23.6	13.0	10.5	26.0	100.0	1,355	35.8
Female	9.9	15.1	24.4	13.7	10.0	26.8	100.0	1,340	36.3
Survival of preceding birth									
Living	8.6	16.4	24.2	13.5	10.2	27.1	100.0	2,587	36.5
Dead	31.1	16.4	20.0	9.8	12.1	10.6	100.0	108	24.4
Birth order									
2-3	10.8	18.6	25.6	12.5	10.0	22.5	100.0	1,886	33.1
4-6	6.2	11.0	19.6	15.6	11.1	36.5	100.0	771	45.2
7+	12.9	18.8	33.1	11.1	5.7	18.4	100.0	39	33.8
Residence									
Urban	7.0	15.6	22.4	12.6	12.4	30.1	100.0	771	40.2
Rural	10.5	16.7	24.7	13.7	9.4	25.0	100.0	1,924	34.7
Region									
Issyk-Kul	9.8	15.9	24.0	11.1	8.7	30.6	100.0	259	36.4
Djalal-Abad	7.5	15.5	25.7	17.9	10.9	22.5	100.0	502	36.6
Naryn	13.2	15.9	20.5	12.2	10.0	28.2	100.0	129	36.2
Batken	8.2	17.4	29.1	15.0	12.3	17.9	100.0	229	33.4
Osh Oblast	10.0	17.4	25.8	12.4	9.3	25.0	100.0	551	34.0
Talas	15.2	20.7	26.8	10.9	6.1	20.3	100.0	185	28.4
Chui	9.5	15.1	20.4	12.8	10.6	31.6	100.0	418	39.3
Bishkek City	8.4	15.8	17.8	11.6	12.4	34.0	100.0	344	43.8
Osh City	5.0	13.9	31.9	13.2	11.6	24.4	100.0	77	35.6
Education									
None/primary	*	*	*	*	*	*	100.0	18	*
Basic general	7.0	14.5	31.0	18.8	11.8	16.8	100.0	260	35.2
Secondary	9.6	16.5	24.5	13.2	9.0	27.1	100.0	1,293	35.5
Professional primary/middle	11.6	16.8	20.0	10.1	9.4	32.1	100.0	469	37.6
Higher	8.3	16.4	23.1	13.6	13.1	25.5	100.0	655	38.0
Wealth quintile									
Lowest	10.2	17.3	24.5	13.8	8.8	25.3	100.0	535	35.2
Second	11.1	17.0	24.6	14.1	9.0	24.3	100.0	535	34.1
Middle	10.7	15.6	26.2	13.7	9.8	24.0	100.0	588	34.0
Fourth	6.8	17.5	23.5	12.8	11.1	28.3	100.0	596	36.8
Highest	8.8	14.1	20.4	12.5	13.1	31.2	100.0	442	42.2
Total	9.5	16.4	24.0	13.4	10.3	26.4	100.0	2,695	36.1

Note: First-order births are excluded. The interval for multiple births is the number of months since the preceding pregnancy that ended in a live birth. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

5.6 POSTPARTUM AMENORRHEA, ABSTINENCE, AND INSUSCEPTIBILITY

Two factors influence birth intervals during the period immediately following a birth: postpartum amenorrhea and postpartum abstinence. Postpartum amenorrhea is the interval between the birth of a child and the resumption of menstruation, during which the risk of pregnancy is very low. Postpartum amenorrhea is affected by the intensity and duration of breastfeeding. Postpartum abstinence refers to the period of voluntary sexual inactivity after childbirth. Delaying the resumption of sexual relations after a birth prolongs the period of postpartum protection. A woman is considered insusceptible to pregnancy if she is not exposed to the risk of pregnancy either because she is amenorrheic or because she is abstaining from sexual intercourse following a birth. The durations of amenorrhea and sexual abstinence following birth jointly determine the length of insusceptibility. Table 5.6 shows the proportion of mothers who are still amenorrheic, abstaining, and insusceptible, by number of months since birth, for all births occurring in the three years before the survey.

Table 5.6 Postpartum amenorrhea, abstinence, and insusceptibility

Percentage of births in the three years preceding the survey for which mothers are postpartum amenorrheic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Kyrgyz Republic 2012

Months since birth	Percentage of births for which the mother is:			Number of births
	Amenorrheic	Abstaining	Insusceptible[1]	
<2	81.0	71.6	84.1	105
2-3	69.4	15.1	71.7	169
4-5	58.9	7.3	61.9	152
6-7	41.9	7.9	45.2	145
8-9	34.7	6.3	36.6	181
10-11	26.8	9.5	31.3	171
12-13	15.1	7.7	18.8	151
14-15	11.3	3.6	11.8	147
16-17	14.7	7.6	16.4	131
18-19	6.2	5.0	6.5	125
20-21	7.4	5.3	9.1	139
22-23	3.1	3.3	3.8	142
24-25	6.3	4.0	8.0	159
26-27	3.6	5.8	7.1	152
28-29	3.6	5.7	7.4	154
30-31	3.2	3.0	5.7	136
32-33	3.4	3.5	3.9	110
34-35	3.0	2.8	4.8	106
Total	22.3	9.0	24.6	2,576
Median	5.7	1.6	6.1	na
Mean	8.2	3.9	9.0	na

Note: Estimates are based on status at the time of the survey.
na = Not applicable
[1] Includes births for which mothers are either still amenorrheic or still abstaining (or both) following birth.

The data indicate that mothers in the Kyrgyz Republic are amenorrheic for a median of 5.7 months, abstain for a median of 1.6 months, and are insusceptible to pregnancy for a median of 6.1 months. The proportion of women who are amenorrheic drops rapidly from 81 percent in the first two months after birth to a low of 3 percent at 34-35 months. The majority (72 percent) of Kyrgyz women abstain from sex during the first two months following a birth. The proportion abstaining drops sharply to 15 percent at 2-3 months and then decreases to 7 percent at 4-5 months. The period of postpartum amenorrhea is longer than the period of postpartum abstinence and is the more important determinant of the length of postpartum insusceptibility to pregnancy. At 10 to 11 months after a birth, more than one-quarter of all women are still amenorrheic (27 percent), but only 10 percent are abstaining.

Because a few women in the Kyrgyz Republic are amenorrheic or abstain for a very long time, the mean durations are higher than the median durations for amenorrhea, abstinence, and insusceptibility.

Table 5.7 shows the median duration of postpartum amenorrhea, abstinence, and insusceptibility by background characteristics. In general, differences in these three variables by background characteristics are small. Nevertheless, the longest median durations of postpartum amenorrhea and insusceptibility are observed among women in Osh (about 11 months each), nearly double the national average for both indicators.

Table 5.7 Median duration of amenorrhea, postpartum abstinence, and postpartum insusceptibility

Median number of months of postpartum amenorrhea, postpartum abstinence, and postpartum insusceptibility following births in the three years preceding the survey, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Postpartum amenorrhea	Postpartum abstinence	Postpartum insusceptibility[1]
Mother's age			
15-29	5.7	1.6	6.1
30-49	5.6	(1.6)	6.0
Residence			
Urban	5.8	(1.5)	6.2
Rural	5.6	1.6	6.0
Region			
Issyk-Kul	4.9	*	6.9
Djalal-Abad	6.6	*	7.4
Naryn	(6.2)	*	(6.2)
Batken	6.1	*	7.3
Osh Oblast	3.7	*	3.8
Talas	5.6	*	5.7
Chui	(5.4)	*	(5.4)
Bishkek City	(5.2)	*	(5.5)
Osh City	(10.7)	*	(10.9)
Education			
None/primary	*	*	*
Basic general	4.8	*	5.1
Secondary	5.8	(1.7)	6.2
Professional primary/middle	4.7	*	5.1
Higher	6.3	(1.6)	6.8
Wealth quintile			
Lowest	5.3	(1.2)	5.9
Second	6.6	*	6.6
Middle	6.4	*	7.2
Fourth	4.5	*	5.2
Highest	5.8	*	6.0
Total	5.7	1.6	6.1

Note: Medians are based on status at the time of the survey (current status). An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.
[1] Includes births for which mothers are either still amenorrheic or still abstaining (or both) following birth.

5.7 MENOPAUSE

The risk of becoming pregnant declines with age. After age 30, women's susceptibility to pregnancy declines as an increasing proportion of women become infecund. The term infecundity denotes a process rather than a well-defined event. Although the onset of infecundity is difficult to determine for an individual woman, one indicator of infecundity is menopause. Menopause is the culmination of a gradual decline in fecundity with increasing age. Women were considered menopausal if they were neither pregnant nor postpartum amenorrheic at the time of the survey and had not had a menstrual period for at least six months prior to the survey. Women who report that they have had a hysterectomy are also defined as menopausal. Table 5.8 presents data on menopause for women age 30 and older.

Table 5.8 Menopause

Percentage of women age 30-49 who are menopausal, by age, Kyrgyz Republic 2012

Age	Percentage menopausal[1]	Number of women
30-34	1.0	1,028
35-39	2.4	915
40-41	3.2	385
42-43	6.3	345
44-45	13.5	389
46-47	23.8	357
48-49	41.7	361
Total	9.4	3,779

[1] Percentage of women who are not pregnant and not postpartum amenorrheic whose last menstrual period occurred 6 or more months preceding the survey

Nine percent of women age 30-49 are estimated to be menopausal. The proportion of women who are menopausal increases with age, from 1 percent among women age 30-34 to 42 percent among women age 48-49.

5.8 AGE AT FIRST BIRTH

Age at first birth has a direct impact on fertility. Early initiation of childbearing lengthens the reproductive period and subsequently increases fertility. In many countries, postponement of first births—reflecting an increase in the age at marriage—has contributed greatly to overall fertility declines. Moreover, bearing children at a young age involves substantial risks to the health of both the mother and the child. Early childbearing also tends to restrict educational and economic opportunities for women.

Table 5.9 presents, by age cohort, the percentage of all women who gave birth by specific ages. Overall, the median age at first birth is 22 years. This median fluctuates between 21 and 23 years across age groups and shows a slight tendency to rise among the younger age groups. Slightly more than one-fifth of women in the Kyrgyz Republic give birth before reaching age 20, while half give birth by age 22 and about three-quarters by age 25.

Table 5.9 Age at first birth

Percentage of women age 15-49 who gave birth by specific exact ages, percentage who have never given birth, and median age at first birth, according to current age, Kyrgyz Republic 2012

	Percentage who gave birth by exact age					Percentage who have never given birth	Number of women	Median age at first birth
Current age	15	18	20	22	25			
15-19	0.0	na	na	na	na	96.0	1,637	a
20-24	0.0	1.8	16.5	na	na	50.6	1,527	a
25-29	0.0	2.5	17.2	42.6	71.6	17.3	1,265	22.6
30-34	0.3	3.8	24.5	48.4	74.6	8.7	1,028	22.1
35-39	0.1	4.6	32.6	60.5	77.3	4.1	915	21.2
40-44	0.0	1.1	19.9	54.0	79.3	4.4	928	21.8
45-49	0.0	2.6	19.7	48.1	76.5	2.7	908	22.1
20-49	0.1	2.6	21.1	na	na	18.0	6,571	a
25-49	0.1	2.9	22.4	50.1	75.5	8.1	5,044	22.0

na = Not applicable due to censoring
a = Omitted because less than 50 percent of women had a birth before reaching the beginning of the age group

Median age at first birth cannot be computed for women age 15-19 and age 20-24 because less than half of these women had a live birth before the beginning of the age group. However, recent trends in the initiation of childbearing among young women can be assessed by comparing the overall proportions who had given birth in the 1997 KgDHS and 2012 KgDHS surveys. In the 1997 KgDHS, 6 percent of women age 15-19 and 66 percent of women age 20-24 had given birth (RIOP and Macro International Inc., 1998). In the 2012 KgDHS, the comparable figures are 4 percent for women age 15-19 and 49 percent for women age 20-24. The decline indicates a delay in the initiation of childbearing among women age 15-24 during the 1997-2012 period.

Changes in the median age at first birth among women age 25-49 over time (22.0 years in 2012 versus 21.7 years in 1997) are small.

As in 1997, the 2012 KgDHS data indicate that Kyrgyz women of all cohorts have adhered to the practice of giving birth to a first child within two years of getting married. Among women age 25-29, for example, the gap between the median age at first marriage and the median age at first birth is almost one and a half years (21.2 and 22.6 years, respectively). The same interval between age at first marriage and age at first birth is observed for women age 45-49 (20.7 and 22.1 years, respectively).

Table 5.10 shows the median age at first birth by background characteristics for women currently age 25-49. The median age at first birth for urban women is one year older than for rural women (22.9 years versus 21.6 years). Women in Bishkek have a slightly higher median age at first birth than women in other regions. Median age at first birth correlates positively with education and wealth status: the median among women living in the wealthiest households is 23.5 years, as compared with 21.5 years among women living in the poorest households.

Table 5.10 Median age at first birth

Median age at first birth among women age 25-49, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Women age 25-49
Residence	
Urban	22.9
Rural	21.6
Region	
Issyk-Kul	22.1
Djalal-Abad	21.7
Naryn	21.7
Batken	21.7
Osh Oblast	21.5
Talas	21.1
Chui	22.3
Bishkek City	23.6
Osh City	22.5
Education	
None/primary	*
Basic general	21.3
Secondary	21.1
Professional primary/middle	21.9
Higher	23.7
Wealth quintile	
Lowest	21.5
Second	21.6
Middle	21.6
Fourth	22.0
Highest	23.5
Total	22.0

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

5.9 TEENAGE PREGNANCY AND MOTHERHOOD

Teenage pregnancy and motherhood is a major social and health concern. Early teenage pregnancy can cause health problems for the mother as well as the child. Teenage mothers are more likely to suffer from severe complications during delivery, which result in higher morbidity and mortality for both themselves and their children. In addition, young mothers may not be sufficiently emotionally mature to bear the burden of childbearing and child rearing. Moreover, an early start to childbearing often reduces women's educational and employment opportunities and is associated with higher levels of fertility.

Table 5.11 shows that 6 percent of adolescents age 15-19 in the Kyrgyz Republic have begun childbearing. Four percent of teenagers have given birth, and another 2 percent are pregnant with their first child. As expected, the proportion of women age 15-19 who have begun childbearing rises with age, from less than 1 percent among women age 15 and age 16 to 23 percent of women age 19.

Teenage fertility varies by urban-rural residence. The proportion of teenagers who have begun childbearing is 4 percent in urban areas and 8 percent in rural areas. Early childbearing among teenagers is more common in Talas (14 percent) than in other regions, especially Bishkek (1 percent). It is less common among women with a higher education and among women in the highest wealth quintile.

In terms of trends, there has been a small decrease in overall adolescent fertility over the past 15 years, from 9 percent in 1997 (RIOP and Macro International Inc., 1998) to 6 percent in 2012.

Table 5.11 Teenage pregnancy and motherhood

Percentage of women age 15-19 who have had a live birth or who are pregnant with their first child, and percentage who have begun childbearing, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Percentage of women age 15-19 who: Have had a live birth	Are pregnant with first child	Percentage who have begun childbearing	Number of women
Age				
15	0.0	0.0	0.0	337
16	0.4	0.4	0.7	390
17	0.6	2.5	3.1	320
18	5.5	3.2	8.7	315
19	16.4	6.4	22.8	275
Residence				
Urban	1.8	1.9	3.8	591
Rural	5.3	2.4	7.7	1,046
Region				
Issyk-Kul	5.4	3.1	8.5	109
Djalal-Abad	6.6	1.8	8.4	260
Naryn	4.5	0.0	4.5	42
Batken	5.4	3.8	9.1	111
Osh Oblast	2.8	2.6	5.4	439
Talas	10.0	3.7	13.7	64
Chui	5.3	3.1	8.4	243
Bishkek City	0.6	0.7	1.3	316
Osh City	2.7	2.5	5.2	54
Education				
None/primary	*	*	*	10
Basic general	4.7	2.1	6.8	653
Secondary	3.4	2.6	6.0	681
Professional primary/middle	5.1	2.2	7.3	138
Higher	3.1	1.5	4.6	155
Wealth quintile				
Lowest	5.6	1.7	7.3	308
Second	5.0	2.6	7.6	314
Middle	3.7	3.2	6.9	307
Fourth	5.3	3.1	8.5	312
Highest	1.3	1.0	2.3	397
Total	4.0	2.3	6.3	1,637

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

FERTILITY PREFERENCES 6

Key Findings

- One in four currently married women and men in the Kyrgyz Republic want to limit childbearing: 25 percent of women and 24 percent of men want no more children, and 2 percent of women and 1 percent of men have been sterilized.
- Women and men prefer moderate family sizes (3.9 children among women and 4.1 among men). The most commonly reported ideal family size is four children (cited by 43 percent of women and 39 percent men).
- Women in the Kyrgyz Republic have an average of 0.2 children more than their desired number of children. This implies that the total fertility rate would be 3.4 if all unwanted births were avoided, instead of the actual rate of 3.6.
- Ninety-five percent of recent births were reported as being wanted at the time they occurred.

Knowledge about fertility preferences is of considerable importance to family planning program managers because it allows them to assess not only the desire for children but also the extent of unwanted and mistimed pregnancies. In addition, data on fertility preferences indicate possible future fertility trends. In the 2012 KgDHS, women and men were asked a series of questions to ascertain their fertility preferences. The resulting data were used to quantify fertility preferences: whether women want to cease childbearing altogether or merely delay the next pregnancy. These data can also be used to determine the demand for family planning—in combination with data on contraceptive use—and to estimate unmet need for family planning, including need for spacing and limiting births. Ideal number of children, the number of children a woman or a man would want in total if she or he could start afresh, is another important indicator of fertility preferences. Information on ideal family size provides two measures. First, for women who have not yet started a family, the data provide an idea of future fertility (to the extent that women are able to realize their fertility desires). Second, the excess of past fertility over ideal family size provides a measure of unwanted fertility. Other topics discussed in this chapter are fertility planning and the effects of unwanted births on fertility rates.

Interpretation of data on fertility preferences is often difficult since it is understood that respondents' reported preferences are, in a sense, hypothetical and thus subject to change and rationalization. Still, data on fertility preferences indicate the direction of future fertility to the extent that individuals and couples will act to achieve their preferred family sizes.

6.1 DESIRE FOR MORE CHILDREN

Information about the desire for more children is important in understanding future reproductive behavior. The provision of adequate and accessible family planning services depends on the availability of such information. In the 2012 KgDHS, insight into the childbearing intentions of Kyrgyz women and men was obtained by asking respondents whether they wanted to have another child and, if so, how soon. The question was phrased differently in the case of pregnant women to refer to a subsequent child after completion of the current pregnancy. Sterilized women and men were not asked questions about their desire for more children because they were considered to want no more children.

Table 6.1 shows fertility preferences among currently married women and men by number of living children at the time of the survey (including any current pregnancy). The majority of married Kyrgyz women express a desire to control their future fertility (Figure 6.1). Overall, more than one in four women want to stop childbearing, either because they do not want to have any more children (25 percent) or because they have been sterilized (2 percent). Furthermore, 10 percent of women reported that they were unable to conceive. Forty-six percent of married women want to have a child at some time in the future, but only 16 percent want a child within two years, and 28 percent would prefer to wait two or more years. One in five (19 percent) married women in the Kyrgyz Republic are undecided about their fertility preferences, either because they are unsure if they want another child (17 percent) or because they want another child but are not sure when to have the next child (2 percent).

Table 6.1 Fertility preferences by number of living children

Percent distribution of currently married women and currently married men age 15-49 by desire for children, according to number of living children, Kyrgyz Republic 2012

	Number of living children							
Desire for children	0	1	2	3	4	5	6+	Total
			WOMEN[1]					
Have another soon[2]	80.3	25.8	16.9	9.4	4.3	1.8	1.3	16.3
Have another later[3]	1.1	48.1	40.1	25.8	10.3	8.0	2.3	27.7
Have another, undecided when	4.3	4.2	2.9	2.1	0.9	0.5	0.0	2.4
Undecided	1.3	9.9	15.7	21.6	23.4	19.4	15.1	16.8
Want no more	0.2	3.9	13.7	28.0	49.2	51.5	54.4	24.5
Sterilized[4]	0.8	0.3	1.1	1.6	2.4	3.6	4.9	1.6
Declared infecund	12.0	7.7	8.8	10.8	9.0	14.8	21.0	10.1
Missing	0.0	0.1	0.6	0.7	0.5	0.5	1.0	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	271	970	1,326	1,279	847	406	157	5,256
			MEN[5]					
Have another soon[2]	76.7	32.4	20.3	18.9	10.5	5.6	(2.2)	21.6
Have another later[3]	1.3	42.5	44.4	29.2	16.8	7.8	(5.8)	30.0
Have another, undecided when	11.3	7.6	4.5	1.7	0.3	0.0	(0.0)	3.5
Undecided	5.5	11.9	20.5	24.4	21.3	14.8	(15.7)	18.8
Want no more	1.0	2.6	9.2	24.3	46.4	66.9	(75.4)	23.5
Sterilized[4]	0.0	0.0	0.0	0.0	2.3	1.2	(0.0)	0.5
Declared infecund	1.7	1.6	1.0	1.0	2.3	3.1	(0.0)	1.5
Missing	2.5	1.4	0.1	0.5	0.1	0.6	(0.9)	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	67	261	377	356	237	101	43	1,443

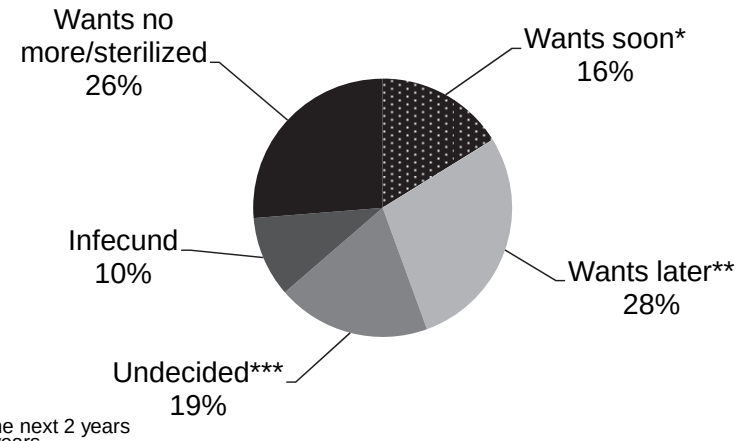
Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] The number of living children includes the current pregnancy.
[2] Wants next birth within 2 years.
[3] Wants to delay next birth for 2 or more years.
[4] Includes both female and male sterilization.
[5] The number of living children includes one additional child if the respondent's wife is pregnant.

The desire to limit fertility increases rapidly with the number of living children (Table 6.1). For example, most married women with no children (80 percent) say that they want to have a child soon. On the other hand, 30 percent of women with three children say they want no more or are sterilized, and this proportion increases to 59 percent among women with six or more living children.

A comparison with data from the 1997 KgDHS shows that there has been a downward trend in the desire to limit childbearing among Kyrgyz women. Forty-seven percent of married women in 1997 wanted no more children, as compared with 26 percent in 2012. At the same time, the percentage of women who want another child at some time in the future has increased from 41 percent to 46 percent. The percentage of women who are unsure about their preferences has increased from 7 percent to 17 percent.

Married men's preferences for children are similar to those of married women's. However, a lower proportion of men than women declared themselves as infecund (2 percent versus 10 percent), and a slightly higher percentage of men than women report that they want to have another child within two years (22 percent versus 16 percent).

Figure 6.1
Fertility preferences among married women



* Within the next 2 years
** After 2 years
*** Wants more, undecided when or undecided if wants more

KgDHS 2012

6.2 DESIRE TO LIMIT CHILDBEARING

The proportion of women who want no more children is an important and easily understood measure of fertility preference. Table 6.2.1 shows the percentage of currently married women who want to stop childbearing by the number of children they already have and by urban-rural residence, region, education, and wealth quintile. Differences by urban-rural residence and wealth quintiles are small. There are substantial differences among women in their desire to limit childbearing by region, ranging from 13 percent of women in Osh Oblast to 37 percent in Batken. The proportions in the remaining regions are between 25 and 34 percent.

There is no clear pattern in the desire to limit childbearing by the woman's education. Up to the professional primary/middle educational level, the more education a woman has, the more likely she is to want no more children. However, women with a higher education are less likely to want to stop childbearing (20 percent) than women with a secondary or professional primary/middle education (28 percent and 36 percent, respectively).

Table 6.2.1 Desire to limit childbearing: Women

Percentage of currently married women age 15-49 who want no more children, by number of living children, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	2.0	6.6	20.3	34.6	61.0	63.7	*	27.0
Rural	0.3	2.8	11.5	27.4	48.5	53.1	58.4	25.7
Region								
Issyk-Kul	(2.4)	2.5	16.0	32.5	54.5	(64.7)	*	29.9
Djalal-Abad	(0.0)	0.7	9.4	31.7	47.3	60.9	(52.6)	26.5
Naryn	*	1.8	9.9	27.5	50.3	(67.2)	(70.5)	30.6
Batken	(0.0)	2.4	15.7	44.2	68.7	76.2	(75.0)	36.7
Osh Oblast	(3.8)	0.0	2.8	9.5	26.2	27.7	(37.3)	12.8
Talas	(0.0)	1.6	7.4	28.1	58.6	82.8	*	34.1
Chui	*	8.7	24.1	36.2	69.2	(61.8)	*	30.3
Bishkek City	(0.0)	8.5	18.3	34.2	67.2	*	*	25.0
Osh City	(0.0)	7.1	22.3	51.0	69.3	*	*	31.3
Education								
None/primary	*	*	*	*	*	*	*	*
Basic general	(0.0)	0.0	6.1	17.1	(36.3)	*	*	12.6
Secondary	2.5	1.6	13.6	30.2	48.7	50.8	56.7	28.1
Professional primary/middle	(0.0)	10.9	20.7	36.6	60.9	66.6	(74.4)	36.3
Higher	0.0	5.8	15.9	26.8	54.3	(59.0)	*	20.0
Wealth quintile								
Lowest	4.3	0.3	8.8	21.6	47.8	44.6	52.9	25.3
Second	(0.0)	1.3	10.7	30.0	45.8	61.6	52.9	26.9
Middle	0.0	3.7	11.5	29.8	50.6	61.6	(74.8)	26.4
Fourth	(1.1)	4.6	17.3	31.2	56.2	63.3	*	26.8
Highest	0.0	8.8	21.7	33.9	64.4	(48.8)	*	25.2
Total	1.0	4.3	14.8	29.6	51.6	55.1	(59.3)	26.1

Note: Women who have been sterilized are considered to want no more children. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.
[1] The number of living children includes the current pregnancy.

Table 6.2.2 shows the percentage of currently married men who want no more children, who are sterilized, or who reported that their wife/partner is sterilized, by number of living children and background characteristics. Men's desires for children are different from those of women. Rural men are more likely than urban men to want to stop having children (27 percent versus 18 percent). As in the case of women, men in Batken are most likely to want to limit having children (44 percent); however, men in Bishkek are least likely to want no more children (2 percent). In the other regions, the percentage of men who want to stop having children ranges between 9 and 39 percent. The relationship between desire to stop childbearing and education is unclear. For example, the proportion of married men who want no more children increases from 10 percent among those with a basic general education to 29-30 percent among those with a secondary or professional primary/middle education and then decreases to 11 percent among those with a higher education. However, wealth status seems to have a negative association with the desire to limit childbearing. Men living in the poorest households are more likely to want no more children than those living in the richest households (33 percent versus 11 percent).

Table 6.2.2 Desire to limit childbearing: Men

Percentage of currently married men age 15-49 who want no more children, by number of living children, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	*	3.5	9.8	19.2	48.8	*	*	17.5
Rural	(0.0)	1.9	8.9	26.6	48.6	70.3	(73.8)	27.0
Region								
Issyk-Kul	*	8	(5.3)	(22.7)	(39.2)	*	*	20.8
Djalal-Abad	*	(0.0)	(11.8)	(49.1)	(58.3)	*	*	34.7
Naryn	*	*	(12.1)	(27.8)	(60.7)	*	*	31.8
Batken	*	(6.8)	(26.6)	(37.1)	(75.6)	*	*	44.2
Osh Oblast	*	(0.0)	10.9	23.6	(66.0)	*	*	34.4
Talas	*	(2.9)	(7.4)	25.1	(28.0)	*	*	23.0
Chui	*	(6.0)	(7.9)	(12.7)	*	*	*	8.9
Bishkek City	*	(0.0)	(0.0)	(0.0)	*	*	*	1.6
Osh City	*	*	(24.4)	(54.0)	*	*	*	38.5
Education								
Basic general	*	*	(3.0)	(5.5)	*	*	*	9.7
Secondary	(1.1)	1.3	10.7	35.7	48.4	73.9	(84.6)	30.1
Professional primary/middle	*	(10.0)	16.5	19.3	51.5	(58.7)	*	28.5
Higher	*	1.4	5.7	10.6	(45.6)	*	*	11.0
Wealth quintile								
Lowest	*	0.0	5.2	26.3	46.6	(75.8)	*	32.7
Second	*	2.8	15.4	26.6	61.8	(66.9)	*	31.0
Middle	*	5.2	10.0	30.5	54.0	*	*	26.6
Fourth	*	(0.0)	8.4	22.3	(38.9)	*	*	18.5
Highest	*	3.7	6.9	15.3	(37.9)	*	*	11.1
Total	1.0	2.6	9.2	24.3	48.7	68.1	(75.4)	24.0

Note: Men who have been sterilized or who state in response to the question about desire for children that their wife has been sterilized are considered to want no more children. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.
[1] The number of living children includes one additional child if the respondent's wife is pregnant.

6.3 IDEAL FAMILY SIZE

Respondents were asked two questions to gauge their ideal family size. Those who did not have any living children were asked "If you could choose exactly the number of children to have in your lifetime, how many would that be?" For respondents who had living children, the question was rephrased as follows: "If you could go back to the time you did not have any children and could choose exactly the number of children to have in your lifetime, how many would that be?" Responses to these questions are meant to be independent of the number of children that a respondent already has. However, there is typically a correlation between the actual number of children that respondents have and their reported ideal. This correlation may be due to respondents who want larger families having more children, respondents adjusting their ideal family size to match their actual family size, or a combination of these factors. It is also possible that respondents with large families, being on average older than those with small families, have larger ideal family sizes because of attitudes they acquired 20 to 30 years ago. Despite the likelihood that some rationalization occurs, it is common to find that many respondents state ideal sizes lower than their actual number of surviving children. The percent distribution of women and men age 15-49 by ideal number of children is detailed in Table 6.3, according to the number of living children.

In 2012, Kyrgyz women consider having 3.9 children as ideal. This is 0.2 children more than the mean ideal number of children recorded in the 1997 KgDHS (Research Institute of Obstetrics and Pediatrics [RIOP] and Macro International Inc., 1998). Among currently married women, the mean number of children considered ideal is 4.2 children, which is 0.3 children higher than in the 1997 KgDHS (3.9 children). More than two in five women (43 percent) want to have four children, while nearly one-quarter (23 percent) want to have five or more children. Three in 10 women prefer either a two-child or a three-child family (15 percent each).

Table 6.3 Ideal number of children by number of living children

Percent distribution of women and men age 15-49 by ideal number of children, and mean ideal number of children for all respondents and for currently married respondents, according to the number of living children, Kyrgyz Republic 2012

	Number of living children							
Ideal number of children	0	1	2	3	4	5	6+	Total
				WOMEN[1]				
0	0.8	0.2	0.2	0.2	0.0	0.6	0.0	0.4
1	2.7	1.9	0.5	0.4	0.1	0.0	0.0	1.3
2	25.0	21.9	13.6	5.5	1.5	1.6	2.4	14.9
3	16.3	22.8	19.9	11.7	2.2	3.3	1.2	14.6
4	34.0	38.5	47.8	56.5	54.4	25.7	27.4	42.6
5	8.0	6.7	9.7	11.8	14.4	25.9	8.2	10.4
6+	6.0	6.6	7.2	13.0	24.6	39.3	57.3	12.3
Non-numeric response	7.3	1.3	1.0	0.9	2.7	3.6	3.5	3.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	2,603	1,244	1,497	1,378	894	426	167	8,208
Mean ideal number of children for:[2]								
All women	3.4	3.5	3.8	4.2	4.7	5.2	5.7	3.9
Number of women	2,412	1,227	1,482	1,365	870	410	161	7,927
Currently married women	3.9	3.7	3.9	4.2	4.7	5.2	5.7	4.2
Number of currently married women	256	957	1,314	1,266	824	390	151	5,157
				MEN[3]				
0	1.6	0.2	0.2	0.0	0.3	0.0	(0.0)	0.7
1	1.1	0.6	0.0	0.0	0.0	0.0	(0.0)	0.5
2	14.4	13.1	9.3	2.0	1.1	2.1	(0.0)	9.4
3	23.1	24.5	16.5	16.9	0.8	3.0	(0.0)	17.8
4	32.5	41.3	45.5	42.3	53.5	19.2	(15.5)	38.5
5	14.9	14.4	18.4	22.9	25.1	52.6	(12.8)	19.2
6+	7.7	4.5	6.9	12.9	17.5	20.3	(70.7)	10.6
Non-numeric responses	4.6	1.3	3.2	2.9	1.7	2.8	(0.9)	3.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	962	298	403	363	241	104	43	2,413
Mean ideal number of children for:[2]								
All men	3.7	3.8	4.0	4.4	4.7	5.1	(6.1)	4.1
Number of men	918	294	390	352	237	101	43	2,335
Currently married men	4.2	3.9	4.1	4.4	4.7	5.1	(6.1)	4.4
Number of currently married men	65	257	364	346	233	98	43	1,406

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] The number of living children includes current pregnancy for women.
[2] Means are calculated excluding respondents who gave non-numeric responses.
[3] The number of living children includes one additional child if the respondent's wife is pregnant.

There is a positive correlation between the actual and ideal number of children. Among all women, the mean ideal number of children increases from 3.4 among those with no children to 5.7 among those with six or more children. The positive association between actual and ideal number of children is due to two factors. First, to the extent that women are able to implement their fertility desires, women who want smaller families will tend to achieve smaller families. Second, some women may have difficulty admitting their desire for fewer children if they could begin childbearing again and may in fact report their actual number as their preferred number. Despite this tendency to rationalize, the data provide evidence of unwanted fertility, with nearly one-third of women with five children reporting an ideal family size of fewer than their actual number of children.

In general, Kyrgyz men and women want the same number of children. The mean ideal number of children is 4.1 among all men and 4.4 among currently married men. Nearly two in five men (39 percent) say that four children are ideal, 30 percent say that five or more children are ideal, and 18 percent say that three children are ideal. As in the case of women, there is a positive correlation between the actual and ideal number of children among men.

Table 6.4 shows the mean ideal number of children for women age 15-49, by background characteristics. The ideal number of children increases with the woman's age. Younger women (15-29) want to have fewer than four children, while women age 30 and older want to have four or more children. Ideal family size is considerably higher in rural areas than urban areas (4.1 and 3.5 children, respectively), and it is inversely related to household wealth. Regional variations in ideal family size range from 3.3 children among women in Bishkek City to 4.4 children among women in Osh Oblast. The association between mean ideal number of children and education is not uniform.

Table 6.4 Mean ideal number of children

Mean ideal number of children for all women age 15-49 by background characteristics, Kyrgyz Republic 2012

Background characteristic	Mean	Number of women[1]
Age		
15-19	3.5	1,504
20-24	3.6	1,482
25-29	3.9	1,241
30-34	4.0	1,008
35-39	4.2	886
40-44	4.2	922
45-49	4.4	884
Residence		
Urban	3.5	2,987
Rural	4.1	4,940
Region		
Issyk-Kul	4.0	645
Djalal-Abad	4.2	1,284
Naryn	4.2	281
Batken	4.0	543
Osh Oblast	4.4	1,531
Talas	4.3	357
Chui	3.7	1,454
Bishkek City	3.3	1,522
Osh City	3.6	310
Education		
None/primary	(3.7)	35
Basic general	3.7	1,062
Secondary	4.1	3,329
Professional primary/middle	4.0	1,340
Higher	3.6	2,160
Wealth quintile		
Lowest	4.4	1,413
Second	4.2	1,401
Middle	4.1	1,460
Fourth	3.8	1,629
Highest	3.4	2,024
Total	3.9	7,927

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Number of women who gave a numeric response.

6.4 FERTILITY PLANNING

Information collected in the 2012 KgDHS can be used to estimate levels of unwanted fertility. This information provides insight into the degree to which couples are able to control fertility. Women age 15-49 were asked a series of questions about each child born to them in the preceding five years, as well as any current pregnancy, to determine whether the birth or pregnancy was wanted then (planned), wanted later (mistimed), or not wanted at all (unplanned) at the time of conception. In assessing these results, it is important to recognize that women may declare a previously unwanted birth or current pregnancy as wanted, and this rationalization results in an underestimate of the true extent of unwanted births.

Table 6.5 shows that the vast majority of births in the five years preceding the survey were wanted at the time they occurred (95 percent). Only 3 percent were mistimed (wanted later), and only 1 percent were unwanted. There has been a notable change since 1997, when only 86 percent of births in the previous three years were wanted at the time they were conceived, 8 percent were mistimed, and 5 percent were not wanted at all (RIOP and Macro International Inc., 1998).

Table 6.5 Fertility planning status

Percent distribution of births to women age 15-49 in the five years preceding the survey (including current pregnancies), by planning status of the birth, according to birth order and mother's age at birth, Kyrgyz Republic 2012

Birth order and mother's age at birth	Planning status of birth				Total	Number of births
	Wanted then	Wanted later	Wanted no more	Missing		
Birth order						
1	97.8	1.0	0.1	1.1	100.0	1,560
2	94.2	4.5	0.3	1.0	100.0	1,251
3	94.8	3.8	0.7	0.7	100.0	923
4+	93.4	3.0	3.0	0.6	100.0	898
Mother's age at birth						
<20	98.5	1.3	0.0	0.3	100.0	321
20-24	95.8	3.1	0.2	0.9	100.0	1,746
25-29	94.6	3.8	0.4	1.2	100.0	1,296
30-34	95.9	2.4	0.9	0.8	100.0	758
35-39	93.6	1.8	4.2	0.4	100.0	380
40-44	90.8	0.6	6.5	2.1	100.0	129
45-49	*	*	*	*	100.0	2
Total	95.4	2.9	0.8	0.9	100.0	4,634

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 6.5 shows that the proportion of wanted births decreases slightly with increasing birth order, while the proportion of unwanted births increases slightly. Ninety-eight percent of first births are wanted, as compared with 93 percent of fourth and higher order births. The proportion of unwanted births increases from a very small fraction of first births to 3 percent of fourth and higher order births.

A similar pattern is observed for mother’s age at birth. The proportion of planned births is highest (99 percent) among mothers in the youngest age group (below age 20) and then decreases with increasing age. Among mothers age 40-44 at the time of the birth, 91 percent of births in the past five years were wanted at the time and 7 percent were unwanted.

6.5 WANTED FERTILITY RATES

The wanted fertility rate measures the potential demographic impact of avoiding unwanted births. It is calculated in the same manner as the total fertility rate but excludes unwanted births from the numerator. A birth is considered wanted if the number of living children at the time of conception is lower than the ideal number of children reported by the respondent. The gap between wanted and actual fertility shows how successful women are in achieving their reproductive intentions. This measure also may be an underestimate to the extent that women may not report an ideal family size lower than their actual family size.

The total wanted fertility rates in Table 6.6 represent the levels of fertility that would have prevailed in the three years preceding the survey if all unwanted births had been avoided. Overall, the total wanted fertility rate for the Kyrgyz Republic is 3.4 children, 0.2 children lower than the actual total fertility rate (TFR) of 3.6. This implies that Kyrgyz women have 0.2 children more than their wanted number of children, and the TFR would be 6 percent lower if unwanted births were prevented.

Wanted and actual fertility rates are higher in 2012 than in 1997, when they were 3.1 and 3.4 children, respectively (RIOP and Macro International Inc., 1998).

Table 6.6 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Total wanted fertility rate	Total fertility rate
Residence		
Urban	2.8	3.0
Rural	3.7	4.0
Region		
Issyk-Kul	4.0	4.2
Djalal-Abad	3.7	4.0
Naryn	4.2	4.5
Batken	4.0	4.4
Osh Oblast	3.3	3.7
Talas	4.5	4.8
Chui	2.9	3.3
Bishkek City	2.8	2.9
Osh City	2.6	2.7
Education		
None/primary	*	*
Basic general	3.4	3.7
Secondary	3.6	4.0
Professional primary/middle	3.7	4.0
Higher	3.0	3.2
Wealth quintile		
Lowest	3.6	4.0
Second	3.7	4.1
Middle	3.6	3.9
Fourth	3.7	4.0
Highest	2.6	2.7
Total	3.4	3.6

Note: Rates are calculated based on births to women age 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 5.2. An asterisk indicates that a figure is based on fewer than 125 woman-years of exposure and has been suppressed.

The gap between wanted and observed fertility rates is not uniform across subgroups of women. Women who live in urban areas, Bishkek, Osh, and Issyk-Kul; those at the highest educational levels; and those from the wealthiest households are most successful in achieving their desired family size. The gap between wanted and actual fertility rates among these women is 0.1 to 0.2 children. On the other hand, the gap between wanted and observed fertility rates among rural women, those with less education, and those in the lower wealth quintiles is higher than the national average.

FAMILY PLANNING 7

Key Findings

- More than 9 in 10 women have heard about at least one family planning method.
- Over one-third (36 percent) of currently married women are using some method of contraception, mostly a modern method (34 percent).
- By far the most popular method is the IUD, used by 22 percent of married women.
- Women in the Chui region are least likely to use any method of contraception (29 percent), while women in the Naryn region have the highest level of current use of any method (53 percent).
- Current use of any contraception method among married women has markedly declined over the past 15 years, from 60 percent in the 1997 KgDHS to 48 percent in the 2006 Multiple Indicator Cluster Survey and 36 percent in the 2012 KgDHS, a 40 percent decrease since 1997.
- The decline in contraceptive use is mostly due to a 42 percent decline in the use of the IUD (from 38 percent in 1997 and 32 percent in 2006 to 22 percent in 2012).
- Public sector providers are the principal source for contraceptive methods, serving 7 in 10 users.
- Most current contraceptive users were provided information essential to making an informed choice at the time they adopted their method; 72 percent were told about potential side effects or problems, 69 percent were advised what to do if they experienced side effects or problems, and 66 percent were informed about other methods.
- Eighteen percent of married women have an unmet need for family planning, 12 percent because they want to delay their next pregnancy and 6 percent because they want no more children.

This chapter begins with an assessment of contraceptive knowledge among KgDHS respondents before moving on to a consideration of current family planning practices. Special attention is focused on sources of contraception, informed choice, nonuse, reasons for discontinuation, unmet need for family planning, and intention to use contraception in the future. The chapter concludes by examining exposure to media coverage on the topic of family planning and level of contact with family planning providers.

These topics are of practical use to reproductive health programs in several ways. A discussion of women's knowledge of family planning methods provides insight into one of the main preconditions to adoption of contraception. Levels of contraceptive use provide the most obvious and widely accepted criterion of success of a family planning program. Examination of contraceptive use in relation to need pinpoints segments of the population for whom intensified service provision efforts are most needed. Since most women have tried at least one method, practical problems with particular methods or in obtaining supplies may be important obstacles to further program advances. The 2012 KgDHS findings on these topics can provide important guidance for improving family planning services.

7.1 KNOWLEDGE OF CONTRACEPTIVE METHODS

The 2012 KgDHS collected information on knowledge and use of contraception. To obtain these data, the names and/or descriptions of 12 contraceptive methods were read aloud, and respondents were asked if they had heard of each method. In addition, respondents were asked about other ways to avoid pregnancy that they may have heard about. Non-pregnant women were then asked if they (or their partners) were currently using any method to delay or avoid getting pregnant. Nonusers and pregnant women were asked whether they had ever used a method of contraception.[1] For analytical purposes, contraceptive methods were grouped into two types: modern and traditional. Modern methods include female sterilization, male sterilization, the pill, the intrauterine device (IUD), injectables, implants, male condoms, female condoms, the lactational amenorrhea method (LAM), and emergency contraception. Traditional methods include the rhythm (calendar) method, withdrawal, and other traditional methods.

Table 7.1 Knowledge of contraceptive methods

Percentage of all respondents, currently married respondents, and sexually active unmarried respondents age 15-49 who have heard of any contraceptive method, by specific method, Kyrgyz Republic 2012

	Women			Men		
Method	All women	Currently married women	Sexually active unmarried women[1]	All men	Currently married men	Sexually active unmarried men[1]
Any method	94.5	98.9	100.0	97.6	99.8	100.0
Any modern method	94.4	98.9	100.0	97.6	99.8	100.0
Female sterilization	42.2	51.5	68.6	27.0	31.7	31.5
Male sterilization	23.7	28.4	63.6	19.8	22.6	25.9
Pill	83.8	93.0	93.8	73.6	84.8	86.1
IUD	87.1	96.8	94.0	76.9	92.5	82.9
Injectables	55.2	66.7	66.8	26.0	29.1	34.9
Implants	12.9	15.4	33.4	17.2	17.8	24.2
Male condom	91.9	96.9	97.2	96.8	99.1	99.4
Female condom	19.5	21.5	53.9	21.5	23.7	30.7
Lactational amenorrhea (LAM)	22.2	29.7	32.4	4.5	4.4	7.9
Emergency contraception	27.7	33.5	53.0	19.8	21.5	38.9
Any traditional method	66.6	82.1	88.2	73.1	81.0	90.2
Rhythm	42.2	52.3	60.5	44.4	57.8	51.1
Withdrawal	62.6	77.9	85.7	67.6	74.7	83.9
Other	1.5	1.9	2.9	0.8	1.1	0.9
Mean number of methods known by respondents	5.7	6.7	8.1	5.0	5.6	6.0
Number of respondents	8,208	5,256	100	2,413	1,443	216

[1] Had last sexual intercourse within 30 days preceding the survey

Contraceptive knowledge is widespread among women in the Kyrgyz Republic. Almost all currently married women (99 percent), most of whom are immediately faced with the need to plan their families, know about at least one contraceptive method. All of these women are aware of a modern method, and more than 8 in 10 (82 percent) recognize at least one traditional method. Considering knowledge of specific methods, the most widely known modern methods among married women are the IUD and the male condom (97 percent each), followed by the pill (93 percent), injectables (67 percent), and female sterilization (52 percent). Other modern methods are less well known among married women, in particular the female condom (22 percent) and implants (15 percent). With respect to traditional methods, 78 percent of married women know about withdrawal, and 52 percent are aware of the rhythm method.

[1] The questions asked about contraceptive knowledge in the 2012 KgDHS questionnaire differed from those asked in the 1997 KgDHS questionnaire. Specifically, in 1997, respondents were first asked to name all of the methods that they had heard about. For methods not mentioned spontaneously, a description of the method was read, and the respondents were asked if they had heard of the method. For each method named or recognized, respondents were asked if they had ever used the method. Finally, women were asked if they (or their partners) were currently using a method.

The mean number of methods known is a rough indicator of the breadth of knowledge of family planning methods. Table 7.1 shows that, on average, currently married women in the Kyrgyz Republic are aware of almost seven (6.7) methods.

In the past 15 years, contraceptive knowledge has remained consistently high among currently married women (100 percent in 1997 and 99 percent in 2012) as well as women overall (97 percent in 1997 and 95 percent in 2012). There have been increases in knowledge of pills (from 73 percent to 93 percent) and male condoms (from 85 percent to 97 percent), but knowledge of female sterilization has decreased (from 59 percent to 52 percent). Overall, married women know on average one more method of contraception in 2012 than they did in 1997[2] (6.7 versus 5.6) (Research Institute of Obstetrics and Pediatrics [RIOP] and Macro International Inc., 1998).

Among currently married men, close to 100 percent know about at least one contraceptive method and at least one modern method. The most commonly known modern methods among married men are the male condom (99 percent), the IUD (93 percent), and the pill (85 percent). LAM is the least commonly known method (4 percent) among men. More than 8 in 10 married men (81 percent) know at least one traditional method; 75 percent know about withdrawal, and 58 percent know about the rhythm method.

On average, currently married men know about one method less than currently married women (5.6 versus 6.7).

7.2 CURRENT USE OF CONTRACEPTION

Level of current contraceptive use is the most widely used and valuable measure of the success of a reproductive health planning program. Furthermore, it can be used to estimate reductions in fertility attributable to contraception.

To obtain information on current use of contraception, all female KgDHS respondents who were not pregnant at the time of the survey were asked if they (or their partners) were currently using a method. Table 7.2 shows the level of current contraceptive use by method for all women and currently married women according to age. More than one-third (36 percent) of currently married women are using some method of contraception. Most contraceptive users rely on a modern method (34 percent), with only 3 percent relying on a traditional method. By far the most popular method is the IUD, used by 22 percent of married women; thus, two of every three women who are using contraception use the IUD. The male condom is used by 8 percent of married women, and female sterilization, the pill, and withdrawal are each used by 2 percent of married women. Less than 1 percent of currently married women report using injectables, LAM, or the rhythm method.

Table 7.2 also shows how the current use of contraception varies with age. The results conform to the inverted U-shaped pattern of prevalence by age typically observed for currently married women. Use is lower among young women (because they are in an early stage of family building) and among older women (some of whom are no longer fecund) than among those at intermediate ages. Contraceptive use levels are quite low among married women under age 20 but rise rapidly with age, peaking at 50 percent among women age 30-34 before declining to 30 percent among women age 45-49. The IUD is the most frequently used method in all age groups. Ten percent of women age 30-34 rely on male condoms.

[2] In the 1997 KgDHS, respondents were not specifically asked about male sterilization, the lactational amenorrhea method, female condoms, implants, or emergency contraception.

Table 7.2 Current use of contraception by age

Percent distribution of all women and currently married women age 15-49 by contraceptive method currently used, according to age, Kyrgyz Republic 2012

			Modern method									Traditional method					
Age	Any method	Any modern method	Female sterilization	Pill	IUD	Injectables	Male condom	Foam/jelly/ diaphragm	LAM	Other	Any traditional method	Rhythm (calendar) method	Withdrawal	Other	Not currently using	Total	Number of women
ALL WOMEN																	
15-19	0.6	0.6	0.0	0.0	0.2	0.0	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	99.4	100.0	1,637
20-24	14.1	12.8	0.0	0.9	6.5	0.0	5.2	0.1	0.1	0.0	1.3	0.0	1.3	0.0	85.9	100.0	1,527
25-29	27.4	26.0	0.0	2.0	14.5	0.2	8.6	0.0	0.6	0.1	1.3	0.0	1.3	0.0	72.6	100.0	1,265
30-34	44.0	41.8	2.0	1.6	27.5	0.9	9.8	0.0	0.0	0.0	2.2	0.0	2.2	0.0	56.0	100.0	1,028
35-39	42.1	37.7	1.9	1.6	26.0	0.8	7.4	0.0	0.1	0.0	4.3	0.4	3.7	0.2	57.9	100.0	915
40-44	39.9	36.7	3.3	1.4	27.5	0.5	4.0	0.0	0.1	0.0	3.2	0.5	2.6	0.1	60.1	100.0	928
45-49	24.7	23.2	2.6	0.5	15.1	0.3	4.4	0.0	0.0	0.2	1.5	0.3	1.2	0.0	75.3	100.0	908
Total	24.4	22.7	1.1	1.1	14.6	0.3	5.3	0.0	0.1	0.0	1.7	0.2	1.5	0.0	75.6	100.0	8,208
CURRENTLY MARRIED WOMEN																	
15-19	5.2	5.2	0.0	0.5	2.4	0.0	1.5	0.0	0.7	0.0	0.0	0.0	0.0	0.0	94.8	100.0	158
20-24	21.8	19.5	0.0	1.0	10.6	0.1	7.6	0.1	0.2	0.0	2.3	0.1	2.2	0.0	78.2	100.0	896
25-29	30.9	29.6	0.0	2.1	16.7	0.2	9.6	0.0	0.7	0.2	1.3	0.1	1.3	0.0	69.1	100.0	1,061
30-34	49.5	46.9	1.6	1.9	31.9	1.0	10.4	0.0	0.1	0.0	2.6	0.0	2.6	0.0	50.5	100.0	867
35-39	47.2	42.2	2.2	1.8	29.4	0.9	7.8	0.0	0.1	0.0	5.0	0.5	4.2	0.2	52.8	100.0	801
40-44	46.4	42.8	3.7	1.7	31.9	0.6	4.9	0.0	0.1	0.0	3.6	0.6	2.9	0.1	53.6	100.0	758
45-49	30.4	28.5	3.3	0.7	18.6	0.4	5.5	0.0	0.0	0.0	2.0	0.4	1.5	0.0	69.6	100.0	716
Total	36.3	33.7	1.6	1.5	22.1	0.5	7.7	0.0	0.2	0.0	2.6	0.2	2.3	0.1	63.7	100.0	5,256

Note: If more than one method is used, only the most effective method is considered in this tabulation.
LAM = Lactational amenorrhea method

7.3 CURRENT CONTRACEPTIVE USE BY BACKGROUND CHARACTERISTICS

Table 7.3 presents information on current use of contraception among currently married women by background characteristics. The table allows a comparison of levels of current contraceptive use among major groups of the population. It also permits an examination of differences in the methods used by current users in the various subgroups.

An examination of variations in contraceptive use levels according to number of children confirms that very few married women in the Kyrgyz Republic (2 percent) begin using contraception before they have had at least one child. Use levels remain relatively low until women have more than two children; current use among women with three or four children is 47 percent, substantially higher than the percentage among women with one or two children (32 percent). Level of use drops off slightly to 43 percent among women with five or more children.

The difference in overall use of contraception among married women in urban and rural areas is not large (39 and 35 percent, respectively). Married women from the Chui region are least likely to use any method of contraception (29 percent), while women in the Naryn region have the highest level of current use of any method (53 percent). As expected, contraceptive use increases with educational attainment. Women with higher levels of education are more likely to use a method than women with a basic general education (38-39 percent versus 28 percent). There are no major differences in current use of any method according to wealth quintile.

With regard to patterns of use of specific contraceptive methods, the IUD dominates in all subgroups except among married women with no children (who are most likely to use male condoms). The next most used method overall is the male condom.

Table 7.3 Current use of contraception by background characteristics

Percent distribution of currently married women age 15-49 by contraceptive method currently used, according to background characteristics, Kyrgyz Republic 2012

			Modern method									Traditional method					
Background characteristic	Any method	Any modern method	Female sterilization	Pill	IUD	Injectables	Male condom	Foam/jelly/ diaphragm	LAM	Other	Any traditional method	Rhythm (calendar) method	Withdrawal	Other	Not currently using	Total	Number of women
Number of living children																	
0	2.2	2.2	0.5	0.2	0.0	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	97.8	100.0	444
1-2	31.8	28.8	0.8	1.7	17.1	0.1	8.8	0.1	0.2	0.1	3.0	0.3	2.7	0.1	68.2	100.0	2,243
3-4	46.8	43.8	2.0	1.7	30.7	0.7	8.4	0.0	0.3	0.0	3.0	0.2	2.7	0.0	53.2	100.0	2,037
5+	43.3	41.5	4.2	1.3	28.7	2.0	5.3	0.0	0.1	0.0	1.7	0.5	1.3	0.0	56.7	100.0	532
Residence																	
Urban	38.9	34.2	1.6	1.6	20.5	0.1	10.4	0.0	0.1	0.0	4.6	0.4	4.1	0.1	61.1	100.0	1,684
Rural	35.1	33.4	1.6	1.5	22.9	0.7	6.3	0.0	0.3	0.1	1.7	0.2	1.5	0.0	64.9	100.0	3,572
Region																	
Issyk-Kul	37.7	36.7	1.3	1.9	27.5	0.1	5.2	0.0	0.5	0.0	1.0	0.3	0.5	0.2	62.3	100.0	468
Djalal-Abad	37.5	34.5	0.8	1.0	22.6	0.8	9.0	0.0	0.4	0.0	3.1	0.4	2.7	0.0	62.5	100.0	942
Naryn	53.2	53.2	2.3	2.8	43.2	0.0	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	46.8	100.0	209
Batken	33.3	28.6	1.5	1.2	14.9	1.5	8.9	0.0	0.6	0.0	4.7	0.5	4.2	0.0	66.7	100.0	444
Osh Oblast	31.8	30.5	2.7	1.1	21.4	1.1	4.3	0.0	0.0	0.0	1.3	0.0	1.3	0.0	68.2	100.0	1,049
Talas	46.7	45.5	3.3	2.6	33.1	0.2	5.3	0.0	1.0	0.0	1.3	0.3	1.0	0.0	53.3	100.0	272
Chui	29.4	27.8	1.2	1.8	15.7	0.0	8.8	0.1	0.0	0.2	1.6	0.0	1.6	0.0	70.6	100.0	937
Bishkek City	42.9	36.6	1.0	1.4	21.8	0.0	12.4	0.0	0.0	0.0	6.3	0.5	5.6	0.2	57.1	100.0	750
Osh City	33.0	31.0	1.7	2.9	21.4	0.0	5.0	0.0	0.0	0.0	2.0	0.6	1.5	0.0	67.0	100.0	184
Education																	
None/primary	*	*	*	*	*	*	*	0.0	*	0.0	*	*	*	*	*	*	17
Basic general	28.0	26.9	0.9	0.9	17.4	1.2	6.4	0.0	0.0	0.0	1.1	0.0	1.1	0.0	72.0	100.0	470
Secondary	36.2	33.9	1.7	1.5	24.2	0.4	5.8	0.0	0.2	0.0	2.3	0.1	2.2	0.0	63.8	100.0	2,442
Professional primary/ middle	39.1	36.7	2.1	1.5	24.1	0.4	7.8	0.0	0.5	0.2	2.4	0.4	1.7	0.3	60.9	100.0	967
Higher	37.7	33.8	1.2	1.8	18.7	0.5	11.3	0.1	0.1	0.0	3.9	0.6	3.4	0.0	62.3	100.0	1,360
Wealth quintile																	
Lowest	37.8	36.4	1.9	2.0	27.1	0.9	4.3	0.0	0.3	0.0	1.4	0.1	1.4	0.0	62.2	100.0	1,016
Second	37.0	35.2	2.3	1.5	23.6	0.6	7.0	0.0	0.2	0.0	1.8	0.4	1.4	0.0	63.0	100.0	1,044
Middle	34.9	32.6	1.3	1.5	20.8	0.8	8.0	0.0	0.3	0.0	2.2	0.2	2.1	0.0	65.1	100.0	1,081
Fourth	32.4	30.5	1.4	1.2	19.9	0.1	7.3	0.1	0.2	0.2	2.0	0.1	1.8	0.1	67.6	100.0	1,110
Highest	39.8	34.0	1.2	1.5	19.4	0.1	11.8	0.0	0.0	0.0	5.8	0.6	5.1	0.2	60.2	100.0	1,004
Total	36.3	33.7	1.6	1.5	22.1	0.5	7.7	0.0	0.2	0.0	2.6	0.2	2.3	0.1	63.7	100.0	5,256

Note: If more than one method is used, only the most effective method is considered in this tabulation. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
LAM = Lactational amenorrhea method

7.4 TRENDS IN CURRENT CONTRACEPTIVE USE

The results of the 2012 KgDHS can be compared with findings from the 1997 KgDHS and the 2006 Multiple Indicator Cluster Survey (MICS) to gain an understanding of recent trends in contraceptive use in the Kyrgyz Republic. Table 7.4 and Figure 7.1 show that current use of any contraception method among married women has markedly declined over the past 15 years, from 60 percent in 1997 to 48 percent in 2006 and 36 percent in 2012, a 40 percent decrease since 1997.

Table 7.4 Trends in the current use of contraception

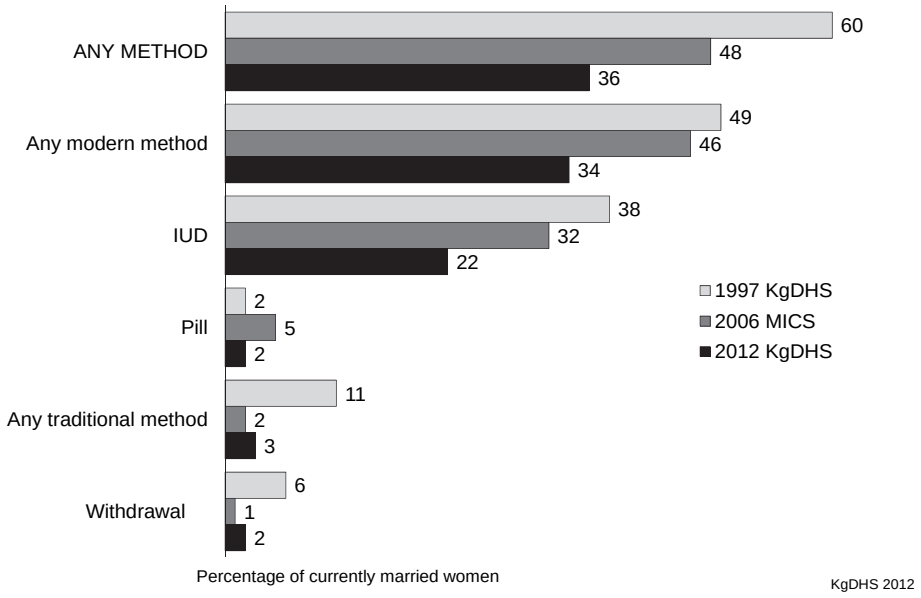
Percent distribution of currently married women age 15-49 by contraceptive method currently used, according to several surveys, Kyrgyz Republic 2012

Method	1997 KgDHS	2006 MICS	2012 KgDHS
Any method	59.5	47.8	36.3
Any modern method	48.9	45.5	33.7
Female sterilization	1.8	0.9	1.6
Pill	1.7	5.1	1.5
IUD	38.2	32.0	22.1
Injectables	1.3	1.2	0.5
Male condom	5.7	5.8	7.7
Female condom	na	0.1	0.0
LAM[1]	na	0.3	0.2
Diaphragm/foam/jelly	0.0	0.3	0.0
Any traditional method	10.7	2.3	2.6
Rhythm (calendar) method[2]	3.2	0.7	0.2
Withdrawal	6.0	0.5	2.3
Other traditional method	1.5	0.8	0.1
Not currently using	40.5	52.2	63.7
Total	100.0	100.0	100.0
Number of women	2,675	4,195	5,256

Note: If more than one method is used, only the most effective method is considered in this tabulation.
na = Not available
[1] LAM was considered a traditional method in the 2006 MICS.
[2] Periodic abstinence in the 1997KgDHS and 2006 MICS

This decline is mostly due to a 31 percent decrease in the use of modern methods of family planning since 1997 (from 49 percent in 1997 to 46 percent in 2006 and 34 percent in 2012). Particularly noticeable is that the use of the IUD by currently married women has declined substantially: from 38 percent in 1997 and 32 percent in 2006 to 22 percent in 2012, a 42 percent decrease during the period. Use of traditional methods has also declined (from 11 percent in 1997 to 3 percent in 2012), as has use of withdrawal (from 6 percent to 2 percent). The percentage of pill users increased between 1997 and 2006 from 2 to 5 percent and thereafter declined to less than 2 percent in 2012 (RIOP and Macro International Inc., 1998; National Statistical Committee [NSC], 2007).

Figure 7.1
Trends in contraceptive use among currently married women



The reason for such a difference in contraceptive use, and in use of the IUD in particular, between the surveys is not clear. The difference in the rates can, in part, be explained by continuous out-migration among the population of Russian and other European ancestry. These are the segments of the population that most frequently use a method of contraception. The use of any method (72 percent) among currently married Russian women exceeded the prevalence among ethnic Kyrgyz women (56 percent) in 1997; however, use of the IUD among ethnic Kyrgyz women in 1997 (39 percent) was higher than the rate among all currently married women in 2012 (22 percent), indicating that emigration of Russian women is not the only reason for the decline in contraceptive prevalence (RIOP and Macro International Inc., 1998). Although a detailed analysis of reasons behind these trends is beyond the scope of this report, it is possible that women are becoming less interested in using contraception. For example, in 2012 married women who were not using contraceptives were more likely to say they do not think they will use them at any time in the future than married nonusers in 1997 (section 7.10). It is also notable that in 2012 married women age 15-49 are less likely to start using a method until they have at least one child. In 1997, 20 percent of nulliparous married women were using contraception, as compared with only 2 percent of women with no children in 2012.

A comparison with data from recent DHS surveys conducted in other countries of the former Soviet Union shows that use of a modern contraceptive method (34 percent) among married women age 15-49 in the Kyrgyz Republic appears to be higher than that in Tajikistan (26 percent in 2012), Armenia (27 percent in 2010), and Azerbaijan (14 percent in 2006) but lower than in Moldova (44 percent in 2006) and Ukraine (48 percent in 2007) (SA/MoH [Tajikistan] and ICF International, 2012; NSS [Armenia] et al., 2012; SSC [Azerbaijan] and Macro International Inc., 2008; NCPM [Moldova] and ORC Macro, 2006; UCSR [Ukraine] et al., 2008). The percentage of currently married women in the Kyrgyz Republic using a traditional method (3 percent) is lower than the percentages reported in Azerbaijan, Armenia, Moldova, and Ukraine (37 percent, 28 percent, 24 percent, and 19 percent, respectively), although the rate is similar to that reported in neighboring Tajikistan (2 percent).

7.5 Source of Modern Contraceptive Methods and Use of Social Marketing Brand Pills

Table 7.5 documents the main sources of contraception for users of different contraceptive methods. This information is useful for reproductive health program managers, particularly those responsible for program logistics.

The results in Table 7.5 show that public sector providers are the principal source for most of the contraceptive methods used in the Kyrgyz Republic. Around 7 in 10 current users of modern methods (71 percent) obtain their method from a public sector provider. The principal public sector sources for contraceptives are family doctor groups (serving 30 percent of current users), maternity homes and government hospitals (each serving 14 percent of current users), and feldsher-accoucher posts (FAPs) (serving 9 percent of current users). Pharmacies are the principal private sector provider for contraceptives, serving 24 percent of users. Private hospital clinics serve 3 percent of current users.

Considering specific methods, almost all IUD and female sterilization users obtain their methods from a public sector provider (92 percent and 91 percent, respectively). IUD users most often obtain their method from family doctor groups (41 percent), followed by government hospitals (18 percent), maternity homes (17 percent), and FAPs (11 percent). The main providers of female sterilization are maternity homes (57 percent) and government hospitals (26 percent). The majority of pill users rely on private sector providers, principally pharmacies (53 percent), for their method. About 4 in 10 pill users (41 percent) obtain their method from the public sector, 22 percent from family doctor groups, and 13 percent from FAPs. More than 8 in 10 male condom users (81 percent) obtain their method from pharmacies.

Although public sector providers are still the main source for contraceptive supplies, there has been a general shift in the source of modern contraceptive methods in the last 15 years from the public

sector to the private sector. The proportion of current users relying on private medical sources increased from less than 1 percent in 1997 to 27 percent in 2012, while the proportion relying on public sources declined from 97 percent to 71 percent. This difference is mostly attributable to the shift from public pharmacies to private pharmacies as a source of modern contraceptives (from less than 1 percent in 1997 to 24 percent in 2012). In 1997, private pharmacies did not supply pill users at all and supplied only 4 percent of condom users, while in 2012 private pharmacies supplied 53 percent of pill users and 81 percent of condom users. In contrast, in 1997, public pharmacies supplied 46 percent of pill users and 75 percent of condom users; it should be noted that in the 2012 KgDHS questionnaire public pharmacies were not listed under the public sector due to their scarcity.

Table 7.5 Source of modern contraception methods

Percent distribution of users of modern contraceptive methods age 15-49 by most recent source of the method, according to method, Kyrgyz Republic 2012

Source	Female sterilization	Pill	IUD	Male condom	Total
Public sector	90.7	41.3	92.4	12.3	70.8
Government hospital	25.8	2.7	18.1	1.5	13.7
Maternity home	56.5	1.1	17.1	0.3	14.2
Groups of family doctors	2.8	21.8	40.5	6.4	29.6
FAP[1]	2.3	12.8	11.2	3.8	9.2
Family medicine center	2.7	2.2	4.2	0.1	3.1
Reproductive health center	0.0	0.0	0.5	0.2	0.4
Marriage and family consultation center	0.0	0.7	0.4	0.0	0.3
Diagnostics center	0.0	0.0	0.0	0.0	0.0
General practice center	0.0	0.0	0.3	0.0	0.2
Immunoprophylaxis center	0.7	0.0	0.0	0.0	0.0
AIDS center	0.0	0.0	0.0	0.0	0.0
Health strengthening center	0.0	0.0	0.1	0.0	0.0
Private medical sector	1.8	56.5	7.3	80.9	26.8
Private hospital clinic	1.8	3.1	4.3	0.0	3.0
Private doctor's office	0.0	0.0	0.4	0.0	0.3
Pharmacy	0.0	53.4	2.6	80.9	23.5
Other	0.0	0.0	0.0	0.0	0.1
Other source	0.0	2.2	0.0	5.5	1.4
Shop/market	0.0	2.2	0.0	4.4	1.2
Friend/relative	0.0	0.0	0.0	1.1	0.3
Other	0.0	0.0	0.0	0.1	0.0
Missing	7.5	0.0	0.3	1.1	0.9
Total	100.0	100.0	100.0	100.0	100.0
Number of women	93	88	1,199	438	1,845

Note: Total includes other modern methods but excludes lactational amenorrhea method (LAM).
[1] FAP = Feldsher-accoucher post. A feldsher is a mid-level health professional who provides care that is beyond the scope of a nurse but less than that of a physician.

In the 2012 KgDHS, pill users were asked about the use of social marketing brands. Overall, 33 percent of pill users reported using the social marketing brand pills Microlut, Microgynon, and Diane 35 (data not shown due to the relatively small number of pill users). The proportion of pill users relying on Microgynon has not changed over the past 15 years (12 percent in 1997 versus 11 percent in 2012), while the proportion using Diane 35 has increased (from 1 percent to 11 percent).

7.6 INFORMED CHOICE

Informed choice is a key component of effective reproductive health programs. Family planning providers should inform all method users of potential side effects and what they should do if they encounter any such effects. Users should also be informed of the range of methods available. This information both assists the user in coping with side effects and decreases unnecessary discontinuation of temporary methods.

Current users of modern methods were asked a series of questions in the KgDHS to assess if family planning providers are giving women the information they need for making an informed choice.

Users were asked if the provider had informed them about possible side effects or problems with the method, about what to do if they experienced side effects, and about other methods that could be used. The questions focused on users' experience at the provider they consulted at the beginning of the current segment of use. Table 7.6 presents information on these three aspects of informed choice obtained from current users who adopted their method within the five-year period prior to the survey.

Table 7.6 Informed choice

Among current users of selected modern methods age 15-49 who started the last episode of use within the five years preceding the survey, the percentage who were informed about possible side effects or problems of that method, the percentage who were informed about what to do if they experienced side effects, and the percentage who were informed about other methods they could use, by method and initial source, Kyrgyz Republic 2012

	Among women who started last episode of modern contraceptive method within five years preceding the survey:			
Method/source	Percentage who were informed about side effects or problems of method used	Percentage who were informed about what to do if side effects experienced	Percentage who were informed by a health or family planning worker of other methods that could be used	Number of women
Method				
Female sterilization	(54.1)	(51.6)	(40.3)	40
Pill	67.0	61.8	61.2	77
IUD	73.5	71.0	67.6	784
Initial source of method[1]				
Public sector	79.4	75.3	72.9	723
Government hospital	79.3	72.8	70.9	132
Maternity home	79.0	77.3	65.7	121
Family doctor group	80.8	75.6	75.9	342
FAP[2]	70.3	69.7	68.0	78
Family medicine center	85.4	84.3	83.4	36
Other	*	*	*	13
Private medical sector	73.4	73.8	63.7	117
Private hospital clinic	79.4	78.6	64.5	48
Pharmacy	69.7	70.4	62.4	64
Other	*	*	*	5
Total	71.6	68.5	65.5	923

Note: Table includes users of injectables not shown separately. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Source at start of current episode of use. Total includes 81 women missing information as to source of method.
[2] FAP = Feldsher-accoucher post. A feldsher is a mid-level health professional who provides care that is beyond the scope of a nurse but less than that of a physician.

The majority of women adopting the contraceptive methods shown in the table were provided information essential to making an informed choice. Seventy-two percent of users were told about side effects or problems they might have using the method, 69 percent were advised what to do if they experienced side effects, and 66 percent were informed about other methods. The likelihood of receiving information needed to make an informed choice was highest among IUD users. Private sector providers (mainly pharmacies serving pill users) were somewhat less likely than public sector providers to discuss side effects or other problems (73 percent versus 79 percent) or to provide information about other methods (64 percent versus 73 percent). However, there was no major difference between public and private sector providers in the percentage of users who were advised what to do if they experienced side effects (75 percent versus 74 percent).

7.7 CONTRACEPTIVE DISCONTINUATION

A key concern for reproductive health programs is the extent to which women discontinue contraceptive use due to problems with their method, leaving many at risk of an unintended pregnancy. Data on discontinuation were obtained in the 2012 KgDHS by asking respondents for information on all episodes of use between January 2007 and the interview. For each episode of use that a respondent reported, information was obtained and recorded (in the calendar included in the KgDHS questionnaire) on the contraceptive method used, the date (month and year) the episode of use began, and, if applicable, the date when the episode ended and the reason for the discontinuation.

Information from the calendar was used to calculate 12-month discontinuation rates, which are presented in Table 7.7 by method and reason for discontinuation. The rates represent the proportion of users discontinuing a method within 12 months after the start of use. The rates refer only to episodes of contraceptive use that began during the period of time covered by the calendar, not all episodes that occurred during this period. In calculating the rates, the month of the interview and the two preceding months were ignored to avoid bias that might be introduced by unrecognized pregnancies. The various reasons for discontinuation were treated as competing risks, and thus the rates are additive across reasons for discontinuing.

Table 7.7 Twelve-month contraceptive discontinuation rates

Among women age 15-49 who started an episode of contraceptive use within the five years preceding the survey, the percentage of episodes discontinued within 12 months, by reason for discontinuation and specific method, Kyrgyz Republic 2012

	Reasons for discontinuation									
Method	Method failure	Desire to become pregnant	Other fertility-related reasons[2]	Side effects/ health concerns	Wanted more effective method	Other method-related reasons[3]	Other reasons	Any reason[4]	Switched to another method[5]	Number of episodes of use[6]
Pill	9.8	12.2	0.3	8.7	2.9	8.9	0.5	43.2	12.5	166
IUD	0.3	2.8	0.2	4.7	0.6	0.5	0.2	9.3	2.2	1,082
Male condom	11.5	6.1	3.2	0.4	2.3	1.3	4.5	29.3	3.2	731
Withdrawal	6.3	7.9	1.2	0.4	9.1	0.0	5.2	30.1	12.7	193
All methods[1]	5.2	5.3	1.6	3.4	2.8	1.5	1.9	21.7	4.8	2,346

Note: Figures are based on life table calculations using information on episodes of use that began 3-62 months preceding the survey.
[1] LAM, female sterilization, injectables, rhythm (calendar), and other methods are included in the discontinuation rate for all methods but are not listed separately.
[2] Includes infrequent sex/husband away, difficult to get pregnant/menopausal, and marital dissolution/separation
[3] Includes lack of access/too far, costs too much, and inconvenient to use
[4] Reasons for discontinuation are mutually exclusive and add to the total given in this column.
[5] The episodes of use included in this column are a subset of the discontinued episodes included in the discontinuation rate. A woman is considered to have switched to another method if she used a different method in the month following discontinuation or if she gave "wanted a more effective method" as the reason for discontinuation and started another method within 2 months of discontinuation.
[6] Number of episodes of use includes both episodes of use that were discontinued during the period of observation and episodes of use that were not discontinued during the period of observation.

Table 7.7 shows that more than one in five (22 percent) contraceptive users who started using within the five-year period before the KgDHS discontinued use within 12 months of the time they adopted the method. Women who adopted the IUD were least likely to discontinue use; 9 percent of IUD users stopped using within 12 months of adopting the method. Discontinuation rates were much higher for other methods; more than 4 in 10 pill users (43 percent) and about 3 in 10 users of the male condom (29 percent) and withdrawal (30 percent) stopped using within 12 months of adopting the method.

What happens after a user discontinues use of a method is important; a woman may simply stop all contraceptive use, leaving her potentially vulnerable to an unintended pregnancy, or switch to another method. Table 7.7 provides information on switching behaviors during the five-year period before the KgDHS among users discontinuing use within 12 months of adopting their method. The episodes of discontinuation used in calculating the rate at which users switched to another method are a subset of all episodes of discontinuation. They include episodes in which a different method was used in the month

following discontinuation and episodes in which the user "wanted a more effective method" and started another method within two months of discontinuation (i.e., there was only one month with no use following the discontinuation). If the woman restarted the same method after the one month of nonuse, she was not considered in the switching rate.

Users of the IUD and male condom were least likely to switch to another method immediately after stopping use (2 percent and 3 percent, respectively), while pill and withdrawal users were most likely to do so (13 percent each). A comparison of the switching rate among withdrawal users (13 percent) with the overall discontinuation rate for the method (30 percent) shows that more than 4 in 10 users discontinuing withdrawal adopted another method shortly thereafter.

Table 7.8 presents the distributions of all discontinued episodes of use in the five years preceding the survey by the reason for discontinuation, according to the method used. Overall, the most frequent reason for discontinuations was the desire to become pregnant (37 percent). Unintended pregnancies due to method failure (i.e., the woman became pregnant while still using the method) were cited as the reason in 20 percent of discontinuations. Side effects or health concerns about the method were a factor in discontinuation for an additional 18 percent of women. Seven percent of discontinuations were due to women wanting a more effective method, and 3 percent were due to women considering the method inconvenient to use. Finally, 6 percent of method discontinuations were due to infrequent sex or the husband being away.

Table 7.8 Reasons for discontinuation

Percent distribution of discontinuations of contraceptive methods in the five years preceding the survey by main reason stated for discontinuation, according to specific method, Kyrgyz Republic 2012

Reason	Pill	IUD	Injectables	Male condom	LAM	Withdrawal	All methods
Became pregnant while using	16.2	6.8	16.2	35.0	8.3	27.2	19.6
Wanted to become pregnant	35.2	47.3	22.3	30.5	21.5	30.7	37.4
Husband disapproved	0.2	0.9	0.0	10.1	0.0	12.3	4.8
Wanted a more effective method	7.8	1.9	7.4	6.1	44.0	19.8	6.9
Side effects/health concerns	19.5	34.8	26.6	1.7	12.5	3.4	18.4
Lack of access/too far	0.0	0.0	1.8	0.0	0.0	0.0	0.1
Cost too much	2.8	0.0	0.0	0.5	0.0	0.0	0.6
Inconvenient to use	10.9	1.5	1.6	2.1	7.2	1.8	2.7
Up to God/fatalistic	0.3	0.0	0.0	0.0	0.0	0.0	0.0
Difficult to get pregnant/menopausal	0.0	1.4	0.9	0.2	0.0	1.4	0.8
Infrequent sex/husband away	3.6	2.7	21.2	11.0	5.0	2.9	6.1
Marital dissolution/separation	0.7	0.4	0.0	1.1	0.0	0.0	0.6
Other	2.3	2.4	0.0	1.1	0.0	0.0	1.6
Don't know	0.0	0.0	1.9	0.5	1.5	0.0	0.2
Missing	0.4	0.0	0.0	0.1	0.0	0.5	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	146	652	42	512	37	125	1,539

Note: All methods includes female sterilization, diaphragm, rhythm (calendar), and other methods in addition to the methods shown in the table.
LAM = Lactational amenorrhea method

With respect to reasons for discontinuing specific methods, pill and IUD users most often stopped using because they were ready to have another child (35 percent and 47 percent, respectively) or because of side effects or health concerns (20 percent and 35 percent, respectively). The primary reason for discontinuation of injectables was side effects or health concerns (27 percent), followed by the desire to become pregnant (22 percent) and infrequent sex or the husband being away (21 percent). Discontinuation due to method failure was most common among users of the male condom (35 percent) and withdrawal (27 percent); however, the leading reason among withdrawal users was the desire to have another child (31 percent), with 20 percent discontinuing because they wanted a more effective method. LAM users discontinued their method mostly because they wanted a more effective method (44 percent); another 22 percent discontinued because they wanted to become pregnant.

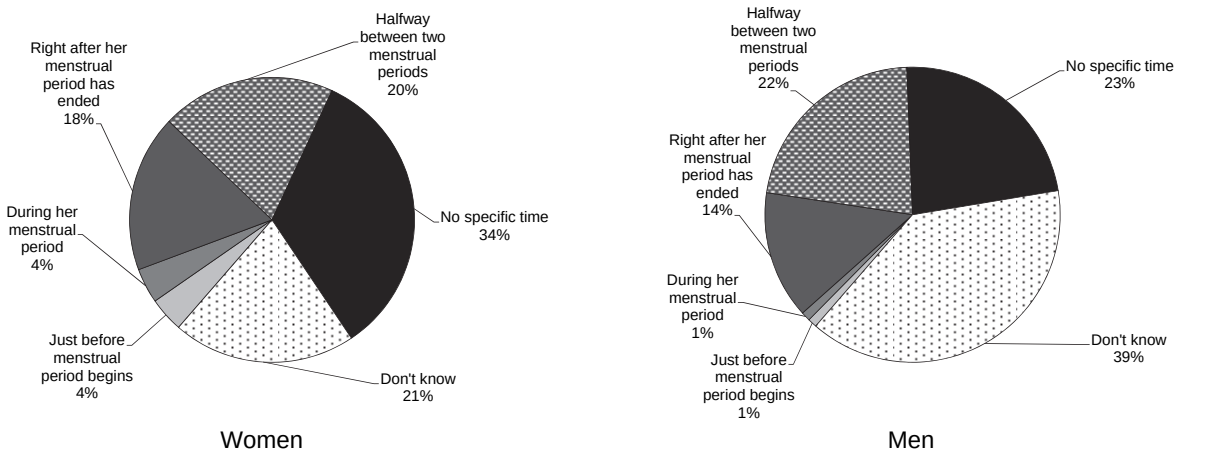
7.8 KNOWLEDGE OF THE FERTILE PERIOD

An elementary knowledge of reproductive physiology provides a useful background for successful practice of coitus-associated methods such as withdrawal, condoms, and vaginal methods. Knowledge is particularly critical in the case of the rhythm method. In the KgDHS, respondents were asked two questions to ascertain their level of understanding of the ovulatory cycle. The first question determined if respondents had a general understanding that there are certain days during a woman's menstrual cycle when she is more likely to become pregnant. Respondents who indicated that there were certain days a woman was more likely to become pregnant were then asked if that time was just before the woman's period begins, during her period, right after her period has ended, or halfway between two periods.

Figure 7.2 shows that Kyrgyz women and men generally have a poor understanding of the ovulatory cycle. A large percentage of women and men either believe that there is no specific time during the menstrual cycle when a woman is more likely to become pregnant (34 percent of women and 23 percent of men) or do not know when a woman is more at risk of becoming pregnant (21 percent of women and 39 percent of men). Only one in five women (20 percent) and men (22 percent) are aware that a woman is most at risk of pregnancy if she has intercourse halfway between two periods.

The percentage of women age 15-49 who can correctly identify the fertile period has not changed over the past 15 years. In both the 1997 and 2012 KgDHS surveys, one in five women correctly identified the fertile period as occurring halfway between periods (19 percent and 20 percent, respectively). However, more women in 2012 than in 1997 incorrectly reported that the fertile period is right after a woman's period has ended (18 percent versus 12 percent) or that there is no specific time during the menstrual cycle when a woman is more likely to become pregnant (34 percent versus 19 percent). The proportion of women who do not know when a woman is most at risk of becoming pregnant decreased from 49 percent in 1997 to 21 percent in 2012.

Figure 7.2 **Knowledge of fertile period among all women and men age 15-49**



KgDHS 2012

7.9 UNMET NEED FOR FAMILY PLANNING

Unmet need for family planning refers to fecund women who are not using contraception but who wish to postpone their next birth (spacing) or stop childbearing altogether (limiting). An estimate of the size and composition of the population of women who have an unmet need for family planning services is useful for planning purpose in reproductive health programs.

The criteria used within the DHS program to identify women with an unmet need for family planning have recently been revised (Bradley et al., 2012).[3] The revised definition was employed in determining the women who have an unmet need for family planning (Table 7.9). Specifically, women are considered to have an unmet need for spacing if they are:

- At risk of becoming pregnant, not using contraception, and either do not want to become pregnant within the next two years or are unsure if or when they want to become pregnant.
- Pregnant with a mistimed pregnancy.
- Postpartum amenorrheic for up to two years following a mistimed birth and not using contraception.

Women are considered to have an unmet need for limiting if they are:

- At risk of becoming pregnant, not using contraception, and want no (more) children.
- Pregnant with an unwanted pregnancy.
- Postpartum amenorrheic for up to two years following an unwanted birth and not using contraception.

Women who are classified as infecund have no unmet need because they are not at risk of becoming pregnant.

Women using contraception are considered to have a met need. Women using contraception who say they want no (more) children are considered to have a met need for limiting, and women who are using contraception and say they want to delay having a child or are unsure if or when they want a (another) child are considered to have a met need for spacing.

Finally, total demand, percentage of demand satisfied, and percentage of demand satisfied by modern methods are defined as follows:

- **Total demand for family planning:** the sum of unmet need (for spacing and limiting) and total contraceptive use
- **Percentage of demand satisfied:** total contraceptive use divided by the sum of unmet need and total contraceptive use
- **Percentage of demand satisfied by modern methods:** use of modern contraceptive methods divided by the sum of unmet need and total contraceptive use

[3] Because of differences in the way in which unmet need is defined, the estimates of need presented in Table 7.9 are not comparable to the results from the 2006 MICS.

Table 7.9 shows that 18 percent of currently married women are in need of family planning, 12 percent to delay a wanted birth and 6 percent because they want no more children. Total unmet need rises rapidly from 10 percent among women age 15-19 to 23 percent among women age 20-24. With the exception of teens, the level of unmet need for spacing is higher among younger women than older women. The opposite is true for unmet need for limiting; it is highest (13 percent) among women age 40-44. Total unmet need is slightly higher among rural than urban women (19 percent versus 16 percent), and it is highest in Chui (23 percent) and lowest in Naryn and Talas (11 percent each). Women with a basic general education (23 percent) and those in the fourth wealth quintile (22 percent) have a higher unmet need than other women.

Table 7.9 Need and demand for family planning among currently married women

Percentage of currently married women age 15-49 with unmet need for family planning, percentage with met need for family planning, the total demand for family planning, and the percentage of the demand for contraception that is satisfied, by background characteristics, Kyrgyz Republic 2012

	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning[1]					
Background characteristic	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total	Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]	Number of women
Age												
15-19	9.7	0.0	9.7	5.2	0.0	5.2	14.8	0.0	14.8	34.8	34.8	158
20-24	22.3	0.6	22.9	21.1	0.7	21.8	43.4	1.3	44.7	48.7	43.7	896
25-29	18.6	1.6	20.2	29.0	1.9	30.9	47.6	3.5	51.1	60.5	57.9	1,061
30-34	14.8	3.8	18.6	37.5	12.0	49.5	52.3	15.8	68.1	72.7	68.9	867
35-39	9.7	8.7	18.4	24.1	23.1	47.2	33.8	31.8	65.6	71.9	64.3	801
40-44	3.5	13.0	16.5	11.7	34.6	46.4	15.2	47.7	62.9	73.8	68.1	758
45-49	0.8	10.2	11.0	3.4	27.0	30.4	4.2	37.3	41.4	73.4	68.7	716
Residence												
Urban	11.1	5.1	16.3	22.6	16.3	38.9	33.7	21.4	55.1	70.5	62.1	1,684
Rural	12.9	5.9	18.8	21.2	13.9	35.1	34.1	19.8	53.9	65.1	61.9	3,572
Region												
Issyk-Kul	12.9	6.1	19.0	21.8	15.9	37.7	34.7	22.0	56.7	66.5	64.6	468
Djalal-Abad	12.4	5.2	17.6	19.7	17.8	37.5	32.1	23.0	55.1	68.1	62.5	942
Naryn	6.7	3.8	10.5	29.5	23.7	53.2	36.2	27.6	63.7	83.5	83.5	209
Batken	13.7	6.8	20.4	13.6	19.7	33.3	27.2	26.5	53.8	62.0	53.2	444
Osh Oblast	16.3	3.3	19.6	23.0	8.8	31.8	39.3	12.1	51.4	61.9	59.3	1,049
Talas	7.2	4.2	11.4	27.6	19.1	46.7	34.8	23.3	58.1	80.4	78.2	272
Chui	12.7	10.1	22.8	19.7	9.7	29.4	32.4	19.8	52.1	56.3	53.3	937
Bishkek City	9.6	4.7	14.2	26.3	16.6	42.9	35.9	21.2	57.1	75.1	64.0	750
Osh City	8.9	3.8	12.7	15.5	17.5	33.0	24.4	21.3	45.7	72.3	67.8	184
Education												
None/primary	*	*	*	*	*	*	*	*	*	*	100.0	17
Basic general	20.2	2.4	22.6	20.3	7.7	28.0	40.5	10.0	50.6	55.4	53.1	470
Secondary	11.9	6.3	18.3	20.9	15.3	36.2	32.8	21.7	54.5	66.5	62.3	2,442
Professional primary/middle	11.4	7.9	19.2	17.9	21.2	39.1	29.2	29.1	58.3	67.0	62.9	967
Higher	11.3	4.1	15.4	26.3	11.4	37.7	37.6	15.5	53.1	71.0	63.6	1,360
Wealth quintile												
Lowest	10.8	4.9	15.7	23.3	14.5	37.8	34.1	19.4	53.5	70.6	68.0	1,016
Second	12.3	5.5	17.8	20.2	16.9	37.0	32.5	22.3	54.8	67.5	64.2	1,044
Middle	14.0	5.8	19.8	21.8	13.1	34.9	35.8	18.9	54.7	63.8	59.7	1,081
Fourth	14.0	7.9	21.8	19.0	13.4	32.4	33.0	21.3	54.3	59.8	56.2	1,110
Highest	10.4	4.0	14.5	24.2	15.7	39.8	34.6	19.7	54.3	73.4	62.7	1,004
Total	12.4	5.7	18.0	21.6	14.7	36.3	34.0	20.3	54.3	66.8	62.0	5,256

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al., 2012. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Total demand is the sum of unmet need and met need.

[2] Percentage of demand satisfied is met need divided by total demand.

[3] Modern methods include female sterilization, male sterilization, pill, IUD, injectables, male condom, and lactational amenorrhea method (LAM).

Table 7.9 also shows that the total demand for family planning among married women in the Kyrgyz Republic is 54 percent. Sixty-seven percent of that demand is satisfied, primarily through use of modern contraceptive methods (62 percent). The level of satisfied demand is markedly lower among women age 15-19 (35 percent), and it generally increases with age. Rural women (65 percent), those residing in the Chui region (56 percent), women with a basic general education (55 percent), and women in the fourth wealth quintile (60 percent) have lower levels of satisfied demand than other subgroups of women.

7.10 FUTURE USE OF FAMILY PLANNING

Intention to use contraception in the future provides a forecast of potential demand for services and acts as a convenient summary indicator of disposition toward contraception among current nonusers. To obtain information on the intention to use family planning in the future, KgDHS respondents who were not using contraception were asked if they thought they would use a method to delay or avoid pregnancy at any time in the future. It should be noted that respondents may or may not adhere to the intentions for future use they described at the time of the interview.

Table 7.10 presents information on intentions to use family planning among currently married nonusers. Around one in four married women (23 percent) who are not using contraception now intend to use a family planning method in the future. An additional 34 percent are unsure if they will use family planning, and 42 percent say they do not think they will use it at any time in the future. The percentage of nonusers indicating that they plan to adopt contraception is highest among those with one or two children (27 and 28 percent, respectively).

Table 7.10 Future use of contraception

Percent distribution of currently married women age 15-49 who are not using a contraceptive method by intention to use in the future, according to number of living children, Kyrgyz Republic 2012

	Number of living children[1]					
Intention to use in the future	0	1	2	3	4+	Total
Intends to use	13.3	26.7	28.3	21.0	19.1	23.0
Unsure	46.6	39.3	35.4	32.5	23.2	33.7
Does not intend to use	40.1	33.4	35.3	45.4	56.5	42.4
Missing	0.0	0.6	1.0	1.1	1.2	0.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	261	757	825	730	775	3,348

[1] Includes current pregnancy.

7.11 EXPOSURE TO FAMILY PLANNING MESSAGES

Data on the media through which subgroups of the population typically receive family planning messages are useful in assessing the coverage of current information, education, and communication efforts and in planning future media campaigns. To assess the extent to which they receive family planning information through mass media, KgDHS respondents were asked if they had heard about family planning on the radio, seen anything about family planning on television, or read about family planning in a newspaper or magazine in the past few months.

Table 7.11 shows that televised messages about family planning reach the largest audience of women and men (20 percent and 21 percent, respectively). Seventeen percent of women and 15 percent of men recently read about family planning in a newspaper or magazine, and 8 and 11 percent, respectively, heard about family planning on the radio.

More than three-quarters of women (76 percent) and 7 in 10 men (70 percent) did not receive family planning information from any of the three sources. Women and men age 15-19, women and men in urban areas, women from Djalal-Abad and Bishkek and men from Osh Oblast, and women and men with a basic general education are most likely not to have been recently exposed to family planning messages through any of the media. Among women, the percentage who are not exposed to any family planning messages through the media generally increases with increasing wealth, while the relationship among men does not follow a clear pattern.

Exposure to family planning messages has decreased since 1997. The most noticeable decrease in exposure to a family planning message is that for newspapers or magazines (48 percent in 1997 and 17 percent in 2012); television is also a less common source in 2012 than it was in 1997, decreasing from 31 percent to 20 percent. On the other hand, the proportion of women who cite radio as a source of family planning messages increased from 3 percent to 8 percent over the same period.

Table 7.11 Exposure to family planning messages

Percentage of women and men age 15-49 who heard or saw a family planning message on radio, on television, or in a newspaper or magazine in the past few months, according to background characteristics, Kyrgyz Republic 2012

	Women					Men				
Background characteristic	Radio	Television	News-paper/ magazine	None of these three media sources	Number of women	Radio	Television	News-paper/ magazine	None of these three media sources	Number of men
Age										
15-19	3.5	10.1	9.7	85.4	1,637	5.8	14.2	10.0	79.0	432
20-24	7.7	20.9	19.0	72.7	1,527	6.4	17.4	11.4	76.5	404
25-29	9.8	25.3	20.3	69.3	1,265	14.3	24.8	20.6	64.6	409
30-34	8.7	22.4	19.3	72.7	1,028	10.8	26.5	17.2	63.4	305
35-39	9.1	22.7	17.7	73.4	915	11.9	21.7	19.3	67.7	292
40-44	9.2	21.6	18.5	74.8	928	14.6	22.5	18.1	66.7	297
45-49	8.0	18.3	17.1	77.3	908	12.7	22.8	12.6	68.1	275
Residence										
Urban	6.1	17.4	15.9	78.9	3,070	11.1	15.2	13.9	73.3	781
Rural	8.6	20.9	17.6	73.5	5,138	10.3	23.8	16.1	68.5	1,632
Region										
Issyk-Kul	26.3	56.9	49.4	38.3	650	6.1	19.6	9.8	77.1	207
Djalal-Abad	1.7	7.8	6.2	89.8	1,332	0.9	7.3	8.2	87.9	402
Naryn	22.0	36.0	43.2	46.4	281	2.5	10.4	29.6	67.5	98
Batken	7.3	27.5	24.4	64.6	616	69.2	71.5	49.7	8.4	186
Osh Oblast	4.1	12.0	7.6	84.5	1,627	0.7	1.6	0.4	98.1	526
Talas	11.7	39.3	37.7	52.2	360	10.4	32.1	8.3	65.7	126
Chui	10.0	22.0	17.1	71.5	1,465	14.7	52.8	35.2	29.7	407
Bishkek City	2.3	8.4	9.0	88.8	1,566	7.1	2.8	8.0	84.5	383
Osh City	12.3	23.4	22.2	72.8	311	5.1	24.7	11.5	66.8	78
Education										
None/primary	*	*	*	*	39	*	*	*	100.0	7
Basic general	3.3	12.0	9.0	84.4	1,139	5.8	19.2	10.0	76.2	338
Secondary	6.3	16.6	13.0	79.1	3,468	11.1	20.6	13.9	71.5	1,158
Professional primary/middle	10.8	25.4	23.5	68.7	1,364	10.3	22.9	20.6	65.2	388
Higher	10.3	24.9	23.6	69.3	2,198	12.8	21.9	18.3	66.2	522
Wealth quintile										
Lowest	11.0	24.1	23.3	69.1	1,459	6.5	14.7	12.6	78.4	502
Second	8.3	20.0	18.8	73.9	1,473	10.8	24.2	15.0	69.5	496
Middle	6.5	19.8	14.1	75.3	1,538	12.7	27.8	17.0	64.9	451
Fourth	9.3	22.0	18.2	73.4	1,667	14.8	29.6	22.8	57.8	449
Highest	4.4	14.1	12.5	83.1	2,071	8.7	10.6	10.5	77.7	515
Total	7.7	19.6	17.0	75.5	8,208	10.6	21.0	15.4	70.1	2,413

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

7.12 CONTACT OF NONUSERS WITH FAMILY PLANNING PROVIDERS

Health providers are an important source of family planning information for nonusers who may be in need of family planning. The 2012 KgDHS included several questions to determine if nonusers had any contact with health providers in the year before the survey and, if they did, whether they received any information about family planning from the provider.

Table 7.12 shows that 13 percent of nonusers were visited in their home by a health worker who discussed family planning and that 17 percent had discussed family planning during a visit they had made to a health facility in the past 12 months. The results also show that some potential opportunities for discussing family planning with nonusers are missed; more than one in four nonusers (26 percent) had visited a health facility in the past year without receiving any information on family planning. Overall, 78 percent of nonusers had not discussed family planning with a fieldworker or at a health facility in the past year. This percentage was lowest among women age 25-29 (61 percent), women in rural areas (74 percent), those in Issyk-Kul (68 percent), and those in the lowest wealth quintile (70 percent).

Table 7.12 Contact of nonusers with family planning providers

Among women age 15-49 who are not using contraception, the percentage who during the past 12 months were visited by a fieldworker who discussed family planning, the percentage who visited a health facility and discussed family planning, the percentage who visited a health facility but did not discuss family planning, and the percentage who did not discuss family planning either with a fieldworker or at a health facility, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Percentage of women who were visited by fieldworker who discussed family planning	Percentage of women who visited a health facility in the past 12 months and who: Discussed family planning	Did not discuss family planning	Percentage of women who did not discuss family planning either with fieldworker or at a health facility	Number of women
Age					
15-19	4.5	4.8	14.7	92.9	1,627
20-24	17.1	24.8	24.0	71.2	1,312
25-29	22.6	31.1	30.6	60.9	919
30-34	18.9	21.3	32.3	69.0	576
35-39	16.6	18.9	38.9	72.8	530
40-44	8.7	12.1	30.5	83.6	558
45-49	6.3	9.4	30.0	87.5	684
Residence					
Urban	9.6	9.9	28.2	85.1	2,361
Rural	14.8	21.1	24.4	74.0	3,844
Region					
Issyk-Kul	27.7	16.0	38.7	68.1	465
Djalal-Abad	20.0	20.1	31.1	73.1	971
Naryn	16.5	18.3	11.6	75.1	167
Batken	12.7	10.2	31.4	83.9	466
Osh Oblast	8.1	23.8	4.3	73.3	1,287
Talas	10.1	15.4	50.0	81.7	229
Chui	14.5	21.0	36.1	75.5	1,162
Bishkek City	5.4	6.4	26.1	90.8	1,208
Osh City	9.4	13.1	20.3	81.8	250
Education					
None/primary	(9.0)	(9.3)	(32.7)	(87.2)	38
Basic general	11.8	13.6	18.9	81.9	1,005
Secondary	13.0	18.0	23.8	76.8	2,555
Professional primary/middle	13.3	16.4	33.6	78.4	970
Higher	12.9	17.3	28.5	77.9	1,637
Wealth quintile					
Lowest	15.6	23.7	19.6	70.1	1,065
Second	15.2	22.0	25.4	72.5	1,079
Middle	14.6	18.0	25.6	77.5	1,149
Fourth	12.6	16.3	30.2	78.7	1,288
Highest	8.2	8.4	26.9	87.4	1,625
Total	12.8	16.8	25.8	78.2	6,205

Note: Figures in parentheses are based on 25-49 unweighted cases.

The proportion of nonusers who visited a health facility at some time in the 12 months prior to the survey but did not discuss family planning decreased from 31 percent in 1997 to 26 percent in 2012 (RIOP and Macro International Inc., 1998).

7.13 MEN'S ATTITUDES TOWARD USE OF CONTRACEPTION BY WOMEN

In the 2012 KgDHS, eligible male respondents were asked about their opinion toward two common statements regarding women's use of contraception: "Contraception is a woman's business" and "Women who use contraception may become promiscuous." The results are shown in Table 7.13 according to background characteristics.

Table 7.13 shows that 56 percent of men age 15-49 disagree with the statement "Contraception is a woman's business," 23 percent agree with it, and 22 percent do not know. The percentage of men who agree with this statement is remarkably higher among men in the Chui region (75 percent) than among men in other regions. It is also higher among men age 35-44 (27 to 28 percent), men with a professional or higher education (29 to 32 percent), and men in the fourth quintile (35 percent) than among men in other subgroups.

Fifty-eight percent of men disagree that "Women who use contraception may become promiscuous," 12 percent agree with the statement, and 29 percent do not know. Men residing in Osh (55 percent) are much more likely to agree with this statement than men from other regions. Also, urban men (15 percent), men with a professional or higher education (14 to 17 percent), and men in the fourth wealth quintile (19 percent) are more likely than other men to agree with this statement.

Table 7.13 Men's attitudes toward use of contraception by women

Percent distribution of men age 15-49 by their attitude toward two common statements regarding women's use of contraception ("Contraception is a woman's business" and "Women who use contraception may become promiscuous"), according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Contraception is a woman's business				Women who use contraception may become promiscuous				Number of men
	Disagree	Agree	Don't know	Total	Disagree	Agree	Don't know	Total	
Age									
15-19	28.3	14.8	57.0	100.0	31.7	6.4	61.9	100.0	432
20-24	60.0	18.6	21.5	100.0	51.1	14.0	34.9	100.0	404
25-29	58.9	26.5	14.6	100.0	62.9	15.5	21.6	100.0	409
30-34	62.5	23.3	14.2	100.0	66.4	12.4	21.2	100.0	305
35-39	62.4	27.3	10.3	100.0	71.1	8.9	20.0	100.0	292
40-44	63.0	27.6	9.4	100.0	70.2	15.0	14.8	100.0	297
45-49	65.0	24.8	10.3	100.0	69.5	14.1	16.4	100.0	275
Residence									
Urban	55.8	23.0	21.2	100.0	58.8	15.0	26.2	100.0	781
Rural	55.6	22.6	21.8	100.0	58.2	10.9	30.9	100.0	1,632
Region									
Issyk-Kul	42.9	45.3	11.8	100.0	79.9	7.5	12.6	100.0	207
Djalal-Abad	93.6	2.3	4.1	100.0	94.0	0.9	5.0	100.0	402
Naryn	88.8	4.1	7.1	100.0	85.3	1.8	13.0	100.0	98
Batken	25.2	10.3	64.5	100.0	27.6	24.0	48.4	100.0	186
Osh Oblast	74.6	1.8	23.6	100.0	55.0	1.8	43.2	100.0	526
Talas	69.3	5.8	24.9	100.0	71.5	4.0	24.5	100.0	126
Chui	2.4	74.8	22.9	100.0	26.4	32.4	41.2	100.0	407
Bishkek City	59.9	12.8	27.3	100.0	55.3	10.4	34.2	100.0	383
Osh City	33.5	66.0	0.5	100.0	41.6	54.9	3.5	100.0	78
Education									
None/primary	*	*	*	*	*	*	*	100.0	7
Basic general	43.2	12.7	44.1	100.0	43.0	8.2	48.8	100.0	338
Secondary	60.2	19.9	19.9	100.0	62.1	10.7	27.2	100.0	1,158
Professional primary/middle	54.0	31.9	14.0	100.0	61.8	14.1	24.1	100.0	388
Higher	55.0	28.6	16.3	100.0	57.7	16.9	25.4	100.0	522
Wealth quintile									
Lowest	67.7	14.9	17.4	100.0	66.0	6.3	27.7	100.0	502
Second	58.5	18.6	23.0	100.0	59.8	9.6	30.6	100.0	496
Middle	53.7	21.1	25.2	100.0	56.6	10.7	32.7	100.0	451
Fourth	43.5	34.9	21.7	100.0	53.2	19.0	27.9	100.0	449
Highest	53.6	25.1	21.3	100.0	55.9	15.9	28.2	100.0	515
Total	55.7	22.7	21.6	100.0	58.4	12.2	29.4	100.0	2,413

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

ABORTION 8

Key Findings

- The total induced abortion rate is 0.7 abortions per woman.
- Abortion rates vary minimally by residence, region, education, and wealth, with the Talas region having the highest rate among regions (1.1).
- A comparison of the total abortion rate from the 2012 KgDHS with the 1997 KgDHS abortion rate suggests that abortions have declined substantially over the past 15 years.
- The vast majority of induced abortions occurred among women who were not using contraception at the time of conception; only 20 percent of induced abortions appear to result from contraceptive failure.
- More than 4 in 10 abortions (42 percent) were performed because of concerns about maternal health. Another 18 percent were attributed to a desire to space the next birth, and 15 percent resulted from a desire to stop childbearing. A partner's objection to having another child was cited as the cause for 6 percent of abortions.
- Nine in ten abortions were done by either vacuum aspiration (65 percent) or dilation and curettage (27 percent).
- Only half of women who had an abortion in the five years before the survey discussed contraception with a health provider at the place of the most recent abortion, most (91 percent) said they were offered a method of contraception at that time.

Abortion is a legally available option to regulate fertility in the Kyrgyz Republic (MOH, 2009a). The pregnancy history, in addition to providing information on live births, gives information on any other pregnancies that may have ended in miscarriage, induced abortion, or stillbirth. The information on induced abortion that is collected in the pregnancy history is employed in this chapter to look at women's lifetime experience with abortion and to investigate the current levels of and trends in abortion in the Kyrgyz Republic. In addition, the chapter explores the relationship between contraceptive use and abortion.

8.1 COLLECTION OF ABORTION DATA

The KgDHS pregnancy history was structured to ensure complete reporting of all reproductive events, including abortions. To obtain historical data, each respondent was asked how many live births, abortions, miscarriages, and stillbirths she had experienced during her life. Then she was asked to list in order all pregnancies, beginning with her first, and to provide information on each outcome. For all pregnancies that did not result in a live birth, the month and year that the pregnancy ended was recorded. At the end of the pregnancy history, the aggregate data collected at the outset of the reproductive event section was compared with the number of the events recorded in the pregnancy history, and discrepancies were reconciled.

The 2012 KgDHS also included a calendar for recording the duration and outcome of all pregnancies and periods of contraceptive use that occurred between January 2007 and the interview. The calendar data was used to explore the role that contraceptive method failure played in abortion.

8.2 PREGNANCIES ENDING IN INDUCED ABORTION

Table 8.1 shows, by pregnancy outcome, the percent distribution of the pregnancies that occurred during the three-year period prior to the KgDHS (approximately August-December 2009 to August-December 2012). More than seven in ten pregnancies during the period resulted in a live birth, 13 percent ended in an induced abortion, 9 percent in a miscarriage, and less than 1 percent in a stillbirth. The proportion of pregnancies ending in an induced abortion rises sharply with the woman's age at the time that the pregnancy ends. Less than 2 percent of teenage pregnancies ended in induced abortion compared with 21 percent of pregnancies among women age 35-44. The proportion of pregnancies ending in induced abortion also rises steadily with the pregnancy order, from 2 percent of first-order pregnancies to 29 percent of fifth- or higher-order pregnancies.

Table 8.1 Pregnancy outcome by background characteristics

Percent distribution of pregnancies ending in the three years preceding the survey by type of outcome, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Pregnancy outcome				Total	Number of pregnancies
	Live birth	Induced abortion	Miscarriage	Stillbirth		
Age at pregnancy outcome						
<20	89.4	1.9	8.5	0.2	100.0	232
20-24	80.8	8.5	10.1	0.6	100.0	1,174
25-34	75.2	16.0	8.1	0.6	100.0	1,526
35-44	66.4	21.2	10.9	1.5	100.0	449
45-49	*	*	*	*	100.0	4
Pregnancy order						
First	90.4	2.0	7.2	0.4	100.0	884
Second	83.2	6.3	9.6	0.9	100.0	725
Third	72.9	14.8	11.7	0.6	100.0	603
Fourth	71.6	18.4	9.1	0.9	100.0	444
Fifth or higher	61.0	28.8	9.3	0.9	100.0	729
Residence						
Urban	71.6	18.4	9.3	0.8	100.0	1,088
Rural	79.5	10.7	9.2	0.7	100.0	2,297
Region						
Issyk-Kul	76.7	12.3	9.4	1.7	100.0	299
Djalal-Abad	78.1	13.5	8.1	0.3	100.0	620
Naryn	87.4	5.9	5.7	1.0	100.0	125
Batken	82.1	10.6	6.8	0.5	100.0	308
Osh Oblast	76.8	10.6	12.2	0.3	100.0	657
Talas	75.1	14.5	9.8	0.6	100.0	215
Chui	77.1	14.6	7.4	0.9	100.0	544
Bishkek City	70.8	17.3	10.7	1.2	100.0	522
Osh City	77.4	13.7	8.9	0.0	100.0	96
Education						
None/primary	*	*	*	*	100.0	17
Basic general	79.4	7.8	12.4	0.4	100.0	359
Secondary	77.4	13.5	8.3	0.7	100.0	1,521
Professional primary/middle	79.0	13.0	7.4	0.6	100.0	533
Higher	73.8	14.8	10.5	0.9	100.0	955
Wealth quintile						
Lowest	81.2	9.2	8.8	0.8	100.0	617
Second	80.1	11.3	7.9	0.7	100.0	633
Middle	79.0	9.3	10.8	1.0	100.0	697
Fourth	74.6	17.1	8.1	0.3	100.0	776
Highest	70.5	18.0	10.6	0.9	100.0	663
Total	76.9	13.1	9.2	0.7	100.0	3,385

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Pregnancies among urban women were somewhat more likely to have ended in an induced abortion than pregnancies among rural women (18 percent versus 11 percent). Among the regions, Bishkek City had the highest proportion of pregnancies ending in induced abortion (17 percent), while the Naryn region had the lowest proportion (6 percent). The likelihood that a pregnancy will end in an induced abortion increase directly with education, from 8 percent of pregnancies among women with basic general education to 15 percent of pregnancies among women with higher education. Based on wealth status, the percentage of pregnancies ending in induced abortion is highest among women in the fourth and fifth wealth quintiles (17 percent and 18 percent, respectively).

8.3 LIFETIME EXPERIENCE WITH INDUCED ABORTION

Table 8.2 presents several indicators relating to women's lifetime experience with abortion, including the percentage of all women reporting they ever had an induced abortion, the percent distribution of women who ever had an abortion by the number of abortions they had, and the mean number of abortions among women who ever had an abortion.

Overall, one in six Kyrgyz women age 15-49 has ever had an induced abortion (18 percent). Half of these women (51 percent) have had only one induced abortion, slightly fewer have had two to three abortions (44 percent), 4 percent have had four to five abortions, and less than 2 percent have had 6 or more abortions. Among women who ever had an abortion, the mean number of abortions per woman is 1.8.

Lifetime experience with abortion increases with the woman's age and number of living children. For example, women age 35 and older are substantially more likely to have had an induced abortion than women age 25-34 (33 percent versus 21 percent). There is no relationship between having had an induced abortion and marital disruption; 25 percent of currently married women have ever had an abortion compared with 24 percent of women who were divorced, separated, or widowed.

Urban women are more likely to have had an induced abortion than rural women. The Talas, Bishkek, Chui, and Issyk-Kul regions have substantially higher percentages of women who have had an abortion than other regions. Generally, the better educated or better off financially that a woman is, the more likely she is to have had an induced abortion. For example, the percentage ever having had an abortion rises from 7 percent among women with basic general education to a peak of 27 percent among women with professional education before declining to 21 percent among women with higher education.

In general, the mean number of abortions reported among women ever having had an abortion does not vary markedly with the background characteristics shown in Table 8.2. The largest differences are observed by the woman's age, number of living children, and region.

Table 8.2 Lifetime experience with induced abortion

Percentage of women age 15-49 who have had at least one induced abortion, and among these women, percent distribution by number of abortions, and the mean number of abortions, according to background characteristics, Kyrgyz Republic 2012

Background Characteristics	Percentage of women who have had an induced abortion	Number of women	Among women who have had an abortion, percent distribution by number of abortions					Mean number of abortions	Number of women who have had an abortion
			1	2-3	4-5	6+	Total		
Age									
<20	0.0	1,637	*	*	*	*	100.0	*	0
20-24	4.6	1,527	66.6	31.2	2.2	0.0	100.0	1.4	71
25-34	21.2	2,293	62.3	35.9	1.4	0.5	100.0	1.5	487
35+	33.3	2,751	44.5	48.5	4.9	2.1	100.0	1.9	917
Number of living children									
0	0.7	2,780	*	*	*	*	100.0	*	21
1	13.8	1,240	58.3	39.8	1.1	0.8	100.0	1.6	171
2	29.4	2,744	52.6	42.9	3.8	0.7	100.0	1.7	807
3	32.9	1,444	45.9	46.7	4.3	3.1	100.0	2.0	475
Marital status									
Never married	0.3	2,245	*	*	*	*	100.0	*	7
Currently married	24.6	5,256	51.5	43.5	3.5	1.6	100.0	1.8	1,295
Formerly married	24.4	707	49.7	44.8	5.0	0.5	100.0	1.8	172
Residence									
Urban	20.7	3,070	49.6	43.8	4.7	2.0	100.0	1.8	634
Rural	16.4	5,138	52.8	43.3	2.8	1.1	100.0	1.7	840
Region									
Issyk-Kul	21.1	650	49.8	43.8	4.9	1.5	100.0	1.8	137
Djalal-Abad	16.2	1,332	44.9	48.2	5.1	1.9	100.0	1.8	215
Naryn	10.7	281	73.3	25.1	1.6	0.0	100.0	1.4	30
Batken	12.2	616	57.2	42.2	0.7	0.0	100.0	1.5	75
Osh Oblast	14.6	1,627	54.1	43.1	2.8	0.0	100.0	1.7	238
Talas	26.6	360	55.7	39.3	4.4	0.5	100.0	1.7	96
Chui	19.8	1,465	52.4	43.1	2.0	2.5	100.0	1.8	290
Bishkek City	22.7	1,566	51.0	42.5	4.5	2.1	100.0	1.8	356
Osh City	12.2	311	(33.8)	(60.3)	(5.6)	(0.3)	100.0	(1.9)	38
Education									
Basic general	7.2	1,139	56.4	38.3	2.8	2.5	100.0	1.7	83
Secondary	16.4	3,468	51.1	43.3	4.0	1.5	100.0	1.8	570
Professional primary/middle	26.6	1,364	51.2	44.7	2.7	1.4	100.0	1.7	363
Higher	20.9	2,198	51.0	43.8	3.9	1.2	100.0	1.7	460
Wealth quintile									
Lowest	15.6	1,459	48.7	47.2	3.9	0.3	100.0	1.7	228
Second	16.3	1,473	52.0	43.6	2.8	1.5	100.0	1.8	240
Middle	15.9	1,538	61.4	36.7	1.2	0.8	100.0	1.5	244
Fourth	20.1	1,667	46.6	47.7	4.2	1.5	100.0	1.8	336
Highest	20.6	2,071	50.6	42.2	4.9	2.4	100.0	1.8	427
Total	18.0	8,208	51.4	43.5	3.6	1.5	100.0	1.8	1,475

Note: Currently married includes respondents in consensual union (living together). Formerly married includes divorced, separated, and widowed respondents. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases. Total includes 39 women with no education or only primary education.

8.4 RATES OF INDUCED ABORTION

8.4.1 Abortion Level

Table 8.3 shows the rates of induced abortion for the three-year period prior to the 2012 KgDHS (approximately August-December 2009 to August-December 2012). Three types of rates are presented: age-specific abortion rates (ASARs), total abortion rates (TARs), and general abortion rates (GARs). These rates are calculated in a manner analogous to the calculation of age-specific fertility rates, total fertility rates, and general fertility rates. Age-specific abortion rates, shown per 1,000 women, express the number of abortions among women of a given age, divided by the total number of women in the age group. The TAR, expressed per woman, is a summary measure across all age groups. The TAR is interpreted as the number of induced abortions a woman would have in her lifetime if she were to experience the currently

observed age-specific induced abortion rates throughout her childbearing years. The general abortion rate is the number of abortions divided by the number of women age 15-44 and is expressed per 1,000 women.

The TAR for all Kyrgyzstan is 0.7 induced abortions per woman. The urban TAR is 0.8 abortions per woman, slightly higher than the rural TAR (0.6 abortions per woman).

Table 8.3 Induced abortion rates

Age-specific induced abortion rates (ASARs) (per 1,000 women), total abortion rates (TAR), and general abortion rates (GAR), for the three-year period preceding the survey, by residence, Kyrgyz Republic 2012

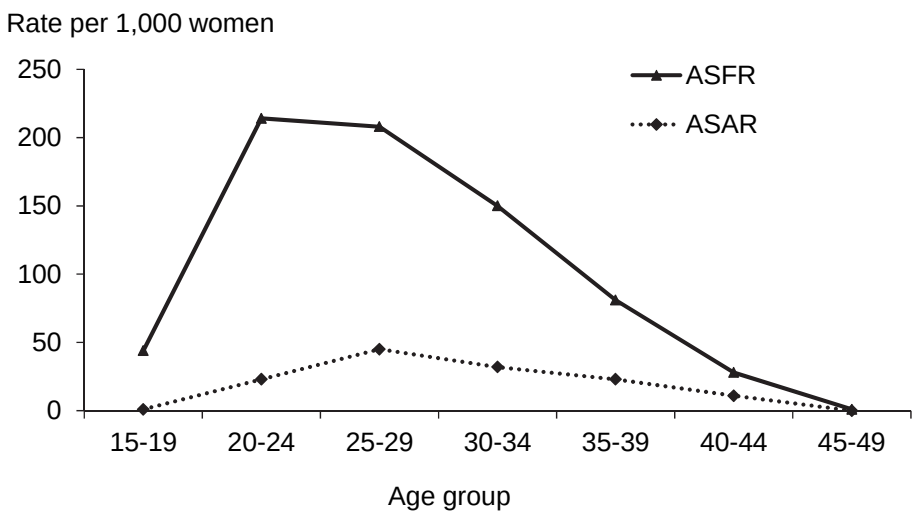
	Residence		
Age group	Urban	Rural	Total
15-19	2	0	1
20-24	28	19	23
25-29	52	40	45
30-34	35	30	32
35-39	32	19	23
40-44	10	12	11
45-49	0	1	0
TAR(15-49)[1]	0.8	0.6	0.7
TAR(15-44)[1]	0.8	0.6	0.7
GAR[2]	25.0	19.0	21.0

[1]Total abortion rate (TAR) expressed per woman.
[2] General abortion rate (GAR) = number of abortions divided by number of women age 15-44, expressed per 1,000 women.

Age-specific abortion rates are very low among women in the group age 15-19, rise rapidly to peak at 45 per 1,000 among women in the age group 25-29, and decline in the older age groups. The urban ASARs are higher than rural rates among women under age 40; among older women, the rural rates exceed the urban rates, although the differences are very small

A comparison of the ASARs with the age-specific fertility rates shows that abortion rates are much lower than fertility rates among women in all age groups (Figure 8.1).

Figure 8.1
Age-specific rates of fertility (ASFR) and induced abortion (ASAR)



KgDHS 2012

The TAR for induced abortions in the Kyrgyz Republic is similar to estimates reported in recent DHS surveys in other parts of the former Soviet Union, including Armenia (0.8) in 2010, Moldova (1.1) in 2005, and Uzbekistan (0.95) in 2002, but is higher than the TAR for Tajikistan (0.5) in 2012 and Ukraine (0.4) in 2007 (NSS [Armenia] et al., 2012; NCPM [Moldova] and ORC Macro, 2006; Analytical and Information Centre [Uzbekistan] et al., 2004; SA/MoH [Tajikistan] and ICF International, 2012; and UCSR [Ukraine] et al., 2008).

8.4.2 Abortion Differentials

Table 8.4 presents differentials in the total induced abortion rate for the three-year period prior to the survey and in the mean number of abortions ever performed among women age 40-49. The latter is an indicator of cumulative terminations over the lifetime of women who are nearing the end of their reproductive period. When compared with the TAR, it allows an assessment of the trend in abortion levels over the past 30 years.

Table 8.4 Induced abortion rates by background characteristics

Total induced abortion rates for the three years preceding the survey and mean number of abortions among women age 40-49, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Total abortion rate	Mean number of abortions among women age 40-49
Residence		
Urban	0.8	0.8
Rural	0.6	0.6
Region		
Issyk-Kul	0.7	0.8
Djalal-Abad	0.8	0.7
Naryn	0.3	0.3
Batken	0.7	0.3
Osh Oblast	0.6	0.5
Talas	1.1	0.9
Chui	0.7	0.7
Bishkek City	0.7	0.9
Osh City	0.6	0.5
Education		
None/primary	*	*
Basic general	0.5	0.5
Secondary	0.7	0.6
Professional primary/middle	0.7	0.7
Higher	0.7	0.8
Wealth quintile		
Lowest	0.5	0.6
Second	0.7	0.7
Middle	0.5	0.5
Fourth	0.9	0.7
Highest	0.7	0.8
Total	0.7	0.7

Note: An asterisk indicates that a figure is based on fewer than 125 unweighted person-years of exposure and has been suppressed.

In general, differences in the TARs in Table 8.4 are minor. The Talas region has the highest TAR (1.1 abortions per woman) and the Naryn region the lowest rate (0.3 abortions per woman). The TAR does not vary in a consistent fashion with the wealth quintile. It is slightly lower among women with basic general education (0.5 abortions per woman) compared with women who have achieved higher levels of education (0.7 abortions per woman).

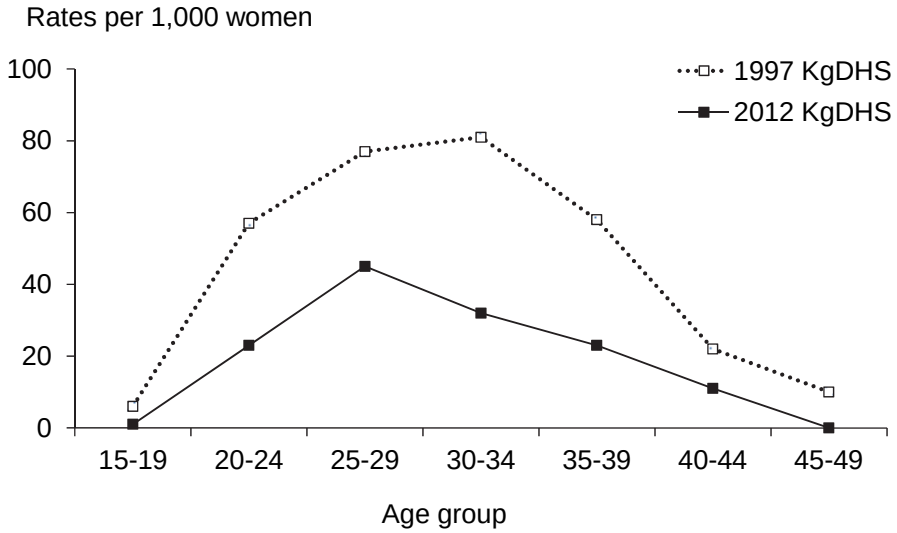
Women age 40-49 report having had an average of 0.7 abortions, which is identical to the TAR for the three years preceding the survey (0.7 abortions per woman). This suggests that abortion levels in the Kyrgyz Republic mayhave remained virtually stationary over the past 30 years. However, the more

detailed examination of abortion data from both the 1997 and 2012 KgDHS surveys presented in the following section indicates that the abortion rate actually has decreased during the past several decades.

8.4.3 Abortion Trends

Several approaches can be used to explore trends in abortion levels. One approach involves a comparison of the TARs reported in the 2012 and 1997 KgDHS surveys. The TAR in the 2012 KgDHS (0.7) is much lower than the TAR reported in the 1997 KgDHS (1.55) (RIOP and Macro International Inc., 1998), suggesting that the abortion level has declined by more than 50 percent over the 15-year period between the two surveys. Figure 8.2, which compares the ASARs from the two surveys, shows that a downward trend is evident for every age group. Differences in the lifetime abortion measures calculated for the two surveys are also consistent with a decline in the induced abortion rate over the past fifteen years. For example, 30 percent of respondents in the 1997 KgDHS reported ever having had an induced abortion, compared with 18 percent in the 2012 KgDHS. Furthermore, according to the 1997 KgDHS, women age 15-49 who have had at least one induced abortion, had an average of 2.3 abortions in 1997 (RIOP and Macro International Inc., 1998), compared with 1.8 in 2012.

Figure 8.2
Trends in age-specific induced abortion rates



KgDHS 2012

Another approach to investigating abortion trends is to examine changes in the age-specific abortion rates of the 2012 KgDHS respondents over time using the KgDHS pregnancy history data. Table 8.5 shows the age-specific abortion rates for four five-year periods prior to the KgDHS. Because women age 50 and older were not interviewed in the survey, the rates are successively more truncated across the periods shown in the table. In contrast with the conclusion reached by comparing rates from the 2012 and 1997 KgDHS surveys, the results in Table 8.5 suggest that the abortion rate has not declined substantially over the past two decades in the Kyrgyz Republic. For example, according to the retrospective data, the TAR for women age 15-34 has decreased only slightly over the past 15 years, from 0.56 abortions per woman in the period 15-19 years before the survey to 0.51 abortions per woman in the five-year period immediately before the 2012 KgDHS.[1]

Table 8.5 Trends in age-specific abortion rates

Age-specific abortion rates for five-year periods preceding the survey, by woman's age at the time of the abortion, Kyrgyz Republic 2012

Woman's age at the time of the abortion	Number of years preceding survey			
	0-4	5-9	10-14	15-19
15-19	1	2	1	1
20-24	24	25	26	25
25-29	44	43	35	42
30-34	32	36	45	[43]
35-39	21	20	]31]	
40-44	11	[12]		
45-49	[0]			

Note: Age-specific induced abortion rates are per 1,000 women. Estimates in brackets are truncated.

The reasons that a substantial downward trend in abortion levels is not evident in the 2012 KgDHS retrospective results are not clear. However, a comparison of ASARs for the period 15-19 years before the 2012 KgDHS (circa 1993-1997) with age-specific abortion rates for the same period from the 1997 KgDHS suggests that abortions may be underreported in the 2012 results. For example, Table 8.6 shows that the ASARs reported in the 2012 KgDHS among women age 15-34 for the approximate period 1993-1997 are uniformly lower than the age-specific rates for the same period obtained in the 1997 KgDHS.

Table 8.6 Comparison of age-specific abortion rates during the 1993-1997 calendar year period

Age-specific abortion rates for the 1993-1997 calendar year period, by the woman's age at the time of the abortion, according to the survey source, Kyrgyz Republic 2012

Woman's age at the time of the abortion	1993-1997 calendar year period	
	0-4 years preceding the 1997 KgDHS	15-19 years preceding the 2012 KgDHS
15-19	6	1
20-24	57	25
25-29	77	42
30-34	81	43

Note: Age-specific induced abortion rates are per 1,000 women. Estimates in brackets are truncated.

The apparent underestimation of abortion events that occurred 15 to 19 years before the 2012 KgDHS interview may be explained in part by recall error, which typically is greater for periods more remote in time from the survey interview. Additionally, the underestimation of the rates for earlier time periods in the KgDHS may reflect changes in the composition of the population in the Kyrgyz Republic since the 1997 KgDHS. In particular, the differences may be related to the continuous migration from the country of Russians and other Europeans. According to the National Statistical Committee inter-census data, the population of Russian ancestry in the Kyrgyz Republic has declined, from 21.5 percent in 1989 to 12.5 percent in 1999 and to 7.8 percent in the 2009 census (NSC, 2011). These were the segments of the population that most frequently used induced abortion at the time of the 1997 KgDHS (RIOP and Macro International Inc., 1998).

The question of whether changes in societal attitudes toward abortion may have affected the reporting of abortions in the 2012 KgDHS must also be considered. If abortion has become socially less acceptable, it is possible that women have become less open to reporting on their abortion experience. The fact that the abortion rate has fallen substantially without corresponding changes in behavior typically related to a reduced need for abortion does raise questions about whether women fully reported the abortions they may have had. In particular, the drop in the TAR between the 1997 and 2012 KgDHS is more substantial than might be expected, given the fact that the use of modern methods of family planning declined substantially during the period (35 percent in 1997 and 23 percent in 2012), presumably leaving women at greater risk of an unwanted pregnancy.

[1] TAR for age 15-34 = Age-Specific Abortion Rates for age 15-34*5/1000.

In conclusion, the abortion rate appears to have declined in the Kyrgyz Republic since the mid-1990s. However, more detailed analysis than is possible within the scope of this report is necessary to understand both the extent of the decline and how various factors, including changes in the population composition and contraceptive usage levels, have influenced the trend.

8.5 USE OF CONTRACEPTION BEFORE ABORTION

Table 8.7 uses information from the reproductive event calendar to look at the use of contraception at the time of conception for all pregnancies in the three-year period prior to the survey. The information contributes to an understanding of the extent to which contraceptive method failures are contributing to abortions and of the role that efforts to increase use of contraception might play in reducing abortions.

Table 8.7 Use of contraception before pregnancy

Percent distribution of pregnancy outcomes in the three years preceding the survey by contraceptive method used at the time of conception, Kyrgyz Republic 2012

	Pregnancy outcome				
	Live birth	Induced abortion	Miscarriage	Stillbirth	All pregnancies
No method used	92.5	80.1	90.0	(87.4)	90.7
Any method	7.5	19.9	10.0	(12.6)	9.3
Any modern method	6.6	16.5	8.1	(12.6)	8.0
Pill	0.5	1.6	1.1	(0.0)	0.7
IUD	2.3	2.2	1.6	(5.9)	2.2
Injectable	0.1	0.5	0.5	(0.0)	0.2
Male condom	3.6	12.1	4.3	(6.7)	4.8
Lactational amenorrhea (LAM)	0.1	0.1	0.0	(0.0)	0.1
Other	0.0	0.0	0.6	(0.0)	0.1
Any traditional method	0.9	3.3	1.9	(0.0)	1.3
Rhythm	0.0	1.3	0.2	(0.0)	0.2
Withdrawal	0.8	1.7	1.6	(0.0)	1.0
Other	0.0	0.4	0.0	(0.0)	0.1
Total	100.0	100.0	100.0	(100.0)	100.0
All pregnancies	2,604	427	300	24	3,355

Note: Figures in parentheses are based on 25-49 unweighted cases.

Table 8.7 shows that women were using contraception at the time of conception in 20 percent of all pregnancies ending in induced abortion during the three-year period prior to the survey. This implies that around one in five induced abortions resulted from contraceptive failure. In 12 percent of the pregnancies ending in induced abortions, women reported they were using the male condom at the time of conception. The IUD, pill, and withdrawal each were being used at the time of conception in 2 percent of pregnancies ending in induced abortions. These results suggest that better counseling for contraceptive users could be an important way to reduce the incidence of abortion.

Although contraceptive failures contribute to abortion, the KgDHS results also show the vast majority (80 percent) of induced abortions in the three-year period prior to the survey occurred among women who were not using contraception. Improving access to contraception for women who want to delay or limit childbearing is, thus, a critical step in efforts to reduce the number of abortions.

8.6 REASONS FOR ABORTION

Table 8.8 presents the main reasons given for having an abortion in the three years prior to the survey. More than 4 in 10 abortions were performed because of concerns about maternal health. Eighteen percent of abortions were performed because of a desire to space the next birth and 15 percent because of a desire to stop childbearing. One in ten abortions (10 percent) occurred for socioeconomic reasons. A partner's objection to having another child was cited for 6 percent of abortions. The risk of birth defects or being unmarried each were cited for 2 percent of abortions. Sex selection was given as a reason for less than 1 percent of all abortions.

Table 8.8 Reason for abortion

Percent distribution of induced abortions in the three years prior to the survey by the most important reason for the abortion, according to background characteristics, Kyrgyz Republic 2012

	Reason for abortion												
Background characteristic	Health of mother	Risk of birth defects	Socio-economic reasons	Did not want children	Spacing next preg-nancy	Partner did not want the child	Sex selection/ wanted a boy	Sex selection/ wanted a girl	Un-married	Other	Missing	Total	Number of cases
Age													
15-19	*	*	*	*	*	*	*	*	*	*	*	100.0	0
20-24	45.4	4.0	4.1	15.3	15.7	10.9	0.0	0.0	1.8	2.9	0.0	100.0	75
25-29	35.9	1.9	12.9	11.9	21.9	5.3	0.0	0.6	5.2	4.5	0.0	100.0	145
30-39	43.9	1.3	11.1	14.2	18.1	5.5	0.2	0.4	0.2	2.3	2.7	100.0	184
40-49	(49.0)	(1.1)	(5.6)	(30.1)	(4.4)	(5.0)	(0.0)	(0.0)	(0.0)	(0.0)	(4.8)	100.0	39
Residence													
Urban	41.0	2.0	12.0	8.5	20.4	6.5	0.0	0.0	3.8	3.7	2.1	100.0	200
Rural	42.9	1.9	8.4	20.3	15.5	6.2	0.2	0.7	0.7	2.3	1.0	100.0	245
Region													
Issyk-Kul	(48.1)	(0.0)	(5.4)	(20.1)	(19.0)	(1.6)	(0.0)	(0.0)	(0.0)	(2.4)	(3.4)	100.0	37
Djalal-Abad	58.1	1.4	11.7	9.5	12.5	4.7	0.0	0.0	0.0	0.0	2.0	100.0	84
Naryn	*	*	*	*	*	*	*	*	*	*	*	100.0	7
Batken	46.9	2.1	4.9	37.4	0.0	0.0	0.0	0.0	0.0	6.5	2.0	100.0	33
Osh Oblast	45.4	0.0	15.5	13.7	16.5	3.9	0.0	2.3	0.0	0.0	2.7	100.0	70
Talas	27.8	4.2	1.1	21.5	17.8	25.0	1.2	0.0	1.4	0.0	0.0	100.0	31
Chui	(38.8)	(1.8)	(6.4)	(14.6)	(20.0)	(12.9)	(0.0)	(0.0)	(1.7)	(3.9)	(0.0)	100.0	80
Bishkek City	26.3	3.9	13.7	7.8	29.3	3.1	0.0	0.0	8.3	7.6	0.0	100.0	91
Osh City	(56.1)	(0.0)	(7.3)	(20.6)	(5.5)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(10.5)	100.0	13
Education													
Basic general	(36.7)	(0.0)	(11.7)	(15.7)	(12.7)	(18.9)	(0.0)	(0.0)	(0.0)	(0.0)	(4.4)	100.0	28
Secondary	52.4	1.9	7.8	15.3	11.4	5.9	0.2	0.4	0.8	2.7	1.2	100.0	206
Professional primary/middle	29.6	6.0	15.6	23.3	13.9	2.8	0.0	0.0	2.7	6.2	0.0	100.0	69
Higher	34.2	0.3	10.2	10.5	29.6	6.1	0.0	0.6	4.1	2.2	2.1	100.0	142
Wealth quintile													
Lowest	44.3	2.1	15.9	12.3	13.1	7.9	0.0	0.0	0.0	1.1	3.4	100.0	57
Second	43.5	1.0	8.8	18.9	15.7	8.6	0.5	2.2	0.0	0.7	0.0	100.0	72
Middle	46.5	1.3	10.6	26.1	6.2	3.1	0.0	0.0	0.7	4.5	1.0	100.0	65
Fourth	41.7	1.8	8.1	14.6	21.7	6.0	0.0	0.0	1.0	3.1	2.2	100.0	133
Highest	38.2	2.9	9.8	8.5	22.8	6.3	0.0	0.0	6.3	4.1	1.2	100.0	119
Total	42.1	1.9	10.0	15.0	17.7	6.3	0.1	0.4	2.1	2.9	1.5	100.0	445

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25 to 49 unweighted cases.

8.7 METHOD OF ABORTION

Table 8.9 shows that most abortions were done by either vacuum aspiration (65 percent) or dilation and curettage (27 percent). About 4 percent of abortions were induced by oxytocin and other medicines, and 1 percent was carried out by other methods. Differences by background characteristics are small; however, women age 30 and older, urban women, well- educated women, and those from households with less wealth are somewhat more likely to have had an abortion performed by vacuum aspiration than other women.

Table 8.9 Method of abortion

Percent distribution of induced abortions in the three years prior to the survey by method of abortion, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Method of abortion							Total	Number of abortions
	Dilation & curettage (D&C)	Vacuum aspiration	Oxytocin	Other medicines	Other	Don't know	Missing		
Age									
15-19	*	*	*	*	*	*	*	100.0	0
20-24	17.3	64.4	0.0	12.6	2.0	3.7	0.0	100.0	75
25-29	31.7	60.6	1.3	3.2	1.9	0.0	1.3	100.0	145
30-39	27.4	68.4	0.9	1.0	0.7	0.0	1.6	100.0	184
40-49	(25.2)	(68.9)	(0.0)	(0.0)	(1.1)	(4.8)	(0.0)	100.0	39
Residence									
Urban	25.5	68.1	0.6	2.8	0.7	0.0	2.4	100.0	200
Rural	28.0	63.0	0.9	4.2	1.9	1.9	0.0	100.0	245
Region									
Issyk-Kul	(36.5)	(60.2)	(0.0)	(0.0)	(0.0)	(0.0)	(3.4)	100.0	37
Djalal-Abad	23.2	73.6	0.0	1.3	0.0	0.0	2.0	100.0	84
Naryn	*	*	*	*	*	*	*	100.0	7
Batken	44.4	52.2	0.0	1.5	0.0	1.9	0.0	100.0	33
Osh Oblast	14.9	71.9	3.8	1.8	1.8	5.8	0.0	100.0	70
Talas	21.2	76.4	2.4	0.0	0.0	0.0	0.0	100.0	31
Chui	(32.6)	(47.5)	(0.0)	(16.1)	(3.8)	(0.0)	(0.0)	100.0	80
Bishkek City	29.8	66.5	0.1	0.0	1.5	0.0	2.1	100.0	91
Osh City	(14.6)	(83.9)	(0.0)	(1.5)	(0.0)	(0.0)	(0.0)	100.0	13
Education									
Basic general	(36.9)	(54.2)	(4.5)	(0.0)	(0.0)	(0.0)	(4.4)	100.0	28
Secondary	32.4	59.3	0.9	3.5	2.2	1.7	0.0	100.0	206
Professional primary/ middle	21.1	71.9	0.2	3.0	2.1	1.8	0.0	100.0	69
Higher	19.7	72.8	0.2	4.7	0.0	0.0	2.5	100.0	142
Wealth quintile									
Lowest	13.3	75.7	0.6	4.8	0.0	5.6	0.0	100.0	57
Second	32.4	63.0	0.0	3.7	0.0	0.9	0.0	100.0	72
Middle	32.6	62.1	0.6	2.7	2.0	0.0	0.0	100.0	65
Fourth	30.6	59.5	2.1	2.4	2.6	0.7	2.2	100.0	133
Highest	22.8	69.9	0.0	4.6	1.1	0.0	1.6	100.0	119
Total	26.9	65.3	0.8	3.6	1.4	1.1	1.1	100.0	445

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25 to 49 unweighted cases.

8.8 COST OF ABORTION

One purpose of the 2012 KgDHS was to obtain information about the costs incurred by a woman for the most recent abortion. Table 8.10 shows that among women age 15-49 who had an induced abortion in the five years preceding the survey, 92 percent said that they paid for the abortion and knew the cost. An additional 4 percent said the abortion was free of charge, and 5 percent did not know the cost. Among those who paid and were able to provide information on cost, 52 percent paid 999 soms or less for the abortion, 23 percent paid 1,000 to 1,499 soms, and 25 percent paid 1,500 soms[2] or more (data not shown). The median cost was 798 soms. Younger women, urban women, women living in Bishkek, Chui, and Osh City, those with higher education, and those from wealthier households tended to pay more than other women for their most recent abortion.

[2] One US dollar is equivalent to 48.8 Kyrgyzstan soms at the current exchange rate.

Table 8.10 Cost of the last abortion

Percentage of women age 15-49 who were pregnant in the five years preceding the survey and had one or more induced abortions, and among these women, percent distribution by the cost status of the most recent abortion, and among women who paid and know the cost of the most recent abortion, the median cost of the most recent abortion, according to background characteristics, Kyrgyz Republic 2012

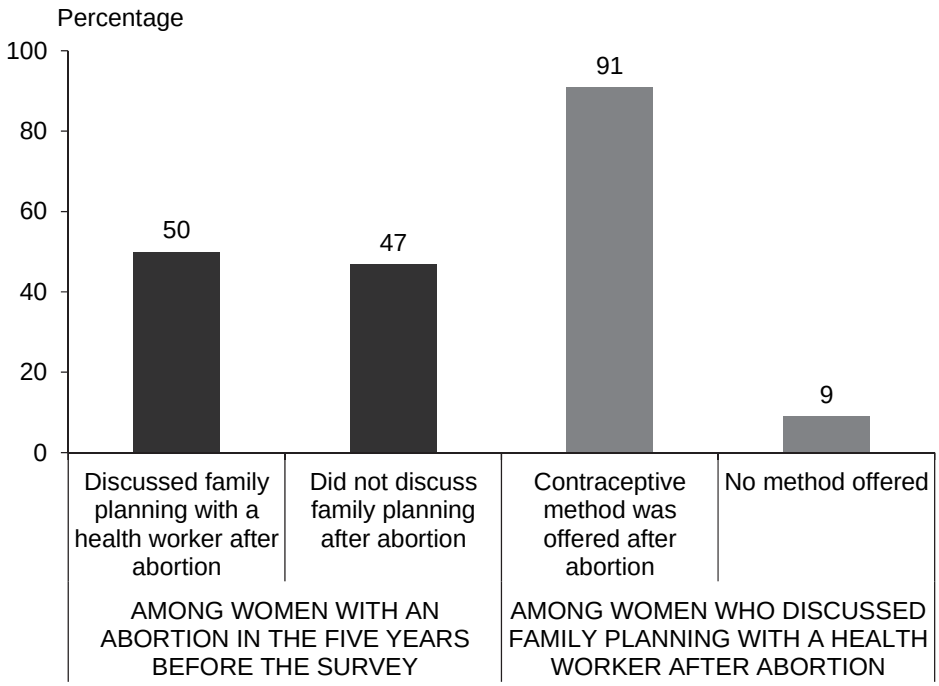
Background characteristic	Percentage of women who had one or more abortions in the five years preceding the survey	Number of women pregnant in the last five years	Among women with at least one abortion, the percent distribution by cost status for the most recent abortion					Among women who paid for and know the cost of the most recent abortion:	
			Received abortion for free	Know the cost	Do not know cost/missing	Total	Number of women	Median cost for the most recent abortion in Kyrgyz soms[1]	Number of women
Age									
<20	0.7	71	*	*	*	100.0	0	nc	0
20-24	8.8	767	4.0	94.3	1.7	100.0	68	993	64
25-34	19.5	1,667	3.6	91.9	4.5	100.0	322	990	296
35+	23.9	785	4.2	90.2	5.6	100.0	187	791	169
Residence									
Urban	24.0	1,050	3.8	91.2	5.0	100.0	250	993	228
Rural	14.6	2,241	3.8	92.0	4.2	100.0	328	791	302
Region									
Issyk-Kul	14.2	312	8.5	85.2	6.3	100.0	44	(497)	38
Djalal-Abad	16.0	590	3.1	87.3	9.5	100.0	94	497	83
Naryn	7.7	132	(35.6)	(62.1)	(2.3)	100.0	10	*	6
Batken	14.1	276	10.6	76.1	13.3	100.0	39	(499)	30
Osh Oblast	14.8	655	2.6	97.4	0.0	100.0	97	791	95
Talas	21.8	189	3.2	94.8	2.0	100.0	41	699	39
Chui	19.5	554	0.0	95.1	4.9	100.0	108	998	103
Bishkek City	26.9	490	2.7	97.3	0.0	100.0	129	1,193	126
Osh City	15.5	94	(1.4)	(77.6)	(21.0)	100.0	14	(990)	11
Mother's education									
Basic general	10.6	353	(2.8)	(92.9)	(4.3)	100.0	37	(595)	35
Secondary	17.1	1,462	3.3	91.5	5.2	100.0	249	740	228
Professional primary/middle	20.1	532	6.8	92.5	0.7	100.0	107	794	99
Higher	20.1	930	3.0	91.1	5.9	100.0	184	996	168
Wealth quintile									
Lowest	12.5	610	3.8	94.0	2.2	100.0	76	792	72
Second	14.0	636	5.6	89.8	4.6	100.0	89	547	80
Middle	14.0	678	5.0	91.8	3.3	100.0	95	696	87
Fourth	21.2	743	2.9	89.8	7.3	100.0	158	800	142
Highest	26.1	623	3.0	93.2	3.7	100.0	160	997	149
Total	17.6	3,291	3.8	91.6	4.6	100.0	578	798	530

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25 to 49 unweighted cases. Total includes 14 women with no or only primary level of education.
[1]One US dollar is equivalent to 48.8 Kyrgyz soms at the current exchange rate.
nc = Not calculated

8.9 COUNSELING ON POST-ABORTION USE OF FAMILY PLANNING

The 2012 KgDHS also collected information on whether women had a post-abortion family planning discussion with any health provider at the place of the most recent abortion. Just under half of the women (47 percent) who had an abortion in the five years before the survey did not discuss contraception with a health provider (Figure 8.3). Of the 50 percent of women who did discuss post-abortion family planning at the facility, 91 percent said that they were offered a method of contraception at that time.

Figure 8.3
Counseling on post-abortion family planning at the facility where the most recent abortion was conducted



Note: Three percent of women with an abortion in the five years before the survey did not remember whether they had discussed family planning after the most recent abortion.

KgDHS 2012

INFANT AND CHILD MORTALITY 9

Key Findings

- The under-5 mortality rate is 31 deaths per 1,000 births. At this rate, one in every 32 children born in the Kyrgyz Republic dies before reaching a fifth birthday.
- The infant mortality rate is 27 deaths per 1,000 births, and the neonatal mortality rate is 20 deaths per 1,000 births. Thus, 87 percent of the deaths of young children take place before the child's first birthday, with nearly three-quarters of infant deaths occurring during the first month of life.
- The Batken region has the highest infant and under-5 mortality levels.
- Infant and under-5 mortality rates increase as the time between births declines. For example, under-5 mortality among children born fewer than two years after a previous birth is over 40 percent higher than the level among children born four or more years after a previous birth (49 versus 29 per 1,000).

One important objective of the 2012 KgDHS was to measure the level of and trends in mortality among children under age 5. Information on levels and trends in mortality in this age group is central to an assessment of the demographic situation in the Kyrgyz Republic. Mortality data help to identify those children at increased risk of death who should be targeted by programs designed to improve child survival. In addition to infant and child mortality rates, the chapter presents the distribution of children according to fertility behavior that elevates risk of death. The chapter also considers information obtained about the registration of child deaths.

9.1 SOURCE AND ASSESSMENT OF MORTALITY DATA

9.1.1 Source of the Data

As described in Chapter 5, the 2012 KgDHS questionnaire included a reproductive history during which respondents reported the outcome of each pregnancy, i.e., if the pregnancy ended in a live birth, stillbirth, miscarriage, or abortion. A live birth was defined for respondents as any birth that cried or showed any sign of life. For each live birth reported in the pregnancy history, information was collected on the date of birth (month and year), sex, survivorship, and current age (for surviving children) or age at death (for deceased children).

In this chapter, KgDHS birth history data are used to produce the following five direct measures of mortality:

Neonatal mortality (NN):	probability of dying within the first month of life
Postneonatal mortality (PNN):	difference between infant and neonatal mortality
Infant mortality ($_1q_0$):	probability of dying between birth and exact age 1
Child mortality ($_4q_1$):	probability of dying between exact ages 1 and 5
Under-5 mortality ($_5q_0$):	probability of dying between birth and exact age 5

All rates are expressed as deaths per 1,000 live births, except for child mortality, which is expressed as deaths per 1,000 children surviving to age 1.

9.1.2 Data Quality

As with all indicators in the KgDHS, the accuracy of early childhood mortality estimates is influenced by two factors: sampling error and nonsampling error. Sampling error is inherent in the survey because the sample for the KgDHS was only one of many samples that could have been selected for the survey. As described further in Appendix B, the sampling error associated with the KgDHS mortality data can be evaluated statistically to provide an estimate of the range within which the actual mortality rates in the Kyrgyz Republic lie.

Nonsampling error arises from problems occurring during the collection or processing of mortality data. Specifically, the reliability of the mortality estimates depends upon full reporting of children who die, the absence of differential displacement of birth dates of surviving and dead children, and accurate information on ages at death. Although the nonsampling error associated with the KgDHS mortality data cannot be evaluated statistically, Appendix C includes several tables that can be used to assess the extent to which the KgDHS mortality data may be subject to common reporting errors.

Omission, or failure to report births that did not survive, can lead to serious underestimation of mortality, if severe. Omission, which can be difficult to detect, is assumed to occur most often for deaths in early infancy and to increase for time periods more remote from the survey. One approach in looking for evidence of omission is to compare the ratio of neonatal deaths to all infant deaths before the survey and the ratio of early neonatal deaths (deaths in the first week of life) to all neonatal deaths to see if these measures fall within expected ranges.

Examination of the 2012 KgDHS infant death data shows that the proportion of neonatal to infant deaths ranges from 76 percent in the period 0 to 4 years prior to the survey to 49 percent during the period 15 to 19 years before the survey (Table C.6). This pattern conforms to the expectation that, as mortality levels decline, a larger proportion of infant deaths will take place during the early neonatal period. Early neonatal deaths do not appear to be severely underreported; the ratio of early neonatal deaths to all neonatal deaths exceeds 78 percent in the period 0 to 4 years prior to the survey. However, 88 percent of early neonatal deaths is high (Table C.5). It most likely results from a shift of births into the 5 to 9 year period from the period 10 to14 years before the survey, although it is possible some deaths may have been shifted from the period 0 to 4 years before the survey into the 5 to 9 year period as well. In summary, while there is evidence of some omission or displacement of infant deaths from one period to another, early neonatal deaths in the 2012 KgDHS do not appear to be severely underreported.

Another potential data quality problem is heaping of the age at death. Errors in the reporting of the age at death may result in the transference of deaths from one age bracket for which mortality rates are being calculated to another. For example, heaping on age 1 or 12 months can result in an underestimate of the infant mortality rate and an overestimate of the child mortality level. Several steps were taken in the training of the KgDHS interviewers and in the structuring of the KgDHS birth history to reduce errors in reporting the age at death. Interviewers were instructed to record age at death in days if the child died during the first month of life. They were to record age at death in months if the child died in the first two years of life. Because heaping on “1 year” or “12 months” is very common, interviewers were asked specifically to probe when the mothers gave these responses. The results presented in Table C.6 show no evidence of heaping of deaths at age 12 months during any of the periods before the survey.

A third data quality problem may arise from errors in the reporting of birth dates. Displacement of births can affect the accuracy of mortality trends if they result in deaths being transferred from one time period to another, e.g., from the period 0 to 4 years to the period 5 to 9 years before the survey. Displacement may result from recall problems among mothers. However, it also may reflect deliberate transference of births from one period to another by interviewers interested in reducing their workload;

they avoid the detailed set of maternal and child health questions included in DHS surveys for births occurring in 2007 or later. An examination of the distribution of KgDHS birth history data by calendar year shows some evidence of transference of births from 2007 to 2006 (Table C.4). However, the transference is more evident for living than dead children (Table C.4) and, thus, has few implications for recent mortality trends (fewer than 1 per 1,000). There is also some evidence of transference of births from 2006 to 2005, with the transference being more evident for children who died. However, because the KgDHS fieldwork started in August 2012, the transference of births from calendar year 2006 to 2005 does not have any effect on the mortality estimates for the period 5 to 9 years before the survey since both years are within that five-year period (approximate calendar period 2003-2007).

Another tool for identifying errors in the reporting of infant and child deaths is to examine the sex ratios of reported deaths. However, there are very few deaths for each sex in the 2012 KgDHS, making it difficult to evaluate the sex ratio fluctuations.

9.2 LEVELS AND TRENDS IN CHILDHOOD MORTALITY

Table 9.1 shows childhood mortality estimates based on data from the 2012 KgDHS. For the five years preceding the survey (approximate calendar years 2008-2012), the under-5 mortality rate was 31 per 1,000. At this rate, one in every 32 children born in the Kyrgyz Republic will die before reaching their fifth birthday. The infant mortality rate iss 27 per 1,000 live births, and the child mortality rate (age 1 to age 4) is 4 per 1,000; thus, 87 percent of deaths among children under age 5 during the period occurred during the first year of life. The estimates of neonatal and postneonatal mortality were 20 and 7 per 1,000, respectively, indicating that around three-quarters of infant deaths took place in the first month of life.

Childhood mortality rates in the Kyrgyz Republic are relatively high when compared with the levels reported in recent DHS surveys in several neighboring countries, Infant mortality for the five-year period prior to the survey was 13 and 14 deaths per 1,000 live births in the 2010 Armenia DHS and 2007 Ukraine DHS, respectively, considerably lower than the rate reported in the KgDHS (NSS [Armenia] et al., 2012; UCSR [Ukraine] et al., 2008). On the other hand, survival probabilities for children under age one in the Kyrgyz Republic are better than those reported in the 2012 Tajikistan DHS (34 per 1,000 births), the 2010 Afghanistan Maternal Mortality Survey (55 per 1,000 births), the 2006 Azerbaijan DHS (43 per 1,000 births), and the 2012-13 Pakistan DHS (74 per 1,000 live births) (SA/MoH [Tajikistan] and ICF International, 2012; APHI/MoPH [Afghanistan] et al., 2011; SSC [Azerbaijan] and Macro International Inc., 2008; NIPS [Pakistan] and ICF International Inc., 2013).

Table 9.1 Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-5 mortality rates for five-year periods preceding the survey, Kyrgyz Republic 2012

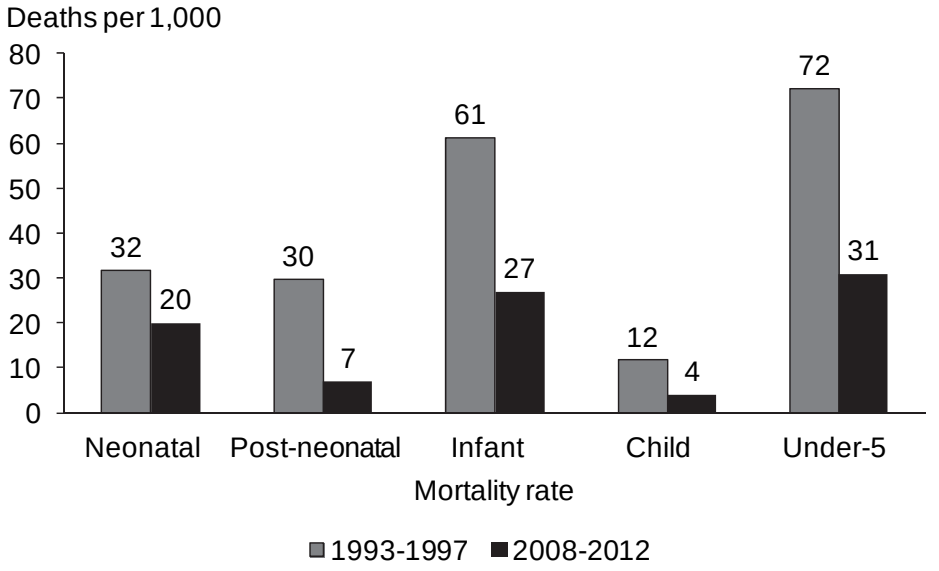
Years preceding the survey	Approximate calendar period	Neonatal mortality (NN)	Postneonatal mortality (PNN) [1]	Infant mortality (1q0)	Child Mortality (4q1)	Under-5 mortality (5q0)
0-4	2008-2012	20	7	27	4	31
5-9	2003-2007	17	11	28	7	35
10-14	1998-2002	17	19	36	9	44

[1] Computed as the difference between the infant and neonatal mortality rates.

Table 9.1 also shows mortality rates calculated from the KgDHS birth history for three successive five-year periods prior to the survey. The data suggest that mortality substantially decreased over the 15-year period. For example, the infant mortality rate was 36 per 1,000 live births during the period 10 to 14 years before the survey compared with the estimate for the five years before the survey of 27 per 1,000. Some caution must be used in interpreting the mortality trends in the 2012 KgDHS results, particularly with respect to the size of the overall decline, because the retrospective data on which they are based are subject to recall error that is typically greater the further back in time one goes. Comparison of the 2012 and 1997 KgDHS survey results indicates that, in fact, the decline in infant and under-5 mortality rates

over the past fifteen years in the Kyrgyz Republic was likely more substantial than the retrospective data from the KgDHS suggest. For example, as Figure 9.1 shows, the under-5 mortality rate was 72 per 1,000 live births during the five-year period prior to the 1997 KgDHS (i.e., 1992-1997), 57 percent higher than the level of 31 per 1,000 live births recorded in the 2012 KgDHS for the period 2008-12. Similarly, the infant mortality rate decreased by more than half over the period between the two surveys, from 61 deaths per 1,000 live births to 27 deaths per 1,000 live births (RIOP and Macro International, 1998).

Figure 9.1
Mortality trends



KgDHS 2012

The 2012 KgDHS mortality estimates can also be compared with estimates derived from the Kyrgyz Republic's vital registration system. Kyrgyzstan has a long history of collecting demographic and health data through the use of national registration systems. Births and children's deaths are registered in the civil registry offices (so-called ZAGS) and in local administrations of rural settlements. National legislation specifies that the births and deaths of children who die during the perinatal period are registered in the same health facilities where the children are born and die, regardless of maternal residence. Second copies of these records are forwarded to the rayon (district) statistical offices for processing and entry to the electronic database. These data are forwarded up the reporting hierarchy to the regional and national levels. Official government statistics on infant mortality based on these administrative records are published in the annual statistical reports of the NSC and MOH.

It is important to recognize that vital statistics data, like survey data, are subject to a number of reporting problems. Prior to 2004, one problem that affected child mortality estimates from the vital statistics system was the system's practice of classifying births as "live" or "still" that differed from the WHO standard and resulted in an underestimation of infant deaths. Since 2004, the Kyrgyz Republic has adopted the WHO definitions of a live birth and an infant death, eliminating one source of potential underreporting. However, there remain factors other than definitional issues that may contribute to underreporting of infant deaths in the registration statistics. For example, not all births or infant deaths may be properly documented or registered. Data obtained in the 2012 KgDHS about the coverage of the death registration system are presented at the end of this chapter.

The infant mortality rate of 27 per 1,000 for the period 0 to 4 years before the 2012 KgDHS survey (for the calendar period 2008-2012) is higher than the NSC rate of 23 per 1,000 derived by averaging the annual rates for the years 2008, 2009, 2010, 2011, and 2012 derived from the vital

registration system (NSC, 2013a). The difference between the KgDHS and the official mortality figures may be in part due to differences in data collection approaches. However, the confidence intervals for the KgDHS estimates[1] overlap with the registration-based statistics, indicating that the difference may simply reflect the variability inherent in sample survey data.

9.3 SOCIOECONOMIC DIFFERENTIALS IN CHILDHOOD MORTALITY

Table 9.2 presents infant and child mortality estimates for the 10-year period prior to the survey (approximate calendar years of 2003 through 2012) by socioeconomic characteristics. The rates were calculated for a period of 10 years rather than over the shorter, 5-year period used in Table 9.1 to reduce sampling variability. Despite the longer period, the number of deaths in some categories is still small and, thus, minor differences in mortality between subgroups of the population should be interpreted cautiously.

Table 9.2 Early childhood mortality rates by socioeconomic characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality (1q0)	Child mortality (4q1)	Under-5 mortality (5q0)
Residence					
Urban	16	7	23	10	33
Rural	20	9	29	4	33
Region					
Issyk-Kul	16	8	25	4	28
Djalal-Abad	20	4	24	4	28
Naryn	16	8	24	3	27
Batken	25	20	45	8	52
Osh Oblast	18	16	35	4	39
Talas	18	15	33	6	38
Chui	19	5	24	6	30
Bishkek City	20	2	21	(11)	(33)
Osh City[a]	1[a]	3[a]	4[a]	(2)[a]	(6)[a]
Mother's education					
None/primary	*	*	*	*	*
Basic general	16	15	31	(8)	(39)
Secondary	19	9	28	5	33
Professional primary/middle	20	8	28	4	32
Higher	19	6	24	7	31
Wealth quintile					
Lowest	22	11	33	3	36
Second	16	14	31	4	34
Middle	25	10	35	5	40
Fourth	18	4	22	5	27
Highest	11	5	16	12	28

Note: Rates in parentheses are based on 250-499 unweighted person-years of exposure. An asterisk indicates that a rate is based on fewer than 250 unweighted person-years of exposure and has been suppressed.
[a] For the levels of mortality in Osh City, see the comments in the text.
[1] Computed as the difference between the infant and neonatal mortality rates

Rural mortality rates during the first year of life are higher than urban rates, while the opposite pattern is observed with respect to child mortality. Among regions, the Batken region has the highest infant and child mortality levels followed by the Osh Oblast and Talas regions. Osh City has markedly lower mortality levels than other regions, which seems unlikely to be the reality given the health problems in that area. A detailed examination of the mortality data for the region in fact suggests that infant and child deaths in the region are severely underreported in the KgDHS. Although the underreporting of mortality in Osh City clearly affects the interpretation of regional patterns, given the low demographic weight of the region[2], it does not significantly affect the national mortality estimates.

[1] See Appendix B for a discussion of sampling error and confidence intervals.
[2] According to the 2009 Population and Housing Census of the Kyrgyz Republic and the sample design document, Osh City represents 4.8 percent of the total population of the Kyrgyz Republic. The survey results show that 3.8 percent of women age 15-49 are from Osh City.

Higher levels of educational attainment are usually associated with lower mortality rates, in part because education exposes mothers to information about better nutrition and adequate spacing between births, as well as better knowledge about childhood illness and treatment. Mortality differentials by the mother's level of education show that children of mothers with secondary or higher levels of education generally fare better than children of mothers with only basic secondary education, although the pattern is not found in the neonatal period. Except for child mortality, mortality levels among children in the lowest three wealth quintiles are generally higher than the levels among children in the fourth and highest quintiles.

9.4 DEMOGRAPHIC DIFFERENTIALS IN CHILDHOOD MORTALITY

Table 9.3 presents differentials in childhood mortality by several demographic variables associated with a child's probability of dying, including the child's sex, the mother's age at the birth, the birth order, the child's size at birth, and, for second and higher order births, the interval between the birth of the previous child and the child who died. As was the case with the socioeconomic differentials, mortality rates in Table 9.3 are shown for the ten-year period prior to the survey to reduce sampling variability except in the case of birth size where information is available to calculate rates only for the five-year period before the survey. Despite the use of a longer time period in calculating the rates for most characteristics, the numbers of deaths in many of the subgroups are small, and, thus, minor differences in the rates in Table 9.3 must be interpreted cautiously.

The differences in child mortality between different demographic groups do not always follow expected patterns in the Kyrgyz Republic. For example, childhood mortality rates vary little by the child's sex, the mother's age at the time of the birth, or birth order. However, the results indicate that both the previous birth interval and the child's birth size are related to early childhood mortality levels. Mortality among children has typically been found to be negatively associated with the length of the previous birth interval. This has been the case particularly when the birth interval is less than two years. As expected, mortality levels in Table 9.3 decline as the birth interval increases. For example, the under-5 mortality rate among children born less than two years after a previous birth is 49 per 1,000 compared with 29 per 1,000 among children born four or more years after a previous birth.

Research has shown that small size at birth relates to an elevated risk of dying in infancy. To obtain information on birth size for births during the five-year period before the KgDHS interview, mothers were asked if, at the time of the birth, the baby was very large, larger than average, average, smaller than average, or very small.[3] Table 9.3 shows that children considered by their mothers to be average or larger at the time of the birth have a better chance of survival in their first year than those born very small or small. In particular, the neonatal mortality rate is more than seven times higher for babies whom the mother considered to be very small or small compared with average or larger babies.

[3] For additional details on the birth size measure, see Chapter 11 in this report.

Table 9.3 Early childhood mortality rates by demographic characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by demographic characteristics, Kyrgyz Republic 2012

Demographic characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality (1q0)	Child mortality (4q1)	Under-5 mortality (5q0)
Child's sex					
Male	19	9	28	4	32
Female	18	9	27	7	34
Mother's age at birth					
<20	22	4	27	(2)	(28)
20-29	19	9	28	7	35
30-39	18	9	27	3	30
40-49	*	*	*	*	*
Birth order					
1	18	7	25	8	33
2-3	19	9	28	6	33
4-6	18	9	27	3	30
7+	*	*	*	*	*
Previous birth interval[2]					
<2 years	29	15	44	6	49
2 years	12	11	23	4	28
3 years	11	8	19	4	23
4+ years	19	6	25	4	29
Birth size[3]					
Small/very small	58	9	68	na	na
Average or larger	8	5	14	na	na

Note: Rates in parentheses are based on 250-499 unweighted person-years of exposure. An asterisk indicates that a rate is based on fewer than 250 unweighted person-years of exposure and has been suppressed.
na = Not applicable.
[1] Computed as the difference between the infant and neonatal mortality rates.
[2] Excludes first-order births.
[3] Rates for the five-year period before the survey.

9.5 PERINATAL MORTALITY

Perinatal mortality takes into account fetal deaths occurring late in pregnancy in addition to early neonatal deaths. Examining the perinatal mortality level is important because the distinction between a stillbirth and an early neonatal death is often a fine one, depending on the mother's observation and recall of sometimes-faint signs of life following delivery. The causes of stillbirths and early neonatal deaths are also closely linked, and examining only one or the other can understate the true level of mortality around delivery. In the KgDHS survey, as in other DHS surveys, perinatal deaths are defined to include any deaths of live births within the first seven days of life (early neonatal deaths) and any pregnancies reported by mothers as having ended in stillbirth after seven or more months of gestation. The KgDHS asks and records pregnancy duration in months; the definition of seven months used for the purpose of calculating perinatal mortality in the survey is the equivalent of 28 weeks of pregnancy (Rutstein, S. O., and G. Rojas, 2006). The information on the durations of pregnancies ending in stillbirth is obtained in the detailed reproductive events calendars completed in the survey for the period after January 2007. The perinatal rate is calculated by dividing the total number of perinatal deaths by the total number of pregnancies reported in the calendar as having lasted seven or more months (i.e., the number of pregnancies of seven or more months that terminated in a fetal death plus pregnancies that ended with a live birth).

Table 9.4 presents the number of stillbirths, the number of early neonatal deaths, and the perinatal mortality for the five-year period preceding the survey by selected demographic and socioeconomic characteristics. In considering the results, it should be remembered that both stillbirths and early neonatal deaths are subject to underreporting. The total number of events is also small (15 stillbirths and 59 early neonatal deaths); as a result, perinatal mortality rates for a number of the subgroups are based on very few events.

Overall, the perinatal mortality rate is 18 per 1,000.[4] Perinatal mortality rates are highest among women under age 20 (29 per 1,000), for those from the Issyk-Kul region (26 per 1,000), among women in the lowest wealth quintile (29 per 1,000), and especially among pregnancies for which the previous pregnancy interval was less than 15 months (53 per 1,000).

Table 9.4 Perinatal mortality

Number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the five-year period preceding the survey, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Number of stillbirths[1]	Number of early neonatal deaths[2]	Perinatal mortality rate[3]	Number of pregnancies of 7+ months duration
Mother's age at birth				
<20	0	8	29	289
20-29	11	39	19	2,655
30-39	3	12	14	1,034
40-49	1	0	7	120
Previous pregnancy interval in months[4]				
First pregnancy	3	23	20	1,266
<15	6	13	53	356
15-26	0	11	12	940
27-38	2	4	12	531
39+	3	7	10	1,004
Residence				
Urban	0	18	15	1,216
Rural	14	41	19	2,881
Region				
Issyk-Kul	4	6	26	389
Djalal-Abad	1	13	20	734
Naryn	1	2	17	177
Batken	2	6	21	367
Osh Oblast	5	9	17	836
Talas	1	4	17	257
Chui	0	10	15	660
Bishkek City	0	9	17	557
Osh City	0	0	0	119
Mother's education				
None/primary	0	0	*	23
Basic general	0	2	5	432
Secondary	10	29	21	1,861
Professional primary/middle	2	7	13	668
Higher	3	20	21	1,112
Wealth quintile				
Lowest	5	18	29	784
Second	5	13	21	819
Middle	4	11	17	876
Fourth	1	7	9	903
Highest	0	9	13	715
Total	15	59	18	4,097

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Stillbirths are fetal deaths in pregnancies lasting seven or more months (the equivalent of 28 or more weeks of pregnancy duration).
[2] Early neonatal deaths are deaths at age 0-6 days among live-born children.
[3] The perinatal mortality rate is the sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of seven or more months' duration, expressed per 1,000.
[4] Categories correspond to birth intervals of <24 months, 24-35 months, 36-47 months, and 48+ months.

[4] The KgDHS classification of perinatal deaths differs somewhat from that used by the Kyrgyz Republic Ministry of Health (MOH) and National Statistical Committee (NSC). In calculating perinatal mortality, the current MOH and NSC approach includes early neonatal deaths and stillbirths occurring after 22 weeks of pregnancy in the numerator of the rate and all births (stillbirths and live births) in the denominator. DHS asks for and records pregnancy duration only in months; thus, it is not possible to exactly match the MOH/NSC definition. However, it is possible to closely approximate the MOH approach by using a cut-off of 6 months or the equivalent of 24 weeks of pregnancy for the purpose of re-calculating perinatal mortality. When the 2012 KgDHS perinatal mortality rate is re-calculated using this cut-off, the estimate of the perinatal mortality rate is 21 per 1,000 (data not shown).

9.6 HIGH-RISK FERTILITY BEHAVIOR

Research suggests a strong relationship between several aspects of women's fertility behavior and children's survival risks. The risk of death in early childhood is highest among children whose mothers are young or old at birth, children of mothers with too high a parity, or children born after too short a preceding birth interval. The category *young* refers to mothers less than 18 years old, while *old* includes mothers over age 34 at the time of the birth. A *short birth interval* is defined as a birth occurring less than 24 months after a previous birth. A child is of *too high a birth order* if the mother has previously given birth to three or more children.

Taking into account the four risk factors, Table 9.5 presents the distribution of births during the five-year period before the survey and the distribution of currently married women[5] by whether they are in a single high-risk category, a multiple high-risk category, or not any high-risk category. Although often at increased risk, first births between ages 18 and 34 are assigned to a separate category because the risk is "unavoidable." Table 9.5 also presents risk ratios. The risk ratios provide a measure of the increased risk of death among births in this category relative to births with no risk factors.

Table 9.5 High-risk fertility behavior

Percent distribution of children born in the five years preceding the survey by category of elevated risk of mortality and the risk ratio, and percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Kyrgyz Republic 2012

Risk category	Births in the 5 years preceding the survey		Percentage of currently married women[1]
	Percentage of births	Risk ratio	
Not in any high risk category	29.6	1.00	20.3[a]
Unavoidable risk category			
First order births between ages 18 and 34 years	32.6	1.89	7.2
Single high-risk category			
Mother's age <18	0.7	(0.00)	0.2
Mother's age >34	3.7	1.39	10.0
Birth interval <24 months	13.1	2.99	12.4
Birth order >3	10.1	2.02	9.5
Subtotal	27.7	2.34	32.2
Multiple high-risk category			
Age <18 and birth interval <24 months[2]	0.0	nc	0.0
Age >34 and birth interval <24 months	0.4	*	0.3
Age >34 and birth order >3	6.2	1.75	31.8
Age >34 and birth interval <24 months and birth order >3	0.9	(0.67)	2.4
Birth interval <24 months and birth order >3	2.7	1.10	5.7
Subtotal	10.1	1.53	40.3
In any avoidable high-risk category	37.8	2.13	72.5
Total	100.0	na	100.0
Number of births/women	4,082	na	5,256

Note: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead among births not in any high-risk category. An asterisk indicates that a figure is based in fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable.
nc = Not calculated because there are no cases.
[1] Women are assigned to risk categories according to the status they would have at the birth of a child if they were to conceive at the time of the survey: current age less than 17 years and 3 months or older than 34 years and 2 months, latest birth less than 15 months ago, or latest birth being of order 3 or higher.
[2] Includes the category age <18 and birth order >3.
[a] Includes sterilized women.

Overall, the first column of the table shows that around four in ten babies were in some avoidable risk category at the time they were born; 28 percent were in a single risk category, and 10 percent were in a multiple risk category. The most common avoidable risk factors were short birth intervals and high birth order.

[5] The criteria for placing women into specific risk categories are adjusted to take into account the gestation time for an additional birth.

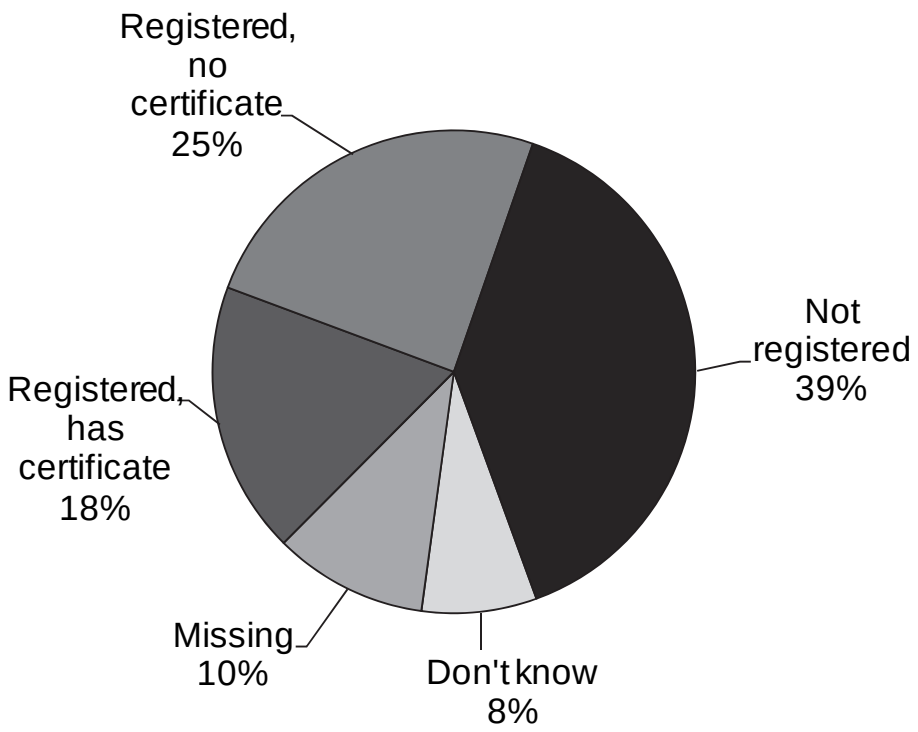
As the second column of Table 9.5 shows, the overall risk of dying was 2.13 times higher among births that fell into any high-risk category compared with births not in any high-risk category. The risk ratio for first births is similar to that for births in any high-risk category.

The final column of Table 9.5 shows that 73 percent of currently married women have the potential to give birth to a child at elevated risk of dying. Three in ten women have the potential for a birth in a single high-risk category (mainly too short a birth interval, too old a mother, and too high a birth order). Another four in ten women have the potential to give birth to a child in a multiple high-risk category (mainly, the mother is too old, and the infant is in a birth order too high).

9.7 REGISTRATION OF CHILD DEATHS

Vital registration systems are a key instrument for tracking mortality trends in a country. To obtain information on the extent to which child deaths are being registered in the Kyrgyz Republic[6], the KgDHS birth history included a question for each child reported as having ever died; the question asked whether a death certificate was available for the child. If a death certificate was not available, an additional question determined whether the death had ever been registered in the State Office for Registration of Civil Status (ZAGS). Using this information, Figure 9.2 shows that only four of the ten deaths that occurred among children born in the five years prior to the survey were registered with civil authorities. Moreover, mothers reported having a death certificate available for only 18 percent of the children who died during the five-year period before the survey. It should be noted, however, that data are based on the small number of cases (116 unweighted cases) and, thus, should be interpreted with caution.

Figure 9.2
Registration of deaths of children born in the five years prior to the 2012 Kyrgyz DHS



KgDHS 2012

[6] Information on birth registration is included in Chapter 2.

MATERNAL HEALTH 10

Key Findings

- Almost all mothers, (97 percent) who had a live birth in the five years before the survey reported seeing a health professional at least once for antenatal care for the most recent birth; 84 percent had at least four antenatal care visits.
- Among women who gave birth in the five years preceding the survey, 39 percent were told they had anemia, 45 percent took iron tablets or syrup, 37 percent took folic acid tablets, and 8 percent took deworming drugs during pregnancy.
- Virtually all deliveries in the Kyrgyz Republic (99 percent) take place in a health facility, and most are delivered by a skilled health provider, 77 percent by a doctor and 21 percent by a nurse or midwife.
- Overall, 96 percent of women received postnatal care (PNC) within 2 days of giving birth; 85 percent received PNC less than 4 hours after delivery, and the other 11 percent received care within 4 to 48 hours after delivery.
- The first postnatal checkup for 86 percent of mothers was provided by a doctor and for 10 percent of mothers was provided by a feldsher, nurse, or midwife.
- Four in ten newborns received PNC within the first hour of birth and another three in ten received care within one to three hours. Eight in ten births received postnatal care in the first two days after birth. Eighteen percent of newborns did not receive any postnatal checkup in the first week after birth.
- Fourteen percent of women who had antenatal care were admitted to a health facility when pregnant with their last child. The reason most often cited for hospital admission was the threat of miscarriage.
- Women are most likely to report that getting money for treatment is a serious problem in accessing health care when they are sick.

Mothers and children benefit from receiving proper care during pregnancy, delivery, and the post-partum period. Information on antenatal, delivery, and postnatal care is of great value in identifying subgroups of women who utilize such services and in planning for further improvements in service delivery. In the 2012 Kyrgyz Demographic and Health Survey (KgDHS), women who gave birth in the five years preceding the survey were asked questions about antenatal, delivery, and postnatal care. The information collected on antenatal care (ANC) included the type of provider, number of ANC visits made, stage of pregnancy at the time of the first visit, and specific services provided during the antenatal visit. In addition, women were asked questions about any hospital admission during the pregnancy. Questions related to delivery care included the place of delivery, the type of provider assisting the delivery, and whether the baby was delivered by Caesarian section. Data on postnatal care was obtained for both the mother and the baby and included the type of provider of postnatal care and timing of first postnatal checkup.

In addition to maternity care data, this chapter also presents information obtained in the 2012 KgDHS on barriers women report facing in getting health care when they are sick.

10.1 ANTENATAL CARE

Antenatal care from a skilled provider is important to monitor the pregnancy, thereby reducing risks for the mother and infant. In the Kyrgyz Republic, providers trained to assist during delivery include doctors, nurses, midwives, and feldshers.[1]

10.1.1 Antenatal Care Coverage

Table 10.1 shows that 97 percent of mothers who had a live birth in the five years before the survey reported seeing a health professional at least once for antenatal care for the most recent birth. Almost four-fifths (79 percent) saw a doctor, 4 percent saw a feldsher, and 13 percent received ANC care from a nurse or midwife. Coverage of antenatal care by a trained provider in the Kyrgys Republic (97 percent) is similar to that found in the 2010 Armenia DHS and 2007 Ukraine DHS (99 percent each), and it is substantially higher than that observed in the 2012 Tajikistan DHS (79 percent) and the 2006 Azerbaijan DHS (77 percent) (NSS [Armenia] et al., 2012; UCSR [Ukraine]et al., 2008; SA/MoH [Tajikistan] and ICF International, 2012; SSC [Azerbaijan] and Macro International Inc., 2008).

Table 10.1 Antenatal care

Percent distribution of women age 15-49 who had a live birth in the five years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth and the percentage receiving antenatal care from a skilled provider for the most recent birth, according to background characteristics, Kyrgyz Republic 2012

	Antenatal care provider								
Background characteristic	Doctor	Feldsher[1]	Nurse/ midwife	Traditional birth attendant	Missing	No ANC	Total	Percentage receiving antenatal care from a skilled provider[2]	Number of women
Mother's age at birth									
<20	75.6	5.4	14.3	0.0	0.0	4.7	100.0	95.3	187
20-34	80.4	4.0	13.1	0.1	0.3	2.2	100.0	97.5	2,421
35-49	75.7	5.6	13.6	0.0	0.2	5.0	100.0	94.8	406
Birth order									
1	84.4	3.7	9.8	0.2	0.0	2.0	100.0	97.9	840
2-3	80.3	4.1	12.8	0.0	0.4	2.4	100.0	97.2	1,482
4-5	73.0	5.5	17.7	0.0	0.2	3.5	100.0	96.3	587
6+	63.5	5.9	21.2	0.0	0.0	9.3	100.0	90.7	105
Residence									
Urban	91.8	1.0	5.9	0.0	0.2	1.1	100.0	98.7	935
Rural	73.9	5.8	16.5	0.1	0.2	3.5	100.0	96.2	2,079
Region									
Issyk-Kul	64.2	15.8	18.9	0.0	0.5	0.6	100.0	98.9	284
Djalal-Abad	94.7	0.0	4.5	0.0	0.5	0.3	100.0	99.2	547
Naryn	82.1	1.4	15.8	0.0	0.3	0.3	100.0	99.3	125
Batken	58.3	1.4	39.4	0.0	0.2	0.7	100.0	99.0	260
Osh Oblast	68.4	8.0	13.5	0.0	0.0	10.2	100.0	89.8	605
Talas	77.0	0.4	22.5	0.0	0.0	0.0	100.0	100.0	170
Chui	76.5	5.7	15.0	0.3	0.3	2.3	100.0	97.2	510
Bishkek City	98.3	0.3	0.4	0.0	0.0	0.9	100.0	99.1	428
Osh City	99.1	0.0	0.6	0.0	0.4	0.0	100.0	99.6	86
Education									
Basic general	81.1	3.8	12.5	0.0	0.1	2.5	100.0	97.4	326
Secondary	73.7	5.0	17.0	0.0	0.2	4.1	100.0	95.7	1,338
Professional primary/ middle	78.1	4.3	14.4	0.0	0.4	2.8	100.0	96.9	481
Higher	88.4	3.3	7.2	0.2	0.2	0.7	100.0	98.9	856
Wealth quintile									
Lowest	72.9	7.3	15.4	0.3	0.5	3.7	100.0	95.5	569
Second	73.7	6.1	16.6	0.0	0.3	3.2	100.0	96.5	587
Middle	73.5	5.4	18.8	0.0	0.3	2.0	100.0	97.7	633
Fourth	82.6	2.4	11.2	0.0	0.0	3.8	100.0	96.2	679
Highest	95.4	0.4	3.4	0.0	0.1	0.7	100.0	99.2	546
Total	79.4	4.3	13.2	0.0	0.2	2.7	100.0	97.0	3,014

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation. Total includes 13 women with no or only primary education.
[1] Feldsher is a mid-level health professional that provides care that is beyond the scope of a nurse but less than that of a physician.
[2] Skilled providers includes doctor, nurse, midwife, and feldsher.

[1] A feldsher is a mid-level health professional (equivalent of a paramedical practitioner). A feldsher provides care that is beyond the scope of a nurse but less than that of a physician. A feldsher oversees work at a feldsher-accoucher post (FAP) with no assigned doctor, while in larger facilities a feldsher works under a physician.

Table 10.1 also presents differentials in the percentage of mothers receiving ANC care from a health professional by selected background charateristics. Overall, the lowest ANC coverage rate was observed among mothers from the Osh Oblast region (90 percent). Although most women saw a trained provider for antenatal care, the proportion of women seeing a doctor for care varied considerably across subgroups. Urban women were more likely to see a doctor than rural women (92 and 74 percent, respectively). The role of doctors in providing ANC is especially limited in the Batken, Issyk-Kul, and Osh Oblast regions (58, 64, and 68 percent, respectively). The proportion of women who saw a doctor for ANC care increases with the wealth quintile, from just over 70 percent in the lowest three quintiles to 95 percent in the highest quintile.

10.1.2 Number of Antenatal Care Visits and Timing of First Visit

The Ministry of Health in the Kyrgyz Republic has adopted the World Health Organization (WHO) recommendation that pregnant women have at least four antenatal care visits during pregnancy (MOH, 2009a). Table 10.2 shows that this standard is met in the case of 84 percent of pregnant women in the Kyrgyz Republic. The proportion having at least four ANC visits has not changed much since the 1997 KgDHS (81 percent) (RIOP and Macro International Inc., 1998). Urban women are more likely than rural women to have four or more antenatal visits (93 and 79 percent, respectively). The proportion of pregnant women who have at least four antenatal care visits during pregnancy is much higher in the Kyrgyz Republic than that recorded in the 2006 Azerbaijan DHS (45 percent) or the 2007 Ukraine DHS (77 percent), but lower than that found in the 2010 Armenia DHS (93 percent) (ICF International, 2013).

Overall, four in five pregnant women (79 percent) received antenatal care in the first trimester. There is almost no difference between urban and rural women in the median number of months pregnant at the first ANC visit (3.0 months and 3.1 months, respectively).

Table 10.2 Number of antenatal care visits and timing of first visit

Percent distribution of women age 15-49 who had a live birth in the five years preceding the survey by number of antenatal care (ANC) visits for the most recent live birth, and by the timing of the first visit, and among women with ANC, median months pregnant at first visit, according to residence, Kyrgyz Republic 2012

	Residence		
Number and timing of ANC visits	Urban	Rural	Total
Number of ANC visits			
None	1.3	3.7	2.9
1	0.6	0.5	0.6
2-3	3.1	12.6	9.6
4+	93.0	79.3	83.6
Don't know/missing	2.0	3.9	3.3
Total	100.0	100.0	100.0
Number of months pregnant at time of first ANC visit			
No antenatal care	1.3	3.7	2.9
<4	78.7	78.9	78.8
4-5	17.1	14.6	15.3
6-7	2.3	2.5	2.4
8+	0.2	0.2	0.2
Don't know/missing	0.4	0.2	0.3
Total	100.0	100.0	100.0
Number of women	935	2,079	3,014
Median months pregnant at first visit (for those with ANC)	3.0	3.1	3.1
Number of women with ANC	923	2,002	2,926

10.1.3 Components of Antenatal Care

The content of ANC is important in assessing the quality of services. Pregnancy complications are an important source of maternal and child morbidity and mortality; thus, teaching pregnant women about the danger signs associated with pregnancy and administering appropriate tests are essential components of ANC. Table 10.3 presents information on the percentages of women who were told they have anemia, received iron and folic acid supplements, and took deworming tablets during the pregnancy that resulted in their most recent birth in the five years preceding the survey. The righthand part of the table also shows the percentage of women receiving ANC who were informed about the signs of pregnancy complications and the percentages who received specific routine ANC services, including blood pressure measurement and urine and blood sample analysis.

Among women with a live birth in the past five years, 39 percent were told they had anemia while pregnant, 45 percent took iron tablets or syrup, and 37 percent took folic acid tablets during the pregnancy that resulted in their most recent birth. Eight percent of pregnant women took deworming drugs.

Table 10.3 Components of antenatal care

Among women age 15-49 with a live birth in the five years preceding the survey, the percentage who were told they have anemia, took iron tablets or syrup, folic acid tablets, and drugs for intestinal parasites during the pregnancy of the most recent birth, and among women receiving antenatal care (ANC) for the most recent live birth in the five years preceding the survey, the percentage receiving specific antenatal services, according to background characteristics, Kyrgyz Republic 2012

	Among women with a live birth in the past five years, the percentage who during the pregnancy of their last birth:					Among women who received antenatal care for their most recent birth in the past five years, the percentage with the selected services				
Background characteristic	Were told they had anemia	Took iron tablets or syrup	Took folic acid tablets	Took intestinal parasite drugs	Number of women with a live birth in the past five years	Informed of signs of pregnancy com-plications	Blood pressure measured	Urine sample taken	Blood sample taken	Number of women with ANC for their most recent birth
Mother's age at birth										
<20	40.1	46.4	32.3	8.0	187	57.4	100.0	99.3	100.0	178
20-34	39.5	45.3	38.0	7.9	2,421	61.5	99.5	99.7	99.7	2,362
35-49	37.9	40.4	34.2	7.0	406	63.9	99.8	99.8	99.8	386
Birth order										
1	38.7	47.7	38.8	9.3	840	61.6	99.2	99.3	99.5	823
2-3	42.2	45.4	38.4	7.9	1,482	62.0	99.7	99.8	99.8	1,442
4-5	34.2	40.8	34.5	6.4	587	61.2	99.8	99.8	99.8	565
6+	32.4	33.2	21.2	2.2	105	55.6	100.0	100.0	100.0	95
Anemia status during pregnancy										
Diagnosed with anemia	100.0	80.3	50.8	10.1	1,185	68.6	99.5	99.7	99.8	1,161
No anemia	0.0	21.7	28.4	6.3	1,823	56.9	99.6	99.7	99.7	1,765
Residence										
Urban	45.9	45.0	40.4	11.6	935	69.2	99.7	99.7	99.7	923
Rural	36.4	44.6	35.7	6.1	2,079	58.0	99.5	99.7	99.7	2,002
Region										
Issyk-Kul	48.5	51.0	47.4	9.3	284	52.7	99.4	99.0	99.0	282
Djalal-Abad	39.2	38.5	38.2	2.5	547	65.0	99.8	99.8	99.8	542
Naryn	54.1	64.1	42.6	19.2	125	61.5	100.0	100.0	100.0	124
Batken	57.4	53.5	17.0	1.3	260	35.8	100.0	100.0	100.0	258
Osh Oblast	20.5	41.1	44.4	7.3	605	69.9	100.0	99.9	100.0	544
Talas	52.8	55.2	37.7	6.1	170	66.5	99.7	99.5	100.0	170
Chui	28.6	38.8	23.4	7.0	510	45.1	98.2	99.2	99.2	497
Bishkek City	55.2	47.1	46.7	17.6	428	82.8	100.0	100.0	100.0	424
Osh City	23.7	36.9	31.1	2.2	86	73.6	100.0	100.0	100.0	85
Education										
Basic general	23.7	30.9	28.3	6.5	326	47.4	100.0	99.9	100.0	317
Secondary	37.3	42.9	33.0	6.1	1,338	60.4	99.9	99.8	99.9	1,281
Professional primary/ middle	44.1	47.7	42.6	9.0	481	60.4	99.8	99.6	99.6	467
Higher	46.2	51.4	44.1	10.3	856	70.1	98.8	99.4	99.4	848
Wealth quintile										
Lowest	30.2	43.0	36.9	6.9	569	59.2	99.5	99.4	99.5	545
Second	38.0	46.5	37.9	5.0	587	59.1	99.5	99.9	99.9	567
Middle	39.2	44.0	33.8	6.8	633	53.9	99.8	99.6	99.7	619
Fourth	42.0	46.1	34.7	8.2	679	61.6	99.5	100.0	100.0	653
Highest	47.0	43.9	43.6	12.4	546	75.2	99.5	99.5	99.5	542
Total	39.3	44.7	37.1	7.8	3,014	61.5	99.6	99.7	99.7	2,926

Note: Total includes 13 women with no education or only primary education and 6 women missing anemia status during pregnancy.

The proportion of women who were told that they have anemia varies widely by region and education, ranging from 57 percent in the Batken region to 24 percent among women in Osh City and women with basic general education. Iron and folic acid supplementation rates also vary across subgroups of women. The proportion of women who take iron tablets or syrup is four times higher among women who were told they had anemia while pregnant with the last birth (80 percent) than among women were not told they were anemic (22 percent). Similarly, women who were told they had anemia were almost twice as likely to take folic acid supplements as women with no anemia (51 and 28 percent, respectively). Iron and folic acid supplementation decreases with the birth order. Regional variations in supplementation rates are marked. For example, mothers in the Naryn region are substantially more likely to take iron tablets or syrup than those in Osh city (64 percent versus 37 percent). Mothers in Bishkek and the Issyk-Kul region (47 percent each) are more than twice as likely to take folic acid tablets than mothers in the Batken and Chui regions (17 percent and 23 percent). There is no difference in iron supplementation rate by urban-rural residence, but urban women are slightly more likely to take folic acid supplements than rural women. The likelihood of receiving iron and folic acid supplements increases with education.

The KgDHS results indicate that the measurement of blood pressure and examination of urine and blood samples are virtually universal practices during ANC. Receiving information about signs of pregnancy complications, however, is less common. Overall, only 62 percent of pregnant women were given information about signs that they need to be aware of for the safety of their pregnancy. Women living in the Batken and Chui regions and women with basic general education were the least likely to have been informed about pregnancy complications (36, 45, and 47 percent, respectively).

10.2 DELIVERY CARE

10.2.1 Place of Delivery

Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that can cause the death or serious illness of the mother, infant, or both. Table 10.4 shows that virtually all deliveries in the Kyrgyz Republic (99 percent) take place in a health facility, with nearly all occurring in public sector facilities (98 percent).

Table 10.4 Place of delivery

Percent distribution of live births in the five years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Health facility		Home	Other	Missing	Total	Percentage delivered in a health facility	Number of births
	Public sector	Private sector						
Mother's age at birth								
<20	98.3	0.9	0.0	0.0	0.8	100.0	99.2	288
20-34	98.3	0.5	0.4	0.1	0.6	100.0	98.8	3,338
35-49	98.7	0.8	0.3	0.0	0.3	100.0	99.5	456
Birth order								
1	98.2	0.8	0.0	0.1	1.0	100.0	99.0	1,387
2-3	98.7	0.5	0.3	0.1	0.5	100.0	99.2	1,886
4-5	98.6	0.4	0.5	0.1	0.5	100.0	99.0	686
6+	94.7	0.0	5.3	0.0	0.0	100.0	94.7	123
Antenatal care visits[1]								
None	94.3	0.0	1.5	0.0	4.2	100.0	94.3	88
1-3	98.4	0.5	1.0	0.0	0.0	100.0	99.0	307
4+	98.8	0.8	0.3	0.0	0.1	100.0	99.6	2,519
Don't know/missing	100.0	0.0	0.0	0.0	0.0	100.0	100.0	100
Residence								
Urban	98.1	1.5	0.0	0.0	0.4	100.0	99.5	1,216
Rural	98.5	0.2	0.6	0.1	0.7	100.0	98.7	2,867
Region								
Issyk-Kul	99.6	0.0	0.0	0.3	0.2	100.0	99.6	385
Djalal-Abad	97.9	0.2	0.2	0.0	1.7	100.0	98.2	732
Naryn	99.6	0.0	0.2	0.0	0.2	100.0	99.6	176
Batken	97.8	0.4	1.4	0.2	0.3	100.0	98.1	365
Osh Oblast	99.3	0.0	0.3	0.0	0.4	100.0	99.3	831
Talas	99.0	0.0	0.5	0.0	0.5	100.0	99.0	256
Chui	97.8	0.5	0.8	0.1	0.8	100.0	98.3	660
Bishkek City	97.3	2.7	0.0	0.0	0.0	100.0	100.0	557
Osh City	97.5	1.0	0.0	0.5	1.0	100.0	98.5	119
Mother's education								
Basic general	99.1	0.0	0.3	0.1	0.5	100.0	99.1	432
Secondary	98.3	0.2	0.6	0.1	0.7	100.0	98.6	1,851
Professional primary/middle	99.2	0.3	0.1	0.0	0.4	100.0	99.4	666
Higher	97.8	1.5	0.2	0.0	0.5	100.0	99.3	1,109
Wealth quintile								
Lowest	98.8	0.2	0.3	0.0	0.7	100.0	99.0	779
Second	99.4	0.0	0.4	0.0	0.2	100.0	99.4	814
Middle	98.2	0.2	0.4	0.1	1.1	100.0	98.3	872
Fourth	97.8	0.6	0.7	0.1	0.7	100.0	98.4	902
Highest	97.8	1.9	0.0	0.1	0.2	100.0	99.7	715
Total	98.4	0.6	0.4	0.1	0.6	100.0	98.9	4,082

Note: Total includes 23 women with no or only primary education.
[1] Includes only the most recent birth in the five years preceding the survey.

10.2.2 Assistance at Delivery

Table 10.5 presents information on the the type of provider assisting at the delivery and the prevalence of Caesarian deliveries for births in the five years preceding the survey. Practically all births (99 percent) were delivered by a skilled health provider. The proportion of women who were assisted by a health professional at delivery in the Kyrgyz Republic is higher than that reported in the 2012 Tajikistan DHS and the 2006 Azerbaijan DHS (87 and 89 percent, respectively) and is similar to the rate in the 2010 Armenia DHS (100 percent) (SA/MoH [Tajikistan] and ICF International, 2012; SSC [Azerbaijan] and Macro International Inc., 2008; NSS [Armenia] et al., 2012).

Table 10.5 Assistance during delivery

Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery, percentage of birth assisted by a skilled provider, and the percentage delivered by caesarian-section, according to background characteristics, Kyrgyz Republic 2012

	Person providing assistance during delivery										
Background characteristic	Doctor	Feldsher[1]	Nurse/ midwife	Traditional birth attendant	Relative/ other	No one	Don't know/ missing	Total	Percentage delivered by a skilled provider[2]	Percentage delivered by C-section	Number of births
Mother's age at birth											
<20	76.6	0.0	22.5	0.0	0.0	0.0	0.8	100.0	99.2	5.6	288
20-34	76.7	0.3	22.0	0.1	0.2	0.1	0.6	100.0	99.1	5.0	3,338
35-49	83.2	0.6	16.0	0.0	0.0	0.0	0.3	100.0	99.7	12.1	456
Birth order											
1	78.5	0.1	20.3	0.0	0.0	0.3	0.8	100.0	98.9	6.3	1,387
2-3	76.8	0.3	22.3	0.0	0.1	0.0	0.4	100.0	99.4	5.7	1,886
4-5	78.3	0.7	20.5	0.0	0.1	0.0	0.5	100.0	99.5	5.6	686
6+	70.1	0.7	24.9	2.2	2.2	0.0	0.0	100.0	95.7	4.2	123
Antenatal care visits[1]											
None	82.5	0.0	13.3	0.0	0.0	0.0	4.2	100.0	95.8	11.3	88
1-3	65.5	0.2	33.9	0.0	0.0	0.0	0.5	100.0	99.5	4.6	307
4+	79.8	0.3	19.7	0.1	0.1	0.0	0.1	100.0	99.7	7.1	2,519
Don't know/missing	94.7	0.0	5.3	0.0	0.0	0.0	0.0	100.0	100.0	2.7	100
Residence											
Urban	84.1	0.3	15.1	0.0	0.0	0.0	0.4	100.0	99.5	8.9	1,216
Rural	74.6	0.3	24.1	0.1	0.2	0.1	0.6	100.0	99.0	4.6	2,867
Region											
Issyk-Kul	62.8	3.4	33.6	0.0	0.0	0.0	0.2	100.0	99.8	7.6	385
Djalal-Abad	75.9	0.0	22.4	0.0	0.0	0.0	1.7	100.0	98.3	3.0	732
Naryn	85.5	0.0	13.9	0.0	0.2	0.2	0.2	100.0	99.4	4.4	176
Batken	61.5	0.0	37.8	0.0	0.3	0.0	0.3	100.0	99.3	2.5	365
Osh Oblast	75.4	0.0	24.0	0.0	0.0	0.4	0.1	100.0	99.5	2.8	831
Talas	64.5	0.0	34.9	0.1	0.2	0.1	0.2	100.0	99.4	3.8	256
Chui	87.7	0.0	10.6	0.4	0.5	0.0	0.8	100.0	98.3	9.2	660
Bishkek City	90.7	0.0	9.3	0.0	0.0	0.0	0.0	100.0	100.0	12.2	557
Osh City	93.1	0.0	5.4	0.0	0.5	0.0	1.0	100.0	98.5	7.8	119
Mother's education											
Basic general	79.5	0.0	19.8	0.0	0.1	0.0	0.5	100.0	99.4	3.1	432
Secondary	74.5	0.3	23.9	0.1	0.2	0.2	0.7	100.0	98.8	4.7	1,851
Professional primary/ middle	76.0	0.5	23.0	0.1	0.0	0.0	0.4	100.0	99.5	5.9	666
Higher	82.1	0.3	17.1	0.0	0.2	0.0	0.2	100.0	99.6	8.7	1,109
Wealth quintile											
Lowest	73.3	0.9	24.9	0.0	0.1	0.0	0.8	100.0	99.2	4.0	779
Second	75.0	0.2	24.3	0.0	0.0	0.1	0.4	100.0	99.6	3.5	814
Middle	72.2	0.1	26.5	0.0	0.3	0.4	0.5	100.0	98.8	3.7	872
Fourth	77.7	0.3	20.5	0.3	0.3	0.0	0.9	100.0	98.6	7.7	902
Highest	90.6	0.1	9.1	0.0	0.1	0.0	0.2	100.0	99.7	10.7	715
Total	77.4	0.3	21.4	0.1	0.1	0.1	0.6	100.0	99.1	5.8	4,082

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation. Total includes 23 women with no education or only primary education.

[1] Feldsher is a mid-level health professional who provides medical care beyond the scope of a nurse but less than that of a physician.

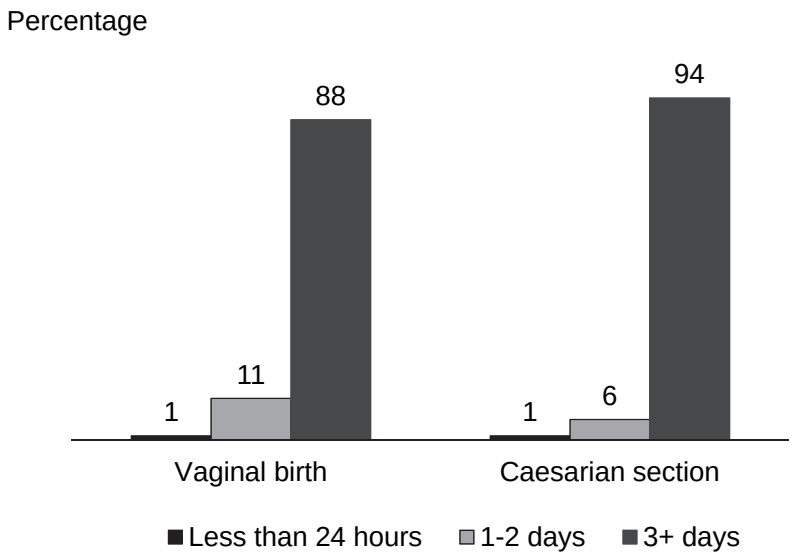
[2] Skilled providers includes doctor, nurse, midwife, and feldsher.

With respect to the type of provider, 77 percent of births were assisted by a doctor, 21 percent by a nurse or midwife, and less than 1 percent by a feldsher. The proportion of women who were assisted at delivery by a doctor is higher in urban areas than in rural areas and varies widely by region, from 62 percent in the Batken region to 93 percent in Osh City.

Six percent of births in the Kyrgyz Republic were delivered by C-section. Women age 35-49, women with no antenatal care, women in Bishkek, and women in the highest wealth quintile were the most likely to have a C-section delivery (11 percent or higher).

As shown in Figure 10.1, a large majority of women who deliver in a health facility stay for at least three days in the facility after delivery. Among those with a vaginal birth, 88 percent stay three or more days in the facility, while 11 percent stay 1-2 days and 1 percent are released within 24 hours after delivering. As expected, the duration of stay in health facilities is longer for those who deliver by C-section. For these births, 94 percent of mothers stay for three or more days.

Figure 10.1
Mother's duration of stay in the health facility after giving birth, Kyrgyz Republic



Note: Percentage among women whose last birth in the last 5 years was delivered in a health facility.

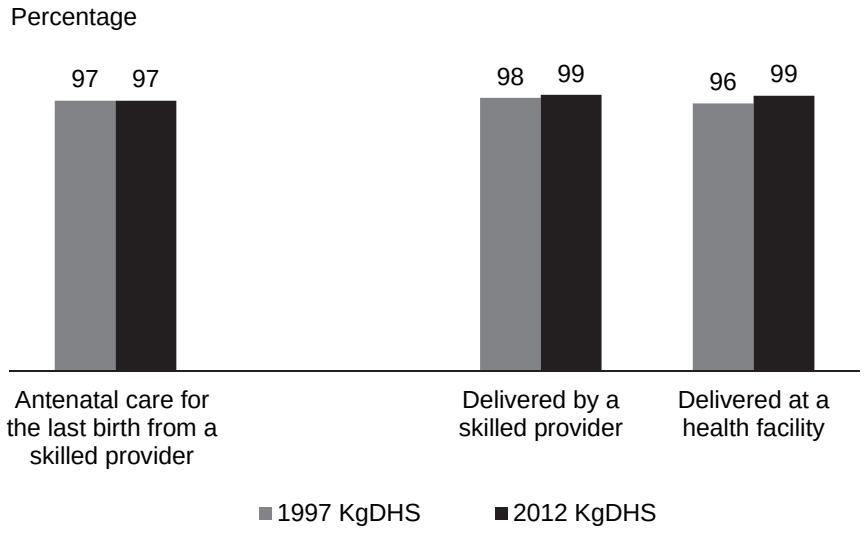
KgDHS 2012

10.3 TRENDS IN ANTENATAL AND DELIVERY CARE INDICATORS

Data from the 2012 KgDHS can be compared with information obtained in the 1997 KgDHS and the 2006 MICS survey to explore trends in antenatal and delivery care in the Kyrgyz Republic over the past 15 years. A comparison of the 1997 and 2012 DHS antenatal and delivery care rates indicates that coverage for these maternal health services has been virtually universal in Kyrgyzstan throughout the past 15 years (Figure 10.2).[2]

[2] The 1997 Kyrgyz DHS survey collected information on maternal care data for all births in the three years before the survey while the 2012 KgDHS obtained ANC data for the last birth and delivery care data for all births during the five years before the survey. Thus, to examine trends in ANC coverage since 1997, data from both the 1997 KgDHS and the 2012 KgDHS data were calculated based on information for the last birth in the three years before the survey. The delivery care indicators for both surveys were calculated for all births in the three years before the survey.

Figure 10.2
Maternal care indicators among women age 15-49 who had a live birth in the three years preceding the survey



Although the overall coverage rates are uniformly high, the KgDHS results document a shift over the past 15 years in the extent to which women are receiving maternity care from a doctor (data not shown). The proportion of women seeing a doctor for ANC care increased from 66 percent in the 1997 KgDHS to 80 percent in the 2012 KgDHS, and the proportion of deliveries assisted by a doctor grew from 61 percent at the time of the 1997 KgDHS to 78 percent in the 2012 KgDHS.[3] Most of the increase in reliance on doctors appears to have taken place before 2006. A comparison of data from the 2006 MICS (NSC, 2007) with the 2012 KgDHS[4] results suggests that the rate of physician-assisted deliveries changed very little in the period between the two surveys (76 and 78 percent, respectively).

10.4 POSTNATAL CARE FOR MOTHERS AND CHILDREN

The postnatal period is defined as the time just after delivery through the first six weeks following delivery. The timing of postnatal care, especially the first two days after delivery, is critical because most maternal and neonatal deaths occur during this period. Postnatal care provides an opportunity to inform the mother on how to care for herself and her newborn and to treat complications arising from the delivery. To assess the extent of postnatal care utilization, women interviewed in the 2012 KgDHS were asked about checkups for their last birth in the five years preceding the survey. Specifically, they were asked if they and/or their child had received a health checkup after the delivery, the timing of the first check, and the type of health provider.

[3] The rate of doctor-provided ANC care was calculated for the most recent birth in the three-year period prior to survey for both the 1997 KgDHS and the 2012 KgDHS. For both surveys, the rate of doctor-assisted deliveries was calculated for all births in the three years before the survey.
[4] The 2006 MICS obtained delivery care data for the most recent birth in the two years before the survey. To examine the trend since the 2006 MICS survey, the rate of doctor-assisted deliveries was calculated for the most recent birth in the two years before the 2012 KgDHS.

10.4.1 Postnatal Checkup for Mother

Overall, 96 percent of women received postnatal care (PNC) within two days after they give birth; the majority (85 percent) received PNC within four hours after delivery, and another 11 percent received care within two days of delivery. Two percent of women did not receive any postnatal care in the first six weeks after delivery (Table 10.6).

Table 10.6 shows that among women who gave birth in the two years before the survey, the likelihood of receiving postnatal care varies little by the mother's characteristics. For example, PNC coverage increases only slightly with women's level of education; 94 percent of mothers with basic general education have a postnatal checkup within two days after birth compared with 97 percent of mothers with higher than secondary education.

Table 10.6 Timing of first postnatal checkup for the mother

Among women age 15-49 giving birth in the two years preceding the survey, the percent distribution of the mother's first postnatal check-up for the last live birth by time after delivery, and the percentage of women with a live birth in the two years preceding the survey who received a postnatal checkup in the first two days after giving birth, according to background characteristics, Kyrgyz Republic 2012

	Time after delivery of mother's first postnatal checkup									
Background characteristic	Less than 4 hours	4-23 hours	1-2 days	3-6 days	7-41 days	Don't know/ missing	No postnatal checkup[1]	Total	Percentage of women with a postnatal checkup in the first two days after birth	Number of women
Mother's age at birth										
<20	84.2	4.2	4.4	1.3	0.0	0.6	5.3	100.0	92.8	133
20-34	84.6	3.6	8.0	0.9	0.2	0.9	1.7	100.0	96.2	1,367
35-49	86.9	2.8	6.0	0.0	0.0	3.5	0.8	100.0	95.7	196
Birth order										
1	85.1	3.4	7.8	1.4	0.1	0.9	1.3	100.0	96.3	553
2-3	85.1	3.5	7.7	0.5	0.1	0.8	2.2	100.0	96.3	803
4-5	83.9	3.5	6.9	0.7	0.4	2.7	1.7	100.0	94.4	286
6+	82.8	6.1	4.7	0.0	0.0	1.5	5.0	100.0	93.5	54
Residence										
Urban	86.3	4.6	6.6	0.1	0.0	1.7	0.8	100.0	97.4	500
Rural	84.3	3.1	7.9	1.1	0.3	1.0	2.4	100.0	95.3	1,196
Region										
Issyk-Kul	87.0	2.0	3.3	0.4	0.5	2.3	4.4	100.0	92.4	157
Djalal-Abad	92.4	4.0	1.8	0.0	0.0	0.6	1.3	100.0	98.2	322
Naryn	89.8	2.5	6.5	0.7	0.0	0.0	0.5	100.0	98.8	72
Batken	87.5	1.9	9.0	0.0	0.3	0.3	0.9	100.0	98.5	165
Osh Oblast	82.9	3.3	9.0	1.4	0.0	2.1	1.2	100.0	95.2	342
Talas	81.0	1.5	13.1	1.2	0.4	0.3	2.5	100.0	95.6	97
Chui	72.4	4.2	15.4	2.4	0.5	0.5	4.6	100.0	92.0	278
Bishkek City	87.9	5.6	3.9	0.0	0.0	2.6	0.0	100.0	97.4	211
Osh City	91.2	4.6	4.0	0.2	0.0	0.0	0.0	100.0	99.8	53
Education										
Basic general	84.2	4.7	4.6	2.1	0.0	2.1	2.4	100.0	93.5	197
Secondary	84.8	2.4	8.7	0.4	0.2	1.1	2.5	100.0	95.9	758
Professional primary/ middle	83.9	3.9	8.6	1.2	0.1	0.7	1.5	100.0	96.5	266
Higher	85.6	4.6	6.3	0.8	0.3	1.3	1.1	100.0	96.5	465
Wealth quintile										
Lowest	86.3	2.0	7.7	1.5	0.0	0.8	1.7	100.0	95.9	315
Second	85.2	3.4	8.0	0.4	0.5	0.5	2.0	100.0	96.6	343
Middle	83.5	3.1	7.8	1.3	0.4	0.6	3.3	100.0	94.5	363
Fourth	84.3	3.3	7.6	0.8	0.0	2.2	1.9	100.0	95.1	380
Highest	85.3	6.1	6.3	0.0	0.0	1.9	0.4	100.0	97.7	296
Total	84.9	3.5	7.5	0.8	0.2	1.2	1.9	100.0	95.9	1,696

Note: Total includes nine women with no education or only primary education.
[1] Includes women who received a checkup after 41 days.

Table 10.7 shows that a doctor provided the first postnatal checkup to 86 percent of mothers who gave birth in the two years preceding the survey, and a feldsher, nurse, or midwife examined 10 percent of the mothers. The proportion of mothers who received the first postnatal care from a doctor generally increases with the woman's age, education level, and wealth quintile. As expected, mothers in the urban areas are more likely than mothers in the rural areas to receive care from a doctor (91 and 83 percent, respectively).

Table 10.7 Type of provider of first postnatal checkup for the mother

Among women age 15-49 giving birth in the two years preceding the survey, the percent distribution by type of provider of the mother's first postnatal health check in the two days after the last live birth, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Type of health provider of mother's first postnatal checkup			No postnatal checkup in the first two days after birth	Total	Number of women
	Doctor	Feldsher[1]/ nurse/midwife	Missing			
Mother's age at birth						
<20	82.4	10.5	0.6	6.5	100.0	133
20-34	85.4	10.8	1.0	2.7	100.0	1,367
35-49	89.4	6.3	3.5	0.8	100.0	196
Birth order						
1	86.8	9.5	0.9	2.8	100.0	553
2-3	85.3	11.0	1.0	2.7	100.0	803
4-5	84.2	10.2	2.7	2.9	100.0	286
6+	86.9	6.6	1.5	5.0	100.0	54
Residence						
Urban	91.4	6.0	1.7	0.9	100.0	500
Rural	83.2	12.0	1.1	3.6	100.0	1,196
Region						
Issyk-Kul	83.7	8.7	3.0	4.6	100.0	157
Djalal-Abad	94.8	3.4	0.6	1.3	100.0	322
Naryn	95.1	3.8	0.0	1.2	100.0	72
Batken	84.2	14.3	0.6	1.0	100.0	165
Osh Oblast	74.5	20.7	2.1	2.7	100.0	342
Talas	88.6	7.0	0.3	4.1	100.0	97
Chui	77.4	14.6	0.5	7.5	100.0	278
Bishkek City	95.1	2.3	2.6	0.0	100.0	211
Osh City	99.4	0.4	0.0	0.2	100.0	53
Education						
Basic general	82.7	10.7	2.1	4.5	100.0	197
Secondary	84.5	11.4	1.3	2.8	100.0	758
Professional primary/middle	86.5	10.0	0.7	2.8	100.0	266
Higher	88.5	8.0	1.3	2.2	100.0	465
Wealth quintile						
Lowest	82.2	13.7	0.8	3.2	100.0	315
Second	84.6	12.0	0.8	2.6	100.0	343
Middle	80.8	13.7	0.7	4.8	100.0	363
Fourth	87.4	7.8	2.2	2.7	100.0	380
Highest	94.3	3.4	1.9	0.4	100.0	296
Total	85.6	10.2	1.3	2.8	100.0	1,696

Note: Total includes 9 women with no or only primary education.
[1] Feldsher is a mid-level health professional that provides medical care beyond the scope of a nurse but less than that of a physician.

10.4.2 Postnatal Checkup for the Newborn

Newborn care is essential to reduce neonatal mortality and to prevent complications soon after delivery. Table 10.8 provides information on the timing of newborn care among last-born births in the two years preceding the survey. Four in ten newborns received postnatal care within the first hour of birth and three in ten received postnatal care within the first four hours. In all, 80 percent of births received postnatal care in the critical first two days after birth.

Table 10.8 Timing of first postnatal checkup for the newborn

Percent distribution of last births in the two years preceding the survey by time after birth of first postnatal checkup, and the percentage of births with a postnatal checkup in the first two days after birth, according to background characteristics, Kyrgyz Republic 2011

Background characteristic	Time after birth of newborn's first postnatal checkup						No postnatal checkup[1]	Total	Percentage of births with a postnatal checkup in the first two days after birth	Number of births
	Less than 1 hour	1-3 hours	4-23 hours	1-2 days	3-6 days	Don't know/ missing				
Mother's age at birth										
<20	46.5	28.3	4.6	0.7	0.7	0.6	18.6	100.0	80.1	133
20-34	43.3	30.2	2.0	3.7	1.4	1.5	18.0	100.0	79.1	1,367
35-49	40.8	36.7	1.7	5.2	0.5	2.0	13.2	100.0	84.4	196
Birth order										
1	46.5	28.3	3.3	2.3	0.9	1.1	17.6	100.0	80.4	553
2-3	41.7	31.5	1.1	4.6	1.6	1.6	17.8	100.0	79.0	803
4-5	42.6	33.2	2.3	3.0	1.1	1.7	16.1	100.0	81.1	286
6+	35.0	33.1	4.3	5.1	0.0	2.6	19.8	100.0	77.6	54
Residence										
Urban	56.0	25.5	2.0	3.1	0.9	1.3	11.2	100.0	86.6	500
Rural	37.9	33.0	2.2	3.8	1.4	1.5	20.1	100.0	76.9	1,196
Region										
Issyk-Kul	67.2	13.2	1.7	0.7	0.9	2.0	14.3	100.0	82.8	157
Djalal-Abad	79.8	7.9	4.0	2.2	0.5	0.6	5.0	100.0	93.9	322
Naryn	20.7	22.9	0.0	1.4	5.7	0.0	49.4	100.0	45.0	72
Batken	21.0	41.7	1.7	0.3	3.2	1.4	30.8	100.0	64.6	165
Osh Oblast	20.5	47.5	1.4	4.1	1.5	3.7	21.3	100.0	73.5	342
Talas	30.6	48.1	0.3	4.8	0.4	0.0	15.8	100.0	83.8	97
Chui	18.0	41.2	3.9	11.2	0.5	0.5	24.7	100.0	74.3	278
Bishkek City	71.4	22.3	0.9	0.3	0.0	1.7	3.3	100.0	95.0	211
Osh City	39.4	38.9	0.5	1.7	3.7	0.0	15.9	100.0	80.4	53
Mother's education										
Basic general	41.1	27.8	2.0	5.2	1.3	2.1	20.5	100.0	76.1	197
Secondary	41.7	32.5	1.7	3.1	1.0	1.8	18.1	100.0	79.1	758
Professional primary/ middle	44.6	29.9	2.5	4.7	1.3	0.6	16.4	100.0	81.7	266
Higher	46.7	29.3	2.8	3.1	1.5	1.2	15.3	100.0	81.9	465
Wealth quintile										
Lowest	43.4	33.7	1.8	1.3	1.2	0.6	18.1	100.0	80.2	315
Second	42.3	33.8	3.0	4.9	1.3	1.8	12.9	100.0	84.1	343
Middle	35.4	29.4	1.5	4.6	2.0	1.3	25.8	100.0	71.0	363
Fourth	37.3	32.0	1.9	4.6	0.8	2.3	21.0	100.0	75.8	380
Highest	61.3	24.2	2.7	2.1	0.9	1.2	7.6	100.0	90.3	296
Total	43.2	30.8	2.1	3.6	1.3	1.5	17.5	100.0	79.8	1,696

Note: Total includes nine women with no education or only primary education.
[1] Includes newborns who received a checkup after the first week.

The likelihood that a newborn received postnatal care within two days after birth varies widely across subgroups. The proportion of births with postnatal checkups within two days of birth is highest among births in Bishkek City (95 percent) and the Djalal-Abad region (94 percent) and among those in the richest households (90 percent). On the opposite end of the spectrum, almost half of newborns in the Naryn region and 31 percent in the Batken region received no postnatal care.

Table 10.9 presents the percent distribution of last births in the two years preceding the survey by type of provider of postnatal care during the first two days after delivery, according to background characteristics. Three in four births received a postnatal checkup from a doctor and 6 percent from a feldsher, nurse, or midwife. The proportion of births who received the first postnatal care checkup from a doctor increases with the mother's age and education level. As expected, mothers in the urban areas are more likely than mothers in the rural areas to receive care from a doctor (84 and 70 percent, respectively). In the Djalal-Abad region and Bishkek City, more than nine in ten births received a postnatal check up from a doctor. On the other hand, only 44 percent of births in the Naryn region were examined by a doctor.

Table 10.9 Type of provider of first postnatal checkup for the newborn

Percent distribution of last births in the two years preceding the survey by type of provider of the newborn's first postnatal health check during the two days after the last live birth, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Type of health provider of newborn's first postnatal checkup			No postnatal checkup in the first two days after birth	Total	Number of births
	Doctor	Feldsher[1]/ nurse/midwife	Missing			
Mother's age at birth						
<20	70.4	9.6	0.6	19.3	100.0	133
20-34	74.0	5.1	1.6	19.4	100.0	1,367
35-49	76.8	7.6	2.0	13.6	100.0	196
Birth order						
1	75.8	4.6	1.3	18.3	100.0	553
2-3	73.4	5.6	1.6	19.4	100.0	803
4-5	72.7	8.4	1.7	17.2	100.0	286
6+	72.1	5.5	2.6	19.8	100.0	54
Residence						
Urban	83.5	3.1	1.3	12.1	100.0	500
Rural	70.1	6.8	1.6	21.4	100.0	1,196
Region						
Issyk-Kul	75.1	7.6	2.0	15.3	100.0	157
Djalal-Abad	91.0	3.0	0.9	5.1	100.0	322
Naryn	44.4	0.6	0.0	55.0	100.0	72
Batken	63.2	1.4	1.4	34.0	100.0	165
Osh Oblast	59.4	14.1	3.7	22.8	100.0	342
Talas	76.5	7.2	0.0	16.2	100.0	97
Chui	68.8	5.5	0.5	25.2	100.0	278
Bishkek City	94.3	0.6	1.7	3.3	100.0	211
Osh City	78.2	2.2	0.0	19.6	100.0	53
Mother's education						
Basic general	68.6	7.5	2.1	21.9	100.0	197
Secondary	72.6	6.4	2.0	19.0	100.0	758
Professional primary/middle	73.8	7.9	0.6	17.7	100.0	266
Higher	79.2	2.8	1.2	16.9	100.0	465
Wealth quintile						
Lowest	71.2	9.0	0.6	19.3	100.0	315
Second	74.3	9.8	2.1	13.8	100.0	343
Middle	66.9	4.1	1.3	27.8	100.0	363
Fourth	71.1	4.7	2.3	21.9	100.0	380
Highest	89.3	1.0	1.2	8.5	100.0	296
Total	74.0	5.7	1.5	18.7	100.0	1,696

Note: Total includes 9 women with no or only primary education.

[1] Feldsher is a mid-level health professional that provides medical care beyond the scope of a nurse but less than that of a physician.

10.5 PROBLEMS IN ACCESSING HEALTH CARE

Many factors can prevent women from getting medical advice or treatment for themselves when they need it. In the 2012 KgDHS, all women were asked if each of the following were a serious problem in obtaining health care when they are sick: getting permission to go for treatment, getting money needed for advice or treatment, distance to the health facility, and not wanting to go alone. It should be noted that answers to the question on getting permission to go for treatment do not necessarily refer to just the respondent’s husband or family but may include non-related people, such as an employer or a health insurance company.

Table 10.10 Problems in accessing health care

Percentage of women age 15-49 who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Problems in accessing health care					
	Getting permission to go for treatment	Getting money for advice or treatment	Distance to health facility	Not wanting to go alone	At least one problem accessing health care	Number of women
Age						
15-19	22.4	36.7	18.3	29.9	48.3	1,637
20-34	23.4	38.1	22.0	16.7	46.9	3,819
35-49	19.8	37.9	21.4	13.5	45.9	2,751
Number of living children						
0	20.1	34.0	17.8	24.8	44.2	2,780
1-2	21.0	36.2	19.3	13.9	43.5	2,683
3-4	23.2	40.5	24.5	14.4	49.9	2,183
5+	31.8	52.2	31.7	21.4	64.0	562
Marital status						
Never married	18.4	33.5	16.6	25.2	43.0	2,245
Married or living together	24.1	39.6	23.5	16.1	49.0	5,256
Divorced/separated/widowed	18.0	37.0	16.9	12.2	43.1	707
Employed last 12 months						
Not employed	25.0	41.5	23.5	22.0	51.6	5,658
Employed for cash	15.3	28.2	15.2	9.6	35.2	2,346
Employed not for cash	14.5	41.0	17.3	11.3	47.9	201
Residence						
Urban	12.5	26.0	13.7	11.0	31.4	3,070
Rural	27.7	44.7	25.4	22.6	56.1	5,138
Region						
Issyk-Kul	6.0	23.7	13.8	12.4	31.1	650
Djalal-Abad	20.5	53.1	17.6	20.0	57.0	1,332
Naryn	10.4	43.3	27.0	13.7	53.0	281
Batken	49.3	63.1	50.6	30.3	75.4	616
Osh Oblast	37.8	49.8	27.3	34.1	68.9	1,627
Talas	23.8	56.0	35.7	25.3	64.8	360
Chui	25.7	25.7	16.4	9.8	35.6	1,465
Bishkek City	5.0	17.4	12.6	7.0	20.6	1,566
Osh City	1.2	20.7	2.0	8.4	23.1	311
Education						
None/primary	(39.5)	(49.8)	(49.0)	(26.3)	(65.4)	39
Basic general	27.9	42.8	22.3	26.7	53.4	1,139
Secondary	28.2	47.9	26.3	22.8	57.7	3,468
Professional primary/middle	17.2	32.2	18.8	13.4	41.2	1,364
Higher	11.9	22.3	12.9	9.6	29.6	2,198
Wealth quintile						
Lowest	20.9	41.4	21.5	19.8	53.5	1,459
Second	28.1	48.8	26.8	25.5	59.6	1,473
Middle	34.3	49.4	30.0	24.7	60.7	1,538
Fourth	23.4	35.2	20.9	17.7	45.5	1,667
Highest	8.2	20.5	10.0	7.6	24.0	2,071
Total	22.0	37.7	21.0	18.2	46.9	8,208

Note: Total includes 3 women with missing information on employment. Figures in parentheses are based on 25-49 unweighted cases.

Table 10.10 shows the percentages, by background characteristics, of women age 15-49 who reported having serious problems in accessing health care for themselves. Forty-seven percent of women reported having at least one problem in accessing health care. The most often cited problem was getting money for treatment (38 percent). Similar percentages reported difficulty in getting permission to go (22 percent) and the distance to the health facility (21 percent) as problems. The least frequently cited problem was not wanting to go alone (18 percent).Younger women, women with many children, married women, women who are not employed, those who live in rural areas, women with secondary or less education, and women in the lowest three wealth quintiles were more likely to report problems in accessing health care than other women. Three in four women in the Batken region reported at least one problem in accessing health care for themselves (75 percent); getting money for treatment was mentioned as a problem by 63 percent and distance to a health facility was cited by half of women in the region. On the other hand, only 23 percent of women in Osh City and 21 percent of women in Bishkek City cited any problem.

10.6 HOSPITAL ADMISSIONS

Women who gave birth in the five years before the survey and had ANC care for the most recent pregnancy were asked whether they had ever been admitted to a health facility during the pregnancy. Those who were admitted to a facility were further asked the number of times they were admitted (including day-bed occupancy) and the reasons for any admissions. Table 10.11 presents the results of these questions.

Table 10.11 Hospital admissions during the most recent pregnancy

Among women age 15-49 with a live birth in the five years preceding the survey who had antenatal care (ANC), the percentage who reported being admitted to the hospital, including day-bed occupancy during the pregnancy for the last live birth and the percent distribution of admitted women by number of admissions, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Percentage of women admitted to a health facility	Number of women with ANC	Percent distribution of women admitted to a health facility by number of admissions					Number of women with admissions to a health facility during the most recent pregnancy
			1-2 times	3-5 times	6+ times	Missing	Total	
Mother's age at birth								
<20	19.6	178	(79.0)	(12.0)	(9.0)	(0.0)	100.0	35
20-34	13.1	2,362	82.7	11.8	4.5	1.0	100.0	309
35-49	13.1	386	84.6	6.5	1.3	7.6	100.0	51
Birth order								
1	18.7	823	77.6	16.0	5.6	0.8	100.0	154
2-3	12.3	1,442	87.0	9.0	2.3	1.7	100.0	177
4-5	10.4	565	80.8	6.0	8.8	4.4	100.0	59
6+	6.1	95	*	*	*	*	100.0	6
Residence								
Urban	15.3	923	86.2	12.0	0.5	1.2	100.0	141
Rural	12.7	2,002	80.6	10.6	6.7	2.0	100.0	254
Region								
Issyk-Kul	18.4	282	89.4	0.0	7.2	3.4	100.0	52
Djalal-Abad	7.8	542	(89.7)	(5.3)	(2.4)	(2.6)	100.0	42
Naryn	15.5	124	(80.9)	(16.8)	(2.3)	(0.0)	100.0	19
Batken	15.1	258	72.1	19.8	6.4	1.6	100.0	39
Osh Oblast	4.5	544	*	*	*	*	100.0	25
Talas	24.4	170	92.1	7.9	0.0	0.0	100.0	41
Chui	18.1	497	73.1	17.8	9.1	0.0	100.0	90
Bishkek City	18.9	424	87.6	10.2	0.0	2.2	100.0	80
Osh City	8.1	85	*	*	*	*	100.0	7
Education								
None/primary	*	13	*	*	*	*	0.0	0
Basic general	6.6	317	*	*	*	*	100.0	21
Secondary	11.9	1,281	81.2	13.5	3.2	2.1	100.0	153
Professional primary/ middle	14.0	467	84.6	5.7	7.3	2.4	100.0	65
Higher	18.4	848	83.8	9.7	5.2	1.3	100.0	156
Wealth quintile								
Lowest	10.5	545	75.7	15.5	7.5	1.4	100.0	57
Second	12.9	567	88.5	8.7	1.3	1.5	100.0	73
Middle	13.9	619	74.2	10.9	11.7	3.2	100.0	86
Fourth	12.6	653	87.9	8.6	2.8	0.6	100.0	82
Highest	17.7	542	85.2	12.7	0.3	1.8	100.0	96
Total	13.5	2,926	82.6	11.1	4.5	1.7	100.0	395

Note: Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 10.11 shows that 14 percent of women who had an antenatal care visit reported being admitted to a health facility at least once when pregnant with their last child. Among these women, 83 percent were admitted to a health facility one to two times, 11 percent three to five times, and 5 percent six or more times. The proportion of women who were admitted to a health facility is slightly higher in urban areas than in rural and varies widely by region, from 5 percent in the Osh Oblast region to 24 percent in the Talas region. Overall, women under age 20, women pregnant with their first child, those with higher education, and those from the highest wealth quintile are more likely than other women to have been addmitted to a health facility during their most recent pregnancy. The most cited reason for a pregnant woman to be admitted to a health facility was the threat of miscarriage (37 percent). Other reasons included anemia (10 percent), high blood pressure (6 percent),and threat of preterm labor (5 percent) (data not shown).

CHILD HEALTH 11

Key Findings

- The proportion of children age18-29 months who received all basic WHO-recommended vaccinations has declined over the past 15 years, from 84 percent of children age 18-29 months at the time of the 1997 Kyrgyz DHS to 74 percent of children in the 2012 KgDHS. The change is primarily due to fewer children receiving the second and third doses of polio and DPT.
- Five percent of children under age 5 had diarrhea in the two weeks preceding the survey. Of these children, 55 percent received treatment from a health facility or health provider, 68 percent were given oral rehydration therapy (ORT), and almost half were given more liquids than usual.
- Three-quarters of mothers of children under age 5 have heard about oral rehydration packets (Regidron).
- Safe disposal of young children's stool is common; 69 percent of mothers reported that the last time their youngest child under age 5 passed stool, they disposed of the fecal material in a safe manner.

This chapter presents findings in several areas of importance to child health, including the mother's estimate of the baby's size at birth, the vaccination status of children, and the prevalence and treatment of several major childhood illnesses. Information on perceived size at birth is important for the design and implementation of programs aimed at reducing neonatal and infant mortality. Knowing how vaccination coverage varies among subgroups of the population can aid in program planning.

Examining treatment practices and contact with health services for children with three major childhood illnesses—acute respiratory infection (ARI), fever, and diarrhea—can help assess national programs aimed at reducing mortality from these illnesses. Information is provided on the prevalence of ARI, fever, and diarrhea in the two weeks before the survey and the extent to which treatment was sought from a health facility or medically trained provider. The data on the coverage of oral rehydration therapy (ORT) and use of increased fluids to treat diarrheal disease can help assess the effectiveness of programs that recommend these treatments. Information is also presented on the mother's knowledge of danger signs indicating a child's need for medical attention.

11.1 CHILD'S SIZE AND WEIGHT AT BIRTH

A child's birth weight or size at birth is an important indicator of the child's vulnerability to the risk of childhood illness and chance of survival. Children whose birth weight is considered low, i.e., less than 2.5 kilograms, have a higher than average risk of early childhood death. In the 2012 KgDHS, for births in the five years before the survey, the actual birth weight was recorded in kilograms in the Woman's Questionnaire, based on either the child's health card or the mother's recall. Because birth weight was likely to be unknown for some babies, particularly for those born at home, the mother's estimate of the baby's size was also obtained in the KgDHS. A mother's report of a child being "very small" or "smaller than average," even though subjective, was considered a useful proxy for low birth weight.

Table 11.1 shows that an actual birth weight was recorded for almost all children (99 percent). Among the children for whom birth weight information was obtained, 6 percent were reported to have weighed less than 2.5 kg at birth. The proportion of children with low birth weight varies only slightly by

background characteristics. The largest differences are observed by region, with the proportion of low birth weight children varying from 2 percent in Osh City to 9 percent in Bishkek City.

Table 11.1 Child's size and weight at birth

Percent distribution of live births in the five years preceding the survey by mother's estimate of baby's size at birth, percentage of live births in the five years preceding the survey that have a reported birth weight, and among live births in the five years preceding the survey with a reported birth weight, percentage less than 2.5 kg, according to background characteristics, Kyrgyz Republic 2012

	Percent distribution of all live births by size of child at birth							Births with a reported birth weight[1]	
Background characteristic	Very small	Smaller than average	Average or larger	Don't know/ missing	Total	Percentage of all births that have a reported birth weight[1]	Number of births	Percentage less than 2.5 kg	Number of births
Mother's age at birth									
<20	4.5	14.0	81.2	0.2	100.0	99.5	288	6.5	287
20-34	2.0	12.8	84.3	0.9	100.0	98.7	3,338	6.0	3,296
35-49	3.0	15.3	81.5	0.3	100.0	99.7	456	6.2	455
Birth order									
1	2.7	15.9	80.1	1.3	100.0	98.6	1,387	6.9	1,367
2-3	2.4	12.0	85.0	0.5	100.0	99.2	1,886	6.3	1,870
4-5	1.5	9.7	88.3	0.6	100.0	98.6	686	4.0	676
6+					100.0	99.8	123	5.2	123
Mother's smoking status									
Smokes cigarettes/ tobacco	(14.2)	(7.0)	(78.8)	(0.0)	100.0	(100.0)	46	(17.7)	46
Does not smoke	2.2	13.2	83.8	0.8	100.0	98.9	4,037	6.0	3,991
Residence									
Urban	2.8	10.0	86.5	0.7	100.0	99.2	1,216	6.6	1,206
Rural	2.1	14.5	82.6	0.8	100.0	98.7	2,867	5.9	2,831
Region									
Issyk-Kul	2.4	16.7	80.8	0.2	100.0	99.4	385	5.6	383
Djalal-Abad	1.1	7.0	90.5	1.4	100.0	98.4	732	4.8	720
Naryn	2.4	16.2	80.9	0.5	100.0	98.7	176	7.1	174
Batken	2.4	13.9	82.0	1.7	100.0	97.3	365	8.0	355
Osh Oblast	1.5	13.4	84.3	0.9	100.0	99.2	831	5.2	825
Talas	2.2	14.5	83.1	0.2	100.0	99.8	256	5.6	256
Chui	3.3	20.8	75.4	0.5	100.0	98.5	660	5.9	651
Bishkek City	3.9	8.0	88.1	0.0	100.0	99.8	557	9.2	556
Osh City	2.7	9.1	85.8	2.4	100.0	98.7	119	2.4	118
Mother's education									
None /primary	*	*	*	*	100.0	*	23	*	22
Basic general	1.4	13.6	84.5	0.4	100.0	99.6	432	5.5	431
Secondary	1.9	12.7	84.4	1.0	100.0	98.6	1,851	5.5	1,825
Professional primary/ middle	2.6	12.5	84.3	0.6	100.0	99.4	666	6.3	662
Higher	2.9	13.8	82.7	0.6		98.9	1,109	7.2	1,097
Wealth quintile									
Lowest	2.7	11.9	85.0	0.4	100.0	98.9	779	5.7	770
Second	1.1	14.0	84.3	0.6	100.0	99.1	814	4.5	806
Middle	2.3	13.8	82.3	1.5	100.0	98.3	872	7.5	857
Fourth	2.7	15.8	80.7	0.8	100.0	98.8	902	5.5	892
Highest	2.8	9.3	87.5	0.4	100.0	99.5	715	7.4	711
Total	2.3	13.1	83.8	0.8	100.0	98.9	4,082	6.1	4,037

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases and has been suppressed.
[1] Based on either a written record or the mother's recall.

Table 11.1 also includes information on the mother's estimate of the baby's size at birth. According to their mother's estimate, 2 percent of children were very small at birth, 13 percent were smaller than average, and 84 percent were average or larger in size. Differentials in the proportion of children reported as either very small or smaller than average at birth are generally not large except by region. Children in the Djalal-Abad region are the least likely to be reported as very small or smaller than average at birth (8 percent) compared with those in the Chui region, which are most likely(24 percent).

The 2006 MICS report shows that for births in the two years before the survey, 97 percent had a reported birth weight (NSC, 2007), only slightly lower than the 99 percent reported in the 2012 KgDHS for

births in the two years before the survey.[1] The 2006 MICS prevalence of LBW was calculated combining reported low birth weight from the card and the mother's assessment of the child's size at birth, and therefore cannot be compared with LBW data from the 2012 KgDHS.

11.2 VACCINATION OF CHILDREN

Universal immunization of children under age 1 against major vaccine-preventable diseases is one of the most cost-effective programs to reduce infant and child morbidity and mortality. The Kyrgyz Republic's Ministry of Health has adopted the World Health Organization (WHO) guidelines for childhood immunizations. These guidelines call for all children to receive the following: a BCG vaccination against tuberculosis; three doses of DPT to prevent diphtheria, pertussis, and tetanus; three doses of polio vaccine; and a measles vaccine during the first year of life (WHO, 2000). In addition to these standard vaccinations, since 2001, the Ministry of Health has recommended that children receive three doses of the hepatitis B vaccine, with the first dose given at birth or at first clinical contact (MOH, 2001). The pentavalent vaccine (Penta), introduced in 2009, replaced the DPT and hepatitis B vaccines, except for the first dose of the hepatitis B vaccine given at birth (MOH, 2009b). The Penta vaccine contains, in addition to DPT, the hepatitis B vaccine and a vaccine against *Haemophilus* influenza type B and is supposed to be given according to the same schedule as DPT. Since 2002, an MMR vaccination at 12 months has been given to protect against measles, mumps, and rubella (MOH, 2002).

Information on vaccination coverage was collected in the 2012 KgDHS for all children under age 5. In the Kyrgyz Republic, child health cards (MOH form 112) and vaccination forms (MOH form 63) are maintained in the local health care facilities. On rare occasions, child health cards are kept at home. In this survey, data were collected from three sources when available during the survey visit. If the mother was able to show the child health card, the dates of vaccinations were transferred from the card to the questionnaire. In the event that the mother did not have a child health card or an immunization was not recorded on the card, she was asked to recall her child's immunizations. Finally, after all the interviews in a cluster were completed, the KgDHS team supervisor went to the local health facility to record information from the health cards of the children in the sample. Health cards were seen for 86 percent of children age 18-29 months. Thus, the data on immunization coverage are largely based on information from health cards; however, for the 14 percent of children for whom a health card was not located or was missing information on specific vaccines, the data are based on the mother's recall.

11.2.1 Vaccination Coverage

Table 11.2 presents information on vaccination coverage according to the source of information. Data are presented for children age 18-29 months, thereby including only those children who have reached the age by which they should be fully vaccinated. The first four rows show the proportions of these children vaccinated at any time before the survey. These results are presented according to the source of the information used to determine coverage, that is, a vaccination card—whether seen at home or at the health facility—a mother's report, or either source. The last row shows the proportion of children who had been vaccinated by age 18 months, the age by which vaccination coverage should be complete.

[1] The 2006 Kyrgyz Republic MICS survey collected information on the birth weight and size for the last live birth in the two years before the survey. Thus, to examine trends since the 2006 MICS, the 2012 KgDHS estimate of the percentage of children with a reported birth weight had to be re-calculated based on information for the last live birth in the two years before the survey.

Table 11.2 Vaccinations by source of information

Percentage of children age 18-29 months who received specific vaccines at any time before the survey, by source of information (vaccination card at home or at a health facility or mother's report), and percentage vaccinated at 18 months of age, Kyrgyz Republic 2012

Source of information	BCG	Hepatitis B at birth	Penta/DPT[1]			Polio[2]				Measles or MMR	All basic vaccinations[3]	All basic[3] plus hepatitis B at birth	No vaccinations	Number of children
			1	2	3	0	1	2	3					
Vaccinated at any time before survey														
Vaccination card at home	*	*	*	*	*	*	*	*	*	*	*	*	*	4
Vaccination card at a health facility	86.0	85.3	86.0	85.2	80.5	86.0	86.0	84.2	76.5	84.9	72.9	72.5	0.0	736
Mother's report	12.5	9.3	11.7	9.3	4.6	10.5	10.4	5.6	2.5	11.2	1.3	1.2	1.1	116
Either source	98.9	95.1	98.1	95.0	85.3	96.9	96.8	90.2	79.2	96.5	74.3	73.9	1.1	856
Vaccinated by 18 months of age[4]	98.9	94.4	97.7	94.3	84.2	96.9	97.1	89.8	77.7	94.2	71.2	70.1	1.1	856

Note: An asterisk denotes a figure based on fewer than 25 unweighted cases and has been suppressed.
[1] DPT is given either separately or most frequently as part of the pentavalent vaccine (Penta) that contains DPT, hepatitis B, and *Hemophilus* influenza type B (Hib) vaccines.
[2] Polio 0 is the polio vaccination given at birth.
[3] BCG, measles or MMR, and three doses each of Penta/DPT and polio vaccines (excluding polio vaccine given at birth).
[4] For children whose information is based on the mother's report, the proportion of vaccinations given during the first year and a half of life is assumed to be the same as for children with a written record of vaccination.

The row labeled “either source” indicates that almost all children age 18-29 months (96 percent or higher) have received vaccinations for BCG, measles or MMR, and the first doses of polio and Penta/DPT. Ninety-five percent received a vaccination for hepatitis at birth. The proportions of children receiving the second and third doses of polio and Penta/DPT are considerably lower. For example, 98 percent of children received the first dose of Penta/DPT, compared with 85 percent who received the third dose. Thus, the dropout rate[2] between the first and third doses of Penta/DPT is 13 percent. The corresponding dropout rate for polio is 18 percent.

Overall, the data show that 74 percent of the children age 18-29 months had received all basic WHO-recommended vaccinations by the date of the interview. An identical proportion of children (74 percent) received the entire course of MOH-recommended vaccinations, which includes hepatitis B at birth. Only 1 percent of children age 18-29 months have not received any vaccinations.

Vaccinations are most effective when given at the proper age. In the Kyrgyz Republic, it is recommended that children complete the schedule of immunizations during the first 18 months of life. Overall, 71 percent of children age 18-29 months had received all the recommended vaccinations before reaching 18 months of age.

11.2.2 Differentials in Vaccination Coverage

Table 11.3 shows differences in vaccination coverage by background characteristics of the child and the mother. Differences by sex and by birth order are not large, but there are marked variations by urban or rural residence and by region (Figure 11.1). The proportion of children who have received all the basic vaccinations is considerably higher in rural areas (78 percent) than in urban areas (67 percent). Children living in the Naryn, Djalal-Abad, Issyk-Kul, and Osh City regions are more likely to be fully immunized (87 to 91 percent) than children in other regions. Vaccination coverage falls below 70 percent among children in the Chui, Bishkek City, and Osh Oblast regions. Basic vaccination coverage shows some tendency to decline as mother’s education and wealth quintile increase.

[2] Dropout rate = (Dose 1 – Dose 3) * 100 / Dose 1.

Table 11.3 Vaccinations by background characteristics

Percentage of children age 18-29 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), and percentage with a vaccination card, by background characteristics, Kyrgyz Republic 2012

Background characteristic	BCG	Hepatitis B at birth	Penta/DPT[1]			Polio[2]				Measles or MMR	All basic vaccinations[3]	All basic[3] plus hepatitis B at birth	No vaccinations	Percentage with a vaccination card seen[4]	Number of children
			1	2	3	0	1	2	3						
Sex															
Male	99.1	95.1	98.8	95.3	85.7	97.3	97.1	89.8	78.4	96.5	74.4	74.3	0.9	87.4	443
Female	98.7	95.0	97.5	94.7	84.8	96.6	96.5	90.6	80.1	96.5	74.1	73.4	1.3	85.5	412
Birth order															
1	97.6	94.1	97.2	94.3	84.6	96.8	96.0	89.5	78.7	95.2	73.8	72.9	2.4	85.0	301
2-3	99.6	95.0	98.4	95.6	85.7	97.7	96.5	89.3	79.5	97.1	75.3	75.3	0.4	86.7	378
4-5	99.6	98.1	99.2	97.1	85.8	98.3	98.6	93.1	77.6	96.6	71.6	71.0	0.4	90.6	147
6+	(100.0)	(90.9)	(100.0)	(84.4)	(84.4)	(81.9)	(100.0)	(93.4)	(88.5)	(100.0)	(79.5)	(79.5)	(0.0)	(76.6)	29
Residence															
Urban	98.7	91.8	98.0	96.2	79.9	96.2	95.1	81.8	70.3	94.9	67.2	66.6	1.3	77.6	266
Rural	99.0	96.5	98.2	94.5	87.7	97.3	97.6	94.0	83.2	97.2	77.5	77.2	1.0	90.5	590
Region															
Issyk-Kul	100.0	98.0	100.0	97.6	96.3	97.8	98.7	96.5	90.7	98.3	89.0	89.0	0.0	94.4	68
Djalal-Abad	100.0	100.0	100.0	99.0	97.3	100.0	98.0	95.9	89.8	97.6	89.1	89.1	0.0	93.2	156
Naryn	99.0	95.1	96.6	96.6	94.6	97.9	97.9	97.9	92.5	94.6	90.5	88.9	1.0	89.8	39
Batken	97.0	89.5	94.2	92.3	88.8	94.2	95.3	87.7	80.1	91.6	77.0	76.1	3.0	88.2	74
Osh Oblast	100.0	97.1	100.0	97.7	82.0	100.0	100.0	98.1	85.2	97.0	69.1	68.4	0.0	97.0	167
Talas	100.0	97.4	99.2	98.2	98.2	99.3	100.0	95.3	81.9	100.0	81.9	81.0	0.0	91.2	48
Chui	97.7	94.3	96.2	85.3	78.7	92.4	91.6	83.2	66.3	97.7	63.0	63.0	2.3	75.9	139
Bishkek City	97.6	89.6	96.8	95.6	68.2	94.4	96.4	76.1	61.3	94.2	57.8	57.8	2.4	69.9	143
Osh City	(100.0)	(88.6)	(100.0)	(94.9)	(87.2)	(97.2)	(90.0)	(90.0)	(90.0)	(96.8)	(87.2)	(83.9)	(0.0)	(87.2)	20
Mother's education															
None/primary	*	*	*	*	*	*	*	*	*	*	*	*	*	*	5
Basic general	95.9	93.6	95.9	94.3	88.1	94.8	95.9	94.3	88.4	91.5	79.4	79.4	4.1	92.0	78
Secondary	99.6	96.2	99.2	95.6	85.5	97.6	97.7	91.3	79.9	97.7	74.6	74.2	0.4	88.0	412
Professional primary/middle	97.3	93.4	97.0	95.8	85.4	95.7	95.2	89.7	79.4	95.2	75.8	75.2	2.7	85.8	151
Higher	99.8	95.4	98.6	94.4	84.3	98.3	97.6	87.5	74.7	96.7	71.2	70.6	0.2	82.4	210
Wealth quintile															
Lowest	100.0	99.0	99.7	98.0	92.2	99.6	100.0	96.4	86.4	99.1	81.8	81.7	0.0	93.3	158
Second	100.0	98.3	99.6	98.0	93.0	99.6	99.4	97.0	92.1	98.0	87.2	86.5	0.0	96.6	154
Middle	99.0	96.7	97.2	94.2	87.1	95.4	95.2	91.8	77.5	97.2	72.4	72.2	1.0	87.2	197
Fourth	98.0	90.5	97.5	90.4	79.9	94.0	96.3	89.7	76.2	92.8	69.6	69.0	2.0	84.0	190
Highest	97.8	91.4	97.1	95.7	75.0	97.1	93.7	75.8	65.2	95.7	62.0	61.6	2.2	71.6	157
Total	98.9	95.1	98.1	95.0	85.3	96.9	96.8	90.2	79.2	96.5	74.3	73.9	1.1	86.4	856

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases and has been suppressed.

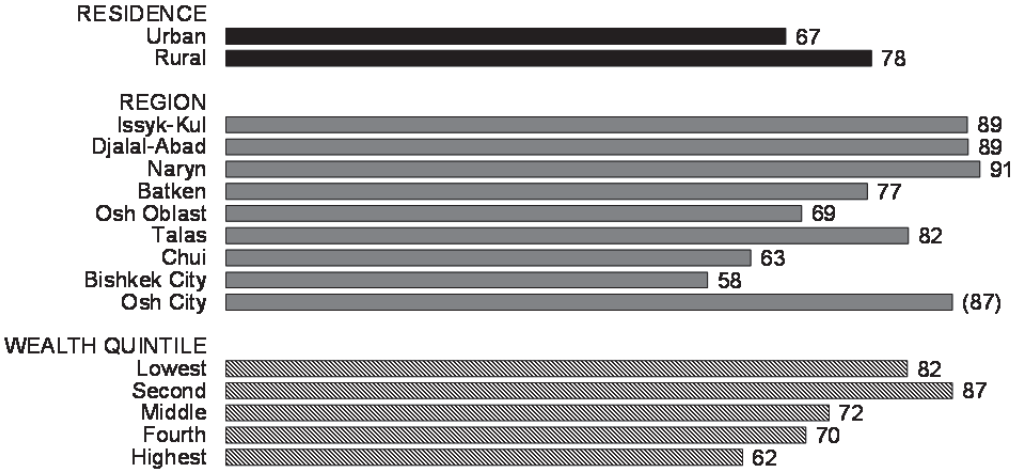
[1] DPT is given either separately or as part of the pentavalent vaccine (Penta) that contains DPT, hepatitis B, and *Hemophilus* influenza type B (Hib) vaccines.

[2] Polio 0 is the polio vaccination given at birth.

[3] BCG, measles or MMR, and three doses each of Penta/DPT and polio vaccines (excluding polio vaccine given at birth).

[4] Either at the health facility or at the home.

Figure 11.1
Differentials in vaccination coverage, Kyrgyz Republic 2012*



* Percentage of children 18-29 months who received BCG, measles or MMR, and three doses each of Penta/DPT and polio (excluding polio at birth) any time before the survey. Figures in parentheses are based on 25-49 unweighted cases.

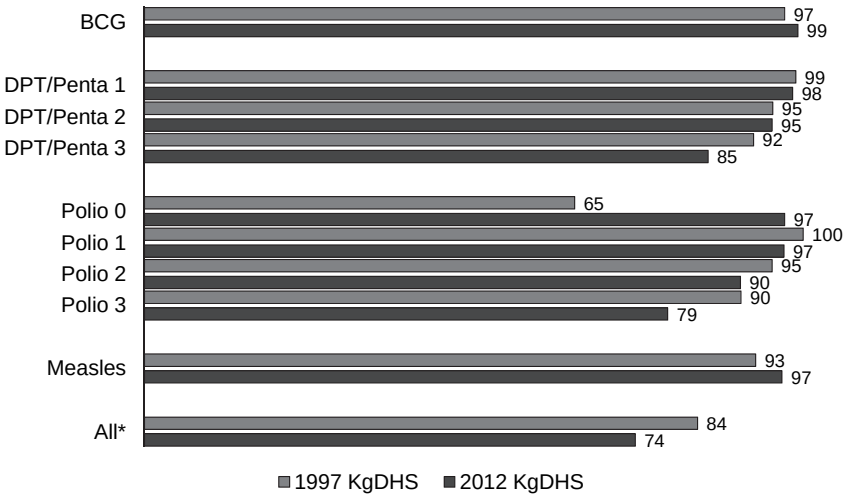
KgDHS 2012

11.2.3 Trends in Vaccination Coverage

Trends in vaccination coverage can be assessed in two ways. First, the 2012 KgDHS data may be compared with the child immunization data obtained in the 1997 KgDHS. The 1997 KgDHS followed similar procedures as the 2012 KgDHS, in that mothers of young children were asked to present the child's health card and, if not available, were asked to report on the child's vaccinations. The interviewing teams made follow-up visits to health facilities to try to locate the health cards of the children. It should be noted that, in the 1997 KgDHS, health cards were found at the health facility for only 69 percent of children age 18-29 months compared with 86 percent in the 2012 KgDHS.

The 2012 KgDHS vaccination coverage data cannot be compared with published results from the 1997 KgDHS survey because the 1997 results were based on information from health cards only and presented for children age 12-23 months (RIOP and Macro International, 1998). These differences make comparisons between surveys difficult. To allow for comparison, Figure 11.2 shows information on vaccination coverage at any time before the interview from the 1997 KgDHS calculated for children age 18-29 months, according to a vaccination card or the mother's report.

Figure 11.2
Trends in vaccination coverage among children age 18-29 months



Percentage of children who received the vaccine at any time before the survey
* BCG, measles, or MMR, and three doses each of DPT/Penta and polio vaccines (except polio 0)

The results in Figure 11.2 indicate that the percentage of children age 18-29 months who received all basic WHO-recommended vaccinations has declined from 84 percent of children age 18-29 months at the time of the 1997 Kyrgyz DHS to 74 percent in the 2012 KgDHS. The proportion of children age 18-29 months who received all basic vaccinations by age 18 months has also declined over the past 15 years from 79 percent in 1997 (data not shown) to 71 percent in the 2012 survey (Table 11.2).

The overall change in vaccination rates is primarily due to a decrease in the proportions of children receiving the second and third doses of DPT/Penta and polio. For example, the dropout rate between the first and third doses of DPT/Penta is 13 percent among children age 18-29 months in 2012 compared with 6 percent in 1997. The corresponding dropout rate for polio is 18 percent in 2012 compared with 9 percent in 1997. In contrast with the declines in DPT/Penta and polio coverage, there were small increases between 1997 and 2012 in the vaccination rates for both BCG (97 percent to 99 percent) and measles (from 93 to 97 percent).

An alternative method of assessing recent trends in vaccination coverage is to compare data from the 2012 KgDHS for successive cohorts of young children. Table 11.4 shows the percentage of children who received specific vaccinations during the first 18 months of life (according to vaccination card or the mother's report) among different cohorts of children.

Table 11.4 Vaccinations in first 18 months of life

Percentage of children age 18-59 months at the time of the survey who received specific vaccines by 18 months of age, and percentage with a vaccination card, by current age of child, Kyrgyz Republic 2012

Age in months	BCG	Hepatitis B at birth	Penta/DPT[1]			Polio[2]				Measles or MMR	All basic vaccinations[3]	No vaccinations	Percentage with a vaccination card seen[4]	Number of children
			1	2	3	0	1	2	3					
18-29	98.9	94.4	97.7	94.3	84.2	96.9	97.1	89.8	77.7	94.2	71.2	1.1	86.4	856
30-41	99.0	90.3	97.9	96.4	86.4	97.0	97.5	91.5	78.9	93.2	71.7	0.7	85.1	750
42-59	98.7	95.4	97.9	95.0	82.2	96.2	97.0	93.2	82.2	91.4	71.1	1.1	87.1	1,030
Total	98.9	93.6	97.8	95.1	84.0	96.7	97.2	91.6	79.8	92.8	71.3	1.0	86.3	2,636

Note: Information was obtained from the vaccination card or if there was no written record, from the mother. For children whose information is based on the mother's report, the proportion of vaccinations given during the first year of life is assumed to be the same as for children with a written record of vaccinations.

[1] DPT is given either separately or as part of the pentavalent vaccine (Penta) that contains DPT, hepatitis B, and *Hemophilus* influenza type B (Hib) vaccines.

[2] Polio 0 is the polio vaccination given at birth.

[3] BCG, measles or MMR, and three doses each of Penta/DPT and polio vaccines (excluding polio vaccine given at birth)

[4] Either at the health facility or at the home

The data show almost no differences by age group of children. For example, the proportion of children who received all the basic vaccinations by age 18 months is 71 to 72 percent for all age groups.

11.3 CHILDHOOD ILLNESS AND TREATMENT

This section presents information about three illnesses that are major contributors to childhood morbidity and mortality in many countries: acute respiratory infection (ARI), fever, and diarrhea. Estimates of the prevalence of these illnesses as well as data concerning types of treatment are presented.

11.3.1 Acute Respiratory Infections (ARI)

Acute respiratory infections (ARIs), primarily pneumonia, are a leading cause of childhood morbidity and mortality throughout the world. Early diagnosis and treatment with antibiotics can reduce the number of deaths caused by ARI, particularly deaths resulting from pneumonia. The 2012 KgDHS estimated the prevalence of ARI by asking mothers whether their children under age 5 had been ill in the two weeks preceding the survey with a cough accompanied by short, rapid breathing or by difficulty in breathing that the mother considered to be chest-related. These symptoms are considered to be a proxy for pneumonia.

Table 11.5 shows that only 1 percent of children under age 5 had symptoms of an ARI, that is, cough accompanied by short, rapid breathing and/or by difficulty in breathing that was chest-related, at some time in the two weeks preceding the survey. The prevalence of suspected ARI was higher (6 percent) in the 2006 MICS survey (NSC, 2007); however that survey was implemented in the winter months (December-January). The 2012 KgDHS was implemented from August to December.

Overall, one-third of children with ARI symptoms were taken to a health facility or provider for advice or treatment, and 41 percent were given antibiotics according to the mother's report (data not shown). These results need to be interpreted cautiously since they are based on a small number of cases (49 unweighted cases). Due to the small number of children with ARI symptoms, it also is not possible to show the data on treatment by background characteristics or to compare them with the MICS survey results.

Table 11.5 Prevalence and treatment of symptoms of ARI

Among children under age 5, the percentage who had symptoms of acute respiratory infection (ARI) in the two weeks preceding the survey, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Among children under age 5: Percentage with symptoms of ARI[1]	Number of children
Age in months		
<6	0.5	421
6-11	1.6	493
12-23	2.5	832
24-35	0.7	793
36-47	0.4	768
48-59	1.8	668
Sex		
Male	1.0	2,043
Female	1.6	1,932
Mother's smoking status		
Smokes cigarettes/tobacco	(2.9)	46
Does not smoke	1.3	3,929
Cooking fuel		
Electricity or gas	1.5	2,736
Coal/lignite	(0.0)	21
Charcoal	1.7	38
Wood/straw[2]	0.8	819
Animal dung	1.3	357
Residence		
Urban	1.5	1,188
Rural	1.2	2,787
Region		
Issyk-Kul	1.4	376
Djalal-Abad	0.7	714
Naryn	0.0	173
Batken	0.3	350
Osh Oblast	1.9	810
Talas	2.2	246
Chui	2.0	643
Bishkek City	0.8	544
Osh City	1.6	119
Mother's education		
None/primary	*	22
Basic general	2.0	427
Secondary	1.0	1,801
Professional primary/middle	0.5	649
Higher	2.0	1,075
Wealth quintile		
Lowest	0.6	751
Second	1.4	794
Middle	1.0	843
Fourth	2.4	888
Highest	0.8	700
Total	1.3	3,975

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk denotes a figure based on fewer than 25 unweighted cases and has been suppressed. Total includes four children for whom type of cooking fuel is missing.

[1] Symptoms of ARI (cough accompanied by short, rapid breathing that was chest-related and/or by difficulty in breathing thatwas chest-related) are considered a proxy for pneumonia.

[2] Includes grass, shrubs, crop residues.

11.3.2 Fever

Table 11.6 shows that 5 percent of children under age 5 had a fever during the two weeks preceding the survey. The prevalence of fever varies by age, with children age 6-23 months being more likely to have a fever than either younger or older children. The prevalence of fever is highest among children in the Chui region (9 percent) and lowest in the Naryn region (2 percent). Fever prevalence does not vary much by other characteristics.

Table 11.6 Prevalence of fever

Among children under age 5, the percentage who had a fever in the two weeks preceding the survey, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Among children under age 5: Percentage with fever	Number of children
Age in months		
<6	2.3	421
6-11	7.8	493
12-23	7.2	832
24-35	5.8	793
36-47	3.7	768
48-59	4.3	668
Sex		
Male	5.6	2,043
Female	4.9	1,932
Residence		
Urban	5.2	1,188
Rural	5.3	2,787
Region		
Issyk-Kul	5.4	376
Djalal-Abad	4.9	714
Naryn	2.0	173
Batken	3.9	350
Osh Oblast	3.6	810
Talas	7.7	246
Chui	8.6	643
Bishkek City	5.0	544
Osh City	5.5	119
Mother's education		
None/primary	*	22
Basic general	4.6	427
Secondary	4.8	1,801
Professional primary/middle	4.6	649
Higher	6.7	1,075
Wealth quintile		
Lowest	4.6	751
Second	5.8	794
Middle	4.2	843
Fourth	6.4	888
Highest	5.3	700
Total	5.3	3,975

Note: An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.

[1] Excludes pharmacy, shop, market, and traditional practitioner.

Two in five children (43 percent) with fever were taken to a health facility or a medically-trained provider for treatment, and the same proportion (43 percent) were given antibiotics (data not shown). The data on treatment by background characteristics are not shown due to the small numbers of children with fever in most groups.

11.3.3 Diarrhea

Diarrhea remains a leading cause of childhood morbidity and mortality in developing countries. Dehydration caused by severe diarrhea is a major cause of illness among young children, although the condition can be easily treated with oral rehydration therapy (ORT). During ORT, the child is given a solution that can be prepared by mixing water with a commercially prepared packet of oral rehydration salts (ORS)—Regidron in Kyrgyzstan—or by making a homemade mixture of sugar, salt, and water.

The 2012 KgDHS asked mothers if any of their children under age 5 had experienced an episode of diarrhea in the two weeks before the survey. If a child had diarrhea during this period, the mother was asked what she did to treat the diarrhea. Because the prevalence of diarrhea varies seasonally, the survey results pertain only to the period from August to December when the fieldwork took place.

Table 11.7 presents information on episodes of diarrhea among young children in the two weeks before the interview. Overall, 5 percent of children under age 5 were reported to have had diarrhea in the two-week period before the survey. Less than 1 percent of children under age 5 were reported to have had bloody diarrhea in the two weeks before the survey, a symptom usually associated with dysentery.

Table 11.7 Prevalence of diarrhea

Percentage of children under age 5 who had diarrhea in the two weeks preceding the survey, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Diarrhea in the two weeks preceding the survey: All diarrhea	Diarrhea with blood	Number of children
Age in months			
<6	3.7	0.1	421
6-11	8.5	0.1	493
12-23	7.4	0.9	832
24-35	4.0	0.4	793
36-47	3.4	0.4	768
48-59	4.2	0.0	668
Sex			
Male	5.2	0.3	2,043
Female	5.1	0.4	1,932
Source of drinking water[1]			
Improved	5.1	0.4	3,419
Not improved	5.3	0.2	555
Toilet facility[2]			
Improved, not shared	5.2	0.3	3,712
Shared[3]	5.3	0.8	193
Non-improved	5.8	0.0	60
Residence			
Urban	3.8	0.2	1,188
Rural	5.7	0.4	2,787
Region			
Issyk-Kul	7.6	0.8	376
Djalal-Abad	3.2	0.2	714
Naryn	2.5	0.5	173
Batken	4.5	0.4	350
Osh Oblast	2.4	0.0	810
Talas	11.0	0.7	246
Chui	11.3	0.9	643
Bishkek City	1.8	0.0	544
Osh City	3.6	0.0	119
Mother's education			
None/primary	*	*	22
Basic general	6.8	0.0	427
Secondary	4.3	0.5	1,801
Professional primary/middle	5.1	0.4	649
Higher	5.9	0.3	1,075
Wealth quintile			
Lowest	4.2	0.3	751
Second	6.6	0.3	794
Middle	5.7	0.6	843
Fourth	6.1	0.6	888
Highest	2.8	0.0	700
Total	5.2	0.4	3,975

Note: Total includes 1 child missing information on source of drinking water and 10 missing data on type of toilet facility. An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.

[1] See Table 2.1 for definition of categories.

[2] See Table 2.2 for definition of categories.

[3] Facilities that would be considered improved if they were not shared by two or more households.

The prevalence of diarrhea is highest at age 6-23 months, a period during which solid and/or semi-solid foods are first introduced into the child's diet. This pattern is believed to be associated with increased exposure to illness as a result of both weaning and the greater mobility of the child, as well as the immature immune system of children in this age group. The prevalence of diarrhea is higher among children in the Chui and Talas regions than among children in other regions. It is lowest among children in the highest wealth quintile.

Table 11.8 shows data on the treatment of recent episodes of diarrhea among children under age 5, as reported by their mothers. Overall, more than half (55 percent) of children with diarrhea were taken to a medically trained health provider for advice or treatment.

Table 11.8 Diarrhea treatment

Among children under age 5 who had diarrhea in the two weeks preceding the survey, the percentage for whom advice or treatment was sought from a health facility or provider, the percentage given oral rehydration therapy (ORT), the percentage given increased fluids, the percentage given ORT or increased fluids, and the percentage given other treatments, Kyrgyz Republic 2012

Diarrhea treatment	Percentage of children under age 5 with diarrhea receiving specific treatment
Percentage for whom advice or treatment was sought from a health facility or provider[1]	54.6
Percentage given:	
Oral rehydration therapy	
Fluid from ORS packets	35.4
Recommended home fluids (RHF)	52.9
Either ORS or RHF	67.5
Increased fluids	46.6
ORT or increased fluids	80.6
Other treatments	
Antibiotic drugs	37.2
Antimotility drugs	0.3
Home remedy/other	32.7
No treatment	6.6
Missing	0.6
Number of children under age 5 with diarrhea	205

Note: ORT includes fluid prepared from oral rehydration salt (ORS) packets and recommended home fluids (RHF).
[1] Excludes pharmacy, shop and traditional practitioner.

More than one-third of children with diarrhea received fluid from oral rehydration salt (ORS) packets, while 53 percent received a homemade fluid. Overall, 68 percent were given either ORS or a homemade fluid and 47 percent were given more fluids. Four in five children with diarrhea (81 percent) were given oral rehydration therapy (ORT) or increased fluids.

Over one-third of children (37 percent) were given antibiotics to treat the diarrhea and just under one-third were given home remedies or other things to treat the diarrhea; 7 percent of children were given nothing to treat the diarrhea. The data on treatment by background characteristics are not shown because of the small numbers of children reported to have been ill with diarrhea.

Mothers are encouraged to continue feeding children with diarrhea normally and to increase the amount of liquids they offer. The 2012 KgDHS asked mothers who had a child under age 5 with a recent episode of diarrhea how much they gave the child to drink and eat during the diarrheal episode compared with usual practice. Table 11.9 shows that just under half (47 percent) of children with diarrhea received more liquids than usual, while 32 percent were given the same amount of liquids as usual. One in five mothers still engage in the dangerous practice of curtailing fluid intake when their children have diarrhea; 11 percent gave the child somewhat less liquid than normal, while 7 percent gave the child much less and 2 percent gave the child no liquids.

With regard to food intake during a diarrhea episode, only half of children with diarrhea are fed according to the recommended practice of giving either more food or the same amount of food as usual. One-quarter of children are given somewhat less food to eat than usual and about one-fifth are given much less to eat than usual.

Table 11.9 also shows that 37 percent of children with diarrhea were given increased fluids and either more, the same as usual, or somewhat less food to eat than usual. When ORT (either ORS fluid or a homemade fluid) is also taken into account, the figure increases to 63 percent of children who are given either ORT or increased fluids and at least the same amount of food or only somewhat less food than usual. The number of children with recent diarrhea is too small in most categories to show the data on feeding practices by background characteristics.

Table 11.9 Feeding practices during diarrhea

Percent distribution of children under age 5 who had diarrhea in the two weeks preceding the survey by amount of liquids and food offered compared with normal practice, the percentage of children given increased fluids and continued feeding during the diarrhea episode, and the percentage of children who continued feeding and were given ORT and/or increased fluids during the episode of diarrhea, Kyrgyz Republic 2012

Feeding practices	Percent
Amount of liquids given	
More	46.6
Same as usual	31.8
Somewhat less	10.9
Much less	7.3
None	2.0
Don't know/missing	1.3
Total	100.0
Amount of food given	
More	11.8
Same as usual	37.9
Somewhat less	25.5
Much less	20.8
None	3.5
Don't know/missing	0.6
Total	100.0
Percentage given increased fluids and continued feeding[1]	37.1
Percentage who continued feeding and were given ORT and/or increased fluids[1]	62.7
Number of children with diarrhea	205

Note: It is recommended that children should be given more liquids to drink during diarrhea and food should not be reduced.
[1] Continued feeding practices includes children who were given more, same as usual, or somewhat less food during the diarrhea episode.

11.3.4 Knowledge of ORS

A simple and effective response to dehydration caused by diarrhea is a prompt increase in the child's fluid intake through some form of oral rehydration therapy, which may include the use of a solution prepared from packets of oral rehydration salts (ORS). To ascertain how widespread knowledge of ORS is in the Kyrgyz Republic, women interviewed in the 2012 KgDHS were asked whether they had ever heard of a special product called Regidron (also known as Rehydron, the name for ORS in the Kyrgyz Republic) for the treatment of diarrhea. Results are tabulated in Table 11.10 for women who gave birth in the five years before the survey.

Table 11.10 Knowledge of ORS packets

Percentage of women age 15-49 with a live birth in the five years preceding the survey who know about ORS packets for treatment of diarrhea by background characteristics, Kyrgyz Republic 2012

Background characteristic	Percentage of women who know about ORS packets	Number of women
Age		
15-19	57.9	66
20-24	70.5	743
25-34	77.0	1,574
35-49	81.9	630
Residence		
Urban	78.5	935
Rural	74.9	2,079
Region		
Issyk-Kul	82.3	284
Djalal-Abad	61.3	547
Naryn	84.4	125
Batken	86.8	260
Osh Oblast	73.2	605
Talas	73.3	170
Chui	81.7	510
Bishkek City	77.9	428
Osh City	85.1	86
Education		
None/primary	*	13
Basic general	60.4	326
Secondary	73.5	1,338
Professional primary/middle	82.0	481
Higher	82.9	856
Wealth quintile		
Lowest	72.6	569
Second	75.4	587
Middle	75.4	633
Fourth	77.3	679
Highest	79.1	546
Total	76.0	3,014

Note: An asterisk denotes a figure based on fewer than 25 unweighted cases that has been suppressed.
ORS = Oral rehydration salts

The table shows that just over three-quarters of mothers have heard of ORS packets. Knowledge of ORS increases steadily with age of the mother. It is lower among mothers in Djalal-Abad region (61 percent) than among those in the other regions (73 to 87 percent). Knowledge of ORS increases with education and wealth of the mother.

11.4 STOOL DISPOSAL

If human feces are left uncontained, disease may spread by direct contact or by animal contact with the feces. Hence, the proper disposal of children's stools is extremely important in preventing the spread of disease. In the 2012 KgDHS, women were asked about stool disposal for their children under age 5. If a woman had more than one child under age 5 living with her, the questions were asked about the youngest child living with her. Specifically, she was asked when the child last passed stools and what was done to dispose of the stools. Table 11.11 presents results by background characteristics.

Table 11.11 Disposal of children's stools

Percent distribution of youngest children under age 5 living with the mother by the manner of disposal of the child's last fecal matter, and percentage of children whose stools are disposed of safely, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Manner of disposal of children's stools							Total	Percentage of children whose stools are disposed of safely[1]	Number of children
	Child used toilet or latrine	Put/rinsed into toilet or latrine	Buried	Put/rinsed into drain or ditch	Thrown into garbage	Left in the open	Other			
Age in months										
<6	4.8	44.4	7.2	16.8	26.3	0.0	0.4	100.0	56.5	417
6-11	6.3	45.4	5.6	23.3	18.0	1.2	0.1	100.0	57.3	484
12-23	7.2	52.3	6.9	16.8	15.8	0.8	0.3	100.0	66.4	753
24-35	22.5	46.3	3.5	13.4	13.6	0.7	0.0	100.0	72.3	552
36-47	36.6	38.9	2.9	15.8	5.5	0.3	0.1	100.0	78.4	423
48-59	60.5	27.7	1.1	4.3	5.9	0.1	0.2	100.0	89.4	321
Toilet facility[2]										
Improved, not shared	19.7	43.9	5.0	16.1	14.6	0.5	0.1	100.0	68.6	2,764
Shared[3]	17.8	60.4	3.4	11.2	7.2	0.0	0.0	100.0	81.6	131
Non-improved or shared	23.8	17.3	1.0	5.2	41.4	5.5	5.7	100.0	42.1	46
Residence										
Urban	15.7	58.3	3.7	7.8	14.3	0.2	0.1	100.0	77.7	893
Rural	21.3	38.3	5.4	19.1	14.9	0.7	0.2	100.0	65.0	2,057
Region										
Issyk-Kul	23.6	57.3	0.5	9.1	9.4	0.0	0.0	100.0	81.4	277
Djalal-Abad	8.1	76.5	10.1	2.3	2.1	1.0	0.0	100.0	94.6	539
Naryn	7.5	8.6	1.9	7.4	74.6	0.0	0.0	100.0	18.0	124
Batken	22.1	27.7	23.8	3.9	18.3	2.0	2.2	100.0	73.6	257
Osh Oblast	20.6	12.7	0.4	55.3	11.0	0.0	0.0	100.0	33.7	597
Talas	17.0	59.8	6.3	2.9	11.5	2.4	0.0	100.0	83.2	168
Chui	36.6	32.1	1.3	12.5	17.0	0.5	0.0	100.0	70.0	507
Bishkek City	12.0	70.1	0.3	1.7	16.0	0.0	0.0	100.0	82.3	399
Osh City	22.3	45.3	5.0	1.2	26.2	0.0	0.0	100.0	72.7	84
Mother's education										
None/primary	*	*	*	*	*	*	*	*	*	13
Basic general	18.5	43.9	3.2	17.0	16.5	0.8	0.0	100.0	65.6	321
Secondary	19.2	39.4	6.3	19.6	14.5	0.7	0.3	100.0	64.9	1,311
Professional primary/ middle	18.1	50.9	5.6	9.8	15.1	0.3	0.1	100.0	74.6	470
Higher	21.1	48.9	3.0	12.3	14.1	0.4	0.2	100.0	73.0	836
Wealth quintile										
Lowest	15.4	40.0	2.6	26.1	15.1	0.8	0.0	100.0	58.0	561
Second	18.0	43.4	6.9	19.7	11.0	0.8	0.2	100.0	68.2	578
Middle	25.6	35.8	8.2	15.4	13.5	0.9	0.6	100.0	69.6	625
Fourth	21.7	42.4	3.9	12.6	19.2	0.1	0.1	100.0	68.0	672
Highest	16.0	63.2	2.4	4.2	13.9	0.3	0.0	100.0	81.6	515
Total	19.6	44.4	4.9	15.7	14.7	0.6	0.2	100.0	68.8	2,950

Note: Totals include nine mothers for whom type of toilet facility is missing. An asterisk denotes a figure based on fewer than 25 unweighted cases and has been suppressed.

[1] Children's stools are considered to be disposed of safely if the child used a toilet or latrine, if the fecal matter was put/rinsed into a toilet or latrine, or if it was buried.

[2] See Table 2.2 for definition of categories.

[3] Facilities that would be considered improved if they were not shared by two or more households.

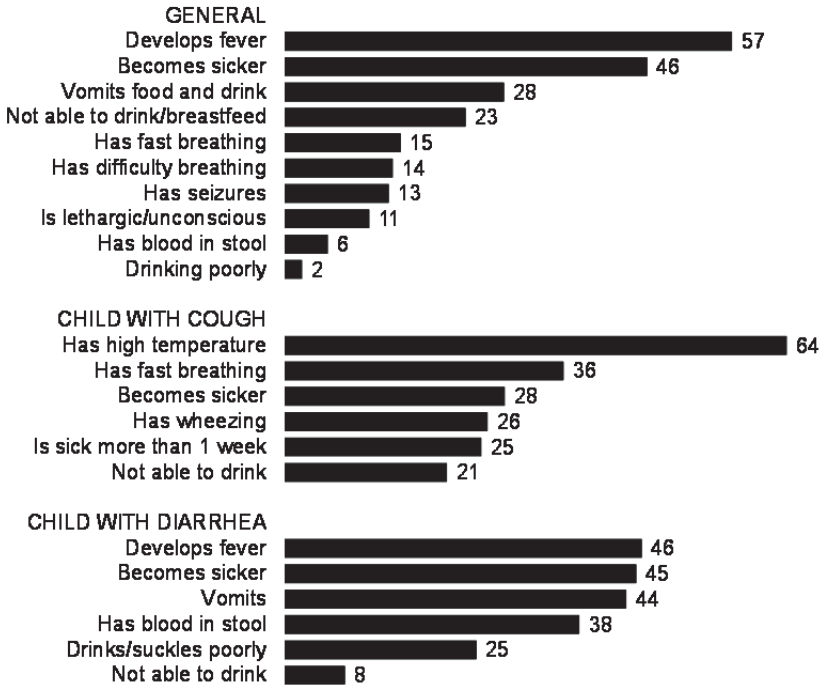
The table shows that the most commonly used method for disposing of young children's stools is putting them into a toilet or latrine (44 percent). Twenty percent of children used the toilet or latrine themselves. Other methods of disposal include rinsing stools into a drain or ditch (16 percent), throwing them into the garbage (15 percent), and burying them (5 percent). Overall, 69 percent of children's stools are disposed of safely.

A closer look at the table shows marked differentials in the disposal of stools. In Naryn region, the stools of less than one-fifth of children under age 5 are disposed of safely, compared to almost all of children in Djalal-Abad region (95 percent). Disposing of young children's stools by throwing them into the garbage is very common among children under age 6 months (presumably using disposable diapers) and in the Osh City region (26 percent, each); however, it is extraordinary high in the Naryn region (75 percent), five times the national average of 15 percent. The percentage of children whose stools are disposed of safely increases with age of the child and is higher in urban areas than rural areas. Increasing levels of education and wealth quintile of the mother are associated with increased safe stool disposal practices.

11.5 Knowledge of Danger Signs of Childhood Illness

Prompt treatment of sick children can have major repercussions regarding recovery of the child. In the 2012 KgDHS, women who had a child under age 5 living with them were asked a set of questions about danger signs in sick children. The first question was general: "Sometimes children have severe illnesses and should be taken immediately to a health facility. What types of symptoms would cause you to take your child to a health facility or medical worker right away?" This was followed by more specific questions about symptoms in a child with cough and with diarrhea. Results are shown in Figure 11.3.

Figure 11.3
Symptoms of illness in children that require immediate medical assistance, Kyrgyz Republic, 2012*



* Percentage of mothers with children under age 5 living with them.

KgDHS 2012

The most commonly reported symptom of serious childhood illness is fever, reported by 57 percent of mothers of young children, followed by "child becomes sicker" (46 percent of mothers). Vomiting (28 percent) and inability to drink or breastfeed properly (23 percent) were also commonly reported signs that a child needs immediate medical attention. From 10 to 15 percent of mothers reported that fast breathing, difficulty breathing, seizures, and/or lethargy or unconsciousness are danger signs of serious illness in a child.

When the interviewer asked what symptoms of an illness in a child with a cough would prompt the mother to take the child to a medical professional immediately, the most common response was a high temperature (64 percent), followed by fast breathing (36 percent), and a deterioration in the child's condition (28 percent). Wheezing and illness for longer than a week were reported by about one in four mothers, while inability to drink was reported as a danger sign by about one in five mothers.

Danger signs for children with diarrhea reported by mothers of young children include fever (46 percent), increased illness (45 percent), and vomiting (44 percent). Bloody stools were mentioned by 38 percent of mothers as a sign of serious illness that would require immediate medical attention. Drinking poorly (25 percent) and inability to drink at all (8 percent) were also mentioned as danger signs for children with diarrhea.

NUTRITION OF CHILDREN AND WOMEN 12

Key Findings

- Eighteen percent of children under age 5 are stunted, 3 percent are wasted, 9 percent are overweight, and 3 percent are underweight.
- Breastfeeding is nearly universal in the Kyrgyz Republic: 99 percent of children are ever breastfed and two-thirds are still breastfeeding at age 1.
- Only slightly over half of children under age 6 months are exclusively breastfed as recommended.
- Complementary foods are not introduced in a timely fashion for all children. Only 57 percent of children age 6-8 months receive complementary foods.
- Overall, only 16 percent of children age 6-23 months are fed appropriately based on recommended infant and young child feeding (IYCF) practices.
- Eleven percent of children age 6-59 months received iron supplement in the seven days prior to the survey and 7 percent were given de-worming medicine in the six months before the survey.
- Three in ten women age 15-49 are overweight or obese (BMI ≥25.0).
- Forty-three percent of children age 6-59 months and 35 percent of women age 15-49 are anemic.
- The vast majority of households (97 percent) have iodized salt.

Good nutrition is a prerequisite for national development and for individual wellbeing. Although problems related to poor nutrition affect the entire population, women and children are especially vulnerable because of their unique physiology and socioeconomic characteristics. In children, the period from birth to age 2 is especially important for optimal growth, health, and development. Unfortunately, this period is often marked by protein-energy and micronutrient deficiencies that interfere with optimal physical growth and cognitive development. Illnesses such as diarrhea and acute respiratory infections, which are common in young children, also contribute to nutritional deficiencies (Black et al., 2008). Malnutrition in adults results in reduced productivity, increased susceptibility to infections, slow recovery from illness, and for women, increased risk of adverse pregnancy outcomes (Cesar et al., 2008). A woman of poor nutritional status (indicated by a low body mass index, short stature, anemia, or other micronutrient deficiencies) has a heightened risk of obstructed labor, having a baby with low birth weight, and dying from postpartum hemorrhage. Morbidity, in general, is high for both the woman and her baby. Numerous socioeconomic and cultural factors influence patterns of feeding and nutritional status.

To assess nutritional status in the 2012 KgDHS, health technicians took height and weight and hemoglobin measurements of all children under age 5 and all women age 15-49 in the household. In addition, data were collected from women on feeding practices for infants and young children, including breastfeeding, introduction of solid and semi-solid foods, diversity of foods, and frequency of feeding. Information was also obtained on the receipt of iron and vitamin A supplements by both women and children. Cooking salt was also tested for the presence of iodine.

This chapter uses these data to look at several aspects of the nutritional status of children and women in the Kyrgyz Republic. It covers the following topics: the nutritional status of women and children under age 5 based on the anthropometric data (height and weight) collected during the survey; infant and young child feeding practices including breastfeeding and complementary feeding patterns and the prevalence of bottle-feeding; prevalence of anemia in women and children; micronutrient intake among mothers and children; and iodization of salt used in the household.

12.1 NUTRITIONAL STATUS OF CHILDREN

The 2012 KgDHS collected data on the nutritional status of children by measuring the height and weight of all children under age 5 in the interviewed households. The nutritional status assessment helps to identify subgroups of the child population that face increased risk of faltered growth.

12.1.1 Measurement of Nutritional Status among Young Children

All children listed in the household questionnaire who were born in January 2007 or later were eligible for height and weight measurement. Thus, height and weight measurements were collected from children whose mothers may not have been interviewed in the survey. Weight was measured using lightweight scales with digital screens manufactured by SECA. The height/length boards were specially produced by Shorr Productions for use in survey settings. Recumbent length was recorded for children under age 2. Standing height was measured for all other children.

A total of 4,774 children (unweighted) under age 5 in the KgDHS sample households were eligible for anthropometric measurements. Nutrition status information is presented in this chapter for the 4,574 (unweighted) children for whom complete and credible anthropometric and age data are available. Measurements were missing for 3 percent of the children because the child was not present, the parents refused, the child was ill, or for some other reason. Another 1 percent of the children were considered to have implausibly high or low values for their height or weight measures.

The nutritional status of children in the survey population is assessed using the World Health Organization (WHO) Child Growth Standards, which are based on data collected from an international sample of ethnically, culturally, and genetically diverse healthy children living under conditions considered optimal for achieving a child's full genetic growth potential (WHO, 2006c). The use of the WHO Child Growth Standards is based on the finding that well-nourished children of all population groups for which data exist follow similar growth patterns before puberty. The WHO standards are, therefore, appropriate for assessing the nutritional status of children all over the world, regardless of ethnicity, social and economic influences, and feeding practices.

In describing the nutritional status of Kyrgyz children, this chapter employs three standard indices of physical growth:

- Height-for-age (stunting)
- Weight-for-height (wasting)
- Weight-for-age (underweight).

Each of these indices provides different information about growth and body composition that is useful for assessing nutritional status. Height-for-age measures linear growth. A child who is more than two standard deviations below the median (-2 SD) of the WHO reference population in terms of height-for-age is considered short for his or her age, or stunted. If a child is below three standard deviations (-3 SD) from the reference median, then he or she is considered severely stunted. Stunting reflects the cumulative effect of chronic malnutrition. It is a result of a failure to receive adequate nutrition over a long period of time and is worsened by recurrent and chronic illness. Height-for-age, therefore, provides a measure of the long-term effects of malnutrition in a population and does not vary appreciably according to recent dietary intake.

Weight-for-height describes current nutritional status. A child who is more than two standard deviations below (-2 SD) the reference median for weight-for-height is considered too thin for his or her height, or wasted. As with stunting, wasting is considered severe if the child is more than three standard deviations below the reference median. Wasting reflects acute or recent nutritional deficit. Severe wasting is closely linked to mortality risk.

Weight-for-age is a composite index of weight-for-height and height-for-age. Thus, it does not distinguish between acute malnutrition (wasting) and chronic malnutrition (stunting). A child can be underweight for age because he or she is stunted, wasted, or both. Children whose weight-for-age is below two standard deviations (-2 SD) from the median of the reference population are classified as underweight. Children whose weight-for-age is below three standard deviations (-3 SD) from the median of the reference population are considered severely underweight. Weight-for-age is an overall indicator of a population's nutritional health.

Mean Z-scores are also calculated for each of the nutritional indices. The mean Z-score describes the nutritional status of the entire population in question without the use of a cut-off. A mean Z-score of less than 0 (i.e., a negative mean value) on any of the indices suggests that the status of the children in the survey population (or in a subgroup of the survey population) on that index is, on average, below that of the WHO Growth Standards reference population.

12.1.2 Levels of Child Malnutrition

Table 12.1 shows the percentage of children under age 5 classified as malnourished according to the three anthropometric indices of nutritional status (height-for-age, weight-for-height, and weight-for-age) by various background characteristics.

Table 12.1 Nutritional status of children

Percentage of children under age 5 classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Kyrgyz Republic 2012

	Height-for-age[1]			Weight-for-height				Weight-for-age				
Background characteristic	Percentage below -3 SD	Percentage below -2 SD[2]	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Number of children
Age in months												
<6	4.0	10.0	0.1	3.5	7.8	16.8	0.3	1.4	5.2	6.3	0.2	387
6-8	2.4	11.0	-0.2	1.0	2.5	13.7	0.6	0.1	2.2	10.1	0.3	226
9-11	2.5	9.3	-0.0	0.2	2.1	10.6	0.6	0.2	1.5	6.1	0.4	267
12-17	6.4	12.8	-0.5	0.6	2.7	9.9	0.4	0.3	2.6	3.7	0.1	485
18-23	9.6	23.9	-1.0	0.9	2.7	7.2	0.4	1.1	3.2	0.5	-0.2	453
24-35	8.8	23.9	-1.2	1.7	4.0	8.3	0.4	1.3	4.5	0.4	-0.3	873
36-47	4.5	18.1	-1.1	0.3	0.6	6.6	0.5	0.5	2.7	0.6	-0.3	860
48-59	4.2	18.4	-1.1	1.1	1.6	4.6	0.4	1.4	3.7	0.0	-0.4	787
Sex												
Male	6.2	19.9	-0.9	1.3	2.9	9.2	0.5	0.8	3.1	2.0	-0.2	2,238
Female	5.3	15.3	-0.7	1.0	2.6	7.8	0.4	1.0	3.7	2.3	-0.1	2,099
Birth interval in months[3]												
First birth[4]	5.7	16.7	-0.7	1.0	2.9	9.3	0.5	0.8	3.0	2.8	-0.1	1,181
<24	4.9	20.1	-0.9	1.2	2.9	9.0	0.5	0.9	3.6	2.1	-0.2	933
24-47	7.0	19.2	-0.8	0.6	1.7	8.0	0.5	0.5	3.1	1.9	-0.2	962
48+	5.0	14.3	-0.7	1.8	3.6	7.9	0.4	2.0	3.3	2.5	-0.1	728
Size at birth[3]												
Very small	13.8	30.6	-1.5	3.6	8.4	7.8	-0.1	8.9	19.6	1.8	-0.9	64
Small	9.3	25.9	-1.2	0.8	2.4	8.2	0.4	1.1	4.8	1.5	-0.4	508
Average or larger	4.9	16.1	-0.7	1.1	2.7	8.7	0.5	0.8	2.6	2.5	-0.1	3,217
Mother's interview status												
Interviewed	5.7	17.7	-0.8	1.1	2.7	8.6	0.4	1.0	3.2	2.3	-0.1	3,804
Not interviewed but in household	(1.5)	(14.1)	(-0.8)	(6.2)	(6.2)	(15.1)	(0.3)	(0.0)	(12.1)	(0.0)	(-0.2)	36
Not interviewed and not in the household[5]	6.5	18.0	-0.9	1.2	2.7	7.5	0.5	0.6	4.2	0.8	-0.2	497
Mother's nutritional status[6]												
Thin -BMI<18.5)	9.7	24.2	-0.9	1.3	4.4	6.3	0.1	0.8	4.5	0.6	-0.4	205
Normal (BMI 18.5-24.9)	5.0	17.7	-0.8	1.1	2.7	8.6	0.4	1.0	3.4	2.4	-0.1	2,006
Overweight/obese (BMI > = 25)	5.7	16.6	-0.8	0.7	1.5	9.0	0.6	0.7	1.9	3.1	-0.0	1,078
Residence												
Urban	4.5	17.6	-0.7	1.0	3.3	8.1	0.4	0.7	3.6	2.8	-0.1	1,167
Rural	6.2	17.7	-0.8	1.2	2.5	8.7	0.5	1.0	3.3	1.9	-0.1	3,170
Region												
Issyk-Kul	1.8	9.7	-0.7	0.5	1.9	7.6	0.6	0.7	2.0	3.1	0.0	426
Djalal-Abad	3.4	14.6	-0.7	1.3	2.9	3.5	0.1	1.0	4.3	2.0	-0.3	776
Naryn	5.4	17.6	-1.0	0.9	2.1	6.6	0.5	0.6	2.9	1.4	-0.2	202
Batken	5.7	22.5	-0.9	1.7	3.3	7.1	0.3	1.2	4.9	2.3	-0.3	372
Osh Oblast	10.1	25.3	-1.1	1.3	2.7	11.9	0.6	1.1	3.7	1.3	-0.2	1,003
Talas	2.3	13.0	-0.7	2.2	4.0	10.9	0.5	1.1	3.4	2.3	0.0	269
Chui	6.2	11.6	-0.5	0.5	0.9	10.1	0.7	0.6	1.1	3.4	0.2	690
Bishkek City	3.7	18.6	-0.7	1.1	4.3	7.5	0.3	0.5	2.8	1.7	-0.1	476
Osh City	13.4	29.0	-1.2	1.4	5.7	13.4	0.4	2.4	11.3	2.0	-0.4	123
Mother's education[7]												
None/primary	*	*	*	*	*	*	*	*	*	*	*	23
Basic general	5.8	18.1	-0.8	0.4	1.8	8.5	0.4	1.4	3.6	2.7	-0.2	412
Secondary	6.6	19.5	-0.9	1.4	2.9	9.2	0.4	0.9	3.7	1.9	-0.2	1,772
Professional primary/ middle	4.8	14.1	-0.7	1.0	1.5	7.8	0.5	0.9	2.4	2.7	-0.0	617
Higher	4.4	16.4	-0.7	1.0	3.7	8.2	0.4	0.8	3.1	2.6	-0.1	1,016
Wealth quintile												
Lowest	7.7	18.3	-0.9	1.6	2.7	9.5	0.5	1.6	4.5	2.1	-0.2	913
Second	4.7	18.6	-0.9	0.9	2.1	9.5	0.5	0.6	2.6	1.8	-0.1	901
Middle	6.2	16.7	-0.9	1.3	3.2	7.1	0.4	1.2	3.7	1.7	-0.2	936
Fourth	4.8	16.4	-0.6	1.0	2.0	7.6	0.5	0.6	2.9	2.5	-0.0	943
Highest	5.3	19.0	-0.7	0.8	4.1	9.5	0.4	0.4	3.3	2.8	-0.1	644
Total	5.8	17.7	-0.8	1.1	2.7	8.5	0.4	0.9	3.4	2.1	-0.1	4,337

Note: The table is based on children who stayed in the household on the night before the interview. Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards adopted in 2006. The indices in this table are NOT comparable to those based on the previously used 1997 NCHS/CDC/WHO reference. The table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight. An asterisk indicates that a figure is based in fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases. Total includes 14 children whose size at birth is missing.

[1] Recumbent length was measured for children under age 2, or in the few cases when the age of the child was unknown and the child was less than 85 cm; standing height was measured for all other children.

[2] Includes children who are below -3 standard deviations (SD) from the WHO Child Growth standards population median.

[3] Excludes children whose mothers were not interviewed.

[4] First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.

[5] Includes children whose mothers are deceased.

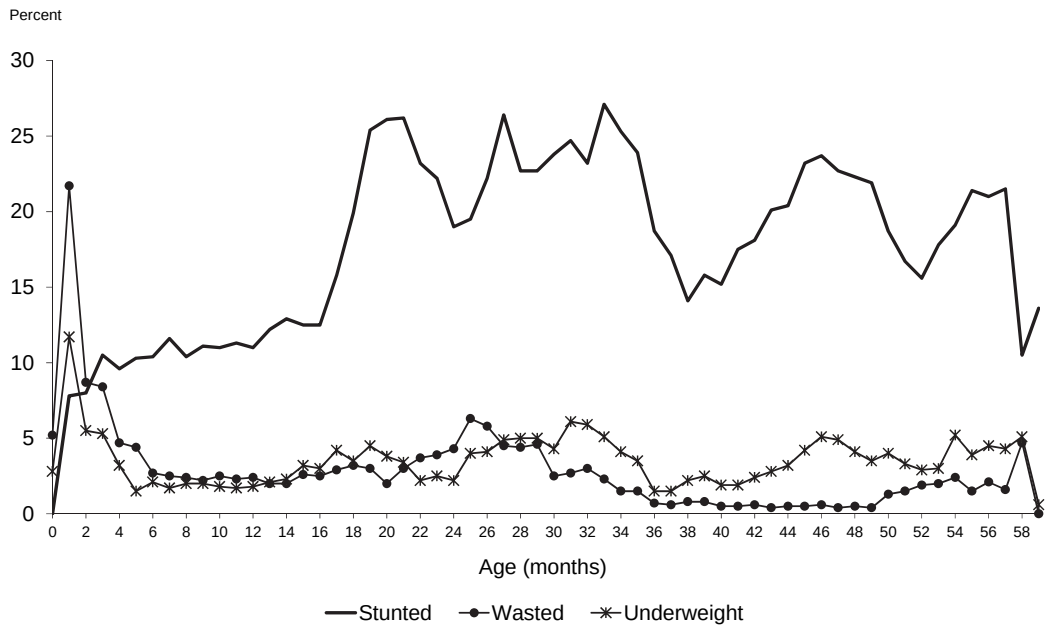
[6] Excludes children whose mothers were not weighed and measured and children whose mothers are pregnant or gave birth within the preceding 2 months. Mother's nutritional status in terms of BMI (Body Mass Index) is presented in Table 12.10.

[7] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Height-for-age (stunting)

At the national level, 18 percent of children under age 5 are stunted, and 6 percent are severely stunted. Analysis by age group shows that stunting rises rapidly from 10 percent among children under age 6 months to almost one-quarter of children age 18-35 months (Figure 12.1). Severe stunting shows a similar pattern, with the lowest proportion of severe stunting in children age 6-11 months (Table 12.1).

Figure 12.1
Nutritional status of children by age



Note: Stunting reflects chronic malnutrition; wasting reflects acute malnutrition; underweight reflects chronic or acute malnutrition or a combination of both. Plotted values are smoothed by a five-month moving average.

KgDHS 2012

Table 12.1 shows that children perceived by their mothers as very small or small at birth are more likely to be stunted (31 and 26 percent, respectively) than children perceived as average or larger in size at birth (16 percent).[1] The mother's body mass index (BMI)[2] is also associated with stunting levels among children; children born to thin mothers are more likely to be stunted than children born to overweight or obese mothers.

No difference is evident in the prevalence of stunting by urban-rural residence, but there is considerable regional variation; the stunting rate ranges from 10 percent in the Issyk-Kul region to 23-25 percent in the Batken and Osh Oblast regions, and 29 percent in Osh City. Prevalence of severe stunting is especially high among children in Osh City and the Osh Oblast region (13 and 10 percent, respectively).

Weight-for-height (wasting)

Overall, 3 percent of children in the Kyrgyz Republic are wasted. Looking at the differentials by age, wasting is highest (8 percent) in children under age 6 months and lowest (1 percent) in children age 36-47 months. Female and male children are almost equally likely to be wasted. Children who are very small at birth are more likely to be wasted (8 percent) than children who are of average size or larger at

[1] In the 2012 KgDHS, mothers were asked their perception of their child's birth size, i.e., if their child was average or larger, small, or very small at birth. Perceived birth size is useful as a proxy for birth weight since not all mothers can recall birth weight accurately and not all newborns are weighed at birth. More information on the perceived size at birth measure is found in Chapter 11.
[2] For more information on the BMI measure, see Section 12.6.

birth (3 percent). By region, wasting in children ranges from 1 percent in the Chui region to 6 percent in Osh City.

Table 12.1 also shows the proportion of children who are more than 2 standard deviations above the reference median. These children are considered to be heavy for their height. Nine percent of children under age 5 are this category. The results suggest that children under age 18 months are more likely to be overweight than older children, with the highest proportion observed among children under age 6 months (17 percent). The variation by other background characteristics tends to be minor, except for region. The proportion of children who are heavy for their height is highest in Osh City (13 percent), followed closely by the Osh Oblast, Talas, and Chiu regions (10-12 percent), and lowest in the Djalal-Abad region (4 percent).

Weight-for-age (underweight)

Table 12.1 shows that 3 percent of children under age 5 are underweight and 1 percent are severely underweight. Children perceived by mothers as very small at birth are much more likely to be underweight (20 percent) than those perceived as either small (5 percent) or average or larger (3 percent) at birth. The Chiu region has the lowest proportion of underweight children (1 percent), while Osh City has the largest (11 percent).

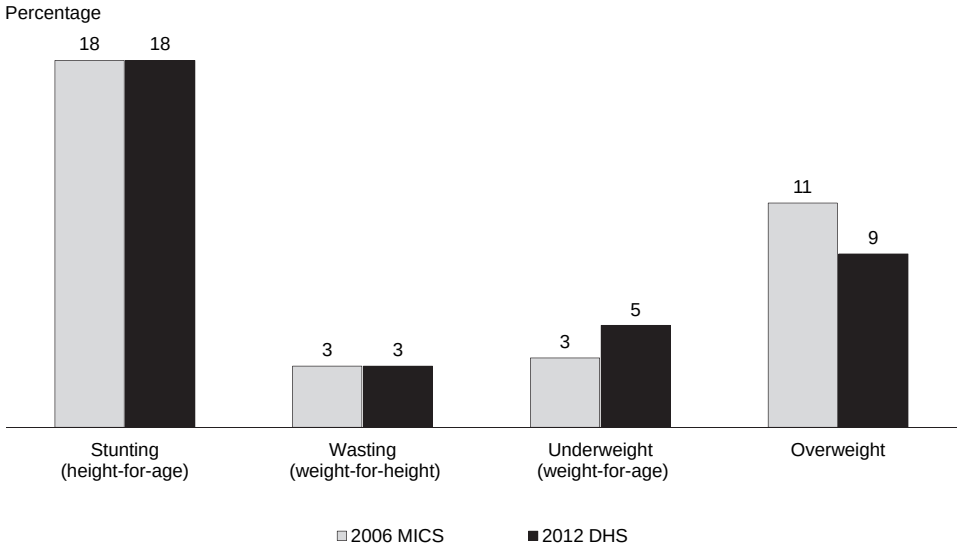
12.1.3 Trends in Children's Nutritional Status

The information from the KgDHS can be compared with the results of the 2006 MICS[3] to look at changes in children's nutritional status over the past six years. The MICS and KgDHS surveys both obtained anthropometric data for all children under age 5. However, the levels of stunting, wasting, and underweight published in the 2006 MICS survey report (NCS, 2007) were derived using the National Center for Health Statistics (NCHS) reference standards. Thus, in order to assess trends in nutrition status, shown in Figure 12.2, the 2006 MICS nutrition indicators have been re-calculated using the 2006 WHO Child Growth Standards (WHO, 2013).

Figure 12.2 shows that, both in 2006 and in 2012, 18 percent of children under age 5 were classified as stunted. Similarly, the proportion of children who were wasted was 3 percent both in 2006 and in 2012, as was the proportion of underweight children (3 percent each). The proportion of overweight children was only slightly higher in 2006 compared with 2012 (11 and 9 percent, respectively). In conclusion, comparisons of the 2006 MICS nutrition status information with the 2012 KgDHS findings suggest that, overall, children's nutritional status has not changed substantially during the past six years.

[3] Changes in children's nutritional status between the 1997 KgDHS and the 2012 KgDHS cannot be assessed because the 1997 KgDHS obtained information only for children under age 3 (0-35 months) whose mothers were interviewed in the survey. It should also be noted that the published figures in the 1997 KgDHS report were derived using the NCHS growth standard, which is not comparable to the WHO Child Growth Standard used in deriving the nutrition status indicators presented in Table 12.1.

Figure 12.2
Trends in nutritional status of children under age 5, Kyrgyz Republic 2012



Note: Based on children who spent the night before the interview in the household, had valid month and year of birth, and valid height and weight measurements, according to the WHO Child Growth Standards. *Stunting* reflects chronic malnutrition; *Wasting* reflects acute malnutrition; *Underweight* reflects chronic or acute malnutrition, or a combination of both. The nutrition status indicators published in the 2006 MICS report were derived using the NCHS/CDC/WHO reference, which is not comparable to the WHO Child Growth Standard used in deriving the nutrition status indicators presented in Figure 12.2.

12.2 BREASTFEEDING AND COMPLEMENTARY FEEDING

Feeding practices play a pivotal role in determining the optimal growth and development of infants. Poor breastfeeding and infant feeding practices have adverse consequences for the health and nutritional status of children. These consequences, in turn, affect children's mental and physical development. Breastfeeding also affects mothers by physiologically suppressing the return of fertility, thereby lengthening the interval between pregnancies.

UNICEF and WHO recommend that children be exclusively breastfed (that is, given no other liquid or solid food or plain water) for the first six months of life and that children be given solid or semi-solid complementary foods beginning in the seventh month of life. The standard indicator of exclusive breastfeeding is the percentage of children under age 6 months who are exclusively breastfeeding. The standard indicator of timely complementary feeding is the percentage of children age 6-8 months who receive solid, semi-solid, or soft foods. WHO recommends that breastfeeding continue through the second year of life. Use of bottles with nipples is not recommended for feeding at any age (WHO, 2008).

12.2.1 Initiation of Breastfeeding

Early initiation of breastfeeding is important for both the mother and the child. There are a number of reasons to encourage early breastfeeding. Mothers benefit from early suckling because it stimulates breast milk production and facilitates the release of oxytocin, which helps to contract the uterus and reduce postpartum blood loss. The first breast milk contains colostrum, which is highly nutritious and has antibodies that protect the newborn from diseases. Early initiation of breastfeeding also encourages bonding between the mother and her newborn.

Table 12.2 presents the breastfeeding status of all last-born children born in the two years preceding the survey by background characteristics. The table shows the percentage of children according to whether they were ever breastfed, when they started breastfeeding, and whether they were fed anything other than breast milk prior to the commencement of breastfeeding. Breastfeeding is almost universal in the Kyrgyz Republic; 99 percent of last-born children born in the two years preceding the survey were breastfed at some point in their life. Overall, 84 percent of last-born children were breastfed within one hour after birth, and 95 percent were breastfed within one day after birth.

Comparisons with data from the 1997 KgDHS[4] and 2006 MICS indicate that the percentage of children who were breastfed within one hour of birth has markedly increased over the past 15 years (45 percent in 1997, 65 percent in 2006, and 84 percent in 2012), with the sharpest increase observed during the period between the 2006 MICS and the 2012 KgDHS. The percentage of children who started breastfeeding within one day of birth increased rapidly, from 69 percent in 1997 to 89 percent in 2006, and reached 95 percent in 2012 (RIOP and Macro International Inc., 1998; NSC, 2007).

Table 12.2 shows no marked differences in the timing of initial breastfeeding within one hour of birth, either by the sex of the child or by urban-rural residence. Considerable variation, however, is observed by region. The proportions of children breastfed within one hour of birth are highest in the Djalal-Abad and Batken regions (93 and 95 percent, respectively) and lowest in the Talas region and Bishkek (72 and 74 percent, respectively). Children born to mothers with higher education and children from households in the highest wealth quintile are less likely to begin breastfeeding within one hour of birth or within one day of birth compared with children born to mothers with less education or wealth.

[4] To allow for an assessment of changes between the surveys, the 1997 KgDHS data on initiation of breastfeeding have been recalculated for the last-born children who were born in the *two* years preceding the survey and therefore are different from the data published in the 1997 KgDHS report that were calculated for children who were born in the *three* years before the survey.

Table 12.2 Initial breastfeeding

Among last-born children who were born in the two years preceding the survey, the percentage who were ever breastfed and the percentages who started breastfeeding within one hour and within one day of birth; and among last-born children born in the two years preceding the survey who were ever breastfed, the percentage who received a prelacteal feed, by background characteristics, Kyrgyz Republic 2012

	Among last-born children born in the past two years:				Among last-born children born in the past two years who were ever breastfed:	
Background characteristic	Percentage ever breastfed	Percentage who started breastfeeding within one hour of birth	Percentage who started breastfeeding within one day of birth[1]	Number of last-born children	Percentage who received a prelacteal feed[2]	Number of last-born children ever breastfed
Sex						
Male	98.0	83.5	95.0	901	14.8	882
Female	99.2	84.2	94.1	796	12.2	789
Residence						
Urban	98.4	81.3	91.5	500	15.2	492
Rural	98.6	84.8	95.9	1,196	12.9	1,180
Region						
Issyk-Kul	98.6	85.6	93.1	157	10.9	154
Djalal-Abad	98.4	93.0	97.7	322	8.9	317
Naryn	99.4	79.5	98.0	72	3.4	72
Batken	98.6	95.2	96.7	165	4.2	163
Osh Oblast	99.7	76.0	97.9	342	25.6	341
Talas	98.3	71.9	91.9	97	7.9	96
Chui	96.6	87.5	93.8	278	8.5	269
Bishkek City	99.2	73.4	85.1	211	23.2	209
Osh City	98.7	86.9	94.9	53	13.8	52
Mother's education						
None/primary	*	*	*	*	*	9
Basic general	98.5	89.3	97.6	197	15.7	194
Secondary	99.2	84.9	95.8	758	13.5	753
Professional primary/middle	99.0	86.6	95.0	266	11.5	264
Higher	97.1	78.3	91.0	465	14.5	452
Wealth quintile						
Lowest	98.5	82.1	95.2	315	14.6	311
Second	98.8	86.1	97.1	343	16.6	339
Middle	98.8	86.7	95.3	363	7.4	358
Fourth	98.3	85.0	96.1	380	11.8	373
Highest	98.3	78.0	88.3	296	19.1	291
Total	98.5	83.8	94.6	1,696	13.6	1,672

Note: Table is based on last-born children born in the two years preceding the survey regardless of whether the children are living or dead at the time of interview. An asterisk indicates that a figure is based in fewer than 25 unweighted cases and has been suppressed.

[1] Includes children who started breastfeeding within one hour of birth

[2] Children given something other than breast milk during the first three days of life

Prelacteal feeding is the practice of giving other liquids to a child during the first three days of life. The practice of prelacteal feeding is discouraged because it limits the frequency of suckling by the infant and exposes the child to the risk of gastrointestinal infection. Only 14 percent of newborns in the two years preceding the 2012 KgDHS received a prelacteal feed. The likelihood of receiving a prelacteal feed is highest for births in the Osh Oblast region and Bishkek and lowest for births in the Naryn and Batken regions.

12.2.2 Breastfeeding Status by Age

Breast milk contains all the nutrients needed by children in the first six months of life. Thus, it is recommended that during the first six months of life a child should not be given any complementary liquid or solid food or plain water. Exclusive breastfeeding (i.e., receiving only breast milk) is encouraged for newborns because it reduces the likelihood of contamination introduced by other feeding and thus decreases the risk of diarrhea. As an infant grows, however, breast milk alone no longer provides sufficient nourishment, and other liquids and foods need to be added to a child's diet. When the child reaches age 6 months, solid or semi-solid complementary foods should be added to the diet with continued breastfeeding.

The 2012 KgDHS collected data on infant and young child feeding for all last-born children under age 2 living with their mothers, using a 24-hour recall method. As Table 12.3 and Figure 12.3 show, a large majority of children in the Kyrgyz Republic are breastfed during the first year of life, and breastfeeding continues through the second year for over half of the children. However, contrary to recommended practices, supplementation of breast milk with other liquids or foods starts at an early age, with only slightly more than half (56 percent) of children under age 6 months exclusively breastfed. In addition to breast milk, 20 percent of children under age 6 months consume plain water, 4 percent consume non-milk liquids, 5 percent consume other milk, and 13 percent consume complementary foods.

Table 12.3 Breastfeeding status by age

Percent distribution of youngest children under two years who are living with their mother by breastfeeding status and the percentage currently breastfeeding; and the percentage of all children under two years using a bottle with a nipple, according to age in months, Kyrgyz Republic 2012

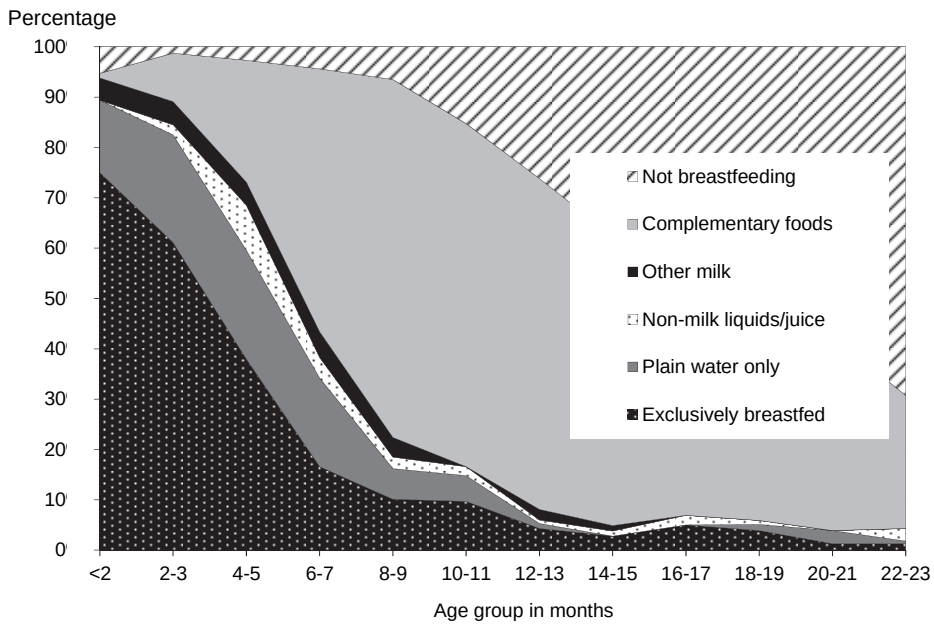
		Breastfeeding status									
Age in months	Not breast-feeding	Exclu-sively breastfed	Breast-feeding and consu-ming plain water only	Breast-feeding and consu-ming non milk liquids[1]	Breast-feeding and consu-ming other milk	Breast-feeding and consu-ming comple-mentary foods	Total	Percent-age currently breast-feeding	Number of youngest children under two years living with the mother	Percent-age using a bottle with a nipple	Number of all children under two years
0-1	5.3	75.0	14.4	0.0	4.4	0.9	100.0	94.7	99	2.8	99
2-3	1.3	61.1	21.4	2.0	4.6	9.6	100.0	98.7	168	14.2	169
4-5	2.7	38.0	21.6	9.0	4.6	24.2	100.0	97.3	149	16.7	152
6-8	4.9	14.0	15.0	3.8	5.0	57.3	100.0	95.1	225	30.7	230
9-11	12.4	10.0	4.0	1.7	1.1	70.9	100.0	87.6	259	31.8	263
12-17	30.4	4.0	0.4	1.2	1.1	62.9	100.0	69.6	409	23.9	426
18-23	60.1	2.2	1.5	1.1	0.0	35.1	100.0	39.9	343	18.0	406
0-3	2.8	66.2	18.8	1.2	4.5	6.4	100.0	97.2	268	10.0	268
0-5	2.7	56.1	19.8	4.0	4.6	12.8	100.0	97.3	417	12.4	421
6-9	5.6	13.0	11.2	3.1	4.4	62.7	100.0	94.4	318	30.6	325
12-15	31.7	3.6	0.5	0.8	1.6	61.7	100.0	68.3	282	25.8	293
12-23	43.9	3.2	0.9	1.1	0.6	50.3	100.0	56.1	753	21.0	832
20-23	63.0	1.3	1.6	1.2	0.0	32.8	100.0	37.0	228	17.2	282

Note: Breastfeeding status refers to a "24-hour" period (yesterday and last night). Children who are classified as breastfeeding and consuming plain water only consumed no liquid or solid supplements. The categories of not breastfeeding, exclusively breastfed, breastfeeding and consuming plain water, non-milk liquids, other milk, and complementary foods (solids and semi-solids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. Thus children who receive breast milk and non-milk liquids and who do not receive other milk and who do not receive complementary foods are classified in the non-milk liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.

[1] Non-milk liquids include juice, juice drinks, clear broth, or other liquids.

Figure 12.3

Infant feeding practices by age, Kyrgyz Republic 2012



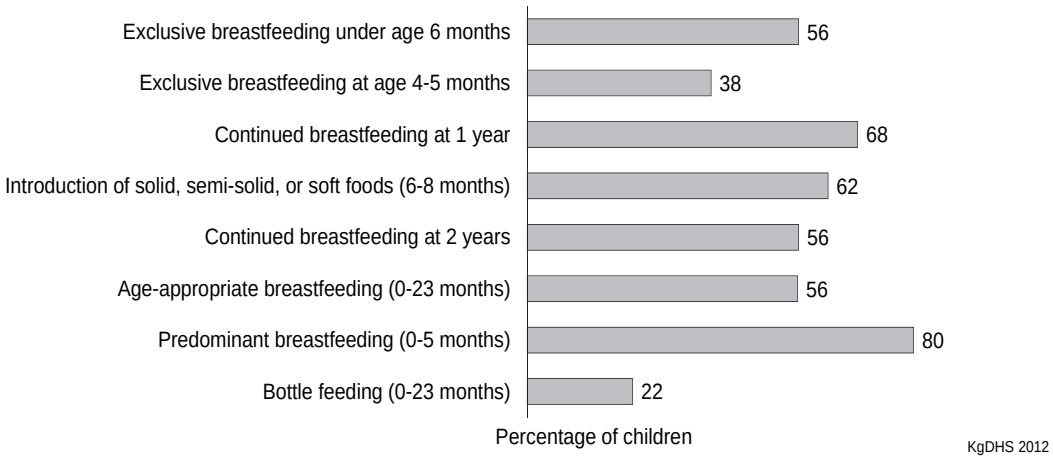
KgDHS 2012

Data from the 1997 KgDHS and the 2006 MICS can be compared with the 2012 KgDHS results to examine changes in the practice of exclusive breastfeeding over the 15-year period covered by the three surveys. Some caution must be used in making the comparisons since there were differences in the manner in which questions on breastfeeding and supplementation were asked in the surveys.[5] Nevertheless, the comparisons show a clear pattern of increases in exclusive breastfeeding. Among children age 0-3 months, for example, the 2012 KgDHS rate of exclusive breastfeeding is 66 percent, which is substantially higher than the rate of 41 percent in the 2006 MICS, and is more than double the rate reported in the 1997 KgDHS (31 percent). Among children under age 6 months, the rate of exclusive breastfeeding increased from 32 percent at the time of the 2006 MICS survey to 56 percent in 2012.

Finally, Table 12.3 also presents the percentage of children who are given a bottle with a nipple. While only 3 percent of children under age 2 months are being given a bottle with a nipple, bottle feeding increases rapidly to 14 percent of children age 2-3 months and reaching a peak at 32 percent of children age 9-11 months. Overall, 22 percent of children under age 2 are bottle fed (Figure 12.4). This is of potential concern, since bottles can transmit germs unless they are adequately sterilized.

Figure 12.4 summarizes information from the 2012 KgDHS relating to key infant and young child feeding (IYCF) practices. The figure shows that, although more than half of all children under age 6 months (56 percent) are being exclusively breastfed, only 38 percent of those age 4-5 months are exclusively breastfed. Predominant breastfeeding (receiving breast milk and only plain water or non-milk liquids such as juice, clear broth, and other liquids) is prevalent in 80 percent of the children age 0-5 months. Over two-thirds of children (68 percent) continue breastfeeding until age 1, and 56 percent continue to breastfeed until age 2. Six in ten children are introduced to complementary foods at an appropriate age, and just over half (56 percent) of children age 0-23 months are breastfed appropriately for their age, i.e., exclusive breastfeeding for children 0-5 months and continued breastfeeding along with complementary foods for children age 6-23 months. In summary, the results in Figure 12.4 indicate that while mothers of a majority of Kyrgyz children are following recommended feeding practices, there is considerable room for improvement.

Figure 12.4
Infant and young indicators on breastfeeding status, Kyrgyz Republic 2012



[5] A major difference between the three surveys is the information obtained on complementary feeding; the 2012 KgDHS survey asked mothers about more kinds of complementary foods that could have been given to the child than were asked about in the 1997 KgDHS and 2006 MICS (NSC, 2007; RIOP and Macro International Inc., 1998).

12.2.3 Duration of Breastfeeding

Table 12.4 shows the median duration of breastfeeding among children born in the three years preceding the KgDHS by selected background characteristics. The table also presents the mean duration of breastfeeding for the entire population of children born in the three years preceding the survey. The estimates are based on current status data, that is, the proportion of children born in the three years preceding the survey who were being breastfed at the time of the survey.

The median duration of any breastfeeding among children in the Kyrgyz Republic in 2012 is 18.3 months. The median duration of exclusive breastfeeding is just 3.1 months, while the median duration of predominant breastfeeding is 5.6 months.

In general, the median durations of any, exclusive, and predominant breastfeeding do not vary consistently across background characteristics. The largest differences are observed by region; however, caution must be exercised in interpreting the regional differentials because of the small number of cases. Children born to mothers with a professional or higher education and children in the highest wealth quintile are breastfed for a somewhat shorter period, on average, than other children.

Table 12.4 Median duration of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the three years preceding the survey, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Median duration (months) of breastfeeding among children born in the past three years[1]		
	Any breastfeeding	Exclusive breastfeeding	Predominant breastfeeding[2]
Sex			
Male	18.8	2.9	5.5
Female	17.4	3.3	5.6
Residence			
Urban	17.0	3.2	5.7
Rural	18.6	3.0	5.5
Region			
Issyk-Kul	(17.0)	(2.4)	4.3
Djalal-Abad	(21.0)	1.3	5.2
Naryn	(14.2)	(5.1)	(5.5)
Batken	(19.0)	2.6	5.2
Osh Oblast	19.4	6.0	7.8
Talas	15.6	2.8	4.3
Chui	(14.9)	*	(0.7)
Bishkek City	(14.4)	(3.9)	(5.7)
Osh City	*	(4.4)	(7.4)
Mother's education			
None/primary	*	*	*
Basic general	(18.9)	1.5	5.1
Secondary	19.1	4.0	5.8
Professional primary/middle	16.5	2.5	5.4
Higher	16.4	2.5	5.3
Wealth quintile			
Lowest	18.9	3.9	5.9
Second	18.6	1.8	5.3
Middle	18.8	3.3	5.9
Fourth	17.3	2.6	4.9
Highest	15.2	3.4	6.0
Total	18.3	3.1	5.6
Mean for all children	17.9	4.8	6.9

Note: Median and mean durations are based on the distributions at the time of the survey of the proportion of births by months since birth. Includes children living and deceased at the time of the survey. An asterisk indicates that a figure is based in fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.

[1] It is assumed that non-last-born children and last-born children not currently living with the mother are not currently breastfeeding.

[2] Either exclusively breastfed or received breast milk and plain water, and/or non-milk liquids only

12.2.4 Types of Complementary Foods

As mentioned, it is recommended that complementary feeding (giving solid or semi-solid foods to infants in addition to breast milk) start at age 6 months, because at this age breast milk is no longer sufficient to maintain the child's growth (WHO, 2008). In the 2012 KgDHS, women who had at least one child living with them who was born in 2010 or later were asked questions about the types of liquids and foods their youngest child had consumed during the day or night preceding the interview (e.g., fortified baby food, meat, eggs, etc.). Data based on responses to these questions are subject to a number of limitations. First, the mother may have had difficulty in recalling all of the foods and liquids her child consumed. In addition, a mother may not have been able to report fully on a child's intake of food and liquids, if the child was fed by individuals other than the respondent during the period. Despite these limitations, the information collected on the types of foods and liquids consumed by young children is useful in assessing timely and appropriate complementary feeding.

Table 12.5 presents information on the types of foods and liquids children under age 2 received on the day before the interview according to the child's age and breastfeeding status. The results show that, for many breastfeeding children, foods and liquids other than breast milk are being consumed earlier than the recommended age of 6 months. For example, on the day before the survey interview, 10 percent of breastfeeding children age 2-3 months were given solid or semi-solid food, 6 percent each received infant formula or fortified baby foods, and 5 percent received liquids other than plain water in addition to breast milk.

Table 12.5 Foods and liquids consumed by children in the day or night preceding the interview

Percentage of youngest children under two years of age who are living with the mother by type of foods consumed in the day or night preceding the interview, according to breastfeeding status and age, Kyrgyz Republic 2012

	Liquids			Solid or semi-solid foods										
Age in months	Infant formula	Other milk[1]	Other liquids[2]	Fortified baby foods	Food made from grains[3]	Fruits and vege-tables rich in vitamin A[4]	Other fruits and vege-tables	Food made from roots and tubers	Food made from legumes and nuts	Meat, fish, poultry	Eggs	Cheese, yogurt, other milk product	Any solid or semi-solid food	Number of children
BREASTFEEDING CHILDREN														
0-1	4.6	0.0	0.6	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	94
2-3	6.1	0.3	4.5	6.1	1.5	0.0	0.0	3.1	0.0	0.0	0.5	1.3	9.8	166
4-5	7.9	9.2	18.0	9.4	10.0	2.5	6.2	8.7	1.1	4.3	5.7	9.3	24.9	146
6-8	9.4	17.6	48.0	15.5	42.2	11.5	16.6	32.2	1.2	20.5	20.0	23.8	60.3	214
9-11	8.6	26.4	67.6	16.7	67.5	23.3	36.6	50.7	3.1	38.1	26.6	40.8	80.9	227
12-17	5.6	24.3	78.2	9.6	83.0	35.9	53.3	67.9	4.5	58.5	41.0	49.3	90.4	285
18-23	4.1	23.4	76.4	5.1	79.1	35.5	53.0	65.8	8.2	62.1	35.5	50.4	88.1	137
6-23	7.1	23.1	67.6	12.2	68.2	26.5	39.7	54.2	3.9	44.3	31.1	40.9	80.0	863
Total	6.9	16.8	48.7	10.2	47.8	18.3	27.7	38.2	2.8	30.6	21.9	29.1	58.7	1,269
NONBREASTFEEDING CHILDREN														
0-1	*	*	*	*	*	*	*	*	*	*	*	*	*	5
2-3	*	*	*	*	*	*	*	*	*	*	*	*	*	2
4-5	*	*	*	*	*	*	*	*	*	*	*	*	*	4
6-8	*	*	*	*	*	*	*	*	*	*	*	*	*	11
9-11	(25.6)	(45.3)	(84.1)	(30.1)	(84.9)	(39.5)	(56.4)	(74.5)	(5.0)	(71.5)	(39.4)	(61.3)	(95.9)	32
0-11	27.8	33.3	68.3	38.1	60.5	32.9	40.1	51.5	2.9	49.4	26.6	49.4	83.8	55
12-17	17.0	38.1	86.5	19.5	92.8	39.0	62.4	72.3	9.2	65.9	39.3	53.8	97.6	124
18-23	6.4	37.7	80.5	13.8	90.5	44.9	52.1	78.3	11.8	70.1	43.0	47.7	95.7	206
6-23	12.7	38.0	82.1	19.0	89.2	42.1	55.4	74.8	10.0	67.8	40.7	50.7	96.5	374
Total	12.8	37.2	80.7	19.1	87.0	41.3	53.7	72.5	9.7	65.8	39.5	49.9	94.6	385

Note: Breastfeeding status and food consumed refer to a 24-hour" period (yesterday and last night). An asterisk indicates that a figure is based in fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.

[1] Other milk includes fresh, tinned and powdered cow or other animal milk.

[2] Does not include plain water

[3] Includes fortified baby food

[4] Includes fruits and vegetables such as pumpkin, carrots, red sweet bell peppers, dark green leafy vegetables, persimmon, and other locally grown fruits and vegetables that are rich in vitamin A

Once children reach age 6 months, they should be fed small quantities of solid and semi-solid foods, while continuing to breastfeed. The results in Table 12.5 suggest that these guidelines are not being observed in the case of many children age 6 months and older. For example, only 60 percent of breastfed children age 6-8 months received any solid or semi-solid food on the day before the interview. Even among breastfeeding children age 9-11 months, only 81 percent were given any solid or semi-solid food on the day before the interview.

It is also recommended that the amount of food a child receives should be increased gradually from 6 to 23 months, which is the period of transition to eating the regular family diet. No information was obtained in the KgDHS on the quantity of food children were receiving. However, the results in Table 12.5 show that the proportion of breastfeeding children receiving other types of liquids and foods tends to increase with the child's age, conforming with the expectation of a gradual introduction of a diverse diet.

Finally, Table 12.5 shows that, as expected, foods made from grains are the staple in the diet of young children. Over two-thirds of breastfeeding children age 6-23 months consume foods made from

grains (including fortified baby foods), 27 percent consume fruits and vegetables rich in vitamin A, 40 percent consume other fruits and vegetables, 44 percent eat meat, fish, or poultry, and 31 percent consume eggs. In addition to being breastfed, 7 percent of these children also receive infant formula, 23 percent receive other milk, and 41 percent receive cheese, yogurt, or other milk products. Overall in the Kyrgyz Republic, 80 percent of breastfed children age 6-23 months are receiving solid or semi-solid foods. As expected, non-breastfeeding children age 6-23 months are more likely than breastfeeding children to receive the different types of liquids and solid and semi-solid foods. However, caution should be exercised when interpreting these results because the number of non-breastfeeding children is small compared with the number of breastfeeding children.

12.2.5 Infant and Young Child Feeding Practices

Infant and young child feeding (IYCF) practices include initiating timely feeding of solid or semi-solid foods at age 6 months and increasing the amount and variety of foods and frequency of feeding as the child gets older, while maintaining frequent breastfeeding. Guidelines have been established for IYCF practices for children age 0-23 months (PAHO/WHO, 2003; WHO, 2005; WHO, 2008). Although breastfeeding is recommended for infants up to age 2, the guidelines include standards for assessing feeding practices for non-breastfeeding children as well as breastfed children, since it is recognized that children may stop breastfeeding before reaching age 2, for various reasons (WHO, 2005).

The IYCF guidelines include recommendations with respect to both dietary diversity and frequency of feeding. With respect to dietary diversity, studies have shown that plant-based complementary foods by themselves are insufficient to meet the needs for certain micronutrients (WHO and UNICEF, 1998). Therefore it is recommended that meat, poultry, fish, or eggs be eaten daily or as often as possible. It is also important to pay attention to the types of fruits and vegetables a child consumes, since vegetarian diets may not meet children's nutrient requirements in the absence of supplements or fortified products. In particular, children should consume fruits and vegetables rich in vitamin A on a daily basis. Children's diets also should include an adequate fat content, because fat provides essential fatty acids, facilitates absorption of fat-soluble vitamins (such as vitamin A), and enhances dietary energy density and palatability. Taking these factors into account, the IYCF guidelines for minimum dietary diversity call for feeding the child food from at least four of the following seven food groups: grains, roots, and tubers; legumes and nuts; dairy products (milk, yogurt, cheese); flesh foods (meat, fish, poultry, and liver/organ meat); eggs; vitamin A-rich fruits and vegetables; and other fruits and vegetables. Consumption of food from at least four food groups means that the child has a high likelihood of consuming at least one animal source of food and at least one fruit or vegetable in addition to a staple food (grains, roots, or tubers) (WHO, 2008).

In addition to dietary diversity, frequency of feeding is important to ensure that children meet their nutrient and caloric requirements. The minimum feeding frequencies are based on the energy needs from complementary foods estimated from age-specific total daily energy requirements. The guidelines differ for breastfeeding and non-breastfeeding children. Meal frequency is considered a proxy for energy intake from foods other than breast milk; therefore, the feeding frequency indicator for non-breastfeeding children includes both milk feeds and solid/semi-solid feeds (WHO, 2008).

The recommended number of feedings is as follows:

- Breastfeeding infants age 6-8 months should be fed meals of complementary foods two to three times per day, with one to two snacks as desired; breastfeeding children age 9-23 months should be fed meals three to four times per day, with one to two snacks.

- Non-breastfeeding children 6-23 months should receive milk products at least twice a day to ensure that they meet their calcium needs. Non-breastfeeding children also should be fed meals four to five times per day, with one to two snacks as desired (WHO, 2005).

Table 12.6 shows the IYCF practices for the youngest children age 6-23 months living with the mother. The recommendations take into account children for whom feeding practices meet minimum standards with respect to:

- Food diversity (the number of food groups consumed)
- Feeding frequency (the number of times the child is fed)
- Consumption of breast milk or other types of milk or milk products.

Table 12.6 shows that 38 percent of breastfeeding children age 6-23 months receive foods from four or more food groups, and 36 percent are fed the minimum number of times. Among non-breastfeeding children age 6-23 months, 48 percent are given milk or milk products, 59 percent are given foods from four or more food groups, and 64 percent are fed the minimum number of times.

Table 12.6 shows that among all children age 6-23 months, 84 percent are given breast milk or other milk products, but less than half receive an appropriately diverse diet (44 percent) or are fed the recommended number of times with solid or semi-solid foods (44 percent). Sixteen percent are being fed in accordance with all three of the IYCF recommendations of consuming breast milk or other milk products, having the minimum dietary diversity, and having the minimum meal frequency.

The proportion of all children age 6-23 months fed according to all three IYCF recommendations increases with the child's age, from 11 percent at age 6-8 months to 19 percent at age 12-17 months. Feeding practices vary little between boys and girls. Children in urban areas (15 percent) are also only slightly less likely to be fed according to the recommendation than children in rural areas (17 percent). Children in the Osh Oblast and Talas regions are least likely to be fed according to all IYCF practices (8 percent each), while children in the Naryn region are most likely (37 percent). The relationships between infant and child feeding practices and mother's education or mother's wealth status are not clear.

Figure 12.5 shows IYCF practices according to breastfeeding status. In terms of overall feeding practices, a higher proportion of breastfeeding children meet the minimum requirements (17 percent) than non-breastfeeding children (15 percent).

Table 12.6 Infant and young child feeding (IYCF) practices

Percentage of youngest children age 6-23 months living with their mother who are fed according to three IYCF feeding practices based on breastfeeding status, number of food groups, and times they are fed during the day or night preceding the survey, by background characteristics, Kyrgyz Republic 2012

	Among breastfeeding children age 6-23 months, percentage fed:				Among non-breastfeeding children age 6-23 months, percentage fed:					Among all children age 6-23 months, percentage fed:				
Background characteristic	4+ food groups[1]	Minimum meal frequency[2]	Both 4+ food groups and minimum meal frequency	Number of breastfeed-ing children age 6-23 months	Milk or milk products[3]	4+ food groups[1]	Minimum meal frequency[4]	With 3 IYCF practices[5]	Number of non-breast-feeding children age 6-23 months	Breast milk, milk, or milk products[6]	4+ food groups[1]	Minimum meal frequency[7]	With 3 IYCF practices	Number of all children age 6-23 months
Age in months														
6-8	16.9	38.3	10.6	214	*	*	*	*	11	97.5	17.4	39.6	11.2	225
9-11	32.1	30.2	13.4	227	(55.6)	(63.5)	(74.3)	(28.4)	32	94.5	36.0	35.7	15.3	259
12-17	51.6	38.2	22.4	285	47.3	61.8	65.3	12.0	124	84.0	54.7	46.4	19.2	409
18-23	49.7	36.0	19.6	137	46.2	58.4	60.6	14.5	206	67.7	54.9	50.8	16.5	343
Sex														
Male	37.4	33.1	16.1	471	43.1	61.5	57.1	14.2	189	83.7	44.3	40.0	15.6	659
Female	37.8	39.0	17.4	392	51.9	56.4	69.9	15.9	185	84.6	43.8	48.9	16.9	577
Residence														
Urban	35.4	38.9	17.2	230	43.1	57.0	67.7	9.0	110	81.6	42.4	48.2	14.6	339
Rural	38.4	34.7	16.5	633	49.3	59.8	61.7	17.5	264	85.1	44.7	42.6	16.8	898
Region														
Issyk-Kul	44.0	47.0	28.2	76	(60.7)	(74.3)	(82.2)	(26.8)	41	86.2	54.7	59.4	27.7	118
Djalal-Abad	60.2	24.6	16.3	186	(41.5)	(74.5)	(39.1)	(9.3)	42	89.2	62.8	27.3	15.0	228
Naryn	61.9	75.9	53.9	28	(31.5)	(69.8)	(78.2)	(14.6)	20	70.8	65.3	76.9	37.1	48
Batken	29.1	41.4	14.6	92	29.5	58.0	57.0	14.0	23	85.9	34.8	44.5	14.5	115
Osh Oblast	10.4	33.3	8.0	196	64.7	31.9	58.1	8.5	66	91.1	15.8	39.6	8.1	262
Talas	25.4	31.3	9.6	42	42.2	52.7	58.1	6.7	27	77.2	36.2	41.9	8.4	69
Chui	53.6	32.3	17.2	130	46.1	64.1	63.1	24.6	87	78.3	57.8	44.7	20.2	217
Bishkek City	26.0	48.2	20.1	84	(42.9)	(61.0)	(82.1)	(8.4)	53	77.8	39.6	61.4	15.6	137
Osh City	42.1	24.7	16.8	30	(33.5)	(53.5)	(34.7)	(12.6)	13	79.7	45.6	27.8	15.5	43
Mother's education														
None/primary	*	*	*	3	*	*	*	*	2	*	*	*	*	5
Basic general	42.2	32.5	14.8	106	(35.9)	(49.6)	(52.7)	(9.8)	33	84.7	44.0	37.3	13.6	140
Secondary	38.5	36.4	17.0	409	49.2	53.6	56.0	12.4	160	85.8	42.7	41.9	15.7	569
Professional primary/middle	37.8	35.8	17.9	127	39.2	72.5	71.4	21.4	61	80.4	49.0	47.3	19.0	188
Higher	33.9	36.0	16.6	217	53.5	62.9	71.8	17.1	118	83.6	44.2	48.7	16.8	335
Wealth quintile														
Lowest	38.8	45.1	19.8	158	57.9	58.0	75.4	13.5	67	87.4	44.5	54.2	18.0	225
Second	36.4	36.0	15.6	196	53.4	64.2	61.6	12.9	66	88.3	43.3	42.4	14.9	261
Middle	37.5	27.0	13.6	190	40.7	58.6	55.3	17.1	77	82.8	43.6	35.2	14.6	267
Fourth	39.4	32.7	17.5	196	42.7	48.8	52.3	20.4	90	81.9	42.4	38.9	18.5	287
Highest	35.1	42.0	17.8	123	45.7	68.3	76.6	9.4	73	79.8	47.4	54.9	14.7	196
Total	37.6	35.8	16.7	863	47.5	59.0	63.5	15.0	374	84.1	44.0	44.1	16.2	1,237

Note: An asterisk indicates that a figure is based in fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.

[1] Food groups: a. infant formula, milk other than breast milk, cheese or yogurt or other milk products; b. foods made from grains, roots, and tubers, including porridge and fortified baby food from grains; c. vitamin A-rich fruits and vegetables; d. other fruits and vegetables; e. eggs; f. meat, poultry, fish, and shellfish (and organ meats); g. legumes and nuts.

[2] For breastfed children, minimum meal frequency is receiving solid or semi-solid food at least twice a day for infants 6-8 months and at least three times a day for children 9-23 months.

[3] Includes two or more feedings of commercial infant formula, fresh, tinned, and powdered animal milk, and yogurt.

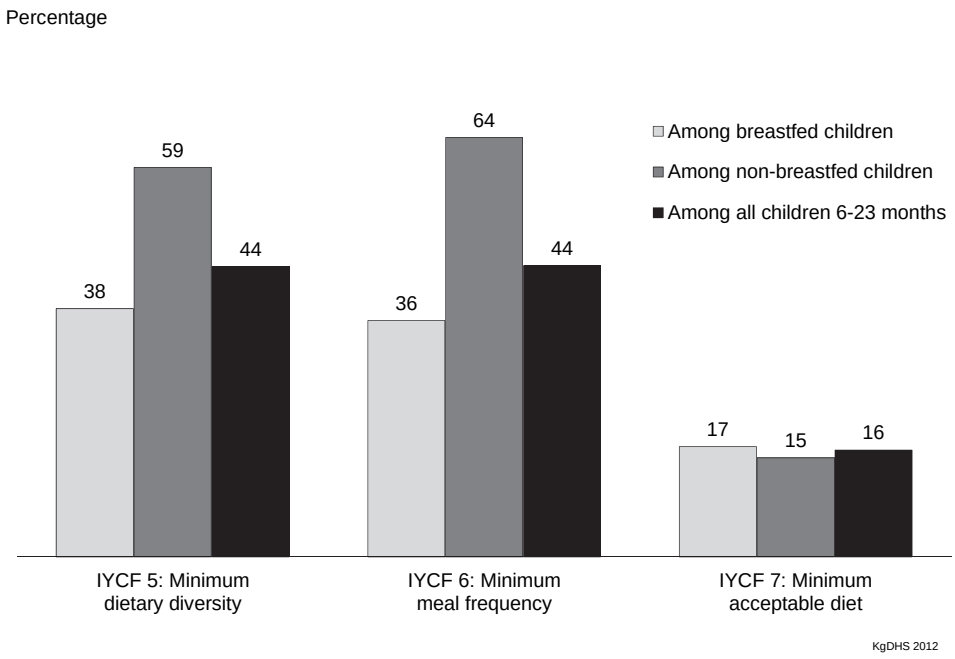
[4] For non-breastfed children age 6-23 months, minimum meal frequency is receiving solid or semi-solid food or milk feeds at least four times a day.

[5] Non-breastfed children age 6-23 months are considered to be fed with a minimum standard of three Infant and Young Child Feeding Practices if they receive other milk or milk products at least twice a day, receive the minimum meal frequency, and receive solid or semi-solid foods from at least four food groups not including the milk or milk products food group.

[6] Breastfeeding, or not breastfeeding and receiving two or more feedings of commercial infant formula, fresh, tinned and powdered animal milk, and yogurt.

[7] Children are fed the minimum recommended number of times per day according to their age and breastfeeding status as described in footnotes 2 and 4.

Figure 12.5
IYCF indicators on minimum acceptable diet, Kyrgyz Republic 2012



12.3 ANEMIA IN CHILDREN

Anemia is a condition characterized by a reduction in the red blood cell volume and a decrease in the concentration of hemoglobin in the blood. Hemoglobin is necessary for transporting oxygen to tissues and organs in the body. About half of the global burden of anemia is due solely to iron deficiency. Iron deficiency, in turn, is largely due to an inadequate dietary intake of bioavailable iron, increased iron requirements during rapid growth periods, such as pregnancy and infancy, and increased blood loss due to hookworm or schistosome infestation. Nutritional anemia includes the anemic burden due to deficiency in iron plus deficiencies in folate, vitamins B and B12, and certain trace elements involved with red blood cell production. Anemia in children is associated with impaired mental and physical development and with increased mortality and morbidity. Anemia can be a particularly serious problem for pregnant women, leading to premature delivery and low birth weight.

Determining anemia levels among women and their children under age 5 was one component of the KgDHS. Anemia levels were determined by measuring the level of hemoglobin in the blood, a decreased concentration of which characterizes anemia. Hemoglobin concentration was measured using the Hb201+ analyzer by HemoCue. For the hemoglobin measurement, capillary blood was taken with a finger prick using sterile, disposable instruments. The first two drops of blood were wiped off using a sterile gauze pad, and the third drop was used for anemia testing. As described in Chapter 1, medically trained personnel on each 2012 KgDHS interviewing team performed the testing procedures on eligible, consenting respondents. Hemoglobin measurements were obtained from 97 percent of the 4,317 (unweighted) eligible children.

Table 12.7 presents anemia prevalence for children age 6-59 months. The results are based on tests of 4,178 (unweighted) children who were present at the time of testing, whose parents consented to their being tested, and whose hemoglobin results represented plausible data. Levels of anemia were classified as severe, moderate, and mild based on the hemoglobin concentration in the blood and according to criteria developed by WHO (DeMaeyer et al., 1989). Because hemoglobin levels vary by altitude, the measurements were adjusted based on altitude measurements taken in each cluster. Levels of anemia were classified as follows:

- Mild: hemoglobin concentration 10.0-10.9 g/dl
- Moderate: hemoglobin concentration 7.0-9.9 g/dl
- Severe: hemoglobin concentration less than 7.0 g/dl

The results in Table 12.7 indicate that anemia is common among children in the Kyrgyz Republic. Overall, four in ten children age 6 to 59 months (43 percent) have some level of anemia. Almost all children who suffer from anemia are mildly anemic (22 percent of all children) or moderately anemic (19 percent of all children). Only 1 percent of children age 6-59 months are severely anemic.

Compared with estimates from recent DHS surveys, the prevalence of any anemia among children age 6-59 months in the 2012 Kyrgyz Republic DHS (43 percent) is higher than that in Moldova (32 percent in 2005), Kazakhstan (36 percent in 1999), Armenia (37 percent in 2005), and Azerbaijan (39 percent in 2006), but lower than in Uzbekistan (49 percent in 2002) and Turkmenistan (47 percent in 2000) (NCPM [Moldova] and ORC Macro, 2006; Academy of Preventive Medicine [Kazakhstan] and Macro International Inc., 1999; NSS [Armenia] at al., 2012; SSC [Azerbaijan] and Macro International Inc., 2008; Analytical and Information Center, [Uzbekistan] et al., 2004; GECRCMCH [Turkmenistan] and ORC Macro, 2001).

As Table 12.7 shows, anemia prevalence declines with age; children age 48-59 months are half as likely to be anemic as children age 6-23 months. Anemia is almost equally prevalent in boys and girls (42 and 43 percent, respectively). Children in rural areas (42 percent) are almost as likely as urban children (45 percent) to be anemic. Children in the Talas and Chui regions (58-59 percent) are most likely to be anemic, while children in Osh City and the Djalal-Abad region are least likely (26-28 percent). Differences in the prevalence of anemia by maternal education or wealth are small.

Changes in anemia levels in the Kyrgyz Republic over the past 15 years can be explored by comparing the 2012 KgDHS results with similar results in the 1997 KgDHS. The 1997 KgDHS collected anemia prevalence among children under age 3 (0-35 months) whose mothers were interviewed. For comparison purposes, therefore, data on anemia from both the 1997 and 2012 surveys were recalculated and restricted to children age 6-35 months born to women interviewed with the Woman's Questionnaire and living with an interviewed mother. A comparison of the data from the two KgDHS surveys indicates that anemia rates among children age 6-35 months have not changed over the past 15 years. According to the 1997 KgDHS, 52 percent of Kyrgyz children age 6-35 months had any anemia, a finding identical to the 52 percent reported in the 2012 KgDHS (data not shown).

Table 12.7 Prevalence of anemia in children

Percentage of children age 6-59 months classified as having anemia, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Anemia status by hemoglobin level				
	Any anemia (<11.0 g/dl)	Mild anemia (10.0-10.9 g/dl)	Moderate anemia (7.0-9.9 g/dl)	Severe anemia (< 7.0 g/dl)	Number of children
Age in months					
6-8	54.8	25.8	27.7	1.4	213
9-11	59.4	27.6	28.8	3.0	275
12-17	57.8	25.6	28.5	3.6	480
18-23	55.1	25.1	29.1	0.9	456
24-35	44.7	22.7	21.0	1.0	879
36-47	32.8	20.8	11.2	0.8	868
48-59	25.6	17.2	7.9	0.5	800
Sex					
Male	42.2	21.6	19.3	1.3	2,042
Female	43.0	23.0	18.6	1.4	1,929
Mother's interview status					
Interviewed	43.0	22.5	19.0	1.4	3,425
Not interviewed but in household	(38.2)	(12.1)	(21.6)	(4.6)	35
Not interviewed and not in the household[1]	39.9	21.4	18.0	0.5	511
Residence					
Urban	44.5	23.0	19.9	1.7	1,052
Rural	41.9	22.0	18.6	1.2	2,919
Region					
Issyk-Kul	49.2	26.5	20.3	2.4	384
Djalal-Abad	28.2	15.6	12.5	0.0	700
Naryn	48.6	17.5	27.0	4.1	182
Batken	44.2	21.8	22.2	0.2	325
Osh Oblast	34.9	22.8	11.5	0.6	950
Talas	58.4	27.3	29.3	1.7	249
Chui	58.5	26.2	30.7	1.6	627
Bishkek City	45.2	24.3	17.5	3.4	442
Osh City	25.6	13.9	11.5	0.2	111
Mother's education[2]					
None/primary	*	*	*	*	14
Basic general	36.7	22.8	13.5	0.5	366
Secondary	43.0	22.6	19.4	0.9	1,622
Professional primary/middle	44.7	21.9	20.7	2.1	543
Higher	44.4	22.2	19.7	2.5	911
Wealth quintile					
Lowest	45.0	23.3	20.3	1.5	840
Second	41.9	21.8	19.1	1.0	838
Middle	39.9	21.4	17.3	1.1	860
Fourth	42.6	21.6	20.0	1.0	851
Highest	44.0	24.0	17.6	2.4	583
Total	42.6	22.3	18.9	1.3	3,971

Note: Table is based on children who stayed in the household on the night before the interview and who were tested for anemia. Prevalence of anemia, based on hemoglobin levels, is adjusted for altitude using formulas in CDC, 1998. Hemoglobin in grams per deciliter (g/dl).

[1] Includes children whose mothers are deceased.

[2] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

12.4 MICRONUTRIENT INTAKE AMONG CHILDREN

Micronutrient deficiency is a major contributor to childhood morbidity and mortality. Children can receive micronutrients from foods, fortified food, and direct supplementation. The 2012 KgDHS collected information on consumption of foods rich in vitamin A and iron; vitamin A, iron, and other micronutrient supplementation; and deworming status for children age 6-59 months. Household salt samples were also tested for iodine levels.

Table 12.8 presents data regarding the intake of key micronutrients among children age 6-59 months, by background characteristics. The table shows the percentage of youngest children age 6-23 months living with their mother who consumed foods rich in vitamin A and iron in the day or night preceding the survey. In addition, the table shows the proportion of all children age 6-59 months who had received deworming medication in the six months preceding the survey and iron supplements in the week before the survey. The table also presents information on children age 6-59 months in households with iodized salt.

12.4.1 Consumption of Micronutrient-rich Foods

Table 12.8 shows that two-thirds of children age 6-23 months consumed foods rich in vitamin A in the day or night preceding the survey. The proportion of children consuming vitamin A-rich foods increases with age, from 35 percent among children age 6-8 months to 81 percent among children age 18-23 months. Similarly, consumption of vitamin A-rich foods is higher among children who are not breastfeeding, since these children also tend to be older than children still being breastfed. Consumption of vitamin A-rich foods varies greatly by region; the proportion of children consuming vitamin A-rich foods is lowest in the Osh Oblast region (37 percent) and highest in the Naryn region (92 percent). Differences in consumption of vitamin A-rich foods by other background characteristics are small.

Table 12.8 Micronutrient intake among children

Among youngest children age 6-23 months who are living with their mother, the percentages who consumed vitamin A-rich and iron-rich foods in the day or night preceding the survey, and among all children 6-59 months, the percentages who were given iron supplements in the past seven days, and who were given deworming medication in the six months preceding the survey, and among all children age 6-59 months who live in households that were tested for iodized salt, the percentage who live in households with iodized salt, by background characteristics, Kyrgyz Republic 2012

	Among youngest children age 6-23 months living with the mother:			Among all children age 6-59 months:			Among children age 6-59 months living in households tested for iodized salt	
Background characteristic	Percentage who consumed foods rich in vitamin A in past 24 hours[1]	Percentage who consumed foods rich in iron in past 24 hours[2]	Number of children	Percentage given iron supplements in past 7 days	Percentage given deworming medication in last 6 months[3]	Number of children	Percentage living in households with iodized salt[4]	Number of children
Age in months								
6-8	34.8	29.6	225	12.8	2.7	230	93.1	227
9-11	55.6	51.5	259	14.1	7.4	263	94.1	261
12-17	76.4	70.2	409	12.1	5.8	426	94.9	420
18-23	81.1	76.4	343	11.0	7.5	406	95.7	404
24-35	na	na	na	13.1	7.6	793	94.6	791
36-47	na	na	na	9.2	7.6	768	96.2	761
48-59	na	na	na	8.1	7.9	668	95.3	662
Sex								
Male	64.8	59.0	659	11.9	8.1	1,822	94.9	1,808
Female	66.8	62.5	577	10.1	6.1	1,732	95.3	1,719
Breastfeeding status								
Breastfeeding	58.6	53.9	863	12.2	4.7	938	94.5	929
Not breastfeeding	82.4	76.2	374	10.5	8.0	2,597	95.2	2,579
Missing	*	*	0	*	*	18	*	18
Mother's age at birth								
15-19	(47.0)	(35.7)	34	(4.1)	(7.5)	37	(98.8)	36
20-29	64.6	59.9	770	10.7	6.9	2,037	94.9	2,021
30-39	70.3	64.2	378	10.5	7.7	1,244	94.7	1,239
40-49	61.6	61.6	55	17.1	5.9	235	97.8	229
Residence								
Urban	65.4	61.5	339	10.5	6.3	1,040	97.2	1,038
Rural	65.9	60.3	898	11.2	7.4	2,514	94.2	2,488
Region								
Issyk-Kul	78.4	64.6	118	11.3	6.7	340	99.4	333
Djalal-Abad	82.3	75.6	228	1.5	2.0	630	98.4	630
Naryn	92.4	90.5	48	8.3	4.9	151	98.8	151
Batken	70.0	60.4	115	3.4	2.4	304	94.8	297
Osh Oblast	37.4	36.6	262	24.8	12.8	739	90.2	733
Talas	59.2	56.5	69	6.2	6.4	220	83.7	220
Chui	71.2	65.2	217	9.2	9.1	584	97.1	579
Bishkek City	65.6	64.0	137	11.2	7.3	476	96.2	473
Osh City	59.3	56.7	43	14.5	4.6	109	98.6	109
Mother's education								
None/primary	*	*	5	*	*	18	*	18
Basic general	62.6	54.3	140	8.6	7.5	373	93.6	371
Secondary	65.1	59.7	569	12.7	7.4	1,631	94.3	1,616
Professional primary/ middle	69.1	64.7	188	7.1	4.5	577	96.3	575
Higher	66.7	63.3	335	11.5	8.2	955	96.1	946
Wealth quintile								
Lowest	66.2	61.6	225	12.9	8.9	670	94.1	668
Second	63.2	57.4	261	9.6	6.5	718	93.2	708
Middle	69.0	63.8	267	10.3	5.6	761	95.1	749
Fourth	63.7	55.9	287	11.9	8.5	798	95.8	796
Highest	67.3	66.3	196	10.3	5.8	607	97.4	605
Total	65.8	60.6	1,237	11.0	7.1	3,554	95.1	3,526

Note: Information on iron supplements and deworming medication is based on the mother's recall. An asterisk indicates that a figure is based in fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable
[1] Includes meat (and organ meat), fish, poultry, eggs, pumpkin, carrots, red sweet bell pepper, dark green leafy vegetables, persimmon, and other locally grown fruits and vegetables that are rich in vitamin A[2] Includes meat (including organ meat), fish, poultry and eggs.
[3] Deworming for intestinal parasites is commonly done for helminthes and for schistosomiasis.
[4] Excludes children in households in which salt was not tested.

At the national level, 61 percent of children age 6-23 months consumed foods rich in iron in the 24 hours before the survey (Table 12.8). Similar to the patterns observed with respect to consumption of vitamin A-rich foods, the largest differentials in the intake of iron-rich foods are observed by age and region. The proportion consuming iron-rich foods in the 24 hours before the survey varies from 30 percent among children age 6-8 months to 76 percent among children 18-23 months. Children in the Osh Oblast region were about half as likely to receive iron-rich foods in the 24 hours before the survey compared with children in the Djalal-Abad region. The consumption of iron-rich foods is highest among children in the Naryn region (91 percent).

12.4.2 Micronutrient Supplementation

Vitamin A and iron supplementation

The 2012 KgDHS also obtained information on vitamin A and iron supplementation. The data on vitamin A supplementation are not presented because vitamin A supplementation is no longer supported by the MOH and was replaced by supplementation with Gulazyk (a micronutrient supplement) beginning in 2011.

In the 2012 KgDHS, mothers were asked if their children under age 5 had taken an iron tablet in the seven days preceding the survey. Table 12.8 shows that 11 percent of children age 6-59 months received iron supplements in this period. Iron supplementation varies little by the child's background characteristics, except that it is notably higher among children in the Osh Oblast region (25 percent) compared with children in other regions.

Children under age 5 living in households that use iodized salt

Fortified salt that contains 15 parts of iodine per million of salt (15 ppm) is considered adequate for the prevention of iodine deficiency (ICCIDD, UNICEF, and WHO, 2001). To assess the use of iodized salt in the Kyrgyz Republic, the 2012 KgDHS included salt testing at the household level using the MBI rapid test kit for salt fortified with potassium iodate, since in the Kyrgyz Republic salt is commonly iodized with potassium iodate. The MBI rapid test kit provides a qualitative indication of the presence or absence of iodine. To perform the test, interviewers asked households to provide a teaspoon of the salt that the household used for cooking. A recheck solution was used when the salt showed no change in color. Table 12.8 presents information about all children age 6-59 months who live in households that use iodized salt.

At the national level, 95 percent of children live in households that use iodized salt. The most notable differences across the subgroups of children are by region. The percentage of children living in households that use iodized salt ranges from 84 percent in the Talas region to 99 percent in the Issyk-Kul, Naryn and Osh City regions.

12.4.3 Deworming

Certain types of intestinal parasites can cause anemia. Periodic deworming for organisms such as helminthes can improve children's micronutrient status. In the 2012 KgDHS, mothers were asked if their children under age 5 had taken deworming medication in the six months preceding the survey. In interpreting the results from this question, it should be noted that, unless medically justified, the MOH does not recommend periodic deworming of children.

At the national level, Table 12.8 shows that 7 percent of children age 6-59 months received deworming medication in the six months preceding the survey. The percentage of children who received deworming medication increases with age, from 3 percent of children age 6-8 months to 8 percent of children age 18-59 months. Breastfeeding children are slightly less likely than non-breastfeeding children to receive deworming medication (5 percent and 8 percent, respectively). There is little difference between

urban and rural areas, but the coverage of deworming medication varies across regions, from 2 percent each in the Djalal-Abad and Batken regions to 13 percent in the Osh Oblast region.

12.5 HOUSEHOLD IODIZED SALT CONSUMPTION

Salt used in the household is the most common vehicle for iodine fortification to prevent the public health concerns of iodine deficiency disorders (IDD). In the Kyrgyz Republic, the government developed and adopted national laws to prevent and reduce the prevalence of iodine deficiency among its citizens through salt iodization and flour fortification (Law № 40 on prevention of iodine deficiency adopted in 2000 and amended in 2005 as Law № 113; the 2004 decree of the Government of the Kyrgyz Republic on adoption of the list of the flour mills to be engaged in the wheat flour fortification and the Law № 78 on flour fortification passed by the parliament in 2009) (World Bank, 2013). According to the World Health Organization, a country's salt iodization program is considered to be on a good track to eliminate iodine deficiency when 90 percent of households use iodized salt.

Table 12.9 shows the proportion of households with iodized salt according to background characteristics. As described above, the KgDHS interviewers obtained these data by using a rapid test to detect the presence of iodine in a sample of each household's cooking salt. Overall, salt was tested in 99 percent of households and 97 percent of the tested households were found to use salt with at least some iodine. The largest variation is observed by region. The Issyk-Kul region has the highest proportion of households consuming iodized salt (close to 100 percent), while the Talas region has the lowest (83 percent).

Table 12.9 Presence of iodized salt in household

Among all households, the percentage with salt tested for iodine content and the percentage with no salt in the household; and among households with salt tested, the percentage with iodized salt, according to background characteristics, Kyrgyz Republic 2012

	Among all households, the percentage			Among households with tested salt:	
Background characteristic	With salt tested	With no salt in the household	Number of households	Percentage with iodized salt	Number of households
Residence					
Urban	98.7	1.3	3,105	97.5	3,065
Rural	99.2	0.8	4,935	96.0	4,895
Region					
Issyk-Kul	98.6	1.4	756	99.5	746
Djalal-Abad	99.9	0.1	1,221	98.5	1,219
Naryn	99.3	0.7	363	99.0	360
Batken	98.5	1.5	549	95.9	540
Osh Oblast	98.9	1.1	1,320	92.8	1,306
Talas	99.7	0.3	332	82.8	330
Chui	99.4	0.6	1,649	98.4	1,640
Bishkek City	97.9	2.1	1,478	97.1	1,447
Osh City	99.7	0.3	373	99.1	372
Wealth quintile					
Lowest	99.6	0.4	1,276	95.1	1,270
Second	99.2	0.8	1,368	95.5	1,357
Middle	99.1	0.9	1,504	96.1	1,491
Fourth	99.3	0.7	1,750	97.5	1,738
Highest	98.2	1.8	2,142	97.9	2,104
Total	99.0	1.0	8,040	96.6	7,960

12.6 NUTRITIONAL STATUS OF WOMEN

Low pre-pregnancy body mass index (BMI) and short stature of women are known risk factors for poor maternal and birth outcomes. The prevalence of overweight adults is also a growing concern in developing countries. Overweight individuals are predisposed to a wide range of health problems such as diabetes and cardiovascular diseases, as well as poor birth outcomes for women. In many countries, though, chronic energy deficiency, characterized by a BMI of less than 18.5 among adults, remains the predominant problem, leading to low productivity and reduced resistance to illness.

Using the same equipment employed to measure children (Shorr boards and SECA digital scales), the 2012 KgDHS obtained the height and weight measurements for all women age 15-49. The data are used to derive two measures of women's nutritional status: height and body mass index (BMI). Given the relationship between maternal stature and pelvic size, women's height can be useful in predicting the risk of difficulties in delivery. The risk of giving birth to low-weight babies is also higher among women of small stature. The cut-off point at which mothers are considered at risk because of short stature normally falls between 140 and 150 centimeters. BMI is used to measure thinness or obesity. It is defined as weight in kilograms divided by height in meters squared (kg/m^2). A BMI of less than 18.5 is used to define thinness or acute undernutrition. A BMI of 25 or above usually indicates overweight, and a BMI of 30 or above indicates obesity.

Table 12.10 presents the height analysis for 8,072 women age 15-49, while the analysis of BMI is based on 7,423 women. The table excludes women for whom there was no information on height and/or weight and women for whom a BMI could not be estimated because they were pregnant or had given birth in the preceding two months.

Overall, less than 1 percent of women fall below 145 centimeters in height, the mid-range of the cut-off for risk of giving birth to low-weight babies.

Table 12.10 Nutritional status of women

Among women age 15-49, the percentage with height under 145 cm, mean Body Mass Index (BMI), and the percentage with specific BMI levels, by background characteristics, Kyrgyz Republic 2012

	Height		Body Mass Index[1]								
Background characteristic	Percentage below 145 cm	Number of women	Mean Body Mass Index (BMI)	18.5-24.9 (Total normal)	<18.5 (Total thin)	17.0-18.4 (Mildly thin)	<17 (Moderately and severely thin)	>=25.0 (Total overweight or obese)	25.0-29.9 (Overweight)	>=30.0 (Obese)	Number of women
Age											
15-19	1.0	1,599	20.8	76.4	17.8	13.2	4.6	5.8	5.2	0.6	1,550
20-29	0.4	2,751	22.5	73.6	7.9	5.6	2.3	18.4	15.3	3.1	2,295
30-39	0.4	1,924	25.4	49.4	2.7	1.8	0.9	47.8	33.2	14.6	1,792
40-49	0.5	1,797	27.9	26.5	1.8	1.2	0.7	71.6	40.9	30.7	1,786
Residence											
Urban	0.3	3,019	23.8	59.9	8.1	6.0	2.1	32.1	22.1	9.9	2,802
Rural	0.7	5,053	24.4	55.3	6.8	4.7	2.1	37.9	24.6	13.3	4,621
Region											
Issyk-Kul	0.5	640	24.7	53.9	7.2	5.9	1.3	38.9	23.6	15.3	581
Djalal-Abad	0.9	1,294	23.6	58.3	10.3	5.8	4.6	31.4	23.1	8.3	1,195
Naryn	0.3	276	24.4	55.2	5.3	4.4	0.9	39.5	30.4	9.1	250
Batken	1.2	610	23.9	57.7	7.2	5.6	1.6	35.1	25.6	9.4	552
Osh Oblast	0.3	1,624	24.4	54.5	5.2	4.5	0.7	40.3	26.5	13.8	1,469
Talas	0.4	357	24.8	52.8	5.2	3.4	1.8	42.0	26.5	15.5	317
Chui	0.8	1,410	24.8	55.1	6.2	4.1	2.2	38.6	22.3	16.3	1,320
Bishkek City	0.2	1,552	23.5	62.2	9.0	6.7	2.2	28.8	19.3	9.5	1,460
Osh City	0.3	309	23.7	58.8	5.6	4.8	0.8	35.7	26.9	8.8	277
Education											
None/primary	(0.0)	35	(25.2)	(69.4)	(1.9)	(1.9)	(0.0)	(28.7)	(15.9)	(12.8)	28
Basic general	1.3	1,120	22.2	67.6	13.4	9.5	3.9	19.0	14.5	4.5	1,043
Secondary	0.4	3,430	24.5	53.4	6.6	4.8	1.8	40.0	26.3	13.6	3,145
Professional primary/ middle	1.0	1,335	25.5	48.4	5.0	3.9	1.1	46.6	28.5	18.1	1,247
Higher	0.2	2,152	23.7	62.6	6.5	4.4	2.2	30.8	21.3	9.5	1,960
Wealth quintile											
Lowest	0.5	1,429	24.5	53.1	6.9	4.8	2.0	40.1	25.1	15.0	1,285
Second	0.8	1,459	24.5	53.5	7.1	5.2	1.9	39.5	26.2	13.3	1,341
Middle	0.9	1,512	24.0	58.5	7.1	4.7	2.4	34.4	23.4	11.0	1,382
Fourth	0.6	1,635	24.3	56.9	6.4	4.5	1.8	36.7	24.7	11.9	1,514
Highest	0.2	2,036	23.6	61.3	8.5	6.4	2.1	30.2	20.3	10.0	1,901
Total	0.6	8,072	24.1	57.0	7.3	5.2	2.1	35.7	23.7	12.0	7,423

Note: The Body Mass Index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m2). Figures in parentheses are based on 25-49 unweighted cases.

[1] Excludes pregnant women and women with a birth in the preceding two months.

Over half of women have a normal BMI (57 percent), while 7 percent are undernourished or thin (BMI less than 18.5), and 36 percent are overweight or obese (BMI 25 or higher). The mean BMI for women age 15-49 is 24.1, which falls in the normal BMI classification.

Differences in BMI levels by background characteristics are apparent. Women age 15-19 are more likely than women in other age groups to be thin or undernourished (18 percent versus 2-8 percent). In contrast, the proportion of women who are overweight increases with age: among women age 40-49, 41 percent are overweight and 31 percent are obese. Rural women are more likely to be overweight or obese than urban women (38 and 32 percent, respectively). By region, the proportion of undernourished women does not vary much; however, the proportion of overweight women ranges from 19 percent in Bishkek to 30 percent in the Naryn region. Obesity is more common among women from the Issyk-Kul, Osh Oblast, Talas, and Chui regions (14-16 percent) than among women from other regions (8-10 percent). Women with basic general education are more likely to be thin and less likely to be overweight or obese compared with women with more education. Similarly, women in the highest wealth quintile are slightly more likely to be thin and are less likely to be overweight or obese compared with women from less affluent households.

Compared with data from the 1997 KgDHS, the percentage of non-pregnant women age 15-49 who are thin (BMI <18.5) has not changed (7 percent each in 1997 and 2012); while the percentage of women who are obese (BMI >30) has increased somewhat, from 9 percent in 1997 to 12 percent in 2012 (RIOP) and Macro International Inc. 1998).

12.7 ANEMIA IN WOMEN

In addition to causing weakness, frequent tiredness, and lowered resistance to disease, anemia can be a particularly serious problem for pregnant women, leading to premature delivery and low birth weight. All women age 15 to 49 in households interviewed in the 2012 KgDHS were offered an anemia test. Before participating in the survey, each respondent was read a consent statement that informed of her right not to participate in the anemia testing and was asked if she would give permission for the collection of a blood droplet from her and from her children. Ninety-seven percent of eligible women participated in the hemoglobin measurement.

Table 12.11 presents the prevalence of anemia in women age 15-49 based on hemoglobin levels adjusted for altitude and smoking status. Adjustment of hemoglobin levels was made for differences in altitude and smoking status using the formulas recommended by CDC (CDC, 1998).

Thirty-five percent of women in the Kyrgyz Republic suffer from some degree of anemia; most of these (26 percent of all women) have mild anemia, while 8 percent have moderate anemia, and less than 1 percent have severe anemia. Compared with estimates from recent Demographic and Health Surveys, the prevalence of any anemia among women age 15-49 in the Kyrgyz Republic in 2012 (35 percent) is higher than that in Armenia (25 percent in 2005) and Moldova (28 percent in 2005), similar to the prevalence in Azerbaijan (37 percent in 2006), Kazakhstan (36 percent in 1999), but lower than in Turkmenistan (47 percent in 2000) (NSS [Armenia] at al., 2012; NCPM [Moldova] and ORC Macro, 2006; SSC [Azerbaijan] and Macro International Inc., 2008; Academy of Preventive Medicine [Kazakhstan] and Macro International Inc., 1999; GECRCMCH [Turkmenistan] and ORC Macro, 2001).

Table 12.11 shows that anemia rates generally decrease with age. The overall level of anemia does not vary markedly by maternity status. However, there are differences in the proportions of women classified as having mild or moderate anemia depending on maternity status. The prevalence of mild anemia is higher among breastfeeding women (31 percent) than among pregnant women (18 percent), or among women who are neither pregnant nor breastfeeding (26 percent). The prevalence of moderate anemia is more than twice as high among pregnant women (19 percent) as among women who are breastfeeding women or neither pregnant nor breastfeeding (8 percent each), or among women from any socioeconomic group. Women in the Issyk-Kul and Talas regions are most likely to be anemic (51 and 41

percent, respectively) compared with women in other regions (17-39 percent). The prevalence of anemia varies little by other background characteristics.

A comparison of anemia rates from the 1997 and 2012 surveys indicates that, during the past 15 years, the prevalence of any anemia among women age 15-49 has decreased, from 38 percent in the 1997 KgDHS to 35 percent in the 2012 KgDHS (RIOP and Macro International, 1998).

Table 12.11 Prevalence of anemia in women

Percentage of women age 15-49 with anemia, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Anemia status by hemoglobin level: Any (Not pregnant / Pregnant)	Mild (Not pregnant / Pregnant)	Moderate (Not pregnant / Pregnant)	Severe (Not pregnant / Pregnant)	Number of women
	Not pregnant: <12.0 g/dl; Pregnant: <11.0 g/dl	Not pregnant: 10.0-11.9 g/dl; Pregnant: 10.0-10.9 g/dl	Not pregnant: 7.0-9.9 g/dl; Pregnant: 7.0-9.9 g/dl	Not pregnant: < 7.0 g/dl; Pregnant: < 7.0 g/dl	
Age					
15-19	34.5	27.7	6.4	0.5	1,576
20-29	38.3	28.2	9.5	0.7	2,729
30-39	37.9	27.7	9.4	0.7	1,914
40-49	28.3	19.5	7.5	1.4	1,782
Number of children ever born					
0	34.8	26.7	7.6	0.5	2,659
1	36.3	26.3	9.2	0.7	1,168
2-3	36.1	26.6	8.9	0.6	2,586
4-5	34.3	24.4	8.5	1.3	1,348
6+	30.0	19.1	7.9	3.0	240
Maternity status					
Pregnant	37.8	18.2	19.0	0.6	540
Breastfeeding	39.2	30.9	7.7	0.6	1,300
Neither	34.2	25.7	7.6	0.9	6,162
Using IUD					
Yes	38.5	27.5	9.4	1.5	1,176
No	34.7	25.8	8.2	0.7	6,825
Smoking status					
Smokes cigarettes/tobacco	28.5	21.3	5.8	1.4	220
Does not smoke	35.4	26.2	8.5	0.8	7,781
Residence					
Urban	34.2	24.7	8.8	0.7	3,007
Rural	35.8	26.8	8.2	0.8	4,995
Region					
Issyk-Kul	50.9	29.0	19.1	2.8	635
Djalal-Abad	29.8	24.4	4.9	0.5	1,289
Naryn	39.0	26.0	11.9	1.0	275
Batken	31.6	22.6	8.0	1.0	603
Osh Oblast	33.3	26.3	6.5	0.5	1,614
Talas	41.4	29.1	10.2	2.0	356
Chui	39.2	29.7	8.9	0.6	1,372
Bishkek City	34.7	25.7	8.6	0.5	1,549
Osh City	17.4	14.1	3.4	0.0	308
Education					
None/primary	(34.6)	(20.4)	(14.1)	(0.0)	35
Basic general	33.0	26.3	6.2	0.5	1,100
Secondary	35.6	26.3	8.4	0.9	3,408
Professional primary/middle	36.8	25.9	10.0	0.9	1,327
Higher	34.9	25.6	8.5	0.8	2,133
Wealth quintile					
Lowest	38.8	27.3	10.8	0.7	1,421
Second	35.6	27.2	7.6	0.7	1,453
Middle	35.0	26.2	7.7	1.2	1,504
Fourth	35.1	25.6	8.4	1.1	1,595
Highest	32.7	24.5	7.9	0.4	2,029
Total	35.2	26.0	8.4	0.8	8,001

Note: Prevalence is adjusted for altitude and for smoking status, if known, using formulas in CDC, 1998. Figures in parentheses are based on 25-49 unweighted cases.

12.8 MICRONUTRIENT INTAKE AMONG MOTHERS

Adequate micronutrient intake by women has important benefits for women and their children. Breastfeeding children benefit from micronutrient supplementation that mothers receive, especially vitamin A. Iron supplementation during pregnancy can reduce the likelihood of anemia. Iodine deficiency is related to a number of adverse pregnancy outcomes including abortion and stillbirth, as well as fetal brain damage and congenital malformation.

Vitamin A deficiency (VAD) can be prevented by providing a high dose (200,000 IU) vitamin A capsule in the first six to eight weeks after delivery (when women are considered not at risk of being pregnant). Due to possible adverse effects (birth defects) resulting from high doses of vitamin A, pregnant women should not be given a high dose vitamin A supplement. It should also be noted that, since 2011, the MOH guidelines no longer support postpartum vitamin A supplementation during the first six to eight weeks after delivery.

The 2012 KgDHS collected data on use of vitamin A supplements by asking women age 15-49 with a child born in the past five years if they had been given a vitamin A dose in the two months after delivery of their last-born child. Table 12.12 shows that, overall, half of women age 15-49 received a postpartum dose of vitamin A. This proportion tends to increase with women's age. The percentage of women who received a postpartum vitamin A dose is highest in Osh City (77 percent) and lowest in the Djalal-Abad region (20 percent). Postpartum vitamin A supplementation increases steadily with women's educational level, from 44 percent of women with basic general education to 54 percent of women with higher education. Mothers in the highest wealth quintile (58 percent) are more likely than mothers in the other wealth quintiles to have received vitamin A supplements.

The 2012 KgDHS also collected information from women age 15-49 who had given birth during the five years preceding the survey on their use of iron and folic acid supplements during pregnancy. To obtain the information on iron supplementation, women were asked if they had been given or bought iron tablets or syrup during pregnancy for their most recent birth. If they responded affirmatively, they were asked about the number of days that they took the tablets or syrup. A similar set of questions was asked to obtain information on folic acid supplementation.

Table 12.12 shows that 44 percent of women took iron tablets or syrup during pregnancy for their most recent birth in the five years before the survey. Moreover, most of the women who took iron supplements did so for fewer than 60 days; only 2 percent of women said they took iron supplements for 90 days or more. Iron supplementation during pregnancy is more common among women age 20-39, women in the Naryn region, and those with more education.

Supplementation with folic acid tablets is slightly less common than iron supplementation. Thirty-seven percent of women took folic acid tablets during pregnancy for their most recent birth in the five years before the survey. Most took a supplement for fewer than 60 days; only 3 percent took a supplement for 60-89 days, and only 1 percent took folic acid tablets for 90 days or more (data not shown). The percentage of women who received a folic acid supplementation is highest in the Issyk-Kul region and Bishkek City (47 percent each), and lowest in the Batken region (17 percent).

In addition to the questions on iron and folic acid supplementation, women with a birth in the five-year period before the KgDHS were asked if they had taken any drug for intestinal worms during pregnancy for their most recent birth. As Table 12.12 shows, only 8 percent of women took deworming medication during pregnancy for their most recent birth in the five years before the survey. The receipt of deworming medication is most common among urban women (12 percent), women in the Naryn region and Bishkek (19 and 18 percent, respectively), women with the most education (10 percent), and women in the highest wealth quintile (12 percent). The comparatively low proportion of women receiving deworming medication is not surprising, since in the Kyrgyz Republic the medication is not routinely recommended during pregnancy.

Finally, Table 12.12 shows that 95 percent of women age 15-49 with a child born in the past five years live in a household with iodized salt. The Issyk-Kul region has the highest proportion of recent mothers living in households with iodized salt (100 percent), while the Talas region has the lowest proportion (83 percent). Differences by background characteristics in the proportion of women living in households with iodized salt are very small but are positively related to educational and household wealth status.

Table 12.12 Micronutrient intake among mothers

Among women age 15-49 with a child born in the past five years, the percentage who received a vitamin A dose in the first two months after the birth of the last child, the percent distribution by number of days they took iron tablets or syrup during the pregnancy of the last child, and the percentages who took folic acid tablet and deworming medication during the pregnancy of the last child; and among women age 15-49 with a child born in the past five years and who live in households that were tested for iodized salt, the percentage who live in households with iodized salt, by background characteristics, Kyrgyz Republic 2012

		Among women with a child born in the last five years:									Among women with a child born in the last five years, who live in households that were tested for iodized salt:	
		Number of days women took iron tablets or syrup during pregnancy of last birth										
Background characteristic	Percentage who received vitamin A dose postpartum[1]	None	<60	60-89	90+	Don't know/ missing	Total	Percentage of women who took folic acid tablets during pregnancy of last birth	Percentage of women who took deworming medication during pregnancy of last birth	Number of women	Percentage living in households with iodized salt[2]	Number of women
Age												
15-19	34.0	65.3	26.2	5.5	3.0	0.0	100.0	23.1	6.0	66	96.9	65
20-29	48.9	52.7	38.7	5.4	2.6	0.5	100.0	38.9	8.7	1,657	95.0	1,645
30-39	51.3	56.5	34.7	5.6	2.1	1.1	100.0	36.3	6.5	1,069	95.0	1,064
40-49	57.9	60.8	34.1	3.4	1.3	0.3	100.0	32.3	7.6	222	97.7	218
Residence												
Urban	53.8	54.7	36.0	6.1	2.0	1.1	100.0	40.4	11.6	935	96.8	932
Rural	48.4	55.0	37.0	5.0	2.4	0.6	100.0	35.7	6.1	2,079	94.5	2,059
Region												
Issyk-Kul	64.7	48.8	45.4	3.7	1.6	0.5	100.0	47.4	9.3	284	99.6	277
Djalal-Abad	19.8	60.5	32.6	4.5	0.4	1.9	100.0	38.2	2.5	547	98.7	547
Naryn	29.7	35.5	49.8	10.9	3.4	0.3	100.0	42.6	19.2	125	98.2	125
Batken	39.0	46.2	45.3	5.5	2.8	0.2	100.0	17.0	1.3	260	94.6	254
Osh Oblast	69.2	58.7	34.2	5.5	1.1	0.5	100.0	44.4	7.3	605	90.8	601
Talas	53.0	44.8	47.7	4.1	2.2	1.3	100.0	37.7	6.1	170	83.0	169
Chui	50.1	60.9	28.4	5.2	5.2	0.3	100.0	23.4	7.0	510	97.1	506
Bishkek City	58.2	52.9	37.7	6.3	2.8	0.3	100.0	46.7	17.6	428	95.6	426
Osh City	76.7	62.7	28.5	4.8	3.0	1.0	100.0	31.1	2.2	86	98.2	86
Education												
None/primary	*	*	*	*	*	*	100.0	*	*	13	*	13
Basic general	43.8	68.1	28.3	1.9	0.5	1.1	100.0	28.3	6.5	326	94.3	324
Secondary	48.0	56.8	34.9	5.1	2.5	0.7	100.0	33.0	6.1	1,338	94.4	1,325
Professional primary/middle	53.0	52.0	40.2	5.1	2.2	0.5	100.0	42.6	9.0	481	95.9	479
Higher	53.9	48.4	40.8	7.2	2.8	0.8	100.0	44.1	10.3	856	96.4	850
Wealth quintile												
Lowest	49.6	56.3	35.2	5.8	1.6	1.0	100.0	36.9	6.9	569	94.1	566
Second	45.5	53.2	39.9	4.0	2.0	0.8	100.0	37.9	5.0	587	93.8	581
Middle	49.0	55.8	37.6	4.4	2.0	0.2	100.0	33.8	6.8	633	95.4	623
Fourth	49.0	53.5	36.5	5.6	3.5	0.9	100.0	34.7	8.2	679	95.8	677
Highest	58.1	56.0	33.9	7.0	2.3	0.7	100.0	43.6	12.4	546	96.9	544
Total	50.1	54.9	36.7	5.3	2.3	0.7	100.0	37.1	7.8	3,014	95.2	2,991

Note: An asterisk indicates that a figure is based in fewer than 25 unweighted cases and has been suppressed. Figures in parentheses are based on 25-49 unweighted cases.

[1] In the first two months after delivery of last birth.

[2] Excludes women in households where salt was not tested.

HIV/AIDS-RELATED KNOWLEDGE, ATTITUDES, AND BEHAVIOR

13

Key Findings

- Over 90 percent of adults age 15-49 have heard of AIDS; television and radio are the major sources of information about the disease.
- Knowledge of HIV prevention methods is widespread; three-quarters of women and men say that staying faithful to one partner can reduce the chances of getting AIDS, and almost as many know that using condoms can reduce the risk of getting HIV (64 percent of women and 71 percent of men).
- Misconceptions about how the AIDS virus is transmitted are common; only about one-quarter of women and men age 15-49 are considered to have comprehensive knowledge about HIV/AIDS.
- Survey data show considerable stigma toward people living with HIV. Only about one-third of women and one-quarter of men say they would be willing to buy fresh vegetables from a shopkeeper who has the AIDS virus or that a female teacher who has the AIDS virus should be allowed to continue teaching.
- A large majority of women and men say that a woman is justified in refusing to have sex with her husband if she knows he has sex with other women; and a large majority say that a woman can ask her husband to use a condom if she knows he has a sexually transmitted infection.
- Paid sex is not uncommon; 41 percent of men say they have paid for sex, and 8 percent say they did so in the 12 months before the survey.
- Forty-one percent of women and 9 percent of men have ever been tested for HIV and received the results.
- Twenty percent of young women and 24 percent of young men age 15-24 have comprehensive knowledge about HIV/AIDS.
- Sixty-seven percent of women had an HIV test during antenatal care or labor and received the results.

Acquired immune deficiency syndrome (AIDS) is an illness caused by the human immunodeficiency virus (HIV). AIDS was first recognized internationally in 1981. Epidemiological studies have since identified the main routes of transmission of HIV to be unsafe sexual intercourse, injections with contaminated needles, unscreened or contaminated blood transfusions, and transmission from an infected mother to her child during pregnancy, delivery, or breastfeeding. HIV cannot be transmitted through food, water, insect vectors, or casual contact. HIV infection weakens the immune system and makes the body susceptible to and unable to recover from other opportunistic diseases. Secondary infections, if not adequately treated, can lead to death.

In the Kyrgyz Republic, HIV prevalence is still low, with only 0.4 percent of the population age 15-49 estimated to be HIV-positive in 2011 (UNAIDS, 2013). Approximately 12,000 people in the Kyrgyz Republic were living with HIV as of 2011 (UNAIDS, 2013). Nevertheless, HIV prevalence has been increasing, especially among sex workers and injecting drug users, among whom the HIV epidemic is concentrated (AFEW, 2013). The country's geographic location on a major drug trafficking route facilitates the spread of HIV among drug users. The government demonstrated an early commitment to address these issues and has promoted needle-exchange programs in communities and prisons and a pilot opiate substitution program (AFEW, 2013).

This chapter presents data concerning the current levels of knowledge and attitudes among women and men of reproductive age regarding prevention and transmission of HIV/AIDS. The chapter also discusses survey findings regarding risky sexual behavior and self-reported prevalence of sexually transmitted infections (STIs) and symptoms. Data on HIV testing coverage are also presented.

13.1 KNOWLEDGE OF HIV/AIDS AND TRANSMISSION AND PREVENTION METHODS

13.1.1 Knowledge of AIDS

The 2012 KgDHS included a series of questions to gauge women's and men's knowledge and attitudes about HIV and AIDS. Women and men age 15-49 were first asked if they had ever heard of AIDS. Those who had heard of AIDS were then asked about their knowledge of HIV transmission and prevention.

Table 13.1 shows that 91 percent of women and 93 percent of men have heard of AIDS. Awareness of AIDS is considerably lower among the youngest respondents, those who have never married (especially those who have never had sex), those in Osh Oblast, and those with less education.

Table 13.1 Knowledge of AIDS

Percentage of women and men age 15-49 who have heard of AIDS, by background characteristics, Kyrgyz Republic 2012

	Women		Men	
Background characteristic	Has heard of AIDS	Number of respondents	Has heard of AIDS	Number of respondents
Age				
15-24	87.3	3,164	88.0	836
15-19	82.5	1,637	80.8	432
20-24	92.4	1,527	95.6	404
25-29	92.6	1,265	95.8	409
30-39	92.2	1,943	97.7	596
40-49	92.6	1,837	95.1	572
Marital status				
Never married	86.0	2,245	87.3	875
Ever had sex	100.0	92	94.7	462
Never had sex	85.4	2,153	79.0	413
Married/living together	92.1	5,256	97.0	1,443
Divorced/separated/widowed	92.5	707	95.2	95
Residence				
Urban	94.4	3,070	92.4	781
Rural	88.1	5,138	93.9	1,632
Region				
Issyk-Kul	98.9	650	95.2	207
Djalal-Abad	86.7	1,332	96.8	402
Naryn	90.9	281	99.8	98
Batken	95.5	616	100.0	186
Osh Oblast	75.4	1,627	83.9	526
Talas	96.7	360	97.8	126
Chui	97.0	1,465	100.0	407
Bishkek City	95.5	1,566	87.8	383
Osh City	93.9	311	96.9	78
Education				
None/primary	(61.4)	39	*	7
Basic general	78.5	1,139	86.6	338
Secondary	87.1	3,468	92.2	1,158
Professional primary/middle	96.8	1,364	96.7	388
Higher	98.5	2,198	98.1	522
Wealth quintile				
Lowest	87.8	1,459	91.4	502
Second	88.5	1,473	93.6	496
Middle	87.6	1,538	95.3	451
Fourth	90.5	1,667	96.9	449
Highest	95.8	2,071	90.5	515
Total	90.5	8,208	93.4	2,413

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk indicates a figure is based on fewer than 25 unweighted cases and has been suppressed.

The proportion of women who have heard of AIDS hardly changed in the six years between the MICS and the KgDHS (92 percent in 2006 (NSC, 2007) and 91 percent in 2012).

13.1.2 Sources of Knowledge about AIDS

Women and men who said they had heard of AIDS were asked where they had heard of it. As Tables 13.2.1 and 13.2.2 show, about two-thirds of women and men mentioned television or radio as a source, while about four in ten respondents mentioned schools. Women are more likely than men to cite health facilities as a source of information about AIDS; just under half of women (49 percent) mentioned health facilities as a source, compared with 29 percent of men. Women are also more likely than men to mention the print media as a source of information (23 percent and 14 percent, respectively). Among women and men alike, peers, family or parents, civil society, non-governmental organizations, community meetings, and work were not commonly reported as sources of information about AIDS.

Although there are differences in sources of information by background characteristics of the respondents, television or radio is mentioned by a large majority of women and men in almost all categories. There is considerable variation by region in sources of AIDS information. For example, both women and men in the Batken region are most likely to cite health facilities as sources of information. Women in Bishkek City are far less likely than other women to say they got information about AIDS from the television or radio and far more likely to say they got information from schools. Schools are also mentioned by a relatively high proportion of men in the Naryn region. Men in Osh City are far more likely to receive information about AIDS from their peers (45 percent) compared with 3-18 percent of men in other regions.

Table 13.2.1 Source of knowledge about AIDS: Women

Percentage of women age 15-49 who have heard of AIDS by source of information and background characteristics, Kyrgyz Republic 2012

	Source of knowledge about AIDS											
Background characteristic	TV/radio	Peers	School	Health facility	Family/ parents	Print media	Civil society/ NGO/ Community meetings	Work	Common know-ledge	Don't remember	Missing	Number of women who have heard of AIDS
Residence												
Urban	58.2	7.4	48.3	47.3	4.5	23.5	1.6	6.2	7.2	0.5	0.2	2,898
Rural	68.4	8.3	32.9	49.5	3.1	22.0	3.3	6.6	13.0	1.1	0.2	4,527
Region												
Issyk-Kul	67.8	11.5	31.4	56.6	5.2	33.8	6.2	10.3	26.2	0.0	0.2	643
Djalal-Abad	65.0	16.0	26.0	62.5	3.6	14.3	1.1	3.5	7.7	0.0	0.0	1,154
Naryn	76.0	4.6	26.5	40.9	3.0	34.4	3.2	12.2	4.2	0.0	0.0	256
Batken	66.6	5.0	34.0	67.1	0.0	23.7	1.4	6.6	21.7	0.0	0.6	588
Osh Oblast	64.6	4.8	43.9	45.7	2.6	9.2	2.0	8.1	13.2	4.0	0.2	1,226
Talas	67.4	3.5	31.8	53.1	1.5	18.0	3.3	4.8	3.1	0.0	0.0	348
Chui	77.1	8.4	29.3	35.6	4.0	36.1	6.0	7.9	11.9	0.1	0.0	1,422
Bishkek City	44.5	4.4	64.5	47.7	5.2	22.6	0.1	2.9	2.3	1.0	0.4	1,496
Osh City	75.6	11.5	30.3	21.2	6.0	13.6	2.5	10.8	8.8	0.0	0.4	292
Education												
None/primary	(77.2)	(11.7)	(5.6)	(40.6)	(12.0)	(21.8)	(0.0)	(7.4)	(9.9)	(0.0)	(0.0)	24
Basic general	62.7	9.2	46.4	37.3	3.9	13.4	1.6	1.5	10.4	0.6	0.1	894
Secondary	65.9	8.5	30.4	51.0	3.2	18.6	2.0	2.9	11.7	1.4	0.2	3,021
Professional primary/ middle	66.1	7.5	32.4	49.7	2.6	28.4	3.4	9.7	12.9	0.8	0.1	1,320
Higher	61.9	6.9	51.9	49.4	4.7	28.3	3.6	11.4	8.3	0.3	0.3	2,166
Wealth quintile												
Lowest	69.0	11.4	34.3	49.2	3.9	22.4	3.2	7.4	12.7	1.3	0.0	1,281
Second	67.1	8.7	33.1	54.8	2.7	21.6	3.3	6.0	12.4	0.8	0.0	1,304
Middle	66.7	6.2	32.2	53.4	2.6	19.8	2.6	6.1	12.1	1.1	0.4	1,348
Fourth	70.0	7.7	34.1	42.0	3.8	24.5	3.5	7.7	14.1	0.6	0.2	1,508
Highest	53.9	6.6	53.9	46.1	4.8	23.7	1.3	5.4	4.9	0.7	0.2	1,985
Total	64.4	8.0	38.9	48.6	3.7	22.6	2.7	6.4	10.7	0.9	0.2	7,425

Note: Figures in parentheses are based on 25-49 unweighted cases. Percentages may sum to more than 100 because multiple responses were allowed.

Table 13.2.2 Source of knowledge about AIDS: Men

Percentage of men age 15-49 who have heard of AIDS by source of information and background characteristics, Kyrgyz Republic 2012

	Source of knowledge about AIDS											
Background characteristic	TV/radio	Peers	School	Health facility	Family/ parents	Print media	Civil society/ NGO/ Commu-nity meetings	Work	Common know-ledge	Don't remember	Missing	Number of men who have heard of AIDS
Residence												
Urban	65.1	12.2	42.9	28.4	2.6	11.4	2.1	4.5	8.0	0.5	0.0	721
Rural	69.1	9.3	39.1	29.5	1.5	14.6	2.2	2.7	2.4	2.4	0.0	1,532
Region												
Issyk-Kul	87.3	11.1	53.2	51.5	2.4	15.8	2.0	3.9	11.1	0.0	0.0	197
Djalal-Abad	89.7	18.1	24.9	33.6	0.7	35.0	2.1	2.7	0.7	3.3	0.0	390
Naryn	79.9	6.2	62.7	14.2	1.6	20.6	9.3	10.2	3.1	0.0	0.0	98
Batken	74.6	12.1	31.9	76.6	10.1	16.8	8.5	1.5	0.6	0.0	0.4	186
Osh Oblast	63.5	3.9	36.9	26.8	0.7	12.4	1.0	3.9	1.9	5.4	0.0	441
Talas	75.5	15.4	28.2	13.8	0.0	8.2	2.3	0.0	0.0	0.0	0.0	123
Chui	40.2	3.0	52.1	7.9	1.5	4.0	1.0	2.9	1.8	0.6	0.0	407
Bishkek City	57.7	8.0	49.1	27.4	1.7	1.9	0.2	3.2	14.4	0.5	0.0	337
Osh City	79.6	44.9	14.6	11.7	0.0	0.4	0.0	5.1	1.2	0.0	0.0	75
Education												
None/primary	*	*	*	*	*	*	*	*	*	*	*	6
Basic general	68.3	17.9	37.4	23.0	2.3	8.1	1.4	1.9	2.9	2.2	0.0	292
Secondary	73.6	9.4	32.5	32.4	2.1	16.5	2.4	1.8	2.9	2.4	0.1	1,068
Professional primary/ middle	66.4	9.9	36.4	26.0	1.4	15.0	2.5	3.8	6.5	1.4	0.0	376
Higher	57.0	7.8	61.4	28.3	1.6	9.8	1.9	6.8	5.8	0.0	0.0	512
Wealth quintile												
Lowest	67.4	7.4	44.2	28.4	1.2	19.9	2.8	4.8	4.0	3.2	0.0	459
Second	70.4	9.1	39.5	35.0	1.6	15.4	1.7	1.5	2.1	2.1	0.0	464
Middle	74.6	10.4	34.9	28.4	1.9	17.7	2.3	1.5	2.1	2.2	0.2	429
Fourth	65.9	11.6	37.5	29.7	2.8	8.2	2.5	4.5	1.9	1.0	0.0	435
Highest	61.3	12.6	44.8	24.5	1.9	6.9	1.7	4.1	10.3	0.5	0.0	466
Total	67.8	10.2	40.3	29.2	1.9	13.6	2.2	3.3	4.2	1.8	0.0	2,254

Note: An asterisk indicates a figure is based on fewer than 25 unweighted cases and has been suppressed. Percentages may sum to more than 100 because multiple responses were allowed.

Among women with basic general and higher education, schools are the most frequently mentioned source of AIDS information, after television or radio. In contrast, among women with secondary or professional primary or middle education, health facilities are the most often cited source, after television or radio. Although there is no uniform pattern by wealth quintile, women in the highest quintile are least likely of all quintiles to mention television or radio as a source of information about AIDS and are the most likely to mention schools.

13.1.3 Knowledge of HIV Prevention Methods

HIV prevention programs focus their messages and efforts on two important aspects of behavior: (1) using condoms and (2) staying faithful to one uninfected partner. To ascertain whether programs have effectively communicated these messages, respondents were asked specific questions about whether it is possible to reduce the chance of getting the AIDS virus by using a condom at every sexual encounter and by limiting sexual intercourse to one uninfected partner.

Table 13.3 and Figure 13.1 show that knowledge of HIV prevention methods is fairly widespread in the Kyrgyz Republic. Three-quarters of women and men are aware that the chance of getting the AIDS virus can be reduced by limiting sex to one uninfected partner who has no other partners, and almost as many know that using condoms at every sexual encounter can reduce the risk of getting HIV (64 percent of women and 71 percent of men). Almost six in ten adults are aware of both means of reducing HIV risk.

Women and men age 15-19 and those who have never married are less likely than older and ever-married respondents to know ways to avoid getting HIV. Urban respondents are more likely than rural respondents to be aware of safer sexual practices. Looking at regional patterns, knowledge about safer sexual practices is highest among women in the Issyk-Kul region and Bishkek City, and among men in the Djalal-Abad and Talas regions. Knowledge is lowest among both women and men in the Batken region, in large part, especially among men, because of the very low proportion who are aware that condom use can reduce the risk of getting the AIDS virus.

Table 13.3 Knowledge of HIV prevention methods

Percentage of women and men age 15-49 who, in response to prompted questions, say that people can reduce the risk of getting the AIDS virus by using condoms every time they have sexual intercourse, and by having one sex partner who is not infected and has no other partners, by background characteristics, Kyrgyz Republic 2012

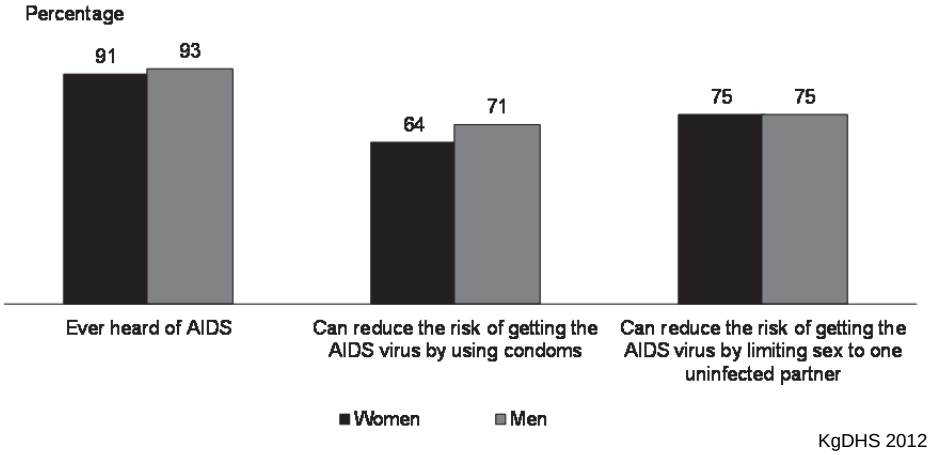
	Women				Men			
	Percentage who say HIV can be prevented by:				Percentage who say HIV can be prevented by:			
Background characteristic	Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Using condoms and limiting sexual intercourse to one uninfected partner[1,2]	Number of women	Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Using condoms and limiting sexual intercourse to one uninfected partner[1,2]	Number of men
Age								
15-24	56.8	67.6	51.5	3,164	66.0	66.4	51.7	836
15-19	47.7	59.0	42.6	1,637	53.7	56.7	39.1	432
20-24	66.7	76.8	61.1	1,527	79.1	76.7	65.2	404
25-29	67.8	78.3	62.1	1,265	71.2	79.6	62.8	409
30-39	68.4	79.3	63.5	1,943	75.7	82.5	66.0	596
40-49	69.3	78.9	63.7	1,837	71.9	76.9	62.0	572
Marital status								
Never married	54.1	65.3	49.5	2,245	65.1	65.8	50.9	875
Ever had sex	83.1	92.2	80.9	92	79.8	76.2	65.4	462
Never had sex	52.8	64.1	48.1	2,153	48.7	54.2	34.6	413
Married/living together	67.1	77.6	61.4	5,256	73.8	80.7	64.8	1,443
Divorced/separated/ widowed	72.6	81.0	68.3	707	73.9	75.2	60.6	95
Residence								
Urban	69.9	81.4	65.6	3,070	74.0	77.5	64.0	781
Rural	60.5	70.5	54.6	5,138	69.0	74.0	57.4	1,632
Region								
Issyk-Kul	82.4	84.5	74.1	650	84.2	72.0	67.4	207
Djalal-Abad	57.5	66.4	54.1	1,332	86.1	85.0	79.6	402
Naryn	66.4	75.1	63.1	281	59.1	74.2	47.0	98
Batken	45.6	60.9	34.4	616	4.4	94.3	4.0	186
Osh Oblast	56.9	68.5	53.3	1,627	65.0	52.3	46.8	526
Talas	72.9	61.1	52.2	360	90.4	82.6	79.0	126
Chui	65.2	82.3	60.7	1,465	76.0	84.4	64.8	407
Bishkek City	75.1	85.4	72.5	1,566	78.8	75.9	71.4	383
Osh City	54.4	71.5	48.5	311	65.9	77.1	52.5	78
Education								
None/primary	(22.5)	(35.2)	(20.8)	39	*	*	*	7
Basic general	44.3	56.4	39.2	1,139	60.4	56.6	40.6	338
Secondary	58.3	69.4	52.6	3,468	67.2	75.4	57.6	1,158
Professional primary/ middle	73.6	82.6	66.6	1,364	75.6	77.5	63.9	388
Higher	78.1	87.7	74.2	2,198	81.8	85.2	73.4	522
Wealth quintile								
Lowest	64.2	71.6	57.8	1,459	71.3	68.4	55.7	502
Second	63.7	70.3	57.0	1,473	69.5	73.0	57.4	496
Middle	57.4	67.9	51.1	1,538	62.8	77.2	54.4	451
Fourth	60.3	75.1	55.8	1,667	72.5	79.4	61.2	449
Highest	72.1	84.2	68.6	2,071	76.3	78.1	68.5	515
Total	64.0	74.6	58.7	8,208	70.6	75.1	59.6	2,413

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk indicates a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Using condoms every time they have sexual intercourse.

[2] Partner who has no other partners.

Figure 13.1
Knowledge of AIDS and HIV prevention methods among women and men age 15-49, Kyrgyz Republic 2012



There is a strong positive relationship between education level and knowledge of ways to prevent getting HIV. For example, 39 percent of women with basic general education say that the risk of getting the AIDS virus can be reduced by using condoms *and* limiting sex to one uninfected partner, compared with 74 percent of women with higher education; results for men are similar. Knowledge of ways to prevent getting HIV is highest among women and men in the highest wealth quintile, although it is not uniformly correlated with wealth.

Comparison with the MICS survey results shows that, overall at the national level, women's knowledge of HIV prevention methods has not changed substantially since 2006. For example, the proportion of women age 15-49 who report condom use as a means of preventing HIV transmission declined slightly, from 67 percent in 2006 to 64 percent in 2012, while the proportion who report staying faithful to one partner who has no other partners as a means of preventing HIV increased slightly, from 71 percent to 75 percent (NSC, 2007).

13.1.4 Comprehensive Knowledge about AIDS

As part of the effort to assess HIV and AIDS knowledge, the 2012 KgDHS collected information on common misconceptions about HIV transmission. Respondents were asked whether they think it is possible for a healthy-looking person to have HIV, and also whether they believe HIV can be transmitted through mosquito bites, by kissing a person who has HIV, or by sharing food with a person who has HIV. Comprehensive knowledge is defined as: (1) knowing that consistent condom use and having just one faithful partner can reduce the chance of getting the AIDS virus, (2) knowing that a healthy-looking person can have the AIDS virus, and (3) rejecting the two misconceptions about HIV transmission most often reported by KgDHS respondents, i.e., that HIV can be transmitted by kissing a person who has HIV and that HIV can be transmitted by mosquito bites.

The data presented in Tables 13.4.1 and 13.4.2 indicate that many women and men in the Kyrgyz Republic lack accurate knowledge about the ways in which the AIDS virus can and cannot be transmitted. Fifty-eight percent of women and 69 percent of men know that a healthy-looking person can have HIV (Figure 13.2). Around two-thirds of women and men know that a person cannot become infected by sharing food with a person who has AIDS, and 59 percent of women and 55 percent of men know that HIV cannot be transmitted by mosquito bites. Fewer women and men (52 percent each) know that HIV cannot be transmitted by kissing someone infected with HIV.

Table 13.4.1 Comprehensive knowledge about AIDS: Women

Percentage of women age 15-49 who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about transmission or prevention of the AIDS virus, and the percentage with a comprehensive knowledge about AIDS by background characteristics, Kyrgyz Republic 2012

	Percentage of women who say that:				Percentage who say that a healthy looking person can have the AIDS virus and who reject the two most common local miscon-ceptions[1]	Percentage with a compre-hensive knowledge about AIDS[2]	
Background characteristic	A healthy-looking person can have the AIDS virus	The AIDS virus cannot be transmitted by mosquito bites	The AIDS virus cannot be transmitted by kissing someone infected with the AIDS virus	A person cannot become infected by sharing food with a person who has AIDS			Number of women
Age							
15-24	52.6	54.8	46.7	58.2	26.5	19.5	3,164
15-19	46.3	46.9	40.2	50.6	20.7	14.0	1,637
20-24	59.4	63.3	53.8	66.4	32.7	25.4	1,527
25-29	60.1	61.1	58.2	68.5	32.7	26.6	1,265
30-39	60.2	61.3	54.5	67.5	32.8	26.3	1,943
40-49	62.8	61.4	52.8	66.4	33.4	26.5	1,837
Marital status							
Never married	51.5	52.2	47.4	57.0	26.6	20.4	2,245
Ever had sex	79.2	69.7	72.3	81.8	55.8	44.9	92
Never had sex	50.3	51.4	46.3	56.0	25.4	19.4	2,153
Married/living together	59.6	60.9	52.5	65.7	31.4	24.3	5,256
Divorced/separated/widowed	65.0	63.9	59.4	72.0	36.3	30.5	707
Residence							
Urban	64.1	65.2	63.9	74.6	38.5	31.7	3,070
Rural	54.1	55.0	44.4	57.4	25.7	19.1	5,138
Region							
Issyk-Kul	65.8	82.3	69.1	81.6	41.6	34.5	650
Djalal-Abad	36.5	61.3	48.6	62.9	23.6	18.1	1,332
Naryn	64.3	77.8	54.3	74.2	37.8	31.4	281
Batken	36.1	55.3	42.5	72.0	13.6	3.3	616
Osh Oblast	55.1	35.9	27.8	38.2	18.0	16.4	1,627
Talas	63.6	55.0	56.0	71.1	27.1	12.3	360
Chui	68.2	64.7	54.4	60.5	36.3	25.8	1,465
Bishkek City	72.2	63.3	71.2	81.1	46.0	40.6	1,566
Osh City	56.6	62.3	53.1	59.6	27.4	17.0	311
Education							
None/primary	(32.6)	(29.7)	(9.4)	(36.5)	(5.7)	(4.0)	39
Basic general	38.8	42.7	34.4	41.9	15.9	10.6	1,139
Secondary	51.1	51.7	41.1	55.3	22.5	16.4	3,468
Professional primary/middle	66.9	68.9	62.1	76.3	38.4	29.8	1,364
Higher	73.2	72.6	71.7	81.4	46.2	38.9	2,198
Wealth quintile							
Lowest	57.4	57.4	45.2	58.5	28.3	22.9	1,459
Second	52.9	55.0	44.1	58.9	24.6	19.3	1,473
Middle	49.7	53.7	44.3	57.1	22.4	15.5	1,538
Fourth	55.9	59.8	49.8	61.8	29.5	21.0	1,667
Highest	69.2	65.5	68.7	77.8	43.0	36.0	2,071
Total	57.8	58.8	51.7	63.8	30.5	23.8	8,208

Note: Figures in parentheses are based on 25-49 unweighted cases.

[1] Two most common local misconceptions: kissing someone with HIV and mosquito bites.

[2] Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about AIDS transmission or prevention.

Table 13.4.2 Comprehensive knowledge about AIDS: Men

Percentage of men age 15-49 who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about transmission or prevention of the AIDS virus, and the percentage with a comprehensive knowledge about AIDS by background characteristics, Kyrgyz Republic 2012

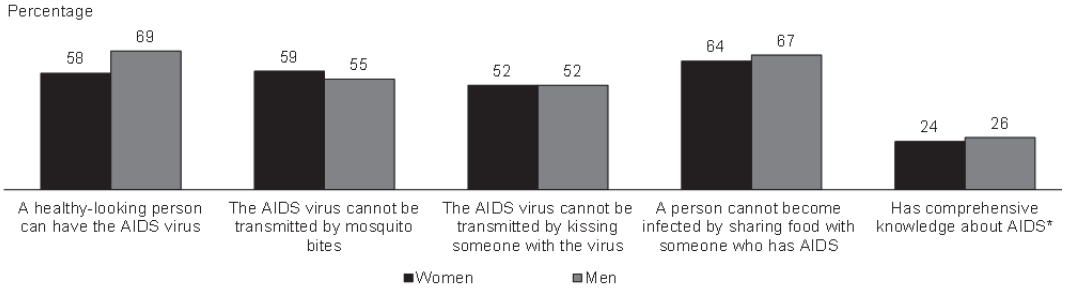
	Percentage of men who say that:				Percentage who say that a healthy looking person can have the AIDS virus and who reject the two most common local miscon-ceptions[1]	Percentage with a compre-hensive knowledge about AIDS[2]	
Background characteristic	A healthy-looking person can have the AIDS virus	The AIDS virus cannot be transmitted by mosquito bites	The AIDS virus cannot be transmitted by kissing someone infected with the AIDS virus	A person cannot become infected by sharing food with a person who has AIDS			Number of men
Age							
15-24	60.7	48.1	48.2	61.5	27.5	24.0	836
15-19	49.8	40.2	42.6	53.1	22.8	18.3	432
20-24	72.4	56.5	54.2	70.5	32.5	30.2	404
25-29	72.2	57.8	56.4	68.2	36.2	27.3	409
30-39	74.1	59.4	54.7	72.1	33.4	28.1	596
40-49	72.4	56.4	53.0	68.0	30.6	24.7	572
Marital status							
Never married	61.1	49.1	46.9	61.0	28.2	23.6	875
Ever had sex	81.2	62.3	51.3	70.2	38.3	32.2	462
Never had sex	38.6	34.4	41.9	50.7	17.0	14.1	413
Married/living together	73.1	57.4	55.4	70.1	32.5	26.8	1,443
Divorced/separated/widowed	73.3	59.8	56.8	69.6	38.1	28.6	95
Residence							
Urban	70.4	58.6	58.0	67.1	36.6	30.6	781
Rural	67.9	52.5	49.6	66.6	28.6	23.4	1,632
Region							
Issyk-Kul	58.7	76.7	64.7	73.9	40.5	33.9	207
Djalal-Abad	81.4	46.8	58.6	70.8	34.6	32.2	402
Naryn	47.6	65.0	54.7	57.6	24.8	16.8	98
Batken	4.1	24.5	88.8	89.2	0.9	0.3	186
Osh Oblast	70.9	40.7	17.9	41.8	15.1	13.5	526
Talas	50.4	42.5	37.1	66.8	19.3	17.5	126
Chui	94.1	88.2	65.2	91.1	56.8	41.2	407
Bishkek City	73.5	48.9	57.8	62.4	37.5	32.4	383
Osh City	70.4	58.1	59.7	48.3	31.3	25.3	78
Education							
None/primary	*	*	*	*	*	*	7
Basic general	56.5	41.9	41.7	56.5	19.8	12.3	338
Secondary	64.6	46.9	45.1	62.0	22.0	18.5	1,158
Professional primary/middle	77.0	61.4	58.7	69.2	38.8	32.7	388
Higher	80.5	74.6	70.9	82.8	53.5	45.5	522
Wealth quintile							
Lowest	63.8	53.0	41.1	60.7	24.0	20.7	502
Second	67.2	47.7	48.0	65.7	25.1	21.0	496
Middle	65.1	50.0	52.7	69.1	26.4	21.2	451
Fourth	74.7	64.3	61.0	75.8	42.1	32.7	449
Highest	73.0	57.9	59.6	63.8	38.6	33.1	515
Total	68.7	54.5	52.3	66.8	31.2	25.7	2,413

Note: An asterisk indicates a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Two most common local misconceptions: kissing someone with HIV and mosquito bites

[2] Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about AIDS transmission or prevention.

Figure 13.2
Knowledge about AIDS transmission among women and men age 15-49, Kyrgyz Republic 2012



*Knows that a healthy-looking person can have the AIDS virus, knows that consistent use of condoms and having just one uninfected partner can reduce the chance of getting the AIDS virus, and rejects the two most common local misconceptions about AIDS transmission.

KgDHS 2012

The data also show that about one-quarter of adults have comprehensive knowledge about AIDS (24 percent of women and 26 percent of men). Comprehensive knowledge about AIDS is higher among urban adults than rural adults. Among regions, comprehensive AIDS knowledge is lowest by far in the Batken region (3 percent of women and less than 1 percent of men) and highest among women in Bishkek City and men in the Chui region. Comprehensive knowledge about AIDS increases with education, for both women and men. Among men it also tends to increase with the level of household wealth.

Since the 2006 MICS the level of comprehensive knowledge about AIDS has improved somewhat among women. Although the proportion of women age 15-49 who know that a healthy-looking person can have the AIDS virus decreased from 65 percent in 2006 to 58 percent in 2012, the proportion who know that the AIDS virus cannot be transmitted by mosquito bites increased from 48 percent in 2006 to 59 percent in 2012. Similarly, the proportion of women who know that a person cannot become infected by sharing food with someone who has AIDS increased from 56 percent in 2006 to 64 percent in 2012 (NSC, 2007).

13.2 KNOWLEDGE OF PREVENTION OF MOTHER-TO-CHILD TRANSMISSION OF HIV

To assess the level of knowledge about how to prevent mother-to-child transmission (MTCT) of HIV, women and men age 15-49 were asked whether HIV can be transmitted from a mother to a child through breastfeeding and whether a mother can reduce the chance of transmitting HIV to her child during pregnancy and delivery by taking antiretroviral drugs.

Table 13.5 shows that 58 percent of women and 62 percent of men know that HIV can be transmitted through breastfeeding, and one-third of women and about one-quarter of men know that the risk of MTCT can be reduced by taking special drugs during pregnancy; only 27 percent of women and 18 percent of men know both these facts.

Women in Osh City, although the most knowledgeable about the risk of HIV transmission through breast milk (75 percent), are among the least aware that the risk of MTCT can be reduced by taking special drugs (20 percent), second only to women in the Batken region (18 percent). Among men, the lowest proportion of men who know about reducing the risk of HIV transmission by taking antiretroviral drugs is in the Osh Oblast region (6 percent). Knowledge of MTCT generally increases with age, and is highest among women and men who are divorced, separated, or widowed. The percentage of adults who know about MTCT is highest in the Issyk-Kul region, for both women and men, and among women lowest in the Djalal-Abad and Batken regions, and among men lowest in the Osh Oblast region. Knowledge of MTCT increases with education but not with wealth.

Table 13.5 Knowledge of prevention of mother to child transmission of HIV

Percentage of women and men age 15-49 who know that HIV can be transmitted from mother to child by breastfeeding and that the risk of mother to child transmission (MTCT) of HIV can be reduced by mother taking special drugs during pregnancy, by background characteristics, Kyrgyz Republic 2012

	Women				Men			
	Percentage who know that:				Percentage who know that:			
Background characteristic	HIV can be transmitted by breastfeeding	Risk of MTCT can be reduced by mother taking special drugs during pregnancy	HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking special drugs during pregnancy	Number of women	HIV can be transmitted by breastfeeding	Risk of MTCT can be reduced by mother taking special drugs during pregnancy	HIV can be transmitted by breastfeeding and risk of MTCT can be reduced by mother taking special drugs during pregnancy	Number of men
Age								
15-24	49.4	25.8	21.5	3,164	52.6	21.2	14.0	836
15-19	39.0	19.2	15.3	1,637	44.8	18.4	13.4	432
20-24	60.5	32.9	28.2	1,527	60.9	24.3	14.7	404
25-29	62.7	37.2	30.3	1,265	67.1	30.8	22.2	409
30-39	63.1	36.8	29.6	1,943	66.6	31.9	21.9	596
40-49	63.9	40.0	32.8	1,837	67.9	27.7	16.5	572
Marital status								
Never married	42.1	20.8	16.9	2,245	50.7	20.6	13.3	875
Ever had sex	67.2	34.9	30.2	92	52.8	24.0	13.3	462
Never had sex	41.1	20.2	16.3	2,153	48.3	16.9	13.4	413
Married/living together	63.5	37.7	30.8	5,256	68.1	30.5	20.2	1,443
Divorced/separated/ widowed	66.6	40.8	34.4	707	76.8	32.9	25.7	95
Currently pregnant								
Pregnant	62.1	38.8	32.2	551	na	na	na	na
Not pregnant or not sure	57.6	33.0	27.0	7,657	na	na	na	na
Residence								
Urban	59.2	35.9	29.7	3,070	60.6	27.8	18.0	781
Rural	57.2	31.8	25.9	5,138	62.9	26.7	17.9	1,632
Region								
Issyk-Kul	72.0	61.1	53.2	650	67.0	56.5	43.1	207
Djalal-Abad	45.0	22.1	15.5	1,332	72.7	23.9	22.3	402
Naryn	56.4	38.4	32.1	281	42.9	22.9	13.5	98
Batken	48.3	17.6	11.7	616	96.9	14.3	14.0	186
Osh Oblast	56.5	28.0	27.7	1,627	60.8	5.5	4.8	526
Talas	63.9	50.9	34.7	360	49.5	39.6	25.2	126
Chui	64.8	33.5	24.8	1,465	40.4	50.3	17.2	407
Bishkek City	57.4	40.6	33.7	1,566	67.8	19.8	17.0	383
Osh City	75.3	20.3	19.6	311	50.9	38.9	29.1	78
Education								
None/primary	(35.1)	(21.8)	(15.4)	39	*	*	*	7
Basic general	41.6	18.8	15.6	1,139	50.4	16.3	11.5	338
Secondary	54.1	29.4	24.8	3,468	63.3	23.0	15.8	1,158
Professional primary/ middle	65.5	40.7	32.8	1,364	61.6	38.3	22.2	388
Higher	68.1	42.7	34.1	2,198	68.1	34.7	23.7	522
Wealth quintile								
Lowest	57.3	34.9	28.7	1,459	63.1	24.7	18.8	502
Second	56.3	31.7	25.2	1,473	66.7	23.8	16.6	496
Middle	56.2	28.7	23.1	1,538	64.5	24.9	17.8	451
Fourth	58.9	32.6	27.2	1,667	57.1	34.2	17.6	449
Highest	60.1	37.5	31.1	2,071	59.1	28.1	18.8	515
Total	57.9	33.4	27.3	8,208	62.1	27.0	17.9	2,413

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk indicates a figure is based on fewer than 25 unweighted cases and has been suppressed.
na=Not applicable

The proportion of women age 15-49 who know that HIV can be transmitted during breastfeeding decreased from 63 percent at the time of the 2006 MICS survey to 58 percent in 2012 (NSC, 2007).

13.3 ATTITUDES TOWARD PEOPLE LIVING WITH HIV

Widespread stigma and discrimination in a population can adversely affect both people's willingness to be tested and adherence to antiretroviral therapy. Reduction of stigma and discrimination in a population is, thus, an important indicator of the success of programs for HIV and AIDS prevention and control.

To assess the level of stigma, women and men interviewed in the KgDHS who had heard of AIDS were asked if they would be willing to care for a family member sick with AIDS in their own households, if they would be willing to buy fresh vegetables from a shopkeeper who had the AIDS virus, if they thought a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching, and if they would want to keep a family member's HIV status secret. Table 13.6.1 shows results for women and Table 13.6.2 shows results for men.

Table 13.6.1 Accepting attitudes toward those living with HIV/AIDS: Women

Among women age 15-49 who have heard of AIDS, percentage expressing specific accepting attitudes toward people with HIV/AIDS, by background characteristics, Kyrgyz Republic 2012

	Percentage of women who:					
Background characteristic	Are willing to care for a family member with AIDS in the respondent's home	Would buy fresh vegetables from shopkeeper who has the AIDS virus	Say that a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Percentage expressing acceptance attitudes on all four indicators	Number of respondents who have heard of AIDS
Age						
15-24	39.0	34.0	33.5	44.4	2.9	2,762
15-19	36.4	30.6	29.9	44.9	2.4	1,351
20-24	41.5	37.2	36.9	43.9	3.4	1,411
25-29	41.3	36.2	35.4	42.3	2.9	1,171
30-39	43.3	39.9	36.7	42.6	4.1	1,792
40-49	44.9	40.3	39.8	45.3	4.8	1,700
Marital status						
Never married	39.8	34.5	32.7	43.9	3.3	1,931
Ever had sex	52.0	49.5	47.0	48.2	6.4	92
Never had sex	39.2	33.8	31.9	43.7	3.2	1,838
Married/living together	41.5	37.0	36.4	43.9	3.6	4,840
Divorced/separated/widowed	49.3	46.7	43.0	43.2	4.9	654
Residence						
Urban	45.7	40.1	38.3	42.9	3.6	2,898
Rural	39.3	35.3	34.6	44.4	3.6	4,527
Region						
Issyk-Kul	42.1	39.4	35.8	68.7	6.4	643
Djalal-Abad	28.5	31.5	34.9	27.8	0.5	1,154
Naryn	42.3	44.7	45.9	55.7	9.5	256
Batken	29.5	19.6	15.0	55.2	2.3	588
Osh Oblast	21.7	19.0	21.8	50.3	0.4	1,226
Talas	48.0	19.6	21.9	53.7	3.5	348
Chui	69.1	69.1	63.0	30.4	8.8	1,422
Bishkek City	42.4	33.6	31.8	46.0	1.8	1,496
Osh City	58.2	44.2	41.3	34.1	5.2	292
Education						
None/primary	*	*	*	*	*	24
Basic general	34.2	26.2	27.7	44.2	2.2	894
Secondary	36.3	30.8	30.7	46.0	2.8	3,021
Professional primary/middle	44.8	41.5	40.5	43.6	4.4	1,320
Higher	50.7	48.4	44.3	40.6	4.8	2,166
Wealth quintile						
Lowest	35.4	32.0	32.1	50.9	4.5	1,281
Second	36.5	31.4	31.4	45.1	3.7	1,304
Middle	35.7	32.4	31.9	42.8	2.9	1,348
Fourth	48.4	45.9	43.4	40.2	3.7	1,508
Highest	48.4	41.0	38.8	41.8	3.4	1,985
Total	41.8	37.2	36.0	43.8	3.6	7,425

Note: An asterisk indicates a figure is based on fewer than 25 unweighted cases and has been suppressed.

The data indicate that there is considerable stigma among women in the Kyrgyz Republic toward people who are living with HIV. Of the four accepting attitudes toward those living with HIV/AIDS, the largest proportion of women express openness toward divulging if a family member got infected with HIV; 44 percent of women say they would not want to keep this a secret. A slightly smaller percentage (42 percent) of women age 15-49 who have heard of AIDS say they would be willing to care in their own households for a relative who is sick with AIDS. Thirty-seven percent of women would be willing to buy fresh vegetables from a shopkeeper who has the AIDS virus, and 36 percent say that a female teacher who has the AIDS virus should be allowed to continue teaching. The percentage expressing acceptance on all the four measures is very low—only 4 percent.

Table 13.6.2 Accepting attitudes toward those living with HIV/AIDS: Men

Among men age 15-49 who have heard of HIV/AIDS, percentage expressing specific accepting attitudes toward people with HIV/AIDS, by background characteristics, Kyrgyz Republic 2012

	Percentage of men who:					
Background characteristic	Are willing to care for a family member with AIDS in the respondent's home	Would buy fresh vegetables from shopkeeper who has the AIDS virus	Say that a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Percentage expressing acceptance attitudes on all four indicators	Number of respondents who have heard of AIDS
Age						
15-24	62.2	24.8	23.6	38.8	3.0	735
15-19	55.5	22.7	21.0	45.1	4.0	349
20-24	68.2	26.6	25.9	33.0	2.1	386
25-29	69.0	25.6	24.6	38.6	1.5	392
30-39	66.2	25.5	24.4	39.5	2.2	583
40-49	64.3	22.5	24.7	40.7	1.3	544
Marital status						
Never married	63.4	25.4	24.6	36.6	2.9	764
Ever had sex	74.3	24.6	28.5	19.5	1.9	437
Never had sex	48.7	26.5	19.4	59.4	4.3	327
Married/living together	65.9	23.6	23.2	40.8	1.8	1,399
Divorced/separated/widowed	63.1	32.0	37.7	41.4	0.5	91
Residence						
Urban	59.1	26.2	30.8	38.1	0.8	721
Rural	67.7	23.8	21.2	40.0	2.8	1,532
Region						
Issyk-Kul	61.2	33.4	16.1	84.4	1.7	197
Djalal-Abad	64.6	26.8	43.2	21.1	1.5	390
Naryn	73.6	34.6	42.9	76.3	18.2	98
Batken	21.0	47.5	20.0	94.6	5.3	186
Osh Oblast	82.6	2.0	2.9	30.2	1.0	441
Talas	11.5	15.9	8.6	47.4	0.6	123
Chui	90.3	32.0	22.0	16.8	1.4	407
Bishkek City	56.5	25.9	44.9	19.9	0.2	337
Osh City	57.6	20.3	4.0	82.4	0.0	75
Education						
None/primary	*	*	*	*	*	6
Basic general	60.2	18.5	17.8	43.6	2.6	292
Secondary	66.9	22.3	21.3	41.2	1.8	1,068
Professional primary/middle	63.5	26.2	26.5	35.3	2.3	376
Higher	65.0	31.5	32.6	35.8	2.5	512
Wealth quintile						
Lowest	67.9	21.3	18.3	45.4	3.6	459
Second	64.1	23.7	21.0	45.0	2.5	464
Middle	61.6	24.9	22.2	39.4	2.1	429
Fourth	70.0	26.6	24.5	36.6	2.0	435
Highest	61.2	26.4	35.1	30.5	0.5	466
Total	64.9	24.6	24.3	39.4	2.1	2,254

Note: An asterisk indicates a figure is based on fewer than 25 unweighted cases and has been suppressed.

Similar questions on HIV-related attitudes were asked of women in the 2006 MICS. The data imply that attitudes have not changed much in the six years between the surveys. In 2006, 5 percent of women did not express negative views on any of the four statements, which is roughly comparable to the 4 percent of women in 2012 who expressed acceptance of all four indicators (NSC, 2007).

The results in Table 13.6.2 indicate that men are far more likely than women to be willing to care for a family member with AIDS in their households (65 and 42 percent, respectively). However, they show less acceptance than women on the other measures of stigma. Only about one-quarter of men say they would be willing to buy fresh vegetables from a shopkeeper who has the AIDS virus or believe that a female teacher who has the AIDS virus should be allowed to continue teaching, and 39 percent of men say they would not necessarily want to keep secret the fact that a family member is HIV-positive. Only 2 percent of men express accepting attitudes acceptance on all four measures.

Differences in the proportions showing accepting attitudes by background characteristics are generally small among both women and men. Women in the Osh Oblast and Djalal-Abad regions are the least likely to express acceptance on all four indicators, while those in the Naryn and Chui regions are the most likely. Men in the Naryn region are far more likely than men in other regions to express accepting attitudes toward people with HIV (18 percent).

13.4 Attitudes toward Negotiating Safe Sexual Relations with Husbands

Comprehensive knowledge about HIV transmission and ways to prevent it are basic prerequisites for HIV prevention. Translating knowledge into behavior, however, depends on a number of individual, social, and contextual factors. One of the important determinants of practicing safer sex is an individual's degree of control over sexual encounters. Knowledge about HIV transmission and ways to prevent it are of little use if women feel powerless to negotiate safer sex practices with their husbands. In an effort to assess a woman's ability to negotiate safer sex, the 2012 KgDHS asked women and men if they think that a wife is justified in refusing to have sex with her husband when she knows he has sex with other women and if they think a wife is justified in asking that they use a condom if she knows her husband has a disease that can be transmitted through sexual contact.

Table 13.7 shows that a large majority of both women and men agree with both these statements; 82 percent of women and 72 percent of men agree that a woman is justified in refusing to have sex with her husband if she knows he has sex with other women, and 83 percent of women and 81 percent of men believe a woman is justified in asking her husband to use a condom if she knows that he has a sexually transmitted infection. For both attitudes, the proportions agreeing increase with age, especially for women. For example, the proportion of women who believe a woman is justified in asking her husband to use a condom if she knows he has a sexually transmitted infection increases from 55 percent of women age 15-19 to 93 percent of women age 40-49. Respondents who have never married, especially those who have never had sex, are least likely to believe that women are justified in negotiating safer sex are.

Women in the Talas region and men in the Naryn region are the most likely to support both statements relating to negotiating safer sex. Men in the Batken region are particularly unlikely to agree that a woman is justified in asking to use a condom if she knows her husband has a sexually transmitted infection. The proportions of women and men who support a woman's right to refuse sex and to ask for condom use increase steadily with education, but there is no clear relationship with wealth quintile.

In an effort to assess a married woman's ability to negotiate safer sex, the 2012 KgDHS asked currently married women if they can say no to their husband/partner if she does not want to have sexual intercourse; and whether she could ask her husband to use a condom if she wanted him to. The data show that a majority of currently married women said they can say no to a husband/partner if she does not want to have sexual intercourse (84 percent) or could ask a husband to use a condom if she wanted him to (83 percent). However, in the Batken region only slightly over half of currently married women are certain they can ask for either of these things (53 percent each) compared with more than nine in ten married women in Bishkek City: 92 percent of currently married women in Bishkek City reported that they can say no to a husband/partner if she does not want to have sexual intercourse and 91 percent reported that they could ask a husband to use a condom if she wanted him to (data not shown).

Table 13.7 Attitudes toward negotiating safer sexual relations with husband

Percentage of women and men age 15-49 who believe that a woman is justified in refusing to have sexual intercourse with her husband if she knows that he has sexual intercourse with other women, and percentage who believe that a woman is justified in asking that they use a condom if she knows that her husband has a sexually transmitted infection (STI), by background characteristics, Kyrgyz Republic 2012

	Women			Men		
	Woman is justified in:			Woman is justified in:		
Background characteristic	Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Number of women	Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Asking that they use a condom if she knows that her husband has an STI	Number of men
Age						
15-24	69.1	69.1	3,164	61.3	71.8	836
15-19	56.0	55.1	1,637	54.2	59.3	432
20-24	83.2	84.1	1,527	68.9	85.3	404
25-29	89.7	91.7	1,265	78.7	83.6	409
30-39	90.6	92.5	1,943	75.1	85.7	596
40-49	91.5	92.6	1,837	80.9	88.5	572
Marital status						
Never married	61.6	60.7	2,245	62.9	73.0	875
Ever had sex	92.3	92.3	92	74.3	89.8	462
Never had sex	60.3	59.4	2,153	50.2	54.2	413
Married/living together	90.2	91.9	5,256	77.4	85.9	1,443
Divorced/separated/widowed	90.7	91.2	707	81.4	85.9	95
Residence						
Urban	85.9	86.3	3,070	75.1	80.3	781
Rural	80.3	81.6	5,138	70.9	81.6	1,632
Region						
Issyk-Kul	87.6	86.7	650	84.8	88.4	207
Djalal-Abad	83.4	84.3	1,332	53.6	83.4	402
Naryn	81.7	86.1	281	91.6	95.1	98
Batken	60.6	65.0	616	45.2	35.7	186
Osh Oblast	74.2	75.0	1,627	72.4	87.0	526
Talas	96.5	95.5	360	80.2	87.0	126
Chui	86.7	89.1	1,465	84.0	86.0	407
Bishkek City	88.8	88.2	1,566	85.1	81.8	383
Osh City	84.8	84.3	311	38.2	65.5	78
Education						
None/primary	(41.6)	(52.6)	39	*	*	7
Basic general	62.1	62.1	1,139	56.7	67.0	338
Secondary	80.9	82.4	3,468	71.7	82.7	1,158
Professional primary/middle	89.7	91.2	1,364	75.2	84.0	388
Higher	91.5	91.5	2,198	81.5	85.0	522
Wealth quintile						
Lowest	82.9	83.1	1,459	74.0	83.6	502
Second	81.3	83.3	1,473	69.3	81.1	496
Middle	77.3	77.9	1,538	67.7	78.0	451
Fourth	80.5	82.9	1,667	73.6	84.1	449
Highest	88.1	88.0	2,071	76.5	79.3	515
Total	82.4	83.4	8,208	72.3	81.2	2,413

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk indicates a figure is based on fewer than 25 unweighted cases and has been suppressed.

13.5 ATTITUDES TOWARD CONDOM EDUCATION FOR YOUTH

Condom use is one of the main strategies for combating the spread of HIV. However, educating youth about condoms is sometimes controversial, with some saying it promotes early sexual experimentation. To gauge attitudes toward condom education, women and men interviewed in the 2012 KgDHS were asked if they thought that children age 12-14 should be taught about using condoms to avoid getting AIDS. Table 13.8 shows the results. Because the table focuses on adult opinion, results are tabulated for respondents age 18-49.

Table 13.8 Adult support of education about condom use to prevent AIDS

Percentage of women and men age 18-49 who agree that children age 12-14 years should be taught about using a condom to avoid AIDS, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Women		Men	
	Percentage who agree	Number of women	Percentage who agree	Number of men
Age				
18-24	50.6	2,117	64.8	556
18-19	49.5	590	63.3	152
20-24	51.0	1,527	65.4	404
25-29	56.9	1,265	65.0	409
30-39	53.8	1,943	60.5	596
40-49	54.5	1,837	50.1	572
Marital status				
Never married	51.5	1,221	66.8	595
Married or living together	53.5	5,233	57.0	1,443
Divorced/separated/widowed	57.7	707	56.6	95
Residence				
Urban	58.1	2,730	64.9	711
Rural	50.8	4,431	57.1	1,423
Region				
Issyk-Kul	68.8	571	52.2	176
Djalal-Abad	50.9	1,169	37.8	350
Naryn	62.6	250	75.0	87
Batken	17.8	540	4.5	155
Osh Oblast	35.5	1,336	53.6	454
Talas	63.5	312	74.5	111
Chui	72.9	1,307	98.9	370
Bishkek City	56.2	1,395	60.7	361
Osh City	66.3	281	94.8	70
Education				
None/primary	(34.1)	32	*	7
Basic general	46.4	577	58.4	204
Secondary	46.4	3,061	51.5	1,034
Professional primary/middle	60.9	1,302	69.5	370
Higher	61.4	2,188	70.1	519
Wealth quintile				
Lowest	56.2	1,245	53.0	435
Second	46.8	1,250	54.1	421
Middle	44.9	1,334	51.5	400
Fourth	55.9	1,470	70.3	399
Highest	60.7	1,862	68.6	478
Total 18-49	53.6	7,161	59.7	2,133

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk indicates a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 13.8 shows that a majority of adults age 18-49 (54 percent of women and 60 percent of men) agree that children age 12-14 should be taught about using condoms to avoid AIDS. Attitudes toward teaching youth about condom use do not differ strongly by background characteristics, except for region. For both women and men, support for condom education is by far the lowest in the Batken region and the highest in the Chui region. For example, the proportion of men who agree that children age 12-14 should be taught about condom use to avoid AIDS ranges from 5 percent in the Batken region to 99 percent in the Chui region. Support for condom education is slightly higher among urban residents, those with at least professional primary or middle schooling, and those in the highest two wealth quintiles.

13.6 MULTIPLE SEXUAL PARTNERS

Although the majority of HIV infections in the Kyrgyz Republic are contracted through injecting drug use, about 30 percent of HIV infections are contracted through heterosexual contact (GKR, 2012). Given that heterosexual contact is one of a major means of HIV infection, information on sexual behavior is important in designing and monitoring intervention programs to control the spread of HIV/AIDS. In the context of HIV/AIDS prevention, limiting the number of sexual partners and having protected sex are

crucial to combating the epidemic. The 2012 KgDHS included questions on the number of respondents' sexual partners during the 12 months preceding the survey. Those who had ever had sex were asked about the total number of partners they had during their lifetime. These questions, of course, are sensitive and respondents' answers are likely subject to at least some reporting bias.

Table 13.9 shows that almost no women reported having more than one sexual partner in the 12 months before the survey. Similarly, among those who ever had sexual intercourse, few reported having had more than one partner; the mean number of lifetime sexual partners for women is 1.2. Differences by background characteristics are very small.

Table 13.9 Multiple sexual partners

Among all women and men age 15-49, the percentage who had sexual intercourse with more than one sexual partner in the past 12 months and for women and men who ever had sexual intercourse, the mean number of sexual partners during their lifetime, by background characteristics, Kyrgyz Republic 2012

	Women				Men			
	All women		Among women who ever had sexual intercourse[1]:		All men		Among men who ever had sexual intercourse[1]:	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Number of women	Mean number of sexual partners in lifetime	Number of women	Percentage who had 2+ partners in the past 12 months	Number of men	Mean number of sexual partners in lifetime	Number of men
Age								
15-24	0.4	3,164	1.1	1,150	15.4	836	6.1	407
15-19	0.0	1,637	1.0	166	7.4	432	5.9	93
20-24	0.7	1,527	1.1	984	24.1	404	6.2	314
25-29	0.7	1,265	1.1	1,172	14.8	409	6.2	331
30-39	0.6	1,943	1.2	1,910	4.5	596	5.3	510
40-49	0.2	1,837	1.2	1,822	2.7	572	5.3	486
Marital status								
Never married	0.7	2,245	2.1	92	19.7	875	6.9	409
Married or living together	0.1	5,256	1.1	5,254	2.9	1,443	5.2	1,246
Divorced/separated/widowed	1.7	707	1.6	707	17.8	95	7.4	79
Residence								
Urban	0.8	3,070	1.3	2,119	9.1	781	5.4	639
Rural	0.2	5,138	1.1	3,935	9.8	1,632	5.8	1,094
Region								
Issyk-Kul	0.0	650	1.1	534	1.7	207	2.6	147
Djalal-Abad	0.3	1,332	1.1	1,011	6.6	402	9.4	348
Naryn	0.0	281	1.0	229	0.0	98	3.0	75
Batken	0.1	616	1.1	484	0.0	186	1.6	120
Osh Oblast	0.3	1,627	1.0	1,149	12.8	526	6.5	363
Talas	0.0	360	1.1	297	5.5	126	3.7	94
Chui	0.3	1,465	1.3	1,128	25.0	407	7.2	191
Bishkek City	1.3	1,566	1.4	1,009	2.3	383	4.3	330
Osh City	0.0	311	1.0	212	21.3	78	4.2	67
Education								
None/primary	(0.0)	39	*	21	*	7	*	6
Basic general	0.2	1,139	1.1	514	7.0	338	6.1	151
Secondary	0.3	3,468	1.1	2,716	8.9	1,158	5.6	871
Professional primary/middle	0.4	1,364	1.2	1,147	10.0	388	6.2	305
Higher	0.8	2,198	1.2	1,655	12.6	522	5.4	401
Wealth quintile								
Lowest	0.0	1,459	1.1	1,102	7.8	502	5.0	354
Second	0.2	1,473	1.1	1,117	11.5	496	5.5	336
Middle	0.1	1,538	1.1	1,197	6.9	451	6.4	304
Fourth	0.5	1,667	1.2	1,277	12.3	449	6.8	298
Highest	1.1	2,071	1.4	1,361	9.6	515	5.1	442
Total	0.4	8,208	1.2	6,054	9.6	2,413	5.7	1,734

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk indicates a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Means are calculated excluding respondents who gave non-numeric responses.

Ten percent of all men interviewed said they had had more than one sexual partner in the 12 months before the survey. Two-thirds (66 percent) of these men said they had used a condom the last time they had sex (data not shown).[1] The mean number of lifetime sexual partners among men who have ever had sex is 5.7. Men in the Djalal-Abad region report the highest average number of lifetime partners (9.4) and men in the Batken region the lowest number (1.6).

13.7 CONCURRENT SEXUAL PARTNERS

According to UNAIDS, concurrent sexual partnerships are defined as "overlapping sexual partnerships where intercourse with one partner occurs between two acts of intercourse with another partner" (UNAIDS, 2009). If an individual has multiple sexual partners in the same year, it is important to know whether these partnerships are serial or concurrent. Concurrent sexual partnerships are theoretically more risky than serial partnerships because concurrent partnerships can create large, interconnected sexual networks whose members are at heightened risk of infection.

The 2012 KgDHS collected information on the time since the first and most recent sexual intercourse with each sexual partner in the 12 months before the survey. This information is used to determine if sexual intercourse with one partner occurred between two acts of intercourse with another partner, i.e., whether two partnerships are concurrent. Two indicators are used to measure concurrent sexual partnerships. Point prevalence of concurrent sexual partnerships is defined as the proportion of women and men age 15-49 with more than one ongoing sexual partnership at the point in time six months before the survey. Cumulative prevalence of concurrent sexual partnerships is defined as the proportion of women and men age 15-49 with any overlapping sexual partnerships in the 12 months before the survey (UNAIDS, 2009). A partnership that involves a single sexual encounter is considered overlapping if it occurs during another ongoing partnership. The point prevalence is generally lower than the cumulative prevalence because the point prevalence only includes relationships ongoing on a particular day rather than over an entire year. Among men, overlapping polygynous unions are considered concurrent partnerships in both the point prevalence and the cumulative prevalence indicators.

Table 13.10 shows that among women age 15-49 less than 1 percent had concurrent sexual partnerships in the 12 months before the survey, by either the point prevalence or cumulative prevalence definition. Among men, 1 percent had concurrent sexual partnerships, according to the point prevalence indicator, while 3 percent had concurrent sexual partnerships, according to the cumulative prevalence indicator. Looking only at men who had multiple partners during the previous 12 months, 34 percent had concurrent partnerships (data not shown).

Considering differentials in the cumulative prevalence indicator, the proportion who had concurrent sexual partnerships is highest among men age 20-29 (6 percent), men who are divorced, separated, or widowed (8 percent), and never-married men (5 percent).

[1] The number of women reporting more than one partner in the 12 months before the survey is too small to produce a meaningful indicator on condom use at last sex for this group; for men, the number is too small to show differences in the indicator by background characteristics.

Table 13.10 Point prevalence and cumulative prevalence of concurrent sexual partners

Percentage of all women and men age 15-49 who had concurrent sexual partners six months before the survey (point prevalence[1]), and percentage of all women and all men age 15-49 who had any concurrent sexual partners during the 12 months before the survey (cumulative prevalence[2]), by background characteristics, Kyrgyz Republic 2012

	Women			Men		
Background characteristic	Point prevalence of concurrent sexual partners[1]	Cumulative prevalence of concurrent sexual partners[2]	Number of women	Point prevalence of concurrent sexual partners[1]	Cumulative prevalence of concurrent sexual partners[2]	Number of men
Age						
15-24	0.0	0.1	3,164	0.8	3.6	836
15-19	0.0	0.0	1,637	0.6	1.4	432
20-24	0.0	0.3	1,527	1.0	6.0	404
25-29	0.0	0.1	1,265	2.7	5.9	409
30-39	0.3	0.5	1,943	0.6	2.0	596
40-49	0.0	0.2	1,837	1.0	2.2	572
Marital status						
Never married	0.1	0.2	2,245	1.6	4.9	875
Married or living together	0.1	0.1	5,256	0.7	1.9	1,443
Divorced/separated/widowed	0.0	1.2	707	4.0	7.9	95
Residence						
Urban	0.2	0.4	3,070	1.5	3.8	781
Rural	0.0	0.1	5,138	0.9	3.0	1,632
Total	0.1	0.2	8,208	1.1	3.2	2,413

Note: Two sexual partners are considered to be concurrent if the date of the most recent sexual intercourse with the earlier partner is after the date of the first sexual intercourse with the later partner.
[1] The percentage of respondents who had two (or more) sexual partners that were concurrent at the point in time six months before the survey.
[2] The percentage of respondents who had two (or more) sexual partners that were concurrent anytime during the 12 months preceding the survey.

13.8 PAID SEX

Sexual encounters in which payments are made are associated with a greater risk of contracting HIV and other sexually transmitted infections because those who can afford to pay for sex have a higher likelihood of having multiple partners. Men interviewed in the 2012 KgDHS were asked if they had ever paid anyone in exchange for having sexual intercourse and if they had done so in the 12 months before the survey. Respondents who had engaged in paid sexual intercourse in the previous 12 months were asked if they had used a condom the last time they paid someone for sex. Table 13.11 shows results.

Results show that 41 percent of men age 15-49 in the Kyrgyz Republic have paid for sex at some time in their lives and 8 percent paid for sex in the 12 months before the survey. Men age 20-24 are the most likely to have ever paid for sex and also to have done so in the 12 months before the survey. Men who are divorced, separated, or widowed are slightly more likely to have ever paid for sex than men who are currently married or have never married; however, the latter are the most likely to have paid for sex in the 12 months before the survey (17 percent). Men in the Djalal-Abad, Osh City, Chui, and Osh Oblast regions are more likely to have paid for sex than men in other regions. Men with the least education and in the lowest wealth quintile are also the least likely to have ever paid for sex, though the differences are small.

Almost all (95 percent) of the men who paid for sex in the 12 months before the survey reported that they used a condom the last time they had paid sex (data not shown).

Table 13.11 Payment for sexual intercourse

Percentage of men age 15-49 who ever paid for sexual intercourse and percentage reporting payment for sexual intercourse in the past 12 months, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Among all men: Percentage who ever paid for sexual intercourse	Percentage who paid for sexual intercourse in the past 12 months	Number of men
Age			
15-24	39.3	15.2	836
15-19	21.1	11.6	432
20-24	58.8	19.0	404
25-29	52.0	8.5	409
30-39	45.4	2.7	596
40-49	32.4	1.1	572
Marital status			
Never married	42.4	17.4	875
Married or living together	40.1	1.4	1,443
Divorced/separated/widowed	49.3	12.1	95
Residence			
Urban	42.4	6.2	781
Rural	40.8	8.3	1,632
Region			
Issyk-Kul	1.3	0.6	207
Djalal-Abad	69.5	8.2	402
Naryn	12.3	0.9	98
Batken	0.2	0.2	186
Osh Oblast	44.9	12.7	526
Talas	3.2	2.3	126
Chui	64.6	12.6	407
Bishkek City	38.9	2.3	383
Osh City	65.0	24.4	78
Education			
None/primary	*	*	7
Basic general	31.5	6.4	338
Secondary	42.5	8.0	1,158
Professional primary/middle	41.8	6.7	388
Higher	44.9	8.5	522
Wealth quintile			
Lowest	32.9	6.3	502
Second	38.4	10.0	496
Middle	44.5	6.4	451
Fourth	46.0	8.8	449
Highest	45.5	6.6	515
Total	41.3	7.6	2,413

Note: An asterisk indicates a figure is based on fewer than 25 unweighted cases and has been suppressed.

13.9 COVERAGE OF HIV COUNSELING AND TESTING

Knowledge of HIV status helps HIV-negative individuals make specific decisions to reduce risk and increase safer sex practices so they can remain disease-free. For those who have HIV, knowledge of their status allows them to take action to protect their sexual partners, to access treatment, and to plan for the future.

To assess the awareness and coverage of HIV testing services, women and men interviewed in the 2012 KgDHS were asked if they had ever been tested for HIV and if so, how long it had been since their most recent test. Additionally, women who had given birth in the two years before the survey were asked if they had been tested for HIV as part of their antenatal care, just before delivery, or any time after the birth. Respondents who reported they had ever been tested were asked whether they had received the results of their last test. If women and men had never been tested, they were asked if they knew a place where they could go to be tested. Table 13.12.1 presents the results regarding prior HIV testing for women and Table 13.12.2 presents similar data for men.

Table 13.12.1 Coverage of prior HIV testing: Women

Percentage of women age 15-49 who know where to get an HIV test, percent distribution of women age 15-49 by testing status and by whether they received the results of the last test, the percentage of women ever tested, and the percentage of women age 15-49 who were tested in the past 12 months and received the results of the last test, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of women by testing status and by whether they received the results of the last test: Ever tested and received results	Ever tested, did not receive results	Never tested[1]	Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of women
Age								
15-24	41.4	25.3	2.8	72.0	100.0	28.0	12.0	3,164
15-19	23.7	9.0	1.1	89.9	100.0	10.1	5.5	1,637
20-24	60.3	42.7	4.5	52.8	100.0	47.2	19.1	1,527
25-29	71.5	56.5	6.7	36.8	100.0	63.2	19.6	1,265
30-39	68.3	55.3	4.5	40.2	100.0	59.8	12.4	1,943
40-49	60.7	41.9	3.3	54.8	100.0	45.2	6.9	1,837
Marital status								
Never married	27.7	9.9	1.2	88.9	100.0	11.1	4.8	2,245
Ever had sex	68.8	39.9	4.5	55.6	100.0	44.4	15.9	92
Never had sex	25.9	8.6	1.0	90.4	100.0	9.6	4.4	2,153
Married/living together	68.3	53.5	5.2	41.2	100.0	58.8	16.0	5,256
Divorced/separated/widowed	62.9	45.5	2.6	51.9	100.0	48.1	6.7	707
Residence								
Urban	59.3	42.4	3.8	53.8	100.0	46.2	13.8	3,070
Rural	55.2	40.0	3.9	56.1	100.0	43.9	11.1	5,138
Region								
Issyk-Kul	66.0	43.8	5.5	50.7	100.0	49.3	19.8	650
Djalal-Abad	68.6	54.2	3.5	42.3	100.0	57.7	11.8	1,332
Naryn	56.0	42.7	4.4	52.9	100.0	47.1	12.8	281
Batken	67.3	36.0	15.9	48.1	100.0	51.9	14.0	616
Osh Oblast	28.9	17.3	1.6	81.1	100.0	18.9	2.8	1,627
Talas	68.5	53.7	3.2	43.2	100.0	56.8	21.6	360
Chui	64.8	50.8	3.0	46.2	100.0	53.8	14.8	1,465
Bishkek City	57.5	44.8	1.9	53.3	100.0	46.7	12.3	1,566
Osh City	55.8	28.3	5.2	66.6	100.0	33.4	17.0	311
Education								
None/primary	(28.7)	(20.4)	(4.6)	(75.0)	(100.0)	(25.0)	(9.4)	39
Basic general	33.0	22.6	2.2	75.3	100.0	24.7	7.7	1,139
Secondary	50.9	36.3	4.7	59.0	100.0	41.0	8.7	3,468
Professional primary/middle	66.2	49.1	3.2	47.7	100.0	52.3	15.9	1,364
Higher	72.8	52.9	3.9	43.1	100.0	56.9	17.5	2,198
Wealth quintile								
Lowest	54.8	38.7	3.4	57.9	100.0	42.1	10.0	1,459
Second	56.1	41.2	4.2	54.6	100.0	45.4	11.1	1,473
Middle	54.3	38.5	4.5	57.0	100.0	43.0	10.8	1,538
Fourth	58.7	40.9	5.2	53.9	100.0	46.1	13.6	1,667
Highest	58.8	44.0	2.6	53.5	100.0	46.5	14.1	2,071
Total	56.7	40.9	3.9	55.2	100.0	44.8	12.1	8,208

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Includes 'don't know/missing'.

More than half of all women (57 percent) know of a place to get tested for HIV, and just under half (45 percent) have ever been tested. Only 12 percent of women were tested and received results in the 12 months before the survey.

Comparison with the 2006 MICS results (NSC, 2007) indicates that the level of HIV testing among women has been increasing. In 2006, 37 percent of women age 15-49 had ever been tested, compared with 45 percent in 2012. Knowledge of where to get tested has remained essentially stable (59 percent of women in 2006 and 57 percent in 2012).

Table 13.12.1 shows that there is considerable variation in HIV testing coverage among women by background characteristics. The proportion of women who have ever been tested for HIV increases with age up to age 25-29 and then decreases. It is higher among currently married women than women who are divorced, widowed, or separated or women who have never married. Considering regional patterns, the percentage who have ever been tested is highest in the Djalal-Abad and Talas regions (57-58 percent) and lowest in Osh Oblast (19 percent). The likelihood that a woman has ever been tested increases with education, but not with wealth. Differentials in knowledge of a place to obtain an HIV test follow a similar pattern to those for the percentage ever tested.

Table 13.12.2 Coverage of prior HIV testing: Men

Percentage of men age 15-49 who know where to get an HIV test, percent distribution of men age 15-49 by testing status and by whether they received the results of the last test, the percentage of men ever tested, and the percentage of men age 15-49 who were tested in the past 12 months and received the results of the last test, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Percentage who know where to get an HIV test	Percent distribution of men by testing status and by whether they received the results of the last test: Ever tested and received results	Ever tested, did not receive results	Never tested[1]	Total	Percentage ever tested	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of men
Age								
15-24	42.7	3.7	0.1	96.3	100.0	3.7	1.4	836
15-19	29.4	1.8	0.0	98.2	100.0	1.8	0.9	432
20-24	57.0	5.7	0.2	94.2	100.0	5.8	1.9	404
25-29	65.6	14.7	0.2	85.2	100.0	14.8	2.4	409
30-39	58.4	11.1	0.6	88.3	100.0	11.7	3.3	596
40-49	54.8	9.0	0.3	90.7	100.0	9.3	1.9	572
Marital status								
Never married	44.0	4.4	0.1	95.6	100.0	4.4	1.7	875
Ever had sex	64.0	6.2	0.1	93.7	100.0	6.3	2.3	462
Never had sex	21.7	2.4	0.0	97.6	100.0	2.4	1.0	413
Married/living together	58.7	11.0	0.3	88.7	100.0	11.3	2.4	1,443
Divorced/separated/widowed	58.0	12.0	1.1	86.9	100.0	13.1	2.9	95
Residence								
Urban	54.8	10.3	0.4	89.3	100.0	10.7	2.8	781
Rural	52.6	7.8	0.2	92.0	100.0	8.0	1.9	1,632
Region								
Issyk-Kul	18.1	8.7	0.5	90.8	100.0	9.2	2.1	207
Djalal-Abad	55.3	2.4	0.4	97.1	100.0	2.9	0.8	402
Naryn	51.8	10.5	0.0	89.5	100.0	10.5	6.2	98
Batken	13.3	7.7	0.0	92.3	100.0	7.7	2.2	186
Osh Oblast	52.5	7.5	0.3	92.3	100.0	7.7	1.7	526
Talas	37.8	9.9	0.0	90.1	100.0	9.9	2.6	126
Chui	93.1	13.0	0.4	86.6	100.0	13.4	3.0	407
Bishkek City	54.6	11.0	0.0	89.0	100.0	11.0	1.3	383
Osh City	51.0	11.2	0.6	88.2	100.0	11.8	6.9	78
Education								
None/primary	*	*	*	*	*	*	*	7
Basic general	39.2	2.4	0.0	97.6	100.0	2.4	0.5	338
Secondary	47.8	5.2	0.3	94.5	100.0	5.5	1.5	1,158
Professional primary/middle	60.1	10.8	0.2	89.0	100.0	11.0	3.1	388
Higher	70.3	18.6	0.5	80.9	100.0	19.1	4.0	522
Wealth quintile								
Lowest	46.2	6.9	0.2	93.0	100.0	7.0	2.4	502
Second	47.2	6.6	0.1	93.3	100.0	6.7	2.1	496
Middle	53.9	8.3	0.4	91.3	100.0	8.7	2.1	451
Fourth	62.5	11.5	0.2	88.2	100.0	11.8	1.8	449
Highest	57.7	10.0	0.4	89.6	100.0	10.4	2.3	515
Total	53.3	8.6	0.3	91.1	100.0	8.9	2.2	2,413

Note: An asterisk indicates a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes 'don't know/missing'.

Although men are almost as likely as women to know of a place to get tested for HIV (53 percent and 57 percent, respectively), men are far less likely to have ever been tested (9 percent). Only 2 percent of men have been tested and received results in the 12 months before the survey (Table 13.2.2).

In general, differentials in the proportion of men who have ever been tested for HIV are similar to those among women. However, the pattern among men by region is quite different from that among women. Men in the Djalal-Abad region show the lowest proportion ever tested. Men in the Chui region are particularly likely to report knowing a place to obtain an HIV test (93 percent).

Table 13.13 presents information on HIV screening during pregnancy for women age 15-49 who gave birth in the two years preceding the survey. Screening of pregnant women is a key tool in reducing mother-to-child transmission (MTCT). Survey results show that 58 percent of women who gave birth in the two years before the survey received HIV counseling during antenatal care, and a total of 73 percent were tested for HIV during antenatal care. Overall, only 45 percent were counseled, tested, and received results during antenatal care.

Table 13.13 Pregnant women counseled and tested for HIV

Among all women age 15-49 who gave birth in the two years preceding the survey, the percentage who received HIV pretest counseling, the percentage who received an HIV test during antenatal care for their most recent birth by whether they received their results and post-test counseling, and percentage who received an HIV test at the time during ANC or labor for their most recent birth by whether they received their test results, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Percentage who received counseling on HIV during antenatal care[1]	Percentage who were tested for HIV during antenatal care and who: Received results and: Received post-test counseling	Did not receive post-test counseling	Did not receive results	Percentage who received counseling on HIV and an HIV test during ANC, and the results	Percentage who had an HIV test during ANC or labor and who:[2] Received results	Did not receive results	Number of women who gave birth in the past two years[3]
Age								
15-24	59.5	47.5	14.9	6.6	44.5	64.5	6.7	637
15-19	48.2	48.2	18.5	6.8	41.5	66.6	6.8	65
20-24	60.8	47.5	14.5	6.6	44.9	64.2	6.7	572
25-29	54.9	43.6	22.1	7.9	42.1	66.6	8.4	519
30-39	59.4	52.1	19.8	6.8	49.4	72.8	7.1	479
40-49	57.5	39.1	18.1	4.5	39.3	58.2	4.5	62
Marital status								
Never married	*	*	*	*	*	*	*	2
Married or living together	58.1	47.5	19.0	6.8	45.1	67.7	7.0	1,637
Divorced/separated/widowed	57.3	45.3	7.2	9.9	42.6	56.4	9.9	57
Residence								
Urban	61.5	51.0	23.3	6.0	51.7	74.9	6.1	500
Rural	56.5	45.8	16.7	7.4	42.2	64.0	7.7	1,196
Region								
Issyk-Kul	70.1	51.8	25.8	5.8	62.8	79.8	5.8	157
Djalal-Abad	60.9	78.1	8.9	0.6	59.0	87.0	0.6	322
Naryn	66.9	42.4	25.7	6.2	49.2	73.5	6.7	72
Batken	68.3	46.4	8.5	35.1	45.2	56.4	35.4	165
Osh Oblast	56.5	23.3	9.1	5.0	26.6	32.7	5.0	342
Talas	57.4	33.4	47.9	4.9	52.6	82.5	5.3	97
Chui	38.6	45.4	25.3	2.9	32.4	74.3	3.8	278
Bishkek City	62.2	43.3	29.3	4.0	51.9	72.6	4.0	211
Osh City	56.5	63.5	7.4	13.3	43.6	71.5	14.3	53
Education								
None/primary	*	*	*	*	*	*	*	9
Basic general	44.6	43.7	9.5	3.9	32.0	54.8	5.2	197
Secondary	58.4	45.6	15.1	9.0	43.4	61.2	9.0	758
Professional primary/middle	60.3	50.8	22.7	5.8	50.0	75.6	6.1	266
Higher	62.6	50.5	25.7	5.8	51.1	78.3	5.9	465
Wealth quintile								
Lowest	65.6	50.3	17.0	4.2	52.6	68.2	4.3	315
Second	55.0	44.3	20.7	7.4	42.5	67.4	7.5	343
Middle	59.8	46.1	12.4	9.4	42.3	59.6	9.9	363
Fourth	50.5	44.5	19.7	7.8	39.1	65.7	8.1	380
Highest	60.9	52.7	24.1	5.7	50.5	77.4	5.9	296
Total	58.0	47.3	18.6	7.0	45.0	67.2	7.3	1,696

Note: An asterisk indicates a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] In this context, "pretest counseling" means that someone talked with the respondent about all three of the following topics: 1) babies getting the AIDS virus from their mother, 2) preventing the virus, and 3) getting tested for the virus.

[2] Women are asked whether they received an HIV test during labor only if they were not tested for HIV during ANC.

[3] Denominator for percentages includes women who did not receive antenatal care for their last birth in the past two years.

Women in the Issyk-Kul and Djalal-Abad regions are more likely than other women to receive counseling, testing, and results for HIV during antenatal care, and women in the Osh Oblast region are less likely than other women. The survey results also show that the proportion of women receiving HIV counseling and testing during antenatal care increases with the level of education but not with wealth.

Comparison of survey data with results from the 2006 MICS survey indicates a slight decrease in the proportion of women who received HIV counseling during antenatal care for a birth in the two years before the survey (from 63 percent in 2006 to 58 percent in 2012). However, the proportion of women who gave birth in the two years before the surveys and who were tested for HIV during an antenatal care visit increased from 69 percent in 2006 to 73 percent in 2012 (NSC, 2007).

13.10 MALE CIRCUMCISION

Recently, male circumcision has been shown to be associated with lower transmission of sexually transmitted infections (STIs), including HIV (Auvert, et al., 2005; Bailey, R.C. et al, 2007; Gray, et al., 2007). In order to investigate the level of the practice in the Kyrgyz Republic, men interviewed in the 2012 KgDHS were asked if they were circumcised**.**

Table 13.14 shows that 92 percent of men age 15-49 in the Kyrgyz Republic are circumcised. Men in rural areas (96 percent) are more likely to have been circumcised than men in urban areas (83 percent). At least 90 percent of men are circumcised in all regions except Bishkek City (73 percent) and the Chui region (84 percent).

Table 13.14 Male circumcision

Percentage of men age 15-49 who report having been circumcised, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Percentage circumcised	Number of men
Age		
15-24	93.2	836
15-19	95.4	432
20-24	90.8	404
25-29	90.5	409
30-39	92.8	596
40-49	90.2	572
Residence		
Urban	82.7	781
Rural	96.4	1,632
Region		
Issyk-Kul	91.8	207
Djalal-Abad	99.0	402
Naryn	100.0	98
Batken	99.5	186
Osh Oblast	100.0	526
Talas	97.4	126
Chui	84.4	407
Bishkek City	73.1	383
Osh City	96.2	78
Total	91.9	2,413

13.11 SELF-REPORTED PREVALENCE OF SEXUALLY TRANSMITTED INFECTIONS AND STI SYMPTOMS

Information about the prevalence of STIs is useful not only as a marker of unprotected sexual intercourse but also as a cofactor for HIV transmission. STIs are closely associated with HIV because they increase the likelihood of contracting HIV and share similar risk factors. In the 2012 KgDHS, women and men who ever had sex were asked whether, in the past 12 months, they had contracted a disease through sexual contact. They were also asked whether they had experienced a genital sore or ulcer or had any abnormal genital discharge in the past year. These symptoms are useful in identifying STIs among men.

However, they are less easily interpreted in women, because women are likely to experience more conditions of the reproductive tract other than STIs that produce a genital discharge.

Table 13.15 shows that self-reported STI prevalence among women age 15-49 in the Kyrgyz Republic is negligible, with only 1 percent of women who ever had sex reporting having an STI in the 12 months before the survey. Nine percent of women reported having had a bad-smelling or abnormal genital discharge, and 1 percent reported having had a genital ulcer or sore. Altogether, 10 percent of women reported having either an STI and/or symptoms of an STI in the 12 months before the survey. The percentage of women reporting an STI and/or STI symptoms is highest among women in the Batken and Talas regions.

Table 13.15 Self-reported prevalence of sexually-transmitted infections (STIs) and STIs symptoms

Among women and men age 15-49 who ever had sexual intercourse, the percentage reporting having an STI and/or symptoms of an STI in the past 12 months, by background characteristics, Kyrgyz Republic 2012

	Women					Men				
	Percentage of women who reported having in the past 12 months:					Percentage of men who reported having in the past 12 months:				
Background characteristic	STI	Bad smelling/ abnormal genital discharge	Genital sore/ulcer	STI/ genital discharge/ sore or ulcer	Number of women who ever had sexual intercourse	STI	Bad smelling/ abnormal genital discharge	Genital sore/ulcer	STI/ genital discharge/ sore or ulcer	Number of men who ever had sexual intercourse
Age										
15-24	1.0	7.0	0.7	7.2	1,149	0.5	0.4	0.0	0.7	446
15-19	0.0	4.7	0.6	4.7	166	0.0	0.0	0.0	0.0	106
20-24	1.1	7.4	0.7	7.6	983	0.7	0.6	0.0	0.9	340
25-29	0.9	10.4	1.1	10.5	1,173	0.1	0.9	0.9	1.0	391
30-39	1.2	10.0	1.2	10.7	1,910	0.2	0.2	0.1	0.3	590
40-49	1.0	8.6	1.7	9.4	1,822	0.7	0.5	0.0	1.2	564
Marital status										
Never married, ever had sex	1.4	13.7	1.4	13.7	92	0.6	0.4	0.0	0.8	462
Married/living together	1.1	9.4	1.2	10.0	5,255	0.4	0.5	0.3	0.8	1,434
Divorced/separated/widowed	0.9	6.1	1.5	6.1	707	0.0	0.5	0.0	0.5	95
Male circumcision										
Circumcised	na	na	na	na	0	0.2	0.5	0.2	0.6	1,819
Not circumcised	na	na	na	na	0	2.8	0.0	0.0	2.8	168
Residence										
Urban	1.5	6.9	0.7	7.7	2,119	0.8	0.2	0.0	0.9	665
Rural	0.8	10.3	1.5	10.6	3,936	0.2	0.6	0.3	0.7	1,326
Region										
Issyk-Kul	1.5	8.0	0.3	8.6	534	0.0	0.0	0.0	0.0	150
Djalal-Abad	0.2	4.4	0.5	4.5	1,011	0.3	0.4	0.0	0.7	352
Naryn	0.6	2.3	0.0	2.3	229	1.1	3.2	0.6	3.2	77
Batken	1.1	20.7	1.0	21.1	483	0.0	0.0	0.0	0.0	120
Osh Oblast	0.2	7.7	1.9	8.0	1,149	0.0	0.0	0.0	0.0	415
Talas	0.5	17.0	0.1	17.0	297	1.0	1.5	0.9	1.9	97
Chui	1.8	11.8	2.6	12.1	1,129	0.7	0.9	0.7	1.6	379
Bishkek City	2.1	6.6	0.3	7.9	1,009	0.4	0.0	0.0	0.4	335
Osh City	0.0	9.4	3.5	10.4	212	1.5	1.2	0.0	2.1	67
Education										
None/primary	*	*	*	*	21	*	*	*	*	6
Basic general	0.4	5.7	1.4	6.1	514	0.3	0.3	0.0	0.3	177
Secondary	1.0	10.5	1.8	10.9	2,717	0.2	0.4	0.1	0.5	983
Professional primary/middle	1.5	8.8	0.7	9.2	1,147	1.2	0.5	0.0	1.7	348
Higher	1.1	8.0	0.7	8.7	1,655	0.3	0.7	0.6	0.9	477
Wealth quintile										
Lowest	0.7	9.2	1.3	9.6	1,101	0.1	0.4	0.3	0.5	395
Second	0.3	9.5	1.1	9.8	1,117	0.5	0.6	0.0	0.9	387
Middle	0.7	10.5	1.1	10.9	1,196	0.1	1.1	0.7	1.1	371
Fourth	1.6	10.2	1.9	10.4	1,279	0.0	0.0	0.0	0.0	385
Highest	1.7	6.4	0.8	7.5	1,361	1.1	0.3	0.0	1.4	454
Total	1.0	9.1	1.2	9.6	6,054	0.4	0.5	0.2	0.8	1,991

Note: An asterisk indicates a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes 4 men with circumcision status missing.
na=Not applicable

Men are far less likely than women to report having STIs or symptoms of an STI. Less than 1 percent of men who ever had sex reported having any STI-related symptom in the 12 months before the survey.

When respondents reported having an STI, STI symptoms, or both in the past 12 months, they were asked whether they sought any advice or treatment. There are too few men who reported having an STI or STI symptoms to provide meaningful results; however, among women, 59 percent said they sought advice or treatment for the symptom(s) from a health professional, and 1 percent said they went to a shop or pharmacy (data not shown).

13.12 Prevalence of Medical Injections

Nonsterile injections can pose a risk of infection with HIV and other diseases. To measure the potential risk of transmission of HIV associated with medical injections, respondents in the 2012 KgDHS were asked if they had received an injection in the past 12 months and, if so, how many.

Table 13.16 shows that 28 percent of women and 19 percent of men age 15-49 received a medical injection in the 12 months preceding the survey. The average number of injections is 3.4 for women and 1.7 for men. The potential risk of transmission of HIV associated with such injections is very low, because almost all respondents (96-97 percent) said they received their most recent injection with a syringe and needle taken from a new, unopened package.

The likelihood of receiving an injection in the previous 12 months tends to increase with age, for both women and men. It is somewhat higher among urban than rural men; however, the difference among women is very small. The proportion receiving an injection in the 12 months before the survey also tends to increase with education level and, among men, increases by wealth quintile. Those who have never married are less likely to have had an injection in the 12 months before the survey; however, this is true only for those who have never had sex. Those who have never married but have had sex are as likely to have had injections as those who have ever married. Recent injections are more prevalent among women in the Talas region and among men in the Djalal-Abad and Bishkek City regions. Men in the Issyk-Kul and Osh Oblast regions are notably less likely to have had an injection in the 12 months before the survey.

Table 13.16 Prevalence of medical injections

Percentage of women and men age 15-49 who received at least one medical injection in the last 12 months, the average number of medical injections per person in the last 12 months, and among those who received a medical injection, the percentage of last medical injections for which the syringe and needle were taken from a new, unopened package, by background characteristics, Kyrgyz Republic 2012

	Women					Men				
Background characteristic	Percentage who received a medical injection in the past 12 months	Average number of medical injections per person in the past 12 months	Number of women	For last injection, syringe and needle taken from a new, unopened package	Number of women receiving medical injections in the past 12 months	Percentage who received a medical injection in the past 12 months	Average number of medical injections per person in the past 12 months	Number of men	For last injection, syringe and needle taken from a new, unopened package	Number of men receiving medical injections in the past 12 months
Age										
15-24	20.5	1.9	3,164	97.8	647	16.0	1.1	836	97.9	134
15-19	15.1	1.4	1,637	96.6	246	14.5	0.9	432	97.6	63
20-24	26.3	2.5	1,527	98.5	401	17.7	1.2	404	98.2	71
25-29	30.9	3.5	1,265	94.6	391	15.5	1.3	409	98.9	63
30-39	31.6	3.9	1,943	95.5	614	21.6	2.1	596	94.6	129
40-49	33.1	5.4	1,837	97.4	608	23.2	2.4	572	95.3	133
Marital status										
Never married	16.2	1.6	2,245	96.9	364	16.5	1.2	875	98.0	144
Ever had sex	32.9	4.5	92	*	30	21.2	1.7	462	98.7	98
Never had sex	15.5	1.5	2,153	96.6	334	11.2	0.6	413	96.7	46
Married/living together	31.6	4.0	5,256	96.6	1,662	20.1	2.0	1,443	95.7	291
Divorced/separated/widowed	33.1	4.4	707	95.3	234	24.9	1.8	95	*	24
Residence										
Urban	28.6	3.4	3,070	94.8	877	24.1	2.4	781	93.3	188
Rural	26.9	3.4	5,138	97.6	1,384	16.6	1.3	1,632	98.5	271
Region										
Issyk-Kul	29.9	3.3	650	99.0	194	4.6	0.3	207	*	9
Djalal-Abad	21.0	2.4	1,332	99.1	280	26.6	2.4	402	98.6	107
Naryn	22.8	2.9	281	100.0	64	24.8	1.8	98	100.0	24
Batken	31.5	4.3	616	97.6	194	17.3	2.2	186	98.1	32
Osh Oblast	29.5	4.4	1,627	96.0	480	7.3	0.8	526	(94.9)	39
Talas	42.7	6.1	360	99.8	154	24.9	0.4	126	100.0	31
Chui	25.8	2.4	1,465	96.2	377	24.2	2.2	407	100.0	99
Bishkek City	28.2	3.2	1,566	91.8	441	26.5	2.1	383	87.6	101
Osh City	24.4	3.1	311	100.0	76	20.4	3.0	78	(100.0)	16
Education										
None/primary	(35.6)	(5.4)	39	*	14	*	*	7	*	0
Basic general	19.2	2.1	1,139	94.6	219	14.7	0.9	338	96.9	50
Secondary	27.2	3.5	3,468	97.4	943	16.9	1.5	1,158	96.5	196
Professional primary/middle	31.0	4.1	1,364	97.8	423	26.5	2.5	388	98.7	103
Higher	30.1	3.5	2,198	95.6	662	21.1	2.0	522	93.7	110
Wealth quintile										
Lowest	29.9	4.0	1,459	97.1	436	13.7	0.9	502	98.1	69
Second	28.9	3.8	1,473	97.6	425	16.2	1.5	496	100.0	80
Middle	25.0	3.1	1,538	98.6	385	18.9	1.4	451	98.2	85
Fourth	26.4	3.1	1,667	97.5	440	22.4	2.7	449	91.4	101
Highest	27.8	3.2	2,071	93.1	575	24.0	1.9	515	95.8	124
Total	27.5	3.4	8,208	96.5	2,261	19.0	1.7	2,413	96.4	459

Note: Medical injections are those given by a doctor, nurse, pharmacist, dentist or other health worker. Figures in parentheses are based on 25-49 unweighted cases; an asterisk indicates a figure is based on fewer than 25 unweighted cases and has been suppressed.

13.13 HIV/AIDS KNOWLEDGE AND SEXUAL BEHAVIOR AMONG YOUTH

This section addresses HIV/AIDS-related knowledge and sexual behavior among youth age 15-24. In addition to knowledge of HIV transmission, data are presented on age at first sexual intercourse, age differences between sexual partners, and voluntary counseling and testing for HIV. Younger people are often at a higher risk of contracting STIs, as they are more likely to be experimenting with sex before marriage and are more prone to risk-taking behavior.

13.13.1 HIV/AIDS-related Knowledge among Young Adults

Young respondents were asked the same set of questions on beliefs about HIV transmission as older respondents. Table 13.17 shows results on the level of knowledge of the main means of avoiding HIV and rejection of major misconceptions.

The data show that only one in five women and just under one in four men age 15-24 have comprehensive knowledge of HIV/AIDS. Knowledge of a source for condoms is considerably higher; 67 percent of young women and 85 percent of young men say they know a place where people can get condoms.

Table 13.17 Comprehensive knowledge about AIDS and of a source of condoms among youth

Percentage of young women and young men age 15-24 with comprehensive knowledge about AIDS and percentage with knowledge of a source of condoms, by background characteristics, Kyrgyz Republic 2012

	Women			Men		
Background characteristic	Percentage with comprehensive knowledge of AIDS[1]	Percentage who know a condom source[1]	Number of women	Percentage with comprehensive knowledge of AIDS[1]	Percentage who know a condom source[1]	Number of men
Age						
15-19	14.0	54.4	1,637	18.3	73.8	432
15-17	12.1	47.3	1,047	14.9	68.7	280
18-19	17.4	66.9	590	24.5	83.0	152
20-24	25.4	81.2	1,527	30.2	97.4	404
20-22	24.9	79.0	899	31.5	96.9	219
23-24	26.1	84.4	628	28.6	98.0	184
Marital status						
Never married	19.2	59.0	2,049	23.6	83.1	736
Ever had sex	*	*	34	34.1	96.9	345
Never had sex	18.8	58.3	2,014	14.3	71.0	390
Ever married	20.1	82.6	1,116	27.2	100.0	100
Residence						
Urban	25.9	69.5	1,220	25.6	89.3	264
Rural	15.5	66.0	1,944	23.3	83.3	572
Education						
None/primary	*	*	22	*	*	2
Basic general	10.6	49.4	823	13.0	73.5	207
Secondary	15.0	66.6	1,194	20.2	85.5	369
Professional primary/middle	29.0	82.9	362	28.6	89.4	105
Higher	32.1	81.5	764	45.4	97.0	153
Total	19.5	67.3	3,164	24.0	85.2	836

Note: An asterisk indicates a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about AIDS transmission or prevention of the AIDS virus. The components of comprehensive knowledge are presented in Tables 13.3, 13.4.1 and 13.4.2.
[2] For this table, the following responses are not considered a source for condoms: friends, family members, and home.

Comprehensive knowledge about AIDS and knowledge of a source for condoms are both higher among respondents age 20-24 than among those age 15-19. Both indicators are also somewhat higher for young people who have married than among those who have never married. Urban respondents are more likely to have comprehensive knowledge about AIDS and know a source of condoms than rural respondents. Both comprehensive knowledge of AIDS and knowledge of a source of condoms increase with educational level. For example, the proportion of young women with comprehensive knowledge

about AIDS increases from 11 percent of those with a basic general education to 32 percent of those who have attended higher education.

13.13.2 Age at First Sexual Intercourse among Young Adults

Since HIV transmission often occurs through heterosexual intercourse between an infected and a non-infected person, age at first intercourse marks the time when many individuals first risk exposure to the virus. Table 13.18 shows the percentage of young women and men age 15-24 who had their sexual debut before age 15, or before age 18.

Table 13.18 Age at first sexual intercourse among young people

Percentage of young women and young men age 15-24 who had sexual intercourse before age 15 and percentage of young women and young men age 18-24 who had sexual intercourse before age 18, by background characteristics, Kyrgyz Republic 2012

	Women				Men			
	Women age 15-24		Women age 18-24		Men age 15-24		Men age 18-24	
Background characteristic	Percentage who had sexual intercourse before age 15	Number of women	Percentage who had sexual intercourse before age 18	Number of women	Percentage who had sexual intercourse before age 15	Number of men)	Percentage who had sexual intercourse before age 18	Number of men
Age								
15-19	0.0	1,637	na	na	2.2	432	na	na
15-17	0.0	1,047	na	na	0.0	280	na	na
18-19	0.0	590	11.5	590	6.2	152	37.4	152
20-24	0.1	1,527	7.8	1,527	2.0	404	32.2	404
20-22	0.0	899	8.5	899	2.2	219	29.4	219
23-24	0.3	628	6.9	628	1.8	184	35.5	184
Marital status								
Never married	0.0	2,049	0.2	1,024	2.3	736	34.0	456
Ever married	0.2	1,116	17.0	1,093	0.4	100	31.7	100
Knows condom source[1]								
Yes	0.1	2,131	9.0	1,635	2.5	712	34.6	520
No	0.0	1,033	8.4	482	0.0	124	(19.8)	37
Residence								
Urban	0.0	1,220	5.6	879	4.2	264	43.6	193
Rural	0.1	1,944	11.2	1,238	1.1	572	28.3	363
Education								
None/primary	*	22	*	15	*	2	*	2
Basic general	0.2	823	24.5	261	1.1	207	23.4	73
Secondary	0.0	1,194	11.6	788	1.5	369	28.3	245
Professional primary/middle	0.2	362	4.6	300	9.2	105	51.4	87
Higher	0.0	764	2.1	753	0.0	153	37.2	149
Total	0.1	3,164	8.9	2,117	2.1	836	33.6	556

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk indicates a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable
[1] For this table, the following responses are not considered a source for condoms: friends, family members and home.

Only a tiny fraction of young women in the Kyrgyz Republic have sex before age 15, while 9 percent have sex before age 18. Young men become sexually active at an earlier age than women; 2 percent report having sex before age 15, and 34 percent before age 18.

By background characteristics, a higher proportion of rural women have had sex by age 18 compared with urban women, while the opposite is true for young men. As expected, the proportion of women age 18-24 who had sex before age 18 is higher among ever-married women than among never-married women; however, among men, the difference is very small and in the opposite direction. The proportion of young women who had sex before age 18 decreases consistently as education level increases; among men, however, the relationship is not clear.

The proportion of women age 20-24 who reported having sex before age 18 was 10 percent in the 2006 MICS compared with 8 percent in the 2012 KgDHS, an insignificant difference (NSC, 2007).

13.13.3 Abstinence and Premarital Sex among Young Adults

The time between initiation of sexual activity and marriage often carries a higher risk of exposure to HIV, since relationships may be less stable. Table 13.19 shows the percentage of never-married youth who have never had sex, the percentage who had sex in the 12 months preceding the survey, and among men who have had sex, the percentage who used a condom at their most recent sexual intercourse.

Table 13.19 Premarital sexual intercourse and condom use during premarital sexual intercourse among youth

Among never-married women and men age 15-24, the percentage who have never had sexual intercourse, the percentage who had sexual intercourse in the past 12 months, and, among those who had premarital sexual intercourse in the past 12 months, the percentage who used a condom at the last sexual intercourse, by background characteristics, Kyrgyz Republic 2012

	Never-married women age 15-24			Never-married men age 15-24				
							Men who had sexual intercourse in the past 12 months	
Background characteristic	Percentage who have never had sexual intercourse	Percentage who had sexual intercourse in the past 12 months	Number of never married women	Percentage who have never had sexual intercourse	Percentage who had sexual intercourse in the past 12 months	Number of never married men	Percentage who used a condom at last sexual intercourse	Number of men
Age								
15-19	99.9	0.1	1,473	75.9	20.6	430	87.2	89
15-17	100.0	0.0	1,024	88.1	11.0	280	*	31
18-19	99.5	0.5	449	53.1	38.5	150	(89.9)	58
20-24	94.4	4.8	575	20.9	67.8	306	78.9	207
20-22	95.9	3.4	427	26.1	60.0	185	79.9	111
23-24	90.2	8.8	148	12.8	79.6	121	77.6	96
Knows condom source[1]								
Yes	97.2	2.4	1,209	45.3	47.1	612	81.2	288
No	100.0	0.0	839	91.3	6.3	124	*	8
Residence								
Urban	97.5	2.0	891	46.4	46.1	231	86.1	107
Rural	98.9	1.0	1,158	56.1	37.5	504	78.7	189
Education								
None/primary	*	*	15	*	*	1	*	0
Basic general	100.0	0.0	617	81.7	15.4	189	*	29
Secondary	99.5	0.5	714	52.0	41.7	319	77.7	133
Professional primary/middle	97.3	2.7	207	37.8	52.3	83	(80.1)	44
Higher	95.0	4.1	496	27.0	63.2	143	84.6	90
Total	98.3	1.4	2,049	53.0	40.2	736	81.4	296

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk indicates a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] For this table, the following responses are not considered a source for condoms: friends, family members and home.

Almost all (98 percent) never-married women age 15-24 report that they have never had sex, compared with just over half (53 percent) of never-married men age 15-24. The percentage of unmarried youths who have never had sex is higher among those age 15-19 compared with age 20-24 (among young women 100 and 94 percent, respectively, and among young men 76 and 21 percent, respectively). Primary abstinence is higher among those who do not know a source for condoms and for rural youth. The proportion of never-married youth who have never had sex decreases as education level increases. This may be due to the fact that youth with higher levels of education are likely to be older.

Among never-married youth, only 1 percent of women and 40 percent of men age 15-24 had sex in the 12 months before the survey. The proportion of never-married young women and men who have been sexually active in the previous 12 months increases steeply between age 15-19 and 20-24. Premarital sexual activity is more common among young men in urban areas and among those who know of a place to get condoms. It also increases with increasing level of education.

The KgDHS results show that, among young men who had premarital sex in the 12 months before the survey, 81 percent reported using a condom the last time they had sex. Condom use at last sex is slightly higher among urban than rural young men. The number of young women who reported having premarital sex is too small to provide meaningful results about condom use.

13.13.4 Multiple Sexual Partners among Young Adults

Table 13.20 shows the proportion of women and men age 15-24 who reported that they had two or more sexual partners in the 12 months before the survey. Overall, less than 1 percent of young women reported having two or more partners, compared with 15 percent of young men. Among men age 15-24, the level rises with age and is higher among never-married men than ever-married men. It is also higher among men who know a source for condoms. The proportion of young men who report having two or more sexual partners in the 12 months before the survey increases as education level increases.

Table 13.20 Multiple sexual partners in the past 12 months among young people

Among all young women and men age 15-24, the percentage who had sexual intercourse with more than one sexual partner in the past 12 months, by background characteristics, Kyrgyz Republic 2012

	Women age 15-24		Men age 15-24	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Number of women	Percentage who had 2+ partners in the past 12 months	Number of men
Age				
15-19	0.0	1,637	7.4	432
15-17	0.0	1,047	2.2	280
18-19	0.0	590	16.8	152
20-24	0.7	1,527	24.1	404
20-22	0.5	899	23.1	219
23-24	1.1	628	25.2	184
Marital status				
Never married	0.4	2,049	17.0	736
Ever married	0.2	1,116	3.7	100
Knows condom source[1]				
Yes	0.5	2,131	18.1	712
No	0.0	1,033	0.0	124
Residence				
Urban	0.6	1,220	13.4	264
Rural	0.2	1,944	16.4	572
Education				
None/primary	*	22	*	2
Basic general	0.0	823	6.0	207
Secondary	0.4	1,194	16.1	369
Professional primary/middle	0.5	362	19.6	105
Higher	0.7	764	24.1	153
Total 15-24	0.4	3,164	15.4	836

Note: An asterisk indicates a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] For this table, the following responses are not considered a source for condoms: friends, family members and home.

Analysis of condom use at last sex among young women with two or more sexual partners in the 12 months before the survey is not possible because of the small numbers who reported having multiple partners. Among young men with two or more partners, 76 percent reported that they used a condom the last time they had sex (data not shown).

13.13.5 Cross-generational Sexual Partners

To examine age differences between sexual partners, women who had sexual intercourse in the 12 months preceding the survey were asked the age of their partners. The issue of cross-generational sex mainly affects younger women who engage with older men, because such relationships can create situations in which women are at a disadvantage. Among women age 15-19, 9 percent reported having a sexual partner who was 10 or more years older (data not shown). The small number of sexually active young women does not allow breakdowns by background characteristics.

13.13.6 Voluntary HIV Counseling and Testing among Young Adults

Knowledge of one's own HIV status can motivate an individual to practice safer sexual behavior thereafter to avoid transmitting the virus to others. Table 13.21 shows the coverage of HIV counseling and testing by background characteristics for women and men age 15-24 who had sexual intercourse in the 12 months before the survey. Among this group, 27 percent of women but only 2 percent of men age 15-24 were tested for HIV and received results in the 12 months preceding the survey.

Urban young women and men are somewhat more likely to have been tested for HIV and received results in the 12 months before the survey than their rural counterparts. Recent HIV testing tends to increase with increased level of education among women, but less so among men.

Table 13.21 Recent HIV tests among youth

Among young women and young men age 15-24 who have had sexual intercourse in the past 12 months, the percentage who were tested for HIV in the past 12 months and received the results of the last test, by background characteristics, Kyrgyz Republic 2012

	Women age 15-24 who have had sexual intercourse in the past 12 months:		Men age 15-24 who have had sexual intercourse in the past 12 months:	
Background characteristic	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of women	Percentage who have been tested for HIV in the past 12 months and received the results of the last test	Number of men
Age				
15-19	30.1	162	1.8	91
15-17	(12.9)	23	*	31
18-19	32.9	140	(2.8)	60
20-24	26.7	928	2.3	304
20-22	29.2	468	0.5	146
23-24	24.0	459	4.0	159
Marital status				
Never married	*	30	2.6	296
Ever married	27.6	1,061	0.9	100
Knows condom source[1]				
Yes	29.5	903	2.3	388
No	16.1	187	*	8
Residence				
Urban	30.9	327	5.1	139
Rural	25.6	763	0.6	256
Education				
None/primary	*	7	*	1
Basic general	22.8	197	(0.0)	47
Secondary	24.0	465	1.5	182
Professional primary/middle	33.5	145	3.4	65
Higher	32.9	275	3.9	100
Total	27.2	1,090	2.2	395

Note: Figures in parentheses are based on 25-49 unweighted cases; an asterisk indicates a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] For this table, the following responses are not considered a source for condoms: friends, family members and home.

DOMESTIC VIOLENCE 14

Key Findings

- Twenty-three percent of all women age 15-49 have experienced physical violence at least once since age 15, and 13 percent have experienced physical violence within the past 12 months.
- One in four ever-married women have been victims of physical violence, 4 percent have experienced sexual violence, and 14 percent have ever suffered emotional violence inflicted by their current or most recent husband.
- Among ever-married women who have ever experienced physical or sexual violence from a husband, more than half (56 percent) report they suffered physical injuries.
- Only 39 percent of women who have experienced any type of physical or sexual violence sought assistance in response to the physical or sexual violence they experienced.

In recent years there has been increasing concern about violence against women in general, and about domestic violence in particular, in both developed and developing countries. Domestic violence against women has been acknowledged worldwide as a violation of the basic human rights of women. Moreover, an increasing amount of research highlights the health burdens, intergenerational effects, and demographic consequences of domestic violence (United Nations General Assembly, 1991; Heise et al., 1994; Heise et al., 1999; and Jejeebhoy, 1998). Gender-based violence occurs across all socio-economic and cultural backgrounds, and in many societies women are socialized to accept, tolerate, and even rationalize domestic violence and to remain silent about it (Zimmerman, 1994). Violence of any kind has a serious impact on the economy of a country. Because women bear the brunt of domestic violence, they bear the health and psychological burdens as well. Victims of domestic violence are abused inside what should be the most secure environment of all–their own homes.

14.1 MEASUREMENT OF VIOLENCE

Collecting valid, reliable, and ethical data on domestic violence poses particular challenges. What constitutes violence or abuse varies across cultures and among individuals. A culture of silence usually surrounds domestic violence and can affect reporting. The sensitivity of the topic is another issue. Specific ethical concerns are assuring the safety of respondents and interviewers when asking about domestic violence in a familial setting, protecting women who disclose violence, and reducing the risk of double-victimization of respondents as they relive their experiences. The responses to these challenges posed by the 2012 KgDHS are described in the sections that follow.

14.1.1 Use of Valid Measures of Violence

In the 2012 KgDHS, information was obtained from ever-married women on violence committed by their current and former spouses and/or by others. Information was collected from never-married women on violence by anyone. Since international research shows that intimate partner violence is one of the most common forms of violence, especially against women, information on spousal violence was measured in more detail than violence by other perpetrators. This was done by using a shortened, modified version of the Conflict Tactics Scale (Strauss, 1990). Specifically, violence by the current husband/partner for currently married respondents and by the most recent husband/partner for formerly married respondents was measured by asking ever-married women the following set of questions.

Did your (last) (husband/partner) ever:

- Push you, shake you, or throw something at you?
- Slap you?
- Twist your arm or pull your hair?
- Punch you with his fist or with something that could hurt you?
- Kick you, drag you, or beat you up?
- Try to choke you or burn you on purpose?
- Threaten or attack you with a knife, gun, or any other weapon?
- Physically force you to have sexual intercourse with him when you did not want to?
- Physically force you to perform any other sexual acts you did not want to?
- Force you with threats or in any other way to perform sexual acts you did not want to?

For every question that a respondent answered "yes," she was asked about the frequency of the act in the 12 months preceding the survey. An affirmative answer to one or more of the first seven items constitutes evidence of *physical violence*, and a positive answer to any of the final three items constitutes evidence of *sexual violence*.

Similarly, *emotional violence* among ever-married respondents was measured by the following questions.

Did your (last) (husband/partner) ever:

- Say or do something to humiliate you in front of others?
- Threaten to hurt or harm you or someone you care about?
- Insult you or make you feel bad about yourself?

The approach of asking about various specific acts to measure different forms of violence has the advantage of not being affected by different understandings of what is meant by a summary term such as "violence." By including a wide range of acts, this approach has the additional advantage of giving the respondent multiple opportunities to disclose any experience of violence.

In addition to these detailed questions that were asked of ever-married women about their current or most recent husband, women who had been married more than once were also asked questions about physical and/or sexual violence perpetrated by any previous husband(s). All women also were asked about physical and sexual violence committed by persons other than the current or most recent husband/partner. Respondents who answered yes to the question about physical violence were asked who committed the violence against them and the frequency of such violence during the 12 months preceding the survey. Respondents who reported experiencing sexual violence were asked for the perpetrators of the violence.

Although the KgDHS module was designed to optimize the reporting of violent acts, the possibility of underreporting of violence, particularly sexual violence, cannot be entirely ruled out in any survey, and this survey is no exception.

14.1.2 Ethical Considerations in Measuring Violence

In recognition of the challenges in collecting data on violence, the interviewers in the 2012 KgDHS were given special training. The training focused on how to ask sensitive questions, ensure privacy, and build rapport between interviewer and respondent. Rapport with the interviewer, confidentiality, and privacy were all keys to building respondents' confidence so that they could safely share their experiences with the interviewer. Placing questions about violence at the end of the questionnaire also provided time for the interviewer to develop a certain degree of intimacy with

respondents that would further encourage women to share their experiences of violence, if any. In addition, the following protections were built into the survey or the questionnaire in keeping with the World Health Organization's ethical and safety recommendations for research on domestic violence (WHO, 2001):

1. To maintain confidentiality, only one woman per household was administered the questions on violence. The random selection of one woman was done through a simple selection procedure using a grid that was built into the Household Questionnaire (Kish, 1965).

2. As a means of obtaining additional consent, beyond the initial consent at the start of the interview, the respondent was informed that the questions could be sensitive and was reassured regarding the confidentiality of her responses.

3. The violence module was implemented only if privacy could be obtained. The interviewers were instructed to skip the module, thank the respondent, and end the interview if they could not maintain privacy during the implementation of this module.

4. A brochure that included information on domestic violence and contact information for service centers across the country was provided to all interviewers. Interviewers were instructed to provide oral information only upon request of the respondents so that they could access the services and be informed about what to do in the event of domestic violence. Interviewers were instructed not to leave any printed or written information about the services available for victims of abuse in the household. This procedure was designed to safeguard against identifying the respondent selected for the module, ensure the respondent's safety, and avoid any further harm.

As mentioned previously, only one woman per household was selected for the module. A total of 6,022 (unweighted) women age 15-49 completed the domestic violence module, including 4,832 (unweighted) ever-married women who were asked detailed questions about spousal violence. Eighteen eligible women were not interviewed because complete privacy could not be obtained. In producing the tables in this chapter, specially constructed weights were used to adjust for the selection of only one woman per household to ensure that the domestic violence results are nationally representative.

14.2 EXPERIENCE OF PHYSICAL VIOLENCE

Table 14.1 shows the percentage of all women age 15-49 who ever experienced physical violence since age 15 and the percentage who experienced violence during the 12 months preceding the survey, by background characteristics. Overall, 23 percent of women ever experienced physical violence since age 15, and 13 percent experienced physical violence in the 12 months prior to the survey. Four percent of women reported that they experienced physical violence often in the 12 months before the survey, while 9 percent said they had experienced physical violence only sometimes during the 12-month period.

The KgDHS results indicate that divorced, separated, or widowed women are far more likely to have ever experienced physical violence (50 percent) than currently married women (27 percent) or women who never married (6 percent). The percentage of women who have ever experienced physical violence increases with both age and the number of living children, presumably at least in part because older and higher-parity women were exposed to the risk of violence for a longer period. The likelihood that a woman ever experienced physical violence varies little by urban-rural residence. The percentage ever experiencing physical violence is highest among women in the Naryn and Talas regions and lowest among women in Osh City. Higher proportions of employed women ever experienced physical violence than women who are not employed. The percentage of women who ever experienced physical violence increases with education to a level of 28 percent among women with professional primary/middle level education, after which it falls to 23 percent. Experience with physical violence decreases from 26 percent of women in the lowest wealth quintile to 21 percent of women in the highest quintile.

Table 14.1 Experience of physical violence

Percentage of women age 15-49 who have ever experienced physical violence since age 15 and percentage who have experienced violence during the 12 months preceding the survey, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Percentage who have ever experienced physical violence since age 15[1]	Percentage who have experienced physical violence in the past 12 months			Number of women
		Often	Sometimes	Often or sometimes[2]	
Age					
15-19	6.3	0.1	3.8	3.9	1,192
20-24	13.8	1.5	6.2	7.7	1,175
25-29	26.7	5.5	12.3	17.8	898
30-39	33.0	6.8	13.0	19.8	1,416
40-49	33.5	7.3	9.3	16.6	1,340
Residence					
Urban	21.6	4.6	6.6	11.2	2,253
Rural	24.1	4.2	10.3	14.5	3,769
Region					
Issyk-Kul	16.3	1.7	8.7	10.4	476
Djalal-Abad	21.5	3.1	9.4	12.6	981
Naryn	36.9	7.0	15.1	22.2	206
Batken	28.6	3.7	17.6	21.3	450
Osh Oblast	26.1	5.1	6.6	11.8	1,192
Talas	33.9	2.5	21.5	23.9	263
Chui	19.3	5.4	8.9	14.3	1,076
Bishkek City	23.0	5.3	3.7	9.1	1,149
Osh City	12.3	1.9	8.6	10.4	228
Marital status					
Never married	6.2	0.1	3.0	3.0	1,661
Married or living together	26.8	5.4	11.5	16.9	3,833
Divorced/separated/widowed	49.8	10.1	9.0	19.1	528
Number of living children					
0	8.2	0.6	3.4	4.0	2,061
1-2	28.7	5.8	10.6	16.3	1,966
3-4	31.9	6.7	12.4	19.1	1,576
5+	37.6	7.3	15.5	22.8	418
Employment					
Employed for cash	29.5	5.9	10.0	15.9	1,703
Employed not for cash	32.9	5.2	15.8	20.9	145
Not employed	20.2	3.7	8.3	11.9	4,173
Education					
None/primary	*	*	*	*	19
Basic general	12.9	2.1	6.4	8.5	805
Secondary	24.7	5.4	10.3	15.7	2,523
Professional primary/middle	28.2	4.8	10.9	15.7	1,047
Higher	22.5	3.4	6.9	10.3	1,628
Wealth quintile					
Lowest	25.5	3.9	11.0	14.9	1,074
Second	24.7	4.2	10.7	14.9	1,076
Middle	23.2	4.3	10.7	15.0	1,137
Fourth	22.7	4.9	8.7	13.5	1,214
Highest	20.7	4.4	5.1	9.5	1,521
Total	23.1	4.4	8.9	13.3	6,022

Note: Totals include one woman missing information on employment status. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes violence in the past 12 months. For women who were married before age 15 and who reported physical violence, the violence could have occurred before age 15.

[2] Includes women who report physical violence in the past 12 months but for whom frequency is not known.

In Table 14.1 the variation by background characteristics in the percentage of women who have experienced physical violence in the past 12 months (often or sometimes) is similar to the variation for women who have ever experienced violence.

Table 14.2 shows data about the perpetrators of physical violence, according to women's marital status, among those who have experienced physical violence since age 15. Among ever-married women, the most commonly reported perpetrator of physical violence is the current husband or partner (67 percent), followed by the former husband/partner (26 percent), indicating a high level of violence is spousal in nature. Among the small number of never-married women who have experienced physical violence since age 15, the most common perpetrators of violence are mothers or stepmothers (45 percent) and sisters/brothers (29 percent).

Table 14.2 Persons committing physical violence

Among women age 15-49 who have experienced physical violence since age 15, percentage who report specific persons who committed the violence, according to the respondent's current marital status, Kyrgyz Republic 2012

	Marital status		
Person	Ever married	Never married	Total
Current husband/partner	66.7	na	61.8
Former husband/partner	25.9	na	24.0
Former boyfriend	0.3	9.8	1.0
Father/stepfather	1.6	14.4	2.5
Mother/stepmother	8.3	44.9	11.0
Sister/brother	5.5	29.2	7.3
Daughter/son	0.0	1.1	0.1
Other relative	2.6	3.8	2.7
Mother-in-law	2.7	na	2.5
Father-in-law	0.6	na	0.5
Other in-law	1.4	na	1.3
Teacher	0.0	2.4	0.2
Employer/someone at work	0.2	0.0	0.2
Other	1.2	13.9	2.1
Number of women who have experienced physical violence since age 15	1,291	103	1,394

Note: Women were able to report more than one person.
na = Not applicable

14.3 EXPERIENCE OF SEXUAL VIOLENCE

Table 14.3 shows the percentage of all women age 15-49 who experienced sexual violence, ever and in the past 12 months, according to background characteristics. Results show that 3 percent of women age 15-49 ever experienced sexual violence and 2 percent experienced sexual violence in the 12 months before the survey. Differentials in the percentage of women who reported experiencing sexual violence are generally small. The percentage is highest among divorced, separated, or widowed women (10 percent) and lowest among never-married women and women age 15-19 (less than 1 percent each). Sexual violence varies little by urban-rural residence, but is higher in the Batken and Talas regions (8 percent and 6 percent, respectively) than in other regions.

Table 14.3 Experience of sexual violence

Percentage of women age 15-49 who have ever experienced sexual violence and percentage who have experienced sexual violence in the 12 months preceding the survey, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Percentage who have experienced sexual violence: Ever[1]	Past 12 months	Number of women
Age			
15-19	0.1	0.0	1,192
20-24	1.8	1.1	1,175
25-29	3.5	2.5	898
30-39	6.6	4.3	1,416
40-49	4.3	2.0	1,340
Residence			
Urban	2.4	1.0	2,253
Rural	4.0	2.7	3,769
Region			
Issyk-Kul	3.2	2.1	476
Djalal-Abad	0.8	0.2	981
Naryn	2.8	0.5	206
Batken	7.8	6.8	450
Osh Oblast	4.1	3.2	1,192
Talas	6.4	3.2	263
Chui	4.9	2.8	1,076
Bishkek City	1.6	0.1	1,149
Osh City	1.3	1.0	228
Marital status			
Never married	0.1	0.0	1,661
Married or living together	3.9	2.8	3,833
Divorced/separated/widowed	10.1	3.4	528
Employment			
Employed for cash	4.2	2.1	1,703
Employed not for cash	1.8	0.5	145
Not employed	3.1	2.1	4,173
Number of living children			
0	0.9	0.4	2,061
1-2	4.4	2.1	1,966
3-4	4.7	3.5	1,576
5+	5.8	4.3	418
Education			
None/primary	*	*	19
Basic general	2.3	1.5	805
Secondary	4.3	2.8	2,523
Professional primary/middle	3.7	1.9	1,047
Higher	2.4	1.4	1,628
Wealth quintile			
Lowest	3.9	2.6	1,074
Second	3.6	3.0	1,076
Middle	3.9	2.8	1,137
Fourth	4.6	2.0	1,214
Highest	1.5	0.5	1,521
Total	3.4	2.1	6,022

Note: Totals include one woman missing information on employment status. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Includes violence in the past 12 months.

Table 14.4 shows information on the perpetrators of sexual violence among ever-married women who have ever experienced sexual violence. The most commonly reported perpetrators of sexual violence are current husbands/partners (63 percent), followed by former husbands/partners (35 percent).

Table 14.4 Persons committing sexual violence

Among women age 15-49 who have experienced sexual violence, percentage who report specific persons who committed the violence, Kyrgyz Republic 2012

Person	Total
Current husband/partner	63.0
Former husband/partner	35.2
Current/former boyfriend	0.8
Other relative	0.5
Own friend/acquaintance	0.7
Employer/someone at work	0.2
Stranger	1.0
Other	0.4
Number women who have experienced sexual violence	204

[1] Women can report more than one person who committed the violence.

14.4 EXPERIENCE OF DIFFERENT FORMS OF VIOLENCE

Table 14.5 presents information on the experience of various forms of violence among women age 15-49. Twenty percent have experienced physical violence only, less than 1 percent have experienced sexual violence only, and 3 percent have experienced both physical and sexual violence. Twenty-three percent of women age 15-49 have experienced either physical or sexual violence. The percentage of women who have experienced physical or sexual violence increases with age, from 6 percent of women age 15-19 to 14 percent of women age 20-24, and then to 27-34 percent of women age 25 and older.

Table 14.5 Experience of different forms of violence

Percentage of women age 15-49 who have ever experienced different forms of violence by current age, Kyrgyz Republic 2012

Age	Physical violence only	Sexual violence only	Physical and sexual violence	Physical or sexual violence	Number of women
15-19	6.3	0.1	0.0	6.3	1,192
15-17	7.9	0.1	0.0	8.0	740
18-19	3.7	0.0	0.0	3.7	452
20-24	12.0	0.1	1.7	13.8	1,175
25-29	23.6	0.3	3.2	27.1	898
30-39	26.6	0.2	6.4	33.2	1,416
40-49	29.4	0.2	4.1	33.7	1,340
Total	19.9	0.2	3.2	23.3	6,022

14.5 VIOLENCE DURING PREGNANCY

Respondents who had ever been pregnant were asked specifically whether they had ever experienced physical violence while pregnant and, if so, who perpetrated the violence.

Table 14.6 shows that 7 percent of women experienced physical violence during pregnancy. Physical violence is higher among women in Bishkek City and in the Osh Oblast region (14 and 10 percent, respectively) than among women in other regions. Women who are divorced, separated, or widowed are much more likely to report experiencing violence during pregnancy (21 percent) than women who are currently married (6 percent).

Table 14.6 Experience of violence during pregnancy

Among women age 15-49 who have ever been pregnant, percentage who have ever experienced physical violence during pregnancy, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Percentage who experienced violence during pregnancy	Number of women who have ever been pregnant
Age		
15-19	0.8	71
20-24	4.2	662
25-29	7.1	787
30-39	8.9	1,346
40-49	7.9	1,303
Residence		
Urban	9.2	1,421
Rural	6.4	2,748
Region		
Issyk-Kul	1.6	376
Djalal-Abad	4.5	707
Naryn	8.9	166
Batken	4.8	337
Osh Oblast	10.1	803
Talas	8.7	207
Chui	5.8	797
Bishkek City	14.1	633
Osh City	2.2	144
Marital status		
Never married	*	14
Married or living together	5.6	3,670
Divorced/separated/widowed	20.8	485
Number of living children		
0	6.7	209
1-2	7.9	1,966
3-4	6.9	1,576
5+	7.1	418
Education		
None/primary	*	14
Basic general	4.5	324
Secondary	8.0	1,905
Professional primary/middle	7.1	838
Higher	7.3	1,088
Wealth quintile		
Lowest	5.7	775
Second	6.2	783
Middle	6.8	816
Fourth	7.7	906
Highest	10.0	890
Total	7.4	4,169

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

14.6 MARITAL CONTROL BY HUSBAND

Close control and monitoring of their wives' behavior by husbands is known to be an important warning sign and correlate of violence in a relationship. A series of questions were included in the 2012 KgDHS to elicit the degree of marital control exercised by husbands over their wives. Controlling behaviors most often manifest themselves in terms of extreme possessiveness, jealousy, and attempts to isolate the wife from her family and friends. To determine the degree of marital control, ever-married women were asked whether their current or former husband/partner exhibits or has exhibited each of the following controlling behaviors: (1) is jealous or gets angry if she talks to other men, (2) frequently accuses her of being unfaithful, (3) does not permit meetings with female friends, (4) tries to limit contact with her family, and (5) insists on knowing where she is at all times. Table 14.7 presents the percentage of ever-married women whose husbands displayed each of the listed behaviors, by selected background characteristics. Because the concentration of such behaviors is more significant than the display of any single behavior, the proportions of respondents whose spouses displayed at least three of the specified behaviors, or none of the behaviors, are also shown.

Table 14.7 Marital control exercised by husbands

Percentage of ever-married women age 15-49 whose current or former husband/partner demonstrates or has ever demonstrated specific types of controlling behaviors, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Percentage of women whose husband/partner shows or has shown the following behaviors:							
	Is jealous or angry if she talks to other men	Frequently accuses her of being unfaithful	Does not permit her to meet her female friends	Tries to limit her contact with her family	Insists on knowing where she is at all times	Displays3 or more of the specific behaviors	Displays none of the specific behaviors	Number of ever-married women
Age								
15-19	75.7	2.4	14.3	4.3	70.2	10.3	11.2	116
20-24	81.1	8.7	16.5	5.1	76.2	20.2	11.6	723
25-29	77.2	11.6	16.0	7.5	76.0	19.2	12.6	827
30-39	69.4	10.9	13.8	4.4	66.8	16.1	19.7	1,376
40-49	62.9	9.6	12.3	4.1	61.3	14.2	24.1	1,319
Residence								
Urban	67.4	11.0	13.2	3.9	65.4	16.4	20.6	1,493
Rural	72.9	9.6	14.8	5.6	70.1	16.7	16.8	2,869
Region								
Issyk-Kul	70.5	7.8	8.5	1.4	76.4	12.2	16.9	391
Djalal-Abad	87.0	8.1	8.5	1.5	87.5	13.1	4.3	745
Naryn	73.7	8.0	6.2	2.0	71.8	11.5	13.6	168
Batken	78.6	13.4	24.8	7.4	86.0	27.1	5.5	355
Osh Oblast	83.5	7.8	15.1	7.7	76.3	16.2	10.6	849
Talas	58.6	11.6	14.2	7.3	61.6	15.5	23.7	214
Chui	53.9	12.0	19.9	6.4	39.4	19.2	37.0	819
Bishkek City	54.8	12.0	11.6	5.2	62.2	16.1	29.2	664
Osh City	84.4	12.1	16.4	3.5	61.6	18.5	7.8	157
Marital status								
Married or living together	70.4	7.1	12.1	3.4	69.0	13.9	18.2	3,833
Divorced/separated/widowed	75.5	31.7	29.7	16.7	65.0	36.3	17.7	528
Number of living children								
0	74.8	12.8	16.1	7.8	73.3	19.5	16.5	408
1-2	73.3	11.1	16.1	5.6	68.1	18.4	16.9	1,960
3-4	67.8	8.7	12.5	3.7	67.7	14.8	20.1	1,576
5+	68.9	7.8	10.1	4.7	69.3	12.4	17.7	418
Employment								
Employed for cash	67.6	12.1	13.5	4.8	63.6	16.3	21.6	1,424
Employed not for cash	65.7	14.1	18.7	3.1	66.5	23.1	21.4	115
Not employed	73.0	8.9	14.4	5.2	71.1	16.5	16.2	2,822
Education								
None/primary	*	*	*	*	*	*	*	14
Basic general	76.7	10.1	19.4	8.2	73.6	20.8	9.4	357
Secondary	73.6	10.4	15.1	5.6	71.1	17.2	16.6	1,981
Professional primary/middle	67.6	9.5	13.5	4.0	62.4	16.0	22.6	855
Higher	67.4	9.6	11.4	3.8	67.1	14.5	20.0	1,155
Wealth quintile								
Lowest	74.6	9.7	12.2	5.9	74.2	15.8	15.8	817
Second	76.0	8.3	14.5	3.5	77.0	16.3	12.2	807
Middle	75.0	11.2	17.6	7.0	70.4	18.9	14.4	870
Fourth	67.8	8.5	13.4	4.5	60.8	14.8	22.7	936
Highest	63.2	12.5	13.5	4.3	62.2	17.3	24.1	932
Woman afraid of husband/ partner								
Most of the time afraid	84.3	25.5	30.5	11.9	79.3	38.9	8.2	543
Sometimes afraid	78.0	9.4	14.2	4.8	77.2	16.6	11.6	2,293
Never afraid	55.4	5.4	8.4	2.8	51.3	8.7	31.8	1,494
Total	71.0	10.1	14.2	5.0	68.5	16.6	18.1	4,361

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated or widowed women. Totals include 1 woman missing information on employment status and 32 women for whom information on how often they are afraid of their husband is missing. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

The main controlling behaviors women experience from their husbands are jealousy or anger if they talk to other men (71 percent) and insistence on knowing where they are at all times (69 percent). The next most common behaviors are not permitting them to meet female friends (14 percent) and frequently accusing them of being unfaithful (10 percent). Only 5 percent of women say their husbands try to limit their contact with their families.

Almost one in six ever-married women (17 percent) say their husbands display three or more of these controlling behaviors. This proportion rapidly increases with age, from 10 percent among women age 15-19 to a peak of 20 percent among women age 20-24, and then declines with the increase in age of the women. Divorced, separated, or widowed women (36 percent), women employed not for cash (23 percent), those with no children (20 percent), women with basic general education (21 percent), and women in the middle wealth quintile (19 percent) are more likely than women in other groups to report three or more controlling behaviors displayed by their husbands. The extent to which husbands display controlling behaviors also varies by region; the proportions who report that their husbands display three or more of the specific behaviors ranges from 12 percent each in the Issyk-Kul and Naryn regions to 27 percent in Batken.

In the 2012 KgDHS, a question about whether (and how frequently) women are afraid of their husbands was included as part of the domestic violence module. For women who report any acts of violence perpetrated by their husbands/partners, information on whether or not women are frequently afraid of their husbands provides a context in which the experience of the reported violent acts can be interpreted. Further, despite the fact that the domestic violence module was designed to optimize the reporting of violent acts, the possibility of underreporting of violence cannot be entirely ruled out. Given that some women may be reluctant to report violence, questions about fear of husband may be a proxy indicator of violence experienced by women. The question asks all ever-married women (irrespective of their experience of spousal violence), whether they are afraid of their husband/partner most of the time, sometimes, or never. More than half of all ever-married women report being afraid of their husbands/partners (data not shown). Additionally, Table 14.7 shows that women who are almost always afraid of their husbands are about four times more likely than women who are never afraid to report that their husbands display at least three controlling behaviors.

14.7 Forms of Spousal Violence

Different types of violence are not mutually exclusive, and women may report multiple forms of violence. Research suggests that physical violence in intimate relationships is often accompanied by psychological abuse and, in one-third to more than one-half of cases, by sexual abuse (Krug et al., 2002). Table 14.8 shows the percentage of ever-married women age 15-49, who have experienced various forms of violence by their husbands, over the course of the marriage and in the 12 months preceding the survey. Currently married respondents reported on violence perpetrated by their current husband, while widowed, divorced, or separated respondents reported on violence committed by their most recent husband.

Table 14.8 shows that 25 percent of ever-married women report they have ever experienced physical violence committed by their current or most recent husband or partner. Four percent report ever experiencing sexual violence, and 14 percent report ever experiencing emotional violence. One-quarter of ever-married women (25 percent) have experienced physical and/or sexual violence, and 28 percent have experienced at least one of the three forms of spousal violence.

The most common form of spousal violence ever experienced by ever-married women is being pushed, shaken, or having something thrown at them (21 percent) (Figure 14.1). Nineteen percent of ever-married women report having been slapped and 10 percent report having ever been punched by their husbands. Seven percent of ever-married women say their husbands have twisted their arm or pulled their hair, 5 percent say their husbands have kicked them or dragged them or beat them up, and 4 percent say they have been forced to have sexual intercourse when they did not want to. One percent reported that their spouse tried to choke or burn them on purpose, and attacked or threatened them with a knife, gun, or other weapon. One woman in every ten says that her husband has said or done something to humiliate her in front of others.

Table 14.8 Forms of spousal violence

Percentage of ever-married women age 15-49 who have experienced various forms of violence ever or in the 12 months preceding the survey, committed by their husband/partner, Kyrgyz Republic 2012

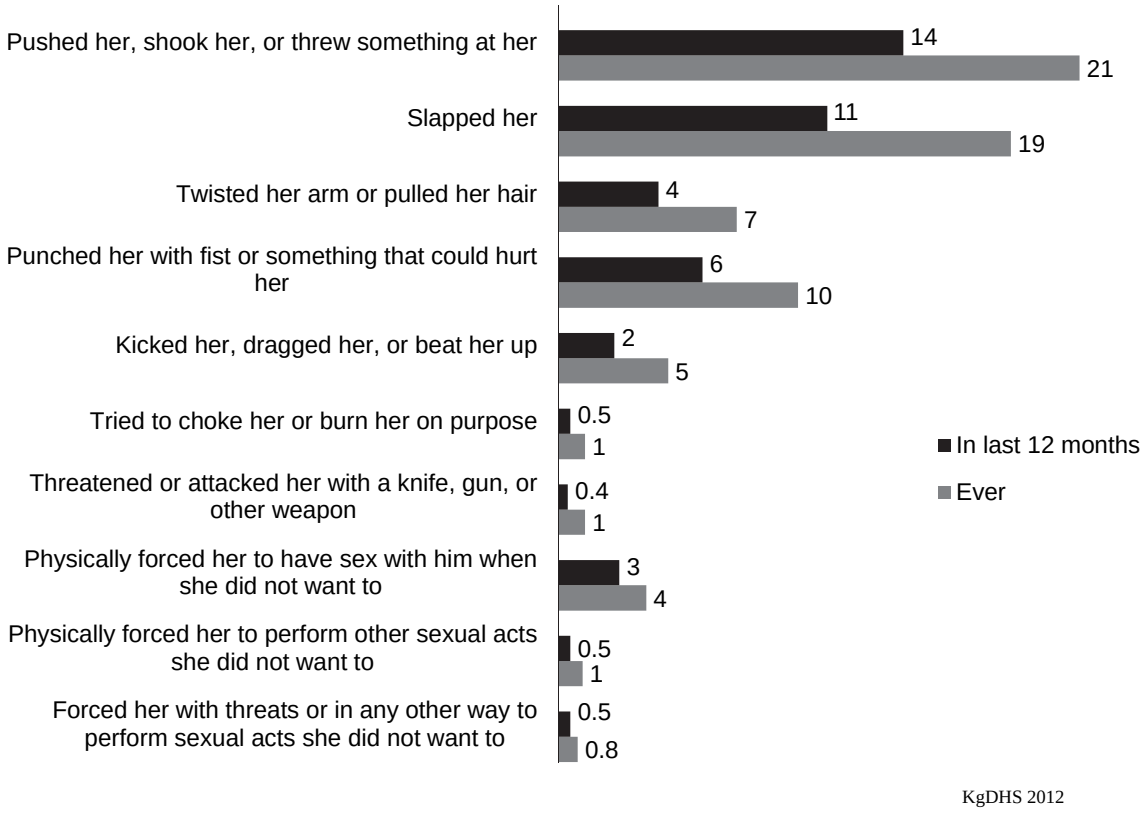
Type of violence	Ever	In the past 12 months		
		Often	Sometimes	Often or sometimes
Spousal violence committed by current or most recent husband/partner				
Physical violence				
Any physical violence	25.1	5.8	11.1	16.9
Pushed her, shook her, or threw something at her	21.3	4.1	10.0	14.1
Slapped her	18.5	2.9	8.1	11.0
Twisted her arm or pulled her hair	7.3	1.1	3.0	4.1
Punched her with his fist or with something that could hurt her	9.8	1.8	4.1	5.9
Kicked her, dragged her, or beat her up	4.5	0.7	1.6	2.3
Tried to choke her or burn her on purpose	1.1	0.2	0.3	0.5
Threatened her or attacked her with a knife, gun, or other weapon	1.1	0.1	0.3	0.4
Sexual violence				
Any sexual violence	4.0	1.1	1.7	2.8
Physically forced her to have sexual intercourse with him when she did not want to	3.6	0.8	1.6	2.5
Physically forced her to perform any other sexual acts she did not want to	1.0	0.1	0.4	0.5
Forced her with threats or in any other way to perform sexual acts she did not want to	0.8	0.2	0.3	0.5
Emotional violence				
Any emotional violence	14.1	4.3	6.1	10.4
Said or did something to humiliate her in front of others	11.4	3.2	4.8	8.0
Threatened to hurt or harm her or someone she cared about	3.5	0.7	1.5	2.2
Insulted her or made her feel bad about herself	6.7	2.1	3.0	5.1
Any form of physical and/or sexual violence	25.4	6.0	11.1	17.1
Any form of emotional and/or physical and/or sexual violence	28.1	7.7	12.1	19.8
Spousal violence committed by any husband/partner[1]				
Physical violence	26.4	na	na	16.9
Sexual violence	4.6	na	na	2.8
Physical and/or sexual violence	26.6	na	na	17.1
Number of ever- married women	4,361	4,361	4,361	4,361

na = Not applicable

[1] Includes information from women married more than once on behavior of prior husbands (partners) as well as the behavior of their current or most recent husband (partner).

Figure 14.1

Percentage of ever-married women age 15-49 who have experienced specific types of violence from current or most recent husband, ever and in the last 12 months, Kyrgyz Republic 2012



Seventeen percent of ever-married women report experiencing spousal physical violence in the past 12 months—11 percent sometimes and 6 percent often. Three percent report experiencing spousal sexual violence in the past 12 months—2 percent sometimes and 1 percent often. Additionally, 10 percent of women report spousal emotional violence in the past 12 months—6 percent sometimes and 4 percent often. Overall, 20 percent of ever-married women have experienced at least one of the three forms of violence by their current or most recent husband or partner in the past year.

The 2012 KgDHS also collected information about spousal violence committed by any husband or partner ever and in the past 12 months. As Table 14.8 shows, 26 percent of ever-married women report ever experiencing physical violence committed by any husband or partner, and 17 percent experienced such violence often or sometimes in the past 12 months. Five percent of ever-married women report ever experiencing sexual violence committed by any husband, and 3 percent experienced such violence often or sometimes in the past 12 months. Overall, 27 percent of ever-married women say they experienced physical and/or sexual violence committed by any husband, and 17 percent experienced such violence often or sometimes in the past year.

14.8 DIFFERENTIALS IN SPOUSAL VIOLENCE

Table 14.9 shows the percentage of ever-married women age 15-49 who have ever experienced spousal emotional, physical, or sexual violence, by selected background characteristics of the woman.

Table 14.9 Spousal violence by background characteristics

Percentage of ever-married women age 15-49 who have ever experienced emotional, physical or sexual violence committed by their husband/partner, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual violence	Physical and sexual and emotional violence	Physical or sexual violence	Physical or sexual or emotional violence	Number of ever-married women
Age								
15-19	1.1	3.0	0.0	0.0	0.0	3.0	3.0	116
20-24	7.4	13.6	2.2	2.0	1.0	13.8	16.7	723
25-29	12.7	23.1	3.2	2.9	1.8	23.5	26.1	827
30-39	17.1	29.6	5.8	5.4	4.0	30.1	33.0	1,376
40-49	16.8	30.0	3.9	3.7	2.6	30.2	32.7	1,319
Residence								
Urban	14.0	26.5	2.7	2.6	1.8	26.6	28.5	1,493
Rural	14.2	24.5	4.6	4.3	2.9	24.8	27.9	2,869
Region								
Issyk-Kul	1.8	17.3	3.6	3.1	0.6	17.8	18.3	391
Djalal-Abad	23.3	23.9	0.7	0.7	0.7	23.9	30.6	745
Naryn	5.9	40.2	2.2	1.8	0.6	40.6	40.6	168
Batken	15.0	32.5	9.7	9.0	5.1	33.2	34.3	355
Osh Oblast	10.1	20.3	5.2	4.4	2.6	21.1	23.4	849
Talas	10.0	36.4	5.8	5.7	2.6	36.5	37.2	214
Chui	17.7	20.3	5.6	5.6	5.5	20.3	23.1	819
Bishkek City	15.0	34.2	1.7	1.7	1.6	34.2	35.6	664
Osh City	13.9	15.7	1.7	1.6	1.2	15.9	20.5	157
Marital status								
Married or living together	11.0	22.3	3.4	3.1	2.0	22.7	25.4	3,833
Divorced/separated/widowed	36.7	45.4	8.5	8.4	6.9	45.5	47.6	528
Number of living children								
0	10.1	10.6	2.9	2.9	2.2	10.6	13.2	408
1-2	14.4	24.4	3.5	3.4	2.4	24.6	26.6	1,960
3-4	14.0	27.6	4.5	4.0	2.7	28.1	31.1	1,576
5+	17.8	33.6	5.3	5.0	3.3	33.9	38.7	418
Employment								
Employed for cash	15.3	29.2	4.3	4.1	3.1	29.4	31.7	1,424
Employed not for cash	19.2	34.8	1.9	1.7	1.4	35.0	37.0	115
Not employed	13.3	22.7	3.9	3.6	2.3	23.0	25.9	2,822
Education								
None/primary	*	*	*	*	*	*	*	14
Basic general	15.7	17.1	4.0	3.9	2.3	17.2	23.4	357
Secondary	13.1	25.3	4.6	4.3	3.1	25.6	28.0	1,981
Professional primary/middle	16.9	29.7	3.8	3.5	2.6	30.0	32.1	855
Higher	13.3	24.0	2.9	2.6	1.7	24.4	26.8	1,155
Wealth quintile								
Lowest	9.4	24.1	4.5	3.9	2.1	24.7	26.5	817
Second	15.0	25.7	4.4	4.1	2.6	26.0	29.9	807
Middle	16.9	25.3	4.5	4.3	3.1	25.5	28.9	870
Fourth	14.6	22.4	4.8	4.4	3.4	22.8	25.5	936
Highest	14.6	28.1	1.9	1.8	1.6	28.2	29.9	932
Total	14.1	25.1	4.0	3.7	2.6	25.4	28.1	4,361

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated or widowed women. Totals include 1 woman missing information on employment status. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

The percentage of women who have ever experienced at least one form of spousal violence increases with age to a peak of 33 percent among women age 30 and over. Women with five or more children are three times more likely than women with no children to have ever experienced some form of spousal violence (39 and 13 percent, respectively). The level of spousal violence is highest among women in the Naryn region (41 percent) and lowest among women in the Issyk-Kul region (18 percent). Women employed not for cash (37 percent) are more likely to have experienced at least one form of spousal than

women employed for cash (32 percent), or than women who were not employed in the past 12 months (26 percent). Divorced, separated, or widowed women are nearly twice as likely to have experienced spousal violence (48 percent) as women who are currently married (25 percent). Women with basic general and higher education are less likely to have been subjected to spousal violence compared with other women.

Table 14.10 presents information on ever-married women age 15-49 who have ever experienced emotional, physical, or sexual violence committed by their husband, according to spousal characteristics and empowerment indicators.

Table 14.10 Spousal violence by husband's characteristics and empowerment indicators

Percentage of ever-married women age15-49 who have ever experienced emotional, physical, or sexual violence committed by their husband/partner, by husband's characteristics and empowerment indicators, Kyrgyz Republic 2012

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual violence	Physical and sexual and emotional violence	Physical or sexual violence	Physical or sexual or emotional violence	Number of ever-married women
Husband's/partner's education								
None/primary	(15.1)	(23.2)	(0.0)	(0.0)	(0.0)	(23.2)	(23.8)	35
Basic general	15.7	21.3	5.4	5.4	3.3	21.3	26.1	344
Secondary	14.0	26.3	4.6	4.2	2.8	26.7	29.4	2,217
Professional primary/middle	16.0	26.5	3.4	3.4	2.5	26.5	30.0	779
Higher	12.5	22.9	2.7	2.4	1.8	23.3	24.5	986
Husband's/partner's alcohol consumption								
Does not drink alcohol	6.9	12.8	1.7	1.5	1.0	13.0	15.5	2,651
Drinks alcohol but is never drunk	6.5	7.9	0.0	0.0	0.0	7.9	10.3	68
Is sometimes drunk	21.2	40.8	6.2	5.7	3.7	41.4	44.6	1,348
Is often drunk	49.0	68.2	14.9	14.9	11.7	68.2	69.9	292
Spousal education difference								
Husband has more education	15.8	23.8	3.5	3.4	2.6	23.9	26.7	1,082
Wife has more education	15.4	28.1	3.9	3.6	2.4	28.4	31.2	1,474
Both have equal education	12.2	23.6	4.4	4.0	2.7	24.0	26.5	1,800
Spousal age difference[1]								
Wife older	8.4	16.5	2.2	2.2	1.6	16.5	18.2	185
Wife is same age	13.9	26.7	4.7	4.5	4.3	26.8	27.7	334
Wife 0-4 years younger	10.5	21.1	3.4	3.0	1.7	21.5	24.5	1,926
Wife 5-9 years younger	12.5	25.7	3.7	3.5	2.1	26.0	29.3	1,148
Wife10 or more years younger	5.3	14.5	0.7	0.7	0.3	14.5	16.2	218
Number of marital control behaviors displayed by husband/ partner[2]								
0	2.8	9.2	0.3	0.1	0.0	9.4	9.8	789
1-2	10.7	21.8	2.5	2.2	1.3	22.1	24.8	2,847
3-4	37.6	56.1	12.0	11.5	8.6	56.5	61.0	623
5	55.8	53.4	24.4	24.4	21.1	53.4	62.6	102
Number of decisions in which women participate[3]								
0	6.3	13.3	3.6	3.6	2.0	13.3	13.7	242
1-2	12.9	25.1	4.1	4.0	2.4	25.2	28.0	560
3	11.1	22.6	3.2	2.8	1.9	22.9	25.9	3,031
Number of reasons for which wife-beating is justified[4]								
0	12.5	21.3	2.9	2.7	2.0	21.5	23.3	2,686
1-2	18.8	31.4	4.7	4.3	2.8	31.8	36.9	1,036
3-4	14.4	32.5	8.6	8.1	5.7	32.9	35.2	452
5	11.2	28.6	3.6	3.6	1.2	28.6	31.3	188
Woman's father beat her mother								
Yes	29.4	48.0	8.9	8.6	6.0	48.4	52.0	601
No	11.0	20.2	3.4	3.1	2.2	20.5	23.0	3,302
Don't know/missing	16.6	30.4	1.6	1.5	0.4	30.6	34.0	458
Woman afraid of husband/partner								
Most of the time afraid	31.1	50.1	14.2	13.8	9.4	50.5	52.8	543
Sometimes afraid	16.0	28.4	3.8	3.5	2.5	28.7	32.0	2,293
Never afraid	5.2	10.9	0.5	0.3	0.1	11.1	13.1	1,494
Total	14.1	25.1	4.0	3.7	2.6	25.4	28.1	4,361

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Total includes 1 woman missing information on husband's education, 3 women for whom husband's alcohol consumption is missing, 6 women for whom spousal education difference is missing, 22 women for whom spousal age difference is missing, and 32 women for whom information on how often they are afraid of their husband is missing. Figures in parentheses are based on 25-49 unweighted cases.

[1] Includes only women who have been married only once.

[2] According to the wife's report. See Table 14.7 for list of behaviors.

[3] According to the wife's report. See Table 15.6.1 for list of decisions.

[4] According to the wife's report. See Table 15.7.1 for list of reasons.

Results show that physical, sexual, or emotional violence increases with the husband's level of education, from 24 percent of ever-married women whose husbands have no education or only primary education to 30 percent of those whose husbands have professional primary or middle education, and then declines to 25 percent among women whose husbands have higher education. As expected, alcohol consumption is highly associated with violence. Spousal violence is highest among women whose husbands are often drunk (70 percent) and lowest among those whose husbands drink alcohol but are never drunk (10 percent).

Spousal violence increases with the number of controlling behaviors displayed by the husband. Among women whose husbands exhibit all of the five types of controlling behaviors, nearly two-thirds (63 percent) have experienced one or more forms of violence. In contrast, among women whose husbands display none of the five controlling behaviors, only 10 percent have experienced any form of spousal violence. However, women's experience of violence does not always show the expected relationship with the indicators of women's empowerment. For example, spousal violence is lowest among women who do not participate in any decisions (14 percent) and is up twice as high among those who participate in one to three decisions (26-28 percent). Spousal violence is lowest among women who do not think wife beating is justified for any of the given reasons (23 percent) but is highest among those who feel wife beating is justified for one to two of the reasons (37 percent), and it declines to 31 percent among those who feel wife beating is justified for all five of the reasons.

Table 14.10 also shows that women with a family history of violence are markedly more likely than other women to have experienced some form of spousal violence. Women whose fathers beat their mothers are about twice as likely to have experienced some form of spousal violence (52 percent) as women whose fathers did not beat their mothers (23 percent). Women who are afraid of their husbands most of the time are much more likely to have experienced any type of violence by their husband compared with women who are only sometimes or never afraid of their husbands (53 percent versus 32 percent and 13 percent, respectively).

14.9 Recent Experience of Spousal Violence

Table 14.11 shows the percentage of ever-married women who have experienced physical or sexual violence by any husband/partner in the past 12 months, by women's background characteristics.

Overall, 17 percent of ever-married women have experienced physical or sexual violence by a husband in the past 12 months. The percentage of women who have experienced spousal physical or sexual violence in the past 12 months is 20 percent or higher among women age 30-39, women living in the Batken, Talas and Naryn regions, women who have five or more children, and women not employed for cash. Women who are afraid of their husbands most of the time are much more likely to have experienced spousal violence in the previous 12 months than those who are only sometimes or never afraid of their husbands. The percentage experiencing physical or sexual violence is lowest among women age 15-19 (3 percent), women who are never afraid of their husbands (5 percent), and women with no children (8 percent).

Table 14.11 Physical or sexual violence in the past 12 months by any husband/partner

Percentage of ever-married women age 15-49 who have experienced physical or sexual violence by any husband/partner in the past 12 months, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Percentage of women who have experienced physical or sexual violence in the past 12 months from any husband/ partner	Number of ever-married women
Age		
15-19	2.7	116
20-24	11.8	723
25-29	19.1	827
30-39	20.6	1,376
40-49	16.5	1,319
Residence		
Urban	15.5	1,493
Rural	18.0	2,869
Region		
Issyk-Kul	12.3	391
Djalal-Abad	16.2	745
Naryn	26.0	168
Batken	27.6	355
Osh Oblast	14.0	849
Talas	27.0	214
Chui	16.9	819
Bishkek City	15.1	664
Osh City	14.3	157
Marital status		
Married or living together	16.9	3,833
Divorced/separated/widowed	18.6	528
Number of living children		
0	7.9	408
1-2	16.0	1,960
3-4	19.4	1,576
5+	23.2	418
Employment		
Employed for cash	18.0	1,424
Employed not for cash	25.8	115
Not employed	16.4	2,822
Education		
None/primary	*	14
Basic general	11.3	357
Secondary	19.3	1,981
Professional primary/middle	19.3	855
Higher	13.6	1,155
Wealth quintile		
Lowest	18.4	817
Second	18.5	807
Middle	18.6	870
Fourth	15.9	936
Highest	14.8	932
Woman afraid of husband/partner		
Most of the time afraid	36.8	543
Sometimes afraid	20.4	2,293
Never afraid	5.0	1,494
Total	17.1	4,361

Note: Any husband/partner includes all current, most recent and former husbands/partners. Total includes 1 woman missing information on employment status and 32 women for whom information on how often they are afraid of their husband is missing. An asterisk denotes a figure based on fewer than 25 unweighted cases and has been suppressed.

14.10 ONSET OF SPOUSAL VIOLENCE

To obtain information on the onset of marital violence, the 2012 KgDHS asked women when they first experienced spousal violence, if ever. Table 14.12 shows the data for currently married women who have been married only once.

Table 14.12 Experience of spousal violence by duration of marriage

Among currently married women age 15-49 who have been married only once, the percentage who first experienced physical or sexual violence committed by their current husband/partner by specific exact years since marriage according to marital duration, Kyrgyz Republic 2012

	Percentage whose first experience of spousal physical or sexual violence by exact marital duration:				Percentage who have not experienced sexual or physical violence	Number of currently married women who have been married only once
	Before marriage	2 years	5 years	10 years		
Years since marriage						
<2	0.1	na	na	na	95.2	390
2-4	0.4	8.7	na	na	87.5	582
5-9	0.4	9.0	21.9	na	75.8	624
10+	0.9	7.6	21.7	27.0	71.4	1,914
Total	0.6	7.7	18.3	21.6	77.5	3,511

na = Not applicable

About three-fourths of currently married women (78 percent) have never experienced physical or sexual violence by their current husband. Less than 1 percent experienced physical or sexual violence before marriage, 8 percent in the first two years of marriage, 18 percent in the first five years, and 22 percent within the first ten years of marriage. These data confirm that the longer a woman is married the more likely she is to experience spousal violence. However, they also clearly show that for a considerable percentage of women who experience spousal physical or sexual violence, the violence begins relatively early in their marriage.

14.11 PHYSICAL CONSEQUENCES OF SPOUSAL VIOLENCE

In the 2012 KgDHS, ever-married women were asked whether they had sustained some form of injury as a result of physical or sexual violence inflicted by their husband. More than half of women (57 percent) who reported ever having experienced spousal physical or sexual violence suffered some sort of injury; 55 percent suffered cuts, bruises, or aches; 14 percent had eye injuries, sprains, dislocations, or burns; and 5 percent had deep wounds, broken bones, broken teeth, or other serious injuries (Table 14.13). The prevalence of all forms of injury is similar among women who experienced violence in the past 12 months.

Table 14.13 Injuries to women due to spousal violence

Percentage of ever-married women age 15-49 who have experienced specific types of spousal violence by types of injuries resulting from the violence, according to the type of violence and whether they experienced the violence ever and in the 12 months preceding the survey, Kyrgyz Republic 2012

Type of violence	Cuts, bruises, or aches	Eye injuries, sprains, dislocations, or burns	Deep wounds, broken bones, broken teeth, or any other serious injury	Any of these injuries	Number of ever-married women who have ever experienced any physical or sexual violence
Experienced physical violence[1]					
Ever[2]	55.8	14.3	5.2	56.2	1,096
In the past 12 months	59.8	14.3	5.8	60.0	736
Experienced sexual violence					
Ever[2]	75.2	37.0	18.8	75.2	174
In the past 12 months	71.6	30.4	16.3	71.6	123
Experienced physical or sexual violence[1]					
Ever[2]	55.2	14.2	5.2	55.6	1,109
In the past 12 months	58.9	14.0	5.7	59.2	748

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated or widowed women.
[1] Excludes women who reported violence only in response to a direct question on violence during pregnancy.
[2] Includes in the past 12 months.

14.12 VIOLENCE BY WOMEN AGAINST THEIR SPOUSE

In cases of domestic violence, either person (husband or wife) can be the perpetrator. In the 2012 KgDHS, ever-married women were asked about instances when they were the instigator of physical violence, specifically, whether they had ever hit, slapped, kicked, or done anything else to physically hurt their husband at a time when he was not already beating or physically hurting the respondent. Table 14.14 shows the percentage of ever-married women age 15-49 who reported initiating physical violence against their spouse, ever and in the 12 months before the survey, by background characteristics.

Overall, 4 percent of ever-married women said they have initiated physical violence against their husband, and 3 percent have done so in the past 12 months. Women who have been physically abused by their husband ever and in the past 12 months are more likely to have initiated spousal physical abuse than women who have never been abused (13, 14, and 1 percent, respectively). The percentages saying they initiated physical violence are highest among divorced, separated, or widowed women (8 percent) and women from the Osh Oblast and Chui regions (7 percent each). Women's use of violence against their husband does not vary much by other background characteristics.

Table 14.15 presents information on ever-married women who have committed physical violence against their spouse, ever and in the past 12 months, according to spousal characteristics and empowerment indicators.

Table 14.14 Women's violence against their spouse

Percentage of ever-married women age 15-49 who have committed physical violence against their current or most recent husband/partner when he was not already beating or physically hurting her, ever and in the past 12 months, according to women's own experience of spousal violence and background characteristics, Kyrgyz Republic 2012

Background characteristic	Percentage who have committed physical violence against their husband/partner		Number of ever-married women
	Ever[1]	Past 12 months	
Women experienced spousal physical violence			
Ever	12.8	9.1	1,096
In the past 12 months	14.3	11.2	736
Never	1.4	1.2	3,265
Age			
15-19	0.0	0.0	116
20-24	1.8	1.7	723
25-29	3.5	2.8	827
30-39	5.0	3.4	1,376
40-49	5.6	4.3	1,319
Residence			
Urban	4.1	2.6	1,493
Rural	4.3	3.5	2,869
Region			
Issyk-Kul	2.1	2.1	391
Djalal-Abad	0.0	0.0	745
Naryn	0.7	0.4	168
Batken	1.9	1.1	355
Osh Oblast	7.2	6.9	849
Talas	3.9	2.4	214
Chui	7.1	4.2	819
Bishkek City	5.2	3.4	664
Osh City	3.7	3.7	157
Marital status			
Married or living together	3.7	3.0	3,833
Divorced/separated/widowed	7.9	4.5	528
Employment			
Employed for cash	5.4	3.6	1,424
Employed not for cash	1.8	1.2	115
Not employed	3.8	3.1	2,822
Number of living children			
0	2.8	1.9	408
1-2	4.5	3.3	1,960
3-4	3.9	2.9	1,576
5+	5.7	4.8	418
Education			
None/primary	*	*	14
Basic general	2.9	2.1	357
Secondary	4.4	3.8	1,981
Professional primary/middle	3.5	1.6	855
Higher	4.8	3.6	1,155
Wealth quintile			
Lowest	4.5	4.1	817
Second	3.5	2.9	807
Middle	3.9	3.1	870
Fourth	4.2	2.7	936
Highest	4.9	3.2	932
Total	4.2	3.2	4,361

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Total includes 1 woman missing information on employment status. An asterisk denotes a figure based on fewer than 25 unweighted cases and has been suppressed.
[1] Includes in the past 12 months.

Table 14.15 Women's violence against their husband by husband's characteristics and empowerment indicators

Percentage of ever-married women age 15-49 who have committed physical violence against their current or most recent husband/partner when he was not already beating or physically hurting her, ever and in the past 12 months, according their husband's characteristics, Kyrgyz Republic 2012

Background characteristic	Percentage who have committed physical violence against their husband/partner		Number of ever-married women
	Ever[1]	Past 12 months	
Husband's/partner's education			
None/primary	(0.0)	(0.0)	35
Basic general	4.7	4.2	344
Secondary	4.0	3.0	2,217
Professional primary/middle	5.4	4.1	779
Higher	3.9	2.7	986
Husband's/partner's alcohol consumption			
Does not drink alcohol	1.6	1.1	2,651
Drinks alcohol but is never drunk	0.0	0.0	68
Is sometimes drunk	6.9	5.1	1,348
Is often drunk	16.6	13.6	292
Spousal education difference			
Husband has more education	4.4	2.7	1,082
Wife has more education	4.7	3.6	1,474
Both have equal education	3.8	3.2	1,800
Spousal age difference[2]			
Wife older	7.1	4.3	185
Wife is same age	7.3	6.8	334
Wife 0-4 years younger	3.0	2.6	1,926
Wife 5-9 years younger	3.7	2.5	1,148
Wife10 or more years younger	2.6	2.6	218
Number of marital control behaviors displayed by husband/partner[3]			
0	1.6	1.6	789
1-2	3.4	2.7	2,847
3-4	9.1	6.0	623
5	18.2	11.1	102
Number of decisions in which women participate[4]			
0	2.4	2.4	242
1-2	2.1	1.9	560
3	4.1	3.3	3,031
Number of reasons for which wife-beating is justified[5]			
0	4.2	3.0	2,686
1-2	4.9	3.8	1,036
3-4	3.5	3.1	452
5	3.3	3.1	188
Woman's father beat her mother			
Yes	9.1	6.3	601
No	3.5	2.8	3,302
Don't know/missing	2.8	2.0	458
Woman afraid of husband/partner			
Most of the time afraid	7.6	6.3	543
Sometimes afraid	4.3	3.1	2,293
Never afraid	2.8	2.2	1,494
Total	4.2	3.2	4,361

Note: Husband/partner refers to the current husband/partner for currently married women and the most recent husband/partner for divorced, separated, or widowed women. Total includes 1 woman missing information on husband's education, 3 women for whom husband's alcohol consumption is missing, 6 women for whom spousal education difference is missing, 22 women for whom spousal age difference is missing, and 32 women for whom information on how often they are afraid of their husband is missing. Figures in parentheses are based on 25-49 unweighted cases.

[1] Includes in the past 12 months.

[2] Includes only women who have been married only once.

[3] According to the wife's report. See Table 14.7 for list of behaviors.

[4] According to the wife's report. See Table 15.6.1 for list of decisions.

[5] According to the wife's report. See Table 15.7.1 for list of decisions.

Results show initiation of violence by women who have ever committed physical violence against their husband is highest among those whose husbands get drunk often (17 percent). Women's violence against their spouse generally increases with the number of controlling behaviors displayed by the husband. Women with a father who beat their mother are somewhat more likely to commit physical

spousal violence than women with a father who did not beat their mother (9 percent versus 4 percent). Violence is slightly more common among women who are afraid of their husbands most of the time than among women who are only sometimes or never afraid of their husbands (8 percent versus 4 percent or fewer). Women's initiation of violence does not vary much by other characteristics. Similar patterns are observed in variations of women's physical violence against a spouse in the past 12 months by background characteristics.

14.13 HELP-SEEKING BEHAVIOR BY WOMEN WHO EXPERIENCE VIOLENCE

This final section of this chapter describes help-seeking behavior by women who have ever experienced physical or sexual violence. Table 14.16 shows the percent distribution of all women age 15-19 who have ever experienced physical or sexual violence committed by anyone, according to whether they ever sought help to stop the violence and, if not, whether or not they told anyone about the violence.

Table 14.16 Help seeking to stop violence

Percent distribution of women age 15-49 who have ever experienced physical or sexual violence by their help-seeking behavior and by type of violence and background characteristics, Kyrgyz Republic 2012

Background characteristic	Sought help to stop violence	Never sought help but told someone	Never sought help, never told anyone	Missing/ don't know	Total	Number of women who have ever experienced any physical or sexual violence
Type of violence experienced						
Physical only	36.7	17.1	41.4	4.8	100.0	1,199
Sexual only	*	*	*	*	100.0	10
Physical and sexual	57.0	14.5	27.2	1.4	100.0	195
Age						
15-19	16.0	2.2	62.3	19.6	100.0	76
20-24	31.3	19.7	46.4	2.6	100.0	163
25-29	36.9	16.2	42.0	5.0	100.0	243
30-39	46.6	16.2	33.6	3.6	100.0	470
40-49	39.9	18.9	38.2	3.0	100.0	452
Residence						
Urban	45.4	19.3	30.0	5.2	100.0	488
Rural	36.1	15.3	44.7	4.0	100.0	915
Region						
Issyk-Kul	36.2	30.7	27.1	6.0	100.0	80
Djalal-Abad	37.4	19.0	38.1	5.5	100.0	211
Naryn	54.2	5.4	38.5	2.0	100.0	77
Batken	23.4	31.6	38.4	6.6	100.0	131
Osh Oblast	27.8	3.8	63.7	4.7	100.0	315
Talas	34.0	19.7	46.3	0.0	100.0	90
Chui	48.3	18.9	26.5	6.2	100.0	208
Bishkek City	53.3	19.9	24.1	2.7	100.0	264
Osh City	44.6	9.5	44.6	1.3	100.0	28
Marital status						
Never married	23.6	7.2	54.3	14.9	100.0	104
Married or living together	33.7	18.8	43.6	3.9	100.0	1,035
Divorced/separated/widowed	67.5	12.2	18.0	2.2	100.0	265
Number of living children						
0	35.4	8.1	45.2	11.3	100.0	170
1-2	45.6	16.4	34.6	3.3	100.0	568
3-4	36.1	19.1	40.9	3.9	100.0	507
5+	31.1	19.2	47.1	2.6	100.0	158
Employment						
Employed for cash	43.6	19.1	33.6	3.7	100.0	506
Employed not for cash	29.6	21.6	43.5	5.4	100.0	48
Not employed	37.4	15.0	42.8	4.8	100.0	849
Education						
None/primary	*	*	*	*	100.0	7
Basic general	29.7	14.2	47.4	8.7	100.0	106
Secondary	41.3	15.3	39.6	3.8	100.0	625
Professional primary/middle	38.0	17.3	41.0	3.7	100.0	296
Higher	40.0	19.1	36.7	4.2	100.0	370
Wealth quintile						
Lowest	29.0	13.1	55.1	2.9	100.0	276
Second	33.5	14.6	47.5	4.4	100.0	269
Middle	36.2	19.2	41.1	3.4	100.0	265
Fourth	48.4	15.5	30.0	6.1	100.0	279
Highest	47.9	20.6	26.5	5.0	100.0	315
Total	39.3	16.7	39.6	4.4	100.0	1,403

Note: Total includes one woman missing information on employment status. An asterisk denotes a figure based on fewer than 25 unweighted cases and has been suppressed.

Overall, 39 percent of women who have experienced any type of physical or sexual violence sought help to stop the violence. Seventeen percent never sought help but told someone about the violence, while 40 percent never sought help and never told anyone about the violence. Women who experienced both physical and sexual violence (57 percent) are substantially more likely to have sought help than women who experienced only physical violence (37 percent).

By background characteristics, a woman's marital status is strongly related to help-seeking behavior; two-thirds of divorced, separated, or widowed women sought help to stop the violence compared with one third of currently married women and just under one-quarter of never-married women. Region also is a strong predictor of whether a woman sought help. In the Naryn region and Bishkek City about half of women who experienced abuse sought help, while in the Osh Oblast region only 28 percent sought help. The percentage of abused women reporting that they never sought help or told anyone about the violence is also high among the youngest women age 15-19 (62 percent) and among women with the lowest levels of education and wealth (47 and 55 percent, respectively).

Table 14.17 shows the percentage of abused women who reported seeking help, by sources from which help was sought, according to the type of violence the woman experienced. The most common sources of help are the respondent's own family (reported by 83 percent of women), the husband's family (reported by 33 percent of women), neighbors or friends (each reported by 8 percent of women), and the police (reported by 5 percent of women). There are some differences by type of violence; the proportion of abused women who sought help from their own family is higher among women who experienced only physical violence (87 percent) compared with women who experienced both physical and sexual violence (67 percent). However, women who experienced only physical violence are less likely to seek help from neighbors and police (6 and 4 percent, respectively) compared with women who experienced both physical and sexual violence (18 percent and 13 percent of women, respectively).

Table 14.17 Sources for help to stop the violence

Percentage of women age 15-49 who have ever experienced physical or sexual violence and sought help by sources from which they sought help, according to the type of violence that women reported, Kyrgyz Republic 2012

	Type of violence experienced			
Person	Physical only	Sexual only	Physical and sexual	Physical or sexual
Own family	87.3	*	67.4	83.3
Husband/partner's family	33.4	*	32.5	33.1
Husband/partner	0.2	*	0.0	0.2
Friend	7.4	*	9.0	7.7
Neighbor	5.9	*	18.1	8.3
Religious leader	0.4	*	3.5	1.1
Doctor/medical personnel	0.9	*	5.2	1.8
Police	3.6	*	12.9	5.4
Lawyer	1.4	*	0.6	1.3
Social work organization	0.3	*	3.3	0.9
Other	0.9	*	0.3	0.8
Number of women who have experienced violence and sought help	440	1	111	552

Note: Women were able report more than one source from which they sought help. An asterisk denotes a figure based on fewer than 25 unweighted cases and has been suppressed.

WOMEN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH OUTCOMES

15

Key Findings

- The majority of currently married employed women who earn cash make decisions about how to use their earnings, either alone (35 percent) or jointly with their husband (60 percent).
- Just over half of all women and nearly two-thirds of men age 15-49 own a house, either alone or jointly, and 33 percent of women and 46 percent men own land.
- Men are far more likely than women to own a house or land alone. For example, 31 percent men said they own a house alone compared with 7 percent of women. Men are six times more likely than women to own land alone (19 percent versus 3 percent).
- The majority of currently married women participate alone or jointly with the husband in decisions regarding their own health care (90 percent), major household purchases (84 percent), and visits to their family or relatives (86 percent).
- One-third of women and half of men agree with one or more reasons justifying wife beating; in the Kyrgyz Republic the most widely accepted reason for wife beating is neglecting the children, cited by 26 percent women and 45 percent men. One in three men and one in four women think it is justifiable for a man to beat his wife if she goes out without telling him (36 percent of men and 23 percent of women).

The 1994 International Conference on Population and Development declared that "advancing gender equality and equity and the empowerment of women and the elimination of all kinds of violence against women, and ensuring women's ability to control their own fertility are cornerstones of population and development related programs" (United Nations, 1994). Women's empowerment has been defined to encompass women having a sense of self-worth, access to opportunities and resources, choices and the ability to exercise them, control over their own lives, and influence over the direction of social change. Empowerment and autonomy for women is essential for the achievement of sustainable development. The full participation and partnership of women and men is required in productive and reproductive life, including the sharing of responsibilities for the care and nurture of children as well as for the maintenance of the household.

According to the United Nations Development Program's (UNDP's) Human Development Report for 2013, the Kyrgyz Republic ranks 64 out of 186 countries on the Gender Inequality Index, which the report defines as "a composite measure reflecting inequality in achievements between women and men in three dimensions: reproductive health, empowerment, and the labor market" (UNDP, 2013). The 2012 Global Gender Gap Index, developed by the World Economic Forum, ranks Kyrgyzstan higher—54 out of 135 countries in terms of gender equality (Hausmann et al., 2012).

This chapter discusses indicators of women's empowerment including employed women's control over their own earnings, women's ownership of assets, women's participation in household decisions, and women's acceptance of wife beating. In addition, two summary indicators of women's empowerment are defined: an index of the number of household decisions (0-3) in which the respondent participates and an index of the number of reasons (0-5) the respondent accepts as justifying wife beating. The ranking of

women on these two indices is then related to selected demographic and health outcomes, including contraceptive use, ideal family size, unmet need for family planning, and child mortality.

15.1 EMPLOYMENT AND FORM OF EARNINGS

Employment, particularly employment for cash, and control over how earnings are used are important indicators of empowerment for women. In the 2012 KgDHS, respondents were asked a number of questions to determine their employment status at the time of the survey and their continuity of employment in the 12 months preceding the survey. They were also asked about the type of payment they received for their work. Table 15.1 shows the percentage of currently married women and men who were employed at any time during the 12 months preceding the survey and the percent distribution of those employed at any time in the 12 months preceding the survey by the type of earnings they received (cash, in-kind, or both).

Table 15.1 Employment and cash earnings of currently married women and men

Percentage of currently married women and men age 15-49 who were employed at any time in the past 12 months and the percent distribution of currently married women and men employed in the past 12 months by type of earnings, according to age, Kyrgyz Republic 2012

	Among currently married respondents:		Percent distribution of currently married respondents employed in the past 12 months, by type of earnings						
Age	Percentage employed in past 12 months	Number of respondents	Cash only	Cash and in-kind	In-kind only	Not paid	Don't know/ missing	Total	Number of respondents
				WOMEN					
15-19	8.6	158	*	*	*	*	*	100.0	13
20-24	17.0	896	92.2	3.0	0.0	4.8	0.0	100.0	152
25-29	31.3	1,061	91.6	1.2	0.1	6.6	0.6	100.0	332
30-34	30.6	867	86.6	4.6	0.7	8.2	0.0	100.0	265
35-39	36.2	801	84.2	2.7	0.3	12.8	0.0	100.0	290
40-44	40.9	758	87.2	4.8	0.0	8.0	0.0	100.0	310
45-49	41.0	716	87.4	4.3	0.2	8.0	0.0	100.0	293
Total	31.5	5,256	88.0	3.4	0.2	8.3	0.1	100.0	1,656
				MEN					
15-19	*	2	*	*	*	*	*	100.0	1
20-24	93.5	96	72.6	18.2	0.0	9.2	0.0	100.0	90
25-29	98.7	276	82.8	8.4	0.0	8.8	0.0	100.0	273
30-34	97.0	265	81.5	10.3	0.0	7.5	0.7	100.0	257
35-39	97.9	267	76.0	17.4	1.5	5.1	0.0	100.0	261
40-44	96.6	273	79.0	9.9	1.5	9.5	0.0	100.0	264
45-49	93.6	263	82.7	13.5	0.0	3.6	0.1	100.0	246
Total	96.4	1,443	79.9	12.3	0.6	7.1	0.1	100.0	1,391

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Almost one-third of currently married women age 15-49 reported being employed in the past 12 months. By age, employment increases from 17 percent among married women age 20-24 to 41 percent among women age 40-49. Younger women are less likely to be employed than women in other age groups, possibly because they are in school or in training programs rather than in the job market.

Although employment is assumed to go hand in hand with payment for work, not all women receive earnings for the work they do. Even among women who receive earnings, not all are paid in cash. Among women who were employed in the preceding 12 months, 88 percent received only cash for their work, while 8 percent did not receive any payment at all. Three percent of women received cash and in-kind earnings for their work, and a negligible number received payment in-kind only. Employed women age 35-39 are more likely than their younger or older counterparts to be unpaid.

Currently married men are much more likely than currently married women to be employed (96 percent versus 32 percent). Among those who are employed, men are slightly less likely than women to be paid in cash only (80 percent versus 88 percent), and somewhat more likely to receive in-kind payments in addition to cash (12 percent versus 3 percent).

15.2 WOMEN'S AND MEN'S CONTROL OVER CASH EARNINGS

15.2.1 Women's Control over Their Own Cash Earnings

In addition to access to paid employment, control over cash earnings is another important dimension of empowerment. Currently married, employed women who earn cash for their work were asked who the main decision maker is with regard to the use of their earnings. In addition, they were asked the relative magnitude of their earnings compared with their husbands' earnings. This information provides some insight into women's empowerment within the family and the extent of their control over other decisionmaking in the household. It is expected that earnings are more likely to empower women if women themselves control the use of the cash they earn and perceive their earnings as significant relative to those of their husband.

Table 15.2.1 shows the percent distribution of currently married women who received cash earnings in the past 12 months, according to the person who mainly decides about the use of their earnings and their perception of the magnitude of their earnings relative to those of their husband. More than one-third of currently married women who earn cash report that they themselves mainly decide how their cash earnings are used (35 percent). An additional 60 percent indicate that decisions about the use of their earnings are made jointly with their husbands. Only 4 percent report that their husbands alone decide how their earnings are used, and 2 percent report that someone else mainly decides.

Regardless of background characteristics, a large majority of women report that they participate in decisions on how their earnings are used. However, some variability is evident in the extent to which women themselves mainly control how their earnings are used. For example, the percentage of women who say they mainly decide on the use of their cash earnings varies widely across regions, from 13 percent in the Batken region to 63 percent in Osh City. Women's ability to decide themselves on how to spend their earnings also generally increases with their wealth. Around 40 percent of women in the two highest wealth quintiles mainly decide by themselves about the use of their earnings compared with 26 percent of women in the lowest wealth quintile.

The 2012 KgDHS data on women's control over their cash earnings can be compared with similar information obtained in the 1997 KgDHS survey from employed women who earned cash. The comparison must be treated with some caution because of minor differences in the wording of the questions on employment and earning in the two surveys. However, the results indicate that the proportion of married women who mainly decide how their cash earnings are used has doubled during the past 15 years, from 19 percent in 1997 to 35 percent in 2012 (RIOP and Macro International Inc., 1998).

Table 15.2.1 Control over women's cash earnings and relative magnitude of women's cash earnings

Percent distribution of currently married women age 15-49 who received cash earnings for employment in the 12 months preceding the survey by person who decides how wife's cash earnings are used and by whether she earned more or less than her husband, according to background characteristics, Kyrgyz Republic 2012

	Person who decides how the wife's cash earnings are used:						Wife's cash earnings compared with husband's cash earnings:						
Background characteristic	Mainly wife	Wife and husband jointly	Mainly husband	Other	Missing	Total	More	Less	About the same	Husband has no earnings	Don't know/ Missing	Total	Number of women
Age													
15-19	*	*	*	*	*	100.0	*	*	*	*	*	100.0	13
20-24	38.5	47.4	6.5	7.4	0.2	100.0	4.7	59.9	30.4	2.9	2.0	100.0	145
25-29	34.5	55.8	5.6	3.2	0.8	100.0	7.6	54.1	34.1	1.9	2.2	100.0	308
30-34	30.2	65.4	2.8	1.6	0.0	100.0	6.5	49.1	42.4	0.6	1.4	100.0	242
35-39	34.1	60.1	4.9	0.4	0.6	100.0	13.0	39.3	43.7	3.2	0.9	100.0	252
40-44	37.4	60.9	0.9	0.4	0.4	100.0	7.7	50.0	39.6	2.3	0.4	100.0	285
45-49	34.0	64.1	1.9	0.0	0.0	100.0	16.2	39.4	42.0	2.1	0.3	100.0	269
Number of living children													
0	34.9	53.6	8.5	3.0	0.0	100.0	7.8	50.4	33.3	5.8	2.7	100.0	119
1-2	39.1	54.2	3.7	2.7	0.4	100.0	8.7	50.1	38.0	2.0	1.2	100.0	748
3-4	28.2	68.3	2.6	0.5	0.4	100.0	11.0	44.9	41.9	1.4	0.8	100.0	553
5+	35.1	61.8	2.0	1.2	0.0	100.0	10.1	45.1	40.5	3.5	0.8	100.0	93
Residence													
Urban	35.4	61.5	1.6	1.1	0.3	100.0	8.9	50.2	38.3	1.1	1.5	100.0	715
Rural	33.7	58.2	5.3	2.5	0.3	100.0	10.1	45.8	40.1	3.2	0.8	100.0	798
Region													
Issyk-Kul	18.2	78.3	2.9	0.0	0.6	100.0	9.0	46.5	43.0	0.5	1.0	100.0	169
Djalal-Abad	30.5	63.7	1.4	2.8	1.6	100.0	4.2	46.6	43.0	0.0	6.2	100.0	154
Naryn	14.3	83.9	1.4	0.0	0.4	100.0	16.1	34.7	48.9	0.0	0.4	100.0	63
Batken	13.3	70.3	6.2	10.2	0.0	100.0	8.1	65.9	21.6	0.6	3.8	100.0	106
Osh Oblast	30.0	52.2	10.2	6.8	0.8	100.0	12.0	35.6	40.2	11.5	0.7	100.0	171
Talas	16.8	80.7	1.6	0.9	0.0	100.0	24.2	60.8	14.6	0.4	0.0	100.0	75
Chui	58.0	37.7	4.3	0.0	0.0	100.0	7.9	45.5	44.1	2.5	0.0	100.0	342
Bishkek City	34.1	64.7	1.2	0.0	0.0	100.0	9.3	48.5	41.6	0.7	0.0	100.0	392
Osh City	62.5	34.4	2.4	0.7	0.0	100.0	4.6	74.3	19.0	0.8	1.3	100.0	41
Education													
None/primary	*	*	*	*	*	100.0	*	*	*	*	*	100.0	2
Basic general	34.1	56.0	9.9	0.0	0.0	100.0	8.4	21.9	66.5	3.2	0.0	100.0	40
Secondary	33.3	62.4	3.1	1.2	0.0	100.0	9.2	45.5	41.4	2.8	1.0	100.0	347
Professional primary/ middle	40.0	55.7	2.7	1.3	0.4	100.0	11.9	50.9	35.8	1.0	0.4	100.0	364
Higher	32.6	60.7	3.7	2.5	0.5	100.0	8.7	49.0	38.4	2.4	1.6	100.0	761
Wealth quintile													
Lowest	26.1	67.9	3.8	2.2	0.0	100.0	9.4	44.6	41.5	3.4	1.1	100.0	253
Second	28.1	63.7	5.3	2.2	0.7	100.0	12.1	48.3	33.4	4.7	1.5	100.0	202
Middle	28.9	57.8	8.1	4.5	0.6	100.0	8.7	48.1	38.6	3.6	0.9	100.0	230
Fourth	40.7	54.7	2.3	1.9	0.4	100.0	9.9	47.9	39.5	0.9	1.8	100.0	358
Highest	39.8	58.5	1.4	0.1	0.2	100.0	8.6	49.4	40.6	0.7	0.7	100.0	471
Total	34.5	59.8	3.5	1.8	0.3	100.0	9.5	47.9	39.2	2.2	1.1	100.0	1,513

Note: An asterisk denotes a figure based on fewer than 25 unweighted cases and has been suppressed.

Table 15.2.1 also presents information from the 2012 KgDHS on the relative magnitude of women's earnings compared with the earnings of their husbands. About half of women (48 percent) earn less than their husbands, 10 percent earn more than their husbands, and 39 percent earn about the same. Two percent of women say that their husbands have no cash earnings. Older women generally are more likely than women under age 25 to earn about the same or more than their husbands earn. Women in the Talas region are most likely to say they earn more than their husbands (24 percent), while women in Osh City are most likely to report earning less than their husbands (74 percent). There is no clear relationship between wife's and husband's comparative cash earnings and women's education or wealth .

15.2.2 Women's Control over Their Husband's Earnings

Women's participation in decisions on how their husband's earnings are used is another indicator of empowerment. The KgDHS obtained information from both married men and women on the extent of wife's control over their husband's earnings. Currently married men age 15-49 who receive cash earnings were asked who decides how their cash earnings are spent. Currently married women age 15-49 whose

husbands receive cash earnings were asked who decides how the husband's cash earnings are spent. Table 15.2.2 presents the results. It should be noted that these data are not based on matching couples.

Table 15.2.2 shows that about half (51 percent) of currently married men age 15-49 who receive cash earnings say they mainly make the decisions themselves on how their earnings will be used, while 42 percent of men say they decide jointly with their wives. Only a small proportion of men (4 percent) say their wives mainly make decisions on how their earnings are used. Men in urban areas are slightly more likely than those in urban areas (46 percent and 40 percent, respectively) to make joint decisions with their wives on how to use their cash earnings. Among regions, the percentage of men who make joint decisions with their wives ranges from 1 percent in the Chui region to 93 percent in Naryn. Joint decisionmaking about men's earnings does not vary uniformly with education and wealth.

Table 15.2.2 Control over men's cash earnings

Percent distributions of currently married men age 15-49 who receive cash earnings and of currently married women age 15-49 whose husbands receive cash earnings, by person who decides how husband's cash earnings are used, according to background characteristics, Kyrgyz Republic 2012

	Men							Women						
	Person who decides how husband's cash earnings are used:							Person who decides how husband's cash earnings are used:						
Background characteristic	Mainly wife	Husband and wife jointly	Mainly husband	Other	Missing	Total	Number of men	Mainly wife	Husband and wife jointly	Mainly husband	Other	Missing	Total	Number of women
Age														
15-19	*	*	*	*	*	100.0	1	0.0	49.1	18.7	31.5	0.6	100.0	155
20-24	4.2	51.6	32.5	11.7	0.0	100.0	82	3.7	59.1	16.4	20.5	0.2	100.0	877
25-29	3.9	34.5	56.8	4.2	0.5	100.0	249	5.8	65.6	17.0	10.9	0.7	100.0	1,048
30-34	3.5	43.8	49.2	3.5	0.0	100.0	236	5.8	74.6	14.1	5.5	0.0	100.0	858
35-39	3.1	47.3	48.6	0.3	0.7	100.0	244	8.0	76.7	13.3	1.7	0.3	100.0	788
40-44	5.5	40.4	53.7	0.0	0.4	100.0	234	8.4	79.3	11.0	0.5	0.7	100.0	744
45-49	5.5	41.7	51.7	0.0	1.1	100.0	237	10.4	79.5	9.9	0.0	0.2	100.0	703
Number of living children														
0	6.3	38.6	45.2	9.9	0.0	100.0	98	2.9	59.7	17.4	19.7	0.3	100.0	430
1-2	5.2	40.1	51.2	2.8	0.6	100.0	560	5.5	68.7	14.4	10.9	0.4	100.0	2,206
3-4	3.1	44.5	51.5	0.7	0.2	100.0	511	7.8	74.1	14.1	3.6	0.4	100.0	2,018
5+	3.2	44.8	49.9	0.4	1.6	100.0	114	9.8	78.8	9.7	1.6	0.1	100.0	520
Residence														
Urban	6.3	45.9	46.1	1.7	0.0	100.0	434	6.7	75.1	13.9	3.9	0.4	100.0	1,667
Rural	3.3	40.3	53.2	2.6	0.7	100.0	848	6.6	69.1	14.2	9.8	0.3	100.0	3,507
Region														
Issyk-Kul	0.0	84.6	13.9	0.0	1.6	100.0	102	2.4	91.8	5.0	0.2	0.5	100.0	464
Djalal-Abad	7.5	81.3	9.4	1.2	0.6	100.0	236	1.8	75.6	12.9	9.0	0.8	100.0	937
Naryn	0.6	93.0	5.5	0.9	0.0	100.0	42	2.3	95.4	1.1	1.2	0.0	100.0	209
Batken	28.5	3.6	67.9	0.0	0.0	100.0	67	2.3	64.6	6.4	26.1	0.7	100.0	442
Osh Oblast	1.1	17.0	72.3	8.6	1.1	100.0	272	15.4	52.1	14.1	18.2	0.3	100.0	1,005
Talas	1.4	73.9	24.1	0.0	0.6	100.0	67	2.0	87.3	7.3	3.4	0.0	100.0	271
Chui	3.7	1.2	95.1	0.0	0.0	100.0	235	7.6	62.7	28.8	0.5	0.3	100.0	917
Bishkek City	2.0	53.3	44.7	0.0	0.0	100.0	222	5.4	83.6	10.3	0.7	0.0	100.0	746
Osh City	1.7	10.5	80.5	7.3	0.0	100.0	39	16.0	53.5	28.4	1.6	0.6	100.0	183
Education														
None/primary	*	*	*	*	*	100.0	4	*	*	*	*	*	100.0	17
Basic general	3.9	41.4	48.7	6.0	0.0	100.0	106	4.9	54.1	22.5	17.9	0.6	100.0	463
Secondary	3.6	39.4	52.9	3.3	0.8	100.0	643	6.9	69.0	13.6	10.1	0.4	100.0	2,401
Professional primary/ middle	7.8	52.3	39.6	0.0	0.3	100.0	238	6.9	76.4	13.4	2.9	0.3	100.0	959
Higher	3.1	39.8	56.4	0.6	0.1	100.0	291	6.5	77.3	11.8	4.0	0.4	100.0	1,334
Wealth quintile														
Lowest	2.2	48.0	48.7	1.1	0.0	100.0	234	5.6	75.3	10.5	8.5	0.2	100.0	991
Second	2.9	46.4	44.8	3.7	2.2	100.0	243	6.8	71.5	11.8	9.5	0.4	100.0	1,027
Middle	3.7	41.3	51.6	3.3	0.0	100.0	259	5.6	64.5	16.5	13.0	0.4	100.0	1,061
Fourth	7.4	31.2	58.3	2.7	0.3	100.0	263	7.3	68.6	16.3	7.3	0.6	100.0	1,097
Highest	4.8	44.8	49.8	0.7	0.0	100.0	284	7.8	76.1	15.1	0.8	0.3	100.0	998
Total	4.3	42.2	50.8	2.3	0.5	100.0	1,282	6.6	71.1	14.1	7.9	0.4	100.0	5,174

Note: An asterisk denotes a figure based on fewer than 25 unweighted cases and has been suppressed.

Table 15.2.2 shows that 71 percent of currently married women age 15-49 whose husbands receive cash earnings report that they decide jointly with their husbands how the husband's earnings will be used. Seven percent of women report that they mainly decide how the husband's cash earnings are used, and 14 percent say that their husbands mainly make this decision.

A comparison of women's perspective on their role in decisionmaking about the use of their husbands' earnings with men's perspective shows a fairly wide gap in the proportion saying decisions are made jointly; 71 percent of women say decisions are made jointly compared with 42 percent of men. The gap is evident across all subgroups but is especially notable in the Batken and Chui regions. There are some interesting patterns in control of husband's earnings by women's background characteristics. For example, among married women age 15-19, 32 percent say that someone else mainly makes decisions about how to spend their husbands' earnings. This finding may reflect the fact that younger married couples are more likely to live with their parents, who may exert influence over decisions about spending. Other groups with relatively large proportions reporting that someone else mainly decides on how to use the husband's earnings include women with no children, rural women, women in the Batken and Osh Oblast regions, and women with less education.

15.2.3 Control over How Earnings Are Used by Relative Magnitude of Earnings

Table 15.3 looks at the question of how the relative magnitude of women's cash earnings is related to decisionmaking with respect to the use of women's own earnings and the earnings of their husbands. With regard to women's cash earnings, decisions on using the earnings are made jointly in the majority of cases, regardless of the relative income of the wife. As expected, however, women whose earnings exceed those of their husbands are most likely to say they are mainly responsible for decisions about the use of their own earnings. Women who earn less than a husband are more likely than women who earn the same as a husband to say they mainly control the decisions on how their earnings are used (37 percent versus 28 percent). The percentage of women saying that the husband mainly decides how their earnings are used is small, regardless of the woman's relative income.

Table 15.3 Women's control over their own earnings and over those of their husbands

Percent distribution of currently married women age 15-49 with cash earnings in the last 12 months by person who decides how the wife's cash earnings are used and percent distribution of currently married women age 15-49 whose husbands have cash earnings by person who decides how the husband's cash earnings are used, according to the relation between wife's and husband's cash earnings, Kyrgyz Republic 2012

	Person who decides how the wife's cash earnings are used:							Person who decides how husband's cash earnings are used:						
Women's earnings relative to husband's earnings	Mainly wife	Wife and husband jointly	Mainly husband	Other	Missing	Total	Number of women	Mainly wife	Wife and husband jointly	Mainly husband	Other	Missing	Total	Number of women
More than husband	40.9	56.7	0.8	0.6	1.0	100.0	144	20.2	68.3	10.4	1.1	0.0	100.0	144
Less than husband	36.9	55.9	4.6	2.6	0.0	100.0	725	6.5	77.3	13.3	2.9	0.0	100.0	725
Same as husband	28.2	69.1	2.4	0.3	0.0	100.0	594	3.7	85.6	9.6	1.0	0.0	100.0	594
Husband has no cash earnings or did not work	(65.2)	(12.8)	(13.6)	(8.4)	(0.0)	100.0	33	na	na	na	na	na	na	0
Woman worked but has no cash earnings	na	na	na	na	na	0.0	0	7.1	80.5	7.5	3.9	1.1	100.0	140
Woman did not work	na	na	na	na	na	0.0	0	6.6	67.1	15.5	10.4	0.4	100.0	3,553
Total	34.5	59.8	3.5	1.8	0.3	100.0	1,513	6.6	71.1	14.1	7.9	0.4	100.0	5,174

Note: Figures in parentheses are based on 25 to 49 unweighted cases.
na = Not applicable.
[1] Includes cases where a woman does not know whether she earned more or less than her husband.

With regard to the husband's cash earnings, decisions on using the earnings are most likely to be made jointly, regardless of the relative income of the wife or whether the wife receives any cash earnings. Nevertheless, women who earn more than their husbands are more likely to be the main decisionmaker as to how to use the husband's earnings (20 percent) than women who earn the same or less than their husbands (7 and 4 percent, respectively). The percentage of women saying the husband mainly makes the decisions about how his earnings are used is slightly higher among women earning less than their husbands (13 percent) compared with women earning the same or more than the husband (10 percent each).

15.3 OWNERSHIP OF ASSETS

Asset ownership, particularly of land and housing, has many beneficial effects for households, including protection against financial ruin. For women, asset ownership is a source of financial empowerment, and for married women it can provide economic protection in the case of marital dissolution or abandonment. The limited information available suggests that women are much less likely than men to own productive assets. Information on women's asset ownership can provide important insights into women's status and demographic and health outcomes. Accordingly, the KgDHS asked respondents about their ownership, alone or jointly, of two of the most important assets: land and housing.

Tables 15.4.1 and 15.4.2 show the distribution of all women and men age 15-49, respectively, by ownership of housing and land, according to background characteristics. If respondents are the sole owners of the asset (they do not share ownership with anyone), they are classified as owning the asset "alone." If respondents share ownership of a single asset with someone else, they are classified as owning the asset "jointly only." If they own more than one asset, and some assets are owned alone and some jointly with someone else, they are classified in the "both alone and jointly" category. Finally, respondents who do not own the specific asset, either alone or jointly, are classified in the "does not own" category.

As Table 15.4.1shows, one-third of women (33 percent) own a house jointly, while 7 percent own a house alone, and 12 percent own a house alone and jointly. Women are less likely to own land than to own a house; 20 percent of women own land jointly, 3 percent own land alone, and 10 percent own land alone or jointly. Overall, almost half of all women interviewed said they do not own a house, while two-thirds said they do not own land.

As might be expected, the proportions of women who do not own a house at all or do not own land at all are highest among younger women, while ownership of land and housing increases with age. Rural women are more likely than urban women to own a house either alone or jointly, and far more likely than urban women to own land. The percentage of women who do not own a house is highest in the Chui region (70 percent), while the percentage of women who do not own land is highest in Bishkek (94 percent). The proportions of women who do not own a house or land tend to decrease with education up to the professional level and then increase among women with higher education. With regard to wealth, the proportions of women who do not own a house and those who do not own land increase steadily as wealth quintile increases.

Table 15.4.2 shows that the proportions of men who do not own a house or land (36 and 54 percent) are considerably smaller than the corresponding proportions of women (48 and 67 percent). Men are far more likely than women to own a house or land alone. For example, 31 percent men own a house alone compared with 7 percent of women. Men are six times more likely than women to own land alone (19 percent versus 3 percent). About a quarter of men own land or a house jointly (23 and 28 percent, respectively), while only a small proportion own land or a house jointly (5-6 percent).

As observed among women, the proportions of men who do not own a house at all or do not own land at all are highest among younger men, while ownership increases with age. Also as among women, a higher percentage of rural men than urban men own a house alone or jointly (69 percent rural versus 54 percent urban). Men living in rural areas are twice as likely as urban men to own land alone or jointly (57 rural versus 24 percent urban). The percentage of men who do not own a house is highest in the Osh City region (62 percent), while the percentage of men who do not own land is highest in Bishkek (94 percent). Men in the highest wealth quintile are more likely not to own a house or land than men in other wealth quintiles.

Table 15.4.1 Ownership of assets: Women

Percent distribution of women age 15-49 by ownership of housing and land, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Percentage who own a house: Alone	Jointly	Alone and jointly	Percentage who do not own a house	Missing	Total	Percentage who own land: Alone	Jointly	Alone and jointly	Percentage who do not own land	Missing	Total	Number of women
Age													
15-19	0.6	15.2	1.2	82.9	0.0	100.0	0.1	8.6	3.4	87.9	0.1	100.0	1,637
20-24	1.5	24.8	6.3	67.4	0.0	100.0	0.6	14.4	6.3	78.7	0.0	100.0	1,527
25-29	3.7	37.8	12.4	46.2	0.0	100.0	1.1	21.0	9.9	67.9	0.1	100.0	1,265
30-34	7.5	41.5	16.3	34.4	0.3	100.0	2.2	24.6	13.5	59.6	0.1	100.0	1,028
35-39	11.0	44.8	18.3	25.9	0.0	100.0	5.0	28.9	15.0	50.9	0.2	100.0	915
40-44	18.1	42.1	20.4	19.3	0.2	100.0	6.8	25.8	14.2	53.0	0.2	100.0	928
45-49	19.4	41.4	20.4	18.6	0.2	100.0	8.1	24.5	15.9	51.4	0.1	100.0	908
Residence													
Urban	11.6	25.1	9.0	54.2	0.1	100.0	2.0	8.5	5.3	84.0	0.2	100.0	3,070
Rural	4.8	37.7	13.7	43.7	0.1	100.0	3.3	26.2	13.0	57.5	0.0	100.0	5,138
Region													
Issyk-Kul	5.6	10.2	49.9	34.3	0.1	100.0	5.3	9.6	46.6	38.5	0.0	100.0	650
Djalal-Abad	2.2	49.8	16.1	31.7	0.1	100.0	1.0	42.8	9.4	46.6	0.2	100.0	1,332
Naryn	4.7	58.1	16.4	20.9	0.0	100.0	2.0	30.5	14.7	52.8	0.0	100.0	281
Batken	2.3	34.4	13.8	49.3	0.2	100.0	1.4	33.6	36.5	28.0	0.4	100.0	616
Osh Oblast	7.3	41.6	11.3	39.8	0.0	100.0	6.3	14.0	5.0	74.6	0.1	100.0	1,627
Talas	2.9	72.9	3.5	20.6	0.0	100.0	1.9	62.2	3.2	32.7	0.0	100.0	360
Chui	8.6	16.5	4.5	70.2	0.1	100.0	2.1	9.5	2.5	85.9	0.0	100.0	1,465
Bishkek City	14.4	21.1	2.2	62.2	0.0	100.0	1.4	4.4	0.2	93.8	0.1	100.0	1,566
Osh City	8.7	29.6	4.5	57.2	0.0	100.0	0.8	6.6	1.0	91.6	0.0	100.0	311
Education													
None/primary	(3.7)	(16.3)	(5.6)	(74.4)	(0.0)	100.0	(0.0)	(16.3)	(3.8)	(79.9)	(0.0)	100.0	39
Basic general	1.5	28.0	4.7	65.8	0.0	100.0	1.4	17.2	3.8	77.6	0.1	100.0	1,139
Secondary	5.9	37.0	13.9	43.1	0.0	100.0	3.1	23.2	12.5	61.1	0.1	100.0	3,468
Professional primary/ middle	10.6	36.6	15.6	37.0	0.3	100.0	3.9	22.4	13.4	60.1	0.2	100.0	1,364
Higher	10.7	27.4	10.5	51.5	0.0	100.0	2.4	13.3	7.7	76.5	0.0	100.0	2,198
Wealth quintile													
Lowest	3.6	41.6	17.8	37.0	0.1	100.0	3.1	30.6	14.2	52.1	0.0	100.0	1,459
Second	3.3	40.1	16.6	39.8	0.1	100.0	2.8	29.2	15.7	52.2	0.0	100.0	1,473
Middle	4.6	39.5	12.6	43.3	0.0	100.0	3.8	27.4	13.9	54.9	0.1	100.0	1,538
Fourth	7.4	29.4	11.1	51.9	0.2	100.0	3.1	13.2	8.3	75.2	0.2	100.0	1,667
Highest	14.8	20.1	4.8	60.4	0.0	100.0	1.6	4.3	1.9	92.2	0.1	100.0	2,071
Total	7.3	33.0	12.0	47.6	0.1	100.0	2.8	19.6	10.1	67.4	0.1	100.0	8,208

Note: Figures in parentheses are based on 25 to 49 unweighted cases.

Table 15.4.2 Ownership of assets: Men

Percent distribution of men age 15-49 by ownership of housing and land, according to background characteristics, Kyrgyz Republic 2012

Background characteristic	Percentage who own a house: Alone	Jointly	Alone and jointly	Percentage who do not own a house	Total	Percentage who own land: Alone	Jointly	Alone and jointly	Percentage who do not own land	Missing	Total	Number of men
Age												
15-19	2.5	16.0	5.8	75.7	100.0	2.8	13.9	5.1	78.2	0.0	100.0	432
20-24	7.0	22.1	3.7	67.2	100.0	5.6	20.2	1.8	72.5	0.0	100.0	404
25-29	27.1	34.2	4.6	34.1	100.0	15.5	27.9	5.5	51.2	0.0	100.0	409
30-34	37.5	37.9	6.3	18.4	100.0	17.5	28.9	5.7	47.9	0.0	100.0	305
35-39	46.9	34.8	6.7	11.6	100.0	27.2	28.5	5.2	38.7	0.4	100.0	292
40-44	58.2	25.3	7.7	8.7	100.0	39.3	21.4	4.5	34.2	0.5	100.0	297
45-49	61.4	27.4	5.1	6.0	100.0	38.7	20.4	4.3	36.3	0.3	100.0	275
Residence												
Urban	27.7	22.3	4.1	45.9	100.0	12.4	9.7	1.6	75.9	0.4	100.0	781
Rural	32.2	30.1	6.3	31.3	100.0	21.8	28.8	5.9	43.4	0.1	100.0	1,632
Region												
Issyk-Kul	50.6	36.3	7.4	5.7	100.0	52.5	35.2	6.1	5.6	0.6	100.0	207
Djalal-Abad	5.0	54.1	12.2	28.6	100.0	3.3	46.0	8.2	42.0	0.6	100.0	402
Naryn	49.0	16.0	10.1	25.0	100.0	36.2	9.4	5.5	48.8	0.0	100.0	98
Batken	16.4	44.5	26.0	13.1	100.0	15.6	41.9	25.1	17.4	0.0	100.0	186
Osh Oblast	35.7	10.7	0.0	53.6	100.0	26.4	12.3	0.2	61.0	0.0	100.0	526
Talas	31.8	64.5	0.3	3.4	100.0	30.0	65.8	0.4	3.8	0.0	100.0	126
Chui	48.6	16.5	0.9	34.1	100.0	14.5	11.9	2.2	71.4	0.0	100.0	407
Bishkek City	22.6	17.7	2.0	57.8	100.0	4.8	1.3	0.3	93.6	0.0	100.0	383
Osh City	35.3	2.9	0.4	61.5	100.0	16.9	0.0	0.4	82.8	0.0	100.0	78
Education												
None/primary	*	*	*	*	100.0	*	*	*	*	*	100.0	7
Basic general	14.5	26.1	7.9	51.6	100.0	8.2	24.6	3.5	63.7	0.0	100.0	338
Secondary	32.9	28.3	6.1	32.8	100.0	21.3	26.8	5.4	46.3	0.2	100.0	1,158
Professional primary/middle	37.1	30.4	4.9	27.6	100.0	24.2	18.7	4.2	52.5	0.4	100.0	388
Higher	32.1	24.7	3.4	39.7	100.0	16.1	14.8	3.3	65.8	0.0	100.0	522
Wealth quintile												
Lowest	31.3	29.5	5.3	33.9	100.0	28.4	27.3	5.2	39.2	0.0	100.0	502
Second	27.3	33.3	7.0	32.5	100.0	21.3	34.3	6.8	37.6	0.0	100.0	496
Middle	33.5	33.5	8.6	24.4	100.0	19.3	32.3	7.3	40.6	0.5	100.0	451
Fourth	36.8	24.3	4.4	34.5	100.0	16.4	16.7	3.2	63.7	0.0	100.0	449
Highest	26.1	17.9	2.8	53.1	100.0	8.8	3.5	0.6	86.9	0.2	100.0	515
Total	30.8	27.6	5.6	36.0	100.0	18.8	22.6	4.5	53.9	0.2	100.0	2,413

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

15.4 WOMEN'S EMPOWERMENT

The 2012 KgDHS survey collected information from women on other measures of women's autonomy and status. In particular, questions were asked about women's and men's participation in household decisions. Such information provides insight into women's control over household resources and environment, factors that are relevant to understanding women's demographic and health behavior. To assess currently married women's decision making autonomy, the 2012 KgDHS collected information on women's participation in three types of decisions: their own health care, major household purchases, and visits to the woman's family or relatives. Currently married men were asked who usually makes decisions about their own health care and about large household purchases.

Table 15.5 Participation in decision making

Percent distribution of currently married women and currently married men age 15-49 by person who usually makes decisions about various issues, Kyrgyz Republic 2012

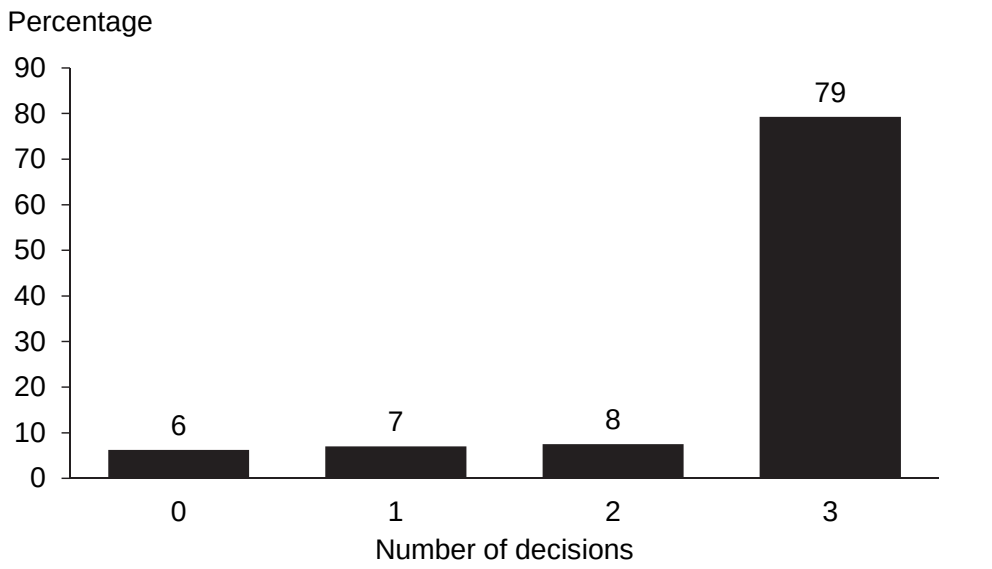
Decision	Mainly wife	Wife and husband jointly	Mainly husband	Someone else	Other	Missing	Total	Number
WOMEN								
Own health care	31.2	59.0	4.3	1.2	3.9	0.3	100.0	5,256
Major household purchases	8.5	75.4	6.3	4.0	5.6	0.3	100.0	5,256
Visits to her family or relatives	13.5	72.3	4.6	4.7	4.5	0.4	100.0	5,256
MEN								
Own health care	21.3	48.7	28.2	0.8	0.6	0.4	100.0	1,443
Major household purchases	17.7	60.8	16.5	1.1	3.4	0.5	100.0	1,443

Table 15.5 shows the percent distribution of currently married women and men age 15-49, according to the person who usually makes each type of decision. Among women, the majority say they make each of the three types of decisions jointly with their husbands. Women are most likely to say they mainly make decisions about their own health care and least likely to say they are mainly responsible for deciding about major household purchases (31 and 9 percent, respectively). Relatively few women report that their husbands mainly make any of the decisions (6 percent or less).

Table 15.5 also shows that more than one-quarter (28 percent) of married men report they are the main decision makers when it comes to their own health care, and about half (49 percent) say they make these decisions jointly with their wives. Only 17 percent of men report they are the main decision makers about major household purchases, with the majority saying they make these decisions jointly with their wives (61 percent). Men are much more likely than women to report their spouse plays a main decision making role; for 21 percent and 18 percent of men, respectively, the decisions about their own health care and about major household purchases are mainly made by their wives.

To assess women's overall decision making autonomy, the number of decisions a woman makes by herself or jointly with her husband can be combined. The total number of decisions a woman participates in is assumed to be positively related to women's empowerment. Figure 15.1 shows the percent distribution of currently married women according to the number of decisions in which they participate. Four in five currently married women participate in all three household decisions, and only 6 percent do not participate in any of the decisions.

Figure 15.1
Number of decisions in which currently married women participate, Kyrgyz Republic 2012



KgDHS 2012

Table 15.6.1 shows how currently married women's participation (alone or jointly) in decision making varies by background characteristics. The table presents the results for the three specific types of decisions asked about in the survey—women's own health care, major household purchases, and visits to the woman's family or relatives. In addition, the table includes two summary indicators: the proportion of women involved in making all three decisions and the proportion not involved in making any of the three decisions.

More than eight in every ten currently married women participate in each individual decision, either alone or jointly with their husbands. Seventy-nine percent of currently married women participate in all three decisions, and only 6 percent do not participate in any of the decisions.

Women's participation in all three decisions varies by background characteristics. Participation in decision making increases steadily with women's age; married women age 15-19 are least likely to participate in all three decisions. As expected, women who were not employed in the past 12 months are less likely to participate in all three decisions (75 percent) compared with employed women who have cash earnings or women who are employed but not for cash (89 percent each). The proportion of married women who participate in all three household decisions increases steadily as their number of children increases, from 57 percent of childless women to 91 percent with five or more children. Urban women are more likely to participate in all three decisions than rural women (84 percent versus 77 percent).

Table 15.6.1 Women's participation in decision-making by background characteristics

Percentage of currently married women age 15-49 who usually make specific decisions either by themselves or jointly with their husband, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Specific decisions			All three decisions	None of the three decisions	Number of women
	Woman's own health care	Making major household purchases	Visits to her family or relatives			
Age						
15-19	70.1	54.9	57.6	47.7	24.3	158
20-24	79.5	66.8	70.1	59.5	13.1	896
25-29	88.1	78.2	81.9	73.7	8.1	1,061
30-34	91.5	88.2	88.1	83.0	5.6	867
35-39	95.9	92.4	93.6	88.8	1.7	801
40-44	95.5	92.8	94.9	89.3	1.8	758
45-49	97.8	95.8	96.6	93.6	0.8	716
Employment (past 12 months)						
Not employed	87.4	79.8	82.3	74.8	8.1	3,600
Employed for cash	96.4	93.0	93.7	89.2	1.8	1,513
Employed, not for cash	96.0	90.6	92.8	89.0	3.1	141
Number of living children						
0	78.3	65.7	66.8	57.3	16.3	444
1-2	88.5	80.5	83.4	75.6	6.9	2,243
3-4	93.1	88.8	90.0	84.9	4.5	2,037
5+	96.3	94.5	95.8	91.3	1.2	532
Residence						
Urban	93.8	87.9	91.9	84.4	3.0	1,684
Rural	88.5	82.0	83.0	76.9	7.6	3,572
Region						
Issyk-Kul	95.2	93.5	93.3	89.1	2.1	468
Djalal-Abad	93.6	77.4	73.0	70.0	5.1	942
Naryn	98.6	95.9	92.1	89.4	0.9	209
Batken	83.6	72.7	81.9	66.1	5.0	444
Osh Oblast	73.5	69.4	74.8	65.8	20.8	1,049
Talas	97.9	94.4	95.4	92.2	1.0	272
Chui	96.9	96.1	94.1	91.0	1.2	937
Bishkek City	96.5	91.4	99.2	90.3	0.2	750
Osh City	91.6	80.0	87.7	75.0	4.7	184
Education						
None/ primary	*	*	*	*	*	17
Basic general	77.7	65.7	67.5	59.0	17.3	470
Secondary	88.3	81.6	84.1	77.1	7.5	2,442
Professional primary /middle	95.0	91.2	92.8	87.8	2.3	967
Higher	94.9	89.5	90.8	84.6	2.3	1,360
Wealth quintile						
Lowest	89.3	82.3	84.1	77.8	7.1	1,016
Second	89.4	82.2	82.7	77.0	7.2	1,044
Middle	86.8	78.8	79.3	72.5	8.7	1,081
Fourth	90.1	86.6	88.1	82.7	6.5	1,110
Highest	95.8	89.6	95.4	86.7	1.1	1,004
Total	90.2	83.9	85.8	79.3	6.2	5,256

Note: Totals include two women missing information as to employment status. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Among administrative regions, women's participation in decisionmaking is lowest in the Batken and Osh Oblast regions (66 percent each) and highest in the Talas region (92 percent). The Osh Oblast region has the highest percentage of married women who do not participate in any of the three types of decisions (21 percent).

Women's education has in general a positive association with their participation in household decisions. The proportion of women who participate in all three decisions increases from 59 percent among women with general basic education to 88 percent among women with professional education, and declines to 85 percent among women with higher education. The proportion of women participating in all three decisions increases from 78 percent among women in the lowest wealth quintile to 87 percent among women in the highest wealth quintile.

Table 15.6.2 shows differences in men's decisionmaking roles by background characteristics. Seventy-seven percent of men participate alone or jointly in decisions about their own health care, and 77 percent are involved in decisionmaking about major household purchases. About two-thirds (66 percent) of currently married men participate in both decisions, and 12 percent report having no say in either of the two household decisions asked about in the survey.

The percentage of men participating in both specified decisions fluctuates with age; it is lowest among men age 20-29 (63 percent) and highest among men age 35-39 (72 percent). Men who were employed for cash (67 percent) are more likely to participate in both specified decisions than men who were employed but not for cash (58 percent) or who were not employed in the past 12 months (49 percent). Rural men are less likely than urban men to participate in both decisions. Across regions, there are large differences in the proportion of currently married men participating in both decisions. This proportion is lowest in the Batken region (21 percent) and highest in Bishkek (98 percent). Men with professional education and those in the highest wealth quintile are more likely to participate in both decisions than men with other levels of education or wealth.

Table 15.6.2 Men's participation in decision-making by background characteristics

Percentage of currently married men age 15-49 who usually make specific decisions either alone or jointly with their wife, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Specific decisions: Man's own health	Specific decisions: Making major household purchases	Both decisions	Neither of the two decisions	Number of men
Age					
15-19	*	*	*	*	2
20-24	77.3	65.9	63.3	20.1	96
25-29	74.1	72.2	62.9	16.6	276
30-34	76.6	75.9	64.5	12.1	265
35-39	79.5	86.4	72.1	6.2	267
40-44	75.8	80.0	64.9	9.1	273
45-49	79.2	76.4	66.0	10.4	263
Employment (past 12 months)					
Not employed	66.5	60.1	49.4	22.8	52
Employed for cash	78.6	79.1	67.2	9.5	1,282
Employed, not for cash	63.6	62.5	57.8	31.7	107
Number of living children					
0	67.0	69.3	60.2	23.9	112
1-2	78.6	75.3	66.4	12.5	620
3-4	78.9	79.3	66.8	8.6	579
5+	68.9	84.6	63.6	10.1	131
Residence					
Urban	83.3	82.5	76.5	10.7	460
Rural	74.0	74.8	60.8	12.0	983
Region					
Issyk-Kul	96.5	96.2	94.1	1.4	133
Djalal-Abad	86.7	87.2	82.4	8.5	250
Naryn	65.5	95.2	61.9	1.3	64
Batken	34.4	30.7	20.9	55.9	114
Osh Oblast	56.3	78.4	49.1	14.4	287
Talas	96.1	95.7	94.4	2.6	84
Chui	75.4	44.9	33.2	12.9	239
Bishkek City	98.3	99.4	98.3	0.6	226
Osh City	86.5	77.8	73.3	9.0	45
Education					
None/primary	*	*	*	*	4
Basic general	72.7	77.2	65.3	15.4	118
Secondary	73.4	76.4	62.5	12.8	746
Professional primary/middle	81.3	80.2	71.6	10.1	264
Higher	83.1	76.6	68.6	8.9	312
Wealth quintile					
Lowest	73.1	79.1	63.1	10.9	287
Second	74.7	78.5	65.0	11.8	287
Middle	73.9	72.4	59.0	12.7	294
Fourth	74.0	70.1	60.4	16.3	282
Highest	88.7	85.9	81.3	6.7	293
Total	76.9	77.3	65.8	11.6	1,443

Note: Totals include two men missing information as to employment status. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

15.5 ATTITUDES TOWARD WIFE BEATING

One of the most common forms of violence against women worldwide is abuse by the husband or partner (Heise et al., 1999). As the results in Chapter 14 show, Kyrgyzstan is no exception in this regard, and an understanding of societal attitudes toward spousal abuse is important in addressing the problem. The 2012 KgDHS obtained information on women's and men's attitudes toward wife beating by asking respondents their opinion on whether a husband is justified in hitting or beating his wife in each of the following circumstances: if she burns the food, if she argues with him, if she goes out without telling him, if she neglects the children, and if she refuses to have sexual intercourse with him.

Table 15.7.1 shows the percentage of all women age 15-49 who agree that a husband is justified in hitting or beating his wife for each of the five reasons and the percentage who agree that wife beating is justified for at least one of the specified reasons, by background characteristics. A woman's attitude toward wife beating is considered a proxy for her perception of women's status. Agreement with wife beating as justified indicates that a woman generally accepts the right of a man to control her behavior even by means of violence. Such a perception could act as a barrier to accessing health care for her children and herself, affect her attitude toward contraceptive use, and have an impact on her general well-being.

Table 15.7.1 Attitude toward wife beating: Women

Percentage of all women age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Kyrgyz Republic 2012

	Husband is justified in hitting or beating his wife if she:						
Background characteristic	Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him	Percentage who agree with at least one specified reason	Number
Age							
15-19	4.0	12.6	15.5	18.8	3.3	24.6	1,637
20-24	4.7	14.7	21.1	25.1	5.8	31.5	1,527
25-29	7.9	20.2	25.7	30.2	9.5	38.9	1,265
30-34	7.3	17.5	26.6	27.7	9.4	36.8	1,028
35-39	6.8	20.0	27.9	30.5	8.9	41.4	915
40-44	6.5	16.6	25.1	24.4	7.1	33.0	928
45-49	8.7	18.9	25.7	26.4	10.4	36.0	908
Employment (past 12 months)							
Not employed	7.0	18.5	25.7	27.6	8.0	36.5	5,658
Employed for cash	4.5	12.4	16.6	20.3	5.7	26.3	2,346
Employed, not for cash	6.4	17.9	26.5	31.1	6.3	40.9	201
Number of living children							
0	3.6	10.9	14.1	17.6	3.5	22.9	2,780
1-2	5.9	17.0	22.6	26.0	7.6	33.5	2,683
3-4	8.7	22.0	32.4	33.2	10.7	44.4	2,183
5+	11.6	24.3	34.4	33.9	11.8	46.3	562
Marital status							
Never married	2.4	9.4	11.9	15.6	2.2	20.5	2,245
Married or living together	8.1	20.5	28.9	31.0	9.6	40.7	5,256
Divorced/separated/widowed	5.1	11.9	15.8	17.2	6.8	23.8	707
Residence							
Urban	3.5	9.8	12.9	16.9	3.9	22.1	3,070
Rural	7.9	20.9	29.2	30.8	9.4	40.7	5,138
Region							
Issyk-Kul	5.9	17.5	22.1	30.3	12.8	39.9	650
Djalal-Abad	3.9	12.4	35.3	31.7	3.8	43.2	1,332
Naryn	6.9	27.6	31.1	28.4	10.5	52.2	281
Batken	16.9	48.8	54.4	33.7	22.7	71.4	616
Osh Oblast	12.1	24.1	26.5	34.5	9.5	36.7	1,627
Talas	8.8	18.3	22.7	31.0	7.5	38.4	360
Chui	2.4	9.8	13.0	17.7	5.6	21.9	1,465
Bishkek City	1.1	3.3	4.6	9.6	0.3	10.4	1,566
Osh City	7.1	21.0	27.2	36.0	8.6	40.5	311
Education							
None/primary	(4.2)	(18.5)	(29.6)	(38.5)	(4.2)	(49.3)	39
Basic general	6.9	17.3	25.6	27.3	7.7	33.2	1,139
Secondary	8.3	21.6	29.9	31.6	9.4	42.0	3,468
Professional primary/middle	5.8	15.0	20.7	24.1	7.0	32.7	1,364
Higher	3.1	9.8	12.4	15.9	4.1	21.2	2,198
Wealth quintile							
Lowest	7.0	18.2	24.3	31.6	9.8	38.5	1,459
Second	8.0	23.2	33.4	33.8	8.8	45.7	1,473
Middle	9.0	24.4	33.4	30.3	9.9	42.9	1,538
Fourth	6.8	15.6	21.1	23.1	7.9	31.6	1,667
Highest	2.1	6.4	8.9	14.1	2.0	16.6	2,071
Total	6.3	16.8	23.1	25.6	7.3	33.7	8,208

Note: Totals include rgeww women missing information as to employment status. Figures in parentheses are based on 25 to 49 unweighted cases.

One-third of women agree that a husband is justified in beating his wife for at least one of the reasons listed. The most widely accepted reason for wife beating among women in the Kyrgyz Republic is neglecting the children (26 percent), followed by going out without telling her husband (23 percent), and arguing with him (17 percent). Less than 10 percent of women agree that refusing to have sexual intercourse (7 percent) and burning the food (6 percent) are acceptable reasons for a man to beat his wife.

Agreement with at least one reason for wife beating is lowest among women age 15-19 (25 percent), and ranges from 32 to 41 percent among older women. The more children a woman has, the more likely she is to say that wife beating is justified in any of the situations. Women who are employed and get paid in cash are less likely to agree with at least one reason for wife beating than women who are either not employed or employed but not for cash. Agreement with at least one reason for wife beating is lower among women who have never married and women who are divorced, separated, or widowed compared with currently married women. Urban women are less likely than rural women to agree that wife beating is justified. Among the regions, women in Bishkek and the Chui region are least likely to accept wife beating for any reason. The percentage of women who agree with at least one of the specified reasons for wife beating generally decreases as education and wealth increase.

Although acceptance of wife beating is prevalent among women in Kyrgyz Republic, there is evidence that women's attitudes are changing. A comparison of the 2012 KgDHS results with data from the 2006 MICS survey indicates that, overall, the proportion of women who agree that wife beating is justified for at least one of the reasons listed is slightly lower in 2012 (34 percent) compared with 2006 (38 percent) (NSC, 2007).

Table 15.7.2 shows men's attitudes toward wife beating. Forty-five percent of men say that wife beating is justified if she neglects the children, 36 percent if she goes out without telling him, 24 percent if she argues with him, 6 percent if she refuses to have sexual intercourse with him, and 5 percent if she burns the food. Overall, men are more likely than women to accept wife beating as justified in at least one of the five situations (50 percent compared with 34 percent). The differential between men's and women's acceptance of wife beating is greatest in the case of neglect of the children (45 and 26 percent, respectively). Notably, the proportions who say wife beating is acceptable if the wife refuses to have intercourse or if the wife burns the food are slightly lower among men than women (6 and 5 percent, respectively, among men compared with 7 and 6 percent, respectively, among women).

Agreement with at least one reason for wife beating is lower among men age 15-19 and age 45-49 (40 percent each) than among men in other age groups, but otherwise varies little with age (51-56 percent). Men who have one or two children (54 percent) are more likely than men with more children (41-50 percent) or childless men (49 percent) to believe that there are occasions when wife beating is justified. Agreement with at least one reason for wife beating is highest among men who are divorced, separated, or widowed (62 percent) compared with currently married men or never-married men (50 percent each). Men who are employed but do not earn cash are far less likely to justify wife beating (28 percent) than unemployed men or men employed for cash (45 and 54 percent, respectively). Men in the Batken region (11 percent) are least likely to agree with at least one of the specified reasons, while men in the Chui region are most likely (87 percent). The percentage of men who agree with at least one of the specified reasons that justify wife beating is lowest among the least educated and poorest men.

Table 15.7.2 Attitude toward wife beating: Men

Percentage of all men age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Kyrgyz Republic 2012

Background characteristic	Husband is justified in hitting or beating his wife if she: Burns the food	Argues with him	Goes out without telling him	Neglects the children	Refuses to have sexual intercourse with him	Percentage who agree with at least one specified reason	Number
Age							
15-19	8.0	14.8	26.5	35.0	7.6	39.5	432
20-24	5.4	22.7	35.2	49.9	6.4	55.9	404
25-29	4.3	26.2	43.3	50.1	4.5	56.2	409
30-34	4.4	30.1	42.4	49.5	7.0	56.2	305
35-39	2.7	29.1	42.2	49.5	4.5	53.2	292
40-44	4.8	27.0	34.1	43.3	6.3	51.2	297
45-49	3.5	18.3	28.8	36.1	2.5	40.1	275
Employment (past 12 months)							
Not employed	8.7	19.9	29.1	40.5	8.3	45.0	530
Employed for cash	4.2	25.4	39.4	48.4	4.9	54.1	1,719
Employed, not for cash	0.6	16.3	20.2	19.9	5.1	28.3	161
Number of living children							
0	7.6	21.0	33.9	45.0	7.3	49.3	1,007
1-2	3.0	25.5	39.3	47.6	3.3	54.1	682
3-4	2.4	26.5	37.1	43.6	5.3	50.0	590
5+	5.9	21.2	28.1	33.5	6.6	41.2	134
Marital status							
Never married	7.6	19.7	33.9	45.5	7.7	49.9	875
Married or living together	2.6	25.1	36.2	43.6	4.1	49.9	1,443
Divorced/separated/widowed	14.3	37.7	49.0	57.0	9.6	62.1	95
Residence							
Urban	5.3	26.3	33.4	41.2	6.3	48.0	781
Rural	4.7	22.4	37.1	46.5	5.3	51.5	1,632
Region							
Issyk-Kul	0.8	20.6	14.0	8.9	3.6	26.0	207
Djalal-Abad	3.4	20.6	40.0	39.9	3.5	42.3	402
Naryn	3.3	17.9	57.1	59.7	10.1	64.6	98
Batken	0.8	3.2	4.5	4.6	6.5	11.4	186
Osh Oblast	9.3	13.2	30.0	50.2	5.1	54.2	526
Talas	1.2	19.0	22.8	27.7	4.0	33.2	126
Chui	5.1	45.9	72.2	85.5	6.2	87.1	407
Bishkek City	2.2	20.5	25.0	36.8	1.0	42.1	383
Osh City	24.1	80.8	45.9	59.6	41.4	82.7	78
Education							
None/primary	*	*	*	*	*	*	7
Basic general	5.5	25.2	30.0	39.3	7.4	45.4	338
Secondary	6.0	22.3	38.8	46.1	5.8	51.4	1,158
Professional primary/middle	4.1	26.8	37.0	47.1	6.5	53.3	388
Higher	2.5	23.1	32.3	43.7	3.5	49.2	522
Wealth quintile							
Lowest	5.1	17.8	29.8	39.6	5.3	45.3	502
Second	5.6	18.9	35.2	42.0	5.2	47.5	496
Middle	2.1	23.9	39.7	47.7	4.2	51.2	451
Fourth	6.5	28.4	43.7	51.3	7.2	58.5	449
Highest	5.2	29.5	32.3	44.2	6.3	50.3	515
Total	4.9	23.6	35.9	44.8	5.7	50.4	2,413

Note: Totals include three men missing information as to employment status. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

15.6 INDICATORS OF WOMEN'S EMPOWERMENT

Women's empowerment has important implications for demographic and health outcomes, including women's use of family planning and maternal health care services. To examine how selected demographic and health outcomes vary by women's empowerment, information on women's participation in household decision-making and women's attitudes toward wife beating are summarized in two separate indices.

The first index is the number of decisions (0 to 3) in which women participate, either alone or jointly with their husbands (see Table 15.6.1 for the list of decisions). This index reflects the degree of control that women are able to exercise through making decisions in areas that affect their own lives and is positively related to women's empowerment (i.e., a higher number of decisions indicates greater empowerment).

The second index is the number of reasons (0 to 5) for which women think a husband is justified in beating his wife (see Table 15.7.1 for the list of reasons). This index is negatively related to women's empowerment, i.e., a lower score is interpreted as reflecting a greater sense of entitlement, higher self-esteem, and a higher status of women.

Accordingly, Table 15.8 provides an overview of how these two basic empowerment indices—number of decisions in which women participate and number of reasons for which wife beating is justified—relate to one another. In general, it is expected that women who participate in making more household decisions are also more likely to reject the reasons justifying wife beating. The findings generally agree with this expectation. Table 15.8 shows that participation in making household decisions declines as the number of justifications for wife beating increases, from 83 percent of women who agree with none of the reasons that justify wife beating to 64 percent among women who agree with all five reasons (although the relationship is not linear). Table 15.8 also shows that 51 percent of women who do not participate in any of the household decisions disagree with all of the given reasons for a husband to beat his wife, compared with 62 percent of women who participate in all three decisions.

Table 15.8 Indicators of women's empowerment

Percentage of currently married women age 15-49 who participate in all decisionmaking and the percentage who disagree with all of the reasons justifying wife beating, by value on each of the indicators of women's empowerment, Kyrgyz Republic 2012

Empowerment indicator	Percentage who participate in all decisionmaking	Percentage who disagree with all the reasons justifying wife beating	Number of women
Number of decisions in which women participate[1]			
0	na	51.2	323
1-2	na	46.4	766
3	na	62.3	4,167
Number of reasons for which wife beating is justified[2]			
0	83.3	na	3,117
1-2	76.9	na	1,313
3-4	69.6	na	580
5	63.9	na	245

na = Not applicable
[1] See Table 15.6.1 for the list of decisions.
[2] See Table 15.7.1 for the list of reasons.

15.7 CURRENT USE OF CONTRACEPTION BY WOMEN'S EMPOWERMENT

A woman's desire and ability to control her fertility and the contraceptive method she chooses are likely to be affected by her status in the household, her self-image, and her own sense of empowerment. A woman who feels that she is unable to control other aspects of her life may be less likely to feel that she can make and carry out decisions about her fertility. She may also feel the need to choose contraceptive methods that can be hidden from others or that do not depend on her husband's cooperation. Table 15.9 shows the distribution of currently married women age 15-49 by current contraceptive method, according to the two women's empowerment indices.

Table 15.9 Current use of contraception by women's empowerment

Percent distribution of currently married women age 15-49 by current contraceptive method, according to selected indicators of women's status, Kyrgyz Republic 2012

			Modern methods						
Empowerment indicator	Any method	Any modern method	Female sterili-zation	Temporary modern female methods[1]	Male condom	Any traditional method	Not currently using	Total	Number of women
Number of decisions in which women participate[1]									
0	20.6	19.4	0.9	12.8	5.7	1.2	79.4	100.0	323
1-2	28.7	26.3	1.4	18.9	6.0	2.4	71.3	100.0	766
3	38.9	36.1	1.7	26.3	8.1	2.8	61.1	100.0	4,167
Number of reasons for which wife beating is justified[2]									
0	35.8	32.9	1.5	23.2	8.2	2.8	64.2	100.0	3,117
1-2	39.0	36.4	1.6	27.4	7.4	2.6	61.0	100.0	1,313
3-4	34.0	31.9	1.8	24.2	5.9	2.1	66.0	100.0	580
5	33.6	32.2	1.7	24.8	5.6	1.4	66.4	100.0	245
Total	36.3	33.7	1.6	24.4	7.7	2.6	63.7	100.0	5,256

Note: If more than one method is used, only the most effective method is considered in this tabulation.
[1] Pill, IUD, injectables, implants, female condom, diaphragm, foam/jelly, and lactational amenorrhea method.
[2] See Table 15.6.1 for the list of decisions.
[3] See Table 15.7.1 for the list of reasons.

Contraceptive use is positively associated with women's participation in household decisionmaking, but varies little by women's agreement with reasons justifying wife beating. In particular, use of any method and use of any modern method increase steadily with the number of decisions in which women participate. For example, only 19 percent of married women who do not participate in making any household decisions are using a modern method of contraception compared with 36 percent of women who participate in all three decisions.

15.8 IDEAL FAMILY SIZE AND UNMET NEED BY WOMEN'S EMPOWERMENT

The ability of women to make decisions effectively has important implications for their fertility preferences and for meeting their goals for family size. In particular, it is expected that more empowered women will want smaller families and be better able to negotiate decisions regarding fertility and family planning. Hence, ideal family size and the level of unmet need for family planning—which reflects women's unsatisfied demand for contraception—should both be lower among more empowered women.

Table 15.10 shows how women's ideal family size and their levels of unmet need for family planning vary by the two indicators of women's empowerment. The mean ideal family size does not show much association with either of the two indicators. It is almost uniform across the number of decisions in which women participate, and is lower only among women who do not believe wife beating is justified for any of the five reasons.

Table 15.10 Ideal number of children and unmet need for family planning by women's empowerment

Mean ideal number of children for women age 15-49 and the percentage of currently married women age 15-49 with an unmet need for family planning, by indicators of women's empowerment, Kyrgyz Republic 2012

Empowerment indicator	Mean ideal number of children[1]	Number of women	Percentage of currently married women with an unmet need for family planning[2]			Number of currently married women
			For spacing	For limiting	Total	
Number of decisions in which women participate[3]						
0	4.3	315	17.5	2.0	19.5	323
1-2	4.1	753	15.0	4.5	19.5	766
3	4.2	4,090	11.5	6.2	17.6	4,167
Number of reasons for which wife beating is justified[4]						
0	3.7	5,265	12.6	6.3	18.9	3,117
1-2	4.3	1,676	11.7	4.6	16.3	1,313
3-4	4.3	715	13.4	3.4	16.8	580
5	4.3	270	10.7	8.6	19.3	245
Total	3.9	7,927	12.4	5.7	18.0	5,256

[1] Mean excludes respondents who gave non-numeric responses.
[2] See table 7.12.1 for the definition of unmet need for family planning.
[3] Restricted to currently married women. See Table 15.6.1 for the list of decisions.
[4] See Table 15.7.1 for the list of reasons.

There is also a weak association between women's participation in decision making and the percentage of women with an unmet need for family planning. Women who participate in 0-2 household decisions have slightly higher levels of unmet need for family planning (20 percent) compared with women who participate in all three decisions (18 percent).

15.9 INFANT AND CHILD MORTALITY AND WOMEN'S EMPOWERMENT

The ability of women to obtain information, make decisions, and act effectively in their own interests or in the interests of those who depend on them are essential aspects of empowerment. It follows that if women, who are the primary caretakers of children, are empowered, the health and survival of their children would be enhanced. In fact, mother's empowerment fits into the Mosley-Chen framework on child survival as an intervening individual-level variable that affects child survival through proximate determinants (Mosley and Chen, 1984).

Table 15.11 shows that infant mortality and under-five mortality rates are lowest among women who participate in all three household decisions compared with women who participate in 1-2 decisions. Similarly, infant mortality and under-five mortality rates are lowest among women who do not agree with any reason for wife beating and generally tend to rise with women's agreement with the reasons for wife beating. For example, among women who do not agree with any reason for wife beating, under-five mortality is 29 deaths per 1,000 live births compared with 53 per 1,000 for women who agree with three or four reasons for wife beating.

Table 15.11 Early childhood mortality rates by women's status

Infant, child, and under-five mortality rates for the 10-year period preceding the survey, by indicators of women's empowerment, Kyrgyz Republic 2012

Empowerment indicator	Infant mortality (1q0)	Child mortality (4q1)	Under-5 mortality (5q0)
Number of decisions in which women participate[1]			
0	(33)	*	*
1-2	32	4	35
3	26	5	31
Number of reasons for which wife beating is justified[2]			
0	23	6	29
1-2	32	3	35
3-4	36	5	40
5	38	16	53

Note: Rates in parentheses are based on 250-499 unweighted person-years of exposure. An asterisk indicates that a rate is based on fewer than 250 uweighted person-years of exposure and has been suppressed.

[1] Restricted to currently married women. See Table 15.6.1 for the list of decisions.

[2] See Table 15.7.1 for the list of reasons.

REFERENCES

Academy of Preventive Medicine [Kazakhstan] and Macro International Inc. 1999. *Kazakhstan Demographic and Health Survey 1999.* Calverton, Maryland: Academy of Preventive Medicine and Macro International Inc.

Afghan Public Health Institute, Ministry of Public Health (APHI/MoPH) [Afghanistan], Central Statistics Organization (CSO) [Afghanistan], ICF Macro, Indian Institute of Health Management Research (IIHMR) [India], and World Health Organization Regional Office for the Eastern Mediterranean (WHO/EMRO) [Egypt]. 2011. *Afghanistan Mortality Survey 2010*. Calverton, Maryland, USA: APHI/MoPH, CSO, ICF Macro, IIHMR, and WHO/EMRO.

AIDS Foundation East West (AFEW), 2013. Accessed online 9 June 2013. http://www.afew.org/about-afew/where-we-work/kyrgyzstan.

Analytical and Information Center, Ministry of Health of the Republic of Uzbekistan; State Department of Statistics, Ministry of Macroeconomics and Statistics [Uzbekistan]; and ORC Macro. 2004. *Uzbekistan Health Examination Survey 2002*. Calverton, Maryland, USA: Analytical and Information Center, State Department of Statistics, and ORC Macro.

Auvert, B., D. Taljaard, E. Largarde, J. Sobngwi-Tambekou, R. Sitta, and A. Puren. 2005. Randomized, Controlled Intervention Trial of Male Circumcision for Reduction of HIV Infection Risk: The ANRS 1265 Trial. *PLoS Medicine* 2(11): e298.

Bailey, Robert, Stephen Moses, Corette B. Parker, Kawango Agot, Ian Maclean, John N. Krieger, Carolyn F.M. Williams, Richard T. Campbell, Jeckoniah O. Ndinya-Achola. 2007. Male Circumcision for HIV Prevention in Young Men in Kisumu, Kenya: a Randomised Controlled Trial. *The Lancet* 369(9562):643-656. doi:10.1016/S0140-6736(07)60312-2.

Black, R.E., L.H. Allen, Z.A. Bhutta, L.E. Caulfied, M. de Onis, M. Ezzati, C. Mathers, and J. Rivera, for the Maternal and Child Undernutrition Study Group. 2008. *Maternal and Child Undernutrition: Global and Regional Exposures and Health Consequences. Lancet* 371:243. doi:10.1016/S0140-6736(07)61690-0.

Bradley, Sarah E.K., Trevor N. Croft, Joy D. Fishel, and Charles F. Westoff. 2012. *Revising Unmet Need for Family Planning*. DHS Analytical Studies No. 25. Calverton, Maryland, USA: ICF International.

Centers for Disease Control and Prevention (CDC). 1998. Recommendations to Prevent and Control Iron Deficiency in the United States. *Morbidity and Mortality Weekly Report* 47 (RR-3): 1-30.

Cesar, G.V., L. Adair , C. Fall, P.C. Hallal, R. Martorell, L. Richter, H. Singh Sachdev. 2008. Maternal and Child Undernutrition: Consequences for Adult Health and Human Capital. *Lancet* 317(9609): 340-357.

Conde-Agudelo, A., A. Rosas-Bermudez, and A. C. Kafury-Goeta. 2006. Birth Spacing and Risk of Adverse Perinatal Outcomes, a Meta-analysis. *Journal of the American Medical Association* 295(15): 1809-1823. doi:10.1001/jama.295.15.1809.

DeMaeyer et al. 1989. *Preventing and Controlling Iron Deficiency Anemia through Primary Health Care: A Guide for Health Administrators and Program Managers*. Geneva: World Health Organization.

Ensink, Jeroen. 2008. *Health Impact of Handwashing with Soap*. WELL factsheet. Available at http://www.lboro.ac.uk/well/resources/fact-sheets/fact-sheets-htm/Handwashing.htm.

Government of the Kyrgyz Republic. 2004. The Decree of the Government of the Kyrgyz Republic on Adoption of the List of the Flour Mills to be Engaged in the Wheat Flour Fortification, Use of Wheat Grain from the State Reserve Stocks and Mandatory Procurement of the Fortified Wheat Flour by the Public Institutions (3 June 2002, ref.no. 89-r, items 5-6).

Government of the Kyrgyz Republic. 2005. About Prophylaxis of Iodine-Deficiency Diseases. In Law of the Kyrgyz Republic, July 25, 2005, No. 113, and February 18, 2000, No. 40.

Government of the Kyrgyz Republic (GKR). 2010. The Constitution of the Kyrgyz Republic, Bishkek. Kyrgyz Republic.

Government of the Kyrgyz Republic (GKR). 2012a. About the National Health Care Reforms Program Den Sooluk for the 2012-2016 Period. Resolution №309 of 24 May, 2012. Bishkek, Kyrgyz Republic: GKR.

Government of the Kyrgyz Republic (GKR). 2012b. The Land Code of the Kyrgyz Republic (Amended as of May 7, 2012, N 46, and August 9, 2012, N 159. Bishkek, Kyrgyz Republic.

Government of the Kyrgyz Republic (GKR). 2012c. UNGASS Country Progress Report on HIV/AIDS Response, Reporting Period of January 2010-December 2011. Bishkek, Kyrgyz Republic: GKR.

Gray, R.H., G. Kigozi, D. Serwadda, F. Makumbi, S. Watya, F. Nalugoda, N. Kiwanuka, L.H. Moulton, M.A. Chaudhary, M.Z. Chen, N.K. Sewankambo, F. Wabwire-Managen, M.C. Bacon, C.F.M. Williams, P. Opendi, S.J. Reynolds, O. Laeyendecker, T.C. Quinn, and M.J. Wawer. 2007. Male circumcision for HIV Prevention in Men in Rakai, Uganda: a Randomised Trial. *The Lancet* 369(9562):657-66.

Gurbansoltan Eje Clinical Research Center for Maternal and Child Health (GECRCMCH), Ministry of Health and Medical Industry [Turkmenistan], and ORC Macro. 2001. *Turkmenistan Demographic and Health Survey* 2000. Calverton, Maryland, USA: GECRCMCH and ORC Macro.

Hausmann, Ricardo, Laura D. Tyson, and Saadia Zahidi. 2012. *The Global Gender Gap Report*. Geneva. Switzerland: World Economic Forum.

Heise, L., J. Pitanguy, and A. Germain. 1994. *Violence against Women: The Hidden Health Burden.* Washington, D.C.: The World Bank.

Heise, L., M. Ellsberg, and M. Gottemoeller. 1999. *Ending Violence against Women*. Population Reports, Series L, No. 11. Baltimore, Maryland, USA.: Johns Hopkins University School of Public Health, Population Information Program.

Ibraimova, A., B. Akkazieva, A. Ibraimov, E. Manzhieva, and B. Rechel. 2011. Kyrgyzstan: Health System Review. *Health Systems in Transition*, 2011; 13(3):1–152

ICF International. 2013. MEASURE DHS STATcompiler - http://www.statcompiler.com - June 17, 2013.

International Council for Control of Iodine Deficiency Disorders (ICCIDD), United Nations Children's Fund (UNICEF), and World Health Organization (WHO). 2001. *Assessment of Iodine Deficiency Disorders and Monitoring Their Elimination: A Guide for Programme Managers*. Geneva, Switzerland: ICCIDD, UNICEF, and WHO.

Jejeeboy, S.J. 1998. Associations between Wife-beating and Fetal and Infant Death: Impressions from a Survey in Rural India. *Studies in Family Planning* 29(3): 300-308.

Kish, L. 1965. *Survey Sampling.* New York: John Wiley and Sons Inc.

Krug, E.G., L. Dahlberg, J. Mercy, A. Zwi, and R. Lozano, eds. 2002. *World Report on Violence and Health.* Geneva, Switzerland: World Health Organization.

Luby, S.P., M. Agboatwalla, D.R. Feikin, et al. Effect of Handwashing on Child Health: A Randomised Controlled Trial. *Lancet* 2005; 366: 225-233.

Ministry of Health of the Kyrgyz Republic. 2001. MOH Decree Number 107, June 4, 2001. About Introduction of a Routine Immunization against Hepatitis B in the Kyrgyz Republic. Bishkek, Kyrgyz Republic: MOH.

Ministry of Health of the Kyrgyz Republic. 2002. MOH Decree Number 25, January 24, 2002. About Introduction of a Three-Component Vaccine against Measles, Mumps and Rubella (MMR) and a Two-Component Vaccine against Measles and Rubella (MR) in the Kyrgyz Republic. Bishkek, Kyrgyz Republic: MOH.

Ministry of Health of the Kyrgyz Republic. 2009a. Clinical Protocols in Obstetrics and Gynecology for the Primary, Secondary and Tertiary Health Care Levels. Volume 3. Bishkek, Kyrgyz Republic: MOH.

Ministry of Health of the Kyrgyz Republic. 2009b. MOH Decree Number 117, March 13, 2009. About Introduction of the Pentavalent Vaccine (DPT-HepB-HiB) for Childhood Immunization. Bishkek, Kyrgyz Republic: MOH.

Ministry of Health [Kyrgyz Republic], National Statistical Committee (NSC), United Nations Children's Fund (UNICEF), and Centers for Disease Control and Prevention (CDC). 2012. *National Survey of the Nutritional Status of Children 6-59 Months of Age and Their Mothers. Kyrgyz Republic, 2009*. Bishkek. Kyrgyz Republic: UNICEF.

Mosley, W. Henry, and Lincoln C. Chen. 1984. An Analytical Framework for the Study of Child Survival in Developing Countries. *Population and Development Review*, Supplement to Vol. 10: 25-45.

National Institute of Population Studies (NIPS) [Pakistan] and ICF International Inc. 2013. *Pakistan Demographic and Health Survey 2012-13: Preliminary Report.* Islamabad, Pakistan: National Institute of Population Studies and ICF International Inc.

National Scientific and Applied Center for Preventive Medicine (NCPM) [Moldova] and ORC Macro. 2006. *Moldova Demographic and Health Survey 2005.* Calverton, Maryland: NCPM and ORC Macro.

National Statistical Committee (NSC) of the Kyrgyz Republic, United Nations Children's Fund. 2007. *Multiple Indicator Cluster Survey 2006.* Bishkek, Kyrgyz Republic: NSC.

National Statistical Committee (NSC) of the Kyrgyz Republic (NSC) 2011. *Twenty years of Independence of the Kyrgyz Republic.* Bishkek, Kyrgyz Republic: NSC.

National Statistical Committee (NSC) of the Kyrgyz Republic (NSC) 2012a. *Demographic Yearbook 2007-2011*. Bishkek, Kyrgyz Republic: NSC.

National Statistical Committee (NSC) of the Kyrgyz Republic (NSC) 2012b. *Kyrgyzstan in Numbers*. Bishkek, Kyrgyz Republic: NSC.

National Statistical Committee (NSC) of the Kyrgyz Republic (NSC) 2013a. *Demographic Yearbook 2008-2012*. Bishkek, Kyrgyz Republic: NSC.

National Statistical Committee (NSC) of the Kyrgyz Republic (NSC) 2013b. System of Statistical estimates, Dynamic Tables, Table 5.01.00.16 Reference data on the population**.** Bishkek, Kyrgyz Republic: NSC. Internet access: http://www.stat.kg/stat.files/din.files/census/5010016.pdf.

National Statistical Service (NSS) [Armenia], Ministry of Health (MOH), and ICF International. 2012. *Armenia Demographic and Health Survey 2010.* Calverton, Maryland: NSS, MOH [Armenia], and ICF International.

Pan American Health Organization (PAHO) and World Health Organization (WHO). 2003. *Guiding Principles for Complementary Feeding of the Breastfed Child.* Washington, D.C. and Geneva, Switzerland: WHO.

Research Institute of Obstetrics and Pediatrics (RIOP) [Kyrgyz Republic] and Macro International Inc. 1998. *Kyrgyz Republic Demographic and Health Survey, 1997.* Calverton, Maryland: RIOP, Ministry of Health of the Kyrgyz Republic, and Macro International Inc.

Rutstein, S.O. 2005. Effects of Preceding Birth Intervals on Neonatal, Infant and Under Five Years Mortality and Nutritional Status in Developing Countries: Evidence from the Demographic and Health Surveys. *International Journal of Gynecology & Obstetrics* 89 (Suppl. 1):S7-24. doi:10.1016/j.ijgo.2004.11.012.

Rutstein, S.O., and K. Johnston. 2004. *The DHS Wealth Index*. DHS Comparative Report No. 6. Calverton, Maryland: ORC Macro.

Rutstein, S., K. Johnston, and D. Gwatkin. 2000. *Poverty, Health Inequality, and Its Health and Demographic Effects*. Paper presented at the 2000 annual meeting of the Population Association of America, Los Angeles, California.

State Statistical Committee (SSC) [Azerbaijan] and Macro International Inc. 2008. *Azerbaijan Demographic and Health Survey 2006*. Calverton, Maryland, USA: State Statistical Committee and Macro International Inc.

Statistical Agency (SA) under the President of the Republic of Tajikistan. Ministry of Health [Tajikistan], and ICF International. 2012. *Tajikistan Demographic and Health Survey 2012, Preliminary Report*. Calverton, Maryland, USA: Statistical Agency and ICF International Inc.

Strauss, M.A. 1990. Measuring Intra-Family Conflict and Violence: The Conflict Tactics Scale. In *Physical Violence in American Families: Risk Factors and Adaptation to Violence in 8,145 Families*. New Brunswick, New Jersey: Transaction Publications.

The Joint United Nations Programme on HIV/AIDS (UNAIDS). 2009. Consultation on Concurrent Sexual Partnerships: Recommendations from a Meeting of the UNAIDS Reference Group on Estimates, Modelling and Projections held in Nairobi, Kenya, April 20-21st 2009. London, England: UNAIDS.

The Joint United Nations Programme on HIV/AIDS (UNAIDS). 2013. Accessed online on 9 June 2013. http://www.unaids.org/en/regionscountries/countries/ kyrgyzstan/.

Ukrainian Center for Social Reforms (UCSR), State Statistical Committee (SSC) [Ukraine], Ministry of Health (MOH) [Ukraine], and Macro International Inc. 2008. *Ukraine Demographic and Health Survey 2007*. Calverton, Maryland, USA: UCSR and Macro International.

United Nations Development Program (UNDP). 2013a. Accessed on line on 9 June 2013. www.undp.kg/en/hiv.

United Nations Development Program (UNDP). 2013b. *Human Development Report 2013*. New York: UNDP.

United Nations Development Program (UNDP). 1994. *Report of the International Conference on Population and Development*. A/CONF.171/13, electronic version made available by the United Nations

Population Information Network (POPIN) Gopher of the Population Division, Department for Economic and Social Information and Policy Analysis.

United Nations General Assembly. 1991. *Advancement of Women: Convention on the Elimination of All Forms of Discrimination against Women, Report of the Secretary-General*. New York: United Nations.

World Bank. 2013. *Kyrgyz Republic Early Childhood Development, SABER Country Report 2013*. Washington, DC: World Bank.

World Health Organization (WHO) and UNICEF. 1998. *Complementary Feeding of Young Children in Developing Countries: A Review of Current Scientific Knowledge*. Geneva, Switzerland: WHO and UNICEF.

World Health Organization (WHO). 2000. *Immunization and Health Care Reform in the Kyrgyz Republic*. Geneva: World Health Organization (WHO/V&B/99.33).

World Health Organization (WHO). 2001a. *Iron Deficiency Anemia: Assessment, Prevention, and Control. A Guide for Program Managers*. Geneva: World Health Organization (WHO/NHD/01.3).

World Health Organization (WHO). 2001b. *Putting Women First: Ethical and Safety Recommendations for Research on Domestic Violence against Women.* Geneva, Switzerland: World Health Organization, Department of Gender and Women's Health,.

World Health Organization (WHO). 2005. *Guiding Principles for Feeding Nonbreastfed Children 6 to 24 Months of Age*. Geneva, Switzerland: WHO.

World Health Organization (WHO). 2006a. *Birth Spacing: Report from a WHO Technical Consultation.* Genev, Switzerland: WHO.

World Health Organization (WHO). 2006b. *Fuel for Life, Household Energy and Health*. Geneva, Switzerland: WHO.

WHO Multicentre Growth Reference Study Group. 2006c. *WHO Child Growth Standards: Length/Height-for-Age, Weight-for-Age, Weight-for-Length, Weight-for-Height and Body Mass Index-for-Age: Methods and Development.* Geneva, Switzerland: World Health Organization.

World Health Organization (WHO). 2008. *Indicators for Assessing Infant and Young Child Feeding Practices: Conclusions of a Consensus Meeting.* Held 6-8 November 2007 in Washington D.C., USA. Geneva, Switzerland: WHO.

World Health Organization (WHO). 2013. Global Database on Child Growth and Malnutrition. At http://www.who.int/nutgrowthdb/database/countries/kgz/en/

Zimmerman, C. 1994. *Plates in a Basket will Rattle: Domestic Violence in Cambodia.* Phnom Penh: The Asia Foundation, USAID.

SAMPLE DESIGN APPENDIX A

A.1 INTRODUCTION

The 2012 Kyrgyz Republic Demographic and Health Survey (2012 KgDHS) is the second DHS survey conducted in the Kyrgyz Republic, following the country's first DHS conducted in 1997, and the Multiple Cluster Indicator Survey (MICS) conducted in 2005. A nationally representative sample of about 8,216 households was selected. All women age 15-49 who were usual members of the selected households or who spent the night before the survey in the households were eligible. In addition, among all women age 15-49 eligible for individual interview in all selected households, only one woman per household was selected for the domestic violence module. The main objectives of the KgDHS 2012 survey were to provide up-to-date information on fertility and fertility preferences; childhood mortality levels; awareness and use of family planning methods; maternal and child health; knowledge and attitudes toward HIV/AIDS and other sexually transmitted infections (STI). The survey was designed to produce representative results for the country as a whole, for the urban and the rural areas separately, and for each of the nine administrative regions (oblast).

In addition, a male survey was simultaneously conducted in a subsample of one-third of the households selected for the female survey. All men age 15-49 who were usual members of the selected households or who spent the night before the survey in the households were eligible. The survey collected information on men's basic demographic status; use of family planning methods; and knowledge and attitudes toward HIV/AIDS and other sexually transmitted infections (STIs).

A.2 SAMPLE FRAME

The sampling frame used for the KgDHS 2012 is the Population and Housing Census of the Kyrgyz Republic (PHCKR) conducted in 2009 and provided by the National Statistical Committee of (NSC) of the Kyrgyz Republic. The sampling frame is a complete list of enumeration areas (EAs) covering the whole country, created for the 2009 PHCKR. An EA is a geographic area consisting of a convenient number of inhabitants, which served as counting unit for the census, with an average size of 405 inhabitants per EA. It contains information about its administration, type of residences, and the number of residential structures and inhabitants. A sketch map, available for each EA, delimits the geographic boundaries of the EA.

Administratively, the Kyrgyz Republic is divided into nine administrative regions or oblasts. Each region is subdivided into districts or rayons, each rayon into municipalities, and each municipality into settlements. In the Kyrgyz Republic, there are 9 oblasts, 13 oblast level cities, 44 rayons, and 10 rayon-level cities as well as a large number of municipalities and settlements. In rural areas, an EA is a village, a group of small villages, or a part of a large village; in urban areas, an EA is a city block.

Table A.1 gives the percent distribution of households by region and by type of residence. The proportion of each region's population varies from 4.2 percent (Talas, the smallest) to 20.5 percent (Osh Oblast, the largest) of the country. In the Kyrgyz Republic, 34.5 percent of the household population lives in urban areas. Table A.2 gives the distribution of EAs by region and by type of residence. Among the total number of 13,297 EAs, 4,123 are in urban areas and 9,174 are in rural areas. Table A.3 gives the average EA size in population by region and by type of residence. The average EA size in population is 451 inhabitants in urban areas and 385 inhabitants in rural areas, with a national average of 405 inhabitants per EA.

Table A.1 Population

Distribution of the population in the sampling frame by region and residence, Kyrgyz Republic 2012

Region	Population in the frame			Percent of total population
	Urban	Rural	Total	
Issyk-Kul	28.6	71.4	100.0	8.1
Djalal-Abad	22.7	77.3	100.0	18.8
Naryn	15.1	84.9	100.0	4.8
Batken	24.1	75.9	100.0	7.9
Osh	8.1	91.9	100.0	20.5
Talas	14.9	85.1	100.0	4.2
Chui	18.0	82.0	100.0	14.7
Bishkek City	99.5	0.5	100.0	16.1
Osh City	90.1	9.9	100.0	4.8
Kyrgyz Republic	34.5	65.5	100.0	100.0

Note: Does not include nonresidential (collective) population.

Table A.2 Enumeration areas

Distribution of the enumeration areas in the sampling frame by region and residence, Kyrgyz Republic 2012

Region	Number of enumeration areas in frame		
	Urban	Rural	Total
Issyk-Kul	259	790	1,049
Djalal-Abad	484	2,055	2,539
Naryn	95	573	668
Batken	221	820	1,041
Osh	184	2,670	2,854
Talas	74	480	554
Chui	302	1,712	2,014
Bishkek City	1,961	11	1,972
Osh city	543	63	606
Kyrgyz Republic	4,123	9,174	13,297

Note: Does not include nonresidential (collective) population.

Table A.3 Average size of enumeration areas in population

Distribution of the average size of enumeration areas in population in the sampling frame by region and residence, Kyrgyz Republic 2012

Region	Average size of enumeration area in population		
	Urban	Rural	Total
Issyk-Kul	482	395	417
Djalal-Abad	476	381	399
Naryn	412	384	388
Batken	465	396	410
Osh	488	381	388
Talas	455	402	409
Chui	475	381	395
Bishkek City	441	380	440
Osh city	428	404	426
Kyrgyz Republic	451	385	405

Note: Does not include nonresidential (collective) population.

A.3 SAMPLE DESIGN AND IMPLEMENTATION

The sample for KgDHS 2012 is a stratified sample selected in two stages. Stratification is achieved by separating each region into urban and rural areas. In total, 18 sampling strata have been created. Samples were selected independently in each stratum, by a two-stage selection procedure, according to the sample allocation given in Table A.4. Implicit stratification and proportional allocation were achieved at each of the lower administrative levels by sorting the sampling frame within each sampling stratum before sample selection, according to administrative units in different levels and by using a probability proportional to size selection at the first stage's sampling.

In the first stage, 316 EAs were selected with a probability proportional to the EA size and with independent selection in each sampling stratum. The EA size is the number of residential inhabitants residing in the EA recorded in the 2009 population census. A household listing operation was carried out in all the selected EAs, and the resulting lists of households served as a sampling frame for the selection of households in the second stage. Some of the selected EAs may be of a large size. To minimize the task of household listing, selected EAs with more than 200 households were segmented. Only one segment was selected for the survey, with probability proportional to the segment size. Household listing was conducted only in the selected segment (see detailed instructions for segmentation in the Manual for the Household Listing). Therefore, a KgDHS 2012 cluster is either an EA or a segment of an EA.

In the second stage of selection, a fixed number of 26 households per cluster was selected using equal probability systematic selection from the newly created household listing. The survey interviewers were asked to interview only the pre-selected households. No replacements and no changes of the pre-selected households were allowed in the implementing stages to prevent bias. All women age 15-49 who were usual members of the selected households or who spent the night before the survey in the selected households were eligible for the female survey. A subsample of one in every three households selected for the female survey was selected for the male survey. All men age 15-49 who were usual members of the selected households or who spent the night before the survey in the selected households were eligible for the male survey.

Table A.4 shows the sample allocation of clusters and households by region, according to residence; Table A.5 shows the sample allocation of expected number of completed interviews with women and men by region, according to residence. To make sure that the survey precisions are comparable across regions, the sample allocation features a power allocation among regions and between urban and rural residences within each region. With a fixed sample take of 26 households per cluster, the survey selected 316 EAs. Among these EAs, 111 were in urban areas, and 205 were in rural areas. Among the 8,216 selected residential households, 2,886 were in urban areas and 5,330 in rural areas. The survey expected to achieve about 10,050 completed interviews with women; 3,532 in urban areas and 6,518 in rural areas. The expected number of completed interviews with men was about 3,119: 1,095 in urban areas and 2,024 in rural areas.

Table A.4 Sample allocation of clusters and households

Sample allocation of clusters and households by region, according to residence, Kyrgyz Republic 2012

	Sample allocation of clusters			Sample allocation of households		
Region	Urban	Rural	Total	Urban	Rural	Total
Issyk-Kul	10	24	34	260	624	884
Djalal-Abad	8	29	37	208	754	962
Naryn	5	28	33	130	728	858
Batken	8	26	34	208	676	884
Osh	3	35	38	78	910	988
Talas	5	27	32	130	702	832
Chui	7	30	37	182	780	962
Bishkek City	36	2	38	936	52	988
Osh city	29	4	33	754	104	858
Kyrgyz Republic	111	205	316	2,886	5,330	8,216

Table A.5 Sample allocation of completed interviews with women and men

Sample allocation of completed interviews with women and men by region, according to residence, Kyrgyz Republic 2012

	Women 15-49			Men 15-49		
Region	Urban	Rural	Total	Urban	Rural	Total
Issyk-Kul	318	763	1,081	98	237	335
Djalal-Abad	255	922	1,177	79	286	365
Naryn	159	890	1,049	50	276	326
Batken	255	827	1,082	79	257	336
Osh	96	1,114	1,210	29	346	375
Talas	159	858	1,017	50	267	317
Chui	223	954	1,177	69	296	365
Bishkek City	1,145	63	1,208	355	19	374
Osh city	922	127	1,049	286	40	326
Kyrgyz Republic	3,532	6,518	10,050	1,095	2,024	3,119

Note: Male survey is in 1/3 households selected for women survey.

The sample allocations are calculated based on the facts obtained from the MICS 2005 survey. The average number of women age 15-49 per household is 1.3 per household; the household's gross response rate is 97 percent; the women's individual response rate is 97 percent. The average number of men age 15-49 is 1.19 per household; the men's response rate is assumed to be 95 percent because there was no male survey in the 2005 MICS.

A.4 SAMPLE PROBABILITIES AND SAMPLE WEIGHTS

Because of the nonproportional allocation of the sample to different regions and to urban and rural areas, and because of the possible differences in response rates, analysis of the 2012 KgDHS data requires the data to be weighted to ensure the actual representation of the survey results at the national level as well as at the domain levels. The 2012 KgDHS sample is a two-stage stratified cluster sample, so sampling weights were calculated based on sampling probabilities for each sampling stage and for each cluster. We use the following notations:

P_{1hi}: first-stage sampling probability of the ith cluster in stratum h

P_{2hi}: second -stage sampling probability within the ith cluster (households)

Let a_h be the number of EAs selected in stratum h, M_{hi} the number of households according to the sampling frame in the ith EA, and $\sum M_{hi}$ the total number of households in the stratum. The probability of selecting the ith EA is calculated as follows:

$$\frac{a_h M_{hi}}{\sum M_{hi}}$$

Let b_{hi} be the proportion of households in the selected cluster compared with the total number of households in EA i in stratum h if the EA is segmented, otherwise $b_{hi} = 1$. Then the probability of selecting cluster i in the sample is the following:

$$P_{1hi} = \frac{a_h M_{hi}}{\sum M_{hi}} \times b_{hi}$$

Let L_{hi} be the number of households listed in the household listing operation in cluster *i* in stratum *h*, and let g_{hi} be the number of households selected in the cluster. The second stage's selection probability for each household in the cluster is calculated as follows:

$$P_{2hi} = \frac{g_{hi}}{L_{hi}}$$

The overall selection probability of each household in cluster *i* of stratum *h* is therefore the production of the two stages of selection probabilities:

$$P_{hi} = P_{1hi} \times P_{2hi}$$

The design weight for each household in cluster *i* of stratum *h* is the inverse of its overall selection probability:

$$W_{hi} = 1 / P_{hi}$$

A spreadsheet containing all sampling parameters and selection probabilities is prepared to facilitate the calculation of the design weight. Next, the design weight is adjusted for household nonresponse and individual nonresponse to get the sampling weights for households and for women and men, respectively. Nonresponse is adjusted at the sampling stratum level. For the household sampling weight, the household design weight is multiplied by the inverse of the household response rate, by stratum. For the women's individual sampling weight, the household sampling weight is multiplied by the inverse of the women's individual response rate, by stratum. For the men's individual sampling weight, the household sampling weight is multiplied by the inverse of the men's individual response rate, by stratum. After adjusting for nonresponse, the sampling weights are normalized to get the final standard weights that appear in the data files. The normalization process is done to obtain a total number of unweighted cases equal to the total number of weighted cases at the national level, for the total number of households, women, and men. Normalization is done by multiplying the sampling weight by the estimated sampling fraction obtained from the survey for the household weight, the individual woman's weight, and the individual man's weight. The normalized weights are relative weights, which are valid for estimating means, proportions, ratios, and rates, but which are not valid for estimating population totals or for pooled data.

A.5 SURVEY RESULTS

Tables A.6 shows the survey implementation results by giving the number of households selected and interviewed, women eligible and interviewed, and the various response rates. According to the definition of each category, the completion rates for the household survey and the woman's survey are based on the following formula. The household completion rate is calculated by:

$$\frac{100 * C}{C + HP + R + DNF}$$

The eligible women completion rate (EWC) is equivalent to the percentage of interviews completed over total eligible women calculated by:

$$\frac{100 * EWC}{EWC + EWNH + EWR + EWPC + EWI + EWO}$$

Table A.6 Sample implementation: Women

Percent distribution of households and eligible women by results of the household and individual interviews, and household, eligible women and overall women response rates, according to urban-rural residence and region (unweighted), Kyrgyz Republic 2012

	Residence		Region									
Result	Urban	Rural	Issyk-Kul	Djalal-Abad	Naryn	Batken	Osh Oblast	Talas	Chui	Bishkek City	Osh City	Total
Selected households												
Completed (C)	97.7	98.1	99.0	96.6	97.3	95.5	99.0	99.2	99.3	97.4	98.4	98.0
Household present but no competent respondent at home (HP)	0.2	0.3	0.2	1.0	0.3	0.2	0.1	0.2	0.0	0.2	0.0	0.3
Refused (R)	0.2	0.2	0.2	0.0	0.0	0.3	0.0	0.5	0.4	0.5	0.1	0.2
Dwelling not found (DNF)	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Household absent (HA)	0.8	0.7	0.0	1.6	0.2	2.1	0.7	0.1	0.1	0.2	1.4	0.7
Dwelling vacant/address not a dwelling (DV)	1.0	0.6	0.6	0.5	1.5	1.8	0.2	0.0	0.2	1.6	0.1	0.7
Dwelling destroyed (DD)	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Other (O)	0.1	0.0	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	2,886	5,322	884	953	858	884	988	832	963	992	854	8,208
Household response rate (HRR)[1]	99.5	99.4	99.5	98.8	99.5	99.4	99.9	99.3	99.6	99.3	99.9	99.5
Eligible women												
Completed (EWC)	99.1	99.0	99.1	98.1	99.4	98.3	99.5	99.5	99.4	98.6	100.0	99.1
Not at home (EWNH)	0.5	0.2	0.4	0.6	0.0	0.3	0.2	0.2	0.0	1.0	0.0	0.3
Refused (EWR)	0.1	0.3	0.4	0.3	0.3	0.6	0.2	0.0	0.1	0.3	0.0	0.2
Partly completed (EWPC)	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0
Incapacitated (EWI)	0.2	0.4	0.0	1.1	0.3	0.8	0.2	0.3	0.2	0.0	0.0	0.3
Other (EWO)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	2,757	5,529	794	1,032	670	987	1,254	926	864	1,031	728	8,286
Eligible women response rate (EWRR)[2]	99.1	99.0	99.1	98.1	99.4	98.3	99.5	99.5	99.4	98.6	100.0	99.1
Overall women response rate (ORR)[3]	98.6	98.5	98.7	96.9	98.9	97.7	99.4	98.7	99.0	97.9	99.9	98.5

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + R + DNF}$$

[2] The eligible women response rate (EWRR) is equivalent to the percentage of interviews completed (EWC).

[3] The overall women response rate (OWRR) is calculated as:

$$OWRR = HRR * EWRR/100$$

Table A.7 shows the survey implementation results by giving the number of households selected and interviewed, men eligible and interviewed, and the various response rates. According to the definition of each category, the completion rates for the household survey and the man's survey are based on the following formula. The household completion rate is calculated by:

$$\frac{100 * C}{C + HP + R}$$

The eligible men completion rate (EMC) is equivalent to the percentage of interviews completed over total eligible men calculated by:

$$\frac{100 * EMC}{EMC + EMNH + EMP + EMR + EMI + EMO}$$

Table A.7 Sample implementation: Men

Percent distribution of households and eligible men by results of the household and individual interviews, and household, eligible men, and overall men response rates, according to urban-rural residence and region (unweighted), Kyrgyz Republic 2012

	Residence		Region									
Result	Urban	Rural	Issyk-Kul	Djalal-Abad	Naryn	Batken	Osh Oblast	Talas	Chui	Bishkek City	Osh City	Total
Selected households												
Completed (C)	97.9	98.2	98.0	97.3	96.6	97.7	98.5	99.3	99.4	97.4	98.6	98.1
Household present but no competent respondent at home (HP)	0.2	0.5	0.7	1.2	0.7	0.0	0.0	0.3	0.0	0.6	0.0	0.4
Refused (R)	0.2	0.2	0.3	0.0	0.0	0.3	0.0	0.3	0.0	0.9	0.0	0.2
Household absent (HA)	0.6	0.5	0.0	1.5	0.3	0.7	1.2	0.0	0.0	0.0	1.4	0.6
Dwelling vacant/address not a dwelling (DV)	0.9	0.5	1.0	0.0	1.3	1.3	0.3	0.0	0.6	1.2	0.0	0.6
Dwelling destroyed (DD)	0.0	0.1	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Other (O)	0.2	0.0	0.0	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	996	1,838	306	328	297	306	342	288	330	342	295	2,834
Household response rate (HRR)[1]	99.6	99.3	99.0	98.8	99.3	99.7	100.0	99.3	100.0	98.5	100.0	99.4
Eligible men												
Completed (EMC)	97.7	96.3	92.4	94.3	97.0	98.3	97.7	97.2	97.2	97.2	99.4	96.7
Not at home (EMNH)	0.7	1.4	3.2	0.9	1.3	0.7	1.5	1.6	0.0	1.2	0.0	1.2
Postponed (EMP)	0.0	0.1	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Refused (EMR)	1.1	1.6	3.6	3.1	0.4	0.3	0.8	0.9	2.0	1.6	0.6	1.5
Incapacitated (EMI)	0.4	0.6	0.4	1.3	1.3	0.7	0.0	0.3	0.8	0.0	0.0	0.5
Other (EMO)	0.0	0.1	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of men	706	1,789	251	318	235	293	397	321	247	252	181	2,495
Eligible men response rate (EMRR)[2]	97.7	96.3	92.4	94.3	97.0	98.3	97.7	97.2	97.2	97.2	99.4	96.7
Overall men response rate (ORR)[3]	97.3	95.6	91.5	93.2	96.3	98.0	97.7	96.5	97.2	95.8	99.4	96.1

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + R}$$

[2] The eligible men response rate (EMRR) is equivalent to the percentage of interviews completed (EMC).

[3] The overall men response rate (OMRR) is calculated as:

$$OMRR = HRR * EMRR/100$$

ESTIMATES OF SAMPLING ERRORS APPENDIX B

Estimates from a sample survey are affected by two types of errors: (1) nonsampling errors and (2) sampling errors. Nonsampling errors result from mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions by either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 2012 Kyrgyz Republic Demographic and Health Survey (KgDHS) to minimize this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 2012 KgDHS is only one of many samples that could have been selected from the same population, using the same design and identical size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability among all possible samples. Although the exact degree of variability is unknown, it can be estimated from the survey results.

Sampling error is usually measured in terms of the *standard error* for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2012 KgDHS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulas. Sampling errors are computed in SAS, using programs developed by ICF Macro. This program uses the Taylor linearization method for variance estimation for survey estimates that are means, proportions, or ratios. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate, $r = y/x$, where y represents the total sample value for variable y, and x represents the total number of cases in the group or subgroup under consideration. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

$$SE^2(r) = var(r) = \frac{1}{x^2}\sum_{h=1}^{H}\left[(1-f_h)\frac{m_h}{m_h-1}\left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h}\right)\right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi}\text{, and } z_h = y_h - rx_h$$

where h represents the stratum which varies from 1 to H,
m_h is the total number of clusters selected in the hth stratum,
y_{hi} is the sum of the weighted values of variable y in the ith cluster in the hth stratum,
x_{hi} is the sum of the weighted number of cases in the ith cluster in the hth stratum, and
f_h is the sampling fraction of PSU in the hth stratum, which is small and ignored

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample and then calculates standard errors for these estimates using simple formulas. Each replication considers *all but one* cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2012 KgDHS, there were 316 non-empty clusters. Hence, 316 replications were created. The variance of a rate r is calculated as follows:

$$SE^2(r) = var(r) = \frac{1}{k(k-1)} \sum_{i=1}^{k} (r_i - r)^2$$

in which

$$r_i = kr - (k-1)r_{(i)}$$

where r is the estimate computed from the full sample of 316 clusters,
$r_{(i)}$ is the estimate computed from the reduced sample of 315 clusters (i^{th} cluster excluded), and
k is the total number of clusters.

In addition to the standard error, the design effect (DEFT) for each estimate is also calculated. The design effect is defined as the ratio between the standard error using the given sample design and the standard error that would result if a simple random sample had been used. A DEFT value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a value greater than 1.0 indicates the increase in the sampling error due to the use of a more complex and less statistically efficient design. Relative standard errors and confidence limits for the estimates are also calculated.

Sampling errors for the 2012 KgDHS are calculated for selected variables considered to be of primary interest for the woman's survey and the man's survey, respectively. The results are presented in this appendix for the country as a whole, for urban and rural areas separately, and for each of the nine regions. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B.2 through B.13 present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits (R±2SE) for each variable. The DEFT is considered undefined when the standard error considering a simple random sample is zero (when the estimate is close to 0 or 1). In the case of the total fertility rate, the number of unweighted cases is not relevant, as there is no known unweighted value for woman-years of exposure to childbearing.

The confidence interval (e.g., as calculated for *children ever born to women over age 40-49*) can be interpreted as follows: the overall average from the national sample is 3.389 and its standard error is 0.064. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e., 3.389±2×0.064. There is a high probability (95 percent) that the *true* average number of children ever born to all women age 40 to 49 is between 3.261 and 3.516.

For the total sample, the value of the DEFT, averaged over all variables for the woman's survey, is 1.411. Because the sample is multistage, with clustering, the average standard error is increased by a factor of 1.411 over that in an equivalent simple random sample.

Table B.1 List of selected indicators for sampling errors, Kyrgyz DHS 2012

Variable	Estimate	Base population
	WOMEN	
Urban residence	Proportion	All women 15-49
No education	Proportion	All women 15-49
Secondary education or higher	Proportion	All women 15-49
Never married/in union	Proportion	All women 15-49
Currently married/in union	Proportion	All women 15-49
Married before age 20	Proportion	All women 25-49
Had sexual intercourse before age 18	Proportion	All women 25-49
Currently pregnant	Proportion	All women 15-49
Children ever born	Mean	All women 15-49
Children surviving	Mean	All women 15-49
Children ever born to women age 40-49	Mean	All women 40-49
Know any contraceptive method	Proportion	Currently married women 15-49
Know a modern method	Proportion	Currently married women 15-49
Currently using any method	Proportion	Currently married women 15-49
Currently using a modern method	Proportion	Currently married women 15-49
Currently using a traditional method	Proportion	Currently married women 15-49
Currently using pill	Proportion	Currently married women 15-49
Currently using IUD	Proportion	Currently married women 15-49
Currently using condoms	Proportion	Currently married women 15-49
Currently using injectables	Proportion	Currently married women 15-49
Currently using female sterilization	Proportion	Currently married women 15-49
Currently using rhythm	Proportion	Currently married women 15-49
Currently using withdrawal	Proportion	Currently married women 15-49
Want no more children	Proportion	Currently married women 15-49
Want to delay next birth at least 2 years	Proportion	Currently married women 15-49
Ideal number of children	Mean	All women 15-49
Mothers received antenatal care for last birth	Proportion	Women with at least one live birth in five years before survey
Births with skilled attendant at delivery	Proportion	Births occurring 1-59 months before survey
Had diarrhea in the past 2 weeks	Proportion	Children under 5
Treated with ORS	Proportion	Children under 5
Sought medical treatment	Proportion	Children under 5 with diarrhea in past 2 weeks
Vaccination card seen	Proportion	Children under 5 with diarrhea in past 2 weeks
Received BCG vaccination	Proportion	Children 18-29 months
Received DPT vaccination (3 doses)	Proportion	Children 18-29 months
Received polio vaccination (3 doses)	Proportion	Children 18-29 months
Received measles vaccination	Proportion	Children 18-29 months
Received all vaccinations	Proportion	Children 18-29 months
Height-for-age (-2SD)	Proportion	Children under 5 who are measured
Weight-for-height (-2SD)	Proportion	Children under 5 who are measured
Weight-for-age (-2SD)	Proportion	Children under 5 who are measured
Prevalence of anemia (children 6-59 months)	Proportion	All children 6-59 months who were tested
Prevalence of anemia (women 15-49)	Proportion	All women 15-49 who were tested
Body mass index (BMI) < 18.5	Proportion	All women 15-49 who are measured
Has heard about HIV/AIDS	Proportion	All women 15-49
Know about condoms	Proportion	All women 15-49
Know about limiting partners	Proportion	All women 15-49
Abstinence among youth (never had sex)	Proportion	Never-married women 15-24
Sexually active in past 12 months among never-married youth	Proportion	Never-married women 15-24
Had an HIV test and received results in past 12 months	Proportion	All women 15-49
Accepting attitudes towards people with HIV	Proportion	All women 15-49 who have heard of HIV/AIDS
Ever experienced any physical violence since age 15	Proportion	All women 15-49
Ever experienced any sexual violence	Proportion	All women 15-49
Ever experienced any physical or sexual violence by any husband/ partner	Proportion	All ever-married women 15-49
Ever experienced any physical or sexual violence by husband/partner in the last 12 months	Proportion	All ever-married women 15-49
Total abortion rate (3 years)	Rate	Women-years of exposure to childbearing
Total fertility rate (3 years)	Rate	Women-years of exposure to childbearing
Neonatal mortality rate[1]	Rate	Children exposed to the risk of mortality
Post-neonatal mortality rate[1]	Rate	Children exposed to the risk of mortality
Infant mortality rate[1]	Rate	Children exposed to the risk of mortality
Child mortality rate[1]	Rate	Children exposed to the risk of mortality
Under-5 mortality rate[1]	Rate	Children exposed to the risk of mortality
	MEN	
Urban residence	Proportion	All men 15-49
No education	Proportion	All men 15-49
Secondary education or higher	Proportion	All men 15-49
Never married/in union	Proportion	All men 15-49
Currently married/in union	Proportion	All men 15-49
Had sexual intercourse before age 18	Proportion	All men 25-49
Know any contraceptive method	Proportion	Currently married men 15-49
Know a modern method	Proportion	Currently married men 15-49
Want no more children	Proportion	Currently married men 15-49
Want to delay next birth at least 2 years	Proportion	Currently married men 15-49
Ideal number of children	Mean	All men 15-49
Had 2+ sexual partners in past 12 months	Proportion	All men 15-49
Abstinence among youth (never had sex)	Proportion	Never-married men 15-24
Sexually active in past 12 months among never-married youth	Proportion	Never-married men 15-24
Paid for sexual intercourse in past 12 months	Proportion	All men 15-49
Had an HIV test and received results in past 12 months	Proportion	All men 15-49
Accepting attitudes towards people with HIV	Proportion	All men 15-49

[1] The mortality rates are calculated for 5 years and 10 years before the survey for the national sample and regional samples, respectively.

Table B.2 Sampling errors: Total sample, Kyrgyz Republic 2012

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
			WOMEN					
Urban residence	0.374	0.015	8,208	8,208	2.736	0.039	0.345	0.403
No education	0.001	0.000	8,208	8,208	0.836	0.407	0.000	0.001
Secondary education or higher	0.995	0.001	8,208	8,208	1.544	0.001	0.993	0.998
Never married/never in union	0.274	0.008	8,208	8,208	1.546	0.028	0.258	0.289
Currently married/in union	0.640	0.009	8,208	8,208	1.726	0.014	0.622	0.659
Married before age 20	0.426	0.010	5,103	5,044	1.486	0.024	0.406	0.447
Had sexual intercourse before age 18	0.141	0.007	5,103	5,044	1.408	0.049	0.127	0.154
Currently pregnant	0.067	0.003	8,208	8,208	1.175	0.048	0.061	0.074
Children ever born	1.856	0.034	8,208	8,208	1.737	0.018	1.788	1.924
Children surviving	1.777	0.032	8,208	8,208	1.722	0.018	1.713	1.841
Children ever born to women age 40-49	3.389	0.064	1,825	1,837	1.626	0.019	3.261	3.516
Know any contraceptive method	0.989	0.001	5,478	5,256	1.058	0.001	0.986	0.992
Know a modern method	0.989	0.001	5,478	5,256	1.058	0.001	0.986	0.992
Currently using any method	0.363	0.009	5,478	5,256	1.333	0.024	0.346	0.380
Currently using a modern method	0.337	0.008	5,478	5,256	1.269	0.024	0.320	0.353
Currently using a traditional method	0.026	0.003	5,478	5,256	1.222	0.101	0.021	0.031
Currently using pill	0.015	0.002	5,478	5,256	1.134	0.123	0.012	0.019
Currently using IUD	0.221	0.007	5,478	5,256	1.298	0.033	0.207	0.236
Currently using condoms	0.077	0.005	5,478	5,256	1.322	0.062	0.067	0.086
Currently using injectables	0.005	0.001	5,478	5,256	1.207	0.230	0.003	0.007
Currently using female sterilization	0.016	0.002	5,478	5,256	1.205	0.128	0.012	0.020
Currently using rhythm	0.002	0.001	5,478	5,256	1.212	0.328	0.001	0.004
Currently using withdrawal	0.023	0.002	5,478	5,256	1.160	0.102	0.018	0.028
Want no more children	0.261	0.008	5,478	5,256	1.365	0.031	0.245	0.278
Want to delay next birth at least 2 years	0.277	0.008	5,478	5,256	1.376	0.030	0.260	0.293
Ideal number of children	3.919	0.032	7,928	7,927	1.962	0.008	3.855	3.983
Mothers received antenatal care for last birth	0.970	0.005	3,148	3,014	1.746	0.006	0.959	0.981
Births with skilled attendant at delivery	0.991	0.002	4,363	4,082	1.380	0.002	0.987	0.996
Had diarrhea in the past 2 weeks	0.052	0.005	4,247	3,975	1.385	0.098	0.041	0.062
Treated with ORS	0.354	0.037	223	205	1.072	0.106	0.280	0.429
Sought medical treatment for diarrhea	0.546	0.047	223	205	1.288	0.086	0.453	0.640
Vaccination card seen	0.864	0.015	871	856	1.252	0.017	0.835	0.894
Received BCG vaccination	0.989	0.006	871	856	1.623	0.006	0.978	1.000
Received DPT vaccination (3 doses)	0.853	0.016	871	856	1.324	0.019	0.821	0.885
Received polio vaccination (3 doses)	0.792	0.017	871	856	1.231	0.021	0.758	0.826
Received measles vaccination	0.965	0.008	871	856	1.299	0.008	0.948	0.981
Received all vaccinations	0.743	0.019	871	856	1.304	0.026	0.704	0.782
Height-for-age (-2SD)	0.177	0.009	4,574	4,337	1.458	0.052	0.159	0.195
Weight-for-height (-2SD)	0.027	0.003	4,574	4,337	1.271	0.119	0.021	0.034
Weight-for-age (-2SD)	0.034	0.003	4,574	4,337	1.169	0.098	0.027	0.041
Prevalence of anemia (children 6-59 months)	0.426	0.013	4,178	3,971	1.560	0.030	0.400	0.451
Prevalence of anemia (women 15-49)	0.352	0.009	8,048	8,001	1.705	0.026	0.334	0.371
Body mass index (BMI) < 18.5	0.073	0.005	7,405	7,423	1.554	0.064	0.063	0.082
Has heard about HIV/AIDS	0.905	0.006	8,208	8,208	1.989	0.007	0.892	0.918
Know about condoms	0.640	0.009	8,208	8,208	1.698	0.014	0.622	0.658
Know about limiting partners	0.746	0.009	8,208	8,208	1.854	0.012	0.728	0.763
Abstinence among youth (never had sex)	0.983	0.003	1,940	2,049	1.169	0.003	0.977	0.990
Sexually active in past 12 months among never-married youth	0.014	0.003	1,940	2,049	1.171	0.220	0.008	0.021
Had an HIV test and received results in past 12 months	0.121	0.005	8,208	8,208	1.388	0.041	0.111	0.131
Accepting attitudes towards people with HIV	0.036	0.003	7,521	7,425	1.466	0.087	0.030	0.042
Ever experienced any physical violence since age 15	0.231	0.010	6,022	6,022	1.753	0.041	0.212	0.250
Ever experienced any sexual violence	0.034	0.003	6,022	6,022	1.301	0.089	0.028	0.040
Ever experienced any physical or sexual violence by any husband/partner	0.266	0.010	4,832	4,361	1.520	0.036	0.247	0.286
Ever experienced any physical or sexual violence by any husband/partner in the last 12 months	0.171	0.009	4,832	4,361	1.593	0.050	0.154	0.189
Total abortion rate (last 3 years)	0.678	0.045	22,963	22,984	1.216	0.066	0.588	0.768
Total fertility rate (last 3 years)	3.633	0.100	22,963	22,984	1.524	0.027	3.434	3.833
Neonatal mortality rate (last 0-4 years)	19.944	3.008	4,405	4,115	1.271	0.151	13.928	25.961
Post-neonatal mortality rate (last 0-4 years)	6.924	1.385	4,380	4,102	1.011	0.200	4.155	9.693
Infant mortality rate (last 0-4 years)	26.868	3.250	4,408	4,119	1.190	0.121	20.369	33.368
Child mortality rate (last 0-4 years)	4.219	1.420	3,992	3,740	1.343	0.337	1.379	7.059
Under-5 mortality rate (last 0-4 years)	30.974	3.402	4,414	4,125	1.174	0.110	24.170	37.777
			MEN					
Urban residence	0.324	0.015	2,413	2,413	1.577	0.046	0.294	0.354
No education	0.000	0.000	2,413	2,413	0.787	1.001	0.000	0.001
Secondary education or higher	0.997	0.001	2,413	2,413	1.123	0.001	0.995	1.000
Never married/in union	0.363	0.012	2,413	2,413	1.215	0.033	0.339	0.386
Currently married/in union	0.598	0.013	2,413	2,413	1.290	0.022	0.572	0.624
Had sexual intercourse before age 18	0.186	0.015	1,591	1,577	1.566	0.082	0.155	0.217
Know any contraceptive method	0.998	0.001	1,470	1,443	0.926	0.001	0.996	1.000
Know a modern method	0.998	0.001	1,470	1,443	0.926	0.001	0.996	1.000
Want no more children	0.240	0.014	1,470	1,443	1.232	0.057	0.212	0.267
Want to delay next birth at least 2 years	0.300	0.015	1,470	1,443	1.286	0.051	0.269	0.331
Ideal number of children	4.080	0.047	2,306	2,335	1.597	0.012	3.985	4.174
Had 2+ sexual partners in past 12 months	0.096	0.009	2,413	2,413	1.456	0.091	0.078	0.113
Abstinence among youth (never had sex)	0.530	0.022	721	736	1.177	0.041	0.487	0.574
Sexually active in past 12 months among never-married youth	0.402	0.021	721	736	1.137	0.052	0.361	0.444
Paid for sexual intercourse in past 12 months	0.076	0.007	2,413	2,413	1.254	0.089	0.063	0.090
Had an HIV test and received results in past 12 months	0.022	0.004	2,413	2,413	1.212	0.166	0.014	0.029
Accepting attitudes towards people with HIV	0.021	0.004	2,293	2,254	1.169	0.165	0.014	0.028

Table B.3 Sampling errors: Urban sample, Kyrgyz Republic 2012

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	1.000	0.000	2,732	3,070	na	0.000	1.000	1.000
No education	0.001	0.000	2,732	3,070	0.794	0.633	0.000	0.001
Secondary education or higher	0.997	0.001	2,732	3,070	1.234	0.001	0.995	1.000
Never married/never in union	0.332	0.013	2,732	3,070	1.454	0.039	0.306	0.358
Currently married/in union	0.548	0.017	2,732	3,070	1.735	0.030	0.515	0.581
Married before age 20	0.355	0.018	1,656	1,850	1.505	0.050	0.320	0.391
Had sexual intercourse before age 18	0.123	0.008	1,656	1,850	0.982	0.064	0.107	0.139
Currently pregnant	0.061	0.005	2,732	3,070	1.142	0.086	0.050	0.071
Children ever born	1.453	0.052	2,732	3,070	1.758	0.036	1.349	1.557
Children surviving	1.395	0.048	2,732	3,070	1.724	0.035	1.298	1.492
Children ever born to women age 40-49	2.732	0.101	611	684	1.632	0.037	2.530	2.935
Know any contraceptive method	0.993	0.001	1,596	1,684	0.683	0.001	0.990	0.995
Know a modern method	0.993	0.001	1,596	1,684	0.683	0.001	0.990	0.995
Currently using any method	0.389	0.016	1,596	1,684	1.298	0.041	0.357	0.420
Currently using a modern method	0.342	0.014	1,596	1,684	1.177	0.041	0.314	0.370
Currently using a traditional method	0.046	0.007	1,596	1,684	1.237	0.141	0.033	0.059
Currently using pill	0.016	0.003	1,596	1,684	1.121	0.223	0.009	0.022
Currently using IUD	0.205	0.011	1,596	1,684	1.124	0.055	0.182	0.227
Currently using condoms	0.104	0.010	1,596	1,684	1.279	0.094	0.085	0.124
Currently using injectables	0.001	0.001	1,596	1,684	0.953	0.629	0.000	0.003
Currently using female sterilization	0.016	0.004	1,596	1,684	1.214	0.241	0.008	0.023
Currently using rhythm	0.004	0.002	1,596	1,684	1.106	0.432	0.001	0.008
Currently using withdrawal	0.041	0.006	1,596	1,684	1.160	0.140	0.029	0.053
Want no more children	0.270	0.013	1,596	1,684	1.210	0.050	0.243	0.297
Want to delay next birth at least 2 years	0.320	0.014	1,596	1,684	1.200	0.044	0.292	0.348
Ideal number of children	3.543	0.061	2,662	2,987	2.336	0.017	3.420	3.665
Mothers received antenatal care for last birth	0.987	0.006	850	935	1.541	0.006	0.976	0.999
Births with skilled attendant at delivery	0.995	0.003	1,128	1,216	1.406	0.003	0.990	1.001
Had diarrhea in the past 2 weeks	0.038	0.008	1,107	1,188	1.309	0.219	0.021	0.055
Treated with ORS	0.373	0.067	47	45	0.802	0.181	0.238	0.507
Sought medical treatment for diarrhea	0.561	0.078	47	45	0.923	0.138	0.406	0.717
Vaccination card seen	0.776	0.032	231	266	1.165	0.041	0.712	0.839
Received BCG vaccination	0.987	0.013	231	266	1.753	0.013	0.962	1.012
Received DPT vaccination (3 doses)	0.799	0.030	231	266	1.162	0.037	0.739	0.859
Received polio vaccination (3 doses)	0.703	0.032	231	266	1.094	0.046	0.639	0.768
Received measles vaccination	0.949	0.018	231	266	1.263	0.019	0.914	0.985
Received all vaccinations	0.672	0.034	231	266	1.103	0.050	0.605	0.739
Height-for-age (-2SD)	0.176	0.014	1,100	1,167	1.113	0.081	0.148	0.205
Weight-for-height (-2SD)	0.033	0.008	1,100	1,167	1.497	0.252	0.016	0.050
Weight-for-age (-2SD)	0.036	0.006	1,100	1,167	1.028	0.168	0.024	0.048
Prevalence of anemia (children 6-59 months)	0.445	0.025	994	1,052	1.513	0.056	0.395	0.496
Prevalence of anemia (women 15-49)	0.342	0.016	2,685	3,007	1.743	0.047	0.310	0.374
Body mass index (BMI) < 18.5	0.081	0.008	2,486	2,802	1.407	0.095	0.065	0.096
Has heard about HIV/AIDS	0.944	0.006	2,732	3,070	1.440	0.007	0.931	0.956
Know about condoms	0.699	0.014	2,732	3,070	1.547	0.019	0.672	0.727
Know about limiting partners	0.814	0.012	2,732	3,070	1.562	0.014	0.791	0.837
Abstinence among youth (never had sex)	0.975	0.006	759	891	1.034	0.006	0.964	0.987
Sexually active in past 12 months among never-married youth	0.020	0.005	759	891	1.025	0.259	0.010	0.031
Had an HIV test and received results in past 12 months	0.138	0.009	2,732	3,070	1.305	0.062	0.121	0.155
Accepting attitudes towards people with HIV	0.036	0.005	2,575	2,898	1.431	0.147	0.025	0.046
Ever experienced any physical violence since age 15	0.216	0.013	1,989	2,253	1.387	0.059	0.190	0.242
Ever experienced any sexual violence	0.024	0.004	1,989	2,253	1.053	0.150	0.017	0.031
Ever experienced any physical or sexual violence by any husband/partner	0.281	0.015	1,491	1,493	1.281	0.053	0.251	0.310
Ever experienced any physical or sexual violence by any husband/partner in the last 12 months	0.155	0.013	1,491	1,493	1.397	0.085	0.129	0.181
Total abortion rate (last 3 years)	0.795	0.086	7,746	8,722	1.113	0.108	0.623	0.968
Total fertility rate (last 3 years)	3.005	0.161	7,746	8,722	1.531	0.053	2.683	3.326
Neonatal mortality rate (last 0-9 years)	15.523	3.864	2,043	2,179	1.245	0.249	7.796	23.251
Post-neonatal mortality rate (last 0-9 years)	7.488	2.628	2,041	2,170	1.179	0.351	2.232	12.743
Infant mortality rate (last 0-9 years)	23.011	4.308	2,044	2,180	1.103	0.187	14.394	31.628
Child mortality rate (last 0-9 years)	9.874	2.971	1,926	2,031	1.222	0.301	3.931	15.817
Under-5 mortality rate (last 0-9 years)	32.658	5.101	2,045	2,181	1.087	0.156	22.456	42.861
MEN								
Urban residence	1.000	0.000	690	781	na	0.000	1.000	1.000
No education	0.000	0.000	690	781	na	na	0.000	0.000
Secondary education or higher	0.997	0.002	690	781	0.996	0.002	0.992	1.001
Never married/in union	0.357	0.022	690	781	1.217	0.062	0.312	0.401
Currently married/in union	0.589	0.024	690	781	1.286	0.041	0.541	0.638
Had sexual intercourse before age 18	0.201	0.025	455	517	1.348	0.126	0.150	0.251
Know any contraceptive method	1.000	0.000	413	460	na	0.000	1.000	1.000
Know a modern method	1.000	0.000	413	460	na	0.000	1.000	1.000
Want no more children	0.175	0.028	413	460	1.519	0.163	0.118	0.232
Want to delay next birth at least 2 years	0.285	0.028	413	460	1.245	0.097	0.229	0.340
Ideal number of children	3.813	0.102	676	758	1.698	0.027	3.609	4.016
Had 2+ sexual partners in past 12 months	0.091	0.018	690	781	1.657	0.200	0.054	0.127
Abstinence among youth (never had sex)	0.464	0.040	207	231	1.145	0.086	0.385	0.544
Sexually active in past 12 months among never-married youth	0.461	0.038	207	231	1.083	0.082	0.386	0.536
Paid for sexual intercourse in past 12 months	0.062	0.011	690	781	1.175	0.173	0.041	0.084
Had an HIV test and received results in past 12 months	0.028	0.008	690	781	1.283	0.289	0.012	0.044
Accepting attitudes towards people with HIV	0.008	0.003	650	721	0.985	0.429	0.001	0.015

Table B.4 Sampling errors: Rural sample, Kyrgyz Republic 2012

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
			WOMEN					
Urban residence	0.000	0.000	5,476	5,138	na	na	0.000	0.000
No education	0.000	0.000	5,476	5,138	0.858	0.533	0.000	0.001
Secondary education or higher	0.994	0.002	5,476	5,138	1.657	0.002	0.991	0.998
Never married/never in union	0.239	0.009	5,476	5,138	1.534	0.037	0.221	0.256
Currently married/in union	0.695	0.009	5,476	5,138	1.521	0.014	0.676	0.714
Married before age 20	0.467	0.012	3,447	3,193	1.414	0.026	0.443	0.491
Had sexual intercourse before age 18	0.151	0.010	3,447	3,193	1.600	0.065	0.131	0.171
Currently pregnant	0.071	0.004	5,476	5,138	1.191	0.058	0.063	0.079
Children ever born	2.097	0.040	5,476	5,138	1.587	0.019	2.017	2.177
Children surviving	2.005	0.038	5,476	5,138	1.571	0.019	1.930	2.080
Children ever born to women age 40-49	3.779	0.073	1,214	1,152	1.557	0.019	3.633	3.924
Know any contraceptive method	0.988	0.002	3,882	3,572	1.166	0.002	0.984	0.992
Know a modern method	0.988	0.002	3,882	3,572	1.166	0.002	0.984	0.992
Currently using any method	0.351	0.010	3,882	3,572	1.354	0.030	0.330	0.372
Currently using a modern method	0.334	0.010	3,882	3,572	1.313	0.030	0.314	0.354
Currently using a traditional method	0.017	0.002	3,882	3,572	1.190	0.146	0.012	0.022
Currently using pill	0.015	0.002	3,882	3,572	1.136	0.146	0.011	0.020
Currently using IUD	0.229	0.009	3,882	3,572	1.371	0.040	0.210	0.247
Currently using condoms	0.063	0.005	3,882	3,572	1.333	0.082	0.053	0.074
Currently using injectables	0.007	0.002	3,882	3,572	1.239	0.242	0.003	0.010
Currently using female sterilization	0.016	0.002	3,882	3,572	1.197	0.151	0.011	0.021
Currently using rhythm	0.002	0.001	3,882	3,572	1.292	0.498	0.000	0.003
Currently using withdrawal	0.015	0.002	3,882	3,572	1.159	0.152	0.010	0.019
Want no more children	0.257	0.010	3,882	3,572	1.443	0.039	0.237	0.277
Want to delay next birth at least 2 years	0.256	0.010	3,882	3,572	1.428	0.039	0.236	0.276
Ideal number of children	4.147	0.033	5,266	4,940	1.620	0.008	4.082	4.213
Mothers received antenatal care for last birth	0.962	0.007	2,298	2,079	1.800	0.008	0.947	0.976
Births with skilled attendant at delivery	0.990	0.003	3,235	2,867	1.400	0.003	0.984	0.996
Had diarrhea in the past 2 weeks	0.057	0.006	3,140	2,787	1.427	0.110	0.045	0.070
Treated with ORS	0.349	0.044	176	160	1.165	0.126	0.262	0.437
Sought medical treatment for diarrhea	0.542	0.056	176	160	1.408	0.103	0.430	0.654
Vaccination card seen	0.905	0.016	640	590	1.332	0.017	0.874	0.936
Received BCG vaccination	0.990	0.006	640	590	1.503	0.006	0.978	1.002
Received DPT vaccination (3 doses)	0.877	0.018	640	590	1.398	0.021	0.841	0.914
Received polio vaccination (3 doses)	0.832	0.019	640	590	1.266	0.023	0.795	0.870
Received measles vaccination	0.972	0.008	640	590	1.265	0.009	0.955	0.988
Received all vaccinations	0.775	0.023	640	590	1.406	0.030	0.728	0.821
Height-for-age (-2SD)	0.177	0.011	3,474	3,170	1.597	0.064	0.154	0.200
Weight-for-height (-2SD)	0.025	0.003	3,474	3,170	1.124	0.126	0.019	0.032
Weight-for-age (-2SD)	0.033	0.004	3,474	3,170	1.236	0.120	0.025	0.041
Prevalence of anemia (children 6-59 months)	0.419	0.015	3,184	2,919	1.590	0.036	0.389	0.448
Prevalence of anemia (women 15-49)	0.358	0.011	5,363	4,995	1.690	0.031	0.336	0.381
Body mass index (BMI) < 18.5	0.068	0.006	4,919	4,621	1.637	0.086	0.056	0.080
Has heard about HIV/AIDS	0.881	0.009	5,476	5,138	2.099	0.010	0.863	0.900
Know about condoms	0.605	0.011	5,476	5,138	1.684	0.018	0.583	0.627
Know about limiting partners	0.705	0.012	5,476	5,138	1.903	0.017	0.681	0.728
Abstinence among youth (never had sex)	0.989	0.004	1,181	1,158	1.317	0.004	0.982	0.997
Sexually active in past 12 months among never-married youth	0.010	0.004	1,181	1,158	1.342	0.389	0.002	0.018
Had an HIV test and received results in past 12 months	0.111	0.006	5,476	5,138	1.410	0.054	0.099	0.123
Accepting attitudes towards people with HIV	0.036	0.004	4,946	4,527	1.483	0.108	0.029	0.044
Ever experienced any physical violence since age 15	0.241	0.013	4,033	3,769	1.948	0.055	0.214	0.267
Ever experienced any sexual violence	0.040	0.004	4,033	3,769	1.393	0.108	0.031	0.048
Ever experienced any physical or sexual violence by any husband/partner	0.259	0.013	3,341	2,869	1.651	0.048	0.234	0.284
Ever experienced any physical or sexual violence by any husband/partner in the last 12 months	0.180	0.011	3,341	2,869	1.688	0.062	0.158	0.202
Total abortion rate (last 3 years)	0.608	0.051	15,216	14,262	1.285	0.083	0.506	0.709
Total fertility rate (last 3 years)	4.032	0.115	15,216	14,262	1.531	0.028	3.803	4.261
Neonatal mortality rate (last 0-9 years)	20.170	2.559	5,617	4,990	1.245	0.127	15.052	25.288
Post-neonatal mortality rate (last 0-9 years)	9.276	1.903	5,592	4,976	1.309	0.205	5.469	13.083
Infant mortality rate (last 0-9 years)	29.446	2.907	5,620	4,996	1.151	0.099	23.632	35.261
Child mortality rate (last 0-9 years)	3.774	0.890	5,277	4,698	1.014	0.236	1.995	5.554
Under-5 mortality rate (last 0-9 years)	33.110	3.038	5,624	4,999	1.161	0.092	27.034	39.185
			MEN					
Urban residence	0.000	0.000	1,723	1,632	na	na	0.000	0.000
No education	0.000	0.000	1,723	1,632	0.809	1.001	0.000	0.001
Secondary education or higher	0.998	0.001	1,723	1,632	1.195	0.001	0.995	1.000
Never married/in union	0.365	0.014	1,723	1,632	1.206	0.038	0.337	0.393
Currently married/in union	0.602	0.015	1,723	1,632	1.283	0.025	0.572	0.632
Had sexual intercourse before age 18	0.179	0.019	1,136	1,060	1.684	0.107	0.141	0.217
Know any contraceptive method	0.997	0.002	1,057	983	0.952	0.002	0.994	1.000
Know a modern method	0.997	0.002	1,057	983	0.952	0.002	0.994	1.000
Want no more children	0.270	0.015	1,057	983	1.075	0.054	0.240	0.299
Want to delay next birth at least 2 years	0.308	0.018	1,057	983	1.290	0.060	0.271	0.344
Ideal number of children	4.208	0.050	1,630	1,577	1.514	0.012	4.108	4.308
Had 2+ sexual partners in past 12 months	0.098	0.010	1,723	1,632	1.331	0.097	0.079	0.118
Abstinence among youth (never had sex)	0.561	0.026	514	504	1.186	0.046	0.509	0.613
Sexually active in past 12 months among never-married youth	0.375	0.025	514	504	1.154	0.066	0.326	0.425
Paid for sexual intercourse in past 12 months	0.083	0.009	1,723	1,632	1.292	0.104	0.066	0.100
Had an HIV test and received results in past 12 months	0.019	0.004	1,723	1,632	1.111	0.195	0.011	0.026
Accepting attitudes towards people with HIV	0.028	0.005	1,643	1,532	1.210	0.177	0.018	0.037

Table B.5 Sampling errors: Issyk-Kul sample, Kyrgyz Republic 2012

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
			WOMEN					
Urban residence	0.270	0.020	787	650	1.263	0.074	0.230	0.310
No education	0.001	0.001	787	650	0.856	1.013	0.000	0.003
Secondary education or higher	0.994	0.003	787	650	0.987	0.003	0.989	0.999
Never married/never in union	0.178	0.015	787	650	1.114	0.086	0.147	0.208
Currently married/in union	0.720	0.018	787	650	1.139	0.025	0.683	0.756
Married before age 20	0.419	0.020	538	448	0.950	0.048	0.378	0.459
Had sexual intercourse before age 18	0.132	0.019	538	448	1.317	0.146	0.093	0.170
Currently pregnant	0.075	0.010	787	650	1.075	0.135	0.055	0.095
Children ever born	2.150	0.058	787	650	0.958	0.027	2.034	2.267
Children surviving	2.052	0.056	787	650	0.974	0.027	1.940	2.164
Children ever born to women age 40-49	3.370	0.125	219	180	1.261	0.037	3.119	3.621
Know any contraceptive method	0.998	0.002	566	468	1.181	0.002	0.993	1.002
Know a modern method	0.998	0.002	566	468	1.181	0.002	0.993	1.002
Currently using any method	0.377	0.029	566	468	1.416	0.077	0.319	0.435
Currently using a modern method	0.367	0.027	566	468	1.351	0.075	0.312	0.421
Currently using a traditional method	0.010	0.005	566	468	1.176	0.485	0.000	0.020
Currently using pill	0.019	0.005	566	468	0.818	0.246	0.010	0.029
Currently using IUD	0.275	0.024	566	468	1.278	0.087	0.227	0.323
Currently using condoms	0.052	0.010	566	468	1.101	0.198	0.032	0.073
Currently using injectables	0.001	0.001	566	468	0.923	1.006	0.000	0.004
Currently using female sterilization	0.013	0.005	566	468	0.985	0.362	0.004	0.022
Currently using rhythm	0.003	0.002	566	468	0.950	0.713	0.000	0.008
Currently using withdrawal	0.005	0.004	566	468	1.399	0.812	0.000	0.014
Want no more children	0.299	0.022	566	468	1.151	0.074	0.255	0.344
Want to delay next birth at least 2 years	0.312	0.022	566	468	1.109	0.069	0.268	0.355
Ideal number of children	4.048	0.068	780	645	1.291	0.017	3.912	4.185
Mothers received antenatal care for last birth	0.989	0.005	342	284	0.922	0.005	0.979	0.999
Births with skilled attendant at delivery	0.998	0.002	466	385	0.892	0.002	0.995	1.002
Had diarrhea in the past 2 weeks	0.076	0.017	454	376	1.256	0.227	0.042	0.111
Treated with ORS	0.487	0.089	37	29	0.944	0.183	0.309	0.666
Sought medical treatment for diarrhea	0.521	0.099	37	29	1.075	0.189	0.324	0.718
Vaccination card seen	0.944	0.024	83	68	0.937	0.025	0.896	0.991
Received BCG vaccination	1.000	0.000	83	68	na	0.000	1.000	1.000
Received DPT vaccination (3 doses)	0.963	0.021	83	68	0.994	0.022	0.921	1.004
Received polio vaccination (3 doses)	0.907	0.029	83	68	0.915	0.032	0.848	0.966
Received measles vaccination	0.983	0.016	83	68	1.153	0.017	0.951	1.016
Received all vaccinations	0.890	0.033	83	68	0.948	0.037	0.825	0.956
Height-for-age (-2SD)	0.097	0.011	504	426	0.847	0.116	0.074	0.119
Weight-for-height (-2SD)	0.019	0.006	504	426	0.965	0.315	0.007	0.030
Weight-for-age (-2SD)	0.020	0.007	504	426	1.142	0.364	0.005	0.034
Prevalence of anemia (children 6-59 months)	0.492	0.027	453	384	1.139	0.054	0.439	0.546
Prevalence of anemia (women 15-49)	0.509	0.023	768	635	1.291	0.046	0.462	0.555
Body mass index (BMI) < 18.5	0.072	0.013	704	581	1.313	0.178	0.046	0.097
Has heard about HIV/AIDS	0.989	0.004	787	650	0.990	0.004	0.982	0.997
Know about condoms	0.824	0.017	787	650	1.225	0.020	0.791	0.858
Know about limiting partners	0.845	0.022	787	650	1.736	0.027	0.800	0.890
Abstinence among youth (never had sex)	1.000	0.000	136	107	na	0.000	1.000	1.000
Sexually active in past 12 months among never-married youth	0.000	0.000	136	107	na	na	0.000	0.000
Had an HIV test and received results in past 12 months	0.198	0.014	787	650	0.989	0.071	0.170	0.226
Accepting attitudes towards people with HIV	0.064	0.011	777	643	1.227	0.169	0.042	0.085
Ever experienced any physical violence since age 15	0.163	0.018	594	476	1.207	0.112	0.127	0.200
Ever experienced any sexual violence	0.032	0.010	594	476	1.442	0.325	0.011	0.053
Ever experienced any physical or sexual violence by any husband/partner	0.182	0.023	510	391	1.364	0.128	0.135	0.229
Ever experienced any physical or sexual violence by any husband/partner in the last 12 months	0.123	0.018	510	391	1.243	0.147	0.086	0.159
Total abortion rate (last 3 years)	0.676	0.117	2,192	1,820	0.942	0.173	0.442	0.910
Total fertility rate (last 3 years)	4.235	0.231	2,192	1,820	1.042	0.054	3.774	4.697
Neonatal mortality rate (last 0-9 years)	16.416	4.626	811	667	1.060	0.282	7.165	25.667
Post-neonatal mortality rate (last 0-9 years)	8.176	3.125	804	662	0.974	0.382	1.927	14.426
Infant mortality rate (last 0-9 years)	24.592	5.409	811	667	1.027	0.220	13.775	35.409
Child mortality rate (last 0-9 years)	3.676	2.593	750	615	1.120	0.706	0.000	8.863
Under-5 mortality rate (last 0-9 years)	28.178	5.647	811	667	0.997	0.200	16.883	39.473
			MEN					
Urban residence	0.230	0.028	232	207	1.024	0.123	0.173	0.287
No education	0.003	0.003	232	207	0.839	1.007	0.000	0.009
Secondary education or higher	0.993	0.005	232	207	0.895	0.005	0.983	1.003
Never married/in union	0.306	0.037	232	207	1.230	0.122	0.232	0.381
Currently married/in union	0.642	0.041	232	207	1.307	0.064	0.559	0.725
Had sexual intercourse before age 18	0.047	0.016	161	145	0.943	0.334	0.016	0.079
Know any contraceptive method	0.980	0.011	146	133	0.955	0.011	0.957	1.002
Know a modern method	0.980	0.011	146	133	0.955	0.011	0.957	1.002
Want no more children	0.208	0.036	146	133	1.066	0.173	0.136	0.280
Want to delay next birth at least 2 years	0.272	0.044	146	133	1.179	0.161	0.184	0.359
Ideal number of children	4.366	0.072	232	207	0.887	0.017	4.222	4.511
Had 2+ sexual partners in past 12 months	0.017	0.008	232	207	0.958	0.484	0.001	0.033
Abstinence among youth (never had sex)	0.939	0.025	60	52	0.794	0.026	0.889	0.988
Sexually active in past 12 months among never-married youth	0.061	0.025	60	52	0.794	0.404	0.012	0.111
Paid for sexual intercourse in past 12 months	0.006	0.006	232	207	1.139	1.001	0.000	0.017
Had an HIV test and received results in past 12 months	0.021	0.010	232	207	1.004	0.447	0.002	0.041
Accepting attitudes towards people with HIV	0.017	0.011	219	197	1.197	0.613	0.000	0.038

Table B.6 Sampling errors: Djalal-Abad sample, Kyrgyz Republic 2012

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
	WOMEN							
Urban residence	0.253	0.019	1,012	1,332	1.422	0.077	0.214	0.292
No education	0.000	0.000	1,012	1,332	na	na	0.000	0.000
Secondary education or higher	0.991	0.003	1,012	1,332	1.133	0.003	0.985	0.998
Never married/never in union	0.242	0.015	1,012	1,332	1.102	0.061	0.212	0.272
Currently married/in union	0.707	0.013	1,012	1,332	0.890	0.018	0.682	0.733
Married before age 20	0.442	0.023	635	828	1.166	0.052	0.396	0.488
Had sexual intercourse before age 18	0.109	0.012	635	828	0.968	0.110	0.085	0.133
Currently pregnant	0.061	0.008	1,012	1,332	1.111	0.137	0.045	0.078
Children ever born	2.076	0.062	1,012	1,332	1.061	0.030	1.952	2.200
Children surviving	1.996	0.061	1,012	1,332	1.095	0.031	1.874	2.117
Children ever born to women age 40-49	3.799	0.125	200	266	1.150	0.033	3.549	4.049
Know any contraceptive method	1.000	0.000	716	942	na	0.000	1.000	1.000
Know a modern method	1.000	0.000	716	942	na	0.000	1.000	1.000
Currently using any method	0.375	0.020	716	942	1.119	0.054	0.335	0.416
Currently using a modern method	0.345	0.017	716	942	0.957	0.049	0.311	0.379
Currently using a traditional method	0.031	0.007	716	942	1.129	0.238	0.016	0.045
Currently using pill	0.010	0.004	716	942	1.144	0.432	0.001	0.018
Currently using IUD	0.226	0.017	716	942	1.073	0.074	0.192	0.259
Currently using condoms	0.090	0.011	716	942	1.047	0.125	0.067	0.112
Currently using injectables	0.008	0.003	716	942	1.044	0.440	0.001	0.015
Currently using female sterilization	0.008	0.003	716	942	1.019	0.423	0.001	0.015
Currently using rhythm	0.004	0.003	716	942	1.281	0.762	0.000	0.010
Currently using withdrawal	0.027	0.006	716	942	1.047	0.237	0.014	0.039
Want no more children	0.265	0.018	716	942	1.091	0.068	0.229	0.301
Want to delay next birth at least 2 years	0.209	0.016	716	942	1.024	0.074	0.178	0.241
Ideal number of children	4.203	0.051	974	1,284	1.414	0.012	4.101	4.306
Mothers received antenatal care for last birth	0.992	0.004	419	547	1.007	0.004	0.983	1.001
Births with skilled attendant at delivery	0.983	0.008	561	732	1.164	0.008	0.968	0.999
Had diarrhea in the past 2 weeks	0.032	0.008	546	714	1.063	0.267	0.015	0.049
Treated with ORS	0.390	0.119	16	23	0.970	0.305	0.153	0.628
Sought medical treatment for diarrhea	0.756	0.126	16	23	1.190	0.167	0.504	1.008
Vaccination card seen	0.932	0.029	118	156	1.255	0.031	0.873	0.990
Received BCG vaccination	1.000	0.000	118	156	na	0.000	1.000	1.000
Received DPT vaccination (3 doses)	0.973	0.016	118	156	1.079	0.017	0.941	1.005
Received polio vaccination (3 doses)	0.898	0.030	118	156	1.065	0.033	0.838	0.957
Received measles vaccination	0.976	0.017	118	156	1.227	0.018	0.942	1.011
Received all vaccinations	0.891	0.032	118	156	1.102	0.035	0.828	0.954
Height-for-age (-2SD)	0.146	0.017	586	776	1.051	0.115	0.113	0.180
Weight-for-height (-2SD)	0.029	0.008	586	776	1.121	0.287	0.012	0.046
Weight-for-age (-2SD)	0.043	0.012	586	776	1.303	0.275	0.019	0.067
Prevalence of anemia (children 6-59 months)	0.282	0.026	536	700	1.322	0.093	0.229	0.334
Prevalence of anemia (women 15-49)	0.298	0.021	985	1,289	1.455	0.071	0.255	0.340
Body mass index (BMI) < 18.5	0.103	0.016	915	1,195	1.589	0.156	0.071	0.135
Has heard about HIV/AIDS	0.867	0.015	1,012	1,332	1.411	0.017	0.836	0.897
Know about condoms	0.575	0.027	1,012	1,332	1.704	0.046	0.522	0.628
Know about limiting partners	0.664	0.025	1,012	1,332	1.706	0.038	0.613	0.714
Abstinence among youth (never had sex)	0.995	0.005	231	303	1.100	0.005	0.984	1.005
Sexually active in past 12 months among never-married youth	0.005	0.005	231	303	1.100	0.978	0.000	0.016
Had an HIV test and received results in past 12 months	0.118	0.013	1,012	1,332	1.240	0.107	0.092	0.143
Accepting attitudes towards people with HIV	0.005	0.002	876	1,154	0.990	0.470	0.000	0.010
Ever experienced any physical violence since age 15	0.215	0.025	726	981	1.644	0.117	0.165	0.265
Ever experienced any sexual violence	0.008	0.003	726	981	0.935	0.378	0.002	0.015
Ever experienced any physical or sexual violence by any husband/partner	0.258	0.031	591	745	1.743	0.122	0.195	0.321
Ever experienced any physical or sexual violence by any husband/partner in the last 12 months	0.162	0.025	591	745	1.656	0.155	0.112	0.212
Total abortion rate (last 3 years)	0.771	0.132	2,836	3,735	0.917	0.171	0.508	1.035
Total fertility rate (last 3 years)	3.983	0.180	2,836	3,735	1.205	0.045	3.622	4.344
Neonatal mortality rate (last 0-9 years)	20.425	6.670	993	1,301	1.334	0.327	7.085	33.765
Post-neonatal mortality rate (last 0-9 years)	3.609	1.975	992	1,297	1.012	0.547	0.000	7.559
Infant mortality rate (last 0-9 years)	24.034	6.371	993	1,301	1.210	0.265	11.293	36.776
Child mortality rate (last 0-9 years)	3.863	2.710	951	1,236	1.372	0.702	0.000	9.284
Under-5 mortality rate (last 0-9 years)	27.804	6.945	993	1,301	1.257	0.250	13.914	41.694
	MEN							
Urban residence	0.224	0.019	300	402	0.800	0.086	0.186	0.263
No education	0.000	0.000	300	402	na	na	0.000	0.000
Secondary education or higher	0.991	0.006	300	402	1.145	0.006	0.979	1.004
Never married/in union	0.336	0.034	300	402	1.243	0.101	0.268	0.404
Currently married/in union	0.621	0.037	300	402	1.301	0.059	0.548	0.694
Had sexual intercourse before age 18	0.185	0.033	191	259	1.163	0.177	0.119	0.251
Know any contraceptive method	1.000	0.000	182	250	na	0.000	1.000	1.000
Know a modern method	1.000	0.000	182	250	na	0.000	1.000	1.000
Want no more children	0.347	0.034	182	250	0.948	0.097	0.280	0.414
Want to delay next birth at least 2 years	0.248	0.043	182	250	1.326	0.172	0.162	0.333
Ideal number of children	4.099	0.091	290	392	1.509	0.022	3.917	4.282
Had 2+ sexual partners in past 12 months	0.066	0.015	300	402	1.063	0.232	0.035	0.096
Abstinence among youth (never had sex)	0.381	0.067	93	120	1.313	0.175	0.248	0.515
Sexually active in past 12 months among never-married youth	0.491	0.062	93	120	1.184	0.126	0.367	0.614
Paid for sexual intercourse in past 12 months	0.082	0.017	300	402	1.081	0.209	0.048	0.116
Had an HIV test and received results in past 12 months	0.008	0.005	300	402	0.983	0.654	0.000	0.017
Accepting attitudes towards people with HIV	0.015	0.007	291	390	0.950	0.451	0.001	0.029

Table B.7 Sampling errors: Naryn sample, Kyrgyz Republic 2012

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	0.163	0.017	666	281	1.177	0.103	0.130	0.197
No education	0.000	0.000	666	281	na	na	0.000	0.000
Secondary education or higher	0.998	0.002	666	281	1.073	0.002	0.995	1.002
Never married/never in union	0.186	0.015	666	281	0.996	0.081	0.156	0.216
Currently married/in union	0.745	0.020	666	281	1.161	0.026	0.705	0.784
Married before age 20	0.432	0.026	475	200	1.141	0.060	0.380	0.484
Had sexual intercourse before age 18	0.151	0.018	475	200	1.114	0.121	0.114	0.187
Currently pregnant	0.074	0.008	666	281	0.827	0.114	0.057	0.090
Children ever born	2.462	0.083	666	281	1.145	0.034	2.295	2.629
Children surviving	2.377	0.084	666	281	1.210	0.036	2.208	2.545
Children ever born to women age 40-49	3.933	0.174	172	73	1.354	0.044	3.585	4.282
Know any contraceptive method	0.998	0.002	497	209	0.979	0.002	0.994	1.002
Know a modern method	0.998	0.002	497	209	0.979	0.002	0.994	1.002
Currently using any method	0.532	0.022	497	209	0.990	0.042	0.488	0.577
Currently using a modern method	0.532	0.022	497	209	0.990	0.042	0.488	0.577
Currently using a traditional method	0.000	0.000	497	209	na	na	0.000	0.000
Currently using pill	0.028	0.008	497	209	1.021	0.268	0.013	0.044
Currently using IUD	0.432	0.020	497	209	0.883	0.045	0.393	0.471
Currently using condoms	0.049	0.009	497	209	0.969	0.192	0.030	0.068
Currently using injectables	0.000	0.000	497	209	na	na	0.000	0.000
Currently using female sterilization	0.023	0.009	497	209	1.264	0.368	0.006	0.040
Currently using rhythm	0.000	0.000	497	209	na	na	0.000	0.000
Currently using withdrawal	0.000	0.000	497	209	na	na	0.000	0.000
Want no more children	0.306	0.020	497	209	0.973	0.066	0.266	0.346
Want to delay next birth at least 2 years	0.361	0.021	497	209	0.966	0.058	0.320	0.403
Ideal number of children	4.166	0.062	665	281	1.114	0.015	4.042	4.290
Mothers received antenatal care for last birth	0.993	0.005	297	125	0.978	0.005	0.984	1.003
Births with skilled attendant at delivery	0.994	0.003	421	176	0.915	0.004	0.987	1.001
Had diarrhea in the past 2 weeks	0.025	0.007	415	173	0.863	0.286	0.011	0.039
Treated with ORS	0.265	0.141	11	4	0.993	0.534	0.000	0.547
Sought medical treatment for diarrhea	0.390	0.160	11	4	0.994	0.410	0.070	0.709
Vaccination card seen	0.898	0.037	93	39	1.160	0.041	0.824	0.971
Received BCG vaccination	0.990	0.011	93	39	1.007	0.011	0.968	1.011
Received DPT vaccination (3 doses)	0.946	0.028	93	39	1.204	0.030	0.890	1.003
Received polio vaccination (3 doses)	0.925	0.035	93	39	1.285	0.038	0.855	0.995
Received measles vaccination	0.946	0.028	93	39	1.191	0.030	0.890	1.002
Received all vaccinations	0.905	0.043	93	39	1.413	0.048	0.819	0.991
Height-for-age (-2SD)	0.176	0.019	473	202	1.037	0.106	0.138	0.213
Weight-for-height (-2SD)	0.021	0.006	473	202	0.943	0.301	0.008	0.033
Weight-for-age (-2SD)	0.029	0.011	473	202	1.375	0.395	0.006	0.052
Prevalence of anemia (children 6-59 months)	0.486	0.023	428	182	0.950	0.048	0.439	0.532
Prevalence of anemia (women 15-49)	0.390	0.023	653	275	1.203	0.059	0.344	0.436
Body Mass Index (BMI) < 18.5	0.053	0.010	593	250	1.108	0.193	0.032	0.073
Has heard about HIV/AIDS	0.909	0.013	666	281	1.209	0.015	0.882	0.936
Know about condoms	0.664	0.025	666	281	1.373	0.038	0.614	0.714
Know about limiting partners	0.751	0.024	666	281	1.411	0.031	0.704	0.799
Abstinence among youth (never had sex)	1.000	0.000	118	49	na	0.000	1.000	1.000
Sexually active in past 12 months among never-married youth	0.000	0.000	118	49	na	na	0.000	0.000
Had an HIV test and received results in past 12 months	0.128	0.013	666	281	1.040	0.105	0.101	0.155
Accepting attitudes towards people with HIV	0.095	0.013	606	256	1.109	0.140	0.068	0.121
Ever experienced any physical violence since age 15	0.369	0.020	552	206	0.995	0.055	0.329	0.410
Ever experienced any sexual violence	0.028	0.012	552	206	1.692	0.429	0.004	0.051
Ever experienced any physical or sexual violence by any husband/partner	0.425	0.028	477	168	1.222	0.065	0.370	0.481
Ever experienced any physical or sexual violence by any husband/partner in the last 12 months	0.260	0.023	477	168	1.158	0.090	0.213	0.306
Total abortion rate (last 3 years)	0.335	0.077	1,869	789	0.950	0.230	0.181	0.488
Total fertility rate (last 3 years)	4.495	0.287	1,869	789	1.147	0.064	3.921	5.069
Neonatal mortality rate (last 0-9 years)	16.149	4.679	807	334	1.028	0.290	6.791	25.507
Post-neonatal mortality rate (last 0-9 years)	7.543	3.280	803	332	1.042	0.435	0.983	14.103
Infant mortality rate (last 0-9 years)	23.692	6.077	807	334	0.994	0.257	11.537	35.847
Child mortality rate (last 0-9 years)	3.467	2.574	777	320	1.173	0.742	0.000	8.615
Under-5 mortality rate (last 0-9 years)	27.077	6.237	807	334	1.006	0.230	14.602	39.551
MEN								
Urban residence	0.147	0.031	228	98	1.336	0.214	0.084	0.210
No education	0.000	0.000	228	98	na	na	0.000	0.000
Secondary education or higher	1.000	0.000	228	98	na	0.000	1.000	1.000
Never married/in union	0.295	0.025	228	98	0.816	0.084	0.246	0.345
Currently married/in union	0.658	0.032	228	98	1.019	0.049	0.593	0.722
Had sexual intercourse before age 18	0.025	0.015	162	70	1.214	0.604	0.000	0.054
Know any contraceptive method	1.000	0.000	149	64	na	0.000	1.000	1.000
Know a modern method	1.000	0.000	149	64	na	0.000	1.000	1.000
Want no more children	0.318	0.041	149	64	1.062	0.128	0.237	0.400
Want to delay next birth at least 2 years	0.375	0.033	149	64	0.818	0.087	0.310	0.440
Ideal number of children	4.200	0.073	228	98	0.840	0.017	4.055	4.346
Had 2+ sexual partners in past 12 months	0.000	0.000	228	98	na	na	0.000	0.000
Abstinence among youth (never had sex)	0.790	0.056	59	25	1.049	0.071	0.678	0.902
Sexually active in past 12 months among never-married youth	0.193	0.051	59	25	0.976	0.262	0.092	0.294
Paid for sexual intercourse in past 12 months	0.009	0.006	228	98	0.986	0.674	0.000	0.022
Had an HIV test and received results in past 12 months	0.062	0.019	228	98	1.163	0.300	0.025	0.100
Accepting attitudes towards people with HIV	0.182	0.033	227	98	1.264	0.178	0.117	0.247

Table B.8 Sampling errors: Batken sample, Kyrgyz Republic 2012

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
	WOMEN							
Urban residence	0.240	0.018	970	616	1.298	0.074	0.204	0.275
No education	0.003	0.002	970	616	1.094	0.605	0.000	0.007
Secondary education or higher	0.994	0.003	970	616	1.003	0.003	0.988	0.999
Never married/never in union	0.215	0.016	970	616	1.240	0.076	0.182	0.248
Currently married/in union	0.721	0.016	970	616	1.087	0.022	0.690	0.753
Married before age 20	0.488	0.028	593	381	1.363	0.057	0.432	0.544
Had sexual intercourse before age 18	0.139	0.017	593	381	1.168	0.120	0.106	0.172
Currently pregnant	0.079	0.008	970	616	0.912	0.100	0.063	0.095
Children ever born	2.164	0.071	970	616	1.130	0.033	2.022	2.306
Children surviving	2.039	0.064	970	616	1.097	0.031	1.911	2.167
Children ever born to women age 40-49	4.214	0.202	215	137	1.709	0.048	3.809	4.619
Know any contraceptive method	0.906	0.014	707	444	1.242	0.015	0.879	0.933
Know a modern method	0.906	0.014	707	444	1.242	0.015	0.879	0.933
Currently using any method	0.333	0.018	707	444	1.032	0.055	0.297	0.370
Currently using a modern method	0.286	0.019	707	444	1.104	0.066	0.248	0.323
Currently using a traditional method	0.047	0.008	707	444	1.020	0.172	0.031	0.064
Currently using pill	0.012	0.006	707	444	1.554	0.529	0.000	0.025
Currently using IUD	0.149	0.019	707	444	1.436	0.129	0.111	0.188
Currently using condoms	0.089	0.015	707	444	1.381	0.167	0.059	0.118
Currently using injectables	0.015	0.005	707	444	1.035	0.315	0.006	0.025
Currently using female sterilization	0.015	0.004	707	444	0.989	0.305	0.006	0.024
Currently using rhythm	0.005	0.003	707	444	1.093	0.579	0.000	0.011
Currently using withdrawal	0.042	0.008	707	444	1.102	0.197	0.026	0.059
Want no more children	0.367	0.022	707	444	1.229	0.061	0.322	0.412
Want to delay next birth at least 2 years	0.258	0.020	707	444	1.215	0.078	0.218	0.298
Ideal number of children	4.041	0.076	855	543	1.815	0.019	3.890	4.192
Mothers received antenatal care for last birth	0.990	0.004	415	260	0.920	0.005	0.981	0.999
Births with skilled attendant at delivery	0.993	0.004	584	365	0.957	0.004	0.985	1.001
Had diarrhea in the past 2 weeks	0.045	0.011	560	350	1.212	0.235	0.024	0.067
Treated with ORS	0.277	0.087	26	16	0.969	0.313	0.104	0.450
Sought medical treatment for diarrhea	0.489	0.114	26	16	1.143	0.233	0.261	0.718
Vaccination card seen	0.882	0.030	117	74	1.020	0.035	0.821	0.943
Received BCG vaccination	0.970	0.018	117	74	1.141	0.019	0.934	1.006
Received DPT vaccination (3 doses)	0.888	0.029	117	74	1.007	0.033	0.829	0.946
Received polio vaccination (3 doses)	0.801	0.040	117	74	1.079	0.050	0.721	0.881
Received measles vaccination	0.916	0.028	117	74	1.102	0.031	0.859	0.972
Received all vaccinations	0.770	0.043	117	74	1.112	0.056	0.683	0.857
Height-for-age (-2SD)	0.225	0.021	589	372	1.142	0.093	0.183	0.267
Weight-for-height (-2SD)	0.033	0.009	589	372	1.120	0.260	0.016	0.051
Weight-for-age (-2SD)	0.049	0.010	589	372	1.125	0.204	0.029	0.069
Prevalence of anemia (children 6-59 months)	0.442	0.026	515	325	1.126	0.060	0.389	0.495
Prevalence of anemia (women 15-49)	0.316	0.024	950	603	1.557	0.074	0.269	0.364
Body mass index (BMI) < 18.5	0.072	0.008	866	552	0.931	0.113	0.056	0.088
Has heard about HIV/AIDS	0.955	0.009	970	616	1.277	0.009	0.938	0.972
Know about condoms	0.456	0.028	970	616	1.765	0.062	0.399	0.512
Know about limiting partners	0.609	0.020	970	616	1.294	0.033	0.568	0.649
Abstinence among youth (never had sex)	0.994	0.006	194	124	1.021	0.006	0.983	1.005
Sexually active in past 12 months among never-married youth	0.000	0.000	194	124	na	na	0.000	0.000
Had an HIV test and received results in past 12 months	0.140	0.013	970	616	1.158	0.092	0.114	0.166
Accepting attitudes towards people with HIV	0.023	0.006	923	588	1.187	0.257	0.011	0.034
Ever experienced any physical violence since age 15	0.286	0.021	683	450	1.202	0.073	0.244	0.327
Ever experienced any sexual violence	0.078	0.011	683	450	1.071	0.141	0.056	0.100
Ever experienced any physical or sexual violence by any husband/partner	0.348	0.021	579	355	1.081	0.062	0.305	0.391
Ever experienced any physical or sexual violence by any husband/partner in the last 12 months	0.276	0.025	579	355	1.336	0.090	0.226	0.326
Total abortion rate (last 3 years)	0.681	0.117	2,730	1,737	1.072	0.172	0.447	0.916
Total fertility rate (last 3 years)	4.400	0.218	2,730	1,737	1.056	0.050	3.964	4.835
Neonatal mortality rate (last 0-9 years)	25.006	5.534	934	583	1.098	0.221	13.938	36.074
Post-neonatal mortality rate (last 0-9 years)	19.955	4.913	927	580	1.008	0.246	10.128	29.782
Infant mortality rate (last 0-9 years)	44.962	7.653	935	584	1.030	0.170	29.655	60.268
Child mortality rate (last 0-9 years)	7.808	2.997	827	518	0.968	0.384	1.814	13.801
Under-5 mortality rate (last 0-9 years)	52.418	8.490	937	585	1.092	0.162	35.439	69.398
	MEN							
Urban residence	0.233	0.024	288	186	0.970	0.104	0.184	0.281
No education	0.000	0.000	288	186	na	na	0.000	0.000
Secondary education or higher	0.995	0.005	288	186	1.169	0.005	0.986	1.005
Never married/in union	0.358	0.027	288	186	0.942	0.075	0.304	0.411
Currently married/in union	0.613	0.025	288	186	0.873	0.041	0.562	0.663
Had sexual intercourse before age 18	0.014	0.008	181	116	0.924	0.574	0.000	0.030
Know any contraceptive method	1.000	0.000	179	114	na	0.000	1.000	1.000
Know a modern method	1.000	0.000	179	114	na	0.000	1.000	1.000
Want no more children	0.442	0.047	179	114	1.267	0.107	0.347	0.536
Want to delay next birth at least 2 years	0.212	0.037	179	114	1.221	0.177	0.137	0.286
Ideal number of children	4.077	0.126	288	186	1.318	0.031	3.825	4.329
Had 2+ sexual partners in past 12 months	0.000	0.000	288	186	na	na	0.000	0.000
Abstinence among youth (never had sex)	1.000	0.000	92	61	na	0.000	1.000	1.000
Sexually active in past 12 months among never-married youth	0.000	0.000	92	61	na	na	0.000	0.000
Paid for sexual intercourse in past 12 months	0.002	0.003	288	186	0.851	1.004	0.000	0.008
Had an HIV test and received results in past 12 months	0.022	0.009	288	186	1.011	0.401	0.004	0.039
Accepting attitudes towards people with HIV	0.053	0.024	288	186	1.836	0.461	0.004	0.102

Table B.9 Sampling errors: Osh Oblast sample, Kyrgyz Republic 2012

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	0.085	0.014	1,248	1,627	1.781	0.166	0.057	0.113
No education	0.001	0.001	1,248	1,627	0.842	1.004	0.000	0.002
Secondary education or higher	0.999	0.001	1,248	1,627	0.842	0.001	0.998	1.001
Never married/never in union	0.294	0.021	1,248	1,627	1.646	0.072	0.251	0.336
Currently married/in union	0.645	0.024	1,248	1,627	1.742	0.037	0.597	0.692
Married before age 20	0.483	0.025	685	903	1.291	0.051	0.434	0.533
Had sexual intercourse before age 18	0.125	0.015	685	903	1.187	0.120	0.095	0.155
Currently pregnant	0.083	0.009	1,248	1,627	1.093	0.103	0.066	0.100
Children ever born	2.024	0.102	1,248	1,627	1.805	0.050	1.820	2.227
Children surviving	1.917	0.094	1,248	1,627	1.777	0.049	1.729	2.106
Children ever born to women age 40-49	4.308	0.167	244	328	1.596	0.039	3.975	4.641
Know any contraceptive method	0.995	0.003	789	1,049	1.168	0.003	0.989	1.001
Know a modern method	0.995	0.003	789	1,049	1.168	0.003	0.989	1.001
Currently using any method	0.318	0.019	789	1,049	1.156	0.060	0.280	0.356
Currently using a modern method	0.305	0.019	789	1,049	1.186	0.064	0.266	0.344
Currently using a traditional method	0.013	0.004	789	1,049	1.107	0.342	0.004	0.022
Currently using pill	0.011	0.004	789	1,049	1.162	0.400	0.002	0.019
Currently using IUD	0.214	0.021	789	1,049	1.421	0.097	0.172	0.255
Currently using condoms	0.043	0.009	789	1,049	1.265	0.213	0.025	0.061
Currently using injectables	0.011	0.004	789	1,049	1.157	0.399	0.002	0.019
Currently using female sterilization	0.027	0.007	789	1,049	1.170	0.251	0.013	0.040
Currently using rhythm	0.000	0.000	789	1,049	na	na	0.000	0.000
Currently using withdrawal	0.013	0.004	789	1,049	1.107	0.342	0.004	0.022
Want no more children	0.128	0.016	789	1,049	1.315	0.122	0.096	0.159
Want to delay next birth at least 2 years	0.204	0.017	789	1,049	1.195	0.084	0.170	0.238
Ideal number of children	4.356	0.078	1,172	1,531	1.616	0.018	4.201	4.512
Mothers received antenatal care for last birth	0.898	0.023	456	605	1.596	0.025	0.853	0.943
Births with skilled attendant at delivery	0.995	0.004	631	831	1.417	0.004	0.987	1.003
Had diarrhea in the past 2 weeks	0.024	0.008	615	810	1.134	0.326	0.008	0.040
Treated with ORS	0.224	0.117	14	20	1.041	0.520	0.000	0.458
Sought medical treatment for diarrhea	0.145	0.083	14	20	0.886	0.570	0.000	0.311
Vaccination card seen	0.970	0.018	122	167	1.157	0.018	0.935	1.005
Received BCG vaccination	1.000	0.000	122	167	na	0.000	1.000	1.000
Received DPT vaccination (3 doses)	0.820	0.045	122	167	1.303	0.054	0.730	0.909
Received polio vaccination (3 doses)	0.852	0.035	122	167	1.110	0.041	0.781	0.922
Received measles vaccination	0.970	0.014	122	167	0.929	0.014	0.942	0.998
Received all vaccinations	0.691	0.049	122	167	1.184	0.071	0.593	0.789
Height-for-age (-2SD)	0.253	0.024	748	1003	1.430	0.094	0.205	0.301
Weight-for-height (-2SD)	0.027	0.007	748	1003	1.144	0.267	0.013	0.041
Weight-for-age (-2SD)	0.037	0.006	748	1003	0.905	0.174	0.024	0.050
Prevalence of anemia (children 6-59 months)	0.349	0.031	704	950	1.618	0.089	0.287	0.411
Prevalence of anemia (women 15-49)	0.333	0.030	1,238	1,614	2.228	0.090	0.274	0.393
Body mass index (BMI) < 18.5	0.052	0.009	1,132	1,469	1.289	0.165	0.035	0.069
Has heard about HIV/AIDS	0.754	0.021	1,248	1,627	1.751	0.028	0.711	0.796
Know about condoms	0.569	0.020	1,248	1,627	1.393	0.034	0.530	0.608
Know about limiting partners	0.685	0.023	1,248	1,627	1.715	0.033	0.640	0.730
Abstinence among youth (never had sex)	1.000	0.000	372	465	na	0.000	1.000	1.000
Sexually active in past 12 months among never-married youth	0.000	0.000	372	465	na	na	0.000	0.000
Had an HIV test and received results in past 12 months	0.028	0.005	1,248	1,627	1.086	0.181	0.018	0.038
Accepting attitudes towards people with HIV	0.004	0.002	963	1,226	0.953	0.488	0.000	0.008
Ever experienced any physical violence since age 15	0.261	0.032	843	1,192	2.080	0.121	0.198	0.324
Ever experienced any sexual violence	0.041	0.009	843	1,192	1.302	0.216	0.024	0.059
Ever experienced any physical or sexual violence by any husband/partner	0.219	0.026	635	849	1.594	0.120	0.167	0.272
Ever experienced any physical or sexual violence by any husband/partner in the last 12 months	0.140	0.023	635	849	1.657	0.163	0.094	0.186
Total abortion rate (last 3 years)	0.583	0.101	3,356	4,385	1.118	0.174	0.380	0.785
Total fertility rate (last 3 years)	3.663	0.253	3,356	4,385	1.561	0.069	3.157	4.170
Neonatal mortality rate (last 0-9 years)	18.412	4.108	1,116	1,477	1.000	0.223	10.195	26.629
Post-neonatal mortality rate (last 0-9 years)	16.150	5.638	1,113	1,475	1.354	0.349	4.875	27.425
Infant mortality rate (last 0-9 years)	34.563	5.789	1,118	1,482	0.973	0.167	22.985	46.140
Child mortality rate (last 0-9 years)	4.499	2.215	1,060	1,407	1.119	0.492	0.070	8.929
Under-5 mortality rate (last 0-9 years)	38.906	6.919	1,119	1,483	1.064	0.178	25.069	52.744
MEN								
Urban residence	0.073	0.027	388	526	2.052	0.372	0.019	0.128
No education	0.000	0.000	388	526	na	na	0.000	0.000
Secondary education or higher	1.000	0.000	388	526	na	0.000	1.000	1.000
Never married/in union	0.424	0.025	388	526	1.001	0.059	0.373	0.474
Currently married/in union	0.547	0.029	388	526	1.144	0.053	0.489	0.605
Had sexual intercourse before age 18	0.240	0.044	228	306	1.545	0.183	0.152	0.328
Know any contraceptive method	1.000	0.000	214	287	na	0.000	1.000	1.000
Know a modern method	1.000	0.000	214	287	na	0.000	1.000	1.000
Want no more children	0.344	0.042	214	287	1.279	0.121	0.260	0.427
Want to delay next birth at least 2 years	0.457	0.041	214	287	1.214	0.091	0.374	0.540
Ideal number of children	4.499	0.072	367	500	1.124	0.016	4.355	4.642
Had 2+ sexual partners in past 12 months	0.128	0.020	388	526	1.169	0.155	0.089	0.168
Abstinence among youth (never had sex)	0.538	0.047	145	200	1.128	0.087	0.444	0.631
Sexually active in past 12 months among never-married youth	0.385	0.041	145	200	1.022	0.108	0.302	0.467
Paid for sexual intercourse in past 12 months	0.127	0.018	388	526	1.035	0.138	0.092	0.162
Had an HIV test and received results in past 12 months	0.017	0.009	388	526	1.423	0.558	0.000	0.035
Accepting attitudes towards people with HIV	0.010	0.008	331	441	1.416	0.779	0.000	0.025

Table B.10 Sampling errors: Talas sample, Kyrgyz Republic 2012

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	0.189	0.013	921	360	1.041	0.071	0.162	0.216
No education	0.001	0.001	921	360	0.942	1.004	0.000	0.003
Secondary education or higher	0.997	0.002	921	360	0.932	0.002	0.994	1.000
Never married/never in union	0.178	0.013	921	360	1.002	0.071	0.153	0.203
Currently married/in union	0.756	0.014	921	360	0.988	0.019	0.728	0.784
Married before age 20	0.525	0.022	592	231	1.067	0.042	0.481	0.569
Had sexual intercourse before age 18	0.191	0.021	592	231	1.296	0.110	0.149	0.232
Currently pregnant	0.090	0.009	921	360	0.923	0.097	0.072	0.107
Children ever born	2.460	0.051	921	360	0.841	0.021	2.357	2.563
Children surviving	2.319	0.051	921	360	0.893	0.022	2.216	2.422
Children ever born to women age 40-49	4.202	0.126	197	78	1.155	0.030	3.950	4.453
Know any contraceptive method	0.998	0.001	700	272	1.024	0.002	0.996	1.001
Know a modern method	0.998	0.001	700	272	1.024	0.002	0.996	1.001
Currently using any method	0.467	0.023	700	272	1.195	0.048	0.422	0.513
Currently using a modern method	0.455	0.022	700	272	1.175	0.049	0.410	0.499
Currently using a traditional method	0.013	0.004	700	272	0.886	0.293	0.005	0.020
Currently using pill	0.026	0.006	700	272	0.970	0.226	0.014	0.037
Currently using IUD	0.331	0.018	700	272	0.997	0.054	0.296	0.367
Currently using condoms	0.053	0.009	700	272	1.028	0.165	0.035	0.070
Currently using injectables	0.002	0.002	700	272	1.115	1.002	0.000	0.005
Currently using female sterilization	0.033	0.007	700	272	0.972	0.198	0.020	0.046
Currently using rhythm	0.003	0.002	700	272	1.090	0.708	0.000	0.008
Currently using withdrawal	0.010	0.003	700	272	0.856	0.330	0.003	0.016
Want no more children	0.341	0.021	700	272	1.150	0.061	0.299	0.382
Want to delay next birth at least 2 years	0.397	0.018	700	272	0.979	0.046	0.361	0.433
Ideal number of children	4.275	0.048	914	357	1.193	0.011	4.180	4.370
Mothers received antenatal care for last birth	1.000	0.000	435	170	na	0.000	1.000	1.000
Births with skilled attendant at delivery	0.994	0.003	658	256	1.001	0.003	0.988	1.000
Had diarrhea in the past 2 weeks	0.110	0.018	632	246	1.236	0.165	0.073	0.146
Treated with ORS	0.376	0.081	65	27	1.185	0.217	0.213	0.539
Sought medical treatment for diarrhea	0.616	0.093	65	27	1.327	0.151	0.429	0.802
Vaccination card seen	0.912	0.028	124	48	1.109	0.031	0.855	0.968
Received BCG vaccination	1.000	0.000	124	48	na	0.000	1.000	1.000
Received DPT vaccination (3 doses)	0.982	0.012	124	48	1.012	0.012	0.958	1.006
Received polio vaccination (3 doses)	0.819	0.034	124	48	0.978	0.042	0.751	0.887
Received measles vaccination	1.000	0.000	124	48	na	0.000	1.000	1.000
Received all vaccinations	0.819	0.034	124	48	0.978	0.042	0.751	0.887
Height-for-age (-2SD)	0.130	0.016	676	269	1.074	0.121	0.099	0.162
Weight-for-height (-2SD)	0.040	0.008	676	269	1.118	0.212	0.023	0.057
Weight-for-age (-2SD)	0.034	0.008	676	269	1.105	0.227	0.019	0.050
Prevalence of anemia (children 6-59 months)	0.584	0.024	626	249	1.144	0.040	0.536	0.631
Prevalence of anemia (women 15-49)	0.414	0.027	910	356	1.651	0.065	0.360	0.468
Body mass index (BMI) < 18.5	0.052	0.009	811	317	1.162	0.174	0.034	0.070
Has heard about HIV/AIDS	0.967	0.006	921	360	0.986	0.006	0.955	0.978
Know about condoms	0.729	0.020	921	360	1.378	0.028	0.688	0.769
Know about limiting partners	0.611	0.018	921	360	1.141	0.030	0.574	0.648
Abstinence among youth (never had sex)	1.000	0.000	156	61	na	0.000	1.000	1.000
Sexually active in past 12 months among never-married youth	0.000	0.000	156	61	na	na	0.000	0.000
Had an HIV test and received results in past 12 months	0.216	0.015	921	360	1.141	0.072	0.185	0.247
Accepting attitudes towards people with HIV	0.035	0.007	890	348	1.135	0.199	0.021	0.049
Ever experienced any physical violence since age 15	0.339	0.017	689	263	0.952	0.051	0.304	0.373
Ever experienced any sexual violence	0.064	0.011	689	263	1.156	0.169	0.042	0.085
Ever experienced any physical or sexual violence by any husband/partner	0.385	0.018	607	214	0.932	0.048	0.348	0.421
Ever experienced any physical or sexual violence by any husband/partner in the last 12 months	0.270	0.018	607	214	0.999	0.067	0.234	0.306
Total abortion rate (last 3 years)	1.059	0.121	2,571	1,005	0.943	0.114	0.817	1.302
Total fertility rate (last 3 years)	4.835	0.226	2,571	1,005	1.138	0.047	4.383	5.287
Neonatal mortality rate (last 0-9 years)	17.724	3.217	1,116	433	0.818	0.181	11.291	24.158
Post-neonatal mortality rate (last 0-9 years)	14.911	4.228	1,110	431	1.135	0.284	6.455	23.367
Infant mortality rate (last 0-9 years)	32.635	5.100	1,116	433	0.962	0.156	22.435	42.835
Child mortality rate (last 0-9 years)	5.763	2.459	1,068	415	0.963	0.427	0.844	10.681
Under-5 mortality rate (last 0-9 years)	38.210	5.571	1,118	434	0.953	0.146	27.069	49.351
MEN								
Urban residence	0.159	0.029	312	126	1.389	0.182	0.101	0.216
No education	0.000	0.000	312	126	na	na	0.000	0.000
Secondary education or higher	0.996	0.004	312	126	1.161	0.004	0.987	1.004
Never married/in union	0.306	0.021	312	126	0.817	0.070	0.263	0.348
Currently married/in union	0.667	0.027	312	126	1.002	0.040	0.614	0.721
Had sexual intercourse before age 18	0.183	0.029	217	88	1.112	0.160	0.124	0.241
Know any contraceptive method	1.000	0.000	207	84	na	0.000	1.000	1.000
Know a modern method	1.000	0.000	207	84	na	0.000	1.000	1.000
Want no more children	0.230	0.033	207	84	1.136	0.145	0.164	0.297
Want to delay next birth at least 2 years	0.478	0.040	207	84	1.142	0.083	0.398	0.557
Ideal number of children	4.629	0.096	247	101	1.067	0.021	4.437	4.820
Had 2+ sexual partners in past 12 months	0.055	0.016	312	126	1.205	0.282	0.024	0.087
Abstinence among youth (never had sex)	0.761	0.053	80	32	1.110	0.070	0.655	0.868
Sexually active in past 12 months among never-married youth	0.180	0.054	80	32	1.251	0.301	0.072	0.289
Paid for sexual intercourse in past 12 months	0.023	0.008	312	126	0.888	0.325	0.008	0.039
Had an HIV test and received results in past 12 months	0.026	0.010	312	126	1.097	0.378	0.006	0.046
Accepting attitudes towards people with HIV	0.006	0.004	305	123	0.950	0.696	0.000	0.015

Table B.11 Sampling errors: Chui sample, Kyrgyz Republic 2012

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
WOMEN								
Urban residence	0.210	0.046	859	1,465	3.263	0.217	0.119	0.302
No education	0.000	0.000	859	1,465	na	na	0.000	0.000
Secondary education or higher	0.990	0.005	859	1,465	1.574	0.005	0.979	1.001
Never married/never in union	0.250	0.022	859	1,465	1.500	0.089	0.206	0.295
Currently married/in union	0.640	0.027	859	1,465	1.671	0.043	0.585	0.694
Married before age 20	0.432	0.030	564	958	1.418	0.069	0.373	0.492
Had sexual intercourse before age 18	0.202	0.026	564	958	1.510	0.127	0.151	0.253
Currently pregnant	0.051	0.008	859	1,465	1.115	0.164	0.034	0.068
Children ever born	1.712	0.089	859	1,465	1.657	0.052	1.535	1.890
Children surviving	1.665	0.085	859	1,465	1.628	0.051	1.495	1.835
Children ever born to women age 40-49	2.748	0.105	222	387	1.158	0.038	2.538	2.959
Know any contraceptive method	0.997	0.003	558	937	1.138	0.003	0.991	1.002
Know a modern method	0.997	0.003	558	937	1.138	0.003	0.991	1.002
Currently using any method	0.294	0.022	558	937	1.148	0.076	0.249	0.338
Currently using a modern method	0.278	0.022	558	937	1.153	0.079	0.234	0.322
Currently using a traditional method	0.016	0.007	558	937	1.280	0.431	0.002	0.029
Currently using pill	0.018	0.005	558	937	0.956	0.296	0.007	0.029
Currently using IUD	0.157	0.016	558	937	1.060	0.104	0.124	0.190
Currently using condoms	0.088	0.013	558	937	1.092	0.149	0.062	0.114
Currently using injectables	0.000	0.000	558	937	na	na	0.000	0.000
Currently using female sterilization	0.012	0.005	558	937	1.064	0.414	0.002	0.021
Currently using rhythm	0.000	0.000	558	937	na	na	0.000	0.000
Currently using withdrawal	0.016	0.007	558	937	1.280	0.431	0.002	0.029
Want no more children	0.303	0.023	558	937	1.183	0.076	0.257	0.350
Want to delay next birth at least 2 years	0.294	0.028	558	937	1.435	0.094	0.238	0.349
Ideal number of children	3.673	0.055	853	1,454	1.093	0.015	3.563	3.782
Mothers received antenatal care for last birth	0.972	0.013	303	510	1.318	0.013	0.947	0.997
Births with skilled attendant at delivery	0.983	0.009	393	660	1.188	0.009	0.965	1.002
Had diarrhea in the past 2 weeks	0.113	0.021	383	643	1.341	0.187	0.071	0.156
Treated with ORS	0.306	0.071	41	73	1.011	0.232	0.164	0.448
Sought medical treatment for diarrhea	0.601	0.090	41	73	1.213	0.150	0.420	0.782
Vaccination card seen	0.759	0.049	78	139	1.036	0.064	0.661	0.856
Received BCG vaccination	0.977	0.023	78	139	1.388	0.023	0.931	1.023
Received DPT vaccination (3 doses)	0.787	0.050	78	139	1.102	0.063	0.688	0.886
Received polio vaccination (3 doses)	0.663	0.053	78	139	1.021	0.080	0.557	0.769
Received measles vaccination	0.977	0.023	78	139	1.388	0.023	0.931	1.023
Received all vaccinations	0.630	0.062	78	139	1.170	0.099	0.506	0.754
Height-for-age (-2SD)	0.116	0.033	401	690	1.798	0.280	0.051	0.181
Weight-for-height (-2SD)	0.009	0.005	401	690	1.119	0.569	0.000	0.020
Weight-for-age (-2SD)	0.011	0.006	401	690	1.073	0.510	0.000	0.022
Prevalence of anemia (children 6-59 months)	0.585	0.032	366	627	1.177	0.055	0.521	0.649
Prevalence of anemia (women 15-49)	0.392	0.019	818	1,372	1.112	0.049	0.354	0.430
Body mass index (BMI) < 18.5	0.062	0.010	782	1,320	1.200	0.167	0.041	0.083
Has heard about HIV/AIDS	0.970	0.013	859	1,465	2.198	0.013	0.945	0.996
Know about condoms	0.652	0.023	859	1,465	1.385	0.035	0.606	0.697
Know about limiting partners	0.823	0.021	859	1,465	1.638	0.026	0.780	0.866
Abstinence among youth (never had sex)	0.946	0.015	185	323	0.888	0.016	0.916	0.975
Sexually active in past 12 months among never-married youth	0.054	0.015	185	323	0.888	0.273	0.025	0.084
Had an HIV test and received results in past 12 months	0.148	0.016	859	1,465	1.279	0.105	0.117	0.179
Accepting attitudes towards people with HIV	0.088	0.013	831	1,422	1.358	0.151	0.062	0.115
Ever experienced any physical violence since age 15	0.193	0.022	644	1,076	1.381	0.111	0.150	0.236
Ever experienced any sexual violence	0.049	0.010	644	1,076	1.170	0.203	0.029	0.069
Ever experienced any physical or sexual violence by any husband/partner	0.207	0.021	529	819	1.165	0.099	0.166	0.248
Ever experienced any physical or sexual violence by any husband/partner in the last 12 months	0.169	0.022	529	819	1.337	0.129	0.125	0.212
Total abortion rate (last 3 years)	0.651	0.129	2,440	4,150	1.272	0.198	0.393	0.908
Total fertility rate (last 3 years)	3.283	0.312	2,440	4,150	1.427	0.095	2.658	3.908
Neonatal mortality rate (last 0-9 years)	19.489	6.425	687	1,146	1.001	0.330	6.639	32.339
Post-neonatal mortality rate (last 0-9 years)	4.755	3.660	685	1,142	1.108	0.770	0.000	12.075
Infant mortality rate (last 0-9 years)	24.245	6.760	688	1,147	0.938	0.279	10.725	37.764
Child mortality rate (last 0-9 years)	5.935	2.650	643	1,061	0.854	0.446	0.636	11.234
Under-5 mortality rate (last 0-9 years)	30.036	6.572	688	1,147	0.864	0.219	16.892	43.180
MEN								
Urban residence	0.181	0.029	240	407	1.152	0.159	0.124	0.239
No education	0.000	0.000	240	407	na	na	0.000	0.000
Secondary education or higher	1.000	0.000	240	407	na	0.000	1.000	1.000
Never married/in union	0.371	0.031	240	407	1.006	0.085	0.308	0.434
Currently married/in union	0.588	0.034	240	407	1.083	0.059	0.519	0.657
Had sexual intercourse before age 18	0.260	0.044	167	283	1.292	0.170	0.172	0.348
Know any contraceptive method	1.000	0.000	139	239	na	0.000	1.000	1.000
Know a modern method	1.000	0.000	139	239	na	0.000	1.000	1.000
Want no more children	0.089	0.023	139	239	0.962	0.262	0.042	0.135
Want to delay next birth at least 2 years	0.102	0.034	139	239	1.336	0.339	0.033	0.171
Ideal number of children	3.460	0.121	240	407	1.396	0.035	3.219	3.702
Had 2+ sexual partners in past 12 months	0.250	0.038	240	407	1.347	0.151	0.175	0.326
Abstinence among youth (never had sex)	0.239	0.050	67	112	0.950	0.209	0.139	0.338
Sexually active in past 12 months among never-married youth	0.744	0.058	67	112	1.072	0.078	0.628	0.859
Paid for sexual intercourse in past 12 months	0.126	0.025	240	407	1.183	0.202	0.075	0.177
Had an HIV test and received results in past 12 months	0.030	0.012	240	407	1.135	0.421	0.005	0.054
Accepting attitudes towards people with HIV	0.014	0.007	240	407	0.906	0.501	0.000	0.027

Table B.12 Sampling errors: Bishkek City sample, Kyrgyz Republic 2012

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
			WOMEN					
Urban residence	0.998	0.000	1,017	1,566	0.233	0.000	0.997	0.999
No education	0.000	0.000	1,017	1,566	na	na	0.000	0.000
Secondary education or higher	0.999	0.001	1,017	1,566	1.167	0.001	0.996	1.001
Never married/never in union	0.392	0.018	1,017	1,566	1.185	0.046	0.356	0.429
Currently married/in union	0.479	0.024	1,017	1,566	1.515	0.050	0.431	0.526
Married before age 20	0.311	0.028	595	918	1.462	0.089	0.255	0.367
Had sexual intercourse before age 18	0.119	0.012	595	918	0.871	0.097	0.095	0.142
Currently pregnant	0.051	0.008	1,017	1,566	1.112	0.151	0.035	0.066
Children ever born	1.232	0.076	1,017	1,566	1.716	0.062	1.080	1.383
Children surviving	1.180	0.070	1,017	1,566	1.680	0.060	1.040	1.321
Children ever born to women age 40-49	2.370	0.147	231	334	1.627	0.062	2.077	2.663
Know any contraceptive method	0.997	0.003	496	750	1.148	0.003	0.992	1.003
Know a modern method	0.997	0.003	496	750	1.148	0.003	0.992	1.003
Currently using any method	0.429	0.031	496	750	1.413	0.073	0.366	0.492
Currently using a modern method	0.366	0.026	496	750	1.211	0.072	0.313	0.418
Currently using a traditional method	0.063	0.011	496	750	1.028	0.178	0.041	0.086
Currently using pill	0.014	0.005	496	750	0.998	0.373	0.004	0.025
Currently using IUD	0.218	0.019	496	750	1.035	0.088	0.179	0.256
Currently using condoms	0.124	0.019	496	750	1.264	0.151	0.086	0.161
Currently using injectables	0.000	0.000	496	750	na	na	0.000	0.000
Currently using female sterilization	0.010	0.006	496	750	1.251	0.567	0.000	0.021
Currently using rhythm	0.005	0.003	496	750	1.096	0.699	0.000	0.012
Currently using withdrawal	0.056	0.009	496	750	0.872	0.161	0.038	0.074
Want no more children	0.250	0.025	496	750	1.288	0.100	0.200	0.300
Want to delay next birth at least 2 years	0.348	0.023	496	750	1.080	0.066	0.302	0.394
Ideal number of children	3.307	0.114	989	1,522	2.659	0.034	3.078	3.535
Mothers received antenatal care for last birth	0.991	0.006	276	428	1.125	0.006	0.978	1.004
Births with skilled attendant at delivery	1.000	0.000	362	557	na	0.000	1.000	1.000
Had diarrhea in the past 2 weeks	0.018	0.012	356	544	1.692	0.661	0.000	0.042
Treated with ORS	0.466	0.041	5	10	0.206	0.087	0.385	0.548
Sought medical treatment for diarrhea	0.466	0.041	5	10	0.206	0.087	0.385	0.548
Vaccination card seen	0.699	0.054	90	143	1.100	0.077	0.591	0.806
Received BCG vaccination	0.976	0.023	90	143	1.464	0.024	0.929	1.023
Received DPT vaccination (3 doses)	0.682	0.048	90	143	0.982	0.070	0.586	0.778
Received polio vaccination (3 doses)	0.613	0.043	90	143	0.836	0.070	0.526	0.699
Received measles vaccination	0.942	0.028	90	143	1.152	0.030	0.886	0.998
Received all vaccinations	0.578	0.047	90	143	0.896	0.081	0.485	0.672
Height-for-age (-2SD)	0.186	0.030	312	476	1.193	0.160	0.127	0.246
Weight-for-height (-2SD)	0.043	0.016	312	476	1.417	0.381	0.010	0.076
Weight-for-age (-2SD)	0.028	0.010	312	476	1.091	0.361	0.008	0.049
Prevalence of anemia (children 6-59 months)	0.452	0.037	290	442	1.220	0.082	0.378	0.526
Prevalence of anemia (women 15-49)	0.347	0.017	1,004	1,549	1.131	0.049	0.313	0.381
Body mass index (BMI) < 18.5	0.090	0.013	952	1,460	1.352	0.140	0.065	0.115
Has heard about HIV/AIDS	0.955	0.007	1,017	1,566	1.109	0.008	0.941	0.970
Know about condoms	0.751	0.019	1,017	1,566	1.416	0.026	0.712	0.789
Know about limiting partners	0.854	0.017	1,017	1,566	1.568	0.020	0.819	0.889
Abstinence among youth (never had sex)	0.973	0.008	343	525	0.942	0.008	0.957	0.990
Sexually active in past 12 months among never-married youth	0.019	0.007	343	525	0.919	0.354	0.006	0.033
Had an HIV test and received results in past 12 months	0.123	0.012	1,017	1,566	1.119	0.094	0.100	0.147
Accepting attitudes towards people with HIV	0.018	0.004	971	1,496	0.978	0.235	0.009	0.026
Ever experienced any physical violence since age 15	0.230	0.018	673	1,149	1.109	0.078	0.194	0.266
Ever experienced any sexual violence	0.016	0.004	673	1,149	0.891	0.271	0.007	0.024
Ever experienced any physical or sexual violence by any husband/partner	0.362	0.023	455	664	1.031	0.064	0.315	0.408
Ever experienced any physical or sexual violence by any husband/partner in the last 12 months	0.151	0.022	455	664	1.280	0.142	0.108	0.195
Total abortion rate (last 3 years)	0.730	0.129	2,893	4,475	1.090	0.177	0.472	0.988
Total fertility rate (last 3 years)	2.922	0.257	2,893	4,475	1.617	0.088	2.407	3.436
Neonatal mortality rate (last 0-9 years)	19.653	7.072	649	999	1.078	0.360	5.509	33.797
Post-neonatal mortality rate (last 0-9 years)	1.776	1.792	648	997	0.854	1.009	0.000	5.360
Infant mortality rate (last 0-9 years)	21.429	7.110	649	999	1.055	0.332	7.208	35.649
Child mortality rate (last 0-9 years)	11.317	5.201	609	940	1.054	0.460	0.915	21.720
Under-5 mortality rate (last 0-9 years)	32.503	7.585	649	999	0.933	0.233	17.334	47.673
			MEN					
Urban residence	0.997	0.001	245	383	0.251	0.001	0.995	0.999
No education	0.000	0.000	245	383	na	na	0.000	0.000
Secondary education or higher	1.000	0.000	245	383	na	0.000	1.000	1.000
Never married/in union	0.360	0.033	245	383	1.071	0.091	0.295	0.426
Currently married/in union	0.589	0.033	245	383	1.054	0.056	0.523	0.656
Had sexual intercourse before age 18	0.259	0.048	169	260	1.428	0.187	0.162	0.355
Know any contraceptive method	1.000	0.000	144	226	na	0.000	1.000	1.000
Know a modern method	1.000	0.000	144	226	na	0.000	1.000	1.000
Want no more children	0.016	0.011	144	226	1.072	0.701	0.000	0.039
Want to delay next birth at least 2 years	0.353	0.044	144	226	1.093	0.124	0.265	0.440
Ideal number of children	3.851	0.196	235	367	1.623	0.051	3.458	4.243
Had 2+ sexual partners in past 12 months	0.023	0.010	245	383	1.037	0.432	0.003	0.043
Abstinence among youth (never had sex)	0.419	0.054	68	110	0.903	0.130	0.311	0.528
Sexually active in past 12 months among never-married youth	0.449	0.058	68	110	0.952	0.129	0.334	0.565
Paid for sexual intercourse in past 12 months	0.023	0.011	245	383	1.189	0.501	0.000	0.045
Had an HIV test and received results in past 12 months	0.013	0.007	245	383	0.911	0.504	0.000	0.026
Accepting attitudes towards people with HIV	0.002	0.002	219	337	0.671	1.019	0.000	0.006

Table B.13 Sampling errors: Osh City sample, Kyrgyz Republic 2012

VARIABLE	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
	WOMEN							
Urban residence	0.924	0.014	728	311	1.430	0.015	0.896	0.952
No education	0.001	0.001	728	311	0.815	1.010	0.000	0.003
Secondary education or higher	0.999	0.001	728	311	0.761	0.001	0.996	1.001
Never married/never in union	0.321	0.021	728	311	1.228	0.066	0.278	0.363
Currently married/in union	0.593	0.026	728	311	1.413	0.043	0.542	0.645
Married before age 20	0.372	0.028	426	178	1.192	0.075	0.316	0.428
Had sexual intercourse before age 18	0.102	0.016	426	178	1.086	0.156	0.070	0.134
Currently pregnant	0.096	0.013	728	311	1.195	0.136	0.070	0.122
Children ever born	1.387	0.071	728	311	1.300	0.051	1.245	1.530
Children surviving	1.372	0.069	728	311	1.275	0.050	1.233	1.510
Children ever born to women age 40-49	2.716	0.141	125	53	1.048	0.052	2.434	2.997
Know any contraceptive method	0.993	0.003	449	184	0.884	0.003	0.987	1.000
Know a modern method	0.993	0.003	449	184	0.884	0.003	0.987	1.000
Currently using any method	0.330	0.026	449	184	1.152	0.078	0.279	0.381
Currently using a modern method	0.310	0.024	449	184	1.119	0.079	0.261	0.359
Currently using a traditional method	0.020	0.008	449	184	1.130	0.372	0.005	0.035
Currently using pill	0.029	0.007	449	184	0.920	0.253	0.014	0.043
Currently using IUD	0.214	0.024	449	184	1.218	0.110	0.167	0.262
Currently using condoms	0.050	0.012	449	184	1.140	0.235	0.026	0.073
Currently using injectables	0.000	0.000	449	184	na	na	0.000	0.000
Currently using female sterilization	0.017	0.007	449	184	1.146	0.415	0.003	0.031
Currently using rhythm	0.006	0.004	449	184	1.101	0.693	0.000	0.013
Currently using withdrawal	0.015	0.006	449	184	1.032	0.400	0.003	0.026
Want no more children	0.313	0.024	449	184	1.076	0.075	0.266	0.360
Want to delay next birth at least 2 years	0.341	0.032	449	184	1.437	0.095	0.277	0.405
Ideal number of children	3.639	0.072	726	310	1.329	0.020	3.496	3.782
Mothers received antenatal care for last birth	0.996	0.004	205	86	0.871	0.004	0.989	1.004
Births with skilled attendant at delivery	0.985	0.007	287	119	0.984	0.007	0.971	0.999
Had diarrhea in the past 2 weeks	0.036	0.014	286	119	1.222	0.401	0.007	0.064
Treated with ORS	0.685	0.149	8	4	0.986	0.217	0.387	0.983
Sought medical treatment for diarrhea	0.631	0.129	8	4	0.925	0.205	0.372	0.890
Vaccination card seen	0.872	0.057	46	20	1.176	0.065	0.758	0.986
Received BCG vaccination	1.000	0.000	46	20	na	0.000	1.000	1.000
Received DPT vaccination (3 doses)	0.872	0.057	46	20	1.176	0.065	0.758	0.986
Received polio vaccination (3 doses)	0.900	0.050	46	20	1.140	0.055	0.800	0.999
Received measles vaccination	0.968	0.031	46	20	1.233	0.032	0.905	1.031
Received all vaccinations	0.872	0.057	46	20	1.176	0.065	0.758	0.986
Height-for-age (-2SD)	0.290	0.036	285	123	1.211	0.125	0.218	0.362
Weight-for-height (-2SD)	0.057	0.016	285	123	1.082	0.278	0.025	0.089
Weight-for-age (-2SD)	0.113	0.018	285	123	0.865	0.156	0.078	0.148
Prevalence of anemia (children 6-59 months)	0.256	0.037	260	111	1.264	0.146	0.181	0.330
Prevalence of anemia (women 15-49)	0.256	0.037	260	111	1.264	0.146	0.181	0.330
Body mass index (BMI) < 18.5	0.056	0.009	650	277	1.018	0.165	0.037	0.074
Has heard about HIV/AIDS	0.939	0.009	728	311	0.980	0.009	0.922	0.957
Know about condoms	0.544	0.025	728	311	1.365	0.046	0.493	0.594
Know about limiting partners	0.715	0.023	728	311	1.359	0.032	0.669	0.760
Abstinence among youth (never had sex)	0.997	0.003	205	91	0.782	0.003	0.991	1.003
Sexually active in past 12 months among never-married youth	0.003	0.003	205	91	0.782	1.005	0.000	0.009
Had an HIV test and received results in past 12 months	0.170	0.017	728	311	1.246	0.102	0.135	0.204
Accepting attitudes towards people with HIV	0.052	0.010	684	292	1.226	0.200	0.031	0.073
Ever experienced any physical violence since age 15	0.123	0.011	618	228	0.833	0.090	0.101	0.145
Ever experienced any sexual violence	0.013	0.005	618	228	1.156	0.400	0.003	0.024
Ever experienced any physical or sexual violence by any husband/partner	0.161	0.015	449	157	0.870	0.094	0.131	0.191
Ever experienced any physical or sexual violence by any husband/partner in the last 12 months	0.143	0.015	449	157	0.900	0.104	0.113	0.173
Total abortion rate (last 3 years)	0.563	0.144	2,076	888	0.920	0.256	0.274	0.851
Total fertility rate (last 3 years)	2.672	0.237	2,076	888	1.245	0.089	2.198	3.145
Neonatal mortality rate (last 0-9 years)	0.731	0.734	547	229	0.636	1.004	0.000	2.199
Post-neonatal mortality rate (last 0-9 years)	3.303	2.364	551	230	0.952	0.716	0.000	8.032
Infant mortality rate (last 0-9 years)	4.034	2.474	547	229	0.911	0.613	0.000	8.981
Child mortality rate (last 0-9 years)	1.866	1.871	518	217	0.961	1.003	0.000	5.608
Under-5 mortality rate (last 0-9 years)	5.892	3.020	547	229	0.909	0.512	0.000	11.932
	MEN							
Urban residence	0.911	0.025	180	78	1.176	0.028	0.861	0.961
No education	0.000	0.000	180	78	na	na	0.000	0.000
Secondary education or higher	0.996	0.004	180	78	0.868	0.004	0.987	1.004
Never married/in union	0.389	0.045	180	78	1.237	0.116	0.299	0.479
Currently married/in union	0.584	0.046	180	78	1.255	0.079	0.491	0.676
Had sexual intercourse before age 18	0.098	0.033	115	49	1.194	0.340	0.031	0.164
Know any contraceptive method	1.000	0.000	110	45	na	0.000	1.000	1.000
Know a modern method	1.000	0.000	110	45	na	0.000	1.000	1.000
Want no more children	0.385	0.044	110	45	0.952	0.115	0.296	0.474
Want to delay next birth at least 2 years	0.254	0.041	110	45	0.986	0.162	0.172	0.337
Ideal number of children	3.993	0.111	179	77	1.237	0.028	3.771	4.214
Had 2+ sexual partners in past 12 months	0.213	0.041	180	78	1.324	0.191	0.131	0.294
Abstinence among youth (never had sex)	0.442	0.078	57	25	1.175	0.177	0.285	0.598
Sexually active in past 12 months among never-married youth	0.558	0.078	57	25	1.175	0.140	0.402	0.715
Paid for sexual intercourse in past 12 months	0.244	0.036	180	78	1.128	0.149	0.171	0.316
Had an HIV test and received results in past 12 months	0.069	0.021	180	78	1.128	0.311	0.026	0.111
Accepting attitudes towards people with HIV	0.000	0.000	173	75	na	na	0.000	0.000

DATA QUALITY TABLES APPENDIX C

Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Kyrgyz Republic 2012

	Female		Male	
Age	Number	Percent	Number	Percent
0	447	2.5	531	3.3
1	466	2.6	508	3.1
2	439	2.5	446	2.7
3	448	2.5	456	2.8
4	427	2.4	425	2.6
5	307	1.7	371	2.3
6	377	2.1	383	2.3
7	329	1.8	353	2.2
8	345	1.9	361	2.2
9	255	1.4	364	2.2
10	356	2.0	313	1.9
11	293	1.6	300	1.8
12	362	2.0	328	2.0
13	359	2.0	312	1.9
14	358	2.0	349	2.1
15	361	2.0	274	1.7
16	384	2.2	321	2.0
17	344	1.9	309	1.9
18	317	1.8	234	1.4
19	282	1.6	239	1.5
20	322	1.8	271	1.7
21	300	1.7	243	1.5
22	299	1.7	254	1.6
23	322	1.8	221	1.4
24	339	1.9	307	1.9
25	310	1.7	271	1.7
26	276	1.5	287	1.8
27	256	1.4	270	1.7
28	243	1.4	216	1.3
29	205	1.2	204	1.3
30	259	1.5	238	1.5
31	178	1.0	165	1.0
32	224	1.3	201	1.2
33	203	1.1	165	1.0
34	198	1.1	185	1.1
35	185	1.0	174	1.1
36	211	1.2	232	1.4
37	181	1.0	156	1.0
38	169	0.9	168	1.0
39	202	1.1	172	1.1
40	188	1.1	177	1.1
41	205	1.1	162	1.0
42	187	1.0	201	1.2
43	175	1.0	182	1.1
44	203	1.1	159	1.0
45	194	1.1	200	1.2
46	185	1.0	168	1.0
47	190	1.1	178	1.1
48	176	1.0	162	1.0
49	195	1.1	149	0.9
50	309	1.7	203	1.2
51	224	1.3	174	1.1
52	294	1.7	216	1.3
53	258	1.4	167	1.0
54	219	1.2	182	1.1
55	192	1.1	175	1.1
56	177	1.0	185	1.1
57	169	0.9	147	0.9
58	147	0.8	146	0.9
59	103	0.6	96	0.6
60	142	0.8	142	0.9
61	97	0.5	74	0.5
62	102	0.6	108	0.7
63	105	0.6	90	0.5
64	93	0.5	79	0.5
65	105	0.6	69	0.4
66	54	0.3	36	0.2
67	46	0.3	34	0.2
68	50	0.3	21	0.1
69	29	0.2	32	0.2
70+	871	4.9	613	3.8
Don't know/missing	3	0.0	1	0.0
Total	17,825	100.0	16,306	100.0

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview.

Table C.2.1 Age distribution of eligible and interviewed women

De facto household population of women age 10-54, interviewed women age 15-49, and percent distribution and percentage of eligible women who were interviewed (weighted), by five-year age groups, Kyrgyz Republic 2012

Age group	Household population of women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed
		Number	Percentage	
10-14	1,727	na	na	na
15-19	1,688	1,674	20.0	99.2
20-24	1,582	1,561	18.6	98.7
25-29	1,291	1,282	15.3	99.3
30-34	1,063	1,055	12.6	99.2
35-39	948	933	11.1	98.5
40-44	958	944	11.3	98.6
45-49	940	928	11.1	98.7
50-54	1,304	na	na	na
15-49	8,470	8,378	100.0	98.9

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both household population of women and interviewed women are household weights. Age is based on the Household Questionnaire.
na = Not applicable

Table C.2.2 Age distribution of eligible and interviewed men

De facto household population of men age 10-59 and interviewed men age 15-49; and percent distribution and percentage of eligible men who were interviewed (weighted), by five-year age groups, Kyrgyz Republic 2012

Age group	Household population of men age 10-59	Interviewed men age 15-54		Percentage of eligible men interviewed
		Number	Percentage	
10-14	644	na	na	na
15-19	442	429	18.0	97.0
20-24	408	392	16.4	96.0
25-29	423	408	17.2	96.4
30-34	309	303	12.7	98.1
35-39	296	287	12.0	96.9
40-44	300	292	12.2	97.2
45-49	282	271	11.4	96.1
50-54	363	na	na	na
15-54	2,460	2,381	100.0	96.8

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both household population of men and interviewed men are household weights. Age is based on the Household Questionnaire.
na = Not applicable

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Kyrgyz Republic 2012

Subject	Reference group	Percentage with information missing	Number of cases
Birth date	Births in the 15 years preceding the survey		
Month only		0.52	9,811
Month and year		0.03	9,811
Age at death	Deceased children born in the 15 years preceding the survey	0.00	332
Age/date at first union[1]	Ever-married women age 15-49	0.00	5,963
	Ever-married men age 15-49	0.00	1,538
Respondent's education	All women age 15-49	0.00	8,208
	All men age 15-49	0.47	3,975
Diarrhea in past 2 weeks	Living children age 0-59 months	0.47	3,975
Anthropometry	Living children age 0-59 months (from the Household Questionnaire)		
Height		3.19	4,543
Weight		2.29	4,543
Height or weight		3.22	4,543
Anemia	Living children age 6-59 months (from the Household Questionnaire)		
Children		3.33	4,108
Women	All women (from the Household Questionnaire)	3.21	8,470

Table C.4 Births by calendar years

Number of births, percentage with complete birth date, sex ratio at birth, and calendar year ratio by calendar year, according to living (L), dead (D), and total (T) children (weighted), Kyrgyz Republic 2012

	Number of births			Percentage with complete birth date[1]			Sex ratio at birth[2]			Calendar year ratio[3]		
Calendar year	L	D	T	L	D	T	L	D	T	L	D	T
2012	680	13	693	100.0	100.0	100.0	118.1	240.2	119.6	na	na	na
2011	888	21	908	100.0	100.0	100.0	105.8	94.0	105.5	na	na	na
2010	843	29	872	99.7	100.0	99.7	95.3	105.1	95.6	103.6	142.9	104.5
2009	739	20	760	100.0	100.0	100.0	117.6	51.9	115.1	96.0	78.3	95.5
2008	697	23	720	100.0	100.0	100.0	94.6	43.9	92.5	102.1	109.8	102.3
2007	626	21	647	100.0	100.0	100.0	110.4	65.9	108.6	93.5	114.0	94.1
2006	643	14	657	99.0	100.0	99.1	104.5	496.6	107.4	109.0	60.9	107.2
2005	553	25	578	98.9	100.0	98.9	107.2	134.2	108.2	87.1	118.4	88.1
2004	627	29	655	99.5	97.8	99.4	107.7	102.5	107.4	115.2	133.7	115.9
2003	535	18	552	98.7	100.0	98.7	125.8	133.4	126.0	91.6	62.7	90.2
2008-2012	3,847	106	3,953	99.9	100.0	99.9	105.4	83.1	104.7	na	na	na
2007-2003	2,983	106	3,089	99.2	99.4	99.3	110.5	124.5	110.9	na	na	na
2002-1998	2,562	105	2,667	99.0	97.6	98.9	92.9	91.3	92.8	na	na	na
1997-1993	2,504	138	2,643	99.2	96.9	99.1	104.7	109.4	105.0	na	na	na
<1992	2,689	194	2,883	98.7	96.5	98.5	106.2	153.7	108.8	na	na	na
All	14,585	650	15,235	99.3	97.8	99.2	104.1	114.6	104.5	na	na	na

NA = Not applicable
[1] Both year and month of birth given.
[2] (Bm/Bf)x100, where Bm and Bf are the numbers of male and female births, respectively.
[3] [2Bx/(Bx-1+Bx+1)]x100, where Bx is the number of births in calendar year x.

Table C.5 Reporting of age at death in days

Distribution of reported deaths under age 1 month by age at death in days and the percentage of neonatal deaths reported to occur at ages 0-6 days, for five-year periods of birth preceding the survey (weighted), Kyrgyz Republic 2012

	Number of years preceding the survey				Total
Age at death (days)	0-4	5-9	10-14	15-19	0-19
<1	10	8	5	5	29
1	12	19	13	21	66
2	12	6	5	7	30
3	15	6	4	2	28
4	3	2	0	0	5
5	1	3	2	0	6
6	4	1	0	0	6
7	4	1	4	2	11
8	0	0	2	0	2
9	1	0	1	2	4
10	2	2	3	4	10
11	0	0	1	0	1
12	0	0	1	0	2
14	0	0	0	0	0
15	2	1	0	0	4
18	1	0	0	0	1
20	1	1	0	0	2
21	3	0	0	0	3
22	0	0	0	1	1
23	2	0	0	0	2
25	0	0	0	3	3
29	0	0	2	0	2
30	0	1	0	0	1
Total 0-30	75	53	44	47	218
Percentage early neonatal[1]	78.3	88.0	66.7	77.0	78.0

[1] ≤6 days / ≤30 days

Table C.6 Reporting of age at death in months

Distribution of reported deaths under age 2 by age at death in months and the percentage of infant deaths reported to occur at age under 1 month, for five-year periods of birth preceding the survey, Kyrgyz Republic 2012

	Number of years preceding the survey				Total
Age at death (months)	0-4	5-9	10-14	15-19	0-19
<1[a]	75	53	44	47	218
1	6	3	4	5	17
2	2	3	8	7	20
3	4	4	9	6	22
4	1	3	4	3	10
5	2	4	9	3	17
6	4	0	3	6	13
7	3	3	6	8	20
8	1	1	3	6	11
9	1	1	1	2	5
10	1	4	3	0	8
11	1	1	0	3	6
12	0	1	3	0	4
13	0	1	0	0	1
18	0	0	0	0	1
22	0	1	0	0	1
1 Year	0	7	4	9	20
Total 0-11	99	81	94	95	368
Percentage neonatal[1]	75.8	65.3	46.6	49.4	59.2

[a] Includes deaths under 1 month reported in days.
[1] Under 1 month / under 1 year.

Table C.7 Nutritional status of children based on the NCHS/CDC/WHO International Reference Population

Percentage of children under age 5 classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, based on the NCHS/CDC/WHO International Reference Population, Kyrgyz Republic 2012

	Height-for-age[1]			Weight-for-height				Weight-for-age				
Background characteristic	Percent-age below -3 SD	Percent-age below -2 SD[2]	Mean Z-score (SD)	Percent-age below -3 SD	Percent-age below -2 SD[2]	Percent-age above +2 SD	Mean Z-score (SD)	Percent-age below -3 SD	Percent-age below -2 SD[2]	Percent-age above +2 SD	Mean Z-score (SD)	Number of children
Age in months												
<6	0.3	5.1	0.1	0.2	2.7	14.7	0.6	0.0	1.4	10.1	0.7	383
6-8	1.4	9.4	-0.3	0.0	1.7	13.6	0.6	0.1	2.6	9.7	0.3	226
9-11	1.8	7.2	-0.0	0.0	2.9	9.5	0.3	0.2	2.8	6.9	0.1	269
12-17	4.1	12.1	-0.5	0.2	3.9	8.8	0.1	0.9	4.5	3.8	-0.4	481
18-23	8.2	21.4	-1.0	0.9	3.3	5.5	0.1	1.1	6.7	0.7	-0.5	451
24-35	4.9	15.1	-0.7	0.8	3.8	1.9	-0.0	1.7	6.8	0.3	-0.5	874
36-47	4.1	13.3	-0.9	0.3	0.6	2.4	0.2	0.6	3.3	0.7	-0.4	861
48-59	3.5	16.2	-1.0	1.0	1.5	3.0	0.2	1.4	4.9	0.2	-0.5	787
Sex												
Male	4.0	14.6	-0.7	0.7	2.6	5.6	0.2	0.9	4.2	2.4	-0.3	2,242
Female	3.9	12.5	-0.6	0.4	2.3	5.5	0.2	0.9	4.9	2.7	-0.3	2,090
Birth interval in months[3]												
First birth[4]	3.3	12.6	-0.6	0.3	2.7	5.8	0.2	0.5	3.9	2.9	-0.3	1,176
<24	4.0	16.0	-0.8	0.3	2.3	6.8	0.3	0.9	5.5	2.5	-0.3	931
24-47	4.7	14.5	-0.7	0.4	1.5	5.3	0.2	0.5	4.3	2.3	-0.3	959
48+	3.7	10.7	-0.5	1.2	3.3	4.7	0.1	2.0	4.4	3.0	-0.3	728
Size at birth[3]												
Very small	13.9	23.9	-1.4	2.8	7.7	5.6	-0.2	7.9	22.9	1.8	-1.0	64
Small	6.2	21.2	-1.0	0.5	2.5	5.7	0.2	1.4	7.8	1.6	-0.6	508
Average or larger	3.3	12.1	-0.6	0.4	2.3	5.7	0.2	0.7	3.6	2.9	-0.2	3,208
Missing	*	*	*	*	*	*	*	*	*	*	*	14
Mother's interview status												
Interviewed	3.9	13.5	-0.7	0.5	2.4	5.7	0.2	0.9	4.5	2.7	-0.3	3,794
Not interviewed but in household	(1.4)	(7.8)	-(1.1)	(6.0)	(9.8)	(14.4)	-(0.3)	(6.0)	(11.6)	(0.0)	-(0.8)	37
Not interviewed and not in the household[5]	4.5	14.4	-0.8	0.6	2.3	3.8	0.1	1.0	4.5	1.8	-0.4	501
Mother's nutritional status[6]												
Thin (BMI<18.5)	6.8	20.4	-0.8	0.7	5.0	5.4	-0.0	1.1	7.3	0.6	-0.6	204
Normal (BMI 18.5-24.9)	3.2	12.9	-0.6	0.5	2.6	5.8	0.2	0.9	5.0	2.8	-0.3	2,000
Overweight/ obese (BMI >= 25)	4.3	13.3	-0.6	0.5	1.5	6.2	0.3	0.8	2.7	3.5	-0.2	1,079
Residence												
Urban	3.5	13.5	-0.6	0.7	3.0	5.6	0.2	0.9	4.9	3.0	-0.3	1,167
Rural	4.1	13.6	-0.7	0.5	2.2	5.5	0.2	1.0	4.4	2.4	-0.3	3,165
Region												
Issyk-Kul	1.3	6.5	-0.5	0.2	2.4	5.3	0.3	0.7	2.6	3.7	-0.1	427
Djalal-Abad	1.7	9.7	-0.5	0.7	2.4	2.9	-0.2	0.5	5.5	2.1	-0.5	766
Naryn	3.8	13.7	-0.8	0.4	1.1	4.0	0.3	0.6	3.5	1.7	-0.3	202
Batken	3.8	16.4	-0.8	0.7	3.2	5.3	0.1	1.4	6.4	2.6	-0.4	375
Osh Oblast	7.3	20.7	-1.0	0.4	1.8	6.0	0.3	1.2	5.6	1.8	-0.4	1,004
Talas	1.6	10.6	-0.6	1.7	3.8	7.0	0.3	0.9	3.5	3.2	-0.1	270
Chui	3.4	9.0	-0.4	0.0	1.0	7.5	0.4	0.9	1.8	3.8	0.0	691
Bishkek City	3.5	14.5	-0.6	1.1	4.5	5.4	0.1	0.9	4.1	1.9	-0.3	476
Osh City	10.8	24.0	-1.0	0.4	5.6	8.1	0.1	2.4	13.9	2.0	-0.6	121
Mother's education[7]												
None/primary	*	*	*	*	*	*	*	*	*	*	*	23
Basic general	3.0	13.8	-0.6	0.0	1.5	5.2	0.2	0.6	4.3	3.2	-0.3	412
Secondary	5.1	14.7	-0.7	0.8	2.9	5.8	0.2	1.0	4.9	2.3	-0.4	1,765
Professional primary/ middle	3.0	11.4	-0.6	0.4	0.9	5.3	0.3	1.1	3.3	2.9	-0.2	616
Higher	2.8	12.6	-0.5	0.5	3.1	6.0	0.2	0.8	5.0	2.9	-0.2	1,015
Wealth quintile												
Lowest	4.9	15.2	-0.8	1.1	3.0	6.1	0.2	1.3	5.5	2.2	-0.3	910
Second	2.8	14.1	-0.7	0.4	1.7	5.2	0.2	0.5	3.9	2.1	-0.3	898
Middle	4.6	12.3	-0.8	0.4	2.6	4.7	0.1	1.2	4.7	2.8	-0.4	939
Fourth	3.4	12.1	-0.5	0.3	1.4	5.3	0.2	0.8	4.2	2.7	-0.2	941
Highest	4.1	14.7	-0.6	0.6	4.1	6.8	0.2	0.9	4.5	3.0	-0.2	644
Total	4.0	13.6	-0.7	0.6	2.5	5.5	0.2	0.9	4.6	2.5	-0.3	4,332

Note: Table is based on children who slept in the household the night before the interview. Each of the indices is expressed in standard deviation units (SDs) from the median of the NCHS/CDC/WHO International Reference Population. Table is based on children with valid dates of birth (month and year) and valid measurement of both height and weight. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Recumbent length is measured for children under age 2, or in the few cases when the age of the child is unknown and the child is less than 85cm; standing height is measured for all other children" to be consistent with table 11.1.1.

[2] Includes children who are below -3 standard deviations (SD) from the International Reference Population median.

[3] Excludes children whose mothers were not interviewed.

[4] First born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.

[5] Includes children whose mothers are deceased.

[6] Excludes children whose mothers were not weighed and measured, and children whose mothers were pregnant or gave birth within the preceding 2 months. Mother's nutritional status in terms of BMI (Body Mass Index) is presented in Table 12.10.

[7] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

PERSONS INVOLVED IN THE 2012 KYRGYZ REPUBLIC DEMOGRAPHIC AND HEALTH SURVEY

APPENDIX D

National Director

Osmonaliev Akylbek, Chairman, National Statistical Committee of the Kyrgyz Republic (KR)

National Directors for Medical Affairs

Saginbaeva Dinara, Minister of Health of the KR
Uzakbaev Kamchibek, Director of the National Center of Maternal and Child Health Protection

National Statistical Committee (NSC) of the KR

Samohleb Galina, DHS Technical Director, Head of Sample Surveys Division
Myrzakmatov Urmatbek, Kyrgyz Republic DHS Expert
Ilibezova Larisa, Kyrgyz Republic DHS Expert
Kulikov Oleg, Kyrgyz Republic DHS Secretary
Praslova Larisa, Coordinator of Data Entry, Deputy Head of Sample Surveys Division
Chynybaeva Rimma, Head of Demographic Statistics Division
Koichumanova Kulyipa, Head of Social Statistics Division
Torgasheva Ludmila, Main Specialist, Demographic Statistics and Censuses Division
Abdraeva Bermet, Main Specialist, Sample Surveys Division
Musaeva Zuura, Supervisor of Data Entry
Jarkynbaeva Aigerim, Office Editor
Pak Rima, Secondary Editor
Begalieva Rina, Administrative Support
Khanov Ravil, IT Support

NSC Regional Coordinators for Listing

Mamadalieva Bermet, Issyk-Kul
Kannazarov Aibek, Djalal-Abad
Aralbaeva Jyparkul, Naryn
Baibubaeva Barahatkhon, Batken
Karaeva Zamira, Osh oblast
Satkanalieva Svetlana, Talas
Usanova Ludmila, Chui
Sainidinova Aigul, Bishkek city
Adanova Cholpon, Osh city

Ministry of Health (MOH) of the KR

Builashev Talaibek, DHS Technical Director for Medical Affairs, Deputy Director of the National Center of Maternal and Child Health Protection
Eshkhodzhaeva Anarbiubiu, Chief, Department of Curative and Preventive Care and Licensing
Ibraeva Gulmira, Deputy Chief, Department of Curative and Preventive Care and Licensing
Boronbaeva Elnura, Main Specialist, Department of Curative and Preventive Care and Licensing
Boobekova Aigul, Main Specialist, Department of Curative and Preventive Care and Licensing
Mamyrbaeva Tursun, Deputy Director for Research of the National Center of Maternal and Child Health Protection
Kyndyakova Olga, Chief of Division, National Medical Information Center
Kalilov Joldosh, Director, National Center for Immunization
Bogatikova Tamara, Physician, National AIDS Center

Coordinators of Regional Health Care Offices of MOH

Satylkanov Esenbek, Issyk-Kul
Miyanov Mamatjan, Djalal-Abad
Berdykozhoeva Anara, Naryn
Toroev Saipidin, Batken
Akimova Valia, Osh oblast
Shadiev Attokur, Talas
Asylbekov Elmir, Chui
Murzaliev Amangeldi, Bishkek city
Nuraliev A, Osh city

ICF International

Gulnara Semenov, Technical Director, Regional Coordinator
Ruilin Ren, Senior Sampling Specialist
Alexander Izmukhambetov, Data Processing Specialist
Annie Cross, Survey Specialist
Ann Way, Survey Specialist
Poedjastoeti Sri, Survey Specialist
Zhuzhi Moore, Survey Specialist
Naila Mammadova, Consultant
Audrey Shenett, Production Specialist
Nancy Johnson, Editor
Christopher Gramer, Cover Design
Erica Nybro, Dissemination Specialist

Listers and Mappers

Listers	Mappers
Kaptagaeva Meerim	Badambaeva Nazgul
Melisbek uulu Daniyar	Kadyrova Nazira
Abdisalamova Sabira	Sultanmuratova Indira
Rahmanjanova Maharam	Kalbaeva Baktygul
Jeenaliev Bakytbek	Mamasaliev Kylychbek
Arakulov Abdymalik	Sultakeev Edil
Urumbaev Bektur	Turdueva Eliza
Ismailov Manas	Ryskulova Laili
Djorobekov Bahtiyar	Omuraly kyzy Aiperi
Talkieva Asira	Madragimova Nargis
Namatova Ainura	Batyrkanov Urmat
Kasygulova Mairamkul	Turdubaev Ryskul
Kasymalieva Meerim	Abdybaev Meder
Djorobekova Guljamal	Satkanalieva Tamara
Imanova Aselya	Turganbaeva Alina
Bashkeev Jumadil	Zakirova Zhybek
Akmatova Nazgul	Tilenbaev Malik
Nasyrova Kanykei	Boobekova Nazira

Field Staff

Issyk-Kul
Mamadalieva Asmat, Coordinator
Karybekov Jarkynbek, Supervisor
Sultankulova Nur, Editor
Mambetalieva Gulbubu, Interviewer
Kadyrova Fatyina, Interviewer
Bakasheva Taalaikul, Interviewer
Eralieva Madina, Interviewer
Melisbek uulu Daniyar, Interviewer
Toktonazarova Zhyldyz, Health Technician

Talas
Kabylbekov Medetbek, Coordinator
Bokoev Nurbek, Supervisor
Kerimbekova Gulnara, Editor
Sabirbaeva Altyngul, Interviewer
Donbaeva Djamilya, Interviewer
Kydyralieva Aigul, Interviewer
Tolbashieva Gulsada, Interviewer
Nazaraliev Muktarbek, Interviewer
Shabdanova Dilbara, Health Technician

Djalal-Abad
Sadyraliev Kadyraly, Coordinator
Kannazarov Nurbek, Supervisor
Kulatayeva Nurjamal, Editor
Jancharova Jazgul, Interviewer
Maksymbekova Begayim, Interviewer
Nyshanbaeva Akinay, Interviewer
Bolotbaeva Meerimgul, Interviewer
Bekmuratov Ruslan, Interviewer
Mamaraimov Erysbek, Health Technician

Chui
Usanova Ludmila, Coordinator
Turdalieva Gulnura, Supervisor
Alieva Gulzar, Editor
Mursabekova Begimmai, Interviewer
Botalieva Nazira, Interviewer
Chikeeva Rahat, Interviewer
Jumadil uulu Taalaibek, Interviewer
Abylbekova Mairam, Interviewer
Dobulbaeva Nargyza, Health Technician

Naryn
Dusheeva Gulnur, Coordinator
Orozbaeva Gulmira, Supervisor
Satarova Elza, Editor
Koshalieva Mairamkul, Interviewer
Almazbekova Nurperizathan, Interviewer
Kanymetova Karlygach, Interviewer
Bektemirova Nazgul, Interviewer
Kaldybaev Melis, Interviewer
Bolotbekova Kyndyz, Health Technician

Bishkek city
Saynidinova Anarkul, Coordinator
Japarova Mahabbat, Supervisor
Dushenalieva Aijan, Editor
Akmatova Aijan, Interviewer
Temirova Sabira, Interviewer
Kukanova Saltanat, Interviewer
Djumabekov Daniyar, Interviewer
Rakatova Jypara, Interviewer
Turdukeeva Elmira, Health Technician

Batken
Baibubaeva Barahatkhon, Coordinator
Zakirov Jarkynbai, Supervisor
Abdisalamova Sabira, Editor
Kalbaeva Baktygul, Interviewer
Gaparova Farida, Interviewer
Sultanmuratova Indira, Interviewer
Turakulov Batyrjan, Interviewer
Rahmanjanova Maharam, Interviewer
Tillabaeva Mahpuret, Health Technician

Osh city
Djorobekov Bahtiyar, Coordinator
Karaeva Jamalhan, Supervisor
Tursunaly kyzy Elmira, Editor
Toktosunova Bunusa, Interviewer
Alahodjaeva Djamila, Interviewer
Talkieva Asira, Interviewer
Kerimbaev Urmatbek, Interviewer
Makambaeva Gulipa, Interviewer
Tursunkulova Raihan, Health Technician

Osh Oblast
Toktarova Turdigul, Coordinator
Ismailov Manas, Supervisor
Tetisheva Jibek, Editor
Abdullaev Azamat, Interviewer
Kalchoroeva Altynai, Interviewer
Akramova Aidina, Interviewer
Saparova Chinara, Interviewer
Nurkulova Meerim, Interviewer
Arzibaeva Meergul, Health Technician

Data Entry Staff

Sulaimanova Ajar
Kenjebaev Aibek
Maatkulova Aizada
Pershina Vera
Turdubaev Daniar
Sheviakova Ludmila
Murzagatov Meder
Alaichieva Myskal
Velikasova Natalia
Fedorova Olga
Djumasheva Saule
Djumakadyrov Shabdan
Bektasheva Elnura

QUESTIONNAIRES

APPENDIX E

2012 KYRGYZ DEMOGRAPHIC AND HEALTH SURVEY
HOUSEHOLD QUESTIONNAIRE

KYRGYZ REPUBLIC
MINISTRY OF HEALTH
NATIONAL STATISTICAL COMMITTEE

QUESTIONNAIRE № [ ][ ][ ][ ][ ]

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . [ ][ ][ ]

HOUSEHOLD NUMBER . . . . . [ ][ ]

HOUSEHOLD IS SELECTED FOR MALE INTERVIEW . . . . . (YES=1, NO=2) [ ]

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY [ ][ ] MONTH [ ][ ] YEAR [ ][ ][ ][ ]
INTERVIEWER'S NAME	_____	_____	_____	INT. NUMBER [ ][ ][ ]
RESULT*	_____	_____	_____	RESULT [ ]
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS [ ]
TIME	_____	_____		

*RESULT CODES:

1 COMPLETED
2 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT
3 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME
4 POSTPONED
5 REFUSED
6 DWELLING VACANT OR ADDRESS NOT A DWELLING
7 DWELLING DESTROYED
8 DWELLING NOT FOUND
9 OTHER _____
(SPECIFY)

TOTAL PERSONS IN HOUSEHOLD [ ][ ]

TOTAL ELIGIBLE WOMEN [ ][ ]

TOTAL ELIGIBLE MEN [ ][ ]

LINE NO. OF RESPONDENT TO HOUSEHOLD QUESTIONNAIRE [ ][ ]

LANGUAGE OF QUESTIONNAIRE: [ ] LANGUAGE OF INTERVIEW: [ ] NATIVE LANGUAGE OF RESPONDENT [ ]

CODES: KYRGYZ-1; RUSSIAN-2 ; OTHER-6 (SPECIFY_____)

TRANSLATOR USED (YES = 1, NO = 2) [ ]

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____ [ ][ ][ ]	NAME _____ [ ][ ][ ]	[ ][ ]	[ ][ ]

HH-1

THIS PAGE IS INTENTIONALLY BLANK

INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with the National Statistical Committee. Together with the Ministry of Health we are conducting a survey about health all over Kyrgyzstan. The information we collect will help the government to plan health services. Your household was selected for the survey. I would like to ask you some questions about your household. The questions usually take about 15 to 20 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.
In case you need more information about the survey, you may contact the person listed on this card.

GIVE CARD WITH CONTACT INFORMATION

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER:_____ DATE: _____

RESPONDENT AGREES TO BE INTERVIEWED . . . 1 ↓ RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . 2 → END

HH-3

HOUSEHOLD SCHEDULE

							IF AGE 15 OR OLDER			
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	MARITAL STATUS	ELIGIBILITY		
1	2	3	4	5	6	7	8	9	10	11
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household. AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-20 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)? IF 95 OR MORE, RECORD '95'.	What is (NAME)'s current marital status? 1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF ALL MEN AGE 15-49	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5
			M F	Y N	Y N	IN YEARS				
01			1 2	1 2	1 2			01	01	01
02			1 2	1 2	1 2			02	02	02
03			1 2	1 2	1 2			03	03	03
04			1 2	1 2	1 2			04	04	04
05			1 2	1 2	1 2			05	05	05
06			1 2	1 2	1 2			06	06	06
07			1 2	1 2	1 2			07	07	07
08			1 2	1 2	1 2			08	08	08
09			1 2	1 2	1 2			09	09	09
10			1 2	1 2	1 2			10	10	10

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = OTHER RELATIVE
10 = ADOPTED/FOSTER/ STEPCHILD
11 = NOT RELATED
98 = DON'T KNOW

	IF AGE 0-17 YEARS				IF AGE 5 YEARS OR OLDER				IF AGE 5-24 YEARS				IF AGE 0-4 YEARS	
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL OR PRE-SCHOOL				2011-2012 SCHOOL YEAR SCHOOL/PRE-SCHOOL ATTENDANCE		2010-2011 SCHOOL YEAR SCHOOL/PRE-SCHOOL ATTENDANCE		BIRTH REGISTRATION	
	12	13	14	15	16	16A	17	17A	18	19	19A	19B	20	21
	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother usually live in this household or was she a guest last night? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	Is (NAME)'s natural father alive?	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is his name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Has (NAME) ever attended school or pre-school?	What is the total number of years of schooling (NAME) has had?	What is the highest level of school (NAME) has attended? SEE CODES BELOW. What is the highest grade (NAME) completed at that level? SEE CODES BELOW.	CHECK 17: IF CODE "1" FOR GENERAL SCHOOL LEVEL AND GRADE 10-11 RECORDED, OR CODE "2" FOR PROFESSIONAL PRIMARY OR CODE "3" FOR PROFESSIONAL MIDDLE RECORDED, ASK: Did (NAME) receive a diploma (attestat) for completing secondary education?	Did (NAME) attend school or pre-school at any time during the (2011-2012) school year?	During this/that school year, what level and grade [is/was] (NAME) attending? SEE CODES BELOW.	Did (NAME) attend school or pre-school at any time during the previous (2010-2011) school year?	During that school year, what level and grade was (NAME) attending? SEE CODES BELOW.	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW	Why (NAME)'s birth is not registered with the civil authority? 1 = EXPENSIVE 2 = FAR TO 3 = DID NOT KNOW IT SHOULD BE REGISTERED 4= NO PASSPORT 5= MARRIAGE IS NOT REGISTERED 6= OTHER 8 = DON'T KNOW
01	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 NEXT LINE	YEARS	LEVEL GRADE	Y N 1 2 GO TO 18	Y N 1 2 GO TO 19A	LEVEL GRADE	Y N 1 2 NEXT LINE	LEVEL GRADE	IF NOT 3 NEXT LINE	
02	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2 GO TO 18	1 2 GO TO 19A		1 2 NEXT LINE		IF NOT 3 NEXT LINE	
03	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2 GO TO 18	1 2 GO TO 19A		1 2 NEXT LINE		IF NOT 3 NEXT LINE	
04	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2 GO TO 18	1 2 GO TO 19A		1 2 NEXT LINE		IF NOT 3 NEXT LINE	
05	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2 GO TO 18	1 2 GO TO 19A		1 2 NEXT LINE		IF NOT 3 NEXT LINE	
06	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2 GO TO 18	1 2 GO TO 19A		1 2 NEXT LINE		IF NOT 3 NEXT LINE	
07	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2 GO TO 18	1 2 GO TO 19A		1 2 NEXT LINE		IF NOT 3 NEXT LINE	
08	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2 GO TO 18	1 2 GO TO 19A		1 2 NEXT LINE		IF NOT 3 NEXT LINE	
09	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2 GO TO 18	1 2 GO TO 19A		1 2 NEXT LINE		IF NOT 3 NEXT LINE	
10	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2 GO TO 18	1 2 GO TO 19A		1 2 NEXT LINE		IF NOT 3 NEXT LINE	

CODES FOR Qs. 17 AND 19: EDUCATION

LEVEL
0 = PRE-SCHOOL
1 = GENERAL SCHOOL (1-11)
2 = PROFESSIONAL PRIMARY
3 = PROFESSIONAL MIDDLE
4= HIGHER
5 = POST-GRADUATE
8 = DON'T KNOW

GRADE
00 = LESS THAN 1 YEAR COMPLETED
(USE '00' FOR Q. 17 ONLY.
THIS CODE IS NOT ALLOWED
FOR Q. 19 AND Q.19B)
98 = DON'T KNOW

							IF AGE 15 OR OLDER			
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	MARITAL STATUS	ELIGIBILITY		
1	2	3	4	5	6	7	8	9	10	11
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household. AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-20 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)? IF 95 OR MORE, RECORD '95'.	What is (NAME)'s current marital status? 1 = MARRIED OR LIVING TOGETHER 2 = DIVORCED/ SEPARATED 3 = WIDOWED 4 = NEVER-MARRIED AND NEVER LIVED TOGETHER	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF ALL MEN AGE 15-49	CIRCLE LINE NUMBER OF ALL CHILDREN AGE 0-5
11			M F 1 2	Y N 1 2	Y N 1 2	IN YEARS		11	11	11
12			1 2	1 2	1 2			12	12	12
13			1 2	1 2	1 2			13	13	13
14			1 2	1 2	1 2			14	14	14
15			1 2	1 2	1 2			15	15	15
16			1 2	1 2	1 2			16	16	16
17			1 2	1 2	1 2			17	17	17
18			1 2	1 2	1 2			18	18	18
19			1 2	1 2	1 2			19	19	19
20			1 2	1 2	1 2			20	20	20

TICK HERE IF CONTINUATION SHEET USED ☐

2A) Just to make sure that I have a complete listing: are there any other persons such as small children or infants that we have not listed?
YES ☐ → ADD TO TABLE NO ☐

2B) Are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here?
YES ☐ → ADD TO TABLE NO ☐

2C) Are there any guests or temporary visitors staying here, or anyone else who stayed here last night, who have not been listed?
YES ☐ → ADD TO TABLE NO ☐

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = OTHER RELATIVE
10 = ADOPTED/FOSTER/ STEPCHILD
11 = NOT RELATED
98 = DON'T KNOW

	IF AGE 0-17 YEARS				IF AGE 5 YEARS OR OLDER				IF AGE 5-24 YEARS				IF AGE 0-4 YEARS	
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL OR PRE-SCHOOL				2011-2012 SCHOOL YEAR SCHOOL/PRE-SCHOOL ATTENDANCE		2010-2011 SCHOOL YEAR SCHOOL/PRE-SCHOOL ATTENDANCE		BIRTH REGISTRATION	
	12	13	14	15	16	16A	17	17A	18	19	19A	19B	20	21
	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother usually live in this household or was she a guest last night? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	Is (NAME)'s natural father alive?	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is his name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Has (NAME) ever attended school or pre-school?	What is the total number of years of schooling (NAME) has had?	What is the highest level of school (NAME) has attended? SEE CODES BELOW. What is the highest grade (NAME) completed at that level? SEE CODES BELOW.	CHECK 17: IF CODE "1" FOR GENERAL SCHOOL LEVEL AND GRADE 10-11 RECORDED, OR CODE "2" FOR PROFESSIONAL PRIMARY OR CODE "3" FOR PROFESSIONAL MIDDLE RECORDED, ASK: Did (NAME) receive a diploma (attestat) for completing secondary education?	Did (NAME) attend school or pre-school at any time during the (2011-2012) school year?	During this/that school year, what level and grade [is/was] (NAME) attending? SEE CODES BELOW.	Did (NAME) attend school or pre-school at any time during the previous (2010-2011) school year?	During that school year, what level and grade was (NAME) attending? SEE CODES BELOW.	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW	Why (NAME)'s birth is not registered with the civil authority? 1 = EXPENSIVE 2 = FAR TO 3 = DID NOT KNOW IT SHOULD BE REGISTERED 4= NO PASSPORT 5= MARRIAGE IS NOT REGISTERED 6= OTHER 8 = DON'T KNOW
11	Y N DK 1 2 8 GO TO 14		Y N DK 1 2 8 GO TO 16		Y N 1 2 NEXT LINE		LEVEL GRADE	Y N 1 2 GO TO 18	Y N 1 2 GO TO 19A	LEVEL GRADE	Y N 1 2 NEXT LINE	GRADE	IF NOT 3 NEXT LINE	
12	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2 GO TO 18	1 2 GO TO 19A		1 2 NEXT LINE		IF NOT 3 NEXT LINE	
13	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2 GO TO 18	1 2 GO TO 19A		1 2 NEXT LINE		IF NOT 3 NEXT LINE	
14	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2 GO TO 18	1 2 GO TO 19A		1 2 NEXT LINE		IF NOT 3 NEXT LINE	
15	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2 GO TO 18	1 2 GO TO 19A		1 2 NEXT LINE		IF NOT 3 NEXT LINE	
16	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2 GO TO 18	1 2 GO TO 19A		1 2 NEXT LINE		IF NOT 3 NEXT LINE	
17	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2 GO TO 18	1 2 GO TO 19A		1 2 NEXT LINE		IF NOT 3 NEXT LINE	
18	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2 GO TO 18	1 2 GO TO 19A		1 2 NEXT LINE		IF NOT 3 NEXT LINE	
19	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2 GO TO 18	1 2 GO TO 19A		1 2 NEXT LINE		IF NOT 3 NEXT LINE	
20	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 NEXT LINE			1 2 GO TO 18	1 2 GO TO 19A		1 2 NEXT LINE		IF NOT 3 NEXT LINE	

CODES FOR Qs. 17 AND 19: EDUCATION

LEVEL	GRADE
0 = PRE-SCHOOL	
1 = GENERAL SCHOOL (1-11)	(USE '00' FOR Q. 17 ONLY.
2 = PROFESSIONAL PRIMARY	THIS CODE IS NOT ALLOWED
3 = PROFESSIONAL MIDDLE	FOR Q. 19 AND 19B)
4= HIGHER	
5 = POST-GRADUATE	98=DON'T KNOW
8 = DON'T KNOW	

HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	How often does anyone smoke inside your house? Would you say daily, weekly, monthly, less than monthly, or never?	DAILY . . . . . 1 WEEKLY . . . . . 2 MONTHLY . . . . . 3 LESS THAN MONTHLY . . . . . 4 NEVER 5	
102	What is the main source of drinking water for members of your household?	PIPED WATER PIPED INTO DWELLING . . . . . 11 PIPED TO YARD/PLOT . . . . . 12 PUBLIC TAP/STANDPIPE . . . . . 13 TUBE WELL OR BOREHOLE . . . . . 21 DUG WELL PROTECTED WELL . . . . . 31 UNPROTECTED WELL . . . . . 32 WATER FROM SPRING PROTECTED SPRING . . . . . 41 UNPROTECTED SPRING . . . . . 42 RAINWATER . . . . . 51 TANKER TRUCK . . . . . 61 CART WITH SMALL TANK . . . . . 71 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ IRRIGATION CHANNEL) . . . . . 81 BOTTLED WATER . . . . . 91 OTHER _____ 96 (SPECIFY)	11, 12 → 105 51 → 105
103	Where is that water source located?	IN OWN DWELLING . . . . . 1 IN OWN YARD/PLOT . . . . . 2 ELSEWHERE 3	1, 2 → 105
104	How long does it take to go there, get water, and come back?	MINUTES . . . . . [ ][ ][ ] DON'T KNOW 998	
105	Do you do anything to the water to make it safer to drink?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	8 → 107
106	What do you usually do to make the water safer to drink? Anything else? RECORD ALL MENTIONED.	BOIL . . . . . A ADD BLEACH/CHLORINE . . . . . B STRAIN THROUGH A CLOTH . . . . . C USE WATER FILTER (CERAMIC/ SAND/COMPOSITE/ETC.) . . . . . D SOLAR DISINFECTION . . . . . E LET IT STAND AND SETTLE . . . . . F OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
107	What kind of toilet facility do members of your household usually use?	FLUSH OR POUR FLUSH TOILET FLUSH TO PIPED SEWER SYSTEM . . . . . 11 FLUSH TO SEPTIC TANK . . . . . 12 FLUSH TO PIT LATRINE . . . . . 13 FLUSH TO SOMEWHERE ELSE . . . . . 14 FLUSH, DON'T KNOW WHERE . . . . . 15 PIT LATRINE VENTILATED IMPROVED PIT LATRINE . . . . . 21 PIT LATRINE WITH SLAB . . . . . 22 PIT LATRINE WITHOUT SLAB/ OPEN PIT . . . . . 23 COMPOSTING TOILET . . . . . 31 BUCKET TOILET . . . . . 41 HANGING TOILET/HANGING LATRINE . . . . . 51 NO FACILITY/BUSH/FIELD . . . . . 61 OTHER _____ 96 (SPECIFY)	→ 110
108	Do you share this toilet facility with other households?	YES . . . . . 1 NO 2	→ 110
109	How many households use this toilet facility?	NO. OF HOUSEHOLDS IF LESS THAN 10 . . . . . [0][ ] 10 OR MORE HOUSEHOLDS . . . . . 95 DON'T KNOW 98	
110	Does your household have:	YES NO	
	Electricity?	ELECTRICITY 1 2	
	A radio?	RADIO 1 2	
	A black and white television?	B&W TELEVIS 1 2	
	A color television?	COLOR TELEVISION 1 2	
	A washing machine?	WASHING MACHINE 1 2	
	A vacuum cleaner?	VACUUM CLEANER 1 2	
	A computer?	COMPUTER 1 2	
	A mobile telephone?	MOBILE TELEPHONE 1 2	
	A non-mobile telephone?	NON-MOBILE TELEPHONE . . . 1 2	
	Intercome wireless/telecome?	INTERCOME 1 2	
	A refrigerator?	REFRIGERATOR 1 2	
	A digital camera?	CAMERA 1 2	
	A video camera/camcorder?	VIDEOCAMERA 1 2	
	A table?	TABLE 1 2	
	A chair?	CHAIR 1 2	
	A sofa/divan?	SOFA 1 2	
	A bed?	BED 1 2	
	A buffet/curio cabinet/wall unit?	BUFFET/SERVANT 1 2	
	An air conditioner?	AIRCONDITIONER 1 2	
	A DVD player?	DVD 1 2	
	A satellite antenna/dish?	DISH 1 2	
	A freezer?	FREEZER 1 2	
	An electric fan?	FAN 1 2	
	A sewing machine?	SEWING MACHINE 1 2	
	Wall carpet?	CARPET 1 2	
	Internet connection (world wide web)	INTERNET 1 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
111	What type of fuel does your household mainly use for cooking?	ELECTRICITY . . . . . 01 LPG . . . . . 02 NATURAL GAS . . . . . 03 BIOGAS . . . . . 04 KEROSENE . . . . . 05 COAL, LIGNITE . . . . . 06 CHARCOAL . . . . . 07 WOOD . . . . . 08 STRAW/SHRUBS/GRASS . . . . . 09 AGRICULTURAL CROP . . . . . 10 ANIMAL DUNG . . . . . 11 NO FOOD COOKED IN HOUSEHOLD . . . . . 95 OTHER _____ 96 (SPECIFY)	→ 114
112	Is the cooking usually done in the house, in a separate building, or outdoors?	IN THE HOUSE . . . . . 1 IN A SEPARATE BUILDING . . . . . 2 OUTDOORS . . . . . 3 OTHER _____ 6 (SPECIFY)	→ 114
113	Do you have a separate room which is used as a kitchen?	YES . . . . . 1 NO 2	
114	MAIN MATERIAL OF THE FLOOR. RECORD OBSERVATION.	NATURAL FLOOR EARTH/SAND . . . . . 11 DUNG . . . . . 12 RUDIMENTARY FLOOR WOOD PLANKS . . . . . 21 REED(SCIRPUS) . . . . . 22 FINISHED FLOOR PARQUET OR POLISHED WOOD . . . . . 31 VINYL OR LINOLEUM . . . . . 32 CERAMIC TILES . . . . . 33 CEMENT . . . . . 34 CARPET . . . . . 35 OTHER _____ 96 (SPECIFY)	
115	MAIN MATERIAL OF THE ROOF. RECORD OBSERVATION.	NATURAL ROOFING NO ROOF . . . . . 11 THATCH/REED . . . . . 12 SOD . . . . . 13 RUDIMENTARY ROOFING RUSTIC MAT . . . . . 21 WOOD PLANKS . . . . . 23 TAULE (TARRED ROOFING PAPER) . . . . 24 FINISHED ROOFING METAL . . . . . 31 WOOD . . . . . 32 CALAMINE/CEMENT FIBER/SHIFER 33 CERAMIC TILES . . . . . 34 CEMENT/CONCRETE BLOCK . . . . . 35 ROOFING SHINGLES/GONT . . . . . 36 OTHER _____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
116	MAIN MATERIAL OF THE EXTERIOR WALLS. RECORD OBSERVATION.	NATURAL WALLS NO WALLS . . . . . 11 REED . . . . . 12 DIRT . . . . . 13 TREE TRUNKS . . . . . 14 RUDIMENTARY WALLS STRAW WITH MUD . . . . . 21 STONE WITH MUD . . . . . 22 UNCOVERED ADOBE . . . . . 23 PLYWOOD . . . . . 24 CARDBOARD . . . . . 25 REUSED WOOD . . . . . 26 TARPAULIN/FELT . . . . . 27 FINISHED WALLS CEMENT . . . . . 31 STONE WITH LIME/CEMENT . . . . . 32 BRICKS . . . . . 33 CEMENT BLOCKS . . . . . 34 COVERED ADOBE . . . . . 35 WOOD PLANKS/SHINGLES . . . . . 36 SHLACK/SHLAKOBLOCK . . . . . 37 POLYMER COVER . . . . . 38 CONCRETE/ REINFORCED CONCRETE/ MONOLITH PANEL . . . . . 39 OTHER _____ 96 (SPECIFY)	
117	How many rooms in this household are used for sleeping?	ROOMS . . . . . [ ][ ]	
118	Does any member of this household own: A watch? A bicycle? A motorcycle or motor scooter? An animal-drawn cart? A car? A boat with a motor? A truck? A tractor or a combine?	YES NO WATCH . . . . . 1 2 BICYCLE . . . . . 1 2 MOTORCYCLE/SCOOTER . . . 1 2 ANIMAL-DRAWN CART . . . . . 1 2 CAR . . . . . 1 2 BOAT WITH MOTOR . . . . . 1 2 TRUCK . . . . . 1 2 TRACTOR 1 2	
119	Does any member of this household own any agricultural land?	YES . . . . . 1 NO 2	→ 121
120	How many hectares of agricultural land do members of this household own? IF 99.5 OR MORE ARES, RECORD IN HECTARES. 100 ARES= 1 HECTARE IF 95 OR MORE HECTARES, CIRCLE '9995'.	ARES . . . . . 1 [ ][ ] . [ ] HECTARES . . . . . 2 [ ][ ] . [ ] 95 OR MORE HECTARES . . . . . 9995 DON'T KNOW 9998	
121	Does this household own any livestock, herds, other farm animals, or poultry?	YES . . . . . 1 NO 2	→ 123

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
122	How many of the following animals does this household own? IF NONE, ENTER '00'. IF 95 OR MORE, ENTER '95'. IF UNKNOWN, ENTER '98'.		
	Cattle?	CATTLE	
	Milk cows or bulls?	COWS/BULLS	
	Horses, donkeys, or mules?	HORSES/DONKEYS/MULES	
	Goats?	GOATS	
	Sheep?	SHEEP	
	Pigs?	PIGS	
	Poultry?	POULTRY	
	Bees(beehives) (number of units)?	BEEHIVE	
123	Does any member of this household have a bank account?	YES . . . . . 1 NO 2	
123A	CHECK 7, 18, AND 19A: ONE OR MORE CHILDREN AGE 6-17 ATTENDED/ING SCHOOL DURING 2010-11 OR 2011-12 SCHOOL YEAR RECORD NAME OF YOUNGEST CHILD LIVING IN HOUSEHOLD AND CONTINUE WITH 123B _____ (NAME)	NONE →	137
123B	Where the school attended by (NAME FROM 123A) is located? Would you say it is located within less than 1 kilometer from your residence, within 1 to 3 kilometers from your residence, or within 3 and more kilometers from your residence, or in different settlement area?	LESS THAN 1 KM FROM RESIDENCE . . 1 1-3 KM FROM RESIDENCE . . . . . 2 MORE THAN 3 KM FROM RESIDENCI . . . . . 3 IN DIFFERENT SETTLEMENT AREA . . . . . 4 OTHER _____ . . . . 6 (SPECIFY) DON'T KNO\ 8	
137	Please show me where members of your household most often wash their hands.	OBSERVED . . . . . 1 NOT OBSERVED, NOT IN DWELLING/YARD/PLOT . . . . . 2 NOT OBSERVED, NO PERMISSION TO SEE . . . . . 3 NOT OBSERVED, OTHER REASON . . . . . 4 (SKIP TO 140)	
138	OBSERVATION ONLY: OBSERVE PRESENCE OF WATER AT THE PLACE FOR HANDWASHING.	WATER IS AVAILABLE . . . . . 1 WATER IS NOT AVAILABLE 2	
139	OBSERVATION ONLY: OBSERVE PRESENCE OF SOAP, DETERGENT, OR OTHER CLEANSING AGENT.	SOAP OR DETERGENT (BAR, LIQUID, POWDER, PASTE) . . . . . A ASH, MUD, SAND . . . . . B NONE C	
140	ASK RESPONDENT FOR A TEASPOONFUL OF COOKING SALT. TEST SALT FOR IODINE.	IODINE PRESENT . . . . . 1 NO IODINE . . . . . 2 NO SALT IN HOUSEHOLD . . . . . 3 SALT NOT TESTED _____ 6 (SPECIFY REASON)	

HH-12

141 **TABLE FOR SELECTION OF ONE WOMAN FOR THE DOMESTIC VIOLENCE INTERVIEW**

INSTRUCTIONS

• LOOK AT THE LAST DIGIT OF THE QUESTIONNAIRE NUMBER ON THE COVER PAGE.
• THIS IS THE ROW NUMBER YOU SHOULD CIRCLE IN THE TABLE BELOW.
• RECORD HERE____ ____ THE TOTAL NUMBER OF ELIGIBLE WOMEN ON THE COVER SHEET OF THE HOUSEHOLD QUESTIONNAIRE:
• THIS IS THE COLUMN NUMBER YOU SHOULD CIRCLE IN THE TABLE BELOW.
• FIND THE BOX WHERE THE CIRCLED ROW AND THE CIRCLED COLUMN MEET AND CIRCLE THE NUMBER THAT APPEARS IN THE BOX.
• THIS IS THE ORDER (RANK) NUMBER OF THE ELIGIBLE WOMAN WHO WILL BE ASKED THE HOUSEHOLD RELATIONS QUESTIONS.
• RECORD THE LINE NUMBER OF THE SELECTED WOMAN IN THE BOX BELOW IN Q142

FOR EXAMPLE:
• IF THE HOUSEHOLD QUESTIONNAIRE NUMBER IS ‘3716’,
• GO TO ROW 6 AND CIRCLE THE ROW NUMBER ('6').
• IF THERE ARE THREE ELIGIBLE WOMEN IN THE HOUSEHOLD, RECORD IN THE BOX "03" AND GO TO COLUMN 3 AND CIRCLE THE COLUMN NUMBER ('3').
• DRAW LINES FROM ROW 6 AND COLUMN 3 AND FIND THE BOX WHERE THE TWO MEET, AND CIRCLE THE NUMBER IN IT (‘2').
• THIS IS THE ORDER/RANK NUMBER OF THE SELECTED WOMEN IN THE HOUSEHOLD SCHEDULE AND IT MEANS YOU HAVE TO SELECT THE SECOND ELIGIBLE WOMAN.
• SUPPOSE THE HOUSEHOLD LINE NUMBERS OF THE THREE ELIGIBLE WOMEN ARE ‘02', ‘03', AND ‘07’; THEN THE ELIGIBLE WOMAN FOR THE HOUSEHOLD RELATIONS QUESTIONS IS THE SECOND ELIGIBLE WOMAN, I.E., THE WOMAN WITH HOUSEHOLD LINE NUMBER ‘03'.
• RECORD THE LINE NUMBER OF THE SELECTED WOMAN IN THE BOX BELOW IN Q142

LAST DIGIT OF THE QUESTIONNAIRE NUMBER	TOTAL NUMBER OF ELIGIBLE WOMEN IN THE HOUSEHOLD							
	1	2	3	4	5	6	7	8
0	1	2	2	4	3	6	5	4
1	1	1	3	1	4	1	6	5
2	1	2	1	2	5	2	7	6
3	1	1	2	3	1	3	1	7
4	1	2	3	4	2	4	2	8
5	1	1	1	1	3	5	3	1
6	1	2	2	2	4	6	4	2
7	1	1	3	3	5	1	5	3
8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5

142 RECORD HERE LINE NUMBER OF THE WOMAN SELECTED FOR THE DV MODULE [ ][ ] → 201

WEIGHT, HEIGHT AND HEMOGLOBIN MEASUREMENT FOR CHILDREN AGE 0-5

201	CHECK COLUMN 11 IN HOUSEHOLD SCHEDULE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 202. IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 1	CHILD 2	CHILD 3
202	LINE NUMBER FROM COLUMN 11 NAME FROM COLUMN 2	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____
203	IF MOTHER INTERVIEWED, COPY MONTH AND YEAR OF BIRTH FROM BIRTH HISTORY AND ASK DAY; IF MOTHER NOT INTERVIEWED, ASK: What is (NAME)'s birth date?	DAY . . . . . [ ][ ] MONTH . . . . . [ ][ ] YEAR [ ][ ][ ][ ]	DAY . . . . . [ ][ ] MONTH . . . . . [ ][ ] YEAR [ ][ ][ ][ ]	DAY . . . . . [ ][ ] MONTH . . . . . [ ][ ] YEAR [ ][ ][ ][ ]
204	CHECK 203: CHILD BORN IN JANUARY 2007 OR LATER?	YES . . . . . 1 NO . . . . . 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214)	YES . . . . . 1 NO . . . . . 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214)	YES . . . . . 1 NO . . . . . 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214)
205	WEIGHT IN KILOGRAMS	KG. [ ][ ] . [ ][ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. [ ][ ] . [ ][ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. [ ][ ] . [ ][ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996
206	HEIGHT IN CENTIMETERS	CM. [ ][ ][ ] . [ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. [ ][ ][ ] . [ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. [ ][ ][ ] . [ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996
207	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3
208	CHECK 203: IS CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR FIVE PREVIOUS MONTHS?	0-5 MONTHS . . . . . 1 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214) OLDER 2	0-5 MONTHS . . . . . 1 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214) OLDER 2	0-5 MONTHS . . . . . 1 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214) OLDER 2
209	LINE NUMBER OF PARENT/ OTHER ADULT RESPONSIBLE FOR THE CHILD (FROM COLUMN 1 OF HOUSEHOLD SCHEDULE). RECORD '00' IF NOT LISTED.	LINE NUMBER . . . . . [ ][ ]	LINE NUMBER . . . . . [ ][ ]	LINE NUMBER . . . . . [ ][ ]
210	ASK CONSENT FOR ANEMIA TEST FROM PARENT/OTHER ADULT IDENTIFIED IN 209 AS RESPONSIBLE FOR CHILD.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. We ask that all children born in 2007 or later take part in anemia testing in this survey and give a few drops of blood from a finger or heel. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you allow (NAME OF CHILD) to participate in the anemia test?		
211	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 _____ (SIGN) REFUSED 2	GRANTED . . . . . 1 _____ (SIGN) REFUSED 2	GRANTED . . . . . 1 _____ (SIGN) REFUSED 2
212	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA PAMPHLET.	G/DL [ ][ ] . [ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL [ ][ ] . [ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL [ ][ ] . [ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996
213	GO BACK TO 203 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 214.			

HH-14

		CHILD 4	CHILD 5	CHILD 6
202	LINE NUMBER FROM COLUMN 11 NAME FROM COLUMN 2	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____
203	IF MOTHER INTERVIEWED, COPY MONTH AND YEAR OF BIRTH FROM BIRTH HISTORY AND ASK DAY; IF MOTHER NOT INTERVIEWED, ASK: What is (NAME)'s birth date?	DAY . . . . . [ ][ ] MONTH . . . . . [ ][ ] YEAR [ ][ ][ ][ ]	DAY . . . . . [ ][ ] MONTH . . . . . [ ][ ] YEAR [ ][ ][ ][ ]	DAY . . . . . [ ][ ] MONTH . . . . . [ ][ ] YEAR [ ][ ][ ][ ]
204	CHECK 203: CHILD BORN IN JANUARY 2007 OR LATER?	YES . . . . . 1 NO . . . . . 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214)	YES . . . . . 1 NO . . . . . 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214)	YES . . . . . 1 NO . . . . . 2 (GO TO 203 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE CHILDREN, GO TO 214)
205	WEIGHT IN KILOGRAMS	KG. [ ][ ] . [ ][ ] NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. [ ][ ] . [ ][ ] NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. [ ][ ] . [ ][ ] NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996
206	HEIGHT IN CENTIMETERS	CM. [ ][ ][ ] . [ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. [ ][ ][ ] . [ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. [ ][ ][ ] . [ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996
207	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3
208	CHECK 203: IS CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR FIVE PREVIOUS MONTHS?	0-5 MONTHS . . . . . 1 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214) OLDER 2	0-5 MONTHS . . . . . 1 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214) OLDER 2	0-5 MONTHS . . . . . 1 (GO TO 203 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE CHILDREN, GO TO 214) OLDER 2
209	LINE NUMBER OF PARENT/ OTHER ADULT RESPONSIBLE FOR THE CHILD (FROM COLUMN 1 OF HOUSEHOLD SCHEDULE). RECORD '00' IF NOT LISTED.	LINE NUMBER . . . . . [ ][ ]	LINE NUMBER . . . . . [ ][ ]	LINE NUMBER . . . . . [ ][ ]
210	ASK CONSENT FOR ANEMIA TEST FROM PARENT/OTHER ADULT IDENTIFIED IN 209 AS RESPONSIBLE FOR CHILD.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. We ask that all children born in 2007 or later take part in anemia testing in this survey and give a few drops of blood from a finger or heel. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you allow (NAME OF CHILD) to participate in the anemia test?		
211	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 _____ (SIGN) REFUSED 2	GRANTED . . . . . 1 _____ (SIGN) REFUSED 2	GRANTED . . . . . 1 _____ (SIGN) REFUSED 2
212	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA PAMPHLET.	G/DL [ ][ ] . [ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL [ ][ ] . [ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL [ ][ ] . [ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996
213	GO BACK TO 203 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE CHILDREN, GO TO 214.			

WEIGHT, HEIGHT, HEMOGLOBIN MEASUREMENT FOR WOMEN AGE 15-49

214	CHECK COLUMN 9 IN HOUSEHOLD SCHEDULE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE WOMEN IN 215. IF THERE ARE MORE THAN THREE WOMEN, USE ADDITIONAL QUESTIONNAIRE(S).			
		WOMAN 1	WOMAN 2	WOMAN 3
215	LINE NUMBER FROM COLUMN 9 NAME FROM COLUMN 2	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____
216	WEIGHT IN KILOGRAMS	KG. [ ][ ][ ] . [ ][ ] NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	KG. [ ][ ][ ] . [ ][ ] NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	KG. [ ][ ][ ] . [ ][ ] NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996
217	HEIGHT IN CENTIMETERS	CM. [ ][ ][ ] . [ ] NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. [ ][ ][ ] . [ ] NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. [ ][ ][ ] . [ ] NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996
218	AGE: CHECK COLUMN 7.	15-17 YEARS . . . . . 1 18-49 YEARS . . . . . 2 (GO TO 223) ↵	15-17 YEARS . . . . . 1 18-49 YEARS . . . . . 2 (GO TO 223) ↵	15-17 YEARS . . . . . 1 18-49 YEARS . . . . . 2 (GO TO 223) ↵
219	MARITAL STATUS: CHECK COLUMN 8.	CODE 4 (NEVER IN UNION) . . . . . 1 OTHER . . . . . 2 (GO TO 223) ↵	CODE 4 (NEVER IN UNION) . . . . . 1 OTHER . . . . . 2 (GO TO 223) ↵	CODE 4 (NEVER IN UNION) . . . . . 1 OTHER . . . . . 2 (GO TO 223) ↵
220	RECORD LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT. RECORD '00' IF NOT LISTED.	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT [ ][ ]	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT [ ][ ]	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT [ ][ ]
221	ASK CONSENT FOR ANEMIA TEST FROM PARENT/ OTHER ADULT IDENTIFIED IN 220 AS RESPONSIBLE FOR NEVER IN UNION WOMEN AGE 15-17.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you and (NAME OF ADOLESCENT) right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes to the test for (NAME OF ADOLESCENT), or you can say no. It is up to you to decide. Will you allow (NAME OF ADOLESCENT) to take the anemia test?		
222	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, GO TO 240)	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, GO TO 240)	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, GO TO 240)

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2	NAME _____	NAME _____	NAME _____
223	ASK CONSENT FOR ANEMIA TEST FROM RESPONDENT.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you take the anemia test?		
224	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 RESPONDENT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, GO TO 240)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, GO TO 240)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, GO TO 240)
225	PREGNANCY STATUS: CHECK 226 IN WOMAN'S QUESTIONNAIRE OR ASK: Are you pregnant?	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8
239	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST(S).			
240	RECORD HEMO-GLOBIN LEVEL HERE AND IN ANEMIA PAMPHLET	G/DL . . . . . [ ][ ].[ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL . . . . . [ ][ ].[ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL . . . . . [ ][ ].[ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996
242	GO BACK TO 216 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE WOMEN, END OF THE INTERVIEW.			

WEIGHT, HEIGHT, HEMOGLOBIN MEASUREMENT FOR WOMEN AGE 15-49

214	CHECK COLUMN 9 IN HOUSEHOLD SCHEDULE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE WOMEN IN 215. IF THERE ARE MORE THAN THREE WOMEN, USE ADDITIONAL QUESTIONNAIRE(S).			
		WOMAN 4	WOMAN 5	WOMAN 6
215	LINE NUMBER FROM COLUMN 9 NAME FROM COLUMN 2	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____
216	WEIGHT IN KILOGRAMS	KG. [ ][ ][ ]. [ ][ ] NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	KG. [ ][ ][ ]. [ ][ ] NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	KG. [ ][ ][ ]. [ ][ ] NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996
217	HEIGHT IN CENTIMETERS	CM. [ ][ ][ ]. [ ] NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. [ ][ ][ ]. [ ] NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. [ ][ ][ ]. [ ] NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996
218	AGE: CHECK COLUMN 7.	15-17 YEARS . . . . . 1 18-49 YEARS . . . . . 2 (GO TO 223) ↵	15-17 YEARS . . . . . 1 18-49 YEARS . . . . . 2 (GO TO 223) ↵	15-17 YEARS . . . . . 1 18-49 YEARS . . . . . 2 (GO TO 223) ↵
219	MARITAL STATUS: CHECK COLUMN 8.	CODE 4 (NEVER IN UNION) . . . . . 1 OTHER . . . . . 2 (GO TO 223) ↵	CODE 4 (NEVER IN UNION) . . . . . 1 OTHER . . . . . 2 (GO TO 223) ↵	CODE 4 (NEVER IN UNION) . . . . . 1 OTHER . . . . . 2 (GO TO 223) ↵
220	RECORD LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT. RECORD '00' IF NOT LISTED.	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT [ ][ ]	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT [ ][ ]	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT [ ][ ]
221	ASK CONSENT FOR ANEMIA TEST FROM PARENT/ OTHER ADULT IDENTIFIED IN 220 AS RESPONSIBLE FOR NEVER IN UNION WOMEN AGE 15-17.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you and (NAME OF ADOLESCENT) right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes to the test for (NAME OF ADOLESCENT), or you can say no. It is up to you to decide. Will you allow (NAME OF ADOLESCENT) to take the anemia test?		
222	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, GO TO 240)	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, GO TO 240)	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, GO TO 240)

		WOMAN 4	WOMAN 5	WOMAN 6
	NAME FROM COLUMN 2	NAME _____	NAME _____	NAME _____
223	ASK CONSENT FOR ANEMIA TEST FROM RESPONDENT.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you take the anemia test?		
224	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 RESPONDENT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, GO TO 240)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, GO TO 240)	GRANTED . . . . . 1 RESPONDENT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, GO TO 240)
225	PREGNANCY STATUS: CHECK 226 IN WOMAN'S QUESTIONNAIRE OR ASK: Are you pregnant?	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8	YES . . . . . 1 NO . . . . . 2 DK 8
239	PREPARE EQUIPMENT AND SUPPLIES ONLY FOR THE TEST(S) FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST(S).			
240	RECORD HEMO-GLOBIN LEVEL HERE AND IN ANEMIA PAMPHLET	G/DL . . . . . [ ][ ].[ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL . . . . . [ ][ ].[ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL . . . . . [ ][ ].[ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996
242	GO BACK TO 216 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE WOMEN, END OF THE INTERVIEW.			

2012 KYRGYZ DEMOGRAPHIC AND HEALTH SURVEY
WOMAN'S QUESTIONNAIRE

KYRGYZ REPUBLIC
THE MINISTRY OF HEALTH
NATIONAL STATISTICAL COMMITTEE

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . [ ][ ][ ]

HOUSEHOLD NUMBER . . . . . [ ][ ]

NAME AND LINE NUMBER OF WOMAN _____ [ ][ ]

CHECK QUESTION 142 IN THE HOUSEHOLD QUESTIONNAIRE. IS THIS WOMAN SELECTED FOR QUESTIONS IN "SECTION 12-DV" ? . . . . . (YES = 1, NO=2) [ ]

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY [ ][ ]
				MONTH [ ][ ]
				YEAR [ ][ ][ ][ ]
INTERVIEWER'S NAME	_____	_____	_____	INT. NUMBER [ ][ ][ ]
RESULT*	_____	_____	_____	RESULT [ ]
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS [ ]
TIME	_____	_____		

*RESULT CODES:

1	COMPLETED	4	REFUSED		
2	NOT AT HOME	5	PARTLY COMPLETED	7	OTHER _____ (SPECIFY)
3	POSTPONED	6	INCAPACITATED		

LANGUAGE OF QUESTIONNAIRE: [ ]

LANGUAGE OF INTERVIEW: [ ]

NATIVE LANGUAGE OF RESPONDENT [ ]

TRANSLATOR USED (YES = 1, NO = 2) [ ]

CODES: KYRGYZ-1; RUSSIAN-2 ; OTHER-6 (SPECIFY_____)

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____ [ ][ ][ ]	NAME _____ [ ][ ][ ]	[ ][ ]	[ ][ ]

W-1

SECTION 1. RESPONDENT'S BACKGROUND

INTRODUCTION AND CONSENT

INFORMED CONSENT

Hello. My name is _____. I am working with the National Statistical Committee. Together wIth the Ministry of Health we are conducting a survey about health all over Kyrgyzstan. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 30 to 60 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.
Do you have any questions? May I begin the interview now?

SIGNATURE OF INTERVIEWER: _____ DATE: _____

RESPONDENT AGREES TO BE INTERVIEWED . . . 1 ↓ RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . 2 → END

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOUR . . . . . [ ][ ] MINUTES . . . . . [ ][ ]	
101A	During the interview I would like to measure your blood pressure. This will be done three times during the interview. This is a harmless procedure. It is used to find out if a person has high blood pressure. If it is not treated, high blood pressure may eventually cause serious damage to the heart and blood vessels in the brain. The results of this blood pressure measurement will be given to you after the interview together with an explanation of the meaning of your blood pressure numbers. If your blood pressure is high, we will suggest that you consult a health facility or doctor since we cannot provide any further testing or treatment during the survey. Do you have any questions about the blood pressure measurement so far? If you have any questions about the procedure at any time, please ask me. You can say yes or not to having the blood pressure measurement now. You can also decide at anytime not to participate in the blood pressure measures. Would you allow me to proceed to take your blood pressure measurement at this time? SIGNATURE OF INTERVIEWER: _____ DATE: _____ RESPONDENT AGREES . . . 1 ↓ RESPONDENT DOES NOT AGREE . . . . . 2 → 101F		
101B	Before taking your blood pressure, I would to ask a few questions about things that may affect these measurements. Have you done any of the following within the past 30 minutes: a) Eaten anything b) Had coffee, tea, cola or other drink that has caffeine? c) Smoked any tobacco product	YES NO EATEN . . . . . 1 2 HAD CAFFEINATED DRINK SMOKED 1 2	
101C	May I begin the process of measuring your blood pressure? BEFORE TAKING THE FIRST BLOOD PRESSURE READING, MEASURE THE CIRCUMFERENCE OF THE RESPONDENT'S ARM MIDWAY BETWEEN HE ELBOW AND THE SHOULDER. RECORD THE MEASUREMENT IN CENTIMETERS.	ARM CIRCUMFERENCE (IN CENTIMETERS) [ ][ ]	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101D	USE THE ARM CIRCUMFERENCE MEASUREMENT TO SELECT THE APPROPRIATE BLOOD PRESSURE MONITOR MODEL AND CUFF SIZE. CIRCLE THE CODE FOR THE MODEL AND CUFF SIZE.	**MODEL 767** SMALL: 16 CM – 23 CM . . . . . 1 MEDIUM: 24 CM – 35 CM . . . . . 2 LARGE: 36 CM – 41 CM . . . . . 3 **MODEL 789** EXTRA LARGE: 42 CM – 60 CM 4	
101E	TAKE THE FIRST BLOOD PRESSURE READING. RECORD THE SYSTOLIC AND DIASTOLIC PRESSURE.THEN PROCEED TO Q102. F YOU ARE UNABLE TO MEASURE THE RESPONDENT'S BLOOD PRESSURE, RECORD THE REASON IN Q101F.	**BLOOD PRESSURE MEASURED** SYSTOLIC . . . . 1 [ ][ ][ ] DIASTOLIC . . . . . 2 [ ][ ][ ]	
101F	RECORD REASON BLOOD PRESSURE NOT MEASURED	REASON BLOOD PRESSURE NOT MEASURED REFUSED . . . . . '9994 TECHNICAL PROBLEMS . . . . . '9995 OTHER _____ '9996 SPECIFY	
102	In what month and year were you born?	MONTH . . . . . [ ][ ] DON'T KNOW MONTH . . . . . 98 YEAR . . . . . [ ][ ][ ][ ] DON'T KNOW YEAR 9998	
103	How old were you at your last birthday? COMPARE AND CORRECT 102 AND/OR 103 IF INCONSISTENT.	AGE IN COMPLETED YEARS [ ][ ]	
104	Have you ever attended school?	YES . . . . . 1 NO 2	→ 106A
104A	What is the total number of years of schooling you have had?	YEARS OF SCHOOLING . . . . . [ ][ ]	
105	What is the highest level of school you attended: general education school, professional primary(trade-school, lyceum), professional middle (tekhnikum, trade-school, college), higher or post-graduate?	SCHOOL . . . . . 1 PROFESSIONAL PRIMAF. . . . . 2 PROFESSIONAL MIDDLE . . . . . 3 HIGHER . . . . . 4 POST-GRADUATE 5	
106	What is the highest (grade/form/year) you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	GRADE/FORM/YEAR . . . . . [ ][ ]	
106A	CHECK 105 AND 106: CODES "1" GENERAL SCHOOL LEVEL AND GRADES 10-11 AT THAT LEVEL, OR CODES "2" OR "3" PROFESSIONAL-PRIMARY OR MIDDLE LEVEL CIRCLED,ASK: [ ] OTHER (CODES [ ] Did you receive a diploma (attestat) for completing secondary education?	 YES . . . . . 1 NO 2	→ 110

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
110	Do you read a newspaper or magazine at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
111	Do you listen to the radio at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
112	Do you watch television at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
112A	Have you used a computer from any location in the last 12 months?	YES . . . . . 1 NO 2	 → 112C
112B	During the last one month, how often did you use a computer: almost every day, at least once a week, less than once a week or not at all?	EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
112C	In the last 12 months, have you used the internet? IF NECESSARY, PROBE FOR USE FROM ANY LOCATION, WITH ANY DEVICE.	YES . . . . . 1 NO 2	 → 115
112D	During the last one month, how often did you use the internet: almost every day, at least once a week, less than once a week or not at all ?	EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
115	In the last 12 months, how many times have you been away from home for one or more nights?	NUMBER OF TIMES . . . . . [ ][ ] NONE 00	 → 201
116	In the last 12 months, have you been away from home for more than one month at a time?	YES . . . . . 1 NO 2	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about all the births you have had during your life. Have you ever given birth?	YES . . . . . 1 NO 2	→ 206
202	Do you have any sons or daughters to whom you have given birth who are now living with you?	YES . . . . . 1 NO 2	→ 204
203	How many sons live with you? And how many daughters live with you? IF NONE, RECORD '00'.	SONS AT HOME . . . . . [ ][ ] DAUGHTERS AT HOME . . . . . [ ][ ]	
204	Do you have any sons or daughters to whom you have given birth who are alive but do not live with you?	YES . . . . . 1 NO 2	→ 206
205	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	SONS ELSEWHERE . . . . . [ ][ ] DAUGHTERS ELSEWHERE [ ][ ]	
206	Have you ever given birth to a boy or girl who was born alive but later died? IF NO, PROBE: Any baby who cried or showed signs of life but did not survive?	YES . . . . . 1 NO 2	→ 208
207	How many boys have died? And how many girls have died? IF NONE, RECORD '00'.	BOYS DEAD . . . . . [ ][ ] GIRLS DEAD . . . . . [ ][ ]	
207A	Were there any other children who were born alive, but who died within a few minutes, hours, or days?	YES . . . . . 1 NO 2	→ 208
207B	CORRECT 207 AND THEN CONTINUE WITH QUESTION 208.		
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL BIRTHS . . . . . [ ][ ]	
209	CHECK 208: Just to make sure that I have this right: you have had in TOTAL _____ births during your life. Is that correct? YES [ ] ↓ NO [ ] → PROBE AND CORRECT 201-208 AS NECESSARY.		
209A	Women sometimes have pregnancies which do not result in a live born child. That is, a pregnancy can be ended early by an abortion, a miscarriage, or a stillbirth. I will now ask you about each of them separately. In total, how many abortions have you had? IF NONE, RECORD '00'	TOTAL ABORTIONS [ ][ ]	
209B	How many miscarriages? IF NONE, RECORD '00'	TOTAL MISCARRIAGES [ ][ ]	
209C	How many stillbirths? IF NONE, RECORD '00'	TOTAL STILLBIRTHS [ ][ ]	
209D	SUM ANSWERS TO 208, 209A, 209B, 209C, AND ENTER TOTAL. IF NO PREGNANCIES/OUTCOMES, RECORD '00'.	TOTAL . . . . . [ ][ ]	
210	CHECK 209D: Just to make sure that I have this right: you have had in TOTAL _____ pregnancies/ outcomes during your life. Is that correct? ONE OR MORE PREGNANCIES [ ] ↓ NO PREGNANCIES [ ]		→ 226

211 PREGNANCY HISTORY. Now I want to talk about each of your pregnancies, including those which ended in a live birth, a stillbirth, a miscarriage, and an induced abortion.
Starting with your first pregnancy, please tell me the following information:
RECORD ALL PREGANCIES. RECORD TWINS AND TRIPLETS ON SEPARATE LINES. IF THERE MORE THAN 15 PREGANCIES USE AN ADDITIONAL QUESTIONNAIRE

212 Did your (first/next) pregnancy end in a live birth, a stillbirth , a miscarriage, or an abortion?	213 Was this a single or a multiple birth?	214 In what month and year (was this child born / did this pregnancy end?)	215 Were there any other pregnancies between this and the pregnancy we were just talking about? IF YES, ADD IT TO TABLE	215A CHECK 212: RECORD SAME RESPONSE	216 What name was given to this child? WRITE 'BABY 1' BABY 2' , ETC. IF NO NAME WAS GIVEN TO A CHILD	217 Is (NAME) a boy or girl?	218 Is (NAME) still alive?	219 IF ALIVE: How old was (NAME) on his/her last birthday? **RECORD AGE IN COMPLETE YEARS**	220 IF ALIVE: Is (NAME) living with you?	221 IF ALIVE: **RECORD HOUSEHOLD LINE N0. OF CHILD.** **RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD**	222 IF DIED: How old was (NAME) when he/she died? IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	222A IF DIED: Does (NAME) have a death certificate? IF NO, PROBE: Has (NAME)'s death ever been registered in ZAGS? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW
01 LIVE BIRTH ..... 1 STILL BIRTH ..... 2 MISCARRIAGE ... 3 ABORTION ..... 4 GOTO 214	SING 1 MULT 2	MONTH YEAR		LIVE BIRTH ..... 1 STILL BIRTH .. 2 MISCARRIAGE .. 3 ABORTION ..... 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES ... 1 NO 2 222	AGE IN YEARS	YES .. 1 NO ... 2	LINE NO.: NEXT PREGNANCY	DAYS ... 1 MONTHS 2 YEARS .. 3	NEXT PREGNACY
02 LIVE BIRTH ..... 1 STILL BIRTH ..... 2 MISCARRIAGE ... 3 ABORTION ..... 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES ..... 1 ADD PREGN NO..... 2	LIVE BIRTH ..... 1 STILL BIRTH .. 2 MISCARRIAGE .. 3 ABORTION ..... 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES .... 1 NO 2 222	AGE IN YEARS	YES .. 1 NO ... 2	LINE NO.: NEXT PREGNANCY	DAYS ... 1 MONTHS 2 YEARS .. 3	NEXT PREGNACY
03 LIVE BIRTH ..... 1 STILL BIRTH ..... 2 MISCARRIAGE ... 3 ABORTION ..... 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES ..... 1 ADD PREGN NO..... 2	LIVE BIRTH ..... 1 STILL BIRTH .. 2 MISCARRIAGE .. 3 ABORTION ..... 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES .... 1 NO 2 222	AGE IN YEARS	YES .. 1 NO ... 2	LINE NO.: NEXT PREGNANCY	DAYS ... 1 MONTHS 2 YEARS .. 3	NEXT PREGNACY
04 LIVE BIRTH ..... 1 STILL BIRTH ..... 2 MISCARRIAGE ... 3 ABORTION ..... 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES ..... 1 ADD PREGN NO..... 2	LIVE BIRTH ..... 1 STILL BIRTH .. 2 MISCARRIAGE .. 3 ABORTION ..... 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES .... 1 NO 2 222	AGE IN YEARS	YES .. 1 NO ... 2	LINE NO.: NEXT PREGNANCY	DAYS ... 1 MONTHS 2 YEARS .. 3	NEXT PREGNACY
05 LIVE BIRTH ..... 1 STILL BIRTH ..... 2 MISCARRIAGE ... 3 ABORTION ..... 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES ..... 1 ADD PREGN NO..... 2	LIVE BIRTH ..... 1 STILL BIRTH .. 2 MISCARRIAGE .. 3 ABORTION ..... 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES .... 1 NO 2 222	AGE IN YEARS	YES .. 1 NO ... 2	LINE NO.: NEXT PREGNANCY	DAYS ... 1 MONTHS 2 YEARS .. 3	NEXT PREGNACY

212 Did your next pregnancy end in a live birth, a stillbirth , a miscarriage, or an abortion?	213 Was this a single or a multiple birth?	214 In what month and year (was this child born / did this pregnancy end?)	215 Were there any other pregnancies between this and the pregnancy we were just talking about? IF YES, ADD IT TO TABLE	215A CHECK 212: RECORD SAME RESPONSE	216 What name was given to this child? WRITE 'BABY 1' BABY 2' , ETC. IF NO NAME WAS GIVEN TO A CHILD	217 Is (NAME) a boy or girl?	218 Is (NAME) still alive?	219 IF ALIVE: How old was (NAME) on his/her last birthday? **RECORD AGE IN COMPLETE YEARS**	220 IF ALIVE: Is (NAME) living with you?	221 IF ALIVE: **RECORD HOUSEHOLD LINE N0. OF CHILD.** **RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD**	222 IF DIED: How old was (NAME) when he/she died? IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	222A IF DIED: Does (NAME) have a death certificate? IF NO, PROBE: Has (NAME)'s death ever been registered in ZAGS? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW
06 LIVE BIRTH ..... 1 STILL BIRTH ..... 2 MISCARRIAGE ... 3 ABORTION ..... 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES .... 1 ADD PREGN NO 2	LIVE BIRTH ..... 1 STILL BIRTH .... 2 MISCARRIAGE .. 3 ABORTION ..... 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES ... 1 NO 2 222	AGE IN YEARS	YES .. 1 NO ... 2	LINE NO.: NEXT PREGNANCY	DAYS ... 1 MONTHS 2 YEARS .. 3	NEXT PREGNACY
07 LIVE BIRTH ..... 1 STILL BIRTH ..... 2 MISCARRIAGE ... 3 ABORTION ..... 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES ..... 1 ADD PREGN NO. 2	LIVE BIRTH ..... 1 STILL BIRTH .... 2 MISCARRIAGE .. 3 ABORTION ..... 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES .... 1 NO 2 222	AGE IN YEARS	YES .. 1 NO ... 2	LINE NO.: NEXT PREGNANCY	DAYS ... 1 MONTHS 2 YEARS .. 3	NEXT PREGNACY
08 LIVE BIRTH ..... 1 STILL BIRTH ..... 2 MISCARRIAGE ... 3 ABORTION ..... 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES. ..... 1 ADD PREGN NO. 2	LIVE BIRTH ..... 1 STILL BIRTH .... 2 MISCARRIAGE .. 3 ABORTION ..... 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES .... 1 NO 2 222	AGE IN YEARS	YES .. 1 NO ... 2	LINE NO.: NEXT PREGNANCY	DAYS ... 1 MONTHS 2 YEARS .. 3	NEXT PREGNACY
09 LIVE BIRTH ..... 1 STILL BIRTH ..... 2 MISCARRIAGE ... 3 ABORTION ..... 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES ..... 1 ADD PREGN NO 2	LIVE BIRTH ..... 1 STILL BIRTH .... 2 MISCARRIAGE .. 3 ABORTION ..... 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES .... 1 NO 2 222	AGE IN YEARS	YES .. 1 NO ... 2	LINE NO.: NEXT PREGNANCY	DAYS ... 1 MONTHS 2 YEARS .. 3	NEXT PREGNACY
10 LIVE BIRTH ..... 1 STILL BIRTH ..... 2 MISCARRIAGE ... 3 ABORTION ..... 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES ..... 1 ADD PREGN NO 2	LIVE BIRTH ..... 1 STILL BIRTH .... 2 MISCARRIAGE .. 3 ABORTION ..... 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES .... 1 NO 2 222	AGE IN YEARS	YES .. 1 NO ... 2	LINE NO.: NEXT PREGNANCY	DAYS ... 1 MONTHS 2 YEARS .. 3	NEXT PREGNACY

212 Did your next pregnancy end in a live birth, a stillbirth , a miscarriage, or an abortion?	213 Was this a single or a multiple birth?	214 In what month and year (was this child born / did this pregnancy end?)	215 Were there any other pregnancies between this and the pregnancy we were just talking about? IF YES, ADD IT TO TABLE	215A CHECK 212: RECORD SAME RESPONSE	216 What name was given to this child? WRITE 'BABY 1' BABY 2' , ETC. IF NO NAME WAS GIVEN TO A CHILD	217 Is (NAME) a boy or girl?	218 Is (NAME) still alive?	219 IF ALIVE: How old was (NAME) on his/her last birthday? **RECORD AGE IN COMPLETE YEARS**	220 IF ALIVE: Is (NAME) living with you?	221 IF ALIVE: **RECORD HOUSEHOLD LINE N0. OF CHILD.** **RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD**	222 IF DIED: How old was (NAME) when he/she died? IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	222A IF DIED: Does (NAME) have a death certificate? IF NO, PROBE: Has (NAME)'s death ever been registered in ZAGS? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW
11 LIVE BIRTH ..... 1 STILL BIRTH ..... 2 MISCARRIAGE ... 3 ABORTION ..... 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES .... 1 ADD PREGN NO 2	LIVE BIRTH ..... 1 STILL BIRTH .... 2 MISCARRIAGE .. 3 ABORTION ..... 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES ... 1 NO 2 222	AGE IN YEARS	YES .. 1 NO ... 2	LINE NO.: NEXT PREGNANCY	DAYS ... 1 MONTHS 2 YEARS .. 3	NEXT PREGNACY
12 LIVE BIRTH ..... 1 STILL BIRTH ..... 2 MISCARRIAGE ... 3 ABORTION ..... 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES ..... 1 ADD PREGN NO..... 2	LIVE BIRTH ..... 1 STILL BIRTH .... 2 MISCARRIAGE .. 3 ABORTION ..... 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES .... 1 NO 2 222	AGE IN YEARS	YES .. 1 NO ... 2	LINE NO.: NEXT PREGNANCY	DAYS ... 1 MONTHS 2 YEARS .. 3	NEXT PREGNACY
13 LIVE BIRTH ..... 1 STILL BIRTH ..... 2 MISCARRIAGE ... 3 ABORTION ..... 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES..... 1 ADD PREGN NO..... 2	LIVE BIRTH ..... 1 STILL BIRTH .... 2 MISCARRIAGE .. 3 ABORTION ..... 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES .... 1 NO 2 222	AGE IN YEARS	YES .. 1 NO ... 2	LINE NO.: NEXT PREGNANCY	DAYS ... 1 MONTHS 2 YEARS .. 3	NEXT PREGNACY
14 LIVE BIRTH ..... 1 STILL BIRTH ..... 2 MISCARRIAGE ... 3 ABORTION ..... 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES ..... 1 ADD PREGN NO 2	LIVE BIRTH ..... 1 STILL BIRTH .... 2 MISCARRIAGE .. 3 ABORTION ..... 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES .... 1 NO 2 222	AGE IN YEARS	YES .. 1 NO ... 2	LINE NO.: NEXT PREGNANCY	DAYS ... 1 MONTHS 2 YEARS .. 3	NEXT PREGNACY
15 LIVE BIRTH ..... 1 STILL BIRTH ..... 2 MISCARRIAGE ... 3 ABORTION ..... 4 GOTO 214	SING 1 MULT 2	MONTH YEAR	YES ..... 1 ADD PREGN NO 2	LIVE BIRTH ..... 1 STILL BIRTH .... 2 MISCARRIAGE .. 3 ABORTION ..... 4 NEXT PREGNANCY	NAME:	BOY 1 GIRL 2	YES .... 1 NO 2 222	AGE IN YEARS	YES .. 1 NO ... 2	LINE NO.: NEXT PREGNANCY	DAYS ... 1 MONTHS 2 YEARS .. 3	NEXT PREGNACY

222B	Have you had any ended pregnancies since the last birth of (NAME of LAST BIRTH)/stillbirth/ miscarriage/ abortion? IF YES, RECORD PREGNANCIES IN TABLE ABOVE.	YES . . . . . 1 NO 2
222C	RECORD AND COMPARE NUMBER OF EVENTS RECORDED IN PREGNANCY HISTORY WITH EARLIER RESPONSES TOTAL NUMBER OF PREGANCIES [ ][ ] SAME AS NUMBER IN 209D [ ] ↓ TOTAL NUMBER OF PREGANCIES DIFFERENT [ ] → (PROBE AND RECONCILE) TOTAL NUMBER OF LIVE BIRTH [ ][ ] SAME AS NUMBER IN 208 [ ] ↓ TOTAL NUMBER OF LIVE BIRTH DIFFERENT [ ] → (PROBE AND RECONCILE) TOTAL NUMBER OF ABORTIONS [ ][ ] SAME AS NUMBER IN 209A [ ] ↓ TOTAL NUMBER OF ABORTIONS DIFFERENT [ ] → (PROBE AND RECONCILE)	
223	COMPARE 209D WITH TOTAL NUMBER OF PREGNANCIES IN PREGNANCY HISTORY AND MARK: NUMBERS ARE SAME [ ] ↓ NUMBERS ARE DIFFERENT [ ] → (PROBE AND RECONCILE) CHECK: FOR EACH PREGNANCY: YEAR WHEN PREGNANCY ENDED IS RECORDED (Q.214) [ ] FOR EACH LIVE BIRTH SINCE JANUARY 2007, MONTH AND YEAR OF BIRTH IS RECORDED (Q.214) [ ] FOR EACH LIVING CHILD: CURRENT AGE IS RECORDED (Qs. 218, 219) [ ] FOR EACH CHILD THAT DIED: AGE AT DEATH IS RECORDED (Qs. 218, 222). [ ] FOR AGE AT DEATH 12 MONTHS OR 1 YEAR: PROBE TO DETERMINE EXACT NUMBER OF MONTHS (Q. 222). [ ]	
224	CHECK 212 AND 214: ENTER THE NUMBER OF BIRTHS IN 2007 OR LATER (IN 212 CIRCLED CODE "1")	NUMBER OF BIRTHS . . . . . [ ] NONE 0

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
225	CHECK 212 AND 214: FOR EACH PREGNANCY SINCE JANUARY 2007 OR LATER, IN THE CALENDAR COLUMN 1 ENTER THE CODE FOR PREGNANCY OUTCOME IN THE MONTH THAT THE PREGNANCY ENDED. ▪ **B** LIVE BIRH ▪ **T** TERMINATION (FOR ABORTION, MISCARRIAGE OR STILLBIRTH) **C** FOR EACH BIRTH SINCE JANUARY 2007, ENTER 'B' IN THE MONTH OF BIRTH IN THE CALENDAR. WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'B' CODE. FOR EACH BIRTH, ASK THE NUMBER OF MONTHS THE PREGNANCY LASTED AND RECORD 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE DURATION OF PREGNANCY. (NOTE: THE NUMBER OF 'P's MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.) FOR EACH PREGNANCY TERMINATION SINCE JANUARY 2007 (ABORTION, MISCARRIAGE OR STILLBIRTH), ENTER 'T' IN THE CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED, AND 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE DURATION OF THE PREGNANCY. AS ABOVE, THE NUMBER OF P's MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.		
226	Are you pregnant now?	YES . . . . . 1 NO . . . . . 2 UNSURE 8	→ 238
227	How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS. **C** ENTER 'P's IN THE CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS.	MONTHS . . . . . [ ][ ]	
228	When you got pregnant, did you want to get pregnant at that time?	YES . . . . . 1 NO 2	→ 238
229	Did you want to have a baby later on or did you not want any (more) children?	LATER . . . . . 1 NO MORE 2	
238	When did your last menstrual period start? _____ (DATE, IF GIVEN)	DAYS AGO . . . . . 1 [ ][ ] WEEKS AGO . . . . . 2 [ ][ ] MONTHS AGO . . . . . 3 [ ][ ] YEARS AGO . . . . . 4 [ ][ ] IN MENOPAUSE/ HAS HAD HYSTERECTOMY . . . 994 BEFORE LAST BIRTH/PREGNANCY 995 NEVER MENSTRUATED 996	
239	From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 241
240	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS . . . . . 1 DURING HER PERIOD . . . . . 2 RIGHT AFTER HER PERIOD HAS ENDED . . . . . 3 HALFWAY BETWEEN TWO PERIODS . . . . . 4 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	

241	CHECK 212 AND 214: ONE OR MORE ABORTIONS SINCE JANUARY 2007 OR LATER ☐ ↓	NO ABORTIONS IN 2007 OR LATER ☐ → 301			
NO.	QUESTIONS AND FILTER	LAST ABORTION	NEXT-TO-LAST ABORTION	SECOND-TO-LAST ABORTION	THIRD-TO-LAST ABORTION
242	PREGNANCY № FROM 212	PREGNANCY № ☐☐	PREGNANCY № ☐☐	PREGNANCY № ☐☐	PREGNANCY № ☐☐
243	How many weeks pregnant you were at the time of this abortion?	WEEKS ☐☐	WEEKS ☐☐	WEEKS ☐☐	WEEKS ☐☐
244	What was the main reason you decided to have this (last, next-to-last, second-from-last, third-from-last) abortion (mini-abortion)?	HEALTH OF MOTHER . . . . . 01 RISK OF BIRTH DEFECTS . . . . 02 SOCIOECONOMIC REASONS . . 03 RESPONDENT DID NOT WANT (ANYMORE) CHILDREN . . . 04 SPACING NEXT PREGNANCY. . 05 PARTNER DID NOT WANT THE CHILD . . . . . 06 SEX SELECTION/WANTED BOY 07 SEX SELECTION/WANTED GIRL 08 UNMARRIED . . . . . 09 OTHER _____ 96 (SPECIFY)	HEALTH OF MOTHER . . . . . 01 RISK OF BIRTH DEFECT . . . . 02 SOCIOECONOMIC REASONS 03 RESPONDENT DID NOT WANT (ANYMORE) CHILDREN . . . 04 SPACING NEXT PREGNANCY 05 PARTNER DID NOT WANT THE CHILD . . . . . 06 SEX SELECTION/WANTED B(07 SEX SELECTION/WANTED GI 08 UNMARRIED . . . . . 09 OTHER _____ 96 (SPECIFY)	HEALTH OF MOTHER . . . . . 01 RISK OF BIRTH DEFECT . . . . 02 SOCIOECONOMIC REASONS 03 RESPONDENT DID NOT WANT (ANYMORE) CHILDREN . . . 04 SPACING NEXT PREGNANCY 05 PARTNER DID NOT WANT THE CHILD . . . . . 06 SEX SELECTION/WANTED BC 07 SEX SELECTION/WANTED GII 08 UNMARRIED . . . . . 09 OTHER _____ 96 (SPECIFY)	HEALTH OF MOTHER . . . . . 01 RISK OF BIRTH DEFECT . . . . 02 SOCIOECONOMIC REASONS 03 RESPONDENT DID NOT WANT (ANYMORE) CHILDREN . . . 04 SPACING NEXT PREGNANCY 05 PARTNER DID NOT WANT THE CHILD . . . . . 06 SEX SELECTION/WANTED BC 07 SEX SELECTION/WANTED GII 08 UNMARRIED . . . . . 09 OTHER _____ 96 (SPECIFY)
245	What method was used for this (last, next-to-last, second-from-last, third-from-last) abortion?	D & C (DILATION&CURETTING) 01 VACUUM ASPIRATION . . . . 02 OXYTOCIN . . . . . 03 CATHETER . . . . . 04 OTHER MEDICINES . . . . 05 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	D & C . . . . . 01 VACUUM ASPIRATION . . . . 02 OXYTOCIN . . . . . 03 CATHETER . . . . . 04 OTHER MEDICINES . . . . 05 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	D & C . . . . . 01 VACUUM ASPIRATION . . . . 02 OXYTOCIN . . . . . 03 CATHETER . . . . . 04 OTHER MEDICINES . . . . 05 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	D & C . . . . . 01 VACUUM ASPIRATION . . . . 02 OXYTOCIN . . . . . 03 CATHETER . . . . . 04 OTHER MEDICINES . . . . 05 OTHER _____ 96 (SPECIFY) DON'T KNOW 98
NO.	QUESTIONS AND FILTER	LAST ABORTION			
246	How much did you pay for this abortion, including gifts or money given to the doctor (person, who performed the abortion)?	☐☐☐☐☐ ENTER TOTAL NUMERIC VALUE IN SOMS PAID NO MONEY . . . . 99994 DON'T KNOW 99998			
247	At the place where you had the abortion, did anyone talk to you about using family planning after abortion?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 249) ← DON'T REMEMBER 8			
248	Were you offered any contraceptive method at that time?	YES . . . . . 1 NO 2			
249		GO BACK TO 242 IN NEXT COLUMN; OR, IF NO MORE ABORTIONS, GO TO 301.	GO BACK TO 242 IN NEXT COLUMN; OR, IF NO MORE ABORTIONS, GO TO 301.	GO BACK TO 242 IN NEXT COLUMN; OR, IF NO MORE ABORTIONS, GO TO 301.	GO BACK TO 242 IN NEXT-TO-LAST-ABORTION COLUMN IN THE NEW QUESTIONNAIRE; OR, IF NO MORE ABORTIONS, GO TO 301.

SECTION 3. CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)?		
01	**Female Sterilization**. PROBE: Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	
02	**Male Sterilization**. PROBE: Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	
03	**IUD**. PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse.	YES . . . . . 1 NO 2	
04	**Injectables**. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES . . . . . 1 NO 2	
05	**Implants**. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2	
06	**Pill**. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO 2	
07	**Condom**. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO 2	
08	**Female Condom**. PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO 2	
09	**Lactational Amenorrhea Method (LAM)**.	YES . . . . . 1 NO 2	
10	**Rhythm Method (or the Calendar method).** PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant.	YES . . . . . 1 NO 2	
11	**Withdrawal**. PROBE: Men can be careful and pull out before climax.	YES . . . . . 1 NO 2	
12	**Emergency Contraception**. PROBE: As an emergency measure, within three days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES . . . . . 1 NO 2	
13	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES . . . . . 1 _____ (SPECIFY) _____ (SPECIFY) NO 2	
302	CHECK 226: NOT PREGNANT OR UNSURE ☐ ↓ PREGNANT ☐		→ 311
303	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→ 311

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
304	Which method are you using? CIRCLE ALL MENTIONED. IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION . . . . . A MALE STERILIZATION . . . . . B IUD . . . . . C INJECTABLES . . . . . D IMPLANTS . . . . . E PILL . . . . . F CONDOM . . . . . G FEMALE CONDOM . . . . . H DIAPHRAGM . . . . . I FOAM/JELLY . . . . . J LACTATIONAL AMEN. METHOD . . . . . K RHYTHM METHOD . . . . . L WITHDRAWAL . . . . . M OTHER MODERN METHOD . . . . . X OTHER TRADITIONAL METHOD . . . Y	→ 307 → 308A → 308A
305	What is the brand name of the pills you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE.	MICROLUT . . . . . 01 MICROGYNON . . . . . 02 DIANE 35 . . . . . 03 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	→ 308A
307	In what facility did the sterilization take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC MEDICAL SECTOR GOVT. HOSPITAL . . . . . 11 MATERNITY HOME . . . . . 12 FAMILY DOCTORS GROUP (FDG) 13 FELDSHER-ACCOUCHER POST(FAP)14 FAMILY MEDICINE CENTEF. . . . . 15 REPRODUCTIVE HEALTH CENTER . .16 MARRIAGE&FAMILY CONSULT. . .17 DIAGNOSTIC CENTER. . . . . .18 SKIN-VENEREAL DIS. DISPANCER . .19 PROPHYLACTIC MEDICINE CENTER . . . . . 20 GENERAL PRACTICE CENTER . . . .21 IMMUNOPROPHYLAXIS CENTEF. . . .22 AIDS CENTER . . . . . 23 HEALTH STRENGTHENING CENTER 24 OTHER PUBLIC 25 SECTOR _____ (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . 31 PRIVATE DOCTOR'S OFFICE . . . . . 32 PHARMACY . . . . . 33 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY) DON'T KNOW 98	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
308	In what month and year was the sterilization performed?		
308A	Since what month and year have you been using (CURRENT METHOD) without stopping? PROBE: For how long have you been using (CURRENT METHOD) now without stopping?	MONTH . . . . . [ ][ ] YEAR . . . . . [ ][ ][ ][ ]	
309	CHECK 308/308A, 212 AND 214 : ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 308/308A GO BACK TO 308/308A, PROBE AND RECORD MONTH AND YEAR AT START OF CONTINUOUS USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH OR PREGNANCY TERMINATION).	YES ☐ NO ☐	
310	CHECK 308/308A: YEAR IS 2007 OR LATER ☐ **C** ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING. YEAR IS 2006 OR EARLIER ☐ **C** ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND EACH MONTH BACK TO JANUARY 2007. THEN SKIP TO → 322		
311	I would like to ask you some questions about the times you or your partner may have used a method to avoid getting pregnant during the last few years. USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 2007. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS. **C** **IN COLUMN 1**, ENTER METHOD USE CODE OR '0' FOR NONUSE IN EACH BLANK MONTH. ILLUSTRATIVE QUESTIONS: * When was the last time you used a method? Which method was that? * When did you start using that method? How long after the birth of (NAME)? * How long did you use the method then? **IN COLUMN 2**, ENTER CODES FOR DISCONTINUATION NEXT TO THE LAST MONTH OF USE. NUMBER OF CODES IN COLUMN 2 MUST BE SAME AS NUMBER OF INTERRUPTIONS OF METHOD USE IN COLUMN 1. ASK WHY SHE STOPPED USING THE METHOD. IF A PREGNANCY FOLLOWED, ASK WHETHER SHE BECAME PREGNANT UNINTENTIONALLY WHILE USING THE METHOD OR DELIBERATELY STOPPED TO GET PREGNANT. ILLUSTRATIVE QUESTIONS: * Why did you stop using the (METHOD)? Did you become pregnant while using (METHOD), or did you stop to get pregnant, or did you stop for some other reason? * IF DELIBERATELY STOPPED TO BECOME PREGNANT, ASK: How many months did it take you to get pregnant after you stopped using (METHOD)? AND ENTER '0' IN EACH SUCH MONTH IN COLUMN 1.		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
312	CHECK THE CALENDAR FOR USE OF ANY CONTRACEPTIVE METHOD IN ANY MONTH NO METHOD USED ☐ ↓ ; ANY METHOD USED ☐ →		314
313	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	 324
314	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	NO CODE CIRCLED . . . . . 00 FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 FOAM/JELLY . . . . . 10 LACTATIONAL AMEN. METHOD . . . . . 11 RHYTHM METHOD . . . . . 12 WITHDRAWAL . . . . . 13 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD 96	324 317A 326 315A 326
315	You first started using (CURRENT METHOD) in (DATE FROM 308/308A). Where did you get it at that time?	PUBLIC MEDICAL SECTOR GOVT. HOSPITAL . . . . . 11 MATERNITY HOME . . . . . 12 FAMILY DOCTORS GROUP (FDG) 13 FELDSHER-ACCOUCHER POST(FAP)14 FAMILY MEDICINE CENTEF. . . . . 15 REPRODUCTIVE HEALTH CENTER . .16 MARRIAGE&FAMILY CONSULT. . .17 DIAGNOSTIC CENTER. . . . . .18 SKIN-VENEREAL DIS. DISPANCER . .19 PROPHYLACTIC MEDICINE CENTER . . . . . 20 GENERAL PRACTICE CENTER . . . .21 IMMUNOPROPHYLAXIS CENTEF. . . .22 AIDS CENTER . . . . . 23 HEALTH STRENGTHENING CENTER 24 OTHER PUBLIC 25 SECTOR _____ (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . 31 PRIVATE DOCTOR'S OFFICE . . . . . 32 PHARMACY . . . . . 33 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER SOURCE SHOP/MARKET . . . . . 41 FRIEND/RELATIVE . . . . . 43 OTHER _____ 96 (SPECIFY)	
315A	Where did you learn how to use the rhythm/lactational amenorrhea method? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
316	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 FOAM/JELLY . . . . . 10 LACTATIONAL AMEN. METHOD . . . . . 11 RHYTHM METHOD 12	 → 323 → 320 → 326 → 326
317	At that time, were you told about side effects or problems you might have with the method?	YES . . . . . 1 NO 2	→ 319
317A	When you got sterilized, were you told about side effects or problems you might have with the method?		
318	Were you ever told by a health or family planning worker about side effects or problems you might have with the method?	YES . . . . . 1 NO 2	 → 320
319	Were you told what to do if you experienced side effects or problems?	YES . . . . . 1 NO 2	
320	CHECK 317: CODE '1' CIRCLED → At that time, were you told about other methods of family planning that you could use? CODE '1' NOT CIRCLED → When you obtained (CURRENT METHOD FROM 314) from (SOURCE OF METHOD FROM 307 OR 315), were you told about other methods of family planning that you could use?	YES . . . . . 1 NO 2	→ 322
321	Were you ever told by a health or family planning worker about other methods of family planning that you could use?	YES . . . . . 1 NO 2	
322	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 FOAM/JELLY . . . . . 10 LACTATIONAL AMEN. METHOD . . . . . 11 RHYTHM METHOD . . . . . 12 WITHDRAWAL . . . . . 13 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD . . . 96	 → 326 → 326

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
323	Where did you obtain (CURRENT METHOD) the last time? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC MEDICAL SECTOR GOVT. HOSPITAL . . . . . 11 MATERNITY HOME . . . . . 12 FAMILY DOCTORS GROUP (FDG) 13 FELDSHER-ACCOUCHER POST(FAP) 14 FAMILY MEDICINE CENTER . . . . . 15 REPRODUCTIVE HEALTH CENTER . . 16 MARRIAGE&FAMILY CONSULT. . . 17 DIAGNOSTIC CENTER . . . . . 18 SKIN-VENEREAL DIS. DISPANCER . . 19 PROPHYLACTIC MEDICINE CENTER . . . . . 20 GENERAL PRACTICE CENTER . . . . 21 IMMUNOPROPHYLAXIS CENTER . . . . 22 AIDS CENTER . . . . . 23 HEALTH STRENGTHENING CENTER 24 OTHER PUBLIC SECTOR _____ 25 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . 31 PRIVATE DOCTOR'S OFFICE . . . . . 32 PHARMACY . . . . . 33 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER SOURCE SHOP/MARKET . . . . . 41 FRIEND/RELATIVE . . . . . 43 OTHER _____ 96 (SPECIFY)	→ 326
324	Do you know of a place where you can obtain a method of family planning?	YES . . . . . 1 NO 2	→ 326
325	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____	PUBLIC MEDICAL SECTOR GOVT. HOSPITAL . . . . . A MATERNITY HOME . . . . . B FAMILY DOCTORS GROUP (FDG) C FELDSHER-ACCOUCHER POST(FAP) D FAMILY MEDICINE CENTER . . . . . E REPRODUCTIVE HEALTH CENTER . . F MARRIAGE&FAMILY CONSULT. . . G DIAGNOSTIC CENTER . . . . . H SKIN-VENEREAL DIS. DISPANCER . . I PROPHYLACTIC MEDICINE CENTER . . . . . J GENERAL PRACTICE CENTER . . . . K IMMUNOPROPHYLAXIS CENTER . . . . L AIDS CENTER . . . . . M HEALTH STRENGTHENING CENTER N OTHER PUBLIC SECTOR _____ O (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . P PRIVATE DOCTOR'S OFFICE . . . . . Q PHARMACY . . . . . R OTHER PRIVATE MEDICAL SECTOR _____ S (SPECIFY) OTHER SOURCE SHOP/MARKET . . . . . T FRIEND/RELATIVE . . . . . U OTHER _____ X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
326	In the last 12 months, were you visited by a healthworker who talked to you about family planning?	YES . . . . . 1 NO 2	
327	In the last 12 months, have you visited a health facility for care for yourself (or your children)?	YES . . . . . 1 NO 2	→ 401
328	Did any staff member at the health facility speak to you about family planning methods?	YES . . . . . 1 NO 2	

SECTION 4. PREGNANCY AND POSTNATAL CARE

401	CHECK 224: ONE OR MORE BIRTHS IN 2007 OR LATER ☐		NO BIRTHS IN 2007 OR LATER ☐ → 556	
402	CHECK 214: ENTER IN THE TABLE THE PREGNANCY HISTORY NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2007 OR LATER. ASK THE QUESTIONS ABOUT ALL OF LIVE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE LAST 2 COLUMNS OF ADDITIONAL QUESTIONNAIRES). Now I would like to ask some questions about your children born in the last five years. (We will talk about each separately.)			
403	PREGNANCY HISTORY NUMBER FROM 212 IN PREGNANCY HISTORY TABLE	LAST BIRTH PREGNANCY NUMBER FROM 212 ☐☐	NEXT-TO-LAST BIRTH PREGNANCY NUMBER FROM 212 ☐☐	SECOND-FROM-LAST BIRTH PREGNANCY NUMBER FROM 212 ☐☐
404	FROM 216 AND 218	NAME _____ LIVING ☐ DEAD ☐	NAME _____ LIVING ☐ DEAD ☐	NAME _____ LIVING ☐ DEAD ☐
405	When you got pregnant with (NAME), did you want to get pregnant at that time?	YES . . . . . 1 (SKIP TO 408) NO 2	YES . . . . . 1 (SKIP TO 430) NO 2	YES . . . . . 1 (SKIP TO 430) NO 2
406	Did you want to have a baby later on, or did you not want any (more) children?	LATER . . . . . 1 NO MORE . . . . . 2 (SKIP TO 408)	LATER . . . . . 1 NO MORE . . . . . 2 (SKIP TO 430)	LATER . . . . . 1 NO MORE . . . . . 2 (SKIP TO 430)
407	How much longer did you want to wait?	MONTHS . .1 ☐☐ YEARS . . 2 ☐☐ DON'T KNOW . . . 998	MONTHS . .1 ☐☐ YEARS . . 2 ☐☐ DON'T KNOW . . . 998	MONTHS . .1 ☐☐ YEARS . . 2 ☐☐ DON'T KNOW . . . 998
408	Did you see anyone for antenatal care for this pregnancy?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 414A)		
409	Whom did you see? Anyone else? PROBE TO IDENTIFY EACH TYPE OF PERSON AND RECORD ALL MENTIONED.	HEALTH PERSONNEL DOCTOR . . . . . A NURSE/MIDWIFE B FELDSHER . . . . . C OTHER PERSON TRADITIONAL BIRTH ATTENDANT . . D COMMUNITY/ VILLAGE HEALTH WORKER . . . E OTHER_____ X (SPECIFY)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
410	Where did you receive antenatal care for this pregnancy? Anywhere else? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	HOME YOUR HOME . . . A OTHER HOME . . . B PUBLIC SECTOR GOVT. HOSPITAL . . C MATERNITY HOME D FAMILY DOCTORS GROUP(FDG) . . E FAMILY MEDICINE CENTER . . . . . F FAP . . . . . G OTHER PUBLIC SECTOR . . . . . H _____ (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC . . . . . J OTHER PRIVATE MED. SECTOR . . K _____ (SPECIFY) OTHER _____ X (SPECIFY)		
411	How many months pregnant were you when you first received antenatal care for this pregnancy?	MONTHS . . . [ ][ ] DON'T KNOW 98		
412	How many times did you receive antenatal care during this pregnancy?	NUMBER OF TIMES [ ][ ] DON'T KNOW 98		
413	As part of your antenatal care during this pregnancy, were any of the following done at least once: Was your blood pressure Did you give a urine sample? Did you give a blood sample?	YES NO BP . . . . . 1 2 URINE . . . . . 1 2 BLOOD . . . 1 2		
414	During (any of) your antenatal care visit(s), were you told about things to look out for that might suggest problems with the pregnancy?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
414A	Have you been admitted to a health facility during this pregnancy, including day-bed occupancy?	YES . . . . . 1 NO . . . . . 2 (GOTO 414D) ←		
414B	In total, how many times have you been hospitalised during this pregnancy, including day-bed occupancy?	TIMES [ ][ ][ ] DON'T KNOW 998		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
414C	Please, list the reasons for all hospitalizations. Anythig else? RECORD ALL MENTIONED	HIGH BLOOD PRESSURE . . . . . A BLURRED VISION . . . . . B SEIZURES . . . . . C BLEEDING . . . . . D MISCARRIAGE THREA . . E PRETERM LABOR THREAT . . . . . F LABORTERM OVERDUE . . . . . G FETAL/PLACENTAL PROBLEMS . . . . . H DIABETES . . . . . I ANEMIA . . . . . J STD . . . . . K OTHER INFECTION . . L DIAGNOSTIC TESTS. . M ACCIDENT/INJURY/ . . N OTHER X _____ (SPECIFY) DON'T KNOW Z		
414D	During this pregnancy, were you told that you have anemia?	YES . . . . . 1 NO 2		
421	During this pregnancy, were you given or did you buy any iron tablets or iron syrup?	YES . . . . . 1 NO . . . . . 2 (GOTO 422A) ← DON'T KNOW 8		
422	During the whole pregnancy, for how many days did you take the tablets or syrup? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.	DAYS [ ][ ][ ] DON'T KNOW . . . 998		
422A	During this pregnancy, were you given or did you buy any folic acid tablets?	YES . . . . . 1 NO . . . . . 2 (GOTO 423) ← DON'T KNOW 8		
422B	During the whole pregnancy, for how many days did you take the folic tablets? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.	DAYS [ ][ ][ ] DON'T KNOW . . . 998		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
423	During this pregnancy, did you take any drug for intestinal worms?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
430	When (NAME) was born, was he/she very large, larger than average, average, smaller than average, or very small?	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . . 2 AVERAGE . . . . . 3 SMALLER THAN AVERAGE . . . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . . 2 AVERAGE . . . . . 3 SMALLER THAN AVERAGE . . . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . . 2 AVERAGE . . . . . 3 SMALLER THAN AVERAGE . . . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8
431	Was (NAME) weighed at birth?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 433) ←┤ DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 433) ←┤ DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 433) ←┤ DON'T KNOW 8
432	How much did (NAME) weigh? RECORD WEIGHT IN KILOGRAMS FROM HEALTH CARD, IF AVAILABLE.	KG FROM CARD 1 [ ] . [ ][ ][ ] KG FROM RECALL 2 [ ] . [ ][ ][ ] DON'T KNOW 99998	KG FROM CARD 1 [ ] . [ ][ ][ ] KG FROM RECALL 2 [ ] . [ ][ ][ ] DON'T KNOW 99998	KG FROM CARD 1 [ ] . [ ][ ][ ] KG FROM RECALL 2 [ ] . [ ][ ][ ] DON'T KNOW 99998
433	Who assisted with the delivery of (NAME)? Anyone else? PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED. IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY.	HEALTH PERSONNEL DOCTOR . . . . . A NURSE/MIDWIFE B FELDSHER . . . C OTHER PERSON TRADITIONAL BIRTH ATTENDANT . . D RELATIVE/FRIEND E OTHER _____ X (SPECIFY) NO ONE ASSISTED Y	HEALTH PERSONNEL DOCTOR . . . . . A NURSE/MIDWIFE B FELDSHER . . . C OTHER PERSON TRADITIONAL BIRTH ATTENDANT . . D RELATIVE/FRIEND E OTHER _____ X (SPECIFY) NO ONE ASSISTED Y	HEALTH PERSONNEL DOCTOR . . . . . A NURSE/MIDWIFE B FELDSHER . . . C OTHER PERSON TRADITIONAL BIRTH ATTENDANT . . D RELATIVE/FRIEND E OTHER _____ X (SPECIFY) NO ONE ASSISTED Y

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
434	Where did you give birth to (NAME)? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	HOME YOUR HOME . . . 11 (SKIP TO 438) OTHER HOME . . . 12 PUBLIC SECTOR GOVT. HOSPITAL 21 MATERNITY HOME 22 FAP . . . . . 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC . . . . . 31 OTHER PRIVATE MED. SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 438)	HOME YOUR HOME . . . 11 (SKIP TO 448) OTHER HOME . . . 12 PUBLIC SECTOR GOVT. HOSPITAL 21 MATERNITY HOME 22 FAP . . . . . 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC . . . . . 31 OTHER PRIVATE MED. SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 448)	HOME YOUR HOME . . . 11 (SKIP TO 448) OTHER HOME . . . 12 PUBLIC SECTOR GOVT. HOSPITAL 21 MATERNITY HOME 22 FAP . . . . . 23 OTHER PUBLIC SECTOR _____ 26 (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC . . . . . 31 OTHER PRIVATE MED. SECTOR _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY) (SKIP TO 448)
434A	How long after (NAME) was delivered did you stay there? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 [ ][ ] DAYS 2 [ ][ ] WEEKS 3 [ ][ ] DON'T KNOW . . . 998		
435	Was (NAME) delivered by caesarean, that is, did they cut your belly open to take the baby out?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
436	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health while you were still in the facility?	YES . . . . . 1 (SKIP TO 439) NO 2		
437	Did anyone check on your health after you left the facility?	YES . . . . . 1 (SKIP TO 439) NO . . . . . 2 (SKIP TO 442)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
438	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health after you gave birth to (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 442) ←		
439	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR . . . . . 11 NURSE/MIDWIFE 12 FELDSHER . . . 13 OTHER PERSON TRADITIONAL BIRTH ATTENDANT 21 COMMUNITY/ VILLAGE HEALTH WORKER . . . 22 OTHER _____ 96 (SPECIFY)		
440	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 [ ][ ] DAYS 2 [ ][ ] WEEKS 3 [ ][ ] DON'T KNOW . . . 998		
442	In the two months after (NAME) was born, did any health care provider or a traditional birth attendant check on his/her health?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 446) ← DON'T KNOW 8		
443	How many hours, days or weeks after the birth of (NAME) did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HRS AFTER BIRTH . . 1 [ ][ ] DAYS AFTER BIRTH . . 2 [ ][ ] WKS AFTER BIRTH . . 3 [ ][ ] DON'T KNOW . . . 998		
444	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR . . . . . 11 NURSE/MIDWIFE 12 FELDSHER . . . 13 OTHER PERSON TRADITIONAL BIRTH ATTENDANT 21 COMMUNITY/ VILLAGE HEALTH WORKER . . . 22 OTHER _____ 96 (SPECIFY)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
445	Where did this first check of (NAME) take place? PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	HOME YOUR HOME . . . 11 OTHER HOME . . . 12 PUBLIC SECTOR GOVT. HOSPITAL 21 MATERNITY HOME 22 FDG . . . . . 23 FAP . . . . . 24 FAMILY MEDICINE CENTER . . . . . 25 GENERAL PRACTIC 26 OTHER PUBLIC _____ 27 (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC . . . . . 31 OTHER PRIVATE MED. _____ 36 (SPECIFY) OTHER _____ 96 (SPECIFY)		
446	In the first two months after delivery, did you receive a vitamin A dose?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
447	Has your menstrual period returned since the birth of (NAME)?	YES . . . . . 1 (SKIP TO 449) NO . . . . . 2 (SKIP TO 450)		
448	Did your period return between the birth of (NAME) and your next pregnancy?		YES . . . . . 1 NO . . . . . 2 (SKIP TO 452)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 452)
449	For how many months after the birth of (NAME) did you not have a period?	MONTHS . . . [ ][ ] DON'T KNOW 98	MONTHS . . . [ ][ ] DON'T KNOW 98	MONTHS . . . [ ][ ] DON'T KNOW 98
450	CHECK 226: IS RESPONDENT PREGNANT?	NOT PREG-NANT [ ] PREGNANT OR UNSURE [ ] (SKIP TO 452)		
451	Have you had sexual intercourse since the birth of (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 453)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
452	For how many months after the birth of (NAME) did you not have sexual intercourse?	MONTHS . . . [ ][ ] DON'T KNOW 98	MONTHS . . . [ ][ ] DON'T KNOW 98	MONTHS . . . [ ][ ] DON'T KNOW 98
453	Did you ever breastfeed (NAME)?	YES . . . . . 1 (SKIP TO 455) NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
454	CHECK 404: IS CHILD LIVING?	LIVING [ ] (SKIP TO 460) DEAD [ ] (GO BACK TO 405 IN NEXT COLUMN; OR IF NO MORE BIRTHS, GO TO 501)		
455	How long after birth did you first put (NAME) to the breast? IF LESS THAN 1 HOUR, RECORD '00' HOURS. IF LESS THAN 24 HOURS, RECORD HOURS. OTHERWISE, RECORD DAYS.	IMMEDIATELY . . . 000 HOURS 1 [ ][ ] DAYS 2 [ ][ ]		
456	In the first three days after delivery, was (NAME) given anything to drink other than breast milk?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 458)		
457	What was (NAME) given to drink? Anything else? RECORD ALL LIQUIDS MENTIONED.	MILK (OTHER THAN BREAST MILK) A PLAIN WATER . . . B SUGAR OR GLUCOSE WATER . . . C GRIPE WATER . . . D SUGAR-SALT-WATER SOLUTION . . . . . E FRUIT JUICE . . . . . F INFANT FORMULA G TEA/INFUSIONS . . . H COFFEE . . . . . I HONEY . . . . . J OTHER _____ X (SPECIFY)		
458	CHECK 404: IS CHILD LIVING?	LIVING [ ] DEAD [ ] (GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501)	LIVING [ ] DEAD [ ] (GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501)	LIVING [ ] DEAD [ ] (GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
459	Are you still breastfeeding (NAME)?	YES . . . . . 1 NO 2		
460	Did (NAME) drink anything from a bottle with a nipple yesterday or last night?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
461		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501.	GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501.	GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501.

SECTION 5. CHILD IMMUNIZATION, HEALTH AND NUTRITION

501	ENTER IN THE TABLE THE BIRTH HISTORY NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2007 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE LAST 2 COLUMNS OF ADDITIONAL QUESTIONNAIRES).			
502	PREGNANCY NUMBER FROM 212 IN PREGN. HISTORY	LAST BIRTH PREGNANCY NUMBER FROM 212 ☐☐	NEXT-TO-LAST BIRTH PREGNANCY NUMBER FROM 212 ☐☐	SECOND-FROM-LAST BIRTH PREGNANCY NUMBER FROM 212 ☐☐
503	FROM 212 AND 218	NAME_____ LIVING ☐ DEAD ☐ (GO TO 503 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 553)	NAME_____ LIVING ☐ DEAD ☐ (GO TO 503 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 553)	NAME_____ LIVING ☐ DEAD ☐ (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE, OR IF NO MORE BIRTHS, GO TO 553)
504	Do you have a card where (NAME)'s vaccinations are written down? IF YES: May I see it please?	YES, SEEN . . . . . 1 (SKIP TO 506) YES, NOT SEEN . . . . . 2 (SKIP TO 509) NO CARD 3	YES, SEEN . . . . . 1 (SKIP TO 506) YES, NOT SEEN . . . . . 2 (SKIP TO 509) NO CARD 3	YES, SEEN . . . . . 1 (SKIP TO 506) YES, NOT SEEN . . . . . 2 (SKIP TO 509) NO CARD 3
505	Did you ever have a vaccination card for (NAME)?	YES . . . . . 1 (SKIP TO 509) NO 2	YES . . . . . 1 (SKIP TO 509) NO 2	YES . . . . . 1 (SKIP TO 509) NO 2

506 (1) COPY DATES FROM THE CARD.
(2) WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A DOSE WAS GIVEN, BUT NO DATE IS RECORDED.

	LAST BIRTH DAY	LAST BIRTH MONTH	LAST BIRTH YEAR		NEXT-TO-LAST BIRTH DAY	NEXT-TO-LAST BIRTH MONTH	NEXT-TO-LAST BIRTH YEAR		SECOND-FROM-LAST BIRTH DAY	SECOND-FROM-LAST BIRTH MONTH	SECOND-FROM-LAST BIRTH YEAR
BCG				BCG				BCG			
POLIO 1 (AT BIRTH)				P1				P1			
POLIO 2				P2				P2			
POLIO 3				P3				P3			
POLIO 4				P4				P4			
DPT 1				D1				D1			
DPT 2				D2				D2			
DPT 3				D3				D3			
DPT 4				D4				D4			
HEPATITIS 1 (GIVEN SOON AFTER BIRTH)				HEP1				HEP1			
HEPATITIS 2				HEP2				HEP2			
HEPATITIS 3				HEP3				HEP3			
PENTA 1				PENTA1				PENTA1			
PENTA 2				PENTA2				PENTA2			
PENTA 3				PENTA3				PENTA3			
MEASLES/ MMR				MEA				MEA			
VITAMIN A (MOST RECENT)				VIT A				VIT A			

507	CHECK 506:	BCG TO MEASLES ALL RECORDED ☐ (GO TO 511) OTHER ☐	BCG TO MEASLES ALL RECORDED ☐ (GO TO 511) OTHER ☐	BCG TO MEASLES ALL RECORDED ☐ (GO TO 511) OTHER ☐

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
508	Has (NAME) had any vaccinations that are not recorded on this card, including vaccinations given in a national immunization day campaign? RECORD 'YES' ONLY IF THE RESPONDENT MENTIONS AT LEAST ONE OF THE VACCINATIONS IN 506 THAT ARE NOT RECORDED AS HAVING BEEN GIVEN.	YES . . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 511) NO . . . . . 2 (SKIP TO 511) DON'T KNOW 8	YES . . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 511) NO . . . . . 2 (SKIP TO 511) DON'T KNOW 8	YES . . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 511) NO . . . . . 2 (SKIP TO 511) DON'T KNOW 8
509	Did (NAME) ever have any vaccinations to prevent him/her from getting diseases, including vaccinations received in a national immunization day campaign?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 511) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 511) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 511) DON'T KNOW 8
510	Please tell me if (NAME) had any of the following vaccinations:			
510A	A BCG vaccination against tuberculosis, that is, an injection in the arm or shoulder that usually causes a scar?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
510B	Polio vaccine, that is, drops in the mouth?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 510E) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 510E) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 510E) DON'T KNOW 8
510C	Was the first polio vaccine given in the first two weeks after birth or later?	FIRST 2 WEEKS . . . 1 LATER 2	FIRST 2 WEEKS . . . 1 LATER 2	FIRST 2 WEEKS . . . 1 LATER 2
510D	How many times was the polio vaccine given?	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]
510E	A DPT vaccination, that is, an injection given in the thigh, sometimes at the same time as polio drops?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 510G) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 510G) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 510G) DON'T KNOW 8
510F	How many times was the DPT vaccination given?	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]
510G	A measles injection or an MRR injection - that is, a shot in the arm or shoulder at the age of 12 months or older - to prevent him/her from getting measles?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
510H	A Hepatitis-1 vaccination against hepatitis B, that is, an injection in the thigh?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 510K) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 510K) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 510K) DON'T KNOW 8
510I	Was the first hepatitis B vaccine given in the first three days after birth or later?	FIRST 3 DAYS . . . 1 LATER 2	FIRST 3 DAYS . . . 1 LATER 2	FIRST 3 DAYS . . . 1 LATER 2
510J	How many times was the hepatitis B vaccination given?	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
510K	A Pentavalent vaccine against five diseases in children — diphtheria, pertussis, tetanus (DPT), hepatitis B and Haemophilus Influenza type B (HIB), that is, an injection given in the thigh at the same time as polio drops?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 511) ←┤ DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 511) ←┤ DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 511) ←┤ DON'T KNOW 8
510L	How many times was the Pentavalent vaccination given?	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]
511	Within the last six months, was (NAME) given a vitamin A dose like (this/any of these)? SHOW COMMON TYPES OF AMPULES/CAPSULES/SYRUPS.	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
512	In the last seven days, was (NAME) given iron pills, sprinkles with iron, or iron syrup?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
512A	Was (NAME) ever given a supplement called Gulazyk like this? SHOW A PACK OF GULAZYK	YES . . . . . 1 NO . . . . . 2 (GOTO 513) ←┤ DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (GOTO 513) ←┤ DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (GOTO 513) ←┤ DON'T KNOW 8
512B	How many months old was (NAME) when you started giving Gulazyk? IF ANSWER IS GIVEN IN YEARS CONVERT TO MONTHS	MONTHS [ ][ ] DON'T KNOW 98	MONTHS [ ][ ] DON'T KNOW 98	MONTHS [ ][ ] DON'T KNOW 98
512C	How many months old was (NAME) when you sttopped giving Gulazyk? IF ANSWER IS GIVEN IN YEARS CONVERT TO MONTHS	MONTHS [ ][ ] DON'T KNOW 98	MONTHS [ ][ ] DON'T KNOW 98	MONTHS [ ][ ] DON'T KNOW 98
512D	(NAME) was given one pack of Gulazyk every other day or less often ?	EVERY OTHER DAY 1 LESS OFTEN 2	EVERY OTHER DAY 1 LESS OFTEN 2	EVERY OTHER DAY 1 LESS OFTEN 2
513	Was (NAME) given any drug for intestinal worms in the last six months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
514	Has (NAME) had diarrhea in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) ←┤ DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) ←┤ DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) ←┤ DON'T KNOW 8
515	Was there any blood in the stools?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
516	Now I would like to know how much (NAME) was given to drink during the diarrhea (including breastmilk). Was he/she given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was he/she given much less than usual to drink or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8
517	When (NAME) had diarrhea, was he/she given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8
518	Did you seek advice or treatment for the diarrhea from any source?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 522) ←┘	YES . . . . . 1 NO . . . . . 2 (SKIP TO 522) ←┘	YES . . . . . 1 NO . . . . . 2 (SKIP TO 522) ←┘

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
519	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVT. HOSPITAL A MATERNITY HOME B FDG . . . . . C FAP . . . . . D FAMILY MEDICINE CENTER . . . . . E REPRODUCTIVE HEALTH CNTR . . F DIAGNOSTICAL CENTER . . . . G PROFILACTIC MEDICINE CENTER . . . . H GENERAL PRACT I IMMUNOPROFILACTIC CENTER . . . . J AIDS CENTER . . . K HEALTH STRENGTHEN. CENTER . . . . . L OTHER PUBLIC SECTOR _____ M (SPECIFY) PRIVATE MEDICAL SECTOR PVT. HOSPITAL/ CLINIC . . . . . N PVT DOCTOR . . . O PHARMACY . . . P OTHER PRIVATE MED. SECTOR Q _____ (SPECIFY) OTHER SOURCE SHOP . . . . . R TRADITIONAL PRACTITIONER S MARKET . . . . . T OTHER _____ X (SPECIFY)	PUBLIC SECTOR GOVT. HOSPITAL A MATERNITY HOME B FDG . . . . . C FAP . . . . . D FAMILY MEDICINE CENTER . . . . . E REPRODUCTIVE HEALTH CNTR . . F DIAGNOSTICAL CENTER . . . . G PROFILACTIC MEDICINE CENTER . . . . H GENERAL PRACT I IMMUNOPROFILACTIC CENTER . . . . J AIDS CENTER . . . K HEALTH STRENGTHEN. CENTER . . . . . L OTHER PUBLIC SECTOR _____ M (SPECIFY) PRIVATE MEDICAL SECTOR PVT. HOSPITAL/ CLINIC . . . . . N PVT DOCTOR . . . O PHARMACY . . . P OTHER PRIVATE MED. SECTOR Q _____ (SPECIFY) OTHER SOURCE SHOP . . . . . R TRADITIONAL PRACTITIONER S MARKET . . . . . T OTHER _____ X (SPECIFY)	PUBLIC SECTOR GOVT. HOSPITAL A MATERNITY HOME B FDG . . . . . C FAP . . . . . D FAMILY MEDICINE CENTER . . . . . E REPRODUCTIVE HEALTH CNTR . . F DIAGNOSTICAL CENTER . . . . G PROFILACTIC MEDICINE CENTER . . . . H GENERAL PRACT I IMMUNOPROFILACTIC CENTER . . . . J AIDS CENTER . . . K HEALTH STRENGTHEN. CENTER . . . . . L OTHER PUBLIC SECTOR _____ M (SPECIFY) PRIVATE MEDICAL SECTOR PVT. HOSPITAL/ CLINIC . . . . . N PVT DOCTOR . . . O PHARMACY . . . P OTHER PRIVATE MED. SECTOR Q _____ (SPECIFY) OTHER SOURCE SHOP . . . . . R TRADITIONAL PRACTITIONER S MARKET . . . . . T OTHER _____ X (SPECIFY)
520	CHECK 519:	TWO OR MORE CODES CIRCLED ☐ / ONLY ONE CODE CIRCLED ☐ (SKIP TO 522)	TWO OR MORE CODES CIRCLED ☐ / ONLY ONE CODE CIRCLED ☐ (SKIP TO 522)	TWO OR MORE CODES CIRCLED ☐ / ONLY ONE CODE CIRCLED ☐ (SKIP TO 522)
521	Where did you first seek advice or treatment? USE LETTER CODE FROM 519.	FIRST PLACE . . . ☐	FIRST PLACE . . . ☐	FIRST PLACE . . . ☐
522	Was he/she given any of the following to drink at any time since he/she started having the diarrhea: a) A fluid made from a special packet called Regidron? c) A homemade fluid?	YES NO DK FLUID FROM ORS PKT 1 2 8 HOMEMADE FLUID . . . 1 2 8	YES NO DK FLUID FROM ORS PKT 1 2 8 HOMEMADE FLUID . . . 1 2 8	YES NO DK FLUID FROM ORS PKT 1 2 8 HOMEMADE FLUID . . . 1 2 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
523	Was anything (else) given to treat the diarrhea?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) DON'T KNOW 8
524	What (else) was given to treat the diarrhea? Anything else? RECORD ALL TREATMENTS GIVEN.	PILL OR SYRUP ANTIBIOTIC . . . . . A ANTIMOTILITY B ZINC . . . . . C OTHER (NOT ANTI-BIOTIC, ANTI-MOTILITY, OR ZINC) . . . . . D UNKNOWN PILL OR SYRUP . . . E INJECTION ANTIBIOTIC . . . . . F NON-ANTIBIOTIC G UNKNOWN INJECTION . . . H (IV) INTRAVENOUS I HOME REMEDY/ HERBAL MED-ICINE . . . . . J OTHER _____ X (SPECIFY)	PILL OR SYRUP ANTIBIOTIC . . . . . A ANTIMOTILITY B ZINC . . . . . C OTHER (NOT ANTI-BIOTIC, ANTI-MOTILITY, OR ZINC) . . . . . D UNKNOWN PILL OR SYRUP . . . E INJECTION ANTIBIOTIC . . . . . F NON-ANTIBIOTIC G UNKNOWN INJECTION . . . H (IV) INTRAVENOUS I HOME REMEDY/ HERBAL MED-ICINE . . . . . J OTHER _____ X (SPECIFY)	PILL OR SYRUP ANTIBIOTIC . . . . . A ANTIMOTILITY B ZINC . . . . . C OTHER (NOT ANTI-BIOTIC, ANTI-MOTILITY, OR ZINC) . . . . . D UNKNOWN PILL OR SYRUP . . . E INJECTION ANTIBIOTIC . . . . . F NON-ANTIBIOTIC G UNKNOWN INJECTION . . . H (IV) INTRAVENOUS I HOME REMEDY/ HERBAL MED-ICINE . . . . . J OTHER _____ X (SPECIFY)
525	Has (NAME) been ill with a fever at any time in the last 2 weeks?	NO . . . . . 2 (SKIP TO 527) DON'T KNOW 8	NO . . . . . 2 (SKIP TO 527) DON'T KNOW 8	NO . . . . . 2 (SKIP TO 527) DON'T KNOW 8
526	At any time during the ilness, did (NAME) have blood taken from his/her finger for testing?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
527	Has (NAME) had an illness with a cough at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 530) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 530) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 530) DON'T KNOW 8
528	When (NAME) had an illness with a cough, did he/she breathe faster than usual with short, rapid breaths or have difficulty breathing?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 531) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 531) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 531) DON'T KNOW 8
529	Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose?	CHEST ONLY . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER _____ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 531)	CHEST ONLY . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER _____ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 531)	CHEST ONLY . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER _____ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 531)
530	CHECK 525: HAD FEVER?	YES NO OR DK (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553)	YES NO OR DK (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553)	YES NO OR DK (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 553)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
531	Now I would like to know how much (NAME) was given to drink (including breastmilk) during the illness with a (fever/cough). Was he/she given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was he/she given much less than usual to drink or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8
532	When (NAME) had a (fever/cough), was he/she given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8
533	Did you seek advice or treatment for the illness from any source?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 537)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 537)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 537)
534	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC SECTOR GOVT. HOSPITAL A MATERNITY HOME B FDG . . . . . C FAP . . . . . D FAMILY MEDICINE CENTER . . . . . E REPRODUCTIVE HEALTH CNTR . . F DIAGNOSTICAL CENTER . . . . G PROFILACTIC MEDICINE CENTER . . . . H GENERAL PRACT I IMMUNOPROFILACTIC CENTER . . . . J AIDS CENTER . . . K HEALTH STRENGTHEN. CENTER . . . . . L OTHER PUBLIC SECTOR _____ M (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC . . . . . N PVT DOCTOR . . . O PHARMACY . . . P OTHER PRIVATE MED. SECTOR Q _____ (SPECIFY) OTHER SOURCE SHOP . . . . . R TRADITIONAL PRACTITIONER S MARKET . . . . . T OTHER _____ X (SPECIFY)	PUBLIC SECTOR GOVT. HOSPITAL A MATERNITY HOME B FDG . . . . . C FAP . . . . . D FAMILY MEDICINE CENTER . . . . . E REPRODUCTIVE HEALTH CNTR . . F DIAGNOSTICAL CENTER . . . . G PROFILACTIC MEDICINE CENTER . . . . H GENERAL PRACT I IMMUNOPROFILACTIC CENTER . . . . J AIDS CENTER . . . K HEALTH STRENGTHEN. CENTER . . . . . L OTHER PUBLIC SECTOR _____ M (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC . . . . . N PVT DOCTOR . . . O PHARMACY . . . P OTHER PRIVATE MED. SECTOR Q _____ (SPECIFY) OTHER SOURCE SHOP . . . . . R TRADITIONAL PRACTITIONER S MARKET . . . . . T OTHER _____ X (SPECIFY)	PUBLIC SECTOR GOVT. HOSPITAL A MATERNITY HOME B FDG . . . . . C FAP . . . . . D FAMILY MEDICINE CENTER . . . . . E REPRODUCTIVE HEALTH CNTR . . F DIAGNOSTICAL CENTER . . . . G PROFILACTIC MEDICINE CENTER . . . . H GENERAL PRACT I IMMUNOPROFILACTIC CENTER . . . . J AIDS CENTER . . . K HEALTH STRENGTHEN. CENTER . . . . . L OTHER PUBLIC SECTOR _____ M (SPECIFY) PRIVATE MED. SECTOR PVT. HOSPITAL/ CLINIC . . . . . N PVT DOCTOR . . . O PHARMACY . . . P OTHER PRIVATE MED. SECTOR Q _____ (SPECIFY) OTHER SOURCE SHOP . . . . . R TRADITIONAL PRACTITIONER S MARKET . . . . . T OTHER _____ X (SPECIFY)
535	CHECK 534:	TWO OR MORE CODES CIRCLED ONLY ONE CODE CIRCLED (SKIP TO 537)	TWO OR MORE CODES CIRCLED ONLY ONE CODE CIRCLED (SKIP TO 537)	TWO OR MORE CODES CIRCLED ONLY ONE CODE CIRCLED (SKIP TO 537)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
536	Where did you first seek advice or treatment? USE LETTER CODE FROM 534.	FIRST PLACE . . . [ ]	FIRST PLACE . . . [ ]	FIRST PLACE . . . [ ]
537	At any time during the illness, did (NAME) take any drugs for the illness?	YES . . . . . 1 NO . . . . . 2 (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 553) DON'T KNOW 8
538	What drugs did (NAME) take? Any other drugs? RECORD ALL MENTIONED.	ANTIBIOTIC DRUGS PILL/SYRUP . . . G INJECTION . . . H OTHER DRUGS ASPIRIN . . . . . I PARACETAMOL . . J IBUPROFEN/IBIFEN/ NUROFEN . . . K SALBUTAMOL . . . . L STOPTUSSIN . . . . M SINECOD . . . . . N MUKALTIN . . . . . O AMBROSAN . . . . P AMBROBENE . . . . Q BRONCHOLYTIN . . R OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	ANTIBIOTIC DRUGS PILL/SYRUP . . . G INJECTION . . . H OTHER DRUGS ASPIRIN . . . . . I PARACETAMOL . . J IBUPROFEN/IBIFEN/ NUROFEN . . . K SALBUTAMOL . . . . L STOPTUSSIN . . . . M SINECOD . . . . . N MUKALTIN . . . . . O AMBROSAN . . . . P AMBROBENE . . . . Q BRONCHOLYTIN . . R OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	ANTIBIOTIC DRUGS PILL/SYRUP . . . G INJECTION . . . H OTHER DRUGS ASPIRIN . . . . . I PARACETAMOL . . J IBUPROFEN/IBIFEN/ NUROFEN . . . K SALBUTAMOL . . . . L STOPTUSSIN . . . . M SINECOD . . . . . N MUKALTIN . . . . . O AMBROSAN . . . . P AMBROBENE . . . . Q BRONCHOLYTIN . . R OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z
552		GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553.	GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 553.	GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 553.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
553	CHECK 214 AND 220, ALL ROWS: NUMBER OF CHILDREN BORN IN 2007 OR LATER LIVING WITH THE RESPONDENT ONE OR MORE ☐ ↓ NONE ☐ → 556 RECORD NAME OF YOUNGEST CHILD LIVING WITH HER AND CONTINUE WITH 554 _____ (NAME)		
554	The last time (NAME FROM 553) passed stools, what was done to dispose of the stools?	CHILD USED TOILET OR LATRINE . . . 01 PUT/RINSED INTO TOILET OR LATRINE . . . . . 02 PUT/RINSED INTO DRAIN OR DITCH . . . . . 03 THROWN INTO GARBAGE . . . . . 04 BURIED . . . . . 05 LEFT IN THE OPEN . . . . . 06 OTHER _____ 96 (SPECIFY)	
554A	Sometimes children have severe illnesses and should be taken immediately to a health facility. What types of symptoms would cause you to take your child to a health facility or medical worker right away? Anything else? RECORD ALL MENTIONED	CHILD NOT ABLE TO DRINK OR BREASTFEED . . . . . A VOMIT ANY FOOD OR DRINK . . . . . B CONVULSIONS . . . . . C LETHARGIC/UNCOUNSCIOUS . . . . . D CHILD BECOMES SICKER E CHILD DEVELOPS A FEVER F CHILD HAS FAST BREATHING G CHILD HAS DIFFICULT BREATHING H CHILD HAS BLOOD IN STOOL I CHILD IS DRINKING POORLY J OTHER _____ X SPECIFY DON'T KNOW . . . . . Z	
554B	What symptoms of an illness in child with cough would cause you to take your child to a medical worker right away? Anything else? RECORD ALL MENTIONED	CHILD NOT ABLE TO DRINK A CHILD IS SICK MORE THAN A WEEK B CHILD HAS FAST BREATHING C CHILD HAS HIGH TEMPERATURE D CHILD IS WHEEZING . . . . . E CHILD BECOMES SICKER . . . . . F OTHER _____ X SPECIFY DON'T KNOW . . . . . Z	
554C	What symptoms of an illness in child with diarrhea would cause you to take your child to a medical worker right away? Anything else? RECORD ALL MENTIONED	DRINKS OR SUCKLES POORLY . . . . . A CHILD DEVELOPS A FEVER . . . . . B VOMITS . . . . . C CHILD HAS BLOOD IN STOOL . . . . . D CHILD BECOMES SICKER . . . . . E CHILD NOT ABLE TO DRINK . . . . . F OTHER _____ X SPECIFY DON'T KNOW . . . . . Z	
555	CHECK 522(a) AND 522(b), ALL COLUMNS: NO CHILD RECEIVED FLUID FROM ORS PACKET ☐ ↓ ANY CHILD RECEIVED FLUID FROM ORS PACKET ☐ → 557		
556	Have you ever heard of a special product called Rehydron you can get for the treatment of diarrhea?	YES . . . . . 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
557	CHECK 214 AND 220, ALL ROWS: NUMBER OF CHILDREN BORN IN 2010 OR LATER LIVING WITH THE RESPONDENT ONE OR MORE ☐ ↓ RECORD NAME OF YOUNGEST CHILD LIVING WITH HER AND CONTINUE WITH 558 _____ (NAME)	NONE ☐	→ 562

558 Now I would like to ask you about liquids or foods that (NAME FROM 557) had yesterday during the day or at night. I am interested in whether your child had the item I mention even if it was combined with other foods.

Did (NAME FROM 557) (drink/eat):		YES	NO	DK
a) Plain water?	**a)**	1	2	8
b) Juice or juice drinks?	**b)**	1	2	8
c) Clear broth?	**c)**	1	2	8
d) Milk such as tinned, powdered, or fresh animal milk?	**d)**	1	2	8
IF YES: How many times did (NAME) drink milk? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES DRANK MILK	☐		
e) Infant formula?	**e)**	1	2	8
IF YES: How many times did (NAME) drink infant formula? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES DRANK FORMULA	☐		
f) Any other liquids?	**f)**	1	2	8
g) Yogurt (kefir or similar)?	**g)**	1	2	8
IF YES: How many times did (NAME) eat yogurt? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES ATE YOGURT	☐		
h) Any commercially fortified baby food, for example, Nestle porriges, Agusha, Winnie, Gerber, Gercules, Ovsynaka, Nutrilak 2 or 3?	**h)**	1	2	8
i) Bread, rice, noodles, porridge, or other foods made from grains?	**i)**	1	2	8
j) Red sweet bell pepper, pumpkin, carrots that are yellow or orange inside?	**j)**	1	2	8
k) Potatoes or any other foods made from roots?	**k)**	1	2	8
l) Any dark green, leafy vegetables (spinach, dark green lettuce)?	**l)**	1	2	8
m) Ripe persimmons, ripe fresh apricots, dried apricots or dried peach?	**m)**	1	2	8
n) Any other fruits or vegetables?	**n)**	1	2	8
o) Liver, kidney, heart or other organ meats?	**o)**	1	2	8
p) Any meat, such as beef, pork, lamb, goat, chicken, or duck?	**p)**	1	2	8
q) Eggs?	**q)**	1	2	8
r) Fresh, dried or canned fish, caviar, squid, shrimp or other seafood?	**r)**	1	2	8
s) Any foods made from beans, peas, lentils, or nuts?	**s)**	1	2	8
t) Cheese or other food made from milk?	**t)**	1	2	8
u) Any other solid, semi-solid, or soft food?	**u)**	1	2	8

559	CHECK 558 (CATEGORIES "g" THROUGH "u"): NOT A SINGLE "YES" ☐ ↓	AT LEAST ONE "YES" ☐	→ 561

W-36

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
560	Did (NAME) eat any solid, semi-solid, or soft foods yesterday during the day or at night? IF 'YES' PROBE: What kind of solid, semi-solid or soft foods did (NAME) eat?	YES . . . . . 1 (GO BACK TO 558 TO RECORD FOOD EATEN YESTERDAY) NO 2	562
561	How many times did (NAME FROM 557) eat solid, semi-solid, or soft foods yesterday during the day or at night? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES . . . . . [ ] DON'T KNOW 8	
562	RECORD THE TIME.	HOUR . . . . . [ ][ ] MINUTES . . . . . [ ][ ]	
563	CHECK 101A: AGREED TO MEASUREMENT [ ]	DID NOT AGREE TO MEASUREMENT [ ]	601
564	May I measure your blood pressure at this time? INTERVIEWER SIGNATURE _____ DATE _____ RESPONDENT AGREES [ ] → RECORD OUTCOME OF BLOOD PRESSURE MEASUREMENT RESPONDENT DOES NOT AGREES [ ] → RECORD 9994	**BLOOD PRESSURE MEASURED** SYSTOLIC . . . . . 1 [ ][ ][ ] DIASTOLIC . . . . . 2 [ ][ ][ ] **REASON FOR BLOOD PRESSURE NOT MEASURED** REFUSED '9994 TECHNICAL PROBLEMS '9995 OTHER '9996 _____ SPECIFY	

W-37

SECTION 6. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	Are you currently married or living together with a man as if married?	YES, CURRENTLY MARRIED . . . . . 1 YES, LIVING WITH A MAN . . . . . 2 NO, NOT IN UNION 3	→ 604
602	Have you ever been married or lived together with a man as if married?	YES, FORMERLY MARRIED . . . . . 1 YES, LIVED WITH A MAN . . . . . 2 NO 3	→ 612
603	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	→ 609
604	Is your (husband/partner) living with you now or is he staying elsewhere?	LIVING WITH HER . . . . . 1 STAYING ELSEWHERE 2	
605	RECORD THE HUSBAND'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME _____ LINE NO. . . . . [ ][ ]	
609	Have you been married or lived with a man only once or more than once?	ONLY ONCE . . . . . 1 MORE THAN ONCE 2	
610	CHECK 609: MARRIED/ LIVED WITH A MAN ONLY ONCE → In what month and year did you start living with your (husband/partner)? MARRIED/ LIVED WITH A MAN MORE THAN ONCE → Now I would like to ask about your first (husband/partner). In what month and year did you start living with him?	MONTH . . . . . [ ][ ] DON'T KNOW MONTH . . . . . 98 YEAR . . . . . [ ][ ][ ][ ] DON'T KNOW YEAR 9998	→ 612
611	How old were you when you first started living with him?	AGE . . . . . [ ][ ]	
612	CHECK FOR THE PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
613	Now I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE . . . . . .00 AGE IN YEARS . . . . . [ ][ ] FIRST TIME WHEN STARTED LIVING WITH (FIRST) HUSBAND/PARTNER 95	→ 628
614	Now I would like to ask you some questions about your recent sexual activity. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question.		
615	When was the <u>last</u> time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 [ ][ ] WEEKS AGO . . . . . 2 [ ][ ] MONTHS AGO . . . . . 3 [ ][ ] YEARS AGO . . . . . 4 [ ][ ]	→ 627

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
616	When was the last time you had sexual intercourse with this person?		DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3
617	The last time you had sexual intercourse (with this second/third person), was a condom used?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 619)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 619)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 619)
618	Was a condom used every time you had sexual intercourse with this person in the last 12 months?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
619	What was your relationship to this person with whom you had sexual intercourse? IF BOYFRIEND: Were you living together as if married? IF YES, CIRCLE '2'. IF NO, CIRCLE '3'.	HUSBAND . . . . . 1 LIVE-IN PARTNER . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . 3 CASUAL ACQUAINTANCE . . . 4 CLIENT/PROSTITUTE 5 OTHER _____ 6 (SPECIFY) (SKIP TO 622)	HUSBAND . . . . . 1 LIVE-IN PARTNER . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . 3 CASUAL ACQUAINTANCE . . . 4 CLIENT/PROSTITUTE 5 OTHER _____ 6 (SPECIFY) (SKIP TO 622)	HUSBAND . . . . . 1 LIVE-IN PARTNER . . . 2 BOYFRIEND NOT LIVING WITH RESPONDENT . . . 3 CASUAL ACQUAINTANCE . . . 4 CLIENT/PROSTITUTE 5 OTHER _____ 6 (SPECIFY) (SKIP TO 622)
620	CHECK 609:	MARRIED ONLY ONCE MARRIED MORE THAN ONCE (SKIP TO 622)	MARRIED ONLY ONCE MARRIED MORE THAN ONCE (SKIP TO 622)	MARRIED ONLY ONCE MARRIED MORE THAN ONCE (SKIP TO 622)
621	CHECK 613:	FIRST TIME WHEN STARTED LIVING WITH FIRST HUSBAND OTHER (SKIP TO 623)	FIRST TIME WHEN STARTED LIVING WITH FIRST HUSBAND OTHER (SKIP TO 623)	FIRST TIME WHEN STARTED LIVING WITH FIRST HUSBAND OTHER (SKIP TO 623)
622	How long ago did you first have sexual intercourse with this (second/third) person?	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4
623	How many times during the last 12 months did you have sexual intercourse with this person? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF TIMES IS 95 OR MORE, WRITE '95'.	NUMBER OF TIMES	NUMBER OF TIMES	NUMBER OF TIMES
624	How old is this person?	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98	AGE OF PARTNER DON'T KNOW 98
625	Apart from (this person/these two people), have you had sexual intercourse with any other person in the last 12 months?	YES . . . . . 1 (GO BACK TO 616 IN NEXT COLUMN) NO . . . . . 2 (SKIP TO 627)	YES . . . . . 1 (GO BACK TO 616 IN NEXT COLUMN) NO . . . . . 2 (SKIP TO 627)	
626	In total, with how many different people have you had sexual intercourse in the last 12 months? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, WRITE '95'.			NUMBER OF PARTNERS LAST 12 MONTHS . . . DON'T KNOW . . . 98

W-39

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
627	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, WRITE '95'.	NUMBER OF PARTNERS IN LIFETIME . . . . . [ ][ ] DON'T KNOW 98	
628	PRESENCE OF OTHERS DURING THIS SECTION	YES NO CHILDREN <10 . . . . . 1 2 MALE ADULTS . . . . . 1 2 FEMALE ADULTS 1 2	
629	Do you know of a place where a person can get condoms?	YES . . . . . 1 NO 2	→ 701
630	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC MEDICAL SECTOR GOVT. HOSPITAL . . . . . A MATERNITY HOME . . . . . B FAMILY DOCTORS GROUP (FDG) C FELDSHER-ACCOUCHER POST(FAP D FAMILY MEDICINE CENTER . . . . . E REPRODUCTIVE HEALTH CENTER . . F MARRIAGE&FAMILY CONSULT. . . G DIAGNOSTIC CENTER . . . . . H SKIN-VENEREAL DIS. DISPANCER . . I PROPHYLACTIC MEDICINE CENTER . . . . . J GENERAL PRACTICE CENTER . . . . K IMMUNOPROPHYLAXIS CENTER . . . . L AIDS CENTER . . . . . M HEALTH STRENGTHENING CENTER N OTHER PUBLIC SECTOR _____ O (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . P PRIVATE DOCTOR'S OFFICE . . . . . Q PHARMACY . . . . . R OTHER PRIVATE MEDICAL SECTOR _____ S (SPECIFY) OTHER SOURCE SHOP/MARKET . . . . . T FRIEND/RELATIVE . . . . . U OTHER _____ X (SPECIFY)	
631	If you wanted to, could you yourself get a condom?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/UNSURE 8	

SECTION 7. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	CHECK 304: NEITHER STERILIZED ☐ HE OR SHE STERILIZED ☐		→ 712
702	CHECK 226: PREGNANT ☐ NOT PREGNANT OR UNSURE ☐		→ 704
703	Now I have some questions about the future. After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	→ 705 → 711
704	Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS SHE CAN'T GET PREGNANT 3 UNDECIDED/DON'T KNOW 8	 → 707 → 712 → 710
705	CHECK 226: NOT PREGNANT OR UNSURE ☐ How long would you like to wait from now before the birth of (a/another) child? PREGNANT ☐ After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 [ ][ ] YEARS . . . . . 2 [ ][ ] SOON/NOW . . . . . 993 SAYS SHE CAN'T GET PREGNANT 994 AFTER MARRIAGE . . . . . 995 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	 → 710 → 712 → 710
706	CHECK 226: NOT PREGNANT OR UNSURE ☐ PREGNANT ☐		→ 711
707	CHECK 303: USING A CONTRACEPTIVE METHOD? NOT CURRENTLY USING ☐ CURRENTLY USING ☐		→ 712
708	CHECK 705: NOT ASKED ☐ 24 OR MORE MONTHS OR 02 OR MORE YEARS ☐ 00-23 MONTHS OR 00-01 YEAR ☐		→ 711

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
709	CHECK 704: WANTS TO HAVE A/ANOTHER CHILD ☐ You have said that you do not want (a/another) child soon. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? WANTS NO MORE/ NONE ☐ You have said that you do not want any (more) children. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? RECORD ALL REASONS MENTIONED.	NOT MARRIED . . . . . A FERTILITY-RELATED REASONS NOT HAVING SEX . . . . . B INFREQUENT SEX . . . . . C MENOPAUSAL/HYSTERECTOMY D CAN'T GET PREGNANT . . . . . E NOT MENSTRUATED SINCE LAST BIRTH . . . . . F BREASTFEEDING . . . . . G UP TO GOD/FATALISTIC . . . . . H OPPOSITION TO USE RESPONDENT OPPOSED . . . . . I HUSBAND/PARTNER OPPOSED . . . J OTHERS OPPOSED . . . . . K RELIGIOUS PROHIBITION . . . . . L LACK OF KNOWLEDGE KNOWS NO METHOD . . . . . M KNOWS NO SOURCE . . . . . N METHOD-RELATED REASONS SIDE EFFECTS/HEALTH CONCERNS . . . . . O LACK OF ACCESS/TOO FAR . . . . . P COSTS TOO MUCH . . . . . Q PREFERRED METHOD NOT AVAILABLE . . . . . R NO METHOD AVAILABLE . . . . . S INCONVENIENT TO USE . . . . . T INTERFERES WITH BODY'S NORMAL PROCESSES . . . . . U OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
710	CHECK 303: USING A CONTRACEPTIVE METHOD? NOT ASKED ☐ NO, NOT CURRENTLY USING ☐ YES, CURRENTLY USING ☐		→ 712
711	Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
712	CHECK 218: HAS LIVING CHILDREN ☐ If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ☐ If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE . . . . . 00 NUMBER . . . . . ☐☐ OTHER _____ 96 (SPECIFY)	→ 714 → 714

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
713	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER [ ][ ] [ ][ ] [ ][ ] OTHER _____ 96 (SPECIFY)	
714	In the last few months have you: Heard about family planning on the radio? Seen anything about family planning on the television? Read about family planning in a newspaper or magazine?	YES NO RADIO . . . . . 1 2 TELEVISION . . . . . 1 2 NEWSPAPER OR MAGAZINE . . . 1 2	
716	CHECK 601: YES, CURRENTLY MARRIED ☐ YES, LIVING WITH A MAN ☐ NO, NOT IN UNION ☐		→ 801
717	CHECK 303: USING A CONTRACEPTIVE METHOD? CURRENTLY USING ☐ NOT CURRENTLY USING OR NOT ASKED ☐		→ 720
718	Would you say that using contraception is mainly your decision, mainly your (husband's/partner's) decision, or did you both decide together?	MAINLY RESPONDENT . . . . . 1 MAINLY HUSBAND/PARTNER . . . . . 2 JOINT DECISION . . . . . 3 OTHER _____ 6 (SPECIFY)	
719	CHECK 304: NEITHER STERILIZED ☐ HE OR SHE STERILIZED ☐		→ 801
720	Does your (husband/partner) want the same number of children that you want, or does he want more or fewer than you want?	SAME NUMBER . . . . . 1 MORE CHILDREN . . . . . 2 FEWER CHILDREN . . . . . 3 DON'T KNOW 8	

SECTION 8. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	CHECK 601 AND 602: CURRENTLY MARRIED/ LIVING WITH A MAN ☐ FORMERLY MARRIED/ LIVED WITH A MAN ☐ NEVER MARRIED AND NEVER LIVED WITH A MAN ☐		803 807
802	How old was your (husband/partner) on his last birthday?	AGE IN COMPLETED YEARS ☐☐	
803	Did your (last) (husband/partner) ever attend school?	YES . . . . . 1 NO 2	→ 806
803A	What is the total number of years of schooling he has had?	YEARS OF SCHOOLING . . . . . ☐☐	
804	What was the highest level of school he attended: general education school, professional primary (trade-school, lyceum) professional middle (technicum, college, trade-school), higher or post-graduate?	SCHOOL . . . . . 1 PROFESSIONAL PRIMAF . . . . . 2 PROFESSIONAL MIDDLE . . . . . 3 HIGHER . . . . . 4 POST-GRADUATE . . . . . 5 DON'T KNOW 8	→ 806
805	What was the highest (grade/form/year) he completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	GRADE . . . . . ☐☐ DON'T KNOW 98	
805A	CHECK 804 AND 805: CODES "1" GENERAL EDUCATION SCHOOL LEVEL AND GRADES 10-11 AT THAT LEVEL, OR CODES "2" OR "3" PROFES-SIONAL-PRIMARY OR MIDDLE LEVEL CIRCLED,ASK: ☐ OTHER (CODES ☐ Did he receive a diploma (attestat) for completing secondary education?	YES . . . . . 1 NO 2	→ 806
806	CHECK 801: CURRENTLY MARRIED/ LIVING WITH A MAN ☐ What is your (husband's/ partner's) occupation? That is, what kind of work does he mainly do? FORMERLY MARRIED/ LIVED WITH A MAN ☐ What was your (last) (husband's/ partner's) occupation? That is, what kind of work did he mainly do?	_____ ☐☐ _____ _____	
807	Aside from your own housework, have you done any work in the last seven days?	YES . . . . . 1 NO 2	→ 811
808	As you know, some women take up jobs for which they are paid in cash or kind. Others sell things, have a small business or work on the family farm or in the family business. In the last seven days, have you done any of these things or any other work?	YES . . . . . 1 NO 2	→ 811
809	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, maternity leave, or any other such reason?	YES . . . . . 1 NO 2	→ 811
810	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→ 815

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
811	What is your occupation, that is, what kind of work do you mainly do?	_____ [ ][ ] _____ _____	
812	Do you do this work for a member of your family, for someone else, or are you self-employed?	FOR FAMILY MEMBER . . . . . 1 FOR SOMEONE ELSE . . . . . 2 SELF-EMPLOYED 3	
813	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR . . . . . 1 SEASONALLY/PART OF THE YEAR 2 ONCE IN A WHILE 3	
814	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY . . . . . 1 CASH AND KIND . . . . . 2 IN KIND ONLY . . . . . 3 NOT PAID 4	
815	CHECK 601: CURRENTLY MARRIED/LIVING WITH A MAN [ ] ↓	NOT IN UNION [ ] →	823
816	CHECK 814: CODE 1 OR 2 CIRCLED [ ] ↓	OTHER [ ] →	819
817	Who usually decides how the money you earn will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . 3 OTHER _____ 6 (SPECIFY)	
818	Would you say that the money that you earn is more than what your (husband/partner) earns, less than what he earns, or about the same?	MORE THAN HIM . . . . . 1 LESS THAN HIM . . . . . 2 ABOUT THE SAME . . . . . 3 HUSBAND/PARTNER HAS NO EARNINGS . . . . . 4 DON'T KNOW 8	→ 820
819	Who usually decides how your (husband's/partner's) earnings will be used: you, your (husband/partner), or you and your (husband/partner) jointly?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . 3 HUSBAND/PARTNER HAS NO EARNINGS . . . . . 4 OTHER _____ 6 (SPECIFY)	
820	Who usually makes decisions about health care for yourself: you, your (husband/partner), you and your (husband/partner) jointly, or someone else?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
821	Who usually makes decisions about making major household purchases?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
822	Who usually makes decisions about visits to your family or relatives?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . 3 SOMEONE ELSE . . . . . 4 OTHER 6	
823	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	
824	Do you own any land either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	
825	PRESENCE OF OTHERS AT THIS POINT (PRESENT AND LISTENING, PRESENT BUT NOT LISTENING, OR NOT PRESENT)	PRES./ LISTEN. / PRES./ NOT LISTEN. / NOT PRES. CHILDREN < 10 . . . . . 1 2 3 HUSBAND . . . . . 1 2 3 OTHER MALES . . . . . 1 2 3 OTHER FEMALES . . . 1 2 3	
826	In your opinion, is a husband justified in hitting or beating his wife in the following situations: If she goes out without telling him? If she neglects the children? If she argues with him? If she refuses to have sex with him? If she burns the food?	YES / NO / DK GOES OUT . . . . . 1 2 8 NEGL. CHILDREN . . . 1 2 8 ARGUES . . . . . 1 2 8 REFUSES SEX . . . . . 1 2 8 BURNS FOOD 1 2 8	

SECTION 9. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	YES . . . . . 1 NO 2	→ 937
901A	Where from have you heard about HIV/AIDS? Anywhere else? RECORD ALL MENTIONED	TV/RADIO . . . . . A PEER TO PEEI . . . . . B EDUCATIONAL INSTITUTION . . . . . C MEDICAL FACILITY . . . . . D PARENTS/FAMILY . . . . . E PRINTED MEDIA . . . . . F CIVIL SCIETY/NGO/COMMUNITY MEETINGS . . . . . G WORK PLACE . . . . . H COMMON KNOWLEDGE . . . . . I DON'T KNOW/DON'T REMEMBER . . . . Z	
902	Can people reduce their chance of getting the AIDS virus by having just one uninfected sex partner who has no other sex partners?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
903	Can people get the AIDS virus from mosquito bites?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
904	Can people reduce their chance of getting the AIDS virus by using a condom every time they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
905	Can people get the AIDS virus by sharing food with a person who has AIDS?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
906	Can people get the AIDS virus through saliva by kissing someone infected with the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
907	Is it possible for a healthy-looking person to have the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
908	Can the virus that causes AIDS be transmitted from a mother to her baby: During pregnancy? During delivery? By breastfeeding?	YES NO DK DURING PREG. . . . . 1 2 8 DURING DELIVERY . . . 1 2 8 BREASTFEEDING . . . 1 2 8	
909	CHECK 908: AT LEAST ONE 'YES' ☐ ↓ OTHER ☐		→ 911
910	Are there any special drugs that a doctor or a nurse can give to a woman infected with the AIDS virus to reduce the risk of transmission to the baby?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
911	CHECK 208 AND 215: NO BIRTHS ☐ LAST BIRTH SINCE JANUARY 2010 **(3)** ☐ ↓ LAST BIRTH BEFORE JANUARY 2010 **(3)** ☐		→ 926 → 926
912	CHECK 408 FOR LAST BIRTH: HAD ANTENATAL CARE ☐ ↓ NO ANTENATAL CARE ☐		→ 920
913	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
914	During any of the antenatal visits for your last birth were you given any information about: Babies getting the AIDS virus from their mother? Things that you can do to prevent getting the AIDS virus? Getting tested for the AIDS virus?	YES NO DK AIDS FROM MOTHER 1 2 8 THINGS TO DO 1 2 8 TESTED FOR AIDS 1 2 8	
915	Were you offered a test for the AIDS virus as part of your antenatal care?	YES . . . . . 1 NO 2	
916	I don't want to know the results, but were you tested for the AIDS virus as part of your antenatal care?	YES . . . . . 1 NO 2	→ 920
917	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC MEDICAL SECTOR GOVT. HOSPITAL . . . . . 11 MATERNITY HOME . . . . . 12 FAMILY DOCTORS GROUP (FDG) 13 FELDSHER-ACCOUCHER POST(FAP 14 FAMILY MEDICINE CENTER . . . . . 15 REPRODUCTIVE HEALTH CENTER . . 16 MARRIAGE&FAMILY CONSULT. . . 17 DIAGNOSTIC CENTER . . . . . 18 SKIN&VENEREAL DISPENSARY . . 19 PROPHYLACTIC MEDICINE CENTER . . . . . 20 GENERAL PRACTICE CENTER . . . . 21 IMMUNOPROPHYLAXIS CENTER . . . . 22 AIDS CENTER . . . . . 23 HEALTH STRENGTHENING CENTER 24 OTHER PUBLIC SECTOR _____ (SPECIFY) 25 PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . 31 PRIVATE DOCTOR'S OFFICE . . . . . 32 PHARMACY . . . . . 33 STUDENTS POLYCLINIC . . . . . 34 PRIVATE AIDS LAB . . . . . 35 OTHER PRIVATE MEDICAL SECTOR _____ 36 OTHER SOURCE HOME . . . . . 41 CORRECTIONAL FACILITY . . . . . 42 OTHER _____ (SPECIFY) 96	
918	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	→ 924
919	All women are supposed to receive counseling after being tested. After you were tested, did you receive counseling?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 924
920	CHECK 434 FOR LAST BIRTH: ANY CODE 21-36 CIRCLED ☐ OTHER ☐		→ 926
921	Between the time you went for delivery but before the baby was born, were you offered a test for the AIDS virus?	YES . . . . . 1 NO 2	
922	I don't want to know the results, but were you tested for the AIDS virus at that time?	YES . . . . . 1 NO 2	→ 926
923	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	
924	Have you been tested for the AIDS virus since that time you were tested during your pregnancy?	YES . . . . . 1 NO 2	→ 927

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
925	How many months ago was your most recent HIV test?	MONTHS AGO . . . . . [ ][ ] TWO OR MORE YEARS 95	→ 932
926	I don't want to know the results, but have you ever been tested to see if you have the AIDS virus?	YES . . . . . 1 NO 2	→ 930
927	How many months ago was your most recent HIV test?	MONTHS AGO . . . . . [ ][ ] TWO OR MORE YEARS 95	
928	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	
929	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC MEDICAL SECTOR GOVT. HOSPITAL . . . . . 11 MATERNITY HOME . . . . . 12 FAMILY DOCTORS GROUP (FDG) 13 FELDSHER-ACCOUCHER POST(FAP 14 FAMILY MEDICINE CENTER . . . . . 15 REPRODUCTIVE HEALTH CENTER . . 16 MARRIAGE&FAMILY CONSULT. . . 17 DIAGNOSTIC CENTER . . . . . 18 SKIN&VENEREAL DISPENSARY . . 19 PROPHYLACTIC MEDICINE CENTER . . . . . 20 GENERAL PRACTICE CENTER . . . . 21 IMMUNOPROPHYLAXIS CENTER . . . . 22 AIDS CENTER . . . . . 23 HEALTH STRENGTHENING CENTER 24 OTHER PUBLIC SECTOR _____ 25 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . 31 PRIVATE DOCTOR'S OFFICE . . . . . 32 PHARMACY . . . . . 33 STUDENTS POLYCLINIC . . . . . 34 PRIVATE AIDS LAB . . . . . 35 OTHER PRIVATE MEDICAL SECTOR _____ 36 OTHER SOURCE HOME . . . . . 41 CORRECTIONAL FACILITY . . . . . 42 OTHER _____ 96 (SPECIFY)	→ 932
930	Do you know of a place where people can go to get tested for the AIDS virus?	YES . . . . . 1 NO 2	→ 932

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
931	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC MEDICAL SECTOR GOVT. HOSPITAL . . . . . A MATERNITY HOME . . . . . B FAMILY DOCTORS GROUP (FDG) C FELDSHER-ACCOUCHER POST(FAP D FAMILY MEDICINE CENTEF . . . . . E REPRODUCTIVE HEALTH CENTEF . . F MARRIAGE&FAMILY CONSULT. . . G DIAGNOSTIC CENTEF . . . . . H SKIN&VENEREAL DISPENSARY . . I PROPHYLACTIC MEDICINE CENTER . . . . . J GENERAL PRACTICE CENTER . . . . K IMMUNOPROPHYLAXIS CENTEI . . . . L AIDS CENTER . . . . . M HEALTH STRENGTHENING CENTER N OTHER PUBLIC SECTOR _____ (SPECIFY) O PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . P PRIVATE DOCTOR'S OFFICE . . . . . Q PHARMACY . . . . . R STUDENTS POLYCLINIC . . . . . S PRIVATE AIDS LAB . . . . . T OTHER PRIVATE MEDICAL SECTOR _____ (SPECIFY) U OTHER _____ (SPECIFY) X	
932	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
933	If a member of your family got infected with the AIDS virus, would you want it to remain a secret or not?	YES, REMAIN A SECRET . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
934	If a member of your family became sick with AIDS, would you be willing to care for her or him in your own household?	YES . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
935	In your opinion, if a female teacher has the AIDS virus but is not sick, should she be allowed to continue teaching in the school?	SHOULD BE ALLOWED . . . . . 1 SHOULD NOT BE ALLOWED . . . . . 2 DK/NOT SURE/DEPENDS 8	
936	Should children age 12-14 be taught about using a condom to avoid getting AIDS?	YES . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
937	CHECK 901: HEARD ABOUT AIDS → Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact? NOT HEARD ABOUT AIDS → Have you heard about infections that can be transmitted through sexual contact?	YES . . . . . 1 NO 2	
938	CHECK 613: HAS HAD SEXUAL INTERCOURSE NEVER HAD SEXUAL INTERCOURSE → 946		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
939	CHECK 937: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES ☐ ↓ NO ☐ → 941		
940	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
941	Sometimes women experience a bad-smelling abnormal genital discharge. During the last 12 months, have you had a bad-smelling abnormal genital discharge?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
942	Sometimes women have a genital sore or ulcer. During the last 12 months, have you had a genital sore or ulcer?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
943	CHECK 940, 941, AND 942: HAS HAD AN INFECTION (ANY 'YES') ☐ ↓ HAS NOT HAD AN INFECTION OR DOES NOT KNOW ☐ → 946		
944	The last time you had (PROBLEM FROM 940/941/942), did you seek any kind of advice or treatment?	YES . . . . . 1 NO 2	→ 946
945	Where did you go? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC MEDICAL SECTOR GOVT. HOSPITAL . . . . . A MATERNITY HOME . . . . . B FAMILY DOCTORS GROUP (FDG) C FELDSHER-ACCOUCHER POST(FAP D FAMILY MEDICINE CENTEI . . . . . E REPRODUCTIVE HEALTH CENTEF . . F MARRIAGE&FAMILY CONSULT. . . G DIAGNOSTIC CENTEF . . . . . H SKIN&VENEREAL DISPENSARY . . I PROPHYLACTIC MEDICINE CENTER . . . . . J GENERAL PRACTICE CENTER . . . . K IMMUNOPROPHYLAXIS CENTEI . . . . L AIDS CENTER . . . . . M HEALTH STRENGTHENING CENTER N OTHER PUBLIC SECTOR _____ O (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . P PRIVATE DOCTOR'S OFFICE . . . . . Q PHARMACY . . . . . R STUDENTS POLYCLINIC . . . . . S PRIVATE AIDS LAB . . . . . T OTHER PRIVATE MEDICAL SECTOR _____ U (SPECIFY) OTHER SOURCE SHOP . . . . . V OTHER _____ X (SPECIFY)	
946	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
947	Is a wife justified in refusing to have sex with her husband when she knows he has sex with other women?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
948	CHECK 601: CURRENTLY MARRIED/ LIVING WITH A MAN ↓ NOT IN UNION →		1001
949	Can you say no to your (husband/partner) if you do not want to have sexual intercourse?	YES . . . . . 1 NO . . . . . 2 DEPENDS/NOT SURE 8	
950	Could you ask your (husband/partner) to use a condom if you wanted him to?	YES . . . . . 1 NO . . . . . 2 DEPENDS/NOT SURE 8	

SECTION 10. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1001	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months? IF YES: How many injections have you had? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . [ ][ ] NONE 00	→ 1004
1002	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . [ ][ ] NONE 00	→ 1004
1003	The last time you got an injection from a health worker, did he/she take the syringe and needle from a new, unopened package?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1004	Do you currently smoke cigarettes?	YES . . . . . 1 NO 2	→ 1006
1005	In the last 24 hours, how many cigarettes did you smoke?	NUMBER OF CIGARETTES . . . . . [ ][ ]	
1006	Do you currently smoke or use any (other) type of tobacco?	YES . . . . . 1 NO 2	→ 1008
1007	What (other) type of tobacco do you currently smoke or use? RECORD ALL MENTIONED.	PIPE . . . . . A CHEWING TOBACCO/NASWAY . . . . . B SNUFF . . . . . C WATER PIPE . . . . . D OTHER _____ X (SPECIFY)	
1008	Many different factors can prevent women from getting medical advice or treatment for themselves. When you are sick and want to get medical advice or treatment, is each of the following a big problem or not?	BIG PROB-LEM / NOT A BIG PROB-LEM	
	Getting permission to go to the doctor?	PERMISSION TO GO . . . 1 2	
	Getting money needed for advice or treatment?	GETTING MONEY 1 2	
	The distance to the health facility?	DISTANCE 1 2	
	Not wanting to go alone?	GO ALONE 1 2	
1009	Are you covered by any health insurance?	YES . . . . . 1 NO 2	→ 1011
1010	What type of health insurance are you covered by? ЗАПИШИ ВСЕ УПОМЯНУТОЕ.	COMPULSORY INSURANCE FUND (OMC) . . . . . A HEALTH INSURANCE THROUGH EMPLOYER . . . . . B SOCIAL SECURITY . . . . . C OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE D OTHER _____ X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1011	Next questions are about common health problems in Kyrgyzstan. Have you ever heard of an illness called tuberculosis or TB?	YES . . . . . 1 NO 2	 → 1022
1012	What signs or symptoms would lead you to think that a person has tuberculosis? PROBE: Any other? RECORD ALL MENTIONED.	COUGHING . . . . . A COUGHING WITH SPUTUM . . . . . B COUGHING FOR SEVERAL WEEKS C FEVER . . . . . D BLOOD IN SPUTUM . . . . . E LOSS OF APPETITE . . . . . F NIGHTSWEATING . . . . . G PAIN IN CHEST . . . . . H TIREDNESS/FATIGUE . . . . . I WEIGHT LOSS . . . . . J LETHARGY . . . . . K OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
1015	How does tuberculosis spread from one person to another? PROBE: Any other ways? RECORD ALL MENTIONED.	THROUGH THE AIR WHEN COUGHING OR SNEEZING . . . . . A THROUGH SHARING UTENSILS . . . . . B THROUGH TOUCHING A PERSON WITH TB . . . . . C THROUGH FOOD . . . . . D THROUGH SEXUAL CONTACT . . . . . E THROUGH MOSQUITO BITES . . . . . F OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
1016	Can tuberculosis be cured?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1017	If a member of your family got tuberculosis, would you want it to remain a secret or not?	YES, REMAIN A SECRET . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/ DEPENDS 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1022	These next questions are about blood pressure. Have you ever been told by a doctor or other health professional that you had hypertension or high blood pressure?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	1025
1023	Were you told on two or more different occasions by a doctor or other health professional that you had hypertension or high blood pressure?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1024	To lower your hypertension or high blood pressure, are you now: a. Taking prescribed medicine? b. Controlling your weight or losing weight? c. Cutting down on salt in your diet? d. Exercising? e. Cutting down on alcohol? f. Stopping smoking?	YES NO N/A TAKE MEDICINE 1 2 3 CONTROL WEIGHT 1 2 3 CUT DOWN SALT 1 2 3 EXERCISE 1 2 3 CUT DOWN ALCOHOL 1 2 3 STOP SMOKING 1 2 3	
1025	RECORD THE TIME.	HOUR . . . . . [ ][ ] MINUTES . . . . . [ ][ ]	
1026	CHECK 101A AND 563: AGREED TO BOTH MEASUREMENTS ☐ ↓ OTHER ☐ →		1108
1027	May I measure your blood pressure at this time? INTERVIEWER SIGNATURE _____ DATE _____ RESPONDENT AGREES ☐ ↓ RECORD OUTCOME OF BLOOD PRESSURE MEASUREMENT RESPONDENT DOES NOT AGREES ☐ ↓ RECORD 9994	**BLOOD PRESSURE MEASURED** SYSTOLIC . . . . . 1 [ ][ ][ ] DIAGSTOLIC . . . . . 2 [ ][ ][ ] **REASON FOR BLOOD PRESSURE NOT MEASURED** REFUSED '9994 TECHNICAL PROBLEMS '9995 OTHER _____ '9996 SPECIFY	

SECTION 11. AVERAGING BLOOD PRESSURE MEASURES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1101	CHECK Q563 AND Q1026.	SYSTOLIC AND DIASTOLIC BLOOD PRESSURE RECORDED IN BOTH Q564 AND Q1027 ☐	
		SYSTOLIC AND DIASTOLIC BLOOD PRESSURE NOT RECORDED IN BOTH Q564 AND Q1027 ☐	→ 1107
1102	RECORD AND CALCULATE THE AVERAGE OF THE SYSTOLIC AND DIASTOLIC BLOOD PRESSURE FROM Q564 AND Q1027.		
1103	BLOOD PRESSURE MEASUREMENTS FROM Q564	**SYSTOLIC** ☐☐☐ **DIASTOLIC** ☐☐☐	
1104	BLOOD PRESSURE MEASUREMENTS FROM Q1027	**SYSTOLIC** ☐☐☐ **DIASTOLIC** ☐☐☐	
1105	RECORD THE SUM OFTHE SYSTOLIC AND DIASTOLIC MEASURES	**SUM SYSTOLIC** ☐☐☐ **SUM DIASTOLIC** ☐☐☐	
1106	CALCULATE THE AVERAGE SYSTOLIC AND DIASTOLIC PRESSURES BY DIVIDING THE SUM IN Q1105 BY 2	**AVERAGE SYSTOLIC** ☐☐☐ **AVERAGE DIASTOLIC** ☐☐☐	→ 1111
1107	CHECK Q1027:	SYSTOLIC AND DIASTOLIC BLOOD PRESSURE NOT RECORDED IN Q1027 ☐	
		SYSTOLIC AND DIASTOLIC BLOOD PRESSURE RECORDED IN Q1027 ☐	→ 1110
1108		SYSTOLIC AND DIASTOLIC BLOOD PRESSURE NOT RECORDED IN Q564 ☐	
		SYSTOLIC AND DIASTOLIC BLOOD PRESSURE RECORDED IN Q564 ☐	→ 1110
1109		SYSTOLIC AND DIASTOLIC BLOOD PRESSURE RECORDED IN Q101E ☐	
		SYSTOLIC AND DIASTOLIC BLOOD PRESSURE NOT RECORDED IN Q101E ☐	→ 1113
1110	RECORD THE SYSTOLIC AND DIASTOLIC PRESSURE.	**SYSTOLIC** ☐☐☐ **DIASTOLIC** ☐☐☐	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP

1111 USE THE TABLE BELOW TO DETERMINE THE CORRECT CODE TO RECORD ON THE BLOOD PRESSURE REPORT AND REFERRAL FORM.

CIRCLE THE ROW IN WHICH THE VALUE FOR THE SYSTOLIC BLOOD PRESSURE FROM Q1106 OR Q1110 IS FOUND.

THEN CIRCLE THE COLUMN IN WHICH THE VALUE FOR THE DIASTOLIC BLOOD FROM Q1106 OR Q1110 IS FOUND.

THE VALUE WHERE THE ROW AND COLUMN YOU HAVE CIRCLED INTERSECT IN THE TABLE WILL BE USED IN COMPLETING Q1112.

AVERAGE SYSTOLIC **PRESSURE**	**AVERAGE DIASTOLIC PRESSURE**					
	<84	85-89	90-99	100- 109	110- 119	>=120
<129	1	2	3	4	5	6
130-139	2	2	3	4	5	6
140-159	3	3	3	4	5	6
160-179	4	4	4	4	5	6
180-209	5	5	5	5	5	6
>=210	6	6	6	6	6	6

1112 RECORD THE NUMBER YOU CIRCLED IN Q1111 IN THE CHART BELOW. THEN USE THE INSTRUCTIONS TO THE RIGHT OF THAT NUMBER TO COMPLETE A BLOOD PRESSURE REPORT AND REFERRAL FORM FOR THE RESPONDENT. GIVE THE FORM TO THE RESPONDENT AND ANSWER ANY QUESTIONS HE/SHE MAY HAVE.

	RESPONDENT'S BLOOD PRESSURE CATEGORY	**CONSULT HEALTH PROVIDER TO CHECK BLOOD PRESSURE WITHIN:**
1	**NORMAL**	**24 MONTHS**
2	**AT THE HIGH END OF THE NORMAL RANGE**	**12 MONTHS**
3	**ABOVENORMAL RANGE**	**2 MONTHS**
4	**MODERATELY HIGH**	**1 MONTH**
5	**VERY HIGH**	**TODAY**
6	**EXTREMELY HIGH**	**TODAY**

1113 CHECK THAT THE RESPONDENT HAS RECEIVED A BROCHURE ON BLOOD PRESSURE

RECEIVED 1
NOT RECEIVED 2

DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1200	CHECK COVER AND HOUSEHOLD QUESTIONNAIRE, [Q142].	WOMAN SELECTED FOR THIS SECTION ☐ ↓ WOMAN NOT SELECTED ☐ →	1300
1201	CHECK FOR PRESENCE OF OTHERS: DO NOT CONTINUE UNTIL PRIVACY IS ENSURED.	PRIVACY OBTAINED . . . . . 1 ↓ PRIVACY NOT POSSIBLE . . . . . 2 →	1232
	READ TO THE RESPONDENT Now I would like to ask you questions about some other important aspects of a woman's life. You may find some of these questions very personal. However, your answers are crucial for helping to understand the condition of women in Kyrgyzstan. Let me assure you that your answers are completely confidential and will not be told to anyone and no one else in your household will know that you were asked these questions.		
1202	CHECK 601 AND 602:	CURRENTLY MARRIED/ LIVING WITH A MAN ☐ ↓ FORMERLY MARRIED/ LIVED WITH A MAN (READ IN PAST TENSE AND USE 'LAST' WITH HUSBAND/PARTNER') ☐ ↓ NEVER MARRIED/ NEVER LIVED WITH A MAN ☐ →	1216

1203 First, I am going to ask you about some situations which happen to some women. Please tell me if these apply to your relationship with your (last) (husband/partner)?

	YES	NO	DK
a) He (is/was) jealous or angry if you (talk/talked) to other men? JEALOUS	1	2	8
b) He frequently (accuses/accused) you of being unfaithful? ACCUSES	1	2	8
c) He (does/did) not permit you to meet your female friends? NOT MEET FRIENDS . . .	1	2	8
d) He (tries/tried) to limit your contact with your family? NO FAMILY	1	2	8
e) He (insists/insisted) on knowing where you (are/were) at all times? WHERE YOU ARE	1	2	8

1204 Now I need to ask some more questions about your relationship with your (last) (husband/partner).

A Did your (last) (husband/partner) ever:	EVER	B How often did this happen during the last 12 months: often, only sometimes, or not at all? OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS
a) say or do something to humiliate you in front of others?	YES 1 → NO 2	1	2	3
b) threaten to hurt or harm you or someone you care about?	YES 1 → NO 2 ↓	1	2	3
c) insult you or make you feel bad about yourself?	YES 1 → NO 2 ↓	1	2	3

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1205	A Did your (last) (husband/partner) ever do any of the following things to you:	B How often did this happen during the last 12 months: often, only sometimes, or not at all?	

		EVER		OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS
a)	push you, shake you, or throw something at you?	YES	1 →	1	2	3
		NO	2 ↓			
b)	slap you?	YES	1 →	1	2	3
		NO	2 ↓			
c)	twist your arm or pull your hair?	YES	1 →	1	2	3
		NO	2 ↓			
d)	punch you with his fist or with something that could hurt you?	YES	1 →	1	2	3
		NO	2 ↓			
e)	kick you, drag you, or beat you up?	YES	1 →	1	2	3
		NO	2 ↓			
f)	try to choke you or burn you on purpose?	YES	1 →	1	2	3
		NO	2 ↓			
g)	threaten or attack you with a knife, gun, or other weapon?	YES	1 →	1	2	3
		NO	2 ↓			
h)	physically force you to have sexual intercourse with him when you did not want to?	YES	1 →	1	2	3
		NO	2 ↓			
i)	physically force you to perform any other sexual acts you did not want to?	YES	1 →	1	2	3
		NO	2 ↓			
j)	force you with threats or in any other way to perform sexual acts you did not want to?	YES	1 →	1	2	3
		NO	2 ↓			

1206	CHECK 1205A (a-j): AT LEAST ONE 'YES' ☐ ↓ NOT A SINGLE 'YES' ☐ →		1209
1207	How long after you first (got married/started living together) with your (last) (husband/partner) did (this/any of these things) first happen? IF LESS THAN ONE YEAR, RECORD '00'.	NUMBER OF YEARS . . . . . ☐☐ BEFORE MARRIAGE/BEFORE LIVING TOGETHER 95	
1208	Did the following ever happen as a result of what your (last) (husband/partner) did to you:		
	a) You had cuts, bruises, or aches?	YES . . . . . 1 NO 2	
	b) You had eye injuries, sprains, dislocations, or burns?	YES . . . . . 1 NO 2	
	c) You had deep wounds, broken bones, broken teeth, or any other serious injury?	YES . . . . . 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1209	Have you ever hit, slapped, kicked, or done anything else to physically hurt your (last) (husband/partner) at times when he was not already beating or physically hurting you?	YES . . . . . 1 NO 2	→ 1211
1210	In the last 12 months, how often have you done this to your (last) (husband/partner): often, only sometimes, or not at all?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NOT AT ALL 3	
1211	Does (did) your (last) (husband/partner) drink alcohol?	YES . . . . . 1 NO 2	→ 1213
1212	How often does (did) he get drunk: often, only sometimes, or never?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NEVER 3	
1213	Are (were) you afraid of your (last) (husband/partner): most of the time, sometimes, or never?	MOST OF THE TIME AFRAID . . . . . 1 SOMETIMES AFRAID . . . . . 2 NEVER AFRAID 3	
1214	CHECK 609: MARRIED MORE THAN ONCE ↓ MARRIED ONLY ONCE →		1216
1215	A So far we have been talking about the behavior of your (current/last) (husband/partner). Now I want to ask you about the behavior of any previous (husband/partner).	B How long ago did this last happen?	

	EVER	0 - 11 MONTHS AGO	12+ MONTHS AGO	DON'T REMEMBER
a) Did any previous (husband/partner) ever hit, slap, kick, or do anything else to hurt you physically?	YES 1 →	1	2	3
	NO 2 ↓			
b) Did any previous (husband/partner) physically force you to have intercourse or perform any other sexual acts against your will?	YES 1 →	1	2	3
	NO 2			

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1216	CHECK 601 AND 602: EVER MARRIED/EVER LIVED WITH A MAN ☐ → From the time you were 15 years old has anyone other than (your/any) (husband/partner) hit you, slapped you, kicked you, or done anything else to hurt you physically? NEVER MARRIED/NEVER LIVED WITH A MAN ☐ → From the time you were 15 years old has anyone hit you, slapped you, kicked you, or done anything else to hurt you physically?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1219
1217	Who has hurt you in this way? Anyone else? RECORD ALL MENTIONED.	MOTHER/STEP-MOTHER . . . . . A FATHER/STEP-FATHER . . . . . B SISTER/BROTHER . . . . . C DAUGHTER/SON . . . . . D OTHER RELATIVE . . . . . E CURRENT BOYFRIEND . . . . . F FORMER BOYFRIEND . . . . . G MOTHER-IN-LAW . . . . . H FATHER-IN-LAW . . . . . I OTHER IN-LAW . . . . . J TEACHER . . . . . K EMPLOYER/SOMEONE AT WORK . . . . . L POLICE/SOLDIER . . . . . M OTHER _____ X (SPECIFY)	
1218	In the last 12 months, how often has (this person/have these persons) physically hurt you: often, only sometimes, or not at all?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NOT AT ALL 3	
1219	CHECK 201, 226, AND 209D: EVER BEEN PREGNANT (YES ON 201 OR 226 OR 209D) ☐ ↓ NEVER BEEN PREGNANT ☐ →		→ 1222
1220	Has any one ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant?	YES . . . . . 1 NO 2	→ 1222
1221	Who has done any of these things to physically hurt you while you were pregnant? Anyone else? RECORD ALL MENTIONED.	CURRENT HUSBAND/PARTNER . . . . . A MOTHER/STEP-MOTHER . . . . . B FATHER/STEP-FATHER . . . . . C SISTER/BROTHER . . . . . D DAUGHTER/SON . . . . . E OTHER RELATIVE . . . . . F FORMER HUSBAND/PARTNER . . . . . G CURRENT BOYFRIEND . . . . . H FORMER BOYFRIEND . . . . . I MOTHER-IN-LAW . . . . . J FATHER-IN-LAW . . . . . K OTHER IN-LAW . . . . . L TEACHER . . . . . M EMPLOYER/SOMEONE AT WORK . . . . . N POLICE/SOLDIER . . . . . O OTHER _____ X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1222	CHECK 601 AND 602: EVER MARRIED/EVER LIVED WITH A MAN ☐ → Now I want to ask you about things that may have been done to you by someone other than (your/any) (husband/partner). At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to? NEVER MARRIED/NEVER LIVED WITH A MAN ☐ → At any time in your life, as a child or as an adult, has anyone ever forced you in any way to have sexual intercourse or perform any other sexual acts when you did not want to?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1226
1223	How old were you the first first time you were forced to have sexual intercourse or perform any other sexual acts?	AGE IN COMPLETED YEARS ☐☐ DON'T KNOW 98	
1224	Who was the person who was forcing you at that time?	CURRENT HUSBAND/PARTNER . . . . . 01 FORMER HUSBAND/PARTNER . . . . . 02 CURRENT/FORMER BOYFRIEND . . . . . 03 FATHER/STEP-FATHER . . . . . 04 BROTHER/STEP-BROTHER . . . . . 05 OTHER RELATIVE . . . . . 06 IN-LAW . . . . . 07 OWN FRIEND/ACQUAINTANCE . . . . . 08 FAMILY FRIEND . . . . . 09 TEACHER . . . . . 10 EMPLOYER/SOMEONE AT WORK . . . . . 11 POLICE/SOLDIER . . . . . 12 PRIEST/RELIGIOUS LEADER . . . . . 13 STRANGER . . . . . 14 OTHER _____ 96 (SPECIFY)	
1225	CHECK 601 AND 602: EVER MARRIED/EVER LIVED WITH A MAN ☐ → In the last 12 months, has anyone other than (your/any) (husband/partner) physically forced you to have sexual intercourse when you did not want to? NEVER MARRIED/NEVER LIVED WITH A MAN ☐ → In the last 12 months has anyone physically forced you to have sexual intercourse when you did not want to?	YES . . . . . 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1226	CHECK 1205A (a-j), 1215, 1216, 1220, 1222, AND 1225: AT LEAST ONE 'YES' ☐ ↓ NOT A SINGLE 'YES' ☐ →		1230
1227	Thinking about what you yourself have experienced among the different things we have been talking about, have you ever tried to seek help?	YES . . . . . 1 NO 2	→ 1229
1228	From whom have you sought help? Anyone else? RECORD ALL MENTIONED.	OWN FAMILY . . . . . A HUSBAND'S/PARTNER'S FAMILY . . . . . B CURRENT/FORMER HUSBAND/PARTNER . . . . . C CURRENT/FORMER BOYFRIEND . . . . . D FRIEND . . . . . E NEIGHBOR . . . . . F RELIGIOUS LEADER . . . . . G DOCTOR/MEDICAL PERSONNEL . . . . . H POLICE . . . . . I LAWYER . . . . . J SOCIAL SERVICE ORGANIZATION . . . . . K OTHER _____ X (SPECIFY)	→ 1230
1229	Have you ever told any one about this?	YES . . . . . 1 NO 2	
1230	As far as you know, did your father ever beat your mother?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

THANK THE RESPONDENT FOR HER COOPERATION AND REASSURE HER ABOUT THE CONFIDENTIALITY OF HER ANSWERS. FILL OUT THE QUESTIONS BELOW WITH REFERENCE TO THE DOMESTIC VIOLENCE MODULE ONLY.

			YES ONCE	YES, MORE THAN ONCE	NO	
1231	DID YOU HAVE TO INTERRUPT THE INTERVIEW BECAUSE SOME ADULT WAS TRYING TO LISTEN, OR CAME INTO THE ROOM, OR INTERFERED IN ANY OTHER WAY?	HUSBAND	1	2	3	
		OTHER MALE ADULT . . .	1	2	3	
		FEMALE ADULT	1	2	3	
1232	INTERVIEWER'S COMMENTS / EXPLANATION FOR NOT COMPLETING THE DOMESTIC VIOLENCE MODULE _____ _____ _____					

INFORMATION ABOUT A HEALTH FACILITY WHERE THE IMMUNIZATION RECORDS (MOH FORMS 063 AND 112) ARE KEPT

1300	CHECK 503, 214 AND 218: HAS LIVING CHILDREN BORN IN JANUARY 2007 OR LATER YES ☐ ↓ NO ☐ → 1309			
1301	CHECK 502: FOR LIVING CHILDREN BORN IN JANUARY 2007OR LATER	LAST BIRTH PREGNANCY LINE № FROM 212 ☐☐	NEXT-TO-LAST BIRTH PREGNANCY LINE № FROM 212 ☐☐	SECOND-FROM-LAST BIRTH PREGNANCY LINE № FROM 212 ☐☐
1302	CHECK 503: FOR LIVING CHILDREN BORN IN JANUARY 2007 OR LATER	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
RECORD MOTHER'S AND CHILD'S FULL NAME,CHILD'S BIRTH DATE, CHILD'S HOME ADDRESS AND NAME AND ADDRESS OF THE MEDICAL FACILITY WHERE CHILD'S IMMUNIZATION RECORDS ARE KEPT (MOH FORMS 063 OR 112)				
1303	CHILD'S FULL NAME	CHILD'S FIRST NAME CHILD'S LAST NAME	CHILD'S FIRST NAME CHILD'S LAST NAME	CHILD'S FIRST NAME CHILD'S LAST NAME
1304	MOTHER'S FULL NAME	MOTHER'S FIRST NAME MOTHER'S LAST NAME	MOTHER'S FIRST NAME MOTHER'S LAST NAME	MOTHER'S FIRST NAME MOTHER'S LAST NAME
1305	RECORD CHILD'S DATE OF BIRTH FROM 214	DAY ☐☐ MONTH ☐☐ YR ☐☐☐☐	DAY ☐☐ MONTH ☐☐ YR ☐☐☐☐	DAY ☐☐ MONTH ☐☐ YR ☐☐☐☐
1306	CHILD HOME ADDRESS			
1307	NAME AND ADDRESS OF MEDICAL FACILITY WHERE CHILD'S IMMUNIZATION RECORDS (FORMS # 063 OR #112) ARE KEPT			
1307A	DISTRICT'S DOCTOR	DOCTOR'S NAME	DOCTOR'S NAME	DOCTOR'S NAME
1307B	DISTRICT'S NUMBER (IN POLYCLINIC)	☐☐	☐☐	☐☐
1308		GO BACK TO 1301 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 1309.	GO BACK TO 1301 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 1309.	GO TO 1301 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 1309.
1309	RECORD THE TIME.		HOUR ..... ☐☐ MINUTES ..... ☐☐	
AFTER COMPLETING ALL INTERVIEWS IN THIS HOUSEHOLD, PLEASE GO TO A MEDICAL FACILITY AND RECORD DATES OF VACCINES IN SECTION 14.				

W-64

SECTION 14. VISIT TO A HEALTH FACILITY TO COLLECT INFORMATION ABOUT IMMUNIZATION (MOH FORMS 063 or 112).

1401	ENTER IN THE TABLE LINE NUMBER, NAME AND INFORMATION ABOUT THE LIVING CHILD, BORN IN 2007 OR LATER, EXACTLY AS IN QUES.1301 AND 1303. (IF 3 OR MORE BIRTHS, USE THE LAST 2 COLUMNS OF ADDITIONAL QUESTIONNAIRES).			
1402	CHECK 1301 AND 1303:	LAST BIRTH PREGNANCY LINE NUMBER FROM 212 . [ ][ ] FULL NAME OF THE CHILD	NEXT-TO-LAST-BIRTH PREGNANCY LINE NUMBER FROM 212 . [ ][ ] FULL NAME OF THE CHILD	SECOND-FROM-LAST BIRTH PREGNANCY LINE NUMBER FROM 212 . [ ][ ] FULL NAME OF THE CHILD
1403	CHECK 1307 ANY INFORMATION ABOUT MEDICAL INSTITUTION KEEPING IMMUNIZATION DATA?	CHECK 1307 YES . . . . . 1 NO . . . . . 2 NEXT CHILD	CHECK 1307 YES . . . . . 1 NO . . . . . 2 NEXT CHILD	CHECK 1307 YES . . . . . 1 NO . . . . . 2 NEXT CHILD
1404	WAS A HEALTH FACILITY VISITED?	YES . . . . . 1 NO . . . . . 2 NEXT CHILD	YES . . . . . 1 NO . . . . . 2 NEXT CHILD	YES . . . . . 1 NO . . . . . 2 NEXT CHILD
1405	ARE THERE IMMUNIZATION RECORDS (FORMS 063 OR 112) IN A HEALTH FACILITY (NAME)?	YES, SEEN . . . . . 1 YES, NOT SEEN . . . . . 2 NEXT CHILD NO RECORD 3	YES, SEEN . . . . . 1 YES, NOT SEEN . . . . . 2 NEXT CHILD NO RECORD 3	YES, SEEN . . . . . 1 YES, NOT SEEN . . . . . 2 NEXT CHILD NO RECORD 3

1406

(1) COPY DATA ABOUT EACH VACCINE FROM IMMUNIZATION RECORDS (MOH FORMS #063 OR #112)

(2) ENTER '44' IN THE COLUMN 'DAY' IF THE CARD READS THAT VACCINATION TOOK PLACE BUT NO DATE IS PROVIDED

(3) WRITE '98' FOR DON'T KNOW IN 'DAY' OR 'MONTH' OR "9998' IN 'YEAR' COLUMN FOR WHICH THE INFORMATION IS NOT GIVEN IF CARD SHOWS THAT A DOSE WAS GIVEN, BUT ONLY PART OF THE DATE IS RECORDED.

	LAST BIRTH DAY	MONTH	YEAR	NEXT-TO-LAST-BIRTH DAY	MONTH	YEAR	SECOND-FROM-LAST BIRTH DAY	MONTH	YEAR
BCG				BCG			BCG		
POLIO 1 (AT BIRTH)				P1			P1		
POLIO 2				P2			P2		
POLIO 3				P3			P3		
POLIO 4				P4			P4		
DPT 1				D1			D1		
DPT 2				D2			D2		
DPT 3				D3			D3		
DPT 4				D4			D4		
HEPATITIS-1 (SOON AFTER BIRTH)				HEP 1			HEP 1		
HEPATITIS-2				HEP 2			HEP 2		
HEPATITIS-3				HEP 3			HEP 3		
PENTA-1				PENTA 1			PENTA1		
PENTA-2				PENTA 2			PENTA2		
PENTA-3				PENTA 3			PENTA3		
MEASLES or MMR				MEASLES or MMR			MEASLES or MMR		
VITAMIN A (MOST RECENT)				VITAMINA(RECENT)			VITAMIN A (REC		

INSTRUCTIONS:
ONLY ONE CODE SHOULD APPEAR IN ANY BOX.
COLUMN 1 REQUIRES A CODE IN EVERY MONTH.

INFORMATION TO BE CODED FOR EACH COLUMN

COLUMN 1: BIRTHS, PREGNANCIES, CONTRACEPTIVE USE**

- B BIRTHS
- P PREGNANCIES
- T TERMINATIONS

- 0 NO METHOD
- 1 FEMALE STERILIZATION
- 2 MALE STERILIZATION
- 3 IUD
- 4 INJECTABLES
- 5 IMPLANTS
- 6 PILL
- 7 CONDOM
- 8 FEMALE CONDOM
- 9 DIAPHRAGM
- J FOAM OR JELLY
- K LACTATIONAL AMENORRHEA METHOD
- L RHYTHM METHOD
- M WITHDRAWAL
- X OTHER MODERN METHOD
- Y OTHER TRADITIONAL METHOD

COLUMN 2: DISCONTINUATION OF CONTRACEPTIVE USE

- 0 INFREQUENT SEX/HUSBAND AWAY
- 1 BECAME PREGNANT WHILE USING
- 2 WANTED TO BECOME PREGNANT
- 3 HUSBAND/PARTNER DISAPPROVED
- 4 WANTED MORE EFFECTIVE METHOD
- 5 SIDE EFFECTS/HEALTH CONCERNS
- 6 LACK OF ACCESS/TOO FAR
- 7 COSTS TOO MUCH
- 8 INCONVENIENT TO USE
- F UP TO GOD/FATALISTIC
- A DIFFICULT TO GET PREGNANT/MENOPAUSAL
- D MARITAL DISSOLUTION/SEPARATION
- X OTHER _____ (SPECIFY)
- Z DON'T KNOW

Note: In case of multiple births, that ended in live and non-live births record live births to Calendar

				1	2	
	12	DEC	01			
	11	NOV	02			
	10	OCT	03			
	09	SEP	04			
2	08	AUG	05			2
0	07	JUL	06			0
1	06	JUN	07			1
2	05	MAY	08			2
*	04	APR	09			*
	03	MAR	10			
	02	FEB	11			
	01	JAN	12			
	12	DEC	13			
	11	NOV	14			
	10	OCT	15			
	09	SEP	16			
2	08	AUG	17			2
0	07	JUL	18			0
1	06	JUN	19			1
1	05	MAY	20			1
*	04	APR	21			*
	03	MAR	22			
	02	FEB	23			
	01	JAN	24			
	12	DEC	25			
	11	NOV	26			
	10	OCT	27			
	09	SEP	28			
2	08	AUG	29			2
0	07	JUL	30			0
1	06	JUN	31			1
0	05	MAY	32			0
*	04	APR	33			*
	03	MAR	34			
	02	FEB	35			
	01	JAN	36			
	12	DEC	37			
	11	NOV	38			
	10	OCT	39			
	09	SEP	40			
2	08	AUG	41			2
0	07	JUL	42			0
0	06	JUN	43			0
9	05	MAY	44			9
*	04	APR	45			*
	03	MAR	46			
	02	FEB	47			
	01	JAN	48			
	12	DEC	49			
	11	NOV	50			
	10	OCT	51			
	09	SEP	52			
2	08	AUG	53			2
0	07	JUL	54			0
0	06	JUN	55			0
8	05	MAY	56			8
*	04	APR	57			*
	03	MAR	58			
	02	FEB	59			
	01	JAN	60			
	12	DEC	61			
	11	NOV	62			
	10	OCT	63			
	09	SEP	64			
2	08	AUG	65			2
0	07	JUL	66			0
0	06	JUN	67			0
7	05	MAY	68			7
*	04	APR	69			*
	03	MAR	70			
	02	FEB	71			
	01	JAN	72			

* Year of fieldwork is assumed to be 2010. For fieldwork beginning in 2011 or 2012, the years should be adjusted.

** Response categories may be added for other methods, including fertility awareness methods.

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

NAME OF SUPERVISOR: _____ DATE: _____

EDITOR'S OBSERVATIONS

NAME OF EDITOR: _____ DATE: _____

2012 KYRGYZ DEMOGRAPHIC AND HEALTH SURVEY
MAN'S QUESTIONNAIRE

KYRGYZ REPUBLIC
THE MINISTRY OF HEALTH
NATIONAL STATISTICAL COMMITTEE

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . [ ][ ][ ]

HOUSEHOLD NUMBER . . . . . [ ][ ]

NAME AND LINE NUMBER OF MAN _____ [ ][ ]

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY [ ][ ] MONTH [ ][ ] YEAR [ ][ ][ ][ ]
INTERVIEWER'S NAME	_____	_____	_____	INT. NUMBER [ ][ ][ ]
RESULT*	_____	_____	_____	RESULT [ ]
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS [ ]
TIME	_____	_____		

*RESULT CODES:

1	COMPLETED	4	REFUSED		
2	NOT AT HOME	5	PARTLY COMPLETED	7	OTHER _____ (SPECIFY)
3	POSTPONED	6	INCAPACITATED		

LANGUAGE OF QUESTIONNAIRE: [ ]

LANGUAGE OF INTERVIEW: [ ]

NATIVE LANGUAGE OF RESPONDENT [ ]

TRANSLATOR USED (YES = 1, NO = 2) [ ]

CODES: KYRGYZ-1; RUSSIAN-2 ; OTHER-6 (SPECIFY_____)

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____ [ ][ ][ ]	NAME _____ [ ][ ][ ]	[ ][ ]	[ ][ ]

M-1

SECTION 1. RESPONDENT'S BACKGROUND

INTRODUCTION AND CONSENT

INFORMED CONSENT

Hello. My name is _____. I am working with National Statistical Committee. Together wlth the Ministry of Health we are conducting a survey about health all over Kyrgyzstan. The information we collect will help the government to plan health services. Your household was selected for the survey. The questions usually take about 20 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.
Do you have any questions? May I begin the interview now?

SIGNATURE OF INTERVIEWER: _____ DATE: _____

RESPONDENT AGREES TO BE INTERVIEWED . . . . . 1 ↓ RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . 2→ END

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOUR . . . . . [ ][ ] MINUTES . . . . . [ ][ ]	
101A	During the interview I would like to measure your blood pressure. This will be done three times during the interview. This is a harmless procedure. It is used to find out if a person has high blood pressure. If it is not treated, high blood pressure may eventually cause serious damage to the heart. The results of this blood pressure measurement will be given to you after the interview together with an explanation of the meaning of your blood pressure numbers. If your blood pressure is high, we will suggest that you consult a health facility or doctor since we cannot provide any further testing or treatment during the survey. Do you have any questions about the blood pressure measurement so far? If you have any questions about the procedure at any time, please ask me. You can say yes or not to having the blood pressure measurement now. You can also decide at anytime not to participate in the blood pressure measures. Would you allow me to proceed to take your blood pressure measurement at this time? SIGNATURE OF INTERVIEWER: _____ DATE: _____ RESPONDENT AGREES . . . 1 ↓ RESPONDENT DOES NOT AGREE . . . . . 2→ 101F		
101B	Before taking your blood pressure, I would to ask a few questions about things that may affect these measurements. Have you done any of the following within the past 30 minutes:	YES NO EATEN . . . . . 1 2 HAD CAFFEINATED DRINK SMOKED 1 2	
	Eaten anything		
	Had coffee, tea, cola or other drink that has caffeine?		
	Smoked any tobacco product		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101C	May I begin the process of measuring your blood pressure? BEFORE TAKING THE FIRST BLOOD PRESSURE READING, MEASURE THE CIRCUMFERENCE OF THE RESPONDENT'S ARM MIDWAY BETWEEN HE ELBOW AND THE SHOULDER. RECORD THE MEASUREMENT IN CENTIMETERS.	ARM CIRCUMFERENCE (IN CENTIMETERS) ☐☐	
101D	USE THE ARM CIRCUMFERENCE MEASUREMENT TO SELECT THE APPROPRIATE BLOOD PRESSURE MONITOR MODEL AND CUFF SIZE. CIRCLE THE CODE FOR THE MODEL AND CUFF SIZE.	**MODEL 767** SMALL: 16 CM – 23 CM . . . . . 1 MEDIUM: 24 CM – 35 CM . . . . . 2 LARGE: 36 CM – 41 CM . . . . . 3 **MODEL 789** EXTRA LARGE: 42 CM – 60 CM 4	
101E	TAKE THE FIRST BLOOD PRESSURE READING. RECORD THE SYSTOLIC AND DIASTOLIC PRESSURE.THEN PROCEED TO Q102. F YOU ARE UNABLE TO MEASURE THE RESPONDENT'S BLOOD PRESSURE, RECORD THE REASON IN Q101F.	**BLOOD PRESSURE MEASURED** SYSTOLIC . . . . . 1 ☐☐☐ DIASTOLIC . . . . . 2 ☐☐☐	
101F	RECORD REASON BLOOD PRESSURE NOT MEASURED	REASON BLOOD PRESSURE NOT MEASURED REFUSED '9994 TECHNICAL PROBLEMS '9995 OTHER _____ '9996 SPECIFY	
102	In what month and year were you born?	MONTH . . . . . ☐☐ DON'T KNOW MONTH . . . . . 98 YEAR . . . . . ☐☐☐☐ DON'T KNOW YEAR 9998	
103	How old were you at your last birthday? COMPARE AND CORRECT 102 AND/OR 103 IF INCONSISTENT.	AGE IN COMPLETED YEARS ☐☐	
104	Have you ever attended school?	YES . . . . . 1 NO 2	→ 106A
104A	What is the total number of years of schooling you have had?	YEARS OF SCHOOLING . . . . . ☐☐	
105	What is the highest level of school you attended: general education school, professional primary (trade-school, lyceum), professional middle (tekhnikum,trade-school, college), higher or post-graduate?	SCHOOL . . . . . 1 PROFESSIONAL PRIMAR . . . . . 2 PROFESSIONAL INTERMEDIATE . . . . . 3 HIGHER . . . . . 4 POST-GRADUATE 5	
106	What is the highest (grade/form/year) you completed at that level? IF COMPLETED LESS THAN ONE YEAR AT THAT LEVEL, RECORD '00'.	GRADE/FORM/YEAR . . . . . ☐☐	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
106A	CHECK 105 AND 106: CODES "1" GENERAL EDUCATION SCHOOL LEVEL AND GRADES 10-11 AT THAT LEVEL, OR CODES "2" PROFESSIONAL-PRIMARY OR "3" PROFESSIONAL MIDDLE LEVEL CIRCLED, ASK: Did you receive a diploma (attestat) for completing secondary education?	OTHER (CODES YES . . . . . 1 NO 2	110
110	Do you read a newspaper or magazine, at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
111	Do you listen to the radio, at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
112	Do you watch television, at least once a week, less than once a week or not at all?	AT LEAST ONCE A WEEK . . . . . 1 LESS THAN ONCE A WEEK . . . . . 2 NOT AT ALL 3	
112A	Have you used a computer from any location in the last 12 months?	YES . . . . . 1 NO 2	112C
112B	During the last one month, how often did you use a computer: almost every day, at least once a week, less than once a week or not at all?	EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
112C	In the last 12 months, have you used the internet? IF NECESSARY, PROBE FOR USE FROM ANY LOCATION, WITH ANY DEVICE.	YES . . . . . 1 NO 2	115
112D	During the last one month, how often did you use the internet: almost every day, at least once a week, less than once a week or not at all ?	EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
115	In the last 12 months, how many times have you been away from home for one or more nights?	NUMBER OF TIMES . . . . . [ ][ ] NONE 00	201
116	In the last 12 months, have you been away from home for more than one month at a time?	YES . . . . . 1 NO 2	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about any children you have had during your life. I am interested in all of the children that are biologically yours, even if they are not legally yours or do not have your last name. Have you ever fathered any children with any woman?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 206
202	Do you have any sons or daughters that you have fathered who are now living with you?	YES . . . . . 1 NO 2	→ 204
203	How many sons live with you? And how many daughters live with you? IF NONE, RECORD '00'.	SONS AT HOME . . . . . [ ][ ] DAUGHTERS AT HOME . . . . . [ ][ ]	
204	Do you have any sons or daughters that you have fathered who are alive but do not live with you?	YES . . . . . 1 NO 2	→ 206
205	How many sons are alive but do not live with you? And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	SONS ELSEWHERE . . . . . [ ][ ] DAUGHTERS ELSEWHERE . . . [ ][ ]	
206	Have you ever fathered a son or a daughter who was born alive but later died? IF NO, PROBE: Any baby who cried or showed signs of life but did not survive?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 208
207	How many boys have died? And how many girls have died? IF NONE, RECORD '00'.	BOYS DEAD . . . . . [ ][ ] GIRLS DEAD . . . . . [ ][ ]	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL CHILDREN . . . . . [ ][ ]	
209	CHECK 208: HAS HAD MORE THAN ONE CHILD ↓ HAS HAD ONLY ONE CHILD → 212 HAS NOT HAD ANY CHILDREN → 301		
210	Did all of the children you have fathered have the same biological mother?	YES . . . . . 1 NO 2	→ 212
211	In all, how many women have you fathered children with?	NUMBER OF WOMEN . . . . . [ ][ ]	
212	How old were you when your (first) child was born?	AGE IN YEARS . . . . . [ ][ ]	
213	CHECK 203 AND 205: AT LEAST ONE LIVING CHILD ↓ NO LIVING CHILDREN → 301		
214	How old is your (youngest) child?	AGE IN YEARS . . . . . [ ][ ]	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
215	CHECK 214: (YOUNGEST) CHILD IS AGE 0-2 YEARS ☐ ↓ OTHER ☐ →		301
216	What is the name of your (youngest) child? WRITE NAME OF (YOUNGEST) CHILD _____ (NAME OF (YOUNGEST) CHILD)		
217	When (NAME)'s mother was pregnant with (NAME), did she have any antenatal check-ups?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 219
218	Were you ever present during any of those antenatal check-ups?	PRESENT . . . . . 1 NOT PRESENT 2	
219	Was (NAME) born in a hospital or health facility?	HOSPITAL/HEALTH FACILITY . . . . . 1 OTHER 2	
220	When a child has diarrhea, how much should he or she be given to drink: more than usual, about the same as usual, less than usual, or nothing to drink at all?	MORE THAN USUAL . . . . . 1 ABOUT THE SAME . . . . . 2 LESS THAN USUAL . . . . . 3 NOTHING TO DRINK . . . . . 4 DON'T KNOW 8	

SECTION 3. CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)?		
01	**Female Sterilization**. PROBE: Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	
02	**Male Sterilization**. PROBE: Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	
03	**IUD**. PROBE: Women can have a loop or coil placed inside them by a doctor or a nurse.	YES . . . . . 1 NO 2	
04	**Injectables**. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant for one or more months.	YES . . . . . 1 NO 2	
05	**Implants**. PROBE: Women can have one or more small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2	
06	**Pill**. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO 2	
07	**Condom**. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO 2	
08	**Female Condom**. PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO 2	
09	**Lactational Amenorrhea Method (LAM)**.	YES . . . . . 1 NO 2	
10	**Rhythm Method (or the Calendar method).** PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant.	YES . . . . . 1 NO 2	
11	**Withdrawal**. PROBE: Men can be careful and pull out before climax.	YES . . . . . 1 NO 2	
12	**Emergency Contraception**. PROBE: As an emergency measure, within three days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy.	YES . . . . . 1 NO 2	
13	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES . . . . . 1 _____ (SPECIFY) _____ (SPECIFY) NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
302	In the last few months have you: Heard about family planning on the radio? Seen anything about family planning on the television? Read about family planning in a newspaper or magazine?	YES NO RADIO . . . . . 1 2 TELEVISION . . . . . 1 2 NEWSPAPER OR MAGAZINE 1 2	
303	In the last few months, have you discussed family planning with a health worker or health professional?	YES . . . . . 1 NO 2	
304	Now I would like to ask you about a woman's risk of pregnancy. From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant when she has sexual relations?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 306
305	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS . . . . . 1 DURING HER PERIOD . . . . . 2 RIGHT AFTER HER PERIOD HAS ENDED . . . . . 3 HALFWAY BETWEEN TWO PERIODS . . . . . 4 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	
306	I will now read you some statements about contraception. Please tell me if you agree or disagree with each one. a) Contraception is a woman's business and a man should not have to worry about it. b) Women who use contraception may become promiscuous.	AGREE / DIS-AGREE / DK CONTRACEPTION WOMAN'S BUSINESS 1 2 8 WOMEN MAY BECOME PROMISCUOUS 1 2 8	
307	CHECK 301 (07): KNOWS MALE CONDOM YES ↓ NO →		401
308	Do you know of a place where a person can get condoms?	YES . . . . . 1 NO 2	→ 401
309	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC MEDICAL SECTOR GOVT. HOSPITAL . . . . . A MATERNITY HOME . . . . . B FAMILY DOCTORS GROUP (FDG) C FELDSHER-ACCOUCHER POST(FAP) D FAMILY MEDICINE CENTER . . . . . E REPRODUCTIVE HEALTH CENTER . . F MARRIAGE&FAMILY CONSULT. . . G DIAGNOSTIC CENTER . . . . . H SKIN-VENEREAL DIS. DISPANCER . . I PROPHYLACTIC MEDICINE CENTER . . . . . J GENERAL PRACTICE CENTER . . . . K IMMUNOPROPHYLAXIS CENTER . . . . L AIDS CENTER . . . . . M HEALTH STRENGTHENING CENTER N OTHER PUBLIC SECTOR _____ O (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . P PRIVATE DOCTOR'S OFFICE . . . . . Q PHARMACY . . . . . R OTHER PRIVATE MEDICAL SECTOR _____ S (SPECIFY) OTHER SOURCE SHOP/MARKET . . . . . T FRIEND/RELATIVE . . . . . U OTHER _____ X (SPECIFY)	
310	If you wanted to, could you yourself get a condom?	YES . . . . . 1 NO 2	

SECTION 4. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
401	Are you currently married or living together with a woman as if married?	YES, CURRENTLY MARRIED . . . . . 1 YES, LIVING WITH A WOMAN . . . . . 2 NO, NOT IN UNION 3	→ 404
402	Have you ever been married or lived together with a woman as if married?	YES, FORMERLY MARRIED . . . . . 1 YES, LIVED WITH A WOMAN . . . . . 2 NO 3	→ 413
403	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	→ 410
404	Is your (wife/partner) living with you now or is she staying elsewhere?	LIVING WITH HIM . . . . . 1 STAYING ELSEWHERE 2	
405	RECORD THE WIFE'S/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF SHE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME _____ LINE NO. . . . . [ ][ ]	
410	Have you been married or lived with a woman only once or more than once?	ONLY ONCE . . . . . 1 MORE THAN ONCE 2	→ 411A
411 411A	In what month and year did you start living with your (wife/partner)? Now I would like to ask about your first (wife/partner). In what month and year did you start living with her?	MONTH . . . . . [ ][ ] DON'T KNOW MONTH . . . . . 98 YEAR . . . . . [ ][ ][ ][ ] DON'T KNOW YEAR 9998	→ 413
412	How old were you when you first started living with her?	AGE . . . . . [ ][ ]	
413	CHECK FOR THE PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
414	Now I would like to ask some questions about sexual activity in order to gain a better understanding of some important life issues. How old were you when you had sexual intercourse for the very first time?	NEVER HAD SEXUAL INTERCOURSE . . . . . .00 AGE IN YEARS . . . . . [ ][ ] FIRST TIME WHEN STARTED LIVING WITH (FIRST) WIFE/PARTNER 95	→ 440
415	Now I would like to ask you some questions about your recent sexual activity. Let me assure you again that your answers are completely confidential and will not be told to anyone. If we should come to any question that you don't want to answer, just let me know and we will go to the next question.		
416	When was the <u>last</u> time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 [ ][ ] WEEKS AGO . . . . . 2 [ ][ ] MONTHS AGO . . . . . 3 [ ][ ] YEARS AGO . . . . . 4 [ ][ ]	→ 430

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
417	When was the last time you had sexual intercourse with this person?		DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3
418	The last time you had sexual intercourse (with this second/third person), was a condom used? **(2)**	YES . . . . . 1 NO . . . . . 2 (SKIP TO 420)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 420)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 420)
419	Was a condom used every time you had sexual intercourse with this person in the last 12 months?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
420	What relationship to you has this person with whom you had sexual intercourse? IF GIRLFRIEND: Were you living together as if married? IF YES, CIRCLE '2'. IF NO, CIRCLE '3'.	WIFE . . . . . 1 LIVE-IN PARTNER . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . 3 CASUAL ACQUAINTANCE . . . 4 CLIENT/PROSTITUTE 5 OTHER _____ 6 (SPECIFY) (SKIP TO 423)	WIFE . . . . . 1 LIVE-IN PARTNER . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . 3 CASUAL ACQUAINTANCE . . . 4 CLIENT/PROSTITUTE 5 OTHER _____ 6 (SPECIFY) (SKIP TO 423)	WIFE . . . . . 1 LIVE-IN PARTNER . . . . 2 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . 3 CASUAL ACQUAINTANCE . . . 4 CLIENT/PROSTITUTE 5 OTHER _____ 6 (SPECIFY) (SKIP TO 423)
421	CHECK 410:	MARRIED ONLY ONCE MARRIED MORE THAN ONCE OR BLANK (SKIP TO 423)	MARRIED ONLY ONCE MARRIED MORE THAN ONCE OR BLANK (SKIP TO 423)	MARRIED ONLY ONCE MARRIED MORE THAN ONCE OR BLANK (SKIP TO 423)
422	CHECK 414:	FIRST TIME WHEN STARTED LIVING WITH FIRST WIFE (SKIP TO 424) OTHER	FIRST TIME WHEN STARTED LIVING WITH FIRST WIFE (SKIP TO 424) OTHER	FIRST TIME WHEN STARTED LIVING WITH FIRST WIFE (SKIP TO 424) OTHER
423	How long ago did you first have sexual intercourse with this (second/third) person?	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4	DAYS AGO 1 WEEKS AGO 2 MONTHS AGO 3 YEARS AGO 4
424	How many times during the last 12 months did you have sexual intercourse with this person? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF TIMES IS 95 OR MORE, WRITE '95'.	NUMBER OF TIMES	NUMBER OF TIMES	NUMBER OF TIMES

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER	THIRD-TO-LAST SEXUAL PARTNER
425	How old is this person?	AGE OF PARTNER [ ][ ] DON'T KNOW 98	AGE OF PARTNER [ ][ ] DON'T KNOW 98	AGE OF PARTNER [ ][ ] DON'T KNOW 98
426	Apart from (this person/these two people), have you had sexual intercourse with any other person in the last 12 months?	YES . . . . . 1 (GO BACK TO 417 IN NEXT COLUMN) NO . . . . . 2 (SKIP TO 428)	YES . . . . . 1 (GO BACK TO 417 IN NEXT COLUMN) NO . . . . . 2 (SKIP TO 428)	
427	In total, with how many different people have you had sexual intercourse in the last 12 months? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, WRITE '95'.			NUMBER OF PARTNERS LAST 12 MONTHS . . . [ ][ ] DON'T KNOW . . . 98

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
428	CHECK 420 (ALL COLUMNS): AT LEAST ONE PARTNER IS PROSTITUTE ☐ NO PARTNERS ARE PROSTITUTES ☐		→ 430
429	CHECK 420 AND 418 (ALL COLUMNS): CONDOM USED WITH EVERY PROSTITUTE ☐ OTHER ☐		→ 433 → 434
430	In the last 12 months, did you pay anyone in exchange for having sexual intercourse?	YES . . . . . 1 NO 2	→ 432
431	Have you ever paid anyone in exchange for having sexual intercourse?	YES . . . . . 1 NO 2	→ 434
432	The last time you paid someone in exchange for having sexual intercourse, was a condom used?	YES . . . . . 1 NO 2	→ 434
433	Was a condom used during sexual intercourse every time you paid someone in exchange for having sexual intercourse in the last 12 months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
434	In total, with how many different people have you had sexual intercourse in your lifetime? IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE. IF NUMBER OF PARTNERS IS 95 OR MORE, WRITE '95'.	NUMBER OF PARTNERS IN LIFETIME . . . . . ☐☐ DON'T KNOW 98	
435	CHECK 418, MOST RECENT PARTNER (FIRST COLUMN): NOT ASKED ☐ CONDOM USED ☐ NO CONDOM USED ☐		→ 438 → 438
437	From where did you obtain the condom the last time? PROBE TO IDENTIFY TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC MEDICAL SECTOR GOVT. HOSPITAL . . . . . 11 MATERNITY HOME . . . . . 12 FAMILY DOCTORS GROUP (FDG) 13 FELDSHER-ACCOUCHER POST(FAP)14 FAMILY MEDICINE CENTER . . . . . 15 REPRODUCTIVE HEALTH CENTER . . 16 MARRIAGE&FAMILY CONSULT. . . 17 DIAGNOSTIC CENTER . . . . . 18 SKIN-VENEREAL DIS. DISPANCER . . 19 PROPHYLACTIC MEDICINE CENTER . . . . . 20 GENERAL PRACTICE CENTER . . . . 21 IMMUNOPROPHYLAXIS CENTER . . . . 22 AIDS CENTER . . . . . 23 HEALTH STRENGTHENING CENTER 24 OTHER PUBLIC SECTOR _____ 25 (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . 31 PRIVATE DOCTOR'S OFFICE . . . . . 32 PHARMACY . . . . . 33 OTHER PRIVATE MEDICAL SECTOR _____ 36 (SPECIFY) OTHER SOURCE SHOP/MARKET . . . . . 41 FRIEND/RELATIVE . . . . . 43 OTHER _____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
438	The last time you had sex did you or your partner use any method (other than a condom) to avoid or prevent a pregnancy?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 440
439	What method did you or your partner use? PROBE: Did you or your partner use any other method to prevent pregnancy? RECORD ALL MENTIONED.	FEMALE STERILIZATION . . . . . A MALE STERILIZATION . . . . . B IUD . . . . . C INJECTABLES . . . . . D IMPLANTS . . . . . E PILL . . . . . F FEMALE CONDOM . . . . . G DIAPHRAGM . . . . . H FOAM/JELLY . . . . . I LAM . . . . . J RHYTHM METHOD . . . . . K WITHDRAWAL . . . . . L OTHER MODERN METHOD . . . . . X OTHER TRADITIONAL METHOD . . . . . Y	
440	RECORD THE TIME.	HOUR . . . . . [ ][ ] MINUTES . . . . . [ ][ ]	
441	CHECK 101A: AGREED TO BOTH MEASUREMENT ↓	DID NOT AGREE TO MEASUREMENT → 501	
442	May I measure your blood pressure at this time? INTERVIEWER SIGNATURE DATE _____ _____ RESPONDENT AGREES ↓ RECORD OUTCOME OF BLOOD PRESSURE MEASUREMENT RESPONDENT DOES NOT AGREES ↓ RECORD 9994	**BLOOD PRESSURE MEASURED** SYSTOLIC . . . . . 1 [ ][ ][ ] DIASTOLIC . . . . . 2 [ ][ ][ ] **REASON FOR BLOOD PRESSURE NOT MEASURED** REFUSED '9994 TECHNICAL PROBLEMS '9995 OTHER _____ '9996 SPECIFY	

SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	CHECK 401: CURRENTLY MARRIED/ LIVING WITH A PARTNER ☐ NOT CURRENTLY MARRIED AND NOT LIVING WITH A PARTNER ☐		→ 509
502	CHECK 439: MAN NOT STERILIZED ☐ MAN STERILIZED ☐		→ 509
503	Is your (wife/partner) currently pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 505
504	Now I have some questions about the future. After the child you and your (wife/partner) are expecting now, would you like to have another child, or would you prefer not have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	→ 506 → 509
505	Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS COUPLE CAN'T GET PREGNANT . . . . . 3 WIFE/PARTNER STERILIZED . . . . . 4 UNDECIDED/DON'T KNOW 8	→ 509
507	CHECK 503: WIFE/PARTNER NOT PREGNANT OR DON'T KNOW ☐ How long would you like to wait from now before the birth of (a/another) child? WIFE/PARTNER PREGNANT ☐ After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 [ ][ ] YEARS . . . . . 2 [ ][ ] SOON/NOW . . . . . 993 COUPLE INFECUND . . . . . 994 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	→ 509
509	CHECK 203 AND 205: HAS LIVING CHILDREN ☐ If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ☐ If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE . . . . . 00 NUMBER . . . . . [ ][ ] OTHER _____ 96 (SPECIFY)	→ 601 → 601
510	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER [ ][ ] [ ][ ] [ ][ ] OTHER _____ 96 (SPECIFY)	

SECTION 6. EMPLOYMENT AND GENDER ROLES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	Have you done any work in the last seven days?	YES . . . . . 1 NO 2	→ 604
602	Although you did not work in the last seven days, do you have any job or business from which you were absent for leave, illness, vacation, or any other such reason?	YES . . . . . 1 NO 2	→ 604
603	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→ 607
604	What is your occupation, that is, what kind of work do you mainly do?	☐☐ _____ _____	
605	Do you usually work throughout the year, or do you work seasonally, or only once in a while?	THROUGHOUT THE YEAR . . . . . 1 SEASONALLY/PART OF THE YEAR 2 ONCE IN A WHILE 3	
606	Are you paid in cash or kind for this work or are you not paid at all?	CASH ONLY . . . . . 1 CASH AND KIND . . . . . 2 IN KIND ONLY . . . . . 3 NOT PAID 4	
607	CHECK 401: CURRENTLY MARRIED OR LIVING WITH A PARTNER ☐ ↓ NOT CURRENTLY MARRIED AND NOT LIVING WITH A PARTNER ☐ →		612
608	CHECK 606: CODE 1 OR 2 CIRCLED ☐ ↓ OTHER ☐ →		610
609	Who usually decides how the money you earn will be used: you, your (wife/partner), or you and your (wife/partner) jointly?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/ PARTNER JOINTLY . . . . . 3 OTHER _____ 6 SPECIFY	
610	Who usually makes decisions about health care for yourself: you, your (wife/partner), you and your (wife/partner) jointly, or someone else?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/ PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER _____ 6 SPECIFY	
611	Who usually makes decisions about making major household purchases?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/ PARTNER JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER _____ 6 SPECIFY	
612	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	
613	Do you own any land either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	
614	In your opinion, is a husband justified in hitting or beating his wife in the following situations: If she goes out without telling him? If she neglects the children? If she argues with him? If she refuses to have sex with him? If she burns the food?	YES NO DK GOES OUT . . . . . 1 2 8 NEGL. CHILDREN . . . 1 2 8 ARGUES . . . . . 1 2 8 REFUSES SEX . . . . . 1 2 8 BURNS FOOD 1 2 8	

SECTION 7. HIV/AIDS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	YES . . . . . 1 NO 2	→ 723
701A	Where from have you heard about HIV/AIDS? Anywhere else? RECORD ALL MENTIONED	TV/RADIO . . . . . A PEER TO PEER . . . . . B EDUCATIONAL INSTITUTION . . . . . C MEDICAL FACILITY . . . . . D PARENTS/FAMILY . . . . . E PRINTED MEDIA . . . . . F CIVIL SCIETY/NGO/COMMUNITY MEETINGS . . . . . G WORK PLACE . . . . . H COMMON KNOWLEDGE . . . . . I DON'T KNOW/DON'T REMEMBER . . . . Z	
702	Can people reduce their chance of getting the AIDS virus by having just one uninfected sex partner who has no other sex partners?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
703	Can people get the AIDS virus from mosquito bites?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
704	Can people reduce their chance of getting the AIDS virus by using a condom every time they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
705	Can people get the AIDS virus by sharing food with a person who has AIDS?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
706	Can people get the AIDS virus through saliva by kissing someone infected with the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
707	Is it possible for a healthy-looking person to have the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
708	Can the virus that causes AIDS be transmitted from a mother to her baby: During pregnancy? During delivery? By breastfeeding?	YES NO DK DURING PREG. . . . . 1 2 8 DURING DELIVERY . . . 1 2 8 BREASTFEEDING . . . 1 2 8	
709	CHECK 708: AT LEAST ONE 'YES' ☐ ↓ OTHER ☐		→ 711
710	Are there any special drugs that a doctor or a nurse can give to a woman infected with the AIDS virus to reduce the risk of transmission to the baby?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
711	CHECK FOR PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
712	I don't want to know the results, but have you ever been tested to see if you have the AIDS virus?	YES . . . . . 1 NO 2	→ 716
713	How many months ago was your most recent HIV test?	MONTHS AGO . . . . . ☐☐ TWO OR MORE YEARS 95	
714	I don't want to know the results, but did you get the results of the test?	YES . . . . . 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
715	Where was the test done? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC MEDICAL SECTOR GOVT. HOSPITAL . . . . . 11 MATERNITY HOME . . . . . 12 FAMILY DOCTORS GROUP (FDG) 13 FELDSHER-ACCOUCHER POST(FAP) 14 FAMILY MEDICINE CENTER . . . . . 15 REPRODUCTIVE HEALTH CENTER . . 16 MARRIAGE&FAMILY CONSULT. . . 17 DIAGNOSTIC CENTER . . . . . 18 SKIN&VENEREAL DISPENSARY . . 19 PROPHYLACTIC MEDICINE CENTER . . . . . 20 GENERAL PRACTICE CENTER . . . . 21 IMMUNOPROPHYLAXIS CENTER . . . . 22 AIDS CENTER . . . . . 23 HEALTH STRENGTHENING CENTER 24 OTHER PUBLIC SECTOR _____ (SPECIFY) 25 PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . 31 PRIVATE DOCTOR'S OFFICE . . . . . 32 PHARMACY . . . . . 33 STUDENTS POLYCLINIC . . . . . 34 PRIVATE AIDS LAB . . . . . 35 OTHER PRIVATE MEDICAL SECTOR _____ 36 OTHER SOURCE HOME . . . . . 41 CORRECTIONAL FACILITY . . . . . 42 OTHER _____ (SPECIFY) 96	→ 718
716	Do you know of a place where people can go to get tested for the AIDS virus?	YES . . . . . 1 NO 2	→ 718
717	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	PUBLIC MEDICAL SECTOR GOVT. HOSPITAL . . . . . A MATERNITY HOME . . . . . B FAMILY DOCTORS GROUP (FDG) C FELDSHER-ACCOUCHER POST(FAP) D FAMILY MEDICINE CENTER . . . . . E REPRODUCTIVE HEALTH CENTER . . F MARRIAGE&FAMILY CONSULT. . . G DIAGNOSTIC CENTER . . . . . H SKIN&VENEREAL DISPENSARY . . I PROPHYLACTIC MEDICINE CENTER . . . . . J GENERAL PRACTICE CENTER . . . . K IMMUNOPROPHYLAXIS CENTER . . . . L AIDS CENTER . . . . . M HEALTH STRENGTHENING CENTER N OTHER PUBLIC SECTOR _____ (SPECIFY) O PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . P PRIVATE DOCTOR'S OFFICE . . . . . Q PHARMACY . . . . . R STUDENTS POLYCLINIC . . . . . S PRIVATE AIDS LAB . . . . . T OTHER PRIVATE MEDICAL SECTOR _____ (SPECIFY) U OTHER _____ (SPECIFY) X	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
718	Would you buy fresh vegetables from a shopkeeper or vendor if you knew that this person had the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
719	If a member of your family got infected with the AIDS virus, would you want it to remain a secret or not?	YES, REMAIN A SECRET . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
720	If a member of your family became sick with AIDS, would you be willing to care for her or him in your own household?	YES . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
721	In your opinion, if a female teacher has the AIDS virus but is not sick, should she be allowed to continue teaching in the school?	SHOULD BE ALLOWED . . . . . 1 SHOULD NOT BE ALLOWED . . . . . 2 DK/NOT SURE/DEPENDS 8	
722	Should children age 12-14 be taught about using a condom to avoid getting AIDS?	YES . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
723	CHECK 701: HEARD ABOUT AIDS → Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact? NOT HEARD ABOUT AIDS → Have you heard about infections that can be transmitted through sexual contact?	YES . . . . . 1 NO 2	
724	CHECK 414: HAS HAD SEXUAL INTERCOURSE → HAS NOT HAD SEXUAL INTERCOURSE →		732
725	CHECK 723: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES → NO →		727
726	Now I would like to ask you some questions about your health in the last 12 months. During the last 12 months, have you had a disease which you got through sexual contact?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
727	Sometimes men experience an abnormal discharge from their penis. During the last 12 months, have you had an abnormal discharge from your penis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
728	Sometimes men have a sore or ulcer near their penis. During the last 12 months, have you had a sore or ulcer near your penis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
729	CHECK 726, 727, AND 728: HAS HAD AN INFECTION (ANY 'YES') ☐ ↓ HAS NOT HAD AN INFECTION OR DOES NOT KNOW ☐ → 732		
730	The last time you had (PROBLEM FROM 726/727/728), did you seek any kind of advice or treatment?	YES . . . . . 1 NO 2	→ 732
731	Where did you go? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	PUBLIC MEDICAL SECTOR GOVT. HOSPITAL . . . . . A MATERNITY HOME . . . . . B FAMILY DOCTORS GROUP (FDG) C FELDSHER-ACCOUCHER POST(FAP) D FAMILY MEDICINE CENTER. . . . . E REPRODUCTIVE HEALTH CENTER . . F MARRIAGE&FAMILY CONSULT. . . G DIAGNOSTIC CENTER. . . . . H SKIN&VENEREAL DISPENSARY . . I PROPHYLACTIC MEDICINE CENTER . . . . . J GENERAL PRACTICE CENTER . . . . K IMMUNOPROPHYLAXIS CENTER. . . . L AIDS CENTER . . . . . M HEALTH STRENGTHENING CENTER N OTHER PUBLIC SECTOR _____ O (SPECIFY) PRIVATE MEDICAL SECTOR PRIVATE HOSPITAL/CLINIC . . . . . P PRIVATE DOCTOR'S OFFICE . . . . . Q PHARMACY . . . . . R STUDENTS POLYCLINIC . . . . . S PRIVATE AIDS LAB . . . . . T OTHER PRIVATE MEDICAL SECTOR _____ U (SPECIFY) OTHER SOURCE SHOP . . . . . V OTHER _____ X (SPECIFY)	
732	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
733	Is a wife justified in refusing to have sex with her husband when she knows her husband has sex with other women?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

SECTION 8. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	Some men are circumcised, that is, the foreskin is completely removed from the penis. Are you circumcised?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 805
802	How old were you when you got circumcised?	AGE IN COMPLETED YEARS . . . . . [ ][ ] DURING CHILDHOOD (<5 YEARS) 95 DON'T KNOW 98	
803	Who did the circumcision?	TRADITIONAL PRACTITIONER/ FAMILY/FRIEND . . . . . 1 HEALTH WORKER/PROFESSIONAL 2 OTHER . . . . . 3 DON'T KNOW 8	
804	Where was it done?	HEALTH FACILITY . . . . . 1 HOME OF A HEALTH WORKER/ PROFESSIONAL . . . . . 2 CIRCUMCISION DONE AT HOME . . . 3 RITUAL SITE . . . . . 4 OTHER HOME/PLACE . . . . . 5 DON'T KNOW 8	
805	Now I would like to ask you some other questions relating to health matters. Have you had an injection for any reason in the last 12 months? IF YES: How many injections have you had? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . [ ][ ] NONE 00	→ 808
806	Among these injections, how many were administered by a doctor, a nurse, a pharmacist, a dentist, or any other health worker? IF NUMBER OF INJECTIONS IS 90 OR MORE, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . [ ][ ] NONE 00	→ 808
807	The last time you got an injection from a health worker, did he/she take the syringe and needle from a new, unopened package?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
808	Do you currently smoke cigarettes?	YES . . . . . 1 NO 2	→ 810
809	In the last 24 hours, how many cigarettes did you smoke?	NUMBER OF CIGARETTES . . . . . [ ][ ]	
810	Do you currently smoke or use any (other) type of tobacco?	YES . . . . . 1 NO 2	→ 812
811	What (other) type of tobacco do you currently smoke or use? RECORD ALL MENTIONED.	PIPE . . . . . A CHEWING TOBACCO/NASWAY . . . . . B SNUFF . . . . . C WATER PIPE . . . . . D OTHER _____ X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
812	Are you covered by any health insurance?	YES . . . . . 1 NO 2	→ 814
813	What type of health insurance are you covered by? RECORD ALL MENTIONED.	COMPULSORY INSURANCE FUND (OMC) . . . . . A HEALTH INSURANCE THROUGH EMPLOYER . . . . . B SOCIAL SECURITY . . . . . C OTHER PRIVATELY PURCHASED COMMERCIAL HEALTH INSURANCE D OTHER _____ X (SPECIFY)	
814	Now I would like to ask you a few questions about drinking alcohol. Have you ever drunk alcohol?	YES . . . . . 1 NO 2	→ 821
815	How old were you when you started drinking alcohol?	AGE . . . . . [ ][ ] DON'T KNOW 98	
816	In the past month, on the days that you drank alcohol, how many drinks did you usually have? We count one drink as one can or bottle of beer, one glass of wine, or one shot of liquor, vodka, cognac or whiskey. (BOTTLE OF BEER=330-500ML, GLASS OF WINE=50-200ML, SHOT OF LIQUOR=50ML.)	NUMBER OF DRINKS . . . [ ][ ] NO DRINKS 00	→ 821
817	How often did you drink that amount? PROBE: How many times in a month?	EVERY DAY . . . . . 1 ALMOST EVERY DAY . . . . . 2 1-2 TIMES A WEEK . . . . . 3 2-3 TIMES A MONTH . . . . . 4 ONCE A MONTH 5	
818	In the past 3 months, have there been days when you had more than usual? (RELATIVE TO THE NUMBER IN 816)	YES . . . . . 1 NO 2	→ 821
819	In the past 3 months, how many drinks did you have on the days that you drank more than usual? (RELATIVE TO THE NUMBER IN 816)	NUMBER OF DRINKS . . . [ ][ ]	
820	How often did you drink that amount?	1-2 TIMES A WEEK . . . . . 1 2-3 TIMES A MONTH . . . . . 2 ONCE A MONTH . . . . . 3 1-2 TIMES IN THREE MONTHS 4	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
821	Next questions are about common health problems in Kyrgyzstan. Have you ever heard of an illness called tuberculosis or TB?	YES . . . . . 1 NO 2	→ 826
822	What signs or symptoms would lead you to think that a person has tuberculosis? PROBE: Any other? RECORD ALL MENTIONED.	COUGHING . . . . . A COUGHING WITH SPUTUM . . . . . B COUGHING FOR SEVERAL WEEKS C FEVER . . . . . D BLOOD IN SPUTUM . . . . . E LOSS OF APPETITE . . . . . F NIGHTSWEATING . . . . . G PAIN IN CHEST . . . . . H TIREDNESS/FATIGUE . . . . . I WEIGHT LOSS . . . . . J LETHARGY . . . . . K OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
823	How does tuberculosis spread from one person to another? PROBE: Any other ways? RECORD ALL MENTIONED.	THROUGH THE AIR WHEN COUGHING OR SNEEZING . . . . . A THROUGH SHARING UTENSILS . . . . . B THROUGH TOUCHING A PERSON WITH TB . . . . . C THROUGH FOOD . . . . . D THROUGH SEXUAL CONTACT . . . . . E THROUGH MOSQUITO BITES . . . . . F OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
824	Can tuberculosis be cured?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
825	If a member of your family got tuberculosis, would you want it to remain a secret or not?	YES, REMAIN A SECRET . . . . . 1 NO . . . . . 2 DON'T KNOW/NOT SURE/ DEPENDS 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
826	These next questions are about blood pressure. Have you ever been told by a doctor or other health professional that you had hypertension or high blood pressure?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 829
827	Were you told on two or more different occasions by a doctor or other health professional that you had hypertension or high blood pressure?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
828	To lower your hypertension or high blood pressure, are you now: a. Taking prescribed medicine? b. Controlling your weight or losing weight? c. Cutting down on salt in your diet? d. Exercising? e. Cutting down on alcohol? f. Stopping smoking?	YES NO N/A TAKE MEDICINE 1 2 3 CONTROL WEIGHT 1 2 3 CUT DOWN SALT 1 2 3 EXERCISE 1 2 3 CUT DOWN ALCOHOL 1 2 3 STOP SMOKING 1 1 2	
829	RECORD THE TIME.	HOUR . . . . . [ ][ ] MINUTES . . . . . [ ][ ]	
830	CHECK 101A AND 441: AGREED TO BOTH MEASUREMENTS ☐ ↓ OTHER ☐ →		908
831	May I measure your blood pressure at this time? INTERVIEWER SIGNATURE _____ DATE _____ RESPONDENT AGREES ☐ ↓ RECORD OUTCOME OF BLOOD PRESSURE MEASUREMENT RESPONDENT DOES NOT AGREES ☐ ↓ RECORD 9994	**BLOOD PRESSURE MEASURED** SYSTOLIC . . . . . 1 [ ][ ][ ] DIASTOLIC . . . . . 2 [ ][ ][ ] **REASON FOR BLOOD PRESSURE NOT MEASURED** REFUSED '9994 TECHNICAL PROBLEMS '9995 OTHER _____ '9996 SPECIFY	

SECTION 9. AVERAGING BLOOD PRESSURE MEASURES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
901	CHECK Q441 AND Q830.	SYSTOLIC AND DIASTOLIC BLOOD PRESSURE RECORDED IN BOTH Q442 AND Q831 ☐	
		SYSTOLIC AND DIASTOLIC BLOOD PRESSURE NOT RECORDED IN BOTH Q442 AND Q831 ☐	907
902	RECORD AND CALCULATE THE AVERAGE OF THE SYSTOLIC AND DIASTOLIC BLOOD PRESSURE FROM Q442 AND Q831.		
903	BLOOD PRESSURE MEASUREMENTS FROM Q442	**SYSTOLIC** ☐☐☐ **DIASTOLIC** ☐☐☐	
904	BLOOD PRESSURE MEASUREMENTS FROM Q831	**SYSTOLIC** ☐☐☐ **DIASTOLIC** ☐☐☐	
905	RECORD THE SUM OFTHE SYSTOLIC AND DIASTOLIC MEASURES	**SUM SYSTOLIC** ☐☐☐ **SUM DIASTOLIC** ☐☐☐	
906	CALCULATE THE AVERAGE SYSTOLIC AND DIASTOLIC PRESSURES BY DIVIDING THE SUM IN Q905 BY 2	**AVERAGE SYSTOLIC** ☐☐☐ **AVERAGE DIASTOLIC** ☐☐☐	911
907	CHECK Q831:	SYSTOLIC AND DIASTOLIC BLOOD PRESSURE NOT RECORDED IN Q831 ☐	
		SYSTOLIC AND DIASTOLIC BLOOD PRESSURE RECORDED IN Q831 ☐	910
908		SYSTOLIC AND DIASTOLIC BLOOD PRESSURE NOT RECORDED IN Q442 ☐	
		SYSTOLIC AND DIASTOLIC BLOOD PRESSURE RECORDED IN Q442 ☐	910
909		SYSTOLIC AND DIASTOLIC BLOOD PRESSURE RECORDED IN Q101E ☐	
		SYSTOLIC AND DIASTOLIC BLOOD PRESSURE NOT RECORDED IN Q101E ☐	913
910	RECORD THE SYSTOLIC AND DIASTOLIC PRESSURE.	**SYSTOLIC** ☐☐☐ **DIASTOLIC** ☐☐☐	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP

911 USE THE TABLE BELOW TO DETERMINE THE CORRECT CODE TO RECORD ON THE BLOOD PRESSURE REPORT AND REFERRAL FORM.

CIRCLE THE ROW IN WHICH THE VALUE FOR THE SYSTOLIC BLOOD PRESSURE FROM Q906 OR Q910 IS FOUND.

THEN CIRCLE THE COLUMN IN WHICH THE VALUE FOR THE DIASTOLIC BLOOD FROM Q906 OR Q910 IS FOUND.

THE VALUE WHERE THE ROW AND COLUMN YOU HAVE CIRCLED INTERSECT IN THE TABLE WILL BE USED IN COMPLETING Q912.

AVERAGE SYSTOLIC **PRESSURE**	**AVERAGE DIASTOLIC PRESSURE**					
	<84	85-89	90-99	100- 109	110- 119	>=120
<129	1	2	3	4	5	6
130-139	2	2	3	4	5	6
140-159	3	3	3	4	5	6
160-179	4	4	4	4	5	6
180-209	5	5	5	5	5	6
>=210	6	6	6	6	6	6

912 RECORD THE NUMBER YOU CIRCLED IN Q911 IN THE CHART BELOW. THEN USE THE INSTRUCTIONS TO THE RIGHT OF THAT NUMBER TO COMPLETE A BLOOD PRESSURE REPORT AND REFERRAL FORM FOR THE RESPONDENT. GIVE THE FORM TO THE RESPONDENT AND ANSWER ANY QUESTIONS HE/SHE MAY HAVE.

	RESPONDENT'S BLOOD PRESSURE CATEGORY	**CONSULT HEALTH PROVIDER TO CHECK BLOOD PRESSURE WITHIN:**
1	**NORMAL**	**24 MONTHS**
2	**AT THE HIGH END OF THE NORMAL RANGE**	**12 MONTHS**
3	**ABOVENORMAL RANGE**	**2 MONTHS**
4	**MODERATELY HIGH**	**1 MONTH**
5	**VERY HIGH**	**TODAY**
6	**EXTREMELY HIGH**	**TODAY**

913	CHECK THAT THE RESPONDENT HAS RECEIVED A BROCHURE ON BLOOD PRESSURE	RECEIVED . . . . . 1 NOT RECEIVED 2	
914	RECORD THE TIME.	HOUR . . . . . [ ][ ] MINUTES . . . . . [ ][ ]	

M-25

INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

COMMENTS ON SPECIFIC QUESTIONS:

ANY OTHER COMMENTS:

SUPERVISOR'S OBSERVATIONS

NAME OF SUPERVISOR: _____ DATE: _____

EDITOR'S OBSERVATIONS

NAME OF EDITOR: _____ DATE: _____