Armenia 2005

Armenia

Demographic and Health Survey

2005

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National Statistical Service
Yerevan, Armenia

Ministry of Health
Yerevan, Armenia

ORC Macro
Calverton, Maryland USA

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USAID
FROM THE AMERICAN PEOPLE

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Ministry of Health

This report summarizes the findings of the 2005 Armenia Demographic and Health Survey (ADHS), which was conducted by the National Statistical Service and the Ministry of Health of the Republic of Armenia. ORC Macro provided technical assistance and the U.S. Agency for International Development (USAID) provided funding under the terms of contract number GPO-C-00-03-00002-00. The opinions expressed herein are those of the authors and do not necessarily reflect the views of USAID.

The ADHS is part of the worldwide MEASURE DHS program, which is designed to collect data on fertility, family planning, and maternal and child health. Additional information about the ADHS may be obtained from the National Statistical Service, 3 Government House, Republic Avenue, 375010 Yerevan, Armenia (Telephone: 37410 524-326 and Fax: 37410 521-921). Additional information about the DHS project may be obtained from ORC Macro, 11785 Beltsville Drive, Calverton, MD 20705 (Telephone 301-572-0200 and Fax 301-572-0999).

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CONTENTS

Page

Tables and Figures vii
Acknowledgments xv
Preface xvii
Summary of Findings xix
Map of Armenia xxiv

CHAPTER 1 INTRODUCTION

1.1 Territory 1
1.2 Demographic Characteristics 1
1.3 Health Care System in Armenia 1
1.4 Objectives and Organization of the Survey 5
1.5 Response Rates 7

CHAPTER 2 HOUSEHOLD POPULATION AND HOUSING CHARACTERISTICS

2.1 Characteristics of the Population 9
2.2 Housing Characteristics 18
2.3 Wealth Quintiles 24
2.4 Birth Registration 25

CHAPTER 3 BACKGROUND CHARACTERISTICS OF RESPONDENTS

3.1 Background Characteristics of Respondents 27
3.2 Educational Level of Respondents 29
3.3 Exposure to Mass Media 31
3.4 Employment 31
3.5 Occupation 36
3.6 Employment 39

CHAPTER 4 FERTILITY

4.1 Current Fertility 41
4.2 Fertility Differentials by Background Characteristics 42
4.3 Fertility Trends 44
4.4 Fertility Rates From NSS and the ADHS 44

4.5 Children Ever Born and Living 44
4.6 Birth Intervals 45
4.7 Age at First Birth 47
4.8 Teenage Pregnancy and Motherhood 49

CHAPTER 5 CONTRACEPTION

5.1 Knowledge of Contraceptive Methods 51
5.2 Ever Use of Contraception 52
5.3 Current Use of Contraception 55
5.4 Current Use by Background Characteristics 57
5.5 Number of Children at First Use 58
5.6 Knowledge of the Fertile Period 59
5.7 Access to Family Planning 60
5.8 Discontinuation Within 12 Months of Use 62
5.9 Reasons for Using Traditional Methods 63
5.10 Intention to Use Family Planning among Nonusers 63
5.11 Exposure to Family Planning Messages in the Mass Media 66
5.12 Contact of Nonusers with Family Planning Providers 69
5.13 Men's Attitudes toward Family Planning 70
5.14 Informed Choice 71

CHAPTER 6 ABORTION

6.1 Pregnancy Outcomes 73
6.2 Lifetime Experience with Induced Abortion 75
6.3 Rates of Induced Abortion 77
6.4 Trends in Induced Abortion 78
6.5 Use of Contraceptive Methods Before Abortion 80

CHAPTER 7 OTHER PROXIMATE DETERMINANTS OF FERTILITY

7.1 Marital Status 81
7.2 Age at First Marriage and Sexual Intercourse 82
7.3 Recent Sexual Activity 87
7.4 Postpartum Amenorrhea, Abstinence, and Insusceptibility 90
7.5 Menopause 90

CHAPTER 8 FERTILITY PREFERENCES

8.1 Fertility Preferences 91
8.2 Need for Family Planning 93
8.3 Fertility Planning 95

8.4 Ideal Number of Children 96
8.5 Wanted and Unwanted Fertility 98

CHAPTER 9 INFANT AND CHILD MORTALITY

9.1 Assessment of Data Quality 99
9.2 Levels and Trends in Childhood Mortality 100
9.3 Infant Mortality Rates from the National Statistical Service and the ADHS 102
9.4 Socioeconomic Differentials in Childhood Mortality 104
9.5 Demographic Differentials in Childhood Mortality 106
9.6 Perinatal Mortality 107
9.7 High-Risk Fertility Behavior 108

CHAPTER 10 REPRODUCTIVE HEALTH

10.1 Antenatal Care 113
10.2 Assistance and Medical Care at Delivery 117
10.3 Postnatal Care 120
10.4 Women's Health Care 123

CHAPTER 11 CHILD HEALTH

11.1 Characteristics of Delivery 127
11.2 Vaccination Coverage 127
11.3 Acute Respiratory Infection 131
11.4 Fever 132
11.5 Diarrhea 132
11.6 Disposal of Children's Stools 136

CHAPTER 12 NUTRITION

12.1 Nutritional Status of Children 139
12.2 Breastfeeding and Supplementation 142
12.3 Anemia in Children 151
12.4 Micronutrient Intake in Children 154
12.5 Nutritional Status of Women 156
12.6 Anemia in Women 158
12.7 Micronutrient Intake in Women 160

CHAPTER 13 HIV/AIDS AND SEXUALLY TRANSMITTED INFECTIONS

13.1 Knowledge of HIV/AIDS and Methods of HIV Prevention 163
13.2 Rejection of Misconceptions About AIDS Transmission and Comprehensive Knowledge of AIDS 167
13.3 Social Aspects of HIV/AIDS 170
13.4 Multiple Sexual Partnerships 173
13.5 Paid Sex 176
13.6 Prevalence of Sexually Transmitted Infections 176
13.7 Prevalence of Injections 178
13.8 HIV/AIDS-Related Knowledge and Behavior among Youth 180
13.9 Age at First Sex among Youth and Condom Use 182

CHAPTER 14 ADULT HEALTH

14.1 Access to and Utilization of Health Care Services 187
14.2 Use of Smoking Tobacco 196
14.3 Tuberculosis 198
14.4 Hypertension 205

CHAPTER 15 WOMEN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH OUTCOMES

15.1 Employment and Cash Earnings 211
15.2 Use of Earnings 212
15.3 Household Decisionmaking 214
15.4 Attitudes towards Wife Beating 217
15.5 Attitudes towards Refusing Sexual Relations 220
15.6 Indicators of Women's Empowerment 223
15.7 Current Use of Contraception by Women's Status 224
15.8 Women's Status and Ideal Family Size and Unmet Need 225
15.9 Women's Status and Reproductive Health Care 226

REFERENCES 229

APPENDIX A SAMPLE DESIGN 231

APPENDIX B ESTIMATES OF SAMPLING ERRORS 235

APPENDIX C DATA QUALITY TABLES 267

APPENDIX D PERSONS INVOLVED IN THE ARMENIA 2005 DEMOGRAPHIC AND HEALTH SURVEY 275

APPENDIX E QUESTIONNAIRES 281

TABLES AND FIGURES

CHAPTER 1 INTRODUCTION

Table 1.1 Results of the household and individual interviews 7

CHAPTER 2 CHARACTERISTICS OF HOUSEHOLDS

Table 2.1 Household population by age, sex, and residence 10
Table 2.2 Household composition 11
Table 2.3 Children's living arrangements and orphanhood 12
Table 2.4.1 Educational attainment of the household population: Male 14
Table 2.4.2 Educational attainment of the household population: Female 15
Table 2.5 School attendance ratios 17
Table 2.6 Housing characteristics 19
Table 2.7 Household drinking water 21
Table 2.8 Household sanitation facility 22
Table 2.9 Household possessions 24
Table 2.10 Population distribution by wealth quintile 25
Table 2.11 Birth registration of children under five 26

Figure 2.1 Population pyramid 10
Figure 2.2 Age-specific school attendance rates, by sex 18
Figure 2.3 Households with electricity and LPG/Natural gas for cooking 20
Figure 2.4 Households with drinking water piped into the house and flush toilet to piped sewer system, by residence 23

CHAPTER 3 BACKGROUND CHARACTERISTICS OF RESPONDENTS

Table 3.1 Background characteristics of respondents 28
Table 3.2.1 Educational attainment by background characteristics: Women 29
Table 3.2.2 Educational attainment by background characteristics: Men 30
Table 3.3.1 Exposure to mass media: Women 32
Table 3.3.2 Exposure to mass media: Men 33
Table 3.4 Employment status 35
Table 3.5.1 Occupation: Women 37
Table 3.5.2 Occupation: Men 38
Table 3.6 Employment characteristics 39

Figure 3.1 Percent distribution of women and men age 15-49 by employment status 34
Figure 3.2 Respondents currently employed, by residence and education 36

CHAPTER 4 FERTILITY

Table 4.1 Current fertility....41
Table 4.2 Fertility by background characteristics....43
Table 4.3 Trends in age-specific fertility rates....44
Table 4.4 Children ever born and living....45
Table 4.5 Birth intervals....46
Table 4.6 Age at first birth....47
Table 4.7 Median age at first birth by background characteristics....48
Table 4.8 Teenage pregnancy and motherhood....49

Figure 4.1 Age-specific fertility rates for the three-year period preceding the survey, by residence....42
Figure 4.2 Total fertility rates for the three years preceding the survey, by residence and education....47
Figure 4.3 Percentage of births occurring less than 24 months and a prior birth, by residence and education

CHAPTER 5 CONTRACEPTION

Table 5.1 Knowledge of contraceptive methods....52
Table 5.2 Knowledge of contraceptive methods by background characteristics....53
Table 5.3.1 Ever use of contraception: Women....54
Table 5.3.2 Ever use of contraception: Men....54
Table 5.4 Current use of contraception....55
Table 5.5 Trends in contraceptive use....57
Table 5.6 Current use of contraception by background characteristics....58
Table 5.7 Number of living children at first use of contraception....59
Table 5.8 Knowledge of fertile period....59
Table 5.9 Source of modern contraceptive methods....60
Table 5.10 Cost of modern contraceptive methods....60
Table 5.11 Informed choice....62
Table 5.12 First-year contraceptive discontinuation rates....63
Table 5.13 Reasons for discontinuing contraceptive methods....64
Table 5.14 Reasons for using traditional methods....65
Table 5.15 Future use of contraception....65
Table 5.16 Reasons for not intending to use contraception....66
Table 5.17 Preferred method of contraception for future use....67
Table 5.18.1 Exposure to family planning messages: Women....68
Table 5.18.2 Exposure to family planning messages: Men....69
Table 5.19 Contact of nonusers with family planning providers....71

Figure 5.1 Contraceptive use among married women....56
Figure 5.2 Trends in current contraceptive use among married women....56
Figure 5.3 Transportation to source of contraceptive supply....61
Figure 5.4 Men's attitudes toward contraception....70

CHAPTER 6 ABORTION

Table 6.1 Pregnancy outcome by background characteristics 74
Table 6.2 Lifetime experience with induced abortion 76
Table 6.3 Induced abortion rates 77
Table 6.4 Induced abortion rates by background characteristics 78
Table 6.5 Use of a contraception before pregnancy 80

Figure 6.1 Trends in pregnancy outcomes 75
Figure 6.2 Age-specific fertility rates and abortion rates, 2005 78
Figure 6.3 Trends in age-specific abortion rates, 2000 and 2005 79

CHAPTER 7 OTHER PROXIMATE DETERMINANTS OF FERTILITY

Table 7.1 Current marital status 81
Table 7.2 Age at first marriage 83
Table 7.3 Age at first sexual intercourse 84
Table 7.4 Median age at first marriage 85
Table 7.5 Median age at first sexual intercourse 86
Table 7.6.1 Recent sexual activity: Women 88
Table 7.6.2 Recent sexual activity: Men 89
Table 7.7 Postpartum amenorrhea, abstinence, and insusceptibility 90
Table 7.8 Menopause 90

Figure 7.1 Marital status of respondents 82
Figure 7.2 Median age at first sexual intercourse among respondents, by residence and education 84

CHAPTER 8 FERTILITY PREFERENCES

Table 8.1 Fertility preferences by number of living children 91
Table 8.2 Desire to limit childbearing 93
Table 8.3 Need for family planning 94
Table 8.4 Fertility planning status 95
Table 8.5 Ideal number of children 96
Table 8.6 Mean ideal number of children 97
Table 8.7 Wanted fertility rates 98

Figure 8.1 Desire for more children among currently married women and men 92

CHAPTER 9 INFANT AND CHILD MORTALITY

Table 9.1 Early childhood mortality rates 101
Table 9.2 Comparison of infant mortality rates 103
Table 9.3 Early childhood mortality rates by socioeconomic characteristics 105
Table 9.4 Early childhood mortality rates by demographic characteristics 106
Table 9.5 Perinatal mortality 107
Table 9.6 High-risk fertility behavior 108

Figure 9.1 Trends in infant mortality, according to 2000 ADHS and 2005 ADHS 102
Figure 9.2 Trends in infant mortality based on estimates from the national statistical service (NSS) and the 2005 ADHS 104
Figure 9.3 Infant mortality rates for the 10-year period preceding the survey, by residence and wealth quintile 105
Figure 9.4 Births in the last five years in categories of high-risk fertility behavior 109

CHAPTER 10 REPRODUCTIVE HEALTH

Table 10.1 Antenatal care 114
Table 10.2 Number of antenatal care visits and timing of first visit 115
Table 10.3 Components of antenatal care 116
Table 10.4 Place of delivery 118
Table 10.5 Assistance during delivery 119
Table 10.6 Timing of postnatal checkup 121
Table 10.7 provider at first postnatal checkup 122
Table 10.8 Last visit to gynecologist 123
Table 10.9 Last breast examination 125

Figure 10.1 Antenatal care provider 115
Figure 10.2 Reasons for gynecological visit 124

CHAPTER 11 CHILD HEALTH

Table 11.1 Child's birth weight and size at birth 128
Table 11.2 Vaccinations by source of information 129
Table 11.3 Vaccinations by background characteristics 130
Table 11.4 Prevalence of acute respiratory infection 131
Table 11.5 Prevalence and treatment of fever 133
Table 11.6 Prevalence of diarrhea 134
Table 11.7 Knowledge of ORS packets 135
Table 11.8 Diarrhea treatment 136
Table 11.9 Feeding practices during diarrhea 136
Table 11.10 Disposal of children's stools 137

Figure 11.1 Treatment of acute respiratory infection among children under five 132

CHAPTER 12 NUTRITION

Table 12.1 Nutritional status of children 140
Table 12.2 Initial breastfeeding 144
Table 12.3 Breastfeeding status by age 146
Table 12.4 Median duration of breastfeedin 148
Table 12.5 Frequency of breastfeeding 149
Table 12.6 Foods consumed by children in the day or night preceding the interview 150
Table 12.7 Appropriate infant and young child feeding (IYCF) practices 151
Table 12.8 Prevalence of anemia in children 153

Table 12.9 Micronutrient intake among children 155
Table 12.10 Presence of iodized salt in household a 156
Table 12.11 Nutritional status of women by background characteristics 157
Table 12.12 Prevalence of anemia in women 158
Table 12.13 Micronutrient intake among mothers 159

Figure 12.1 141
Figure 12.2 Trends in nutritional status of children under five 142
Figure 12.3 Among last-born children in the five years prior to the survey who ever received a prelacteal liquid, percentage given specific liquids 145
Figure 12.4 Trends in infant feeding practices of children under 6 months and 6-8 months 147

CHAPTER 13 HIV/AIDS AND SEXUALLY TRANSMITTED INFECTIONS

Table 13.1 Knowledge of AIDS 162
Table 13.2 Knowledge of HIV prevention methods 164
Table 13.3.1 Misconceptions and comprehensive knowledge about AIDS: women 166
Table 13.3.2 Misconceptions and comprehensive knowledge about AIDS: men 167
Table 13.4.1 Accepting attitudes toward those living with HIV: women 169
Table 13.4.2 Accepting attitudes toward those living with HIV: men 170
Table 13.5.1 Multiple sexual partners and higher-risk sexual intercourse: women 172
Table 13.5.2 Multiple sexual partners and higher-risk sexual intercourse: men 173
Table 13.6 Payment for sexual intercourse 174
Table 13.7 Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms 175
Table 13.8 Prevalence of medical injections 177
Table 13.9 Comprehensive knowledge about AIDS and of a source for condoms among youth 179
Table 13.10 Age at first sexual intercourse among young women and men 181
Table 13.11 Condom use at first sexual intercourse among youth 182
Table 13.12 Premarital sexual intercourse and condom use during premarital sexual intercourse among young men 183

Figure 13.1 Percentage who know about using condoms, limiting sex, etc. 163

CHAPTER 14 ADULT HEALTH

Table 14.1 Utilization of the health system 188
Table 14.2 Results of consultation with an eye doctor 190
Table 14.3 Problems in accessing health care 192
Table 14.4 Cost of consultation 193
Table 14.5 Knowledge of the family medicine program n 194
Table 14.6 Reasons for not approving of family medicine 196
Table 14.7 Use of tobacco: men 197
Table 14.8 Knowledge of tuberculosis 199
Table 14.9.1 Knowledge of symptoms of tuberculosis: women 201
Table 14.9.2 Knowledge of symptoms of tuberculosis: men 202

Table 14.10 Knowledge that tuberculosis can be cured and attitude towards a family member's TB ... 204
Table 14.11.1 Levels of hypertension: women ... 208
Table 14.11.2 Levels of hypertension: men ... 209

Figure 14.1 Consultation with eye doctors ... 189
Figure 14.2 Meaning of "Family Medicine" ... 195
Figure 14.3 Approval of family medicine program ... 195
Figure 14.4 Awareness of hypertension and treatment status ... 207

CHAPTER 15 WOMEN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH OUTCOMES

Table 15.1 Employment and cash earnings of currently married women ... 212
Table 15.2 Control over women's earnings and relative magnitude of women's cash earnings ... 213
Table 15.3 Women's control over her own earnings and over those of her husband/partner ... 214
Table 15.4 Women's participation in decisionmaking ... 215
Table 15.5 Women's participation in decisionmaking by background characteristics ... 216
Table 15.6.1 Attitude toward wife beating: women ... 218
Table 15.6.2 Attitude toward wife beating: men ... 219
Table 15.7.1 Attitude toward refusing sex with husband: women ... 221
Table 15.7.2 Attitude toward refusing sexual intercourse with husband: men ... 222
Table 15.8 Indicators of women's empowerment: women ... 224
Table 15.9 Current use of contraception by women's status ... 225
Table 15.10 Women's empowerment and ideal number of children and unmet need for family planning ... 226
Table 15.11 Reproductive health care by women's empowerment ... 227

Figure 15.1 Distribution of married women by number of household decision in which they participate ... 215

APPENDIX A SAMPLE DESIGN

Table A.1 Sample implementation: Women ... 233
Table A.2 Sample implementation: Men ... 234

APPENDIX B ESTIMATES OF SAMPLING ERRORS

Table B.1.1 List of selected variables for sampling errors, Armenia 2005: Women ... 237
Table B.1.2 List of selected variables for sampling errors, Armenia 2005: Men ... 238
Table B.2.1 Sampling errors for the national sample, Armenia 2005: Women ... 239
Table B.2.2 Sampling errors for the national sample, Armenia 2005: Men ... 240
Table B.3.1 Sampling errors for the urban sample, Armenia 2005: Women ... 241
Table B.3.2 Sampling errors for the urban sample, Armenia 2005: Men ... 242
Table B.4.1 Sampling errors for the rural sample, Armenia 2005: Women ... 243
Table B.4.2 Sampling errors for the rural sample, Armenia 2005: Men ... 244
Table B.5.1 Sampling errors for the Yerevan sample, Armenia 2005: Women ... 245

Table B.5.2 Sampling errors for the Yerevan sample, Armenia 2005: Men 246
Table B.6.1 Sampling errors for the Aragatsotn sample, Armenia 2005: Women..... 247
Table B.6.2 Sampling errors for the Aragatsotn sample, Armenia 2005: Men 248
Table B.7.1 Sampling errors for the Ararat sample, Armenia 2005: Women 249
Table B.7.2 Sampling errors for the Ararat sample, Armenia 2005: Men 250
Table B.8.1 Sampling errors for the Armavir sample, Armenia 2005: Women..... 251
Table B.8.2 Sampling errors for the Armavir sample, Armenia 2005: Men 252
Table B.9.1 Sampling errors for the Gegharkunik sample, Armenia 2005: Women 253
Table B.9.2 Sampling errors for the Gegharkunik sample, Armenia 2005: Men 254
Table B.10.1 Sampling errors for the Lori sample, Armenia 2005: Women..... 255
Table B.10.2 Sampling errors for Lori Armenia 2005: Men 256
Table B.11.1 Sampling errors for the Kotayk sample, Armenia 2005: Women 257
Table B.11.2 Sampling errors for the Kotayk sample, Armenia 2005: Men..... 258
Table B.12.1 Sampling errors for the Shirak sample, Armenia 2005: Women 259
Table B.12.2 Sampling errors for the Shirak sample, Armenia 2005: Men..... 260
Table B.13.1 Sampling errors for the Syunik sample, Armenia 2005: Women 261
Table B.13.2 Sampling errors for the Syunik sample, Armenia 2005: Men 262
Table B.14.1 Sampling errors for the Vayots Dzor, Armenia 2005: Women..... 263
Table B.14.2 Sampling errors for the Vayots Dzor sample, Armenia 2005: Men 264
Table B.15.1 Sampling errors for the Tavush sample, Armenia 2005: Women 265
Table B.15.2 Sampling errors for the Tavush sample, Armenia 2005: Men 266

APPENDIX C DATA QUALITY TABLES

Table C.1 Household age distribution..... 267
Table C.2.1 Age distribution of eligible and interviewed women..... 268
Table C.2.2 Age distribution of eligible and interviewed men 268
Table C.3 Completeness of reporting..... 269
Table C.4 Births by calendar years..... 270
Table C.5 Reporting of age at death in days..... 271
Table C.6 Reporting of age at death in months 272

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PREFACE

The 2005 Armenia Demographic and Health Survey (ADHS) was a nationally representative sample survey designed to provide information on population and health issues in Armenia. The ADHS was conducted by the National Statistical Service and the Ministry of Health of the Republic of Armenia during September-December 2005. ORC Macro provided technical support for the survey through the MEASURE DHS project. The MEASURE DHS project is sponsored by the United States Agency for International Development (USAID) to assist countries worldwide in obtaining information on key population and health indicators. USAID/Armenia provided funding for the survey. UNICEF/Armenia and UNFPA/Armenia supported the survey through in-kind contributions.

The purpose of the 2005 ADHS was to collect national and regional level data on fertility and contraceptive use, maternal and child health, adult health, and AIDS and other sexually-transmitted diseases. Thus, much of the information collected in the survey represents updated estimates of basic health and demographic indicators covered in the 2000 ADHS (NSS, MOH, and ORC Macro, 2001). The survey obtained detailed information on these issues from women of reproductive ages and, on certain topics, from men as well. Data are presented by region (marz) when sample size permits.

The survey findings provide estimates for a variety of demographic indicators. The 2005 ADHS results are intended to provide the information needed to evaluate existing social programs and to design new strategies for improving the health of and health services for the people of Armenia. The 2005 ADHS also contributes to the growing international database on demographic and health-related indicators.

SUMMARY OF FINDINGS

The Armenia Demographic and Health Survey (ADHS) is a nationally representative survey of 6,566 women and 1,447 men age 15-49. Survey fieldwork was conducted during the period of September to December 2005.

The ADHS was conducted by the National Statistical Service and the Ministry of Health of the Republic of Armenia. The MEASURE DHS Project provided technical support for the survey. The U.S. Agency for International Development (USAID)/Armenia provided funding, and the United Nations Children's Fund (UNICEF)/ Armenia and the UN Population Fund (UNFPA)/ Armenia supported the survey through in-kind contributions.

CHARACTERISTICS OF RESPONDENTS

Armenia is an ethnically homogeneous country; virtually all respondents are Armenian and reported that they are Christians. The majority, approximately 60 percent, live in urban areas. Yerevan accounts for more than one-third of all respondents. All households in Armenia have electricity and a majority of households have water piped into the residence, a flush toilet, a finished floor, and a color television.

All but a handful of women and men in the sample have attended school. Approximately 40 percent have reached only secondary school, one-quarter have reached secondary-special school, and one-quarter have attended university. Twenty-nine percent of women and 66 percent of men were employed in the 12 months prior to the survey.

FERTILITY

Fertility rates. A useful index of the level of fertility is the total fertility rate (TFR), which indicates the number of children a woman would have if she passed through the childbearing ages at the current age-specific fertility rates. For the three years preceding the survey, the survey estimate of the TFR was 1.7 children per woman. This is below replacement level.

The survey found that the TFR is only slightly lower in urban areas (1.6 children per woman) than in rural areas (1.8 children per woman).

Time trends. The total fertility rate of 1.7 is identical to the TFR measured in the 2000 ADHS for the three years preceding that survey, indicating no recent change in overall fertility levels.

Age at first birth. Research has shown that childbearing in the teenage years is associated with increased social and health problems for both the mother and her child. The survey found that only 2 percent of women age 15-19 had given birth. Moreover, almost all births to teenage women occurred at ages 18 and 19. Thus, the median age at initiation of childbearing in Armenia is about 22 years.

Birth intervals. Research has shown that children born soon after a previous birth, especially those born within two years of the previous birth, have an increased risk of morbidity and mortality. In Armenia, 32 percent of second and higher order births occur after a birth interval of less than two years. The proportion of closely spaced births declines as education of the mother increases.

Fertility preferences. Among currently married women, 71 percent reported that they either wanted no more children or were sterilized. Another 22 percent wanted another child, and 7 percent were infecund (unable to conceive) or undecided about having another child.

CONTRACEPTION

Knowledge and ever use. Knowledge of contraception is widespread in Armenia. Among married women, knowledge of at least one method is universal (99 percent). On average, married women reported knowing of six methods of contraception. Three-quarters (76 percent) of married women have used a method of contraception at some time.

Current use. Over half (53 percent) of married women reported that they were currently using a contraceptive method: 20 percent using modern methods and 34 percent using traditional methods. By far, the most commonly used method is withdrawal; more than half of all users (28 out of 53 percent) are using withdrawal. The second most common method—the IUD—is used by only 9 percent of married women.

Overall levels of contraceptive use are similar for women in urban and rural areas and across educational categories and wealth quintile (between 42 and 60 percent). Nevertheless, urban women and women with more education show distinctive behavior patterns by relying more on modern methods (the IUD and condom) and less on traditional methods (in particular, withdrawal).

Trends in current use. Use of contraception has declined from 61 percent of married women in the 2000 ADHS to 53 percent in 2005. Use of both modern and traditional methods has declined.

Method failure. A woman may discontinue use of contraception for many reasons, including the desire to have more children, health concerns, or lack of exposure to the risk of pregnancy. In Armenia, the single most prevalent reason for discontinuation is method failure, i.e, becoming pregnant while using a method. The method most commonly used in Armenia, withdrawal, has the second highest failure rate after periodic abstinence (rhythm). Twenty-one percent of women practicing withdrawal experience a contraceptive failure within 12 months of starting use.

Future use. Among married women who were not using contraception, 29 percent reported that they intended to use in the future. When asked which method they would prefer to use, approximately one-third of non-users said the IUD, while one-quarter said withdrawal and about one-fifth said condoms.

Source of supply. Most modern method users obtained their methods through the public sector (53 percent), primarily hospitals and polyclinics. Forty-two percent obtained their contraceptives from the private sector, primarily pharmacies.

Induced Abortion

In Armenia, as in all of the former Soviet Union, induced abortion has been a primary means of fertility control for many years.

Abortion rates. The use of abortion can be measured by the total abortion rate (TAR) which indicates the number of abortions a woman would have in her lifetime if she passed through her childbearing years at the current age-specific abortion rates. The survey estimate of the TAR indicates that a woman in Armenia will have an average of 1.8 abortions during her lifetime. This rate is considerably lower than the comparable rate in the 2000 ADHS of 2.6. Despite this decline, almost half (45 percent) of pregnancies end in an induced abortion.

Abortion differentials. The TAR is significantly higher in rural areas (2.2 abortions per woman) than in urban areas (1.5 abortions per woman).

Contraceptive failure and abortion. When formulating policies designed to improve the reproductive health of women, it is useful to know the contraceptive behavior of women who resort to abortion as a means of fertility control. Over half (52 percent) of all abortions were to women who were using contraception and experienced method failure, a large proportion of whom were using withdrawal. Greater access to and use of more reliable methods would reduce the incidence of abortion.

Childhood Mortality

Trends in childhood mortality. Data from the 2005 ADHS indicate that there has been a decline in childhood mortality over the recent five years. For example, infant mortality has declined from 36 deaths per 1,000 live births for the approximate period 1996-2000 to 26 for the period 2001-2005. There has been a similar decline in under-five mortality from 39 to 30 deaths per 1,000 births.

Differentials in infant mortality. The survey found levels of infant mortality to be slightly higher in rural areas than in urban areas. Infant mortality levels are also much higher among children of poorer women than among children of women in the higher wealth quintiles.

Maternal and Child Health and

NUTRITION

Antenatal care. Armenia has a well-developed health system with an extensive infrastructure of facilities that provide maternal care services. Overall, the levels of antenatal care and delivery assistance are high. Ninety-three percent of mothers receive antenatal care from professional health providers (doctors, nurses, and midwives). In urban areas, 94 percent of care is provided by doctors, as opposed to 83 percent in rural areas. Seven in ten pregnant women make four or more antenatal care visits, although there is a significant urban-rural differential.

In terms of content of care, almost all women said they were weighed, had their blood pressure tested and gave blood and urine specimens (98-99 percent); however less than half say that they were informed about pregnancy complications.

Delivery care. Overall, almost all births are delivered under the supervision of a trained medical professional (98 percent) and occur at health facilities (97 percent). Home deliveries are more common in Gegharkunik and Aragatsotn regions.

Childhood vaccinations. The health cards maintained at the health facilities are the primary source of vaccination data. Almost all children age 12-23 months have received vaccinations for BCG, DPT1 and polio 1. Coverage is also high for the second and third doses of both DPT and polio. Seventy-two percent of children age 12-23 months had received the MMR (measles, mumps, rubella) vaccination before the survey. Only 60 percent of children 12-23 months of age had received all the basic vaccinations (BCG, MMR, and three doses each of DPT and polio) at any time before the survey; however, since MMR is routinely given at 12 months of age, this may represent an underestimate of coverage. Nevertheless, there has been a sharp decline in coverage, from 76 percent of children in 2000 to 60 percent in 2005.

Treatment of diarrhea. The ADHS asked about the treatment of children who suffered from diarrhea during the two weeks preceding the survey. Overall, 65 percent of children under five with diarrhea in the two weeks before the survey were given either oral rehydration salts or increased fluids (oral rehydration therapy). For almost one-fifth of children with diarrhea, mothers reported that they engaged in the hazardous practice of curtailing fluid intake. On a more positive note, 70 percent of mothers who had a birth in the five years preceding the survey know about oral rehydration salts (ORS).

Breastfeeding. Ninety-seven percent of children born in the five years preceding the survey were breastfed at some time. Although the median duration of breastfeeding is 11 months, the durations of exclusive and predominant breastfeeding (breastfeeding plus plain water) are short (one month and three months, respectively).

Nutritional status. In the ADHS, the height and weight of children under five years of age were measured. These data are used to determine the nutritional status of children, i.e., the percentage of children who are stunted (measured in terms of height-for-age), wasted (weight-for-height), or underweight (weight-for-age). Stunting is a sign of chronic, long-term undernutrition; wasting is a sign of acute, short-term undernutrition; and underweight is a composite measure that takes into account both chronic and acute undernutrition.

In a well-nourished population of children, it is expected that slightly more than 2 percent of children will be stunted or wasted. In Armenia, 13 percent of children under age five are stunted and 5 percent are wasted. Overall, 4 percent of children are underweight.

There has been no change in the proportion of children stunted since 2000; however, there has been a slight increase in the proportions wasted (from 2 to 5 percent) and underweight (from 3 to 4 percent).

Anthropometric data were also collected from all women age 15-49. According to the findings of the ADHS, approximately four in ten Armenian women weigh more than they should: 27 percent are overweight and 16 percent are obese. There is a positive relationship between age and obesity: the prevalence of obesity, for example, increases from 2 percent among women age 15-19 to one-third of women age 40-49. More than half of women age 30 and older are either overweight or obese, a serious public health challenge for Armenia.

Anemia. Determining anemia levels among

women and their children under five was one component of the ADHS. Overall, 37 percent of children age 6-59 months have anemia: 17 percent have mild anemia, but 19 percent have moderate anemia and 1 percent have severe anemia. A comparison of data from the 2000 and 2005 ADHS surveys suggests that anemia rates among children have increased by 50 percent over the last five years, from 24 percent of children 6-59 months in 2000 to 37 percent in 2005. The increase is concentrated in Yerevan and Gegharkunik regions and it is possible that data collection problems may account for some of the implausible trend.

Similarly, the proportion of women with anemia appears to have doubled from 12 percent in 2000 to 25 percent in 2005. Again, the increase is concentrated in Yerevan and Gegharkunik. When these two regions are removed from the analysis, the increase in anemia among women is marginal.

HIV/AIDS and other Sexually Transmitted Infections

The currently low level of HIV infection in Armenia provides a unique window of opportunity for early targeted interventions to prevent further spread of the disease. However, the increases in the cumulative incidence of HIV infection suggest that this window of opportunity is rapidly closing.

Knowledge and attitudes. Almost all respondents reported that they have heard of HIV/AIDS and roughly 70-80 percent of women and men know about the three main ways to reduce its transmission, namely, abstinence, being faithful to one uninfected partner, and using condoms. Nevertheless, only about one-quarter of respondents have 'comprehensive' knowledge about HIV, i.e, they know that using condoms consistently and having one faithful partner can reduce the chance of getting HIV, that a healthy-looking person can have the AIDS virus, and that HIV cannot be transmitted by mosquito bites or by sharing food with someone who has AIDS.

Stigma surrounding AIDS is widespread in Armenia. Few women and men say they would be willing to care for a relative sick with AIDS in their own homes and even fewer say they would buy fresh vegetables from a shopkeeper who had the AIDS virus.

Sexual behavior. Only 12 percent of men and a negligible fraction of women reported having had more than one sexual partner in the 12 months before the survey and one-quarter of men reported having sex outside of a marital or cohabiting relationship (higher-risk sex).

Condom use. A large majority of men (76 percent) reported using a condom at the most recent higher risk sexual encounter. Only about two-thirds of youth age 15-24 said they knew a place where they could obtain a condom.

Adult Health

The major causes of death in Armenia are similar to those in industrialized countries (cardiovascular diseases, cancer, and accidents), but there is also a rising incidence of certain infectious diseases, such as tuberculosis.

Women's health. Less than half of all women have been seen by a gynecologist in the five years preceding the survey and only 30 percent of Armenian women had visited a gynecologist during the 12 months preceding the survey. The most common reason for a visit is for a routine examination or for maternal care, however, almost one-fifth are for abortions.

Only 20 percent of Armenian women know about breast self-examinations. Only 10 percent of women have performed a breast exam in the three months prior to the survey and only 1 percent had a breast exam from a health professional in the year prior to the survey. These data underscore the need to improve women's health services in Armenia.

Tuberculosis. Most men and women have heard of tuberculosis; however, only slightly over half of respondents correctly identify the mode of tuberculosis transmission (through the air when coughing). Almost 80 percent of women and men cite coughing as a symptom of tuberculosis.

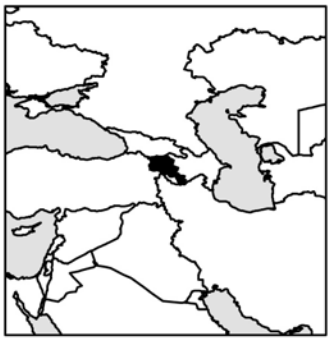
Eye care. Eight in ten women and men have never visited an eye doctor. Most of those who do get care, go to get glasses.

Smoking. Survey data show a slight decline in

the proportion of men age 15-49 who smoke, from 67 percent in 2000 to 64 percent in 2005. The proportion of women who report smoking remains negligible at 2 percent.

Hypertension. The 2005 ADHS included blood pressure measurement for consenting adults age 15-49. Results indicate that about one-quarter of adults in Armenia are classified as hypertensive. A very disturbing finding is that four out of five respondents with high blood pressure are unaware that they are hypertensive.

ARMENIA DHS 2005



INTRODUCTION 1

1.1 TERRITORY

The Republic of Armenia is a small, mountainous country, 90 percent of which is located more than 1,000 meters above sea level. The country is located in southwestern Asia, between the Caucasus and Near Asia (the area between the Kur and Araks rivers). The country is bordered by Georgia and Azerbaijan on the north and east, and by Turkey and Iran on the west and south. The area of the country is 29,743 square kilometers, 46.8 percent of which is agricultural land, 36.4 percent mountains and highlands, 11.2 percent forests, and 5.6 percent water surface. In Armenia, the largest lake is Lake Sevan, which has a surface area of 1,253 square kilometers. The longest river is the Araks.

The highest point in the country is the peak of Aragats (4,090 meters); the lowest point is the Debet River (390 meters). The longest distance between the northwest and the southeast is 360 kilometers, and the longest distance between west and east is 200 kilometers. The country is subdivided into 11 regions (marzes), which includes the region of Yerevan, the capital city of Armenia.

1.2 DEMOGRAPHIC CHARACTERISTICS

According to the most recent census, the population of Armenia is 3.2 million, of which 51.7 percent are female. The urban population consists of 64.1 percent of the total population.

Armenians are a mobile people, with approximately two-thirds of ethnic Armenians living in other countries. The exodus of Armenians began during the first World War, when the territory of Armenia was divided between the warring Ottoman and Russian Empires.

1.3 HEALTH CARE SYSTEM IN ARMENIA

Historical Background

The radical changes that have been taking place after the declaration of independence in Armenia could not help but affect the health system. The implementation of fundamental reforms in this important social area, the departure from the monopolistic state financing, the use of various sources of financing, and the transition to the self-management methods in the health sector brought to light the shortcomings remaining from the Soviet years.

The present health system of Armenia has inherited the positive and negative features of the Soviet health system. On the positive side, it incorporates a rather developed structure and network, and sufficient staffing. However, the system is largely focused on hospital care, as well as deficiencies in the primary health system and a generally low quality of medical care.

In the former Soviet Union, health care was highly centralized. Medical services were basically accessible for the whole population. After independence, the unfavorable socioeconomic and political situation brought forward the need for developing a program of radical reforms.

The system reforms initiated since the mid-1990s were based on the condition that health services could no longer be freely provided to the whole population. Thereafter, a majority of the population had

to pay the full cost of medical services. Although the government tried to provide free medical care to vulnerable groups of the population under state-guaranteed programs, the under-financing of the health sector implied that even the persons included in these groups had to make partial payments. Thus, the changes violated the principle of equity and caused concerns about the deterioration of the population's health.

Basic Principles of Health Policy

Armenia began reforming the health care sector at an early stage following independence. Recognizing health and health care as a fundamental human right, the strategy identified the major components of health care reform to involve a reorientation of health services towards a balanced partnership between primary and hospital care; the promotion of health and prevention of disease through tackling the determinants of health; and a shift from the narrow biomedical model towards a social, multiprofessional, and multisectoral approach to health and health care.

The current long-term directions and objectives include a combination of the following characteristics in service organization and delivery:

- Increase accessibility and utilization, especially at the primary health care level;
- Improve (refine) the system's organizational structure and governance;
- Introduce evidence-based clinical standards and implement continuous quality improvement programs;
- Enhance consumers' participation and responsibility in the clinical decisionmaking process;
- Integrate patient safety programs and medical error management into the system; and
- Assure rational linkages between the different levels of health care delivery.

A population's health status is a major determinant of human development, providing the ground for promoting economic and social growth of the society. Armenia has entered the new millennium with an orientation to the internationally recognized policies and strategies, including those in the health sector. Armenia recognizes basic health values, which include:

- Health as a basic human right;
- Equity in health issues and solidarity in the actions aimed at the health standards; and
- Involvement and responsibility of individuals and institutions in the continuous development of the health system.

In conformity with the said values, Armenia identifies the following internationally recognized health policy objectives:

- Promotion and protection of people's health over the whole life span; and
- Reduction of the incidence of the leading diseases and injuries and mitigation of the suffering caused by them.

The main directions of health sector development in Armenia arise from the basic provisions of the Government's Action Plan and the document "Health for All in the 21st Century" adopted by the World Health Organization. The main tasks of the health system reforms are—given available resources and potential—ensuring citizens' constitutional right to health care, improving access to state-guaranteed free medical care, and initiating targeted balancing of the social and market values in the sector. In order to ensure the hygiene and epidemiological security of the population, it is planned to intensify activities aimed at prevention of infectious and mass non-infectious diseases, as well as the formation, strengthening, and further development of public health.

It is known that the number, capacity, and staffing potential of health facilities currently operating in the system essentially exceed the actual demand for medical care, including the demand under state-guaranteed programs. As a result, the resources allocated from the state budget to these programs are channeled not to ensuring quality health care, but to the maintenance of the whole system, including the payment of salaries of the staff with an inadequate workload. At that, these resources barely cover the current expenses of the medical care providers and are insufficient for providing the necessary pharmaceutical and technological supply or for increasing the salaries of the medical staff. Pursuant to government decrees, the health system optimization will continue in the regions and the city of Yerevan. The long-term continuous optimization programs provide for structural reforms and rationalization of the system, accurate assessment of health care needs, identification and rationing of the required capacities through the consolidation of premises and services, reorganization of ineffective health organizations, and redistribution of vacated capacities.

Further reforms of the health system financing mechanisms will be aimed at the reduction of the unofficial turnover, introduction of objective criteria for counterpart payments, clinical-economic standards, and reimbursement for provided services. The development of the hospital care system will proceed with short- and long-term planning aimed at introducing specific financing mechanisms, improving cost-efficiency, reducing excess capacities, and ensuring the quality of medical care. In order to ensure the provision of high-quality, accessible, and targeted health care to the population and to improve cost-efficiency, it is planned to practice selection-based placement of the state order.

The issue of medical insurance is one of the most important components of health system reforms; at that, it should be viewed not only as a means to involve additional sources of financing, but also to ensure better access to health care, to instill the principles of social equity, to enhance the targeted use of resources, and to improve the efficiency of medical services. In order to provide the legislative framework for the introduction and development of the mandatory medical insurance system, the Law on Mandatory Medical Insurance is to be adopted. The introduction of medical insurance is based on the "Concept Paper on Introduction of Medical Insurance" developed by Ministry of Health (MOH) and approved by the government.

In the arrangement of medical care, it is envisaged to essentially enhance the role of the primary unit. The main focus in the development of the ambulatory-polyclinic system, which appears to be the most important unit in primary care, is on forming the family medicine system and ensuring an adequate volume and quality of free ambulatory-polyclinic services through the use of borrowed and direct budgetary resources.

The main direction in the drug and technological policy will be the improvement of their accessibility, safety, and rational use. Actions will be taken for improving the state system of drug quality assurance, introducing prescription forms, and ensuring affordability of drug prices. Medical equipment acquired through budgetary allocations and international grants will first be provided to improve the technical instrumentation of the primary care unit, with preference given to medical institutions in the regions, as well as to the technical reinforcement—on a competitive basis—of the second- and third-level medical institutions providing really accessible medical care to the vulnerable groups of the population.

In relation to the further improvement of the medical education and scientific systems, it is planned to contract the volume of admissions to basic medical education and to improve the postgraduate education unit through partially transferring the educational process to the regional training centers.

Within the framework of international collaboration in the health sector, it is planned to channel the international collaboration programs to the improvement of the population's health, to further coordinate

the gradually decreasing humanitarian assistance, and to encourage foreign investments in the system including those for the instrumentation of modern technologies.

The next 10-12 years should be viewed as an important period from the perspective of adjusting the situation created in the health sector and assuring the prerequisites for the future development of the system.

Health Care Financing

Historically, the state budget was the primary funding source for health care. Currently, the health system is financed both from local and international sources. The main local sources are the state budget and direct out-of-pocket payments by the population. International financing sources are general humanitarian donations and project-specific support.

The state budget remains the main formal source of financing. State funds are derived from general tax revenues. State health expenditures are not sufficient to support the core system and to meet the health needs of the population. In 2000, actual public health care expenditure amounted to only 4.4 percent of the state budget, about 1.0 percent of the gross domestic product (GDP). However, this share has since risen to 7.4 percent of the state budget in 2005 (1.4 percent of GDP). This increase has been attributed to the strengthening of sustainable budgetary policy introduced by the government, as well as a wider public acceptance of poverty reduction and related programs that are directed towards improving health as national priority. The 2005 health budget is projected to reach 8.2 percent of the total state budget and to rise to 10 percent by 2008 and 12 percent by 2015 (Ministry of Health, 2004). This trend indicates that health has become a higher priority in the allocation of funds across sectors of the state budget. However, state allocations are still too low to meet the costs of the benefits package.

Official external health financing sources include humanitarian aid (donations of medical supplies and equipment) as well as credit and grant programs with or in coordination with the MOH. Grants and credit projects financed by foreign governments and international and multilateral organizations are now the dominant form of external support in immunization, maternal and child health, reproductive health, adolescent health, iodine deficiency, and HIV/AIDS prevention that emphasizes prevention of mother-to-child transmission of HIV.

Family Planning Policies

The main objectives of family planning programs in Armenia are to ensure safe motherhood among women of reproductive age, to decrease health risks during pregnancy, and to reduce reliance upon abortion as a method of family planning while promoting more modern and effective methods of contraception. In Armenia, abortion is a common method used to terminate unwanted pregnancies. Although originally outlawed in 1920, abortion was legalized by the Soviet Union in 1955 because of increases in mortality associated with illegal abortions. Today, abortion is legal during the first 12 weeks of pregnancy. In certain cases, an abortion may be performed until 22 weeks of gestation if there is medical or social justification. Abortions are performed in hospitals by trained medical staff. Despite decreases in recent years, the incidence of abortion remains an important issue for Armenian health care because of its negative effects on women's health.

Although contraceptives are distributed free of charge, health consultations are not free. For many years, oral contraceptives were not commonly available in Armenia because of the order "On the Side Effects and Complications of Oral Contraceptives" enacted by the MOH of the former Soviet Union in 1974. This document in effect banned the distribution and use of oral contraceptives. Currently, obtaining oral contraceptives or an abortion is not a problem in Armenia. In 2002 the Parliament of Armenia

adopted a new law on reproductive health and reproductive human rights. According to this law, use of contraception (including oral contraceptives) is legal in Armenia. Also, in 2005 the Government of Armenia proposed a law on abortion. According to this law, abortion is legal when carried out with drugs.

1.4 OBJECTIVES AND ORGANIZATION OF THE SURVEY

The 2005 Armenia Demographic and Health Survey (2005 ADHS) is the second in a series of nationally representative sample surveys designed to provide information on population and health issues in Armenia. As in the 2000 ADHS, the primary goal of the 2005 survey was to develop a single integrated set of demographic and health data pertaining to the population of the Republic of Armenia. In addition to integrating measures of reproductive, child, and adult health, another feature of the 2005 ADHS survey is that the majority of data are presented at the marz (region) level.

The 2005 ADHS was conducted by the National Statistical Service (NSS) and the MOH of the Republic of Armenia from September through December 2005. ORC Macro provided technical support for the survey through the MEASURE DHS project. MEASURE DHS is a worldwide project, sponsored by the United States Agency for International Development (USAID), with a mandate to assist countries in obtaining information on key population and health indicators. USAID/Armenia provided funding for the survey, while the United Nations Children's Fund (UNICEF)/Armenia and the United Nations Population Fund (UNFPA)/Armenia supported the survey through in-kind contributions.

The 2005 ADHS collected national- and regional-level data on fertility and contraceptive use, maternal and child health, adult health, and HIV/AIDS and other sexually transmitted diseases. The survey obtained detailed information on these issues from women of reproductive age and, on certain topics, from men as well. Data are presented by marz wherever sample size permits.

The 2005 ADHS results are intended to provide the information needed to evaluate existing social programs and to design new strategies for improving the health of and health services for the people of Armenia. The 2005 ADHS also contributes to the growing international database on demographic and health-related variables.

Sample Design and Implementation

The sample was designed to permit detailed analysis—including the estimation of rates of fertility, infant/child mortality, and abortion—for the national level, for Yerevan, and for total urban and total rural areas separately. Many indicators can also be estimated at the regional (marz) level.

A representative probability sample of 7,565 households was selected for the 2005 ADHS sample. The sample was selected in two stages. In the first stage, 308 clusters were selected from a list of enumeration areas in a subsample from a master sample that was designed from the 2001 Population Census. In the second stage, a complete listing of households was carried out in each selected cluster. Households were then systematically selected for participation in the survey.

All women age 15-49 who were either permanent residents of the households in the 2005 ADHS sample or visitors present in the household on the night before the survey were eligible to be interviewed. Interviews were completed with 6,566 women. In addition, in a subsample of one-third of all 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 1,447 men.

Questionnaires

Three questionnaires were used in the 2005 ADHS: a Household Questionnaire, a Women's Questionnaire, and a Men's questionnaire. The Household and Individual Questionnaires were based on model survey instruments developed in the MEASURE DHS program and on questionnaires used in the 2000 ADHS. The model questionnaires were adapted for use by experts from the NSS and MOH. Input was also sought from a number of non-governmental organizations. The questionnaires were developed in English and translated into Armenian. The Household and Individual Questionnaires were pretested in June 2005.

The Household Questionnaire was used to list all usual members of and visitors to the selected households and to collect information on the socioeconomic status of the household. The first part of the Household Questionnaire collected information on the age, sex, educational attainment, and relationship to the household head of each household member or visitor. This information provides basic demographic data for Armenian households. It also was used to identify the women and men who were eligible for the individual interview (i.e., women and men age 15-49). In the second part of the Household Questionnaire, there were questions on housing characteristics (e.g., flooring material, source of water, type of toilet facilities), on ownership of a variety of consumer goods, and other questions relating to the socioeconomic status of the household. In addition, the Household Questionnaire was used to record height and weight measurements of women, men, and children under age five; hemoglobin measurement of women and children under age five; and blood pressure measurement of women and men.

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

- Background characteristics
- Pregnancy history
- Antenatal, delivery, and postnatal care
- Knowledge, attitudes, and use of contraception
- Reproductive and adult health
- Health care utilization
- Vaccinations, birth registration, and health of children under age five
- Episodes of diarrhea and respiratory illness of children under age five
- Breastfeeding and weaning practices
- Marriage and recent sexual activity
- Fertility preferences
- Knowledge of and attitude toward HIV/AIDS and other sexually transmitted infections

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

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

Training of Field Staff

The main survey training, which was conducted by the NSS, was held during a three-week period in August and was attended by all supervisors, field editors, interviewers, and quality control personnel. The training included lectures, demonstrations, practice interviewing in small groups, and examinations. The health technicians, who were recruited by the MOH, were trained separately during the same period. They received training in anthropometric measurement, anemia testing, and blood pressure measurement. All field staff participated in four days of field practice.

Fieldwork and Data Processing

Thirteen teams collected the survey data; each team consisted of four female interviewers, a male interviewer, a field editor, and a team supervisor. A health technician was also assigned to each team. Fieldwork began in early September 2005 and was completed by early December 2005. Senior DHS technical staff visited teams regularly to review the work and monitor data quality.

The processing of the 2005 ADHS results began shortly after the fieldwork commenced. Completed questionnaires were returned regularly from the field to NSS headquarters in Yerevan, where they were entered and edited by data processing personnel who were 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 were received, several office editors, 10 data entry operators, and a secondary editor. The concurrent processing of the data was an advantage because the senior ADHS technical staff were able to advise field teams of problems detected during the data entry. In particular, tables were generated to check various data quality parameters. As a result, specific feedback was given to the teams to improve performance. The data entry and editing phase of the survey was completed in January 2006.

1.5 RESPONSE RATES

Table 1.1 presents household and individual response rates for the survey. A total of 7,565 households were selected for the sample, of which 7,003 were occupied at the time of fieldwork. The main reason for the difference is that some of the dwelling units that were occupied during the household listing operation were either vacant or the household was away for an extended period at the time of interviewing. Of the occupied households, 96 percent were successfully interviewed.

In these households, 6,773 women were identified as eligible for the individual interview, and interviews were completed with 97 percent of them. Of the 1,630 eligible men identified, 89 percent were successfully interviewed. Response rates are almost identical in urban and rural areas.

Table 1.1 Results of the household and individual interviews

Number of households and respondents selected, number of interviews, and response rates, according to residence, Armenia 2005

	Residence		
Result	Urban	Rural	Total
Household interviews			
Households selected	5,446	2,119	7,565
Households occupied	5,032	1,971	7,003
Households interviewed	4,806	1,901	6,707
Household response rate[1]	95.5	96.4	95.8
Individual interviews: women			
Number of eligible women	4,732	2,041	6,773
Number of eligible women interviewed	4,592	1,974	6,566
Eligible women response rate[2]	97.0	96.7	96.9
Individual interviews: men			
Number of eligible men	1,126	504	1,630
Number of eligible men interviewed	999	448	1,447
Eligible men response rate[2]	88.7	88.9	88.8

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

HOUSEHOLD POPULATION AND HOUSING CHARACTERISTICS 2

This chapter provides a summary of the demographic and socioeconomic characteristics of the household population in the 2005 ADHS, including age, sex, place of residence, educational status, and household characteristics. Information collected on the characteristics of the households and respondents is important in understanding and interpreting the findings of the survey and also provides some indication of the representativeness of the survey.

A household is defined as a person or group of related and unrelated persons who live together in the same dwelling unit(s) or in connected premises, who acknowledge one adult member as head of the household, and who have common arrangements for cooking and eating their food. The questionnaire for the 2005 ADHS distinguishes between the de jure population (persons who usually live in a selected household) and the de facto population (persons who stayed the night before the interview in the household). According to the 2005 ADHS data, the differences between these populations are small. Tabulations for the household data presented in this chapter are primarily based on the de facto population.

Due to 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.

2.1 CHARACTERISTICS OF THE POPULATION

Age-Sex Structure

Age and sex are important demographic variables and form the primary basis of demographic classification in vital statistics, censuses, and surveys. They are also important variables in the study of mortality, fertility, and nuptiality. Table 2.1 presents the percent distribution of the de facto population by five-year age groups, according to urban-rural residence and sex. The information is used to construct the population pyramid shown in Figure 2.1.

The total de facto population was 24,443. The data show that in Armenia there are more women than men; 54 percent of the population is female. The gender disparity is more pronounced in urban areas than in rural areas (81 and 88 men per 100 women, respectively). Among the youngest age groups, however, there are more males than females. It is not until the 15-19 age cohort that women outnumber men (Figure 2.1). Overall, this imbalance in the sex ratio among the working age population strongly suggests that the outmigration from Armenia has been disproportionately selective of men.

About two-thirds of the population is in the 15-64 age group, also referred to as the economically active population. The proportion of the population falling within this age group is significantly higher in urban areas (67 percent) than in rural areas (61 percent). This difference may be largely attributed to high levels of rural-urban migration, especially among the young in search of jobs and higher education. The disproportionately low percentage of the population in the 60-64 age group is probably due to low levels of fertility during World War II (Figure 2.1).

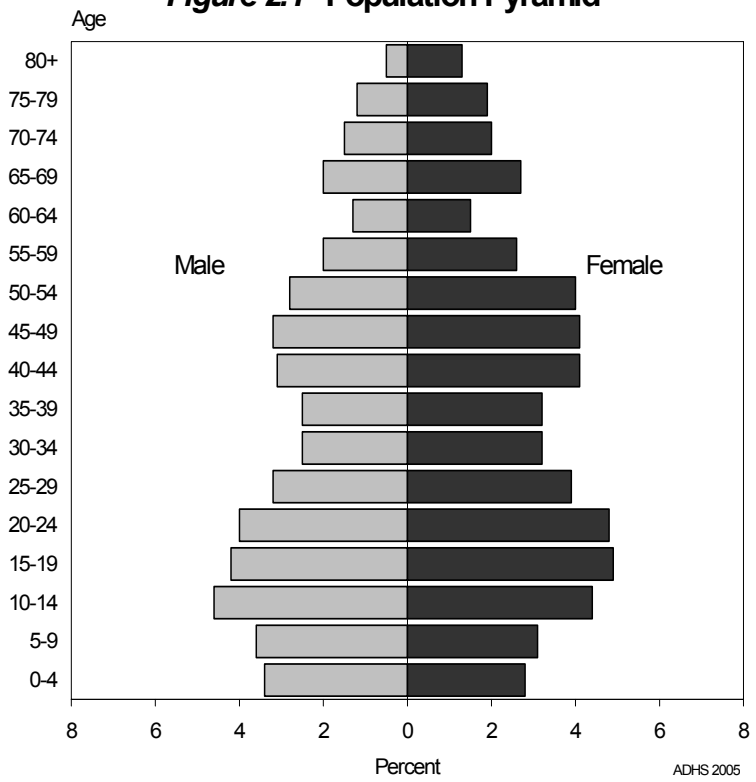
Table 2.1 Household population by age, sex, and residence

Percent distribution of the de facto household population by five-year age group, according to sex and residence, Armenia 2005

	Urban			Rural			Total		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	6.8	5.4	6.1	8.5	4.6	6.4	7.5	5.1	6.2
5-9	7.1	4.7	5.8	9.0	7.4	8.1	7.9	5.7	6.7
10-14	8.9	7.3	8.0	12.0	9.3	10.5	10.1	8.1	9.0
15-19	9.1	8.6	8.8	9.5	9.5	9.5	9.3	9.0	9.1
20-24	9.0	9.1	9.1	8.3	8.2	8.2	8.7	8.8	8.8
25-29	7.8	7.4	7.6	5.9	6.8	6.4	7.1	7.2	7.2
30-34	5.9	6.1	6.0	4.6	5.3	5.0	5.4	5.8	5.6
35-39	5.4	5.7	5.6	5.5	6.1	5.8	5.5	5.8	5.7
40-44	6.5	7.2	6.9	7.4	8.2	7.8	6.9	7.6	7.2
45-49	7.1	7.9	7.5	6.7	6.8	6.7	6.9	7.5	7.2
50-54	6.8	8.0	7.4	5.0	6.4	5.8	6.1	7.4	6.8
55-59	5.2	5.5	5.4	3.2	3.7	3.5	4.4	4.8	4.7
60-64	3.3	3.0	3.1	2.0	2.1	2.1	2.8	2.7	2.7
65-69	5.0	4.7	4.8	3.7	5.4	4.6	4.5	5.0	4.8
70-74	2.7	3.6	3.2	4.2	3.7	3.9	3.3	3.7	3.5
75-79	2.4	3.2	2.8	3.2	4.0	3.6	2.7	3.5	3.1
80 +	1.0	2.3	1.7	1.2	2.5	1.9	1.1	2.4	1.8
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number[1]	6,824	8,392	15,222	4,310	4,912	9,221	11,134	13,304	24,443

[1]Total includes five persons whose sex was not stated.

Figure 2.1 **Population Pyramid**



The data further indicate that 22 percent of the population is under 15 years of age. The proportion under 15 is larger in the rural areas than in the urban areas (25 and 20 percent, respectively). This is evidence of higher fertility in the rural areas (see Chapter 4). The percentages of the 10-14 and 15-19 year-old cohorts are larger than younger age cohorts, which may largely be due to the fertility peaks of both 1986 and 1990-1991—the second of which was the so-called "compensation period" following the earthquake of 1988.

Household Composition

Table 2.2 presents the percent distribution of households in the 2005 ADHS sample by sex of the head of the household and by household size for urban and rural areas and mean size of household. These characteristics are important because they are often associated with differences in household socioeconomic levels. For example, female-headed households are frequently poorer than households headed by males. In addition, the size and composition of the household affects the allocation of financial and other resources among household members, which in turn influences the overall well-being of these individuals. Household size is also associated with crowding in the dwelling, which can lead to unfavorable health conditions.

In general, heads of household in Armenia are male (64 percent). This is lower than that recorded in the 2000 ADHS (71 percent). Households in the urban areas are more likely than in rural areas to be headed by a woman (37 percent compared with 33 percent). The average household size in Armenia is 3.8 persons, compared with 4.3 persons in 2000. The average household size in rural areas is much larger than in urban areas (4.2 compared with 3.5 members). The increase over time in the proportion of female-headed households and the smaller average household size would be consistent with continued outmigration, particularly of men.

Table 2.2 Household composition

Percent distribution of households by sex of head of household and by household size, according to residence, Armenia 2005

	Residence		
Characteristic	Urban	Rural	Total
Sex of head of household			
Male	62.6	66.9	64.1
Female	37.4	33.1	35.9
Total	100.0	100.0	100.0
Number of usual members			
1	14.5	10.3	13.1
2	17.9	14.4	16.7
3	17.4	11.3	15.3
4	22.1	19.6	21.3
5	13.4	18.0	14.9
6	9.8	14.8	11.5
7	3.0	7.5	4.5
8	1.2	2.7	1.7
9+	0.8	1.4	1.0
Total	100.0	100.0	100.0
Number of households	4,429	2,278	6,707
Mean size	3.5	4.2	3.8

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

Children's Living Arrangements and Orphanhood

Detailed information on living arrangements and orphanhood for children under 18 years of age is presented in Table 2.3. Of the 6,903 children under age 18 recorded in the 2005 ADHS, four in five live with both parents, 16 percent live with their mother only, 1 percent live with their father only, and 2 percent live with neither of their natural parents.

The table also provides data on the extent of orphanhood, that is, the proportion of children who have lost one or both parents. Three percent of children under 18 years have lost their fathers. Very few children have lost their mothers or both parents.

Table 2.3 Children's living arrangements and orphanhood

Percent distribution of de jure children under age 18 by living arrangements and survival status of parents according to background characteristics, Armenia 2005

Background characteristic	Living with both parents	Living with mother but not father		Living with father but not mother		Not living with either parent				Missing information on father/mother	Total	Number of children
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Only father alive	Only mother alive	Both dead			
Age												
<2	87.8	11.5	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.3	100.0	659
2-4	87.1	11.2	0.9	0.0	0.0	0.4	0.0	0.0	0.0	0.3	100.0	867
5-9	82.8	13.6	1.6	0.4	0.3	0.8	0.1	0.1	0.0	0.4	100.0	1,619
10-14	78.2	15.0	2.9	0.9	0.6	1.5	0.1	0.0	0.0	0.7	100.0	2,212
15-17	72.2	14.5	4.7	0.5	1.5	3.5	0.1	0.0	0.3	2.6	100.0	1,547
Sex												
Male	80.1	14.2	2.5	0.5	0.6	1.1	0.0	0.0	0.1	0.9	100.0	3,641
Female	79.8	13.3	2.5	0.6	0.6	2.0	0.1	0.1	0.1	1.1	100.0	3,260
Residence												
Urban	78.8	14.2	2.4	0.6	0.4	2.1	0.0	0.1	0.1	1.3	100.0	3,941
Rural	81.5	13.2	2.7	0.4	0.8	0.8	0.1	0.0	0.1	0.5	100.0	2,962
Region												
Yerevan	78.7	13.9	2.1	0.7	0.2	2.2	0.0	0.1	0.1	2.0	100.0	2,230
Aragatsotn	87.6	6.7	3.5	1.0	0.0	0.6	0.3	0.0	0.0	0.1	100.0	350
Ararat	82.4	8.0	5.5	0.9	2.4	0.5	0.1	0.0	0.1	0.2	100.0	615
Armavir	86.2	10.1	0.8	0.5	0.3	1.5	0.3	0.0	0.0	0.3	100.0	687
Gegharkunik	65.7	31.1	1.3	0.1	0.7	0.8	0.0	0.0	0.0	0.3	100.0	522
Lori	84.4	9.5	2.0	1.0	1.0	1.4	0.0	0.0	0.0	0.7	100.0	554
Kotayk	82.6	10.7	2.5	0.2	0.6	2.2	0.0	0.0	0.3	0.9	100.0	569
Shirak	73.4	21.4	2.9	0.0	0.4	1.1	0.0	0.0	0.4	0.3	100.0	634
Syunik	86.4	7.6	3.5	0.0	0.2	1.3	0.4	0.0	0.0	0.7	100.0	304
Vayots Dzor	88.5	3.1	5.0	0.0	0.8	0.7	0.0	0.0	0.0	1.8	100.0	119
Tavush	77.2	18.6	2.3	0.3	0.2	1.2	0.1	0.0	0.0	0.2	100.0	320
Wealth quintile												
Lowest	79.9	13.2	3.8	0.3	1.1	1.1	0.2	0.0	0.0	0.4	100.0	1,613
Second	78.0	16.8	2.0	0.6	0.7	1.0	0.0	0.0	0.2	0.7	100.0	1,425
Middle	77.0	15.9	2.2	0.5	0.2	2.4	0.1	0.0	0.3	1.5	100.0	1,291
Fourth	80.0	13.0	2.8	0.3	0.3	2.3	0.0	0.1	0.0	1.1	100.0	1,324
Highest	85.5	9.6	1.4	0.9	0.3	1.1	0.0	0.0	0.0	1.2	100.0	1,250
Total <15	82.2	13.5	1.9	0.5	0.3	1.0	0.1	0.0	0.0	0.5	100.0	5,356
Total <18	80.0	13.8	2.5	0.5	0.6	1.5	0.1	0.0	0.1	0.9	100.0	6,903

Note: Total includes two children (weighted) with missing information on sex. Table is based on de jure members, i.e., usual residents.

Differentials in fosterhood and orphanhood by background characteristics are not large. As expected, older children are more likely than younger children to be fostered and orphaned; older children are less likely than younger children to live with both parents and more likely than younger children to have lost one or both parents. Small differences in living arrangements are found between rural and urban children. However, Vayots Dzor and Aragatsotn have the highest proportion of children living with both parents (89 percent and 88 percent, respectively), while Gegharkunik has the lowest (66 percent). Table 2.3 shows that children's living arrangements have no specific pattern according to the household wealth index.

Table 2.3 also presents the extent of orphanhood among children under age 15 to allow comparison with data from the 2000 ADHS. There has been a shift in the proportions of children under 15 by their living arrangements since 2000. Overall, the proportion of children under 15 living with both parents has declined from 90 percent in 2000 to 82 percent in 2005. This is due to a substantial increase in the proportion of children who live only with their mothers, but whose fathers are alive (from 5 percent to 14 percent). This trend is particularly pronounced in Gegharkunik, Shirak, and Yerevan regions. These areas are also subject to high male migration away from home.

Education

The educational attainment of household members is an important determinant of their opportunities and behaviors. Many phenomena such as use of health facilities, reproductive behavior, health of children, and proper hygienic habits are associated with the educational level of household members, especially women.

The school system in Armenia has three levels. The first level, primary school, consists of grades one through three for students age 7-9.[1] The second level, or middle school, consists of grades 4-8 for students age 10-14. The first two levels together are called general basic education and are compulsory. The third level, or high school, comprises grades 9 and 10. The three levels together (primary school plus middle school plus high school) are referred to as a full general secondary education.

Students who have completed a minimum of eight grades may enroll in specialized secondary education. There are two tracks within specialized secondary education. The first track consists of professional-technical institutions that train students in a variety of specializations. Students who have completed at least primary and middle school are eligible for this secondary-special track. The second track prepares specialists with mid-level qualifications, such as teachers, midwives, and mechanics. This track can be completed in two years by students who have completed the tenth grade, or it can be completed in four years by students who completed the eighth grade.

University and postgraduate education prepares higher level specialists. Students who complete a full general secondary education may enroll in university.

Tables 2.4.1 and 2.4.2 present information on the educational attainment of the Armenian population age six and over. Virtually all Armenians have gone to school. The median number of years of schooling is 9.5 years for men and 9.8 years for women. The proportion of the population with no education is low (less than 2 percent), with the highest levels being among those age six to nine (reflecting some who have not yet started school) and those 65 years and older. Individuals residing in urban areas have significantly higher levels of university education than those in rural areas. One in three individuals

[1] Since 2005, according to law children are allowed to enter school starting at 6 years and 6 months.

living in the capital city of Yerevan has attended university. Wealth status has a strong positive relationship with education; 45 percent of men in the highest wealth quintile have at least some university education, compared with 4 percent of men in the lowest quintile. The corresponding proportions for women are 42 percent and 4 percent, respectively.

Table 2.4.1 Educational attainment of the household population: Male

Percent distribution of the de facto male household population age six and over by highest level of schooling attended or completed, median number of years completed, and percentage with general basic and general secondary completed, according to background characteristics, Armenia 2005

Background characteristic	Highest level of schooling attended						Total	Median number of years of schooling	General basic completed[1]	General secondary completed[2]	Number of men
	No education	Primary (1-3)	Middle (4-8)	High school (9-10)	Specialized secondary	Higher					
Age											
6-9	7.6	92.0	0.5	0.0	0.0	0.0	100.0	0.7	0.0	0.0	725
10-14	0.5	12.3	86.7	0.2	0.2	0.0	100.0	4.9	6.7	0.2	1,120
15-19	0.9	0.3	30.5	44.4	5.0	19.0	100.0	8.9	95.9	46.6	1,032
20-24	0.5	0.7	17.2	40.0	12.1	29.5	100.0	9.8	97.4	81.2	971
25-29	0.0	0.3	16.5	40.0	14.8	28.4	100.0	9.8	99.1	82.7	790
30-34	0.5	0.0	9.0	31.3	26.7	32.5	100.0	11.6	99.0	90.5	600
35-39	0.2	0.0	9.1	35.5	34.1	21.1	100.0	11.2	99.6	90.6	610
40-44	0.4	0.0	9.4	32.1	34.7	23.4	100.0	11.4	98.5	90.0	764
45-49	0.2	0.2	9.9	33.2	32.2	24.5	100.0	11.4	98.6	89.7	774
50-54	0.0	0.3	8.9	37.0	31.5	22.4	100.0	11.2	98.5	90.8	677
55-59	0.5	0.4	10.2	32.1	26.5	30.3	100.0	11.6	98.9	89.0	492
60-64	1.0	1.2	19.5	33.6	21.4	23.3	100.0	9.9	89.6	77.8	310
65+	3.3	3.4	35.9	23.9	13.9	19.6	100.0	9.4	71.8	56.9	1,287
Residence											
Urban	0.8	7.5	19.9	26.4	18.6	26.8	100.0	9.8	81.4	69.5	6,270
Rural	2.1	10.2	31.7	31.9	15.2	8.8	100.0	9.1	71.2	53.3	3,882
Region											
Yerevan	0.6	7.3	17.7	24.0	17.3	33.0	100.0	10.0	83.2	72.4	3,657
Aragatsotn	2.4	10.6	22.7	28.0	26.2	10.2	100.0	9.5	74.5	61.8	462
Ararat	1.2	8.0	29.0	41.1	12.6	8.1	100.0	9.3	77.7	59.4	865
Armavir	1.9	8.6	34.5	28.4	14.8	11.9	100.0	9.1	71.6	52.5	903
Gegharkunik	2.1	11.9	27.7	30.1	16.2	11.9	100.0	9.2	71.4	55.2	608
Lori	2.2	10.1	24.9	28.5	21.1	13.2	100.0	9.4	73.1	60.3	795
Kotayk	1.5	8.7	25.4	32.2	17.3	14.9	100.0	9.4	77.7	61.8	852
Shirak	2.2	7.8	31.6	28.0	15.0	15.4	100.0	9.2	70.5	55.3	883
Syunik	0.2	7.7	22.2	27.8	26.8	15.2	100.0	9.7	81.1	66.9	496
Vayots Dzor	1.8	7.7	26.5	41.8	13.4	8.8	100.0	9.3	75.8	59.6	186
Tavush	0.5	12.8	31.9	28.0	13.4	13.5	100.0	9.1	70.9	52.9	444
Wealth quintile											
Lowest	2.9	11.8	39.7	29.1	12.3	4.2	100.0	7.9	65.4	43.6	2,027
Second	1.4	9.5	27.6	35.3	17.0	9.2	100.0	9.3	75.4	58.5	1,997
Middle	1.2	6.1	22.9	32.5	22.5	14.8	100.0	9.6	80.5	67.2	1,987
Fourth	0.6	8.3	19.0	27.0	19.3	25.7	100.0	9.8	81.4	69.3	2,072
Highest	0.3	7.1	13.2	18.9	15.6	45.0	100.0	11.7	84.5	77.7	2,068
Total	1.3	8.6	24.4	28.5	17.3	19.9	100.0	9.5	77.5	63.3	10,152

[1] Completed grade 8 or higher
[2] Defined as having completed high school (grade 10) or having attended either specialized secondary or higher. The proportions may be slightly overestimated because some students enroll in specialized secondary after completing only grade 8.

Table 2.4.2 Educational attainment of the household population: Female

Percent distribution of the de facto female household population age six and over by highest level of schooling attended or completed, median number of years completed, and percentage with general basic and general secondary completed, according to background characteristics, Armenia 2005

Background characteristic	Highest level of schooling						Total	Median number of years of schooling	General basic completed[1]	General secondary completed[2]	Number of women
	No education	Primary (1-3)	Middle (4-8)	High school (9-10)	Specialized secondary	Higher					
Age											
6-9	11.1	88.9	0.1	0.0	0.0	0.0	100.0	0.8	0.0	0.0	655
10-14	0.5	11.1	88.0	0.2	0.1	0.1	100.0	5.0	9.3	0.2	1,072
15-19	0.3	0.2	19.5	42.3	17.2	20.6	100.0	9.3	98.1	61.1	1,192
20-24	0.3	0.1	7.3	29.0	30.4	32.9	100.0	11.8	99.3	92.0	1,171
25-29	0.2	0.3	7.4	36.2	28.1	27.8	100.0	11.4	99.1	90.7	958
30-34	0.1	0.0	4.4	35.8	32.6	27.1	100.0	11.5	99.4	94.9	772
35-39	0.8	0.0	4.3	35.3	35.7	23.3	100.0	11.5	98.5	94.1	777
40-44	0.2	0.7	3.6	40.4	36.1	19.0	100.0	11.2	99.1	95.4	1,005
45-49	0.0	0.5	4.8	36.4	39.2	19.0	100.0	11.3	99.0	94.5	994
50-54	0.4	0.4	6.3	32.9	37.5	22.2	100.0	11.5	98.2	92.5	985
55-59	0.0	0.5	11.0	32.4	29.5	26.7	100.0	11.6	97.8	88.0	645
60-64	0.5	0.4	19.4	36.2	23.9	19.6	100.0	9.8	91.2	79.6	357
65+	5.1	4.8	35.6	28.2	13.1	13.2	100.0	9.2	67.8	52.7	1,933
Residence											
Urban	1.1	5.3	15.6	26.1	26.0	25.9	100.0	10.5	84.4	75.9	7,889
Rural	2.5	8.8	24.7	35.9	20.8	7.4	100.0	9.4	75.0	61.1	4,630
Region											
Yerevan	1.0	4.6	13.8	22.8	24.7	33.0	100.0	11.4	86.4	78.6	4,583
Aragatsotn	1.9	5.8	20.3	37.7	26.1	8.2	100.0	9.5	79.5	67.0	515
Ararat	1.0	8.5	23.9	36.4	22.4	7.9	100.0	9.4	78.3	65.1	974
Armavir	2.5	9.5	24.2	32.7	22.7	8.3	100.0	9.4	74.8	61.6	1,097
Gegharkunik	3.4	9.9	23.2	35.9	19.5	8.2	100.0	9.3	73.4	59.8	819
Lori	1.9	6.4	18.2	35.0	25.1	13.5	100.0	9.7	81.0	70.9	1,060
Kotayk	2.1	8.0	18.8	32.8	24.3	14.0	100.0	9.6	78.5	69.0	983
Shirak	1.9	5.9	24.2	33.4	21.6	12.9	100.0	9.5	77.9	64.8	1,152
Syunik	0.5	6.6	19.9	25.6	32.9	14.4	100.0	9.9	80.5	71.1	554
Vayots Dzor	1.6	6.0	20.1	41.9	21.5	8.9	100.0	9.5	80.1	70.2	205
Tavush	2.6	8.9	24.0	28.7	24.1	11.6	100.0	9.5	75.8	61.6	577
Wealth quintile											
Lowest	3.5	9.9	31.2	36.0	15.5	4.0	100.0	9.1	69.7	52.3	2,503
Second	1.7	6.4	21.8	37.9	24.1	7.9	100.0	9.5	79.8	67.5	2,505
Middle	1.4	5.8	17.2	30.0	27.9	17.7	100.0	9.8	82.5	73.3	2,564
Fourth	0.9	6.2	13.8	26.7	28.9	23.6	100.0	10.7	84.9	77.4	2,469
Highest	0.5	4.6	10.7	17.8	23.9	42.3	100.0	12.1	87.8	81.9	2,477
Total	1.6	6.6	19.0	29.7	24.1	19.0	100.0	9.8	80.9	70.4	12,518

Note: Totals include 0.1 percent of cases with missing data that are not shown separately.
[1] Completed grade 8 or higher
[2] Defined as having completed high school (grade 10) or having attended either specialized secondary or higher. The proportions may be slightly overestimated because some students enroll in specialized secondary after completing only grade 8.

Data on net attendance ratios (NARs) and gross attendance ratios (GARs) by school level, sex, residence, region, and wealth quintile are shown in Table 2.5. The NAR indicates participation in general basic education (primary and middle school) for the population age 7-14 and high school for the population age 15-16. The GAR measures participation at each level of schooling among those of any age from 6 to 24. The GAR is nearly always higher than the NAR for the same level because the GAR includes participation by those who may be older or younger than the official age range for that level.[2] A NAR of 100 percent would indicate that all children in the official age range for the level are attending education at that level. The GAR can exceed 100 percent if there is significant over age or under age participation at a given level of schooling.

In Armenia, school attendance among school-age household members is high. The overall NAR for general basic education is 94 and the GAR is 101. A comparison of the NAR and GAR indicates that approximately 7 percent of students are either under age or over age. Attendance ratios are virtually the same by sex, region, and urban-rural residence.

The NAR for the high school level is much lower than that recorded in the 2000 ADHS (72 versus 87). The GAR, however, is approximately the same (90 versus 92). This suggests that there has been an increase in over age or under age participation in high school. Indeed, a comparison of the NAR and GAR indicates that approximately 17 percent of students are either under age or over age.

The gender parity index (GPI), or the ratio of the female to the male GAR at the general basic and high school levels, indicates the magnitude of the gender gap in attendance ratios. If there is no gender difference, the GPI will be equal to one. GPI will be closer to zero if the disparity is in favor of males. If the gender gap favors females, the GPI will exceed one. Table 2.5 shows the GPI is 0.96 in the general basic level and 1.15 in the high school level, which indicates that there is a substantial gender gap in favor of females at the secondary level.

Figure 2.2 presents the age-specific attendance rates (ASAR) for the population age 6-24, by sex. The ASAR indicates participation in schooling at any level, from primary through higher education. The closer the ASAR is to 100 percent, the higher the proportion of a given age attending school.

In Armenia, almost all youths of general basic age (7-14) attend school, and there are no significant differences by gender. Among the high-school-age population (15-16), attendance ratios begin to decline, particularly among males. It should be noted that among young people age 17 to 19, a significantly higher proportion of females than males are attending school. This is also the age when many young men are required to serve in the military.

In Armenia, virtually all students in grades 2 through 8 are promoted every year, and nearly all stay in school until grade 8. Findings from the 2005 ADHS show that the dropout rate after eighth grade is 9 percent. This means that these children stop studying after the compulsory years of school (estimates not shown).

[2] Students who are over age for a given level of schooling may have started school over age, may have repeated one or more grades in school, or may have dropped out of school and later returned.

Table 2.5 School attendance ratios

Net attendance ratios (NAR), gross attendance ratios (GAR), and gender parity index (GPI) for the de jure household population by sex and level of schooling, according to background characteristics, Armenia 2005

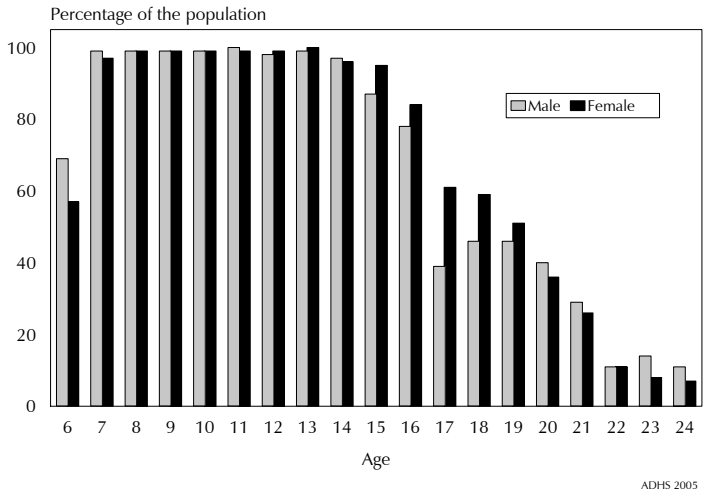
Background characteristic	Net attendance ratio[1]			Gross attendance ratio[2]			Gender parity index[3]
	Male	Female	Total	Male	Female	Total	
GENERAL BASIC							
Residence							
Urban	94.1	92.6	93.4	102.9	98.0	100.4	0.95
Rural	95.1	92.2	93.7	102.2	99.1	100.7	0.97
Region							
Yerevan	94.1	91.6	92.9	104.0	97.3	100.8	0.94
Aragatsotn	93.5	92.9	93.2	100.4	98.3	99.5	0.98
Ararat	93.8	94.5	94.2	99.6	103.7	101.7	1.04
Armavir	97.0	89.7	93.3	101.5	93.9	97.7	0.93
Gegharkunik	96.5	95.2	95.8	107.2	100.5	103.8	0.94
Lori	92.4	92.2	92.3	97.4	98.0	97.7	1.01
Kotayk	92.5	96.9	94.7	99.7	103.3	101.5	1.04
Shirak	94.7	87.5	91.3	101.9	92.4	97.5	0.91
Syunik	96.7	94.3	95.4	106.9	98.0	102.2	0.92
Vayots Dzor	95.0	95.8	95.4	101.2	100.7	101.0	1.00
Tavush	96.9	95.1	96.1	108.9	108.8	108.8	1.00
Wealth quintile							
Lowest	94.9	91.1	93.1	102.0	99.0	100.6	0.97
Second	95.4	92.3	93.9	103.4	95.8	99.9	0.93
Middle	93.6	91.8	92.7	99.2	99.6	99.4	1.00
Fourth	95.2	94.8	95.0	106.0	99.3	102.7	0.94
Highest	93.5	92.4	93.0	102.3	98.1	100.3	0.96
Total	94.6	92.4	93.5	102.6	98.4	100.6	0.96
HIGH SCHOOL							
Residence							
Urban	68.0	74.8	71.4	85.4	96.5	91.0	1.13
Rural	70.1	76.9	73.2	81.0	95.2	87.5	1.18
Region							
Yerevan	63.4	68.5	66.1	83.9	93.8	89.1	1.12
Aragatsotn	77.1	92.3	86.5	92.6	101.7	98.3	1.10
Ararat	62.9	52.9	59.0	77.0	74.7	76.1	0.97
Armavir	71.2	67.0	69.3	74.5	89.0	80.9	1.19
Gegharkunik	67.4	85.6	75.7	78.6	97.2	87.1	1.24
Lori	90.0	71.3	78.3	115.9	87.2	98.0	0.75
Kotayk	56.7	87.3	69.0	67.3	96.7	79.1	1.44
Shirak	75.0	88.9	81.9	91.0	121.7	106.3	1.34
Syunik	83.3	95.4	88.6	90.9	110.4	99.5	1.22
Vayots Dzor	78.4	82.0	79.6	87.0	92.6	88.9	1.06
Tavush	76.2	85.3	80.5	87.6	97.0	92.1	1.11
Wealth quintile							
Lowest	54.3	73.6	63.9	61.8	90.7	76.2	1.47
Second	74.0	79.1	76.2	90.8	97.7	93.8	1.08
Middle	75.5	79.6	77.5	91.5	112.2	101.4	1.23
Fourth	67.8	68.1	67.9	80.2	86.1	82.8	1.07
Highest	76.2	77.7	77.1	98.6	95.5	96.7	0.97
Total	68.9	75.6	72.2	83.4	96.0	89.5	1.15

[1] The NAR for general basic school is the percentage of the primary and middle-school-age (7-14 years) population that is attending primary or middle school. The NAR for high school is the percentage of the high-school-age (15-16 years) population that is attending grades 9 or 10. By definition, the NAR cannot exceed 100 percent.

[2] GAR for general basic school is the total number of primary and middle school students, expressed as a percentage of the official general basic-school-age population. The GAR for high school is the total number of high school students, expressed as a percentage of the official high-school-age population. If there are significant numbers of over age and under age students at a given level of schooling, the GAR can exceed 100 percent.

[3] The (GPI) for general basic school is the ratio of the general basic school GAR for females to the GAR for males. The Gender Parity Index for high school is the ratio of the high school GAR for females to the GAR for males.

Figure 2.2 **Age-Specific School Attendance Rates, by Sex**



2.2 HOUSING CHARACTERISTICS

To assess the socioeconomic conditions under which the population lives, respondents were asked to give specific information about their household environment. Type of water source, sanitation facilities, and floor material are characteristics that affect the health status of household members, particularly children. They also indicate the socioeconomic status of households. Tables 2.6 to 2.8 present major housing characteristics by urban-rural residence.

All households in Armenia have electricity (Table 2.6). A majority of households and population in the country have a finished floor, use liquid petroleum gas (LPG) or natural gas for cooking, and have a specific place for cooking inside the house. Overall, most of the respondents in urban areas live in environments with adequate sanitary conditions. In rural areas, living conditions are more mixed.

Parquet or polished wood floors are most common in urban areas (63 percent). In rural areas, the majority of households have wooden plank floors (67 percent) while 2 percent of households have an earth or sand floor. Almost half of households (45 percent) have two rooms used for sleeping. There is little difference between urban and rural households.

Cooking fuel appears to have changed dramatically since 2000. The proportion of households using electricity for cooking has declined from 37 percent in 2000 to 14 percent in 2005. Conversely, the proportion using LPG or natural gas has increased from 14 percent to 80 percent in the same time period. Differences in coding categories between the two surveys could account for some of the apparent shifts. Figure 2.3 shows the percentage of households using electricity or LPG/natural gas for cooking.

The last panel in Table 2.6 shows the distribution of the very small proportion of households that use biomass fuel (5 percent) by type of stove they use. The majority of these households in Armenia (three in four) use an open fire without chimney or hood. One in six households uses an open fire or stove with a chimney or hood. Rural households are much more likely to use this type of stove than urban households.

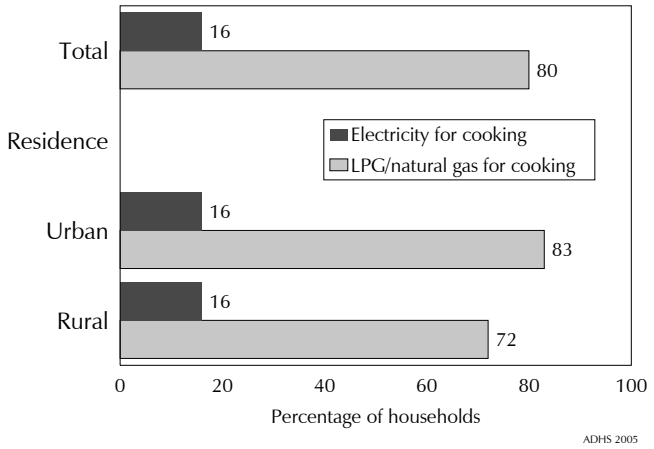
Table 2.6 Housing characteristics

Percentage of households with electricity and percent distribution of households by housing characteristics, according to residence, Armenia 2005

Characteristic	Residence		Total	De jure population[1]
	Urban	Rural		
Electricity	99.9	99.7	99.8	99.8
Flooring material				
Earth, sand	0.5	2.0	1.0	1.0
Wood planks	20.8	66.9	36.5	39.0
Parquet, polished wood	63.4	12.6	46.2	44.5
Vinyl, asphalt strips	9.1	5.8	8.0	6.8
Ceramic tiles	2.7	1.3	2.2	2.2
Cement	1.9	8.2	4.0	4.4
Other/missing	1.7	3.2	2.2	2.1
Total	100.0	100.0	100.0	100.0
Rooms for sleeping				
One	34.7	23.8	31.0	19.4
Two	45.9	41.6	44.5	47.4
Three or more	18.5	33.5	23.6	32.2
Missing	0.9	1.1	1.0	1.0
Total	100.0	100.0	100.0	100.0
Cooking fuel				
Electricity	15.9	15.6	15.8	14.2
Liquid petroleum gas (LPG)	39.9	31.3	36.9	36.2
Natural gas	43.4	41.0	42.6	44.9
Other/missing	0.8	12.2	4.6	4.8
Total	100.0	100.0	100.0	100.0
Place for cooking				
In the house	98.9	92.9	96.9	96.7
In a separate building	0.6	4.5	1.9	2.1
Outdoors	0.2	2.6	1.0	1.0
Other/missing	0.3	0.1	0.2	0.2
Total	100.0	100.0	100.0	100.0
Number of households	4,429	2,278	6,707	25,235
Type of fire/stove among households using solid fuel[2]				
Closed stove with chimney/hood	1.8	6.8	6.2	6.9
Open fire/stove with chimney/hood	3.0	16.9	15.4	16.1
Open fire/stove without chimney/hood	75.5	75.7	75.7	74.6
Other/missing	19.6	0.6	2.7	2.5
Total	100.0	100.0	100.0	100.0
Number of households/de jure population using solid fuel	34	269	303	1,149

[1] Household members, i.e., usual residents
[2] Solid fuel includes coal/lignite, charcoal, wood/straw/shrubs, and animal dung.

Figure 2.3 **Households with Electricity and LPG/ Natural Gas for Cooking**



Drinking Water

The source of drinking water is an indicator of whether it is suitable for drinking. Table 2.7 provides information on the source of drinking water, time to obtain the water, the age and sex of the person who usually collects the drinking water, and the treatment of water used for drinking. The table presents the percentage of households as well as the percentage of the de jure population living in those households.

Three in four households in Armenia have their drinking water piped directly into the house (Figure 2.4). Urban households are much more likely than rural households to have piped water in their house (94 percent compared with 39 percent). In rural areas, 36 percent of households have their drinking water piped to the yard or plot. Because most households use water that is available in the dwelling, less than 10 percent of Armenians have to go out to get drinking water. In households with no water in the house, water is collected most frequently by an adult woman (age 15 or older). This is particularly true in rural areas (16 percent).

Because households may use more than one method to treat water to make it safer to drink, water treatment is given as the percentages of households using the treatment method and the percentage of the de jure population (usual residents) of those households, rather than a percent distribution. Data in Table 2.7 show that no treatment is done in 89 percent of households. The most frequently used treatment for water is boiling (8 percent).

Table 2.7 Household drinking water

Percent distribution of households by source of drinking water, time to obtain drinking water, and person who usually collects drinking water, according to residence; percent distribution of the de jure household population by the same characteristics; and percentage of households and of the de jure household population using various water treatment prior to drinking, Armenia 2005

Characteristic	Residence		Total	De jure population[1]
	Urban	Rural		
Source of drinking water				
Improved				
Piped water into dwelling	93.6	38.8	75.0	73.0
Piped into yard/plot	3.8	36.2	14.8	16.1
Other protected	2.0	17.9	7.4	7.7
Non-improved				
Tanker truck	0.0	6.1	2.1	2.4
Other unprotected	0.1	0.4	0.2	0.3
Other/missing	0.5	0.7	0.6	0.5
Total	100.0	100.0	100.0	100.0
Time to obtain drinking water (round trip)				
Water on premises	97.7	77.8	91.0	90.4
Less than 30 minutes	1.5	14.9	6.1	6.5
30 minutes or longer	0.7	6.8	2.8	2.8
Don't know/missing	0.1	0.4	0.2	0.2
Total	100.0	100.0	100.0	100.0
Person who usually collects drinking water				
Adult male 15+	0.5	3.7	1.6	1.6
Adult female 15+	1.6	16.4	6.6	7.1
Male child under age 15	0.0	0.6	0.2	0.3
Female child under age 15	0.1	0.6	0.3	0.4
Water on premises	97.7	77.8	91.0	90.4
Other/Missing	0.1	0.8	0.3	0.3
Total	100.0	100.0	100.0	100.0
Water treatment prior to drinking				
Boiled	8.7	5.4	7.6	8.3
Other	2.6	2.5	2.6	2.5
No treatment	88.8	90.8	89.4	88.7
Don't know/missing	0.7	1.9	1.1	1.2
Number of households/de jure population	4,429	2,278	6,707	25,235

[1] Household members, i.e., usual residents

Sanitation Facility

Table 2.8 shows the proportion of households and of the de jure population with access to hygienic sanitation facilities. Hygienic status is determined by type of facility used and whether or not it is a shared facility.

A household's toilet/latrine facility is classified as hygienic if it is used only by household members (i.e., not shared) and 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 into a piped sewer system/septic tank/pit latrine, ventilated improved pit latrine, pit latrine with a slab, and a composting toilet. A household's sanitation facility is classified as unhygienic if it is shared with other households or if it does not effectively separate human waste from human contact.

Most households in Armenia use improved sanitation facilities that are not shared with another household (Table 2.8). Two in three households in Armenia use a flush toilet connected to piped sewer system (Figure 2.4) and 18 percent use a ventilated improved pit latrine. Flush toilets are widespread in urban areas (92 percent), while VIP latrines are the most common type of facility in rural areas (47 percent). It should be noted that the 2005 ADHS questionnaire categorized sanitation facilities differently than the 2000 ADHS questionnaire and thus it is difficult to compare data from the two surveys.

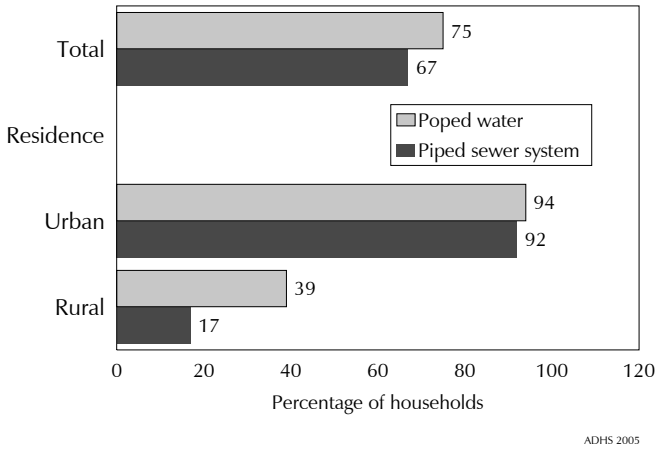
Table 2.8 Household sanitation facility

Percent distribution of households by type of sanitation facility; and percent distribution of the de jure population by type of sanitation facility, Armenia 2005

Characteristic	Residence		Total	De jure population[1]
	Urban	Rural		
Improved, not shared				
Flush/pour flush to piped sewer system	92.1	17.3	66.7	64.1
Flush/pour flush to septic tank	0.3	0.3	0.3	0.3
Flush/pour flush to a pit latrine	1.0	7.1	3.1	3.6
Ventilated improved pit (VIP) latrine	2.9	47.2	18.0	19.3
Pit latrine with a slab	0.6	7.5	3.0	3.1
Not improved				
Any facility shared with other households	1.6	3.1	2.1	1.9
Flush/pour flush not to sewer/septic tank/pit latrine	0.5	0.2	0.4	0.3
Pit latrine without slab/open pit	0.5	17.0	6.1	7.1
Bucket	0.2	0.1	0.1	0.1
No facility/bush/field	0.1	0.0	0.1	0.1
Other/missing	0.2	0.1	0.1	0.1
Total	100.0	100.0	100.0	100.0
Number of households/de jure population	4,429	2,278	6,707	25,235

[1] Household members, i.e., usual residents

Figure 2.4 **Households with Drinking Water Piped into the House and Flush Toilet to Piped Sewer System, by Residence**



Household Possessions

The availability of durable goods is a proximate measure of household socioeconomic status. 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 transportation allows greater access to many services away from the local area. Table 2.9 provides information on household ownership of durable goods (e.g., radios, televisions, telephones, refrigerators) and means of transportation (e.g., bicycles, motorcycles, automobiles).

Table 2.9 shows that urban households are more likely than rural households to own durable goods, while rural households are more likely to own a means of transportation. Overall, 85 percent of Armenian households have color televisions, 82 percent have refrigerators, 72 percent have land line (non-mobile) telephones, and 67 percent have a washing machine. Both mobile and non-mobile telephones are much more common in urban areas than in rural areas. While 84 percent of urban households have a non-mobile telephone, the corresponding proportion in the rural areas is only 49 percent.

One in four households in Armenia has a car or truck, while only 5 percent have a bicycle. Rural households are more likely than urban households to own a car or truck. Bicycles are also more common in rural areas than in urban areas (12 percent and 2 percent, respectively).

Forty-one percent of Armenian households own agricultural land; the proportion is understandably higher in rural than urban areas (85 percent vs. 17 percent). One-quarter of Armenian households own farm animals.

Table 2.9 Household possessions

Percentage of households with various household effects, means of transportation, agricultural land, and farm animals by residence; and percentage of de jure household population with various household effects, means of transportation, agricultural land, and farm animals, Armenia 2005

Possession	Residence: Urban	Residence: Rural	Total	De jure population[1]
Household effects				
Radio	34.7	17.8	28.9	29.6
Black and white television	11.1	18.6	13.6	12.1
Color television	88.5	77.3	84.7	88.0
Washing machine	69.2	62.7	67.0	71.3
Vacuum cleaner	54.1	24.7	44.1	46.5
Computer	12.1	2.0	8.7	9.1
Mobile telephone	39.2	19.4	32.5	37.1
Non-mobile telephone	83.5	49.4	71.9	72.5
Refrigerator	86.3	74.8	82.4	84.0
Camera	46.1	27.7	39.9	45.6
Means of transportation				
Bicycle	1.9	11.6	5.2	6.7
Animal-drawn cart	0.1	1.6	0.6	0.7
Motorcycle/scooter	0.2	1.2	0.6	0.8
Car/truck	22.6	27.6	24.3	29.7
Ownership of agricultural land	17.3	85.4	40.5	45.2
Ownership of farm animals	5.1	63.7	25.0	30.4
Number of households/ de jure population	4,429	2,278	6,707	25,235

[1] Household members, i.e., usual residents

2.3 WEALTH QUINTILES

The wealth index is a recently developed measure that has been tested in a number of countries in relation to inequities in household income, use of health services, and health outcomes (Rutstein 2004, Rutstein et al., 2000). The wealth index is constructed by assigning a weight or factor score to each household asset through principal components analysis. These scores were summed by household, and individuals were ranked according to the total score of the household in which they resided. The sample was then divided into population quintiles—five groups with the same number of individuals in each. At the national level, approximately 20 percent of the population is in each wealth quintile.

Table 2.10 shows the distribution of the population across the five wealth quintiles, by urban and rural areas and region. These distributions indicate the degree to which wealth is evenly (or unevenly) distributed by geographic areas. For example, over three-fourths of the rural population is in the lowest and second-lowest wealth quintiles. This compares to approximately six in ten urban residents who are in the two highest wealth quintiles.

Table 2.10 Population distribution by wealth quintile

Percent distribution of the de jure population by wealth quintile, according to residence and region, Armenia 2005

Residence/region	Wealth quintile					Total	Number of de jure population[1]
	Lowest	Second	Middle	Fourth	Highest		
Residence							
Urban	3.6	12.9	24.2	28.7	30.7	100.0	15,703
Rural	47.1	31.8	12.9	5.9	2.3	100.0	9,531
Region							
Yerevan	0.7	6.8	20.8	30.7	41.0	100.0	9,115
Aragatsotn	54.2	26.4	8.4	8.0	3.1	100.0	1,091
Ararat	27.3	38.3	21.1	10.0	3.3	100.0	2,101
Armavir	39.9	27.1	14.2	12.9	5.9	100.0	2,201
Gegharkunik	33.8	28.7	19.3	11.6	6.6	100.0	1,578
Lori	25.0	24.3	21.3	17.4	12.0	100.0	2,190
Kotayk	13.2	21.4	26.8	20.6	17.9	100.0	2,044
Shirak	32.6	35.5	19.7	9.2	3.0	100.0	2,184
Syunik	16.0	14.0	21.9	31.5	16.6	100.0	1,137
Vayots Dzor	38.8	30.9	15.3	9.8	5.2	100.0	462
Tavush	46.0	21.5	19.4	7.9	5.3	100.0	1,130
Total	20.0	20.0	19.9	20.1	20.0	100.0	25,235

[1] Household members, i.e., usual residents

2.4 BIRTH REGISTRATION

In Armenia, birth registration is recognized as one of children's rights. The registration of births is the inscription of the facts of the birth into an official log kept at the registrar's office. A birth certificate is issued at the time of registration or later as proof of the registration of the birth. In the 2005 ADHS, for all children born since January 2000, mothers were asked if their child had been registered. Table 2.11 gives the percentage of children under five years of age whose births were officially registered and the percentage who had a birth certificate at the time of the survey. Not all children who are registered may have a birth certificate because some certificates may have been lost or were never issued. However, all children with a certificate have been registered.

Birth registration is almost universal in Armenia, with 96 percent of births in the five years preceding the survey registered, and practically all of these births have a certificate. Small variations are found across subgroups of children. The proportion of births that are registered ranges from 90 percent in Shirak to 100 percent in Tavush.

Table 2.11 Birth registration of children under five

Percentage of de jure children under five years of age whose births are registered with the civil authorities, according to background characteristics, Armenia 2005

Background characteristic	Percentage of children whose births are registered: Had a birth certificate	Didn't have a birth certificate	Total registered	Number of children
Age				
<2	95.6	0.5	96.1	659
2-4	96.0	0.6	96.6	867
Sex				
Male	96.2	0.4	96.6	839
Female	95.3	0.8	96.1	687
Residence				
Urban	97.0	0.2	97.1	928
Rural	94.0	1.2	95.2	598
Region				
Yerevan	96.6	0.0	96.6	573
Aragatsotn	96.0	2.7	98.7	82
Ararat	96.4	1.5	97.9	141
Armavir	93.6	0.0	93.6	133
Gegharkunik	96.0	0.2	96.3	122
Lori	94.8	2.8	97.6	99
Kotayk	97.0	0.0	97.0	123
Shirak	90.0	0.0	90.0	91
Syunik	95.1	1.9	97.0	66
Vayots Dzor	95.9	0.0	95.9	21
Tavush	99.5	0.0	99.5	75
Wealth quintile				
Lowest	90.8	2.6	93.4	293
Second	93.4	0.0	93.4	301
Middle	96.3	0.0	96.3	297
Fourth	99.5	0.3	99.8	328
Highest	98.6	0.0	98.6	307
Total	95.8	0.6	96.4	1,526

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

BACKGROUND CHARACTERISTICS OF RESPONDENTS

3

The purpose of this chapter is to provide a demographic and socioeconomic profile of the 2005 ADHS sample. Information on the basic characteristics of women and men interviewed in the survey is essential for the interpretation of findings presented later in the report and can provide an approximate indication of the representativeness of the survey.

3.1 BACKGROUND CHARACTERISTICS OF RESPONDENTS

Table 3.1 presents the percent distribution of interviewed women and men age 15-49 by background characteristics including age, marital status, educational level, place of residence, and region. As noted in Chapter 1, all women age 15-49 who were usual residents or present in the household on the night before the interviewer's visit were eligible to be interviewed in the 2005 ADHS. Men age 15-49 were interviewed in every third household.[1] In order not to double-count respondents, the tables in this report are based on the de facto population, that is, those who stayed in the household the previous night.

For the most part, the male and female populations represented in the sample are evenly distributed by age, but there are some noticeable exceptions. For example, there are lower proportions of women and men in their thirties compared with in older and younger age groups. This is notable because people in this age group tend to be economically active.

A majority of both women and men are married (or living together). Compared with the results of the 2000 ADHS, there is a much lower proportion of men who are married or living with a woman (56 percent versus 68 percent). This can be explained in part by a larger cohort of the youngest men (age 15-19) and the exclusion in 2005 of men aged 50-54. Seven percent of women are divorced, separated, or widowed as opposed to 1 percent of men. Thirty-one percent of women and 43 percent of men have never been married.

Almost two-thirds of the population live in urban areas, the majority of those in Yerevan. There is considerable variation by region. All but a tiny handful of the respondents interviewed had attended school at some time. Approximately 10 percent of respondents attended only basic general education, while about 40 percent reached high school or general secondary. Thirty percent of women have attended a specialized secondary institution, as have 22 percent of men. Approximately one-quarter of respondents have at least some higher education.

[1] In the 2000 ADHS, men age 15-54 in every third household were included in the survey.

Table 3.1 Background characteristics of respondents

Percent distribution of women and men age 15-49 by background characteristics, Armenia 2005

Background characteristic	Women			Men		
	Weighted percent	Weighted number	Unweighted number	Weighted percent	Weighted number	Unweighted number
Age						
15-19	17.1	1,123	1,136	20.2	292	295
20-24	17.2	1,131	1,067	16.3	237	239
25-29	14.2	929	910	14.0	202	183
30-34	11.4	749	709	10.8	156	157
35-39	10.8	711	720	10.4	150	138
40-44	14.7	965	1,024	13.8	199	210
45-49	14.6	958	1,000	14.6	211	225
Marital status						
Never married	31.1	2,043	2,006	42.5	615	614
Married	60.8	3,995	4,064	49.6	717	754
Living together	0.7	49	48	6.7	98	61
Divorced/separated	4.9	325	281	0.9	13	15
Widowed	2.4	155	167	0.3	4	3
Residence						
Urban	63.9	4,194	4,592	63.1	913	999
Rural	36.1	2,372	1,974	36.9	534	448
Region						
Yerevan	37.6	2,468	1,141	37.8	547	262
Aragatsotn	4.5	292	553	4.9	71	142
Ararat	7.0	462	545	7.6	110	108
Armavir	8.6	567	613	9.6	139	146
Gegharkunik	6.7	443	593	5.6	81	123
Lori	8.2	537	464	6.0	87	56
Kotayk	8.6	563	562	10.4	151	128
Shirak	8.6	563	583	6.8	98	112
Syunik	4.3	281	537	4.6	67	139
Vayots Dzor	1.6	107	407	2.1	31	106
Tavush	4.3	285	568	4.4	64	125
Education						
Basic general[1]	8.1	529	506	14.1	205	193
Secondary general	37.2	2,440	2,522	40.5	586	601
Specialized secondary	30.4	1,997	2,141	21.5	310	328
Higher	24.4	1,600	1,397	23.9	346	325
Total	100.0	6,566	6,566	100.0	1,447	1,447

Note: Unweighted numbers refer to the number of interviews actually completed. Education refers to the highest level of education attended, whether or not that level was completed.
[1] Includes a tiny proportion with no education.

3.2 EDUCATIONAL LEVEL OF RESPONDENTS

Tables 3.2.1 and 3.2.2 show the educational level of female and male respondents by selected background characteristics. Education has been almost universal in Armenia for some time; the median years of schooling for women is 10.8 years and for men is 9.9 years.

Table 3.2.1 Educational attainment by background characteristics: Women

Percent distribution of women by highest level of schooling attended, median number of years completed, and percentage with general basic and general secondary completed, according to background characteristics, Armenia 2005

Background characteristic	Highest level of schooling attended						Total	Median number of years of schooling	General basic completed[1]	General secondary completed[2]	Number of women
	No education	Primary (1-3)	Middle (4-8)	High school (9-10)	Specialized secondary	Higher					
Age											
15-19	0.0	0.2	18.7	43.7	16.3	21.1	100.0	9.4	98.6	62.6	1,123
20-24	0.2	0.0	6.8	29.8	30.6	32.6	100.0	11.7	99.5	92.7	1,131
25-29	0.0	0.8	7.6	35.5	27.6	28.5	100.0	11.4	99.0	90.4	929
30-34	0.0	0.2	4.4	36.9	32.0	26.7	100.0	11.4	99.3	94.8	749
35-39	0.3	0.0	4.1	35.8	35.7	24.2	100.0	11.5	98.8	94.6	711
40-44	0.1	0.8	3.6	40.9	35.9	18.7	100.0	11.1	98.8	95.4	965
45-49	0.0	0.5	4.8	37.3	38.9	18.5	100.0	11.3	99.0	94.4	958
Residence											
Urban	0.0	0.3	5.8	30.2	31.4	32.3	100.0	11.5	99.3	90.6	4,194
Rural	0.2	0.5	10.8	49.4	28.7	10.3	100.0	9.7	98.5	84.2	2,372
Region											
Yerevan	0.0	0.3	5.6	25.6	28.6	39.9	100.0	11.9	99.2	91.1	2,468
Aragatsotn	0.0	0.0	6.9	51.2	31.2	10.7	100.0	9.8	100.0	86.0	292
Ararat	0.0	0.1	10.2	46.1	32.7	11.0	100.0	9.8	98.4	88.2	462
Armavir	0.0	0.9	11.7	44.5	30.4	12.5	100.0	9.8	98.0	84.2	567
Gegharkunik	0.4	0.0	11.7	48.8	27.2	11.9	100.0	9.7	99.0	82.2	443
Lori	0.2	0.1	4.3	45.7	31.5	18.1	100.0	10.0	99.6	90.7	537
Kotayk	0.1	0.5	9.0	43.2	31.0	16.2	100.0	9.9	98.7	87.1	563
Shirak	0.3	0.0	9.2	42.6	29.6	18.3	100.0	9.9	98.9	86.3	563
Syunik	0.2	0.8	5.8	29.2	43.5	20.6	100.0	11.5	98.9	89.3	281
Vayots Dzor	0.0	0.5	5.4	51.9	29.9	12.3	100.0	9.8	99.2	90.3	107
Tavush	0.0	1.2	10.3	39.0	32.5	17.0	100.0	9.9	98.3	84.0	285
Wealth quintile											
Lowest	0.2	0.8	16.4	54.2	22.3	6.1	100.0	9.6	97.2	77.5	1,164
Second	0.1	0.2	8.3	48.2	33.6	9.6	100.0	9.8	99.5	88.0	1,284
Middle	0.0	0.1	6.2	36.5	35.9	21.3	100.0	11.0	99.6	90.0	1,303
Fourth	0.1	0.1	6.0	31.0	33.9	28.8	100.0	11.5	99.3	90.9	1,375
Highest	0.0	0.5	2.8	20.0	25.8	50.9	100.0	12.4	99.1	93.4	1,440
Total	0.1	0.3	7.6	37.2	30.4	24.4	100.0	10.8	99.0	88.3	6,566

[1] Completed grade 8 or higher
[2] Defined as having completed high school (grade 10) or having attended either specialized secondary or higher. The proportions may be slightly overestimated because some students enroll in specialized secondary after completing only grade 8.

There are small differentials across subgroups of the population. Younger women, women in the poorest households, and those in rural areas have less education than other women. Nevertheless, based on the median, half of the women have at least ten years of education. Education is closely related to wealth status; women in the lowest wealth quintile have the least education while women in the highest wealth quintile have the most education. Women in Yerevan and Syunik are better educated than women in other regions; the median years of schooling for women in these regions is 11.5 years or higher, while in other regions it is 10 years or less.

As Table 3.2.2 shows, the pattern of educational attainment among men is similar to that of women. Younger men and men in rural areas generally have a lower level of education. Thirty percent of urban men have some university-level education or higher, compared with 14 percent of rural men. Wealth status is positively associated with education; while 7 percent of men in the lowest wealth quintile have higher education, the corresponding proportion for men in the highest wealth quintile is 53 percent. There is considerable variation by region, with men in Yerevan and Syunik having more years of education than men from other regions.

Table 3.2.2 Educational attainment by background characteristics: Men

Percent distribution of men by highest level of schooling attended, median number of years completed, and percentage with general basic and general secondary completed, according to background characteristics, Armenia 2005

Background characteristic	Highest level of schooling attended						Total	Median number of years of schooling	General basic completed[1]	General secondary completed[2]	Number of men
	No education	Primary (1-3)	Middle (4-8)	High school (9-10)	Specialized secondary	Higher					
Age											
15-19	0.8	0.4	23.7	53.3	4.8	17.0	100.0	8.9	98.4	47.7	292
20-24	0.0	0.0	18.0	46.0	11.4	24.5	100.0	9.7	99.3	81.4	237
25-29	0.0	0.0	16.3	42.5	13.9	27.3	100.0	9.8	97.9	82.2	202
30-34	0.0	0.0	7.5	30.1	28.3	34.1	100.0	11.8	99.7	92.2	156
35-39	1.1	0.0	7.4	40.6	33.5	17.3	100.0	10.8	99.1	91.7	150
40-44	0.0	0.0	7.3	30.9	40.7	21.1	100.0	11.8	99.6	92.7	199
45-49	0.8	0.2	7.2	31.0	31.2	29.6	100.0	12.1	98.8	91.7	211
Residence											
Urban	0.4	0.2	10.8	36.4	22.3	29.9	100.0	10.3	98.8	83.8	913
Rural	0.3	0.0	18.6	47.4	20.0	13.7	100.0	9.6	99.2	73.5	534
Region											
Yerevan	0.4	0.0	10.8	32.6	22.8	33.4	100.0	11.4	99.0	84.6	547
Aragatsotn	0.0	0.0	16.9	34.3	32.7	16.1	100.0	9.9	97.7	78.0	71
Ararat	1.5	0.0	7.3	61.0	18.7	11.5	100.0	9.6	98.7	79.5	110
Armavir	0.0	0.0	25.7	44.0	18.3	12.1	100.0	9.5	99.1	69.7	139
Gegharkunik	0.0	0.0	15.1	40.4	30.3	14.1	100.0	9.8	98.7	81.7	81
Lori	2.0	0.0	13.6	42.1	13.9	28.4	100.0	9.8	98.4	78.1	87
Kotayk	0.0	0.7	16.7	52.3	10.6	19.7	100.0	9.6	98.9	75.8	151
Shirak	0.0	0.0	13.0	38.3	23.7	25.0	100.0	9.8	99.9	78.3	98
Syunik	0.0	0.6	11.2	32.8	29.3	26.1	100.0	10.5	99.7	80.2	67
Vayots Dzor	0.0	0.0	5.8	72.9	9.8	11.5	100.0	9.5	99.6	82.1	31
Tavush	0.0	0.0	17.5	37.5	27.6	17.4	100.0	9.8	99.8	78.5	64
Wealth quintile											
Lowest	0.0	0.0	26.6	46.7	19.3	7.3	100.0	9.4	99.4	68.8	261
Second	0.0	0.0	11.2	51.2	26.8	10.8	100.0	9.7	99.2	81.0	264
Middle	1.2	0.3	11.1	43.0	26.6	17.8	100.0	9.8	98.4	80.4	326
Fourth	0.6	0.1	12.5	38.9	18.4	29.6	100.0	10.0	98.2	81.7	316
Highest	0.0	0.0	8.1	23.3	15.9	52.7	100.0	12.5	99.7	87.1	280
Total	0.4	0.1	13.6	40.5	21.5	23.9	100.0	9.9	98.9	80.0	1,447

[1] Completed grade 8 or higher
[2] Defined as having completed high school (grade 10) or having attended either specialized secondary or higher. Some students enroll in specialized secondary after completing only grade 8.

3.3 EXPOSURE TO MASS MEDIA

The 2005 ADHS collected information on the exposure of women and men to both the broadcast and print media. This information is important because it can help program managers plan the dissemination of information on health, family planning, nutrition, and other programs. The results are presented in Tables 3.3.1 and 3.3.2.

At least once a week, 97 percent of Armenian women watch television, 53 percent read a newspaper, and 33 percent listen to the radio (Table 3.3.1). Only 2 percent do not regularly have access to mass media, and 23 percent have access to all three media.

Younger women are more likely than older women to read newspapers or magazines and have access to the three types of media. Exposure to media has a strong positive association with education and wealth status. For example, while 44 percent of women in the highest wealth quintile have access to all three media, the corresponding proportion for women in the lowest wealth quintile is only 5 percent. Urban women are about twice as likely to be exposed to mass media as their rural counterparts. Overall, women from Syunik, Vayots Dzor, and Yerevan are the most likely to have access to all media.

Interestingly, men have different patterns of media exposure by age from that of women (Table 3.3.2). Younger men are in general less likely than older men to be exposed to three media, partly because they are less likely to read a newspaper on a weekly basis. Across regions, exposure to the three media ranges from 37 percent in Yerevan to 5 percent or less for men in Ararat, Gegharkunik, Shirak, and Vayots Dzor.

There has apparently been a large increase in the proportion of women who read a newspaper once a week, from 29 percent in 2000 to 53 percent in 2005. Television watching has also increased, from 88 percent of women who said they watched at least once a week in 2000 to 97 percent in 2005. Slight changes in the wording of the questions between the two surveys may account for some of the trends.

3.4 EMPLOYMENT

In the 2005 ADHS, respondents were asked a number of questions to determine their employment status at the time of the survey and continuity of employment in the 12 months prior to the survey. The measurement of women's employment is difficult because some of the activities that women do, especially work on family farms, family businesses, or in the informal sector, are often not perceived by women themselves as employment and hence are not reported as such. To avoid underestimating women's employment, the 2005 ADHS survey asked women several questions to ascertain their employment status. First, women were asked, "Aside from your own housework, are you currently working?" Women who answered "no" to this question were then asked, "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. Are your currently doing any of these things or any other work?" Women who answered "no" to this question were asked, "Have you done any work in the last 12 months?" Women are considered currently employed if they answered "yes" to either of the first two questions. Women who answered "yes" to the third question are not currently employed but have worked in the past 12 months. All employed women were asked their occupation; whether they were paid in cash, in kind, or not at all; and for whom they worked.

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, Armenia 2005

Background characteristic	Type of mass media exposure: Reads a newspaper/ magazine at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three media at least once a week	No mass media at least once a week	Number of women
Age						
15-19	64.0	97.7	35.8	26.5	1.0	1,123
20-24	56.4	97.6	41.6	29.3	1.8	1,131
25-29	48.8	97.5	31.1	20.5	1.9	929
30-34	51.1	97.5	33.2	22.0	1.9	749
35-39	50.9	96.9	30.0	22.0	2.3	711
40-44	47.0	95.6	27.9	17.1	3.5	965
45-49	46.4	95.7	28.0	18.5	2.9	958
Residence						
Urban	58.0	98.0	39.9	27.9	1.2	4,194
Rural	43.0	95.1	20.5	13.1	3.9	2,372
Region						
Yerevan	60.6	98.2	48.9	34.0	0.9	2,468
Aragatsotn	46.0	94.0	27.5	14.9	4.2	292
Ararat	43.9	98.9	26.2	18.9	1.0	462
Armavir	46.4	94.5	20.6	13.4	5.0	567
Gegharkunik	47.8	96.8	5.2	3.6	2.5	443
Lori	50.2	94.5	27.4	17.1	3.6	537
Kotayk	49.7	95.5	36.3	22.9	3.6	563
Shirak	41.4	98.5	13.8	9.2	0.9	563
Syunik	66.5	97.6	42.8	36.3	1.7	281
Vayots Dzor	57.0	97.7	44.4	36.1	1.4	107
Tavush	40.5	94.7	5.7	3.1	4.7	285
Education						
Basic general	30.1	89.3	23.5	10.8	8.6	529
Secondary general	40.7	96.7	25.8	14.6	2.5	2,440
Specialized secondary	54.1	97.8	31.5	21.4	1.4	1,997
Higher	76.3	98.8	48.6	40.2	0.5	1,600
Wealth quintile						
Lowest	30.5	90.9	11.1	5.4	7.2	1,164
Second	46.4	96.1	23.3	14.3	2.7	1,284
Middle	54.8	98.7	26.2	17.7	0.4	1,303
Fourth	58.6	98.7	40.9	27.4	1.0	1,375
Highest	68.2	99.4	57.5	43.7	0.4	1,440
Total	52.6	97.0	32.9	22.6	2.2	6,566

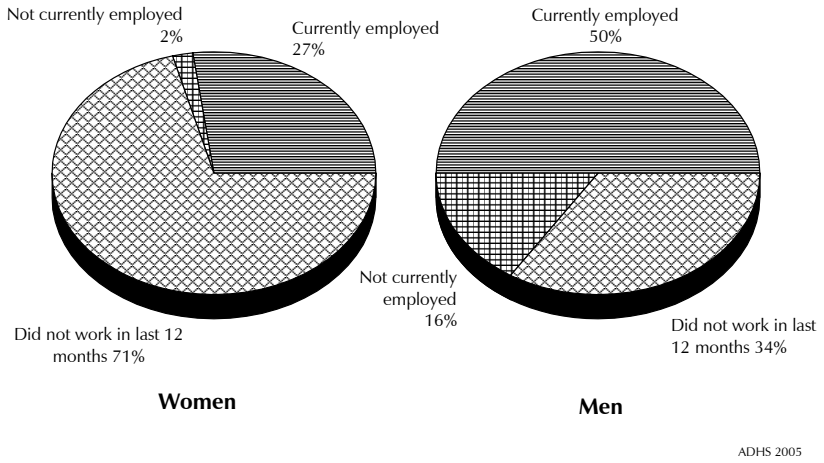
Table 3.3.2 Exposure to mass media: Men

Percentage of men age 15-49 who are exposed to specific media on a weekly basis, by background characteristics, Armenia 2005

Background characteristic	Type of mass media exposure: Reads a newspaper/ magazine at least once a week	Watches television at least once a week	Listens to the radio at least once a week	All three media at least once a week	No mass media at least once a week	Number of men
Age						
15-19	26.0	99.0	35.1	17.3	1.0	292
20-24	30.6	100.0	51.9	21.1	0.0	237
25-29	31.1	99.3	57.6	22.1	0.0	202
30-34	43.1	99.3	52.9	26.5	0.0	156
35-39	36.0	98.3	53.7	24.2	1.7	150
40-44	40.9	97.8	44.3	24.6	1.8	199
45-49	39.8	98.7	39.1	21.2	0.5	211
Residence						
Urban	39.9	98.9	55.8	28.0	0.7	913
Rural	25.0	99.1	31.2	11.4	0.7	534
Region						
Yerevan	45.6	99.0	72.7	37.3	0.6	547
Aragatsotn	40.0	100.0	48.7	26.2	0.0	71
Ararat	15.0	100.0	23.7	3.4	0.0	110
Armavir	33.0	100.0	62.0	24.4	0.0	139
Gegharkunik	36.9	99.5	8.9	4.0	0.0	81
Lori	31.4	95.3	30.1	8.1	1.9	87
Kotayk	28.8	98.5	43.7	18.1	1.5	151
Shirak	4.0	98.0	3.4	1.8	2.0	98
Syunik	25.8	99.3	16.7	7.3	0.0	67
Vayots Dzor	8.4	98.2	9.3	5.4	1.8	31
Tavush	52.1	100.0	21.8	15.8	0.0	64
Education						
Basic general	11.2	98.9	33.5	6.4	0.5	205
Secondary general	24.8	99.2	41.6	14.7	0.7	586
Specialized secondary	29.0	98.8	46.8	14.8	0.9	310
Higher	69.2	98.8	63.0	49.5	0.7	346
Wealth quintile						
Lowest	21.9	98.1	27.1	9.0	1.4	261
Second	21.1	98.3	29.9	7.6	1.7	264
Middle	33.9	100.0	39.4	17.7	0.0	326
Fourth	39.4	99.5	59.8	26.7	0.0	316
Highest	53.7	98.7	74.6	46.6	0.6	280
Total	34.4	99.0	46.7	21.9	0.7	1,447

Table 3.4 shows the percent distribution of female and male respondents by employment status according to background characteristics. Twenty-seven percent of women reported being currently employed, 2 percent were employed in the 12 months preceding the survey but not working at the time of the survey, and 71 percent were not employed in the 12 months preceding the survey (Figure 3.1). Almost twice as many men as women reported being currently employed (50 percent versus 27 percent). Nonetheless, one-third of men reported that they were not employed during the 12 months preceding the survey. Women who are formerly married are more likely than other women to be employed at the time of the survey (Table 3.4). For men, those who are currently married are most likely to be employed.

Figure 3.1 **Percent Distribution of Women and Men Age 15-49 by Employment Status**



Employment among women and men increases with age, education, and wealth quintile. Figure 3.2 depicts the differentials by residence and education. Differences in employment between rural and urban women are not significant; however, urban men are more likely to be employed than rural men. Employment among women is highest in Syunik and Tavush (47 and 41 percent, respectively) while in Shirak the proportion is only 13 percent. For men, employment rates range from 64 percent in Armavir to 26 percent in Vayots Dzor.

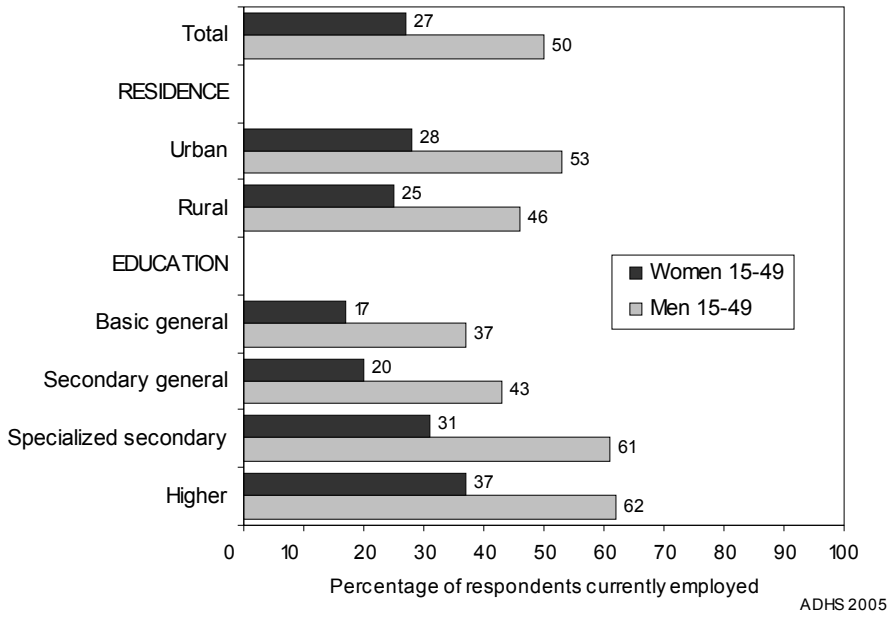
Table 3.4 Employment status

Percent distribution of women and men age 15-49 by employment status, according to background characteristics, Armenia 2005

	Women					Men				
	Employed in last 12 months					Employed in last 12 months				
Background characteristic	Currently employed[1]	Not currently employed	Not employed in the 12 months preceding the survey	Total	Number of women	Currently employed[1]	Not currently employed	Not employed in the 12 months preceding the survey	Total	Number of men
Age										
15-19	3.3	0.3	96.4	100.0	1,123	4.9	13.4	81.6	100.0	292
20-24	17.7	2.4	79.8	100.0	1,131	36.6	15.9	47.5	100.0	237
25-29	25.4	3.3	71.3	100.0	929	68.1	12.8	19.1	100.0	202
30-34	32.1	2.7	65.2	100.0	749	70.0	20.0	10.0	100.0	156
35-39	39.0	1.8	59.2	100.0	711	71.8	15.2	12.0	100.0	150
40-44	39.0	2.5	58.6	100.0	965	64.6	21.1	14.1	100.0	199
45-49	42.4	3.0	54.6	100.0	958	68.9	14.0	17.1	100.0	211
Marital status										
Never married	19.3	1.5	79.2	100.0	2,043	26.1	14.6	59.3	100.0	615
Married/living together	28.1	2.3	69.6	100.0	4,044	68.8	16.2	14.7	100.0	815
Divorced/separated/ widowed	50.5	5.3	44.2	100.0	479	*	*	*	*	17
Number of living children										
0	20.2	1.8	78.0	100.0	2,352	30.0	14.8	55.3	100.0	688
1-2	29.4	2.3	68.3	100.0	2,812	73.2	15.0	11.8	100.0	519
3+	33.7	2.8	63.6	100.0	1,402	59.6	20.4	19.0	100.0	240
Residence										
Urban	27.9	2.1	70.0	100.0	4,194	53.2	12.4	34.1	100.0	913
Rural	25.4	2.5	72.0	100.0	2,372	45.5	21.5	32.9	100.0	534
Region										
Yerevan	29.4	2.4	68.2	100.0	2,468	57.2	9.7	32.8	100.0	547
Aragatsotn	15.8	4.4	79.8	100.0	292	42.2	21.0	36.8	100.0	71
Ararat	37.8	0.1	62.1	100.0	462	41.8	9.5	48.7	100.0	110
Armavir	30.5	4.7	64.7	100.0	567	64.0	9.5	26.5	100.0	139
Gegharkunik	19.9	0.8	79.4	100.0	443	53.0	22.1	24.9	100.0	81
Lori	17.9	1.5	80.5	100.0	537	28.0	54.2	17.9	100.0	87
Kotayk	22.4	2.8	74.8	100.0	563	51.1	21.4	27.4	100.0	151
Shirak	13.0	1.0	86.0	100.0	563	42.0	3.4	54.6	100.0	98
Syunik	47.3	2.1	50.6	100.0	281	46.9	28.1	25.0	100.0	67
Vayots Dzor	20.7	0.3	78.5	100.0	107	26.0	4.2	67.9	100.0	31
Tavush	41.4	2.8	55.8	100.0	285	40.4	24.2	35.5	100.0	64
Education										
Basic general	16.8	1.6	81.6	100.0	529	36.8	21.8	41.3	100.0	205
Secondary general	19.5	1.5	78.9	100.0	2,440	43.1	15.5	41.4	100.0	586
Specialized secondary	30.8	3.0	66.1	100.0	1,997	60.6	21.1	18.3	100.0	310
Higher	37.0	2.5	60.5	100.0	1,600	61.7	7.9	30.0	100.0	346
Wealth quintile										
Lowest	23.7	2.8	73.5	100.0	1,164	42.2	24.3	33.3	100.0	261
Second	23.5	1.7	74.7	100.0	1,284	44.2	18.1	37.7	100.0	264
Middle	27.3	3.2	69.5	100.0	1,303	49.1	16.1	34.8	100.0	326
Fourth	28.6	1.4	70.1	100.0	1,375	47.2	14.0	38.3	100.0	316
Highest	31.1	2.2	66.7	100.0	1,440	69.0	7.3	23.8	100.0	280
Total	27.0	2.2	70.7	100.0	6,566	50.4	15.8	33.7	100.0	1,447

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 seven days and includes persons who did not work in the past seven days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

Figure 3.2 **Respondents Currently Employed, by Residence and Education**



3.5 OCCUPATION

In the survey, respondents who indicated that they were currently working were asked about the kind of work that they did. Their responses were recorded verbatim and served as the basis for the coding of occupation that occurred in the central office. Table 3.5.1 shows the percent distribution of employed women in the 12 months preceding the survey by occupation, according to background characteristics. Information on a woman's occupation not only allows an evaluation of the woman's source of income but also has implications for her empowerment.

Almost half (45 percent) of employed women are in professional, technical, or managerial positions, and 20 percent are employed in sales and services. Two in ten women work in agriculture. Women with specialized secondary or higher education, women living in households in the highest wealth quintile, and urban women are more likely to hold professional, technical, or managerial jobs. There is a relationship between the number of children that a woman has and her occupation. Women with more children are more likely to be employed in the agriculture sector. In regions where agricultural work is scarce, such as Yerevan, Gegharkunik, Lori, and Shirak, more than half of women work in professional positions. On the other hand, two in three women in Ararat were engaged in agricultural jobs.

Table 3.5.1 Occupation: Women

Percent distribution of women employed in the 12 months preceding the survey by occupation, according to background characteristics, Armenia 2001

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Un-skilled manual	Agri-culture	Don't know/ missing	Total	Number of women
Age									
15-19	(38.3)	(3.8)	(34.1)	(0.4)	(7.1)	(16.3)	(0.0)	(100.0)	40
20-24	53.1	8.8	23.7	2.8	0.2	9.7	1.8	100.0	228
25-29	53.2	9.3	17.4	2.1	0.8	16.2	0.9	100.0	267
30-34	48.5	2.8	20.4	4.6	2.8	20.9	0.0	100.0	261
35-39	47.3	3.1	16.8	3.3	3.0	25.8	0.6	100.0	290
40-44	38.9	3.8	18.9	7.1	8.3	22.8	0.1	100.0	400
45-49	39.5	3.5	22.0	5.2	7.6	21.8	0.4	100.0	434
Marital status									
Never married	51.4	14.5	22.4	3.7	1.2	6.3	0.5	100.0	425
Married or living together	46.1	2.0	15.6	4.6	4.3	27.0	0.4	100.0	1,229
Divorced/separated/widowed	31.8	2.8	37.3	4.9	11.1	10.9	1.1	100.0	268
Number of living children									
0	52.6	13.2	21.4	3.5	1.7	7.0	0.5	100.0	518
1-2	48.5	2.3	21.2	4.8	5.5	16.8	0.9	100.0	892
3+	32.2	0.8	17.1	4.6	5.8	39.4	0.0	100.0	511
Residence									
Urban	54.1	6.5	26.0	5.6	4.4	2.9	0.5	100.0	1,258
Rural	28.5	1.8	9.0	2.1	5.0	52.9	0.7	100.0	663
Region									
Yerevan	54.1	7.4	26.6	5.9	3.9	1.7	0.5	100.0	784
Aragatsotn	42.8	1.1	10.2	3.1	3.0	39.8	0.0	100.0	59
Ararat	21.5	0.7	5.6	1.6	4.1	66.6	0.0	100.0	175
Armavir	28.0	0.6	16.5	3.7	4.6	45.5	1.1	100.0	200
Gegharkunik	55.6	3.2	19.0	5.9	3.0	13.3	0.0	100.0	91
Lori	59.2	5.2	17.4	3.1	1.9	10.9	2.2	100.0	104
Kotayk	48.1	3.6	22.4	4.4	16.5	4.4	0.6	100.0	142
Shirak	55.0	8.4	31.4	0.0	2.3	2.9	0.0	100.0	79
Syunik	44.3	5.1	13.1	3.7	2.1	31.3	0.4	100.0	139
Vayots Dzor	39.7	6.9	19.4	13.1	14.6	4.1	2.2	100.0	22
Tavush	26.2	2.6	12.5	3.0	1.9	53.5	0.2	100.0	126
Education									
Basic general	3.8	0.5	29.6	2.9	16.3	47.0	0.0	100.0	97
Secondary general	8.9	1.8	29.8	11.4	7.8	39.5	0.8	100.0	514
Specialized secondary	50.1	5.5	19.9	2.4	4.3	17.2	0.6	100.0	677
Higher	76.2	7.3	11.2	1.1	0.4	3.5	0.3	100.0	633
Wealth quintile									
Lowest	16.5	1.5	11.7	2.3	6.3	61.4	0.4	100.0	308
Second	32.5	2.9	18.4	2.8	7.6	34.6	1.1	100.0	324
Middle	37.7	7.7	25.0	8.2	6.2	14.4	0.9	100.0	398
Fourth	56.4	4.8	25.8	5.2	3.9	3.9	0.0	100.0	411
Highest	69.3	6.0	18.0	3.1	0.6	2.6	0.4	100.0	479
Total	45.3	4.9	20.2	4.4	4.6	20.2	0.5	100.0	1,921

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

Table 3.5.2 shows that among employed men, 25 percent hold professional, technical, or managerial jobs, 27 percent are in sales and services, 19 percent work as skilled manual laborers, and 18 percent work in agriculture. Men show similar variations across subgroups as women. However, the relationship between the number of children a man has and his occupation is less clear than that for women.

Table 3.5.2 Occupation: Men

Percent distribution of men employed in the 12 months preceding the survey by occupation, according to background characteristics, Armenia 2005

Background characteristic	Professional/ technical/ managerial	Clerical	Sales and services	Skilled manual	Un-skilled manual	Agri-culture	Don't know/ missing	Total	Number of men
Age									
15-19	(0.3)	(3.1)	(21.8)	(23.4)	(12.5)	(39.0)	(0.0)	(100.0)	54
20-24	19.3	2.0	22.8	24.7	8.0	22.3	0.9	100.0	124
25-29	27.0	2.3	31.4	17.7	11.9	9.8	0.0	100.0	164
30-34	31.6	0.0	27.0	18.2	10.5	12.6	0.0	100.0	140
35-39	23.1	1.0	25.4	22.7	7.5	20.2	0.0	100.0	131
40-44	20.6	1.1	35.3	15.0	7.1	21.0	0.0	100.0	171
45-49	35.3	1.1	23.0	18.5	7.9	14.3	0.0	100.0	175
Marital status									
Never married	19.5	1.6	23.9	23.5	10.8	20.3	0.4	100.0	251
Married or living together	27.2	1.3	28.4	18.0	8.2	17.0	0.0	100.0	693
Divorced/separated/widowed	*	*	*	*	*	*	*	*	15
Number of living children									
0	21.2	1.9	23.3	23.2	10.1	19.9	0.3	100.0	308
1-2	28.7	1.1	34.1	15.4	9.1	11.6	0.0	100.0	457
3+	22.4	1.1	18.2	22.5	6.9	28.8	0.0	100.0	192
Residence									
Urban	32.2	1.7	34.5	20.2	9.4	1.9	0.2	100.0	600
Rural	13.1	0.8	15.6	18.0	8.4	44.1	0.0	100.0	358
Region									
Yerevan	37.0	1.2	34.6	17.0	9.0	1.2	0.0	100.0	366
Aragatsotn	8.7	2.8	15.3	23.0	7.3	42.9	0.0	100.0	45
Ararat	14.3	0.0	23.3	30.3	6.6	25.5	0.0	100.0	57
Armavir	13.2	2.5	14.1	12.1	10.9	47.1	0.0	100.0	103
Gegharkunik	15.9	1.8	20.5	20.6	1.4	39.7	0.0	100.0	61
Lori	(15.4)	(0.0)	(33.8)	(20.6)	(8.4)	(21.9)	(0.0)	(100.0)	72
Kotayk	24.6	2.8	13.1	35.9	11.5	11.1	1.0	100.0	110
Shirak	17.1	1.3	50.3	8.1	18.7	4.4	0.0	100.0	44
Syunik	27.0	0.0	19.8	12.4	2.7	38.1	0.0	100.0	50
Vayots Dzor	(24.2)	(0.0)	(48.9)	(3.0)	(18.7)	(5.2)	(0.0)	(100.0)	9
Tavush	18.4	0.0	33.3	15.1	10.2	23.0	0.0	100.0	41
Education									
Basic general	3.8	2.0	23.7	24.9	17.4	28.2	0.0	100.0	120
Secondary general	13.2	0.3	29.2	25.4	11.0	20.5	0.3	100.0	343
Specialized secondary	15.8	1.1	32.7	23.5	8.2	18.6	0.0	100.0	254
Higher	62.1	2.7	21.2	3.7	2.8	7.5	0.0	100.0	241
Wealth quintile									
Lowest	7.6	0.0	15.4	18.2	11.7	47.1	0.0	100.0	174
Second	9.7	2.0	25.3	23.9	9.1	29.8	0.0	100.0	165
Middle	19.5	0.0	31.0	25.3	10.4	13.4	0.5	100.0	213
Fourth	35.2	2.2	29.3	16.1	12.6	4.5	0.0	100.0	193
Highest	47.3	2.5	33.7	13.8	2.1	0.7	0.0	100.0	213
Total	25.0	1.4	27.4	19.3	9.0	17.7	0.1	100.0	958

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.

3.6 EMPLOYMENT CHRACTERISTICS

Table 3.6 shows the percent distribution of women who were employed in the 12 months preceding the survey by type of earnings, type of employer, and continuity of employment. Type of earnings refers to whether they were paid in cash, in kind, or not at all. Women who reported being currently employed were asked about their employer—whether they were employed by a relative, a nonrelative, or were self-employed. Additionally, women were also asked whether they worked continuously throughout the year or seasonally.

Overall, 80 percent of employed women earn cash only, 4 percent were paid in cash and in kind, and 15 percent received no payment. Men are more likely to receive compensation than women—84 percent receive cash and only 6 percent work for no payment (not shown in table). Seven in ten women who work in agriculture did not receive payment, while 96 percent who work in nonagricultural jobs were paid in cash.

Table 3.6 shows that 71 percent of women who work are employed by a nonrelative, 21 percent are employed by a family member, and 8 percent are self-employed. As expected, most women who work in agriculture are employed by a family member (69 percent), while most of those who hold a position in nonagricultural jobs were employed by nonfamily members (86 percent).

With regard to continuity of employment, the data show that three-fourths of employed women work all year. Most women who work in agriculture work seasonally (80 percent), while most of those who work in nonagricultural jobs work all year (90 percent).

Table 3.6 Employment characteristics

Percent distribution of women employed in the 12 months preceding the survey by type of earnings, type of employer, and continuity of employment, according to type of employment (agricultural or nonagricultural), Armenia 2005

Employment characteristics	Agricultural work	Non-agricultural work	Total
Type of earnings			
Cash only	19.7	95.6	80.2
Cash and in-kind	10.4	2.3	3.9
In-kind only	1.4	0.3	0.5
Not paid	68.5	1.7	15.2
Missing	0.0	0.1	0.2
Total	100.0	100.0	100.0
Type of employer			
Employed by family member	69.3	8.3	20.6
Employed by nonfamily member	12.1	86.2	71.0
Self-employed	18.5	5.5	8.2
Missing	0.0	0.0	0.2
Total	100.0	100.0	100.0
Continuity of employment			
All year	19.9	90.0	75.7
Seasonal	80.0	7.7	22.2
Occasional	0.1	2.1	1.7
Missing	0.0	0.2	0.3
Total	100.0	100.0	100.0
Number	387	1,523	1,921

Note: Total includes 10 women with missing information on type of employment who are not shown separately.

FERTILITY 4

All women who were interviewed in the 2005 ADHS were asked to give a complete reproductive history. In collecting these histories, each woman was first asked about the total numbers of pregnancies that had ended in live births, induced abortions, miscarriages, and stillbirths. After obtaining these aggregate data, an event-by-event pregnancy history was collected. For each pregnancy, the duration, the month and year of termination, and the result of the pregnancy were recorded. Information was collected about the most recent completed pregnancy, then the next-to-last, etc. For each live birth, information was collected on the sex of the child, survival status, and age (for surviving children) or age at death (for deceased children).

4.1 CURRENT FERTILITY

The data collected in the reproductive history were used to calculate two of the most widely used measures of current fertility: the total fertility rate (TFR) and its component age-specific fertility rates. The TFR is interpreted as the average number of children a woman would bear in her lifetime if she experienced the currently observed age-specific rates throughout her reproductive years. The fertility rates refer to the three-year period before the survey (i.e., approximately from October 2002 to October 2005).

According to the results of the 2005 ADHS, the TFR is 1.7 children per woman (Table 4.1). This is below replacement level fertility (which is slightly more than 2.0). The 2005 ADHS rate of 1.7 is the same as the rate estimated by the 2000 ADHS. Thus, there is no evidence of change in overall levels of fertility in Armenia over the last five years.

The data suggest, however, some change in urban-rural differentials. While urban fertility is statistically the same (1.5 in 2000 versus 1.6 in 2005) there is some evidence of decline in rural areas (from 2.1 in 2000 to 1.8 in 2005). Overall, the pattern of age-specific fertility rates is the same, although there has been a shift away from childbearing at the youngest ages (15-19) to higher levels of fertility among women in their late 20s.

Most childbearing takes place when women are in their 20s. The age-specific fertility rates peak at age 20-24 regardless of residence (Figure 4.1). In fact, in both urban and rural areas, fertility rates in these age groups (20-24 and 25-29) account for three-fourths of the total fertility rate.

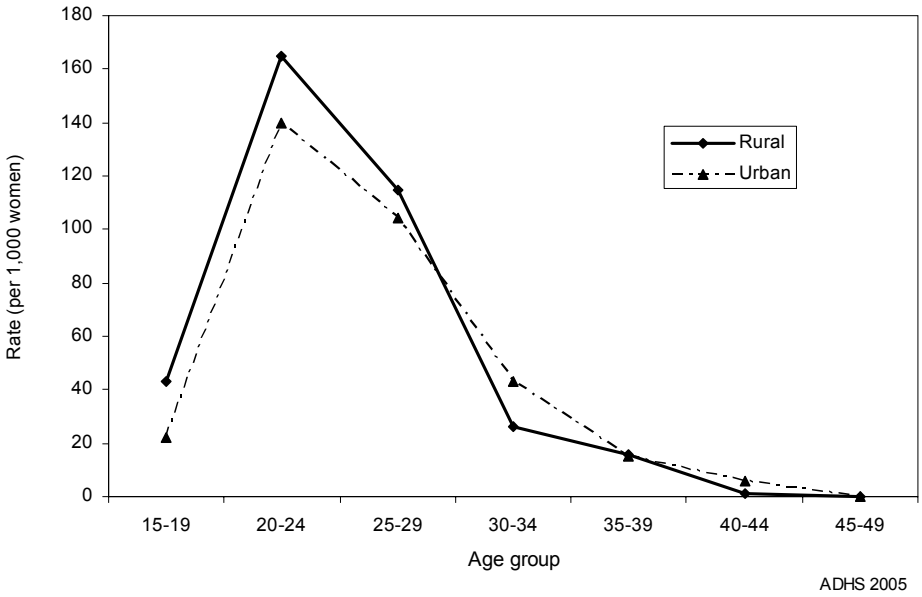
Table 4.1 Current fertility

Age-specific and cumulative fertility rates, the general fertility rate, and the crude birth rate for the three years preceding the survey, by residence, Armenia 2005

	Residence		
Age	Urban	Rural	Total
15-19	22	43	30
20-24	140	165	148
25-29	104	115	107
30-34	43	26	37
35-39	15	16	16
40-44	6	1	4
45-49	0	0	0
TFR	1.6	1.8	1.7
GFR	57	60	58
CBR	14.5	14.9	14.6

Note: Rates are for the period 1-36 months preceding the survey. Rates for age group 45-49 may be slightly biased due to truncation.
TFR: Total fertility rate for ages 15-49, expressed per woman.
GFR: General fertility rate expressed per 1,000 women
CBR: Crude birth rate expressed per 1,000 population

Figure 4.1 **Age-specific Fertility Rates for the Three-year Period Preceding the Survey, by Residence**



4.2 FERTILITY DIFFERENTIALS BY BACKGROUND CHARACTERISTICS

Table 4.2 shows the total fertility rate by background characteristics. Albeit not strong, there is a negative association between education and fertility (Figure 4.2). Women who have higher education have fewer children than women with less education (1.5 versus 1.8 or 1.9).

The TFR in Yerevan is 1.7 births per woman. There appears to be marked variation between regions, ranging from approximately one birth per woman in Vayots Dzor to 2.5 in Aragatsotn. Undoubtedly, some of these differences are due to sampling variability, which is quite large due to the small number of respondents in each region (see Appendix B).

Three percent of women reported being pregnant at the time of the survey. Small differences are found in this percentage across subgroups of women.

The last column in Table 4.2 shows the mean number of children ever born to women age 40-49. This is an indicator of cumulative fertility; it reflects the fertility performance of older women who are nearing the end of their reproductive period and thus represents completed fertility. If fertility had remained stable over time, the two fertility measures, TFR and children ever born, would be equal or similar. The findings show that the mean number of children ever born to women age 40-49 (2.5 children per woman) is higher than the TFR for the three years preceding the survey (1.7 children per woman), indicating a decline in fertility over the past 30 years.

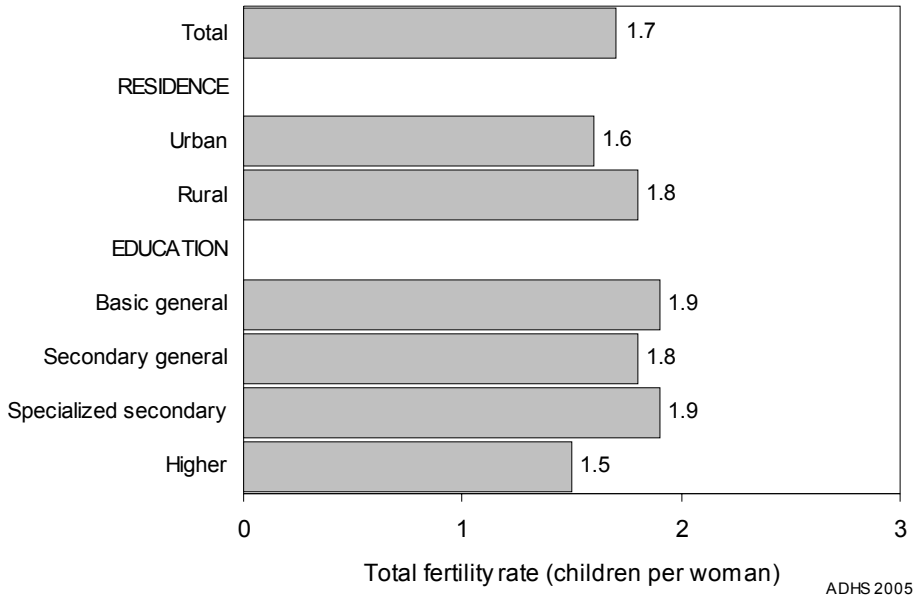
Table 4.2 Fertility by background characteristics

Total fertility rate for the three years preceding the survey, percentage currently pregnant, and mean number of children ever born to women age 40-49, by background characteristics, Armenia 2005

Background characteristic	Total fertility rate[1]	Percentage currently pregnant[1]	Mean number of children ever born to women age 40-49
Residence			
Urban	1.6	3.1	2.3
Rural	1.8	2.8	2.8
Region			
Yerevan	1.7	2.9	2.2
Aragatsotn	2.5	2.6	3.0
Ararat	2.0	2.5	2.8
Armavir	1.7	2.9	2.7
Gegharkunik	2.1	2.1	2.8
Lori	(1.4)	4.2	2.6
Kotayk	1.8	3.6	2.8
Shirak	1.2	3.9	2.7
Syunik	1.8	2.7	2.7
Vayots Dzor	(0.9)	2.9	2.8
Tavush	1.6	1.6	2.5
Education			
Basic general	1.9	2.7	2.6
Secondary general	1.8	3.3	2.7
Specialized secondary	1.9	2.7	2.5
Higher	1.5	2.8	2.1
Wealth quintile			
Lowest	1.8	3.2	2.9
Second	2.0	3.0	2.7
Middle	1.9	2.7	2.4
Fourth	1.6	3.4	2.4
Highest	1.5	2.6	2.3
Total	1.7	3.0	2.5

Note: Figures in parentheses are based on 250-499 unweighted women.
[1] Women age 15-49

Figure 4.2 **Total Fertility Rates for the Three Years Preceding the Survey, by Residence and Education**



4.3 FERTILITY TRENDS

One of the most important and complex issues for Armenia is the decline in fertility. One method of understanding fertility trends is to examine the age-specific fertility rates over time. Because women age 50 and older were not interviewed in the survey, the rates are successively truncated as the number of years before the survey increases (see Table 4.3). Data in this table indicate that fertility has declined in the past 20 years. This decline is particularly evident among women in the youngest age groups (15-19 and 20-24) in the 10 years preceding the survey. For example, age-specific fertility among women age 20-24 declined from 178 births per 1,000 women in the period five to nine years before the survey to 146 births per 1,000 women in the period zero to four years before the survey, a decrease of 18 percent.

Table 4.3 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, Armenia 2005

Mother's age at time of the birth	Number of years preceding the survey			
	0-4	5-9	10-14	15-19
15-19	33	56	101	71
20-24	146	178	215	255
25-29	95	93	120	142
30-34	36	42	57	[77]
35-39	15	18	[32]	
40-44	4	[7]		
45-49	[0]			

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

4.4 FERTILITY RATES FROM NSS AND THE ADHS

At the national level, the 2005 ADHS TFR of 1.7 is higher than the official government rates published for the same period. For example, 1.4 was the official TFR for both 2003 and 2004 based on administrative records (National Statistical Service, 2006). An important difference in the computing of these rates should be noted: whereas the ADHS rate is based on the de facto population, the official government rates are based on the de jure population.

Other factors that could contribute to the difference between fertility rates include sampling variability of the ADHS estimates and underreporting of births to the government registration system.

4.5 CHILDREN EVER BORN AND LIVING

Table 4.4 shows the distribution of all women and currently married women by number of children ever born. Data on the number of children ever born reflect the accumulation of births to women over their entire reproductive years and therefore have limited reference to current fertility levels, particularly when the country has experienced a decline in fertility.

On average, women in Armenia have given birth to 1.5 children by their late twenties. Even in the oldest age groups, the mean number of children ever born is only 2.5. As expected, currently married women have had more births than all women in all age groups. Nevertheless, the mean number of children ever born does not exceed 3.0. The largest difference between the data on children ever born for currently married women and all women is in the young age groups, because a large number of unmarried young women are not exposed to the risk of pregnancy. Differences at older ages reflect the impact of marital dissolution (divorce or widowhood).

Among currently married women, 14 percent have had only one live-born child, 42 percent have had two children, and 27 percent have three children. Ten percent of women have had four or more children. In total, only 1 percent of currently married women age 45-49 have never had a live birth. This is an indirect indicator of primary infertility. Voluntary childlessness is rare in Armenia, and most women desire to have at least one child, preferably soon after marriage.

Table 4.4 Children ever born and living

Percent distribution of all women and currently married women by number of children ever born, and mean number of children ever born and mean number of living children, according to age group, Armenia 2005

Age	Number of children ever born							Total	Number of women	Mean number of children ever born	Mean number of living children
	0	1	2	3	4	5	6+				
ALL WOMEN											
15-19	97.6	2.3	0.2	0.0	0.0	0.0	0.0	100.0	1,123	0.03	0.03
20-24	64.4	20.1	14.1	1.3	0.1	0.0	0.0	100.0	1,131	0.53	0.52
25-29	27.2	17.6	41.6	10.8	2.0	0.4	0.2	100.0	929	1.45	1.41
30-34	11.4	10.5	49.7	22.4	5.1	0.5	0.3	100.0	749	2.03	1.93
35-39	6.9	10.8	42.9	29.6	8.0	0.8	1.0	100.0	711	2.28	2.19
40-44	6.7	6.1	37.9	33.4	11.3	3.4	1.2	100.0	965	2.52	2.36
45-49	6.3	9.7	32.2	35.6	11.0	3.4	1.8	100.0	958	2.53	2.35
Total	35.6	11.0	28.9	17.6	5.0	1.2	0.6	100.0	6,566	1.52	1.44
CURRENTLY MARRIED WOMEN											
15-19	65.6	32.5	1.9	0.0	0.0	0.0	0.0	100.0	78	0.36	0.36
20-24	21.6	43.6	31.6	3.0	0.3	0.0	0.0	100.0	504	1.17	1.14
25-29	7.2	21.0	53.7	14.5	2.7	0.6	0.3	100.0	695	1.88	1.82
30-34	2.3	7.9	56.9	25.9	6.2	0.4	0.4	100.0	601	2.29	2.18
35-39	1.6	8.5	45.4	33.0	9.4	0.9	1.2	100.0	602	2.48	2.39
40-44	1.5	4.5	38.6	37.2	12.8	3.8	1.4	100.0	824	2.74	2.56
45-49	1.4	5.1	33.1	42.6	12.0	3.9	1.9	100.0	741	2.79	2.59
Total	6.3	14.0	42.3	27.0	7.6	1.8	0.9	100.0	4,044	2.25	2.14

Note: Currently married includes respondents in consensual union (living together).

4.6 BIRTH INTERVALS

A birth interval is defined as the length of time between two live births. Research has shown that short birth intervals may adversely affect maternal health and children's chances of survival. Children born too close to a previous birth, especially if the interval between the births is less than two years, are at increased risk of health problems and dying at an early age. Longer birth intervals, on the other hand, contribute to the improved health status of both mother and child.

Table 4.5 shows the percent distribution of second and higher-order births in the five years prior to the survey by the number of months since the previous birth. The overall median birth interval is 37 months. Nonetheless, approximately one-third of births (32 percent) occur within 24 months of the previous birth. Indeed, 17 percent of births occur within 18 months of a previous birth. This finding has not changed since 2000.

In general younger women have shorter birth intervals than older women. While 41 percent of women age 20-29 space their births less than 24 months apart, the corresponding statistic for women 30-39 is 16 percent. There is a strong relationship between birth interval and education. Births to mothers with basic general education have shorter intervals than births to mothers who have attended secondary education. For example, whereas 42 percent of births to mothers with basic general education are born less than 24 months after their older sibling, the corresponding statistic for women in each of the three more highly educated categories is approximately 30 percent (Figure 4.3).

Measured in terms of the median number of months between births, birth intervals also vary by the selected background characteristics. Births to young mothers in their 20s and to mothers with basic education have the shortest median birth interval (28 months each). While there is no clear relationship between birth interval and wealth status, births to mothers in the lowest wealth quintile have the shortest

interval compared with births to mothers in the higher wealth quintiles. Birth interval is also related to birth order and residence. For example, the median birth interval for fourth to sixth order births is 64 months compared with 34 months for second and third order births. Birth interval varies widely across regions, with the longest in Ararat (43 months) and the shortest in Gegharkunik and Tavush (less than 30 months).

Table 4.5 Birth intervals

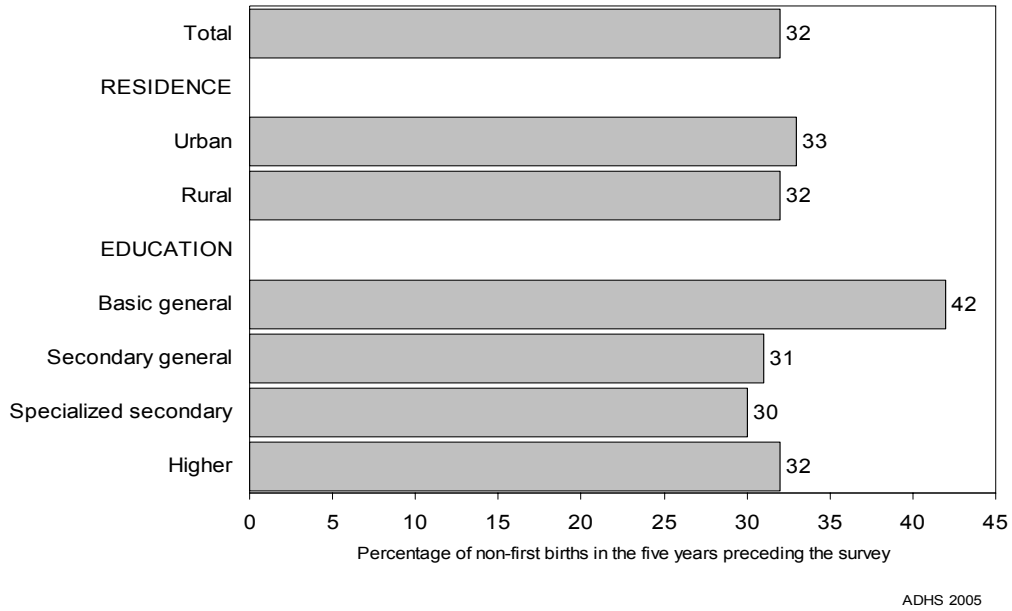
Percent distribution of non-first births in the five years preceding the survey by number of months since preceding birth, and median number of months since preceding birth, according to background characteristics, Armenia 2005

Background characteristic	Number of months since preceding birth					Total	Number of non-first births	Median number of months since preceding birth[1]
	7-17	18-23	24-35	36-47	48+			
Age								
15-19	*	*	*	*	*	*	2	*
20-29	20.3	20.7	20.0	18.6	20.5	100.0	528	28.1
30-39	9.9	6.3	10.4	11.4	62.0	100.0	214	64.9
40-49	(3.0)	(0.0)	(8.5)	(9.8)	(78.7)	(100.0)	41	(>70)
Sex of preceding birth								
Male	16.0	18.3	17.8	16.9	31.0	100.0	386	34.3
Female	16.9	13.3	16.0	15.4	38.4	100.0	399	38.5
Survival of preceding birth								
Living	16.3	15.6	17.1	16.4	34.6	100.0	751	37.0
Dead	(21.1)	(18.6)	(11.3)	(9.5)	(39.6)	(100.0)	34	(34.9)
Birth order								
2-3	17.8	16.6	17.8	17.1	30.8	100.0	691	34.2
4-6	6.1	10.1	7.1	7.0	69.7	100.0	87	63.9
7+	*	*	*	*	*	*	7	*
Residence								
Urban	20.1	12.4	15.3	16.9	35.4	100.0	437	37.6
Rural	12.0	20.0	18.9	15.1	34.0	100.0	348	35.3
Region								
Yerevan	22.7	11.5	12.3	17.6	35.9	100.0	266	38.0
Aragatsotn	11.4	16.6	19.1	16.3	36.6	100.0	51	37.5
Ararat	11.0	11.3	15.9	16.4	45.4	100.0	72	42.8
Armavir	11.1	22.2	12.8	14.1	39.7	100.0	74	37.9
Gegharkunik	15.2	25.7	17.9	9.1	32.1	100.0	73	27.7
Lori	(16.1)	(22.3)	(12.4)	(17.2)	(32.0)	(100.0)	50	(33.7)
Kotayk	11.0	4.4	28.8	20.8	35.0	100.0	65	41.5
Shirak	(19.3)	(13.9)	(30.9)	(13.7)	(22.2)	(100.0)	45	(30.4)
Syunik	16.2	22.7	14.8	13.2	33.2	100.0	33	32.0
Vayots Dzor	(8.1)	(22.9)	(33.7)	(18.2)	(17.0)	(100.0)	9	(30.3)
Tavush	13.1	23.6	19.9	17.1	26.3	100.0	47	28.5
Education								
Basic general	24.7	17.2	13.2	21.4	23.4	100.0	83	28.3
Secondary general	13.7	17.6	20.2	16.9	31.6	100.0	320	34.5
Specialized secondary	16.2	14.2	14.0	15.2	40.4	100.0	220	40.4
Higher	18.2	13.3	16.0	13.2	39.3	100.0	163	37.3
Wealth quintile								
Lowest	13.5	20.2	19.1	17.1	30.0	100.0	183	32.7
Second	12.6	17.4	16.8	14.3	39.0	100.0	163	40.2
Middle	17.2	13.4	18.5	13.4	37.5	100.0	151	36.5
Fourth	21.1	16.6	13.7	17.3	31.4	100.0	135	34.7
Highest	19.5	10.3	15.5	18.4	36.3	100.0	154	37.9
Total	16.5	15.7	16.9	16.1	34.8	100.0	785	36.9

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. 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] The median is the midpoint of the distribution of births by number of months since preceding birth.

Figure 4.3 **Percentage of Births Occurring Less than 24 Months after a Prior Birth, by Residence and Education**



4.7 AGE AT FIRST BIRTH

Age at first birth is an important determinant of fertility. It has significant demographic consequences for society as a whole, as well as for the health and welfare of mothers and children. Table 4.6 shows the percentage of women age 15-49 who have given birth by specific exact ages, according to current age. For women age 25 and older, the median age at first birth is presented in the last column of the table.

Table 4.6 Age at first birth

Percentage of women age 15-49 who have given birth by specific exact ages, percentage who have never given birth, and median age at first birth, according to current age, Armenia 2005

	Percentage of women who have given birth by exact age:					Percentage who have never given birth	Number of women	Median age at first birth[1]
Current age	15	18	20	22	25			
15-19	0.0	na	na	na	na	97.6	1,123	a
20-24	0.0	3.4	15.4	na	na	64.4	1,131	a
25-29	0.2	9.0	27.7	46.5	64.2	27.2	929	22.5
30-34	0.0	6.2	36.0	56.4	74.4	11.4	749	21.3
35-39	0.0	5.7	28.9	58.8	78.3	6.9	711	21.3
40-44	0.0	1.1	19.7	47.8	73.8	6.7	965	22.2
45-49	0.1	2.8	17.3	40.9	68.7	6.3	958	22.8
25-49	0.1	4.8	25.2	49.3	71.4	11.9	4,312	22.1

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
[1]The median is the midpoint of the distribution of women by exact age at first birth.

The 2005 ADHS findings indicate that childbearing among Armenian women begins relatively late. The majority of women age 20-24 (64 percent) have never given birth. The median age at first birth among women age 25 and older is between 21 and 23 years. The median age at first birth has decreased by more than one year from 22.8 years among women age 45-49 to 21.3 years among women age 30-39. However, median age at first birth seems to be increasing among younger women; the median age for women age 25-29 is 22.5 years.

Changes in the median age at first birth are associated with changes in age at first marriage (see Table 7.2). Other researchers have noted that among Armenians, there is an expectation that a child will be born within the first two years of marriage (National Program on Reproductive Health, 1998). The 2005 ADHS data indicate that Armenian 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 median age at first marriage is almost one and a half years less than the median age at first birth (21.2 and 22.5 years, respectively). The same interval between age at first marriage and age at first birth is observed for women age 45-49 (21.5 and 22.8 years, respectively).

Table 4.7 shows that, overall, there is little significant difference in the median age at first birth by background characteristics. The median age at first birth shows a positive relationship with wealth status. The median age at first birth varies only slightly by region, ranging from 21 years in Gegharkunik to 23 years in Yerevan.

Table 4.7 Median age at first birth by background characteristics

Median age at first birth among women 25-49, by current age, according to background characteristics, Armenia 2005

Background characteristic	Current age					Women age 25-49
	25-29	30-34	35-39	40-44	45-49	
Residence						
Urban	23.6	22.4	21.6	22.7	23.1	22.7
Rural	20.7	20.0	20.8	21.4	22.5	21.1
Region						
Yerevan	23.9	23.0	21.8	23.5	23.3	23.2
Aragatsotn	20.9	20.1	20.8	21.6	22.2	21.3
Ararat	21.4	20.8	21.2	22.0	22.5	21.7
Armavir	21.1	20.0	21.0	21.5	23.1	21.4
Gegharkunik	19.8	20.4	20.5	21.0	22.7	20.9
Lori	21.3	20.2	(20.9)	21.1	22.9	21.3
Kotayk	21.7	21.4	20.6	21.4	21.3	21.3
Shirak	24.4	20.1	21.9	22.7	22.9	22.3
Syunik	23.3	21.6	21.1	22.2	22.5	22.2
Vayots Dzor	(22.8)	(20.2)	(20.5)	21.9	22.8	21.5
Tavush	21.2	21.0	21.2	21.4	22.6	21.6
Education						
Basic general	18.9	(19.5)	(19.7)	(20.6)	(21.4)	20.4
Secondary general	20.1	19.7	20.0	21.1	21.7	20.6
Specialized secondary	24.3	20.9	21.4	22.2	22.7	22.2
Higher	a	24.5	24.3	24.9	25.4	a
Wealth quintile						
Lowest	20.0	19.9	20.9	21.7	23.0	21.2
Second	21.6	20.5	20.9	21.6	22.8	21.5
Middle	22.0	21.8	21.1	22.2	22.5	22.1
Fourth	23.5	21.3	21.4	22.5	22.5	22.4
Highest	24.6	23.2	21.9	22.8	23.5	23.2
Total	22.5	21.3	21.3	22.2	22.8	22.1

Note: The median is the midpoint of the distribution of women by exact age at first birth. Figures in parentheses are based on 25-49 unweighted cases.
a = Omitted because less than 50 percent of the women had a birth before the beginning of the age group

4.8 TEENAGE PREGNANCY AND MOTHERHOOD

It is well known that adolescent pregnancy, early childbearing, and motherhood have negative socioeconomic and health consequences. Adolescent mothers are more likely to have complications during labor, which result in higher morbidity and mortality for themselves and their children. Moreover, childbearing during the teenage years frequently has adverse social consequences, particularly on female educational attainment, because women who become mothers in their teens are more likely to curtail education.[1]

Table 4.8 Teenage pregnancy and motherhood

Percentage of women age 15-19 who are mothers or pregnant with their first child and percentage who have begun childbearing, by background characteristics, Armenia 2005

Background characteristic	Percentage who are: Mothers	Percentage who are: Pregnant with first child	Percentage who have begun child-bearing	Number of women
Age				
15	0.0	0.0	0.0	234
16	0.0	0.8	0.8	242
17	1.3	2.6	3.9	207
18	3.5	3.0	6.5	192
19	7.3	5.1	12.4	248
Residence				
Urban	2.3	1.7	4.0	684
Rural	2.6	3.2	5.9	439
Region				
Yerevan	3.1	1.2	4.3	386
Aragatsotn	0.4	0.6	1.0	56
Ararat	6.7	0.8	7.5	66
Armavir	0.0	3.1	3.1	113
Gegharkunik	2.0	3.5	5.5	84
Lori	0.0	4.7	4.7	95
Kotayk	5.9	3.5	9.4	105
Shirak	1.3	3.8	5.1	117
Syunik	1.2	0.0	1.2	46
Vayots Dzor	0.0	0.6	0.6	18
Tavush	2.6	2.7	5.3	36
Education				
Basic general	2.7	1.6	4.3	212
Secondary general	3.2	3.4	6.7	491
Specialized secondary	2.2	2.8	5.0	183
Higher	0.8	0.0	0.9	237
Wealth quintile				
Lowest	0.9	4.4	5.3	215
Second	2.5	1.9	4.5	237
Middle	4.8	4.0	8.8	226
Fourth	4.4	1.0	5.4	196
Highest	0.0	0.2	0.2	248
Total	2.4	2.3	4.7	1,123

Table 4.8 shows the percentage of women age 15-19 (teenagers) who are mothers or pregnant with their first child, by background characteristics. Overall, 5 percent of teenagers in Armenia have begun childbearing, 2 percent are already mothers, and 2 percent are pregnant with their first child. As expected, the proportion of young women who have begun childbearing increases rapidly with age, from less than 1 percent among women age 15 and 16 to 12 percent of women age 19.

The variation in early childbearing by educational attainment and wealth quintile is unclear. The proportion of teenagers who have begun childbearing is highest among women with secondary general education and among women in the middle wealth quintile.

Teenage fertility varies slightly by urban-rural residence. The proportion of teenagers who have begun childbearing is 4 percent in urban areas compared with 6 percent in urban areas. Teenage childbearing varies significantly across regions, ranging from 1 percent in Vayots Dzor, Aragatsotn, and Syunik to 9 percent in Kotayk.

In terms of trends, at the national level there is little difference overall in adolescent fertility between the 2000 and 2005 ADHS surveys. Six percent of teenagers in 2000 and 5 percent of teenagers in 2005 reported either being pregnant or mothers at the time of data collection. Although the results by background characteristics vary greatly between the two surveys, this can be explained in part by sampling variability due to the small numbers of respondents in the samples who are teenagers.

[1]The legal age at marriage in Armenia is 17.

CONTRACEPTION 5

The primary function of family planning programs is to advocate conscious entry into parenthood for both women and men. Contraception provides women and men with the means to achieve their desired number of children and to time the birth of those children. The efficacy of family planning depends on people's knowledge of contraceptive methods and on the availability of methods to meet the varying needs of a wide spectrum of potential users. Availability of methods, in turn, depends on the quality and quantity of service providers and on available financial and technical resources. In 2002 the Parliament of Armenia adopted a new law on reproductive health and reproductive human rights. According to this law, use of contraception, including voluntary sterilization, is legal in Armenia.

Family planning topics addressed in this chapter include knowledge of contraceptive methods, use of methods in the past and present, source of supply, reasons for nonuse, desire to use in the future, exposure to family planning messages, and attitudes toward family planning. Although the focus of this chapter is on women, some results from the men's survey will also be presented because men play an important role in the realization of reproductive goals.

5.1 KNOWLEDGE OF CONTRACEPTIVE METHODS

Acquiring knowledge about fertility control is an important step towards gaining access to and then using a suitable contraceptive method in a timely and effective manner. The 2005 ADHS collected information on knowledge and use of contraception. To obtain these data, 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. For analytical purposes, contraceptive methods are grouped into two types in Table 5.1: modern and traditional. Modern methods include female sterilization, male sterilization, pill, intra uterine device (IUD), injectables, implants, male condom, female condom, diaphragm, foam/jelly, lactational amenorrhea method (LAM)[1] and emergency contraception. Traditional methods include periodic abstinence (rhythm method), withdrawal, and folk methods.

Table 5.1 shows that knowledge of contraception is high among both women and men. Almost all respondents know at least one method of contraception. The mean number of methods known is a rough indicator of the breadth of knowledge of family planning methods. On average, currently married women, who have the greatest exposure to the risk of pregnancy, know at least six methods. Knowledge of a modern method is nearly universal. Approximately nine out of every ten married women have heard about the male condom and the IUD. Withdrawal is the most widely known traditional method (87 percent).

Married men know an average of over five contraceptive methods, one less than married women. Almost all married men have heard of the condom and two-thirds have heard of the IUD. Eighty-six percent of married men have heard of withdrawal.

[1] The 2005 ADHS questionnaire differed from the 2000 ADHS questionnaire in terms of asking about LAM. In 2000, a description of LAM would be read to the respondent if she did not recognize the term "lactational amenorrhea method." The 2000 results suggested that the description caused many respondents to confuse the modern method of LAM with the folk method of breastfeeding. Thus, the description was dropped in the 2005 ADHS questionnaire.

Table 5.1 Knowledge of contraceptive methods

Percentage of all respondents, currently married respondents, and sexually active unmarried men age 15-49 who know of specific contraceptive methods, Armenia 2005

	Women		Men		
Method	All	Currently married	All	Currently married	Sexually active unmarried[1]
Any method	95.1	98.9	97.1	99.0	99.6
Any modern method	94.5	97.9	97.0	98.8	99.6
Female sterilization	24.7	27.6	25.9	31.3	44.2
Male sterilization	12.2	13.4	22.6	26.0	43.3
Pill	76.5	82.2	52.9	60.4	62.3
IUD	85.5	93.5	53.5	67.7	66.7
Injectables	34.2	37.4	22.7	25.5	36.3
Implants	8.3	8.8	6.3	7.7	10.5
Male condom	90.7	95.0	96.6	98.5	99.6
Female condom	20.9	23.0	14.6	17.1	26.7
Diaphragm	5.9	6.1	7.5	8.6	12.4
Foam/jelly	40.3	45.2	19.2	23.7	21.6
Lactational amenorrhea (LAM)	14.3	17.6	2.3	2.5	7.1
Emergency contraception	15.6	17.5	20.7	25.9	31.3
Any traditional method	70.5	90.1	75.5	86.9	92.9
Periodic abstinence	42.0	52.9	28.2	39.1	35.0
Withdrawal	66.8	87.2	75.0	86.0	92.9
Folk method	7.9	11.1	0.5	0.5	1.3
Mean number of methods known	5.5	6.2	4.5	5.2	5.9
Number	6,566	4,044	1,447	815	143

[1]Had sexual intercourse in the 30 days preceding the survey

Table 5.2 shows the percentage of currently married women and currently married men who know of at least one method of contraception, by background characteristics. With the exception of married women in Aragatsotn, knowledge of any method and of a modern method does not vary by background characteristics and is virtually universal.

5.2 EVER USE OF CONTRACEPTION

All respondents who had heard of a specific method of contraception were asked whether they (or a partner with them) had ever used that method; each known method was inquired about separately. The questionnaire contained an additional probe to be asked of women who reported no contraceptive use. Results are presented in Table 5.3.1 for all women and for currently married women by five-year age groups.

Three-quarters of currently married women have used a contraceptive method at some time in their lives. Levels of ever use among all women are significantly lower than among currently married women because the former includes women who have never been sexually active (50 percent versus 76 percent). More married women have tried a traditional method (57 percent) than a modern method (39 percent). The most common method is, by far, withdrawal. Ever use of withdrawal (50 percent) exceeds, by a factor of more than two, ever use of the condom (22 percent) or the IUD (18 percent). It should be noted that female condoms have never been distributed through the public sector in Armenia or sold in pharmacies; less than 1 percent of all women reported ever use.

Table 5.2 Knowledge of contraceptive methods by background characteristics

Percentage of currently married women and men age 15-49 who have heard of at least one contraceptive method and who have heard of at least one modern method, by background characteristics, Armenia 2005

	Women			Men		
Background characteristic	Heard of any method	Heard of any any modern method[1]	Number of women	Heard of any method	Heard of any modern method[1]	Number of men
Age						
15-19	98.0	98.0	78	na	na	0
20-24	98.7	98.2	504	(98.0)	(98.0)	50
25-29	99.5	98.7	695	98.9	98.9	126
30-34	99.3	99.1	601	100.0	100.0	131
35-39	98.7	97.5	602	100.0	100.0	129
40-44	99.0	97.8	824	97.9	97.0	180
45-49	98.1	96.6	741	99.1	98.8	198
Residence						
Urban	99.6	99.4	2,447	99.2	99.1	499
Rural	97.7	95.8	1,597	98.7	98.2	315
Region						
Yerevan	99.8	99.6	1,362	99.3	99.3	288
Aragatsotn	86.1	75.6	196	100.0	100.0	48
Ararat	98.0	97.2	307	100.0	100.0	60
Armavir	99.7	99.7	381	100.0	100.0	80
Gegharkunik	99.6	98.1	303	100.0	100.0	51
Lori	100.0	99.6	343	(94.1)	(94.1)	54
Kotayk	98.8	98.2	357	100.0	98.0	81
Shirak	99.4	99.2	357	96.2	95.1	55
Syunik	100.0	100.0	189	98.6	98.6	38
Vayots Dzor	98.8	95.2	65	100.0	100.0	19
Tavush	99.9	99.7	184	100.0	100.0	42
Education						
Basic general	95.9	92.8	235	94.4	92.3	75
Secondary general	98.7	97.6	1,629	99.6	99.6	288
Specialized secondary	99.0	98.1	1,353	98.9	98.7	241
Higher	100.0	99.9	828	100.0	100.0	212
Wealth quintile						
Lowest	96.5	93.4	764	98.2	96.8	162
Second	98.4	97.6	809	99.3	99.3	162
Middle	99.7	99.1	788	100.0	100.0	159
Fourth	99.9	99.8	841	97.5	97.5	151
Highest	99.8	99.5	842	100.0	100.0	181
Total	98.9	97.9	4,044	99.0	98.8	815

Note: Figures in parentheses are based on 25-49 unweighted cases
na = Not applicable
[1]Female sterilization, male sterilization, pill, IUD, injectables, implants, male condom, female condom, diaphragm, foam or jelly, lactational amenorrhea method (LAM), and emergency contraception

In the 2005 ADHS, men were asked only about ever use of male-oriented contraceptive methods, so the data are not comparable to women's data. Two-thirds of currently married men and virtually all sexually active unmarried men reported using a male-oriented method at some time (Table 5.3.2). The most common method is the male condom. Over half of married men have used a condom, as have 95 percent of sexually active unmarried men.

Table 5.3.1 Ever use of contraception: Women

Percentage of all women and currently married women age 15-49 who have ever used any contraceptive method, by specific method and age, Armenia 2005

		Modern method												Traditional method				
Age	Any method	Any modern method	Female sterilization	Pill	IUD	Injectables	Implants	Male condom	Female condom	Diaphragm	Foam/jelly	LAM	Emergency contraception	Any traditional method	Periodic abstinence	Withdrawal	Any folk method	Number of women
ALL WOMEN																		
15-19	1.4	0.4	0.0	0.0	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	1.0	0.3	1.0	0.1	1,123
20-24	24.0	11.6	0.0	1.0	5.1	0.0	0.0	6.4	0.1	0.0	0.7	1.7	0.0	16.5	1.8	14.6	1.7	1,131
25-29	60.8	35.8	0.2	4.8	14.1	0.0	0.0	21.2	0.4	0.0	1.5	2.2	1.7	44.1	8.5	40.2	4.5	929
30-34	74.5	43.8	0.0	8.1	19.6	0.1	0.2	25.6	0.0	0.0	2.1	3.4	1.0	56.7	14.9	47.1	9.6	749
35-39	73.8	41.3	0.9	7.6	20.0	0.9	0.0	24.3	0.7	0.0	3.9	2.6	2.0	54.2	12.9	47.8	4.4	711
40-44	75.7	38.2	1.1	5.3	18.9	1.2	0.0	19.9	0.9	0.1	1.7	1.0	1.5	59.1	13.9	52.1	6.7	965
45-49	64.1	26.8	0.6	4.4	13.5	0.5	0.2	12.9	0.4	0.0	1.2	1.9	0.7	51.1	17.8	42.5	5.9	958
Total	49.9	26.1	0.4	4.0	12.1	0.4	0.1	14.5	0.3	0.0	1.4	1.7	0.9	37.7	9.3	32.8	4.3	6,566
CURRENTLY MARRIED WOMEN																		
15-19	18.8	4.5	0.0	0.0	3.4	0.0	0.0	0.4	0.0	0.0	0.0	0.7	0.0	14.4	4.1	14.4	1.1	78
20-24	53.3	26.0	0.0	2.2	11.5	0.1	0.0	14.2	0.2	0.0	1.6	3.8	0.0	36.7	4.0	32.4	3.8	504
25-29	77.9	45.7	0.2	5.9	18.8	0.0	0.1	26.6	0.5	0.0	2.0	2.9	1.9	56.0	11.0	51.2	5.1	695
30-34	85.7	51.5	0.0	10.1	23.1	0.2	0.2	29.9	0.1	0.0	2.5	4.2	1.3	65.3	16.7	54.3	10.7	601
35-39	79.9	42.9	0.7	7.7	21.1	1.1	0.0	25.6	0.8	0.0	2.6	2.7	1.9	59.5	12.8	53.6	4.6	602
40-44	83.4	41.2	1.3	5.8	20.8	1.3	0.0	21.0	1.0	0.2	1.9	1.1	0.8	65.0	14.5	57.3	7.6	824
45-49	73.7	30.5	0.8	4.0	15.4	0.6	0.3	15.4	0.6	0.0	1.6	2.2	0.9	59.3	21.2	49.3	6.3	741
Total	75.5	39.2	0.6	5.9	18.4	0.6	0.1	21.7	0.5	0.0	2.0	2.6	1.1	57.1	13.7	49.8	6.3	4,044

LAM= Lactational amenorrhea method

Table 5.3.2 Ever use of contraception: Men

Percentage of all men, currently married men, and sexually active unmarried men age 15-49 who have ever used any contraceptive method, by specific method and age, Armenia 2005

		Modern method			Traditional method			
Age	Any method	Any modern method	Male sterilization	Male condom	Any traditional method	Periodic abstinence	Withdrawal	Number of men
ALL MEN								
15-19	12.7	11.8	0.1	11.7	2.8	0.4	2.8	292
20-24	63.7	60.6	0.0	60.6	30.1	5.5	29.1	237
25-29	79.8	73.9	1.3	73.9	56.7	9.8	56.6	202
30-34	85.5	76.2	0.0	76.2	58.8	13.3	57.2	156
35-39	91.2	75.7	0.0	75.7	75.0	26.1	73.5	150
40-44	88.1	72.0	0.0	72.0	74.4	17.5	72.3	199
45-49	88.1	70.3	0.4	69.9	71.3	20.6	69.0	211
Total	67.8	58.8	0.3	58.8	48.2	11.9	47.0	1,447
CURRENTLY MARRIED MEN								
15-19	18.5	17.0	0.0	17.0	3.8	0.7	3.8	184
20-24	62.9	60.9	0.0	60.9	28.3	5.6	26.8	146
25-29	77.2	71.9	0.0	71.9	59.2	9.6	59.2	120
30-34	81.2	70.9	0.0	70.9	56.8	10.8	55.1	89
35-39	90.0	64.9	0.0	64.9	73.3	31.6	70.2	71
40-44	87.1	72.6	0.0	72.6	72.1	14.8	69.6	126
45-49	84.8	66.5	0.7	65.8	69.2	22.8	67.6	123
Total	66.2	56.9	0.1	56.8	46.3	11.6	45.0	861
SEXUALLY ACTIVE UNMARRIED MEN[1]								
Total	97.9	95.3	0.0	95.3	59.9	12.7	58.3	143

[1]Men who had sexual intercourse in the 30 days preceding the survey

5.3 CURRENT USE OF CONTRACEPTION

Table 5.4 presents levels of current use of contraception for all women and for currently married women. Approximately one-third of all women of reproductive age are using a method of contraception; almost all users are currently married women. Overall, the ADHS found that 53 percent of married women are currently using a contraceptive method. Among married women, use of traditional methods (34 percent) is almost 75 percent higher than the use of modern methods (20 percent) (Figure 5.1). The most widely used method is, by far, withdrawal. Among married women, current use of withdrawal (28 percent) exceeds, by a factor of three, current use of the IUD (9 percent) or the condom (8 percent).

Table 5.4 Current use of contraception

Percent distribution of all women and currently married women age 15-49 by contraceptive method currently used, according to age, Armenia 2005

		Modern method							Traditional method						
Age	Any method	Any modern method	Female sterilization	Pill	IUD	Male condom	Foam/jelly	LAM	Any traditional method	Periodic abstinence	Withdrawal	Any folk method	Not currently using	Total	Number of women
ALL WOMEN															
15-19	1.1	0.3	0.0	0.0	0.2	0.0	0.0	0.0	0.8	0.0	0.8	0.0	98.9	100.0	1,123
20-24	19.3	8.3	0.0	0.2	3.9	3.4	0.0	0.8	11.0	0.7	9.3	1.0	80.7	100.0	1,131
25-29	46.7	21.1	0.2	0.9	8.7	10.3	0.6	0.4	25.6	1.9	22.3	1.4	53.3	100.0	929
30-34	54.4	22.6	0.0	1.6	11.7	8.8	0.2	0.3	31.8	4.8	24.7	2.3	45.6	100.0	749
35-39	54.3	19.5	0.9	0.7	9.7	8.3	0.0	0.0	34.8	4.5	29.1	1.2	45.7	100.0	711
40-44	47.8	15.6	1.1	0.7	7.3	6.5	0.0	0.0	32.2	3.2	26.9	2.1	52.2	100.0	965
45-49	26.2	5.7	0.6	0.1	3.3	1.6	0.0	0.0	20.5	3.4	15.7	1.5	73.8	100.0	958
Total	33.1	12.3	0.4	0.5	5.9	5.1	0.1	0.2	20.8	2.4	17.1	1.3	66.9	100.0	6,566
CURRENTLY MARRIED WOMEN															
15-19	16.5	4.5	0.0	0.0	3.4	0.4	0.0	0.7	12.0	0.0	12.0	0.0	83.5	100.0	78
20-24	42.9	18.6	0.0	0.5	8.8	7.6	0.0	1.8	24.3	1.5	20.5	2.3	57.1	100.0	504
25-29	61.7	27.4	0.2	1.2	11.6	13.0	0.9	0.5	34.3	2.5	29.8	1.9	38.3	100.0	695
30-34	67.3	27.7	0.0	1.9	14.5	10.6	0.2	0.3	39.6	6.0	30.8	2.7	32.7	100.0	601
35-39	62.4	21.5	0.7	0.8	10.7	9.4	0.0	0.0	40.8	5.0	34.4	1.4	37.6	100.0	602
40-44	55.9	18.2	1.3	0.8	8.5	7.6	0.0	0.0	37.7	3.7	31.5	2.5	44.1	100.0	824
45-49	33.5	7.3	0.8	0.1	4.3	2.1	0.0	0.0	26.2	4.3	20.1	1.9	66.5	100.0	741
Total	53.1	19.5	0.6	0.8	9.4	8.1	0.2	0.4	33.6	3.8	27.7	2.1	46.9	100.0	4,044

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

Contraceptive use ranges from a low of 17 percent of currently married women age 15-19 to two-thirds of currently married women age 30-34. This pattern holds true for specific methods, with a few exceptions. Male condoms are most frequently used by women age 25-29, while female sterilization is more common among older women. It should be noted, however, that female sterilization is generally performed for medical reasons as opposed to contraceptive purposes.

Overall, use of contraception has decreased from 61 percent of married women in the 2000 ADHS. The data indicate decreases in the use of both modern and traditional methods (Figure 5.2 and Table 5.5).

Figure 5.1 Contraceptive Use among Married Women

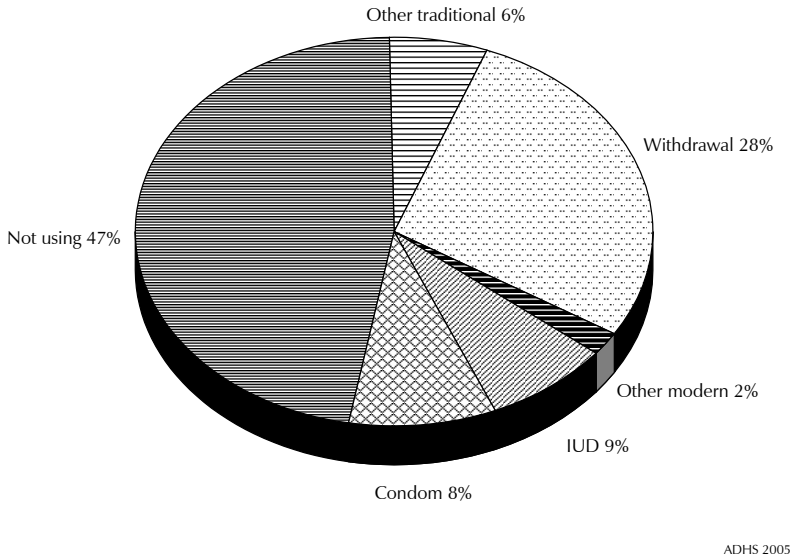


Figure 5.2 Trends in Current Contraceptive Use among Married Women

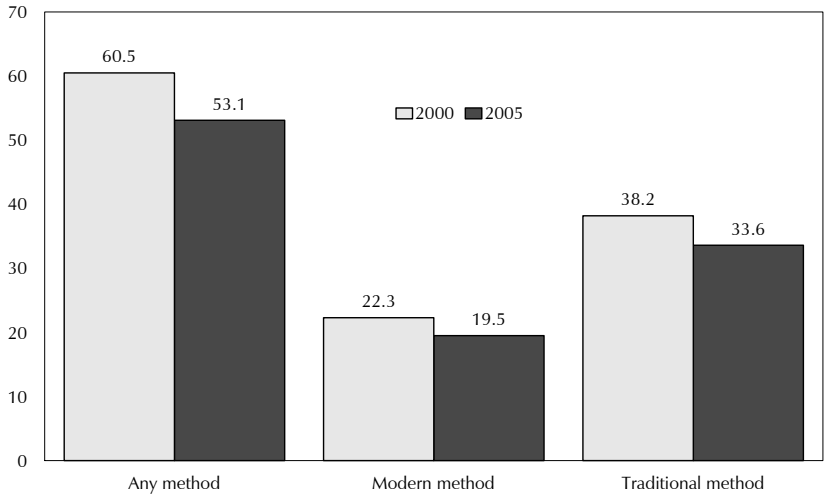


Table 5.5 Trends in contraceptive use

Percent distribution of currently married women age 15-49 by contraceptive method currently used, Armenia

Method	2000 ADHS	2005 ADHS
Any method	60.5	53.1
Any modern method	22.3	19.5
Female sterilization	2.7	0.6
Pill	1.1	0.8
IUD	9.4	9.4
Male condom	6.9	8.1
Foam/jelly	0.2	0.2
Lactational amenorrhea (LAM)	1.9	0.4
Any traditional method	38.2	33.6
Periodic abstinence	4.8	3.8
Withdrawal	31.9	27.7
Folk method	1.5	2.1
Not using	39.5	46.9
Total	100.0	100.0
Number of currently married women	4,125	4,044

5.4 CURRENT USE BY BACKGROUND CHARACTERISTICS

Table 5.6 shows that levels of current contraceptive use among currently married women vary little by background characteristics. As expected, contraceptive use, particularly the use of modern methods, increases with educational attainment. Almost three times as many women with higher education than general basic education use a modern method (29 percent versus 11 percent). In general, women do not begin to use contraception until they have had at least one child. A majority of women with at least one living child use a method of contraception.

There is considerable variation in contraceptive use by region. Regarding withdrawal, the most popular contraceptive method, at least one-fifth of married women in all regions report current use. Vayots Dzor and Armavir are the regions with the highest percentage of women using withdrawal (42 percent), while in Ararat less than 20 percent of women rely on withdrawal. Use of a modern method ranges from a high of 25 percent in Yerevan to 11 percent in Kotayk. The IUD is used by at least 10 percent of currently married women in Yerevan, Aragatsotn, Lori, Shirak, and Syunik compared with 3 percent in Vayots Dzor. Condom use is reported by more than one in ten currently married women in Yerevan (12 percent) and Vayots Dzor (15 percent) but less than 1 in 40 women in Syunik (2 percent). Although sampling variation may account for some of the difference, female sterilization appears to be more prevalent in Aragatsotn than in other regions. More than half of women in four regions—Ararat, Gegharkunik, Kotayk, and Shirak—are not using any method of contraception.

Table 5.6 Current use of contraception by background characteristics

Percentage of currently married women by contraceptive method currently used, according to age, Armenia 2005

		Modern method							Traditional method						
Background characteristic	Using any method	Any modern method	Female sterilization	Pill	IUD	Male condom	Foam/jelly	LAM	Any traditional method	Periodic abstinence	Withdrawal	Any folk method	Not currently using	Total	Number of women
Number of living children															
0	3.6	1.8	0.0	0.0	0.0	1.8	0.0	0.0	1.8	0.0	1.8	0.0	96.4	100.0	265
1-2	57.2	22.7	0.2	0.8	10.5	10.3	0.3	0.5	34.5	4.1	27.8	2.6	42.8	100.0	2,458
3+	55.3	17.1	1.3	1.1	9.4	5.2	0.0	0.2	38.2	4.0	32.7	1.5	44.7	100.0	1,321
Residence															
Urban	54.3	21.7	0.7	1.0	9.8	9.8	0.3	0.2	32.6	4.7	25.3	2.6	45.7	100.0	2,447
Rural	51.2	16.1	0.4	0.6	8.9	5.5	0.0	0.7	35.2	2.5	31.4	1.3	48.8	100.0	1,597
Region															
Yerevan	58.5	25.4	0.9	1.1	10.5	12.2	0.5	0.1	33.1	5.8	24.4	2.9	41.5	100.0	1,362
Aragatsotn	53.6	23.0	1.5	1.5	11.8	7.3	0.0	0.9	30.6	2.5	26.9	1.2	46.4	100.0	196
Ararat	41.1	16.6	0.2	0.3	8.8	5.0	0.0	2.3	24.5	3.8	19.5	1.2	58.9	100.0	307
Armavir	57.8	12.6	0.0	0.0	7.0	5.6	0.0	0.0	45.2	1.2	41.8	2.2	42.2	100.0	381
Gegharkunik	41.0	16.4	0.7	0.9	6.4	7.8	0.0	0.5	24.7	2.9	20.6	1.1	59.0	100.0	303
Lori	51.4	22.1	0.0	1.5	14.0	6.7	0.0	0.0	29.3	2.6	25.6	1.1	48.6	100.0	343
Kotayk	48.9	11.3	0.5	0.7	4.9	4.8	0.0	0.4	37.6	4.0	31.8	1.8	51.1	100.0	357
Shirak	41.7	16.3	0.3	0.5	10.7	4.7	0.0	0.0	25.3	1.5	23.2	0.6	58.3	100.0	357
Syunik	61.4	16.5	0.9	0.5	11.9	2.4	0.0	0.8	44.9	2.1	38.9	3.9	38.6	100.0	189
Vayots Dzor	66.9	18.6	0.0	1.2	2.8	14.5	0.0	0.0	48.3	5.0	42.1	1.2	33.1	100.0	65
Tavush	62.2	16.8	0.0	0.8	7.5	8.2	0.3	0.0	45.3	4.6	37.5	3.3	37.8	100.0	184
Education															
Basic general	41.6	11.1	0.0	0.0	7.2	1.5	2.4	0.0	30.5	1.3	28.1	1.1	58.4	100.0	235
Secondary general	52.3	17.1	0.9	0.4	9.1	6.2	0.0	0.4	35.2	2.3	31.1	1.8	47.7	100.0	1,629
Specialized secondary	52.5	18.1	0.3	1.5	9.0	7.0	0.0	0.3	34.4	4.6	27.6	2.2	47.5	100.0	1,353
Higher	58.8	28.9	0.5	0.8	11.4	15.5	0.1	0.5	30.0	6.1	21.2	2.7	41.2	100.0	828
Wealth quintile															
Lowest	50.8	12.4	0.3	0.8	6.0	5.0	0.0	0.2	38.4	2.0	35.6	0.7	49.2	100.0	764
Second	48.4	16.0	0.3	0.3	9.6	5.2	0.0	0.6	32.4	2.4	28.7	1.3	51.6	100.0	809
Middle	51.1	17.4	0.5	0.7	8.5	7.5	0.0	0.2	33.7	3.9	27.7	2.1	48.9	100.0	788
Fourth	54.7	22.1	0.8	1.0	10.8	9.0	0.0	0.4	32.7	5.7	23.4	3.6	45.3	100.0	841
Highest	59.8	28.6	0.9	1.4	11.8	13.2	0.8	0.5	31.2	4.8	23.9	2.5	40.2	100.0	842
Total	53.1	19.5	0.6	0.8	9.4	8.1	0.2	0.4	33.6	3.8	27.7	2.1	46.9	100.0	4,044

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

5.5 Number of Children at First Use

To make an assessment of the motivations for using family planning methods, women were asked how many living children they had at the time they first used a method of family planning. Women who first use a method before having a child presumably want to delay their childbearing to some time in the future. Women who first employ a method after having one or two children may either want to delay the next child or to limit their childbearing. Women who use a method for the first time after having several children are more likely to be using family planning to stop childbearing than to space their births.

Table 5.7 shows the percent distribution of women by number of living children at the time of first use of contraception, according to current age.

The data show that it is most common to begin using a method after the birth of at least one child (Table 5.7). Less than 2 percent of all women age 15-49 report that they started using contraception before they began having children, compared with 18 percent of women who began using after having one child and 21 percent who began using after two children.

Table 5.7 Number of living children at first use of contraception

Percent distribution of women age 15-49 by number of living children at the time of first use of contraception, according to current age, Armenia 2005

Current age	Never used	Number of living children at time of first use of contraception					Total	Number of women
		0	1	2	3	4+		
15-19	98.6	0.1	1.2	0.1	0.0	0.0	100.0	1,123
20-24	76.0	0.8	16.9	5.4	0.8	0.0	100.0	1,131
25-29	39.2	3.8	28.0	24.4	3.9	0.5	100.0	929
30-34	25.5	1.1	27.9	35.1	9.6	0.8	100.0	749
35-39	26.2	2.3	18.9	35.9	14.1	2.6	100.0	711
40-44	24.3	1.6	20.2	30.9	18.7	4.3	100.0	965
45-49	35.9	1.3	16.9	25.6	15.9	4.4	100.0	958
Total	50.1	1.5	17.8	20.6	8.4	1.7	100.0	6,566

5.6 KNOWLEDGE OF THE FERTILE PERIOD

A basic knowledge of the physiology of reproduction is especially useful for the successful practice of coitus-related methods such as periodic abstinence. All women in the 2005 ADHS were asked about their knowledge of a woman's fertile period. Table 5.8 shows that one-third of all women correctly identify the fertile period as occurring halfway between periods. Approximately four in ten women said that they did not know when a woman has her fertile period. Among users of periodic abstinence (rhythm method), however, 76 percent were able to correctly identify the fertile period. This is approximately the same proportion as that estimated in the 2000 ADHS.

Table 5.8 Knowledge of fertile period

Percent distribution of women age 15-49 by knowledge of the fertile period during the ovulatory cycle, according to current use of periodic abstinence, Armenia 2005

Perceived fertile period	Users of periodic abstinence	Nonusers of periodic abstinence	All women
Just before her menstrual period begins	3.0	2.4	2.5
During her menstrual period	0.6	0.2	0.2
Right after her menstrual period has ended	15.8	12.2	12.3
Halfway between two menstrual periods	76.0	33.1	34.1
No specific time	1.6	9.7	9.5
Don't know	2.4	42.0	41.1
Missing	0.6	0.3	0.3
Total	100.0	100.0	100.0
Number of women	156	6,410	6,566

5.7 ACCESS TO FAMILY PLANNING

Source of Supply

Information on sources of modern contraceptives is useful for family planning managers and implementers. Women who reported they were currently using a modern method of contraception were asked where they obtained the method the last time. Because the distinction between different types of clinics and between public and private sources may not always be clear, the information on the source of supply must be interpreted with caution.

Table 5.9 Source of modern contraceptive methods

Percent distribution of users of modern contraceptive methods age 15-49 by most recent source of method, according to specific methods, Armenia 2005

Source	Pill	IUD	Male condom	All modern methods
Public sector	(9.3)	96.6	4.7	52.8
Hospital	(5.7)	20.5	1.4	12.6
Maternity hospital	(0.0)	45.5	0.0	23.6
Polyclinic	(1.9)	16.7	0.4	8.4
Women's health consult center	(1.7)	13.0	1.8	7.2
Other public	(0.0)	0.9	1.1	0.9
Private medical sector	(88.6)	1.8	84.7	41.8
Pharmacy	(88.6)	0.7	83.8	40.9
Other	(0.0)	1.0	1.0	0.9
Other	(1.2)	1.6	2.5	2.0
Don't know	(0.9)	0.0	8.1	3.5
Total	(100.0)	100.0	100.0	100.0
Number of women	35	387	337	791

Note: The total includes 25 users of female sterilization and 8 users of foam/jelly. Figures in parentheses are based on 25-49 unweighted cases.

Table 5.9 shows that more than half of modern method users received their method from the public sector. This is due primarily to the fact that the public sector is the source for almost all users (97 percent) of the IUD, the most common modern method. Among condom and pill users, the vast majority (more than eight in ten) reported obtaining their most recent supply from the pharmacy. Eight percent of condom users, however, did not know their source of supply, which suggests that their partners obtain the condoms.

Cost of Modern Contraceptives

One goal of the 2005 ADHS was to obtain information about expenditures on modern contraceptives. Differentials in cost are quite large depending on the type of method (Table 5.10). The IUD is the most expensive method. Of the 84 percent of IUD users who paid and were able to provide information on cost, the median cost was 7,991 drams. This means that approximately half of women paid more than 8,000 drams to have an IUD inserted and approximately half paid less than 8,000 drams.

Table 5.10 Cost of modern contraceptive methods

Percent distribution of women age 15-49 who are currently using a modern contraceptive method by cost of method, Armenia 2005

Cost of method	Pill	IUD	Male condom	All modern methods
Method free	(4.7)	5.3	4.8	5.0
Cost not known	(7.7)	10.7	53.9	30.3
Cost known	(87.6)	84.0	41.3	64.7
Total	(100.0)	100.0	100.0	100.0
Median cost[1]	(1,498)	7,991	990	4,997
Number of women	35	387	337	766

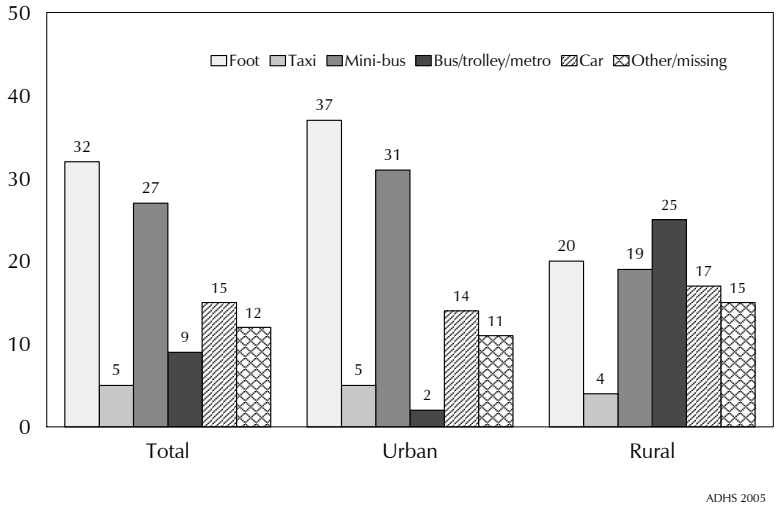
Note: Table excludes sterilization and lactational amenorrhea method (LAM). Total includes 8 users of foam/jelly. Costs are based on the last time current users obtained method. Costs include consultation costs, if any. For condom, costs are per package; for pills, per cycle. Figures in parentheses are based on 25-49 unweighted cases.
[1]Median cost in Armenian drams is based only on those women who reported a cost

Among condom users, more than half of women stated either that the condom was free or that they did not know the cost. The small number of pill users means that the estimate is unreliable.

Transportation to Source of Supply

Good access to modern contraception means that the transportation to the source should be quick, easy, and cheap. Figure 5.3 shows that the most common way to get to a source of contraception is public transportation (36 percent), such as minibus or bus/trolley/train. Almost one-third of women (32 percent) walk to their source of supply. Another one-fifth of women report that they either go with a car that the household has (15 percent) or by taxi (5 percent).

Figure 5.3 **Transportation to Source of Contraceptive Supply**



A majority of women (eight in ten) who took transportation to their source of supply had to pay for the transportation. The median cost of transportation varies according to residence with rural women paying more than urban women (299 drams versus 200 drams, data not shown).

Not only do rural women pay more for transportation, it also takes them longer than urban women to reach their source of supply. Just one-third of rural women live within 20 minutes of their source of contraception compared with over half (55 percent) of urban women. Overall, just under half of modern method users are within 20 minutes of their source, while 71 percent are within 30 minutes of the source.

5.8 DISCONTINUATION WITHIN 12 MONTHS OF USE

Table 5.11 shows contraceptive discontinuation rates. Overall, one-third of all users of a contraceptive method discontinued use within 12 months of adopting the method. The first year discontinuation rate is lowest among users of the IUD (7 percent) and highest among users of periodic abstinence (rhythm method) (41 percent). Approximately one-third of users of condoms and withdrawal discontinued using the method during the first year of use.

Table 5.11 First-year contraceptive discontinuation rates

Percentage of contraceptive users who discontinued use of a method within 12 months after beginning its use, by reason for discontinuation and to specific method, Armenia 2005

	Reason for discontinuation				
Method	Method failure	Desire to become pregnant	Switched to another method[1]	Other reason	Total
IUD	0.6	0.6	3.2	2.4	6.9
Male condom	6.9	7.4	7.7	9.0	31.0
Periodic abstinence	28.4	2.5	4.8	5.1	40.9
Withdrawal	20.9	2.8	2.3	7.2	33.3
Other	18.8	4.5	10.9	14.2	48.4
All methods	15.9	3.7	4.7	7.8	32.1

Note: Table is based on episode of contraceptive use that began 3-59 months prior to the survey
[1] Used a different method in the month following discontinuation or said that they wanted a more effective method and started another method within two months of discontinuation

Table 5.12 shows the distribution of discontinuations of all contraceptive methods during the five years preceding the survey by reason for discontinuation. More than four in ten (43 percent) of all discontinuations were attributed to method failure, i.e., accidental pregnancy (became pregnant while using). The low efficacy of periodic abstinence, withdrawal, and other traditional methods is evidenced by the high failure rate of these methods during use.

As previously noted, withdrawal is the most popular method of contraception. It is used by 28 percent of currently married women and accounts for half of all contraceptive use. Yet, Table 5.11 shows that over one-fifth of users (21 percent) discontinued use because of method failure, i.e., accidental pregnancy. Method failure accounts for over half of all discontinuations of withdrawal (Table 5.12). It is striking that method failure is more likely than not among women who are using the most common method of contraception. Stated another way, a substantial proportion of Armenian women who are trying to control their fertility using withdrawal are unable to do so.

Sixty-one percent of discontinuations of periodic abstinence were reported to be method failures. Unexpectedly, method failure was also the most common reason cited for discontinuation of the pill and condom (25 percent and 29 percent, respectively). Almost half of IUD users attributed discontinuation to health concerns. Although method failure is the most commonly cited reason for discontinuations, 15 percent of respondents who discontinued reported infrequent sex or the absence of their partner and 14 percent said that they wanted to get pregnant.

Table 5.12 Reasons for discontinuing contraceptive methods

Among women age 15-49 who started an episode of contraceptive use in the five years before the survey, percent distribution of episodes discontinued within 12 months by main reason for discontinuation, according to specific method, Armenia 2005

	Modern method				Traditional method			
Reason for discontinuation	Pill	IUD	Condom	Other	Periodic abstinence	Withdrawal	Other	All methods
Became pregnant while using	24.8	4.1	28.5	(30.0)	60.8	51.2	54.3	42.5
Wanted to become pregnant	12.9	15.1	20.3	(5.1)	10.3	13.2	8.4	13.8
Husband disapproved	1.8	0.7	9.1	(3.3)	2.7	3.4	0.0	3.8
Side effects	6.9	17.7	0.2	(0.0)	0.0	0.1	0.0	1.9
Health concerns	16.2	49.3	1.1	(0.0)	0.0	1.2	0.3	5.7
Lack of access/availability	0.0	0.0	0.4	(3.0)	0.0	0.0	0.0	0.2
Wanted a more effective method	3.4	0.6	8.5	(20.9)	3.8	4.5	9.9	5.5
Inconvenient to use	8.1	1.2	4.5	(7.5)	1.3	0.8	4.0	2.2
Infrequent sex/husband away	16.9	2.6	13.5	(12.8)	13.6	18.5	11.9	15.3
Cost too much	3.6	0.0	5.4	(0.0)	0.0	0.2	0.0	1.2
Fatalistic	0.0	0.0	0.0	(0.0)	3.3	0.1	0.0	0.3
Difficult to get pregnant/menopausal	1.8	1.1	1.9	(0.0)	2.6	2.2	0.8	1.9
Marital dissolution/separation	1.1	2.0	1.3	(0.0)	0.0	0.8	0.0	0.9
Other	0.4	5.8	2.3	(10.7)	1.5	1.5	3.0	2.3
Missing	2.1	0.0	3.0	(6.7)	0.0	2.2	7.5	2.5
Total	100.0	100.0	100.0	(100.0)	100.0	100.0	100.0	100.0
Number of discontinuations	90	172	350	55	157	1,080	130	2,034

Note: Figures in parentheses are based on 25-49 unweighted cases. Table is based on episodes of contraceptive use that began 3-59 months prior to survey

5.9 Reasons for Using Traditional Methods

Given the unreliability of traditional methods, why do so many Armenian women opt to use them instead of modern methods? Table 5.13 shows the reasons that users of traditional methods agree are a factor in their decision to use a traditional method. The most common reason, given by 59 percent of women, was that the traditional method is the husband or partner's choice. However, almost half (47 percent) say that fear of or experience with side effects was a concern and more than one-third (37 percent) say that the cost of modern methods was a factor in their choice. Furthermore, some women feel that they lack knowledge about modern methods (20 percent) or that they are difficult to find or are not readily available (26 percent). Clearly, Armenian women perceive barriers, whether they be related to cost, information, or supply, to the use of modern contraceptives.

5.10 Intention to Use Family Planning among Nonusers

The needs and practices of women in the area of contraception change as they go through their reproductive years. Currently married respondents who were not using contraception at the time of the survey were asked whether they intend to use family planning methods in the future. The results are presented in Table 5.14.

Twenty-nine percent of all currently married nonusers stated that they do intend to use a contraceptive method at some time in the future, down from 36 percent in the 2000 ADHS. More than four in ten (44 percent) women with one child say they intend to use a contraceptive method in the future. These women are significantly more likely to intend to use than women with no children and women with two or more living children. Indeed, a majority of women with two or more children report that they do not intend to use a method in the future.

Table 5.13 Reasons for using traditional methods

Among women using traditional methods of contraception, percentage who cite specific reasons that influenced their decision to use a traditional method, according to background characteristics, Armenia 2005

Background characteristic	Modern methods difficult to find/not available	Cost of modern methods	Little knowledge of modern methods	Fear of or experience with side effects	Husband/ partner choice	Religious beliefs	Doctor's recom-mendation	Another person's advice	Number of women
Age									
15-19	*	*	*	*	*	*	*	*	10
20-24	27.0	41.2	15.5	49.2	56.2	1.4	6.1	15.6	133
25-29	22.8	32.9	21.4	45.8	60.2	0.6	9.3	12.0	242
30-34	25.4	35.6	14.9	50.7	54.3	0.8	8.8	12.6	240
35-39	26.8	38.0	19.0	43.7	58.7	2.5	3.1	9.7	247
40-44	30.2	37.0	24.5	50.7	58.0	1.1	5.5	11.4	311
45-49	21.7	38.8	21.2	40.9	65.7	1.3	6.5	11.4	197
Residence									
Urban	20.8	33.4	20.5	50.8	57.3	1.7	6.2	11.5	807
Rural	33.3	42.0	19.5	41.7	61.0	0.6	6.8	12.0	573
Region									
Yerevan	18.5	33.0	23.4	52.8	55.3	1.8	7.8	8.6	456
Aragatsotn	60.1	56.9	35.6	55.9	62.7	2.3	19.9	20.8	62
Ararat	31.8	37.0	6.8	46.0	86.1	0.3	8.6	13.4	82
Armavir	36.8	45.9	12.1	72.1	60.8	1.1	3.1	12.6	172
Gegharkunik	11.5	21.1	5.0	13.4	44.4	1.9	2.6	3.3	76
Lori	19.0	27.3	2.8	6.6	62.6	0.0	7.6	6.6	101
Kotayk	23.4	25.8	22.8	38.1	45.3	2.9	6.0	13.6	138
Shirak	23.0	29.7	17.8	29.5	71.5	0.0	2.0	1.0	91
Syunik	62.0	75.5	52.3	81.9	64.6	0.0	6.5	33.6	87
Vayots Dzor	14.4	54.7	0.6	8.7	62.4	0.0	2.4	24.4	31
Tavush	9.6	31.3	26.4	49.7	54.6	0.0	2.9	13.3	83
Education									
Basic general	43.8	55.6	30.1	51.2	40.3	0.0	4.6	18.9	72
Secondary general	28.1	41.2	23.3	44.0	60.0	1.1	6.0	12.3	580
Specialized secondary	27.1	35.4	17.7	45.1	63.7	0.9	6.9	10.9	471
Higher	14.2	25.1	14.4	56.3	52.5	2.5	7.2	9.8	256
Wealth quintile									
Lowest	39.0	49.5	21.4	42.6	56.2	1.2	5.6	13.9	295
Second	30.4	43.1	21.8	48.3	63.0	0.6	7.5	9.7	267
Middle	30.0	36.7	19.1	36.5	56.8	2.3	5.1	11.0	268
Fourth	15.3	30.9	18.0	51.9	60.5	1.3	5.8	10.4	280
Highest	14.5	23.9	20.0	56.0	57.9	0.8	8.4	13.5	270
Total	26.0	37.0	20.1	47.0	58.8	1.2	6.5	11.7	1,380

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

Table 5.14 Future use of contraception

Percent distribution of currently married women who are not using a contraceptive method by intention to use in the future, according to number of living children, Armenia 2005

	Number of living children[1]					
Intention	0	1	2	3	4+	Total
Intends to use	28.0	43.9	27.9	22.1	16.6	28.7
Unsure	43.4	29.8	18.4	14.0	11.3	20.9
Does not intend to use	28.6	26.0	52.6	62.1	72.1	49.4
Missing	0.0	0.4	1.1	1.9	0.0	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	149	362	779	465	142	1,898

[1]Includes current pregnancy

An understanding of the reasons that people do not like to use family planning methods is critical in designing programs that could improve the quality of services. Table 5.15 shows the main reasons for not intending to use family planning cited by currently married women who are not using contraception and do not intend to use a method in the future.

Two-thirds of women report a fertility-related reason for not intending to use, the majority (36 percent) reporting that they are subfecund or infecund[2]. It is worth noting that 15 percent of women report being opposed to contraception and 14 percent cite a method-related reason such as health concerns.

Table 5.15 Reasons for not intending to use contraception

Percent distribution of currently married women who are not using contraception and do not intend to use in the future, by main reason for not intending to use, Armenia 2005

Reason	Nonusers who do not intend to use contraception
Fertility-related reasons	65.4
Infrequent sex/no sex	10.3
Menopausal/had hysterectomy	17.9
Subfecund/infecund	35.7
Wants as many children as possible	1.5
Opposition to use	16.8
Respondent opposed	15.0
Husband/partner opposed	1.4
Religious prohibition	0.4
Lack of knowledge	0.8
Knows no method	0.7
Knows no source	0.2
Method-related reasons	13.9
Health concerns	4.3
Fear of side effects	1.2
Costs too much	0.4
Inconvenient to use	0.2
Interferes with body's normal processes	7.7
Other	1.9
Don't know	1.0
Total	100.0
Number of women	938

[2] While "subfecund/infecund" women make up more than one-third of the women who are not using contraception and do not intend to, they constitute a much smaller proportion of the overall survey sample. Women who have declared themselves infecund make up 4.2 percent (279 women) of the unweighted sample and 3.9 percent (257 women) of the weighted sample.

Future demand for specific methods of family planning can be assessed by asking nonusers who intend to use in the future which methods they prefer to use. Table 5.16 presents information on method preference among currently married nonusers who say they intend to use in the future. The IUD is the most popular method among women who intend to use in the future (31 percent), followed by withdrawal (24 percent) and condoms (21 percent). Just 7 percent of women report pills as their preferred method.

Table 5.16 Preferred method of contraception for future use

Percent distribution of currently married women who are not using a contraceptive method but who intend to use in the future by preferred method, Armenia 2005

Preferred method	Nonusers who intend to use contraception
Modern method	
Pill	7.4
IUD	31.0
Injectables	0.2
Implants	0.1
Male condom	21.4
Female condom	1.0
Foam/jelly	1.2
Traditional method	
Periodic abstinence	3.0
Withdrawal	23.7
Other	1.8
Unsure of method	9.3
Total	100.0
Number of women	544

5.11 Exposure to Family Planning Messages in the Mass Media

The mass media provide an opportunity to communicate family planning information to a broad spectrum of the population. Information on the level of exposure to such media is important for programmers and planners to effectively target population subgroups for information, education, and communication campaigns. Table 5.17.1 shows that over half of women have seen a mass media family planning message in the few months preceding the survey.

Television is the most common source of messages on family planning: 48 percent of all female respondents have seen a family planning message on television. Community events and newspapers or magazines are also common sources (29 percent and 23 percent, respectively). Women are least likely to report radio or print materials such as brochures or posters as a source; nonetheless, in the months preceding the survey 16 percent of women heard a message on the radio and 12 percent saw a message in a pamphlet or other printed material.

Exposure to family planning messages is closely related to place of residence, level of education and household wealth. Women living in rural areas, women with lower levels of education, and those living in the poorer households are less likely to have been exposed to family planning messages than urban dwellers, women with higher levels of education, and those living in economically advantaged households.

Table 5.17.1 Exposure to family planning messages: Women

Percentage of women age 15-49 who heard or saw a family planning message in the past few months, by source of message and background characteristics, Armenia 2005

Background characteristic	Source of family planning message					None of the specified sources	Number of women
	Radio	Television	Newspaper/ magazine	Pamphlet/ poster/leaflet/ booklet	Commu-nity event		
Age							
15-19	9.2	33.6	16.9	7.1	21.3	57.0	1,123
20-24	20.1	52.4	23.6	13.0	29.0	40.0	1,131
25-29	16.6	56.0	26.5	15.3	34.5	36.2	929
30-34	22.4	55.6	26.2	15.9	34.3	38.3	749
35-39	17.5	52.1	24.5	11.6	32.2	40.3	711
40-44	15.5	50.4	24.6	11.9	30.8	42.9	965
45-49	14.9	42.1	21.2	10.4	26.5	50.7	958
Residence							
Urban	20.8	53.1	26.7	14.7	32.7	39.3	4,194
Rural	8.3	39.8	16.7	7.1	23.4	52.9	2,372
Region							
Yerevan	27.2	55.1	25.0	14.2	33.1	37.7	2,468
Aragatsotn	17.6	37.8	16.7	7.8	18.4	53.5	292
Ararat	0.2	32.3	3.2	0.6	2.1	66.3	462
Armavir	10.1	50.3	30.8	9.9	22.1	45.1	567
Gegharkunik	0.4	26.7	11.1	7.8	10.1	70.2	443
Lori	18.0	57.3	36.7	15.7	39.1	33.9	537
Kotayk	17.8	44.1	26.9	19.2	44.5	42.3	563
Shirak	2.4	34.7	14.8	6.2	16.7	58.2	563
Syunik	18.7	77.2	39.7	17.6	62.8	15.1	281
Vayots Dzor	18.0	42.1	18.9	6.2	2.1	49.7	107
Tavush	1.8	46.9	16.9	12.2	49.4	35.1	285
Education							
Basic general	7.0	26.7	8.1	4.3	18.6	68.0	529
Secondary general	10.0	40.3	15.2	5.3	24.8	51.6	2,440
Specialized secondary	15.9	53.2	23.8	12.6	30.8	39.6	1,997
Higher	29.6	61.3	39.1	23.9	37.8	30.7	1,600
Wealth quintile							
Lowest	5.6	31.5	12.3	4.5	19.6	60.9	1,164
Second	6.9	43.3	16.4	6.5	22.0	50.3	1,284
Middle	10.1	45.2	20.5	10.2	27.2	46.0	1,303
Fourth	20.4	54.3	28.8	15.6	34.6	37.2	1,375
Highest	35.1	63.2	34.6	21.0	40.4	30.2	1,440
Total	16.3	48.2	23.1	12.0	29.3	44.2	6,566

Men are far less likely than women to have seen or heard a family planning message during the months preceding the survey (Table 5.17.2). Overall, three-quarters of men were not exposed to a family planning message from any of the specified sources. Differentials by wealth index and residence are not as pronounced among men as women. There is, however, a strong positive relationship with education. Television, reported by 16 percent of men, is the most likely source of a message.

Table 5.17.2 Exposure to family planning messages: Men

Percentage of men age 15-49 who heard or saw a family planning message in the past few months, by source of message and background characteristics, Armenia 2005

Background characteristic	Source of family planning message					None of the specified sources	Number of men
	Radio	Television	Newspaper/ magazine	Pamphlet/ poster/leaflet/ booklet	Commu-nity event		
Age							
15-19	1.8	7.7	5.2	2.6	7.5	87.1	292
20-24	1.9	11.0	5.5	2.8	11.5	78.5	237
25-29	4.2	16.1	6.5	4.9	7.3	78.3	202
30-34	8.9	22.0	8.9	3.5	11.5	68.1	156
35-39	8.7	23.5	6.9	2.3	8.5	70.0	150
40-44	7.7	21.3	14.0	6.4	14.7	68.4	199
45-49	8.0	15.9	8.5	5.4	10.3	76.7	211
Residence							
Urban	5.6	16.3	7.6	4.5	7.5	77.0	913
Rural	4.9	14.6	7.8	3.0	14.3	75.8	534
Region							
Yerevan	6.9	17.3	6.9	3.1	6.6	77.1	547
Aragatsotn	19.3	22.3	11.4	4.7	7.4	71.1	71
Ararat	2.1	3.1	2.2	0.3	20.8	76.4	110
Armavir	6.0	9.2	4.1	3.4	4.4	87.6	139
Gegharkunik	2.1	15.7	11.9	0.8	10.8	74.2	81
Lori	6.4	17.5	13.8	22.5	24.8	55.2	87
Kotayk	2.7	15.5	6.5	0.0	10.4	80.6	151
Shirak	0.0	7.4	4.0	3.3	2.2	88.9	98
Syunik	1.5	10.3	2.2	2.2	1.5	88.3	67
Vayots Dzor	(3.2)	(6.5)	(3.2)	(2.5)	(3.2)	(93.5)	31
Tavush	2.7	50.7	29.4	8.8	38.5	36.7	64
Education							
Basic general	0.4	4.0	2.6	3.6	4.5	90.5	205
Secondary general	3.1	9.1	3.8	2.0	7.9	84.2	586
Specialized secondary	5.5	18.2	8.5	3.5	10.9	73.7	310
Higher	12.0	31.3	16.4	8.0	16.2	58.0	346
Wealth quintile							
Lowest	3.9	11.4	6.1	1.1	8.5	81.7	261
Second	3.8	11.0	5.5	3.3	10.8	82.6	264
Middle	2.9	15.6	7.0	4.6	10.5	75.1	326
Fourth	4.9	17.1	8.6	6.5	7.8	76.1	316
Highest	11.6	22.6	11.0	3.5	12.8	68.2	280
Total	5.4	15.7	7.7	3.9	10.1	76.5	1,447

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

5.12 CONTACT OF NONUSERS WITH FAMILY PLANNING PROVIDERS

Table 5.18 shows the percent age of female nonusers who were exposed to a family planning provider. The vast majority of women not using a method of contraception had no discussions about family planning with a health professional during the 12 months preceding the survey. Very few nonusers discussed family planning with a health worker either inside or outside a health facility (4 percent and 5 percent, respectively). Approximately one-quarter of nonusers visited a health facility but did not discuss family planning.

Table 5.18 Contact of nonusers with family planning providers

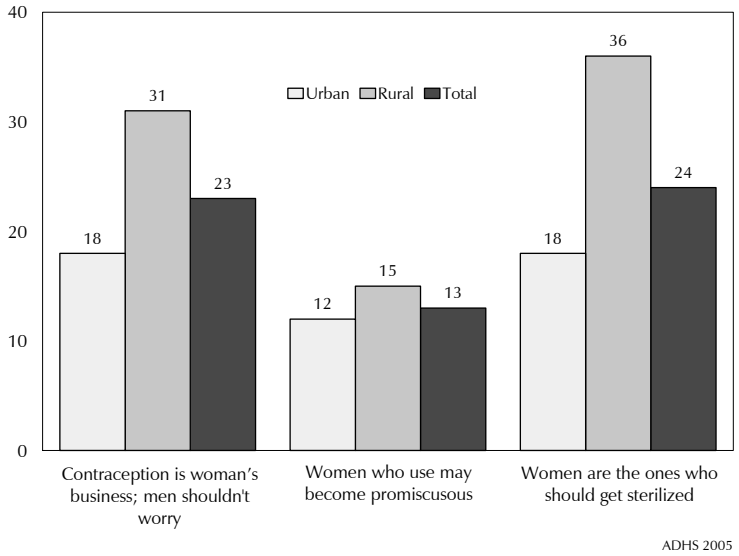
Among women age 15-49 who are not using contraception, the percentage who were visited in the past 12 months by a fieldworker who discussed family planning, the percentage who visited a health facility and discussed family planning, the percentage who visited a health facility but did not discuss family planning, and the percentage who neither discussed family planning with a fieldworker nor at a health facility, by background characteristics, Armenia 2005

Background characteristic	Percentage who were visited by a fieldworker who discussed family planning	Among women who visited a health facility in the past 12 months: Percentage who discussed family planning	Among women who visited a health facility in the past 12 months: Percentage who did not discuss family planning	Percentage who neither discussed family planning with a fieldworker nor at a health facility	Number of women
Age					
15-19	1.9	1.0	13.9	97.8	1,110
20-24	5.9	5.7	23.6	92.2	913
25-29	9.9	7.7	36.7	88.3	495
30-34	4.8	4.9	35.1	92.4	342
35-39	3.9	5.8	24.2	92.9	325
40-44	4.7	2.6	28.4	94.1	503
45-49	2.7	0.9	28.5	96.9	707
Residence					
Urban	4.6	3.2	28.3	94.6	2,842
Rural	4.2	4.3	18.7	93.6	1,553
Region					
Yerevan	4.0	2.3	33.2	95.4	1,652
Aragatsotn	5.5	6.7	16.4	91.8	187
Ararat	0.8	0.2	8.9	99.0	336
Armavir	2.7	2.5	21.6	96.1	347
Gegharkunik	2.3	10.0	19.0	88.2	319
Lori	7.5	4.4	22.4	92.1	360
Kotayk	9.6	6.8	26.1	89.3	384
Shirak	2.1	1.1	17.2	97.9	414
Syunik	8.1	8.4	19.9	90.7	164
Vayots Dzor	7.8	0.6	9.3	92.2	63
Tavush	5.1	2.5	35.7	94.7	170
Education					
Basic general	0.9	0.8	19.5	99.0	432
Secondary general	3.8	3.8	23.1	94.3	1,582
Specialized secondary	5.8	4.2	25.7	92.9	1,281
Higher	5.1	3.6	28.8	93.8	1,100
Wealth quintile					
Lowest	3.6	3.6	17.0	94.6	771
Second	3.5	3.5	21.7	94.5	892
Middle	2.9	2.4	26.4	95.9	894
Fourth	5.5	3.5	30.0	93.7	911
Highest	6.5	4.9	28.2	92.6	927
Total	4.5	3.6	24.9	94.2	4,395

5.13 MEN'S ATTITUDES TOWARD FAMILY PLANNING

Use of effective contraceptive methods is facilitated when couples have a positive attitude toward family planning. Attitudinal data were collected by asking men whether they agreed or disagreed with three statements about family planning use: 1) contraception is a woman's business and a man should not have to worry about it; 2) women who use contraception may become promiscuous; and 3) a woman is the one who gets pregnant so she should be the one who gets sterilized. Results are shown in Figure 5.4.

Figure 5.4 **Men's Attitudes Toward Contraception**



The data show that approximately one-fifth of men believe that contraception is a woman's business only, and one-quarter of men believe that women are the ones who should be sterilized. Just 13 percent of men think that women who use contraception may become promiscuous. Rural men are more likely than urban men to agree with each statement. It is particularly notable that 31 percent of rural men believe that women should bear the burden of dealing with contraception.

Married women who were using a contraceptive method were also asked if their husbands knew that they were using family planning. Almost all (98 percent) reported that their husbands know that they are using family planning (data not shown).

5.14 INFORMED CHOICE

Women should make decisions about contraceptive use after having been fully informed of the various methods and side effects or risks associated with the methods. Table 5.19 shows the percentage of current users of modern contraception who were told about the side effects of methods and the different methods available by a health or family planning worker at the time they accepted their current method.

Almost half of contraceptive users were informed about side effects (46 percent) and were told what to do if they did experience side effects (44 percent). This compares with approximately one-third of users in the 2000 ADHS (36 and 32 percent, respectively). Furthermore, 35 percent were informed about other methods of contraception, up from 23 percent in 2000. Despite the improvements suggested by the comparison of the 2000 and 2005 ADHS surveys, it is clear that both public and private health and family planning workers in Armenia need to provide women with more information about contraceptive methods in order to help women make informed choices.

Table 5.19 Informed choice

Among current users of 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 source, Armenia 2005

Method and initial source	Type of information: Percentage who were informed about side effects or problems of method used	Percentage who were informed what to do if experienced side effects	Percentage who were informed by a family planning worker of other methods that could be used
Method			
Pill	(24.4)	(26.3)	(34.1)
IUD	49.5	47.7	37.2
Initial source of method[1]			
Hospital	(55.8)	(54.1)	(42.7)
Maternity hospital	75.6	68.2	61.0
Women's health consulting center	(60.9)	(60.6)	(54.0)
Pharmacy	(30.0)	(35.5)	(35.9)
Other	*	*	(28.8)
Missing	16.1	15.7	12.9
Total	45.6	44.2	35.0

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 excludes users who obtained their method from friends/relatives.
[1]Source at start of current episode of use

ABORTION 6

In Armenia, as in all former Soviet countries, induced abortion was the primary means of fertility control for many years. Induced abortion was first legalized in the Soviet Union in 1920 but was banned in 1936 as part of a pronatalist policy. This decision was reversed in 1955 when abortion for nonmedical reasons was again legalized throughout the former Soviet Union. In 2002 the Parliament of Armenia adopted a new law, "About Reproductive Health and Reproductive Human Rights", that confirmed the legality of induced abortion up to 12 weeks of gestation. As published in the ADHS 2000 final report, between 10 and 20 percent of maternal deaths were from induced abortion. Over the past five years, this figure has declined substantially to an average of 5 percent of maternal deaths due to induced abortion (2 of 46 cases).

The practice of induced abortion can adversely affect a woman's health, reduce her chances for further childbearing, and contribute to maternal and perinatal mortality. In an effort to reduce the number of induced abortions, the Ministry of Health (MOH), with assistance from UNFPA, implemented the Armenian National Family Planning Program in 1997. According to official MOH statistics, in 2002 in Armenia, induced abortions before 22 weeks of gestation accounted for 33 percent of all maternal deaths, a figure that declined to 7 percent in 2005 (MOH, 2006).

Information about induced abortion was collected in the ADHS through a detailed reproductive history. In collecting the histories, each woman was first asked about the total number of pregnancies that had ended in live births, induced abortions, miscarriages, and stillbirths. After obtaining these aggregate data, an event-by-event pregnancy history was collected. For each pregnancy, the duration, the month and year of termination, and the outcome of the pregnancy were recorded.[1]

6.1 PREGNANCY OUTCOMES

Table 6.1 shows the percent distribution of pregnancy outcomes occurring during the three-year period preceding the survey (approximately from October 2002 to October 2005). Almost half of pregnancies resulted in a live birth (48 percent), and approximately the same proportion resulted in an induced abortion (45 percent).[2] Miscarriages compose 7 percent of all pregnancy outcomes, while stillbirths compose less than 1 percent.

[1] The pregnancy history was structured to ensure as complete reporting of abortions as possible, especially for the period immediately before the survey. Data were collected in reverse chronological order (i.e., information was first collected about the most recent pregnancy and then about the next to last and so on). This procedure was designed to result in more complete reporting of events for the years immediately before the survey than collecting information in chronological order. At the end of the pregnancy history, interviewers were required to check the consistency between the aggregate data collected at the outset of the reproductive section and the number of events reported in the pregnancy history.

[2] A modification in data collection methodology should be noted. In the 2000 ADHS, respondents were asked about "self-induced abortions" and "induced abortions" separately. This was done in response to other research that indicated a significant proportion of abortions are self-induced (Khachikyan and Abrahamyan, 1998). However, only 37 women in the 2000 ADHS sample reported inducing an abortion themselves without the assistance of a medical professional. Thus, this distinction was dropped in the 2005 ADHS questionnaire.

Table 6.1 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, Armenia 2005

Background characteristic	Pregnancy outcome					
	Live birth	Induced abortion	Miscarriage	Stillbirth	Total	Number of pregnancies
Age at pregnancy outcome						
<20	81.2	8.6	10.2	0.0	100.0	121
20-24	67.1	27.2	5.6	0.1	100.0	672
25-34	38.1	54.2	7.4	0.3	100.0	949
35-44	20.8	72.9	5.3	1.0	100.0	234
45-49	*	*	*	*	*	14
Pregnancy order						
First	90.0	1.5	8.5	0.0	100.0	456
Second	79.3	12.2	8.3	0.1	100.0	349
Third	37.5	57.5	5.0	0.0	100.0	319
Fourth	23.3	70.4	6.2	0.0	100.0	292
Fifth or higher	14.6	79.1	5.4	0.9	100.0	574
Residence						
Urban	50.3	42.2	7.3	0.3	100.0	1,190
Rural	45.2	48.8	5.7	0.3	100.0	800
Region						
Yerevan	50.1	42.0	7.5	0.4	100.0	755
Aragatsotn	46.9	45.5	7.6	0.0	100.0	123
Ararat	65.8	31.0	2.9	0.3	100.0	135
Armavir	42.9	49.6	7.5	0.0	100.0	176
Gegharkunik	42.8	52.8	4.4	0.0	100.0	172
Lori	49.7	42.9	7.5	0.0	100.0	122
Kotayk	45.0	48.1	6.9	0.0	100.0	186
Shirak	37.7	56.2	4.5	1.6	100.0	142
Syunik	56.8	32.7	10.5	0.0	100.0	70
Vayots Dzor	41.7	50.9	7.3	0.0	100.0	22
Tavush	44.4	49.8	5.5	0.3	100.0	89
Education						
Basic general	51.8	38.1	8.3	1.9	100.0	145
Secondary general	43.5	47.9	8.3	0.3	100.0	817
Specialized secondary	51.3	44.4	4.3	0.0	100.0	599
Higher	51.8	41.9	6.3	0.0	100.0	429
Wealth quintile						
Lowest	41.8	53.1	4.5	0.6	100.0	416
Second	47.2	44.7	8.2	0.0	100.0	423
Middle	55.1	39.8	5.0	0.1	100.0	334
Fourth	49.6	40.3	9.5	0.7	100.0	434
Highest	48.8	45.6	5.6	0.0	100.0	384
Total	48.2	44.8	6.7	0.3	100.0	1,990

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

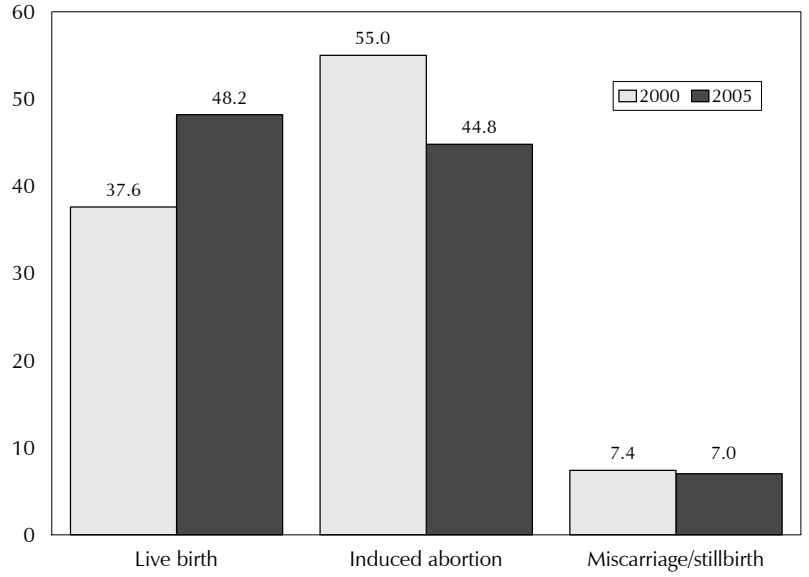
The proportion of pregnancies that end in induced abortion rises dramatically with age of the woman and with pregnancy order. Less than 10 percent of pregnancies to teenagers end in abortion, compared with one-quarter of pregnancies among women age 20-24, half of those to women age 25-34, and almost three-quarters of pregnancies among women age 35-44. There is an even steeper increase by pregnancy order, from 2 percent of first pregnancies to 79 percent of fifth or higher pregnancies.

There is little difference in pregnancy outcome by urban-rural residence, although rural women are slightly more likely than urban women to have had a recent pregnancy end in an induced abortion. It is interesting to note that there is a curvilinear relationship between induced abortion and education. Women with a basic general education have the lowest percentage of pregnancies resulting in induced abortion (38 percent), and women with a secondary general education have approximately one-quarter more pregnancies resulting in induced abortion (48 percent). Among women with specialized secondary and higher education, the percentage of pregnancies ending in abortion decreases (44 percent and 42 percent, respectively).

There is substantial variation in pregnancy outcomes by region, ranging from a low of 31 percent of pregnancies resulting in induced abortion in Ararat to a high of 56 percent in Shirak.

The proportion of pregnancies ending in induced abortion has declined over the past five years, from 55 percent in 2000 to 45 percent in 2005 (Figure 6.1). Conversely, the proportion of pregnancies ending in live births has increased.

Figure 6.1 **Trends in Pregnancy Outcomes**



6.2 LIFETIME EXPERIENCE WITH INDUCED ABORTION

Table 6.2 shows women's lifetime experience with abortion. The statistics on the proportion of women who have ever had an abortion are based on all women 15-49 irrespective of their exposure to the risk of pregnancy.

Over one-third of all respondents have had an induced abortion (37 percent). Among women who have had an abortion, the mean number of abortions per woman is 2.6. As expected, the frequency of abortions increases with age: among women 20-24 years of age, 8 percent have had an abortion, compared with 44 percent of women age 25-34 and 60 percent of women age 35 and older. There is also a positive relationship between having had an induced abortion and number of living children. Less than 1 percent of women with no living children have had an abortion, compared with 22 percent of women with one child, 64 percent of women with two to three children, and 69 percent of women with four or more children.

Table 6.2 Lifetime experience with induced abortion

Percentage of women 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, Armenia 2005

Background characteristic	Percentage of women with an induced abortion	Number of women	Among women who had an abortion, percent distribution by number of abortions					Mean number of abortions	Number of women with abortions
			1	2-3	4-5	6+	Total		
Age									
<20	0.2	1,123	*	*	*	*	*	*	2
20-24	8.1	1,131	74.0	23.3	2.7	0.0	100.0	1.4	92
25-34	44.4	1,679	43.1	42.0	9.4	5.6	100.0	2.3	745
35+	60.1	2,633	29.9	48.1	12.9	9.0	100.0	2.8	1,582
Number of living children									
0	0.6	2,352	*	*	*	*	*	*	13
1	21.6	743	51.7	36.8	7.6	3.8	100.0	2.0	160
2-3	64.4	3,194	34.6	46.6	11.3	7.6	100.0	2.6	2,056
4+	69.0	278	30.4	40.3	17.1	12.2	100.0	3.2	192
Marital status									
Never married	0.5	2,043	*	*	*	*	*	*	10
Currently married	54.5	4,044	35.1	45.4	11.8	7.7	100.0	2.6	2,203
Formerly married	43.3	479	42.3	44.5	7.5	5.7	100.0	2.2	208
Residence									
Urban	35.0	4,194	36.6	44.7	11.0	7.6	100.0	2.6	1,467
Rural	40.2	2,372	34.3	46.1	12.0	7.6	100.0	2.6	955
Region									
Yerevan	34.4	2,468	38.7	43.1	10.4	7.8	100.0	2.6	849
Aragatsotn	38.0	292	33.7	42.7	13.2	10.4	100.0	2.6	111
Ararat	38.2	462	38.9	50.9	8.0	2.2	100.0	2.1	177
Armavir	35.1	567	39.5	52.4	7.3	0.7	100.0	1.9	199
Gegharkunik	45.7	443	24.2	36.1	17.7	22.0	100.0	3.9	202
Lori	39.0	537	39.7	54.9	4.8	0.6	100.0	1.9	209
Kotayk	41.7	563	22.2	44.9	19.0	13.9	100.0	3.6	235
Shirak	35.4	563	35.7	45.4	12.6	6.2	100.0	2.7	199
Syunik	28.9	281	64.2	33.9	1.3	0.7	100.0	1.5	81
Vayots Dzor	34.4	107	29.5	50.2	14.4	5.9	100.0	2.6	37
Tavush	42.9	285	26.8	48.2	18.6	6.4	100.0	2.7	122
Education									
Basic general	27.2	529	39.7	42.8	13.7	3.8	100.0	2.4	144
Secondary general	40.8	2,440	32.5	44.4	12.6	10.5	100.0	2.9	995
Specialized secondary	42.6	1,997	37.8	45.1	11.2	5.8	100.0	2.4	850
Higher	27.0	1,600	37.4	48.2	8.5	5.9	100.0	2.4	432
Wealth quintile									
Lowest	39.3	1,164	35.8	44.9	11.1	8.2	100.0	2.6	457
Second	37.8	1,284	34.7	45.5	12.0	7.8	100.0	2.7	485
Middle	39.3	1,303	38.0	44.6	10.8	6.6	100.0	2.4	513
Fourth	36.6	1,375	34.4	46.6	11.9	7.1	100.0	2.6	504
Highest	32.0	1,440	35.4	44.7	11.2	8.7	100.0	2.7	461
Total	36.9	6,566	35.7	45.3	11.4	7.6	100.0	2.6	2,421

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.

There are no pronounced differentials in lifetime prevalence of induced abortions by urban-rural residence. There is a curvilinear relationship between level of education and induced abortion with both the least educated women and the most educated women less likely to have an induced abortion than other women. It is possible that reduced access to abortion services among less educated women accounts for the low recourse to abortion (i.e., when a woman gets pregnant, she is more likely to give birth); at the same time, it is possible that women with higher education, who use more reliable methods of birth control, are less likely to become accidentally pregnant in the first place. There is significant variation in lifetime experience of induced abortion by region, ranging from a low of 29 percent in Syunik to a high of 46 percent in Gegharkunik.

Among women who have ever had an abortion, almost two-thirds have had more than one abortion. Forty-five percent of women who ever had an abortion reported 2 to 3 abortions, and 11 percent reported 4 to 5 abortions. Eight percent had 6 or more abortions; for these women, abortion is the main method of fertility control. There is considerable variation by region.

6.3 RATES OF INDUCED ABORTION

In Table 6.3, rates of induced abortion are shown for the three-year period preceding the ADHS survey (approximately October 2002 to October 2005). Three types of rates are presented: age-specific abortion rates, the total abortion rate, and the general abortion rate. Age-specific abortion rates (ASARs), which are shown per 1,000 women, express the number of abortions among women of a given age, divided by the total number of women in that age group. The total abortion rate (TAR), which is expressed per woman, is a summary measure of the age-specific rates. The TAR is interpreted as the number of abortions a woman would have in her lifetime if she experienced the currently observed age-specific rates during her childbearing years.

Table 6.3 Induced abortion rates

Age-specific induced abortion rates (per 1,000 women), total abortion rates (TAR), and general abortion rate (GAR) for the three-year period preceding the survey, Armenia 2005

	Place of residence		
Age group	Urban	Rural	Total
15-19	5	2	4
20-24	53	73	60
25-29	112	144	123
30-34	75	122	92
35-39	39	73	53
40-44	15	16	16
45-49	9	2	7
Rate[1]			
TAR 15-49	1.5	2.2	1.8
TAR 15-44	1.5	2.2	1.7
GAR	48	64	54

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

At the national level, the age-specific rates for induced abortion increase in the first few age groups of women, peak among women age 25-29 (123 per 1,000 women), and decline in the older age group. Age-specific abortion rates are lower than the fertility rates of women under age 25 but are greater than the fertility rates for older women (Figure 6.2).

The total abortion rate is 1.8. The rural TAR is almost 50 percent higher than the urban TAR (2.2 versus 1.5). The age-specific abortion rates are higher among rural women than among urban women for all but the youngest and oldest cohorts.

Figure 6.2 **Age-specific Fertility Rates and Abortion Rates, 2005**

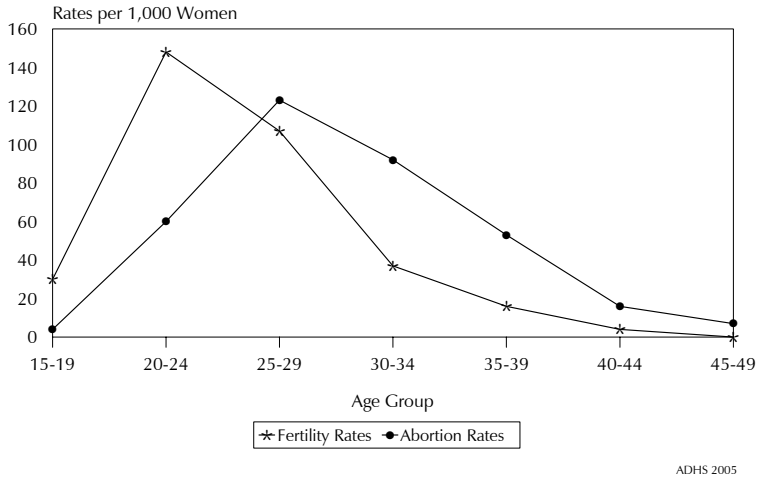


Table 6.4 shows induced abortion rates by background characteristics. There are significant differentials by background characteristics. The total abortion rates vary by region from a low of 1.1 in Ararat and Syunik to a high of 2.9 in Gegharkunik. Yerevan has a TAR of 1.6. The women with the highest education have the lowest TAR.

6.4 Trends in Induced Abortion

The 2005 ADHS TAR of 1.8 is significantly lower than the 2000 ADHS rate of 2.6. The decline is evident at every age group except the oldest (Figure 6.3). The reason for such a difference is not clear, particularly given the accompanying decline in contraceptive use. It is notable that more married women reported that their husbands were residing elsewhere in 2005 than in 2000 (14 percent versus 11 percent; data not shown).

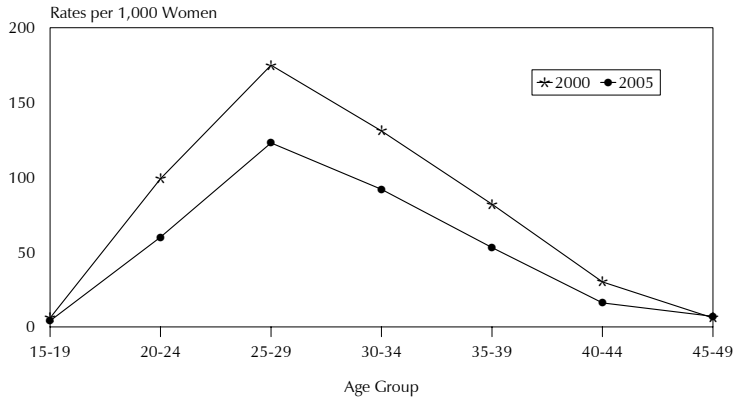
Table 6.4 Induced abortion rates by background characteristics

Total induced abortion rates for the three years preceding the survey and mean number of abortions among women age 40-49, by background characteristics, Armenia 2005

Background characteristic	Total abortion rate among women age 15-49	Mean number of abortions among women age 40-49
Residence		
Urban	1.5	1.7
Rural	2.2	1.8
Region		
Yerevan	1.6	1.6
Aragatsotn	2.6	1.9
Ararat	1.1	1.3
Armavir	2.1	1.0
Gegharkunik	2.9	3.1
Lori	(1.4)	1.2
Kotayk	2.1	3.1
Shirak	1.8	1.8
Syunik	1.1	0.6
Vayots Dzor	(1.4)	1.7
Tavush	1.9	2.1
Education		
Basic general	1.7	1.5
Secondary general	2.1	2.0
Specialized secondary	1.7	1.6
Higher	1.4	1.4
Wealth quintile		
Lowest	2.4	1.6
Second	2.0	1.8
Middle	1.4	1.7
Fourth	1.5	1.7
Highest	1.6	1.8
Total	1.8	1.7

Note: Figures in parentheses are based on 250-499 unweighted women.

Figure 6.3 **Trends in Age-Specific Abortion Rates, 2000 and 2005**



Although it is possible that a decline in sexual activity could have contributed to a lower TAR, approximately the same proportion of women in both surveys reported being sexually active during the month preceding the survey (Table 7.6.1). Thus, the data do not suggest a decline in sexual activity.

Furthermore, even if there was a recent decline in the prevalence of induced abortion, an accompanying decline in lifetime abortion measures would not be expected. For example, whereas almost half (47 percent) of all respondents in the 2000 ADHS had had an induced abortion, just 37 percent reported having an induced abortion according to the 2005 ADHS. Furthermore, according to the 2000 ADHS, women age 40-49 had an average of 2.8 abortions, compared with 1.7 in the current survey.

Detailed analysis is beyond the scope of this report. However, a number of factors could contribute to this anomaly. First, the apparent trend could be due to underreporting of abortions in 2005 compared with 2000. Anecdotal evidence suggests that the drug Cytotec®—the trade name of a synthetic prostaglandin analogue, misoprostol—recently became available in Armenia. This drug was originally used for treatment of ulcers but currently is widely used for induction of abortion in early stages of pregnancy before 49 days of gestation. Typically, a woman whose menstrual period is delayed for a week or more might obtain the drug in tablet form in a private pharmacy. Private pharmacy sales are not regulated in Armenia, and Cytotec can be purchased without a physician's prescription or a positive pregnancy test. Combination of the drug taken both by mouth and in the vagina for a period of two to three days is effective in inducing an abortion. The total cost is approximately 1,000 drams, significantly cheaper than a medically induced abortion for a pregnancy of up to 12 weeks of gestation performed under medical supervision. Thus, compared with an induced abortion performed in a clinic, a Cytotec-induced abortion usually is self-prescribed and can be performed at home. In this case, the woman might consider it a menstrual regulation procedure and might not report the event as an abortion in the survey.

Second, if social norms are beginning to change, then it is possible that women feel an increased reluctance to openly answer questions about abortion. Third, underreporting might be due to the interviewer performance, as the interviewers were not trained to ask specifically about any types of menstrual regulation procedures performed by the woman at home. In the case of using Cytotec or similar medication at home, the woman may not consider herself to be pregnant and may not report this event, contrary to a more advanced pregnancy terminated in the clinic.

6.5 USE OF CONTRACEPTIVE METHODS BEFORE ABORTION

It is important to know the contraceptive behavior of women that leads to an induced abortion. This information is of particular interest to both family planning counselors and abortion providers because a woman who has an abortion is either not using a method of contraception at the time of conception or is using (perhaps incorrectly) a method that failed. For each pregnancy that terminated in the three years preceding the survey, respondents were asked whether they were using a method of contraception at the time they became pregnant, and if so, which method.

Table 6.5 shows use of contraception at the time of conception. Approximately half of respondents who had an induced abortion were using a method of contraception at the time they became pregnant (52 percent). Thus, these abortions were the result of contraceptive failure. The majority of these contraceptive failures (43 percent overall) occurred after failure of a traditional contraceptive method—33 percent while using withdrawal and 6 percent using periodic abstinence.

Table 6.5 Use of a contraception before pregnancy

Percent distribution of pregnancy outcomes in the three years preceding the survey, by contraceptive method used at the time of conception, Armenia 2005

	Pregnancy outcome			
Contraceptive method	Live birth	Induced abortion	Miscarriage	All pregnancies
No method used	84.0	48.1	80.5	67.6
Any method	16.0	51.9	19.5	32.4
Any modern method	4.1	9.2	3.9	6.3
Pill	0.1	1.1	0.6	0.6
IUD	1.2	0.3	0.0	0.7
Injection	0.0	0.0	0.0	0.0
Male condom	2.8	7.0	3.3	4.7
Foam/jelly	0.0	0.8	0.0	0.4
Any traditional method	11.9	42.7	15.7	26.1
Lactational amenorrhea	0.4	0.0	0.0	0.2
Periodic abstinence	0.2	5.7	0.0	2.7
Withdrawal	9.9	33.0	10.5	20.4
Other	1.3	4.0	5.2	2.8
Total	100.0	100.0	100.0	100.0
Number of pregnancies	959	892	133	1,990

Note: Total includes 6 stillbirths that are not shown separately.

In addition to a high level of contraceptive failure, it is important to note that almost half of pregnancies resulting in induced abortion occurred to women not using any method of contraception to prevent the pregnancy. It seems clear that access to and use of more reliable methods of contraception would reduce the incidence of induced abortion, thus improving the reproductive health of the women of Armenia.

OTHER PROXIMATE DETERMINANTS OF FERTILITY 7

Given the biological capacity to reproduce, the social environment in which people live largely determines whether couples will have children and, if so, how many and with what kind of spacing. This chapter addresses the principal factors other than contraception and abortion that influence fertility. These factors include marriage (including consensual unions), sexual activity, postpartum amenorrhea and abstinence from sexual relations, and menopause.

Marriage is a primary indicator of a woman's exposure to the risk of pregnancy. More direct measures of exposure are age at first sexual intercourse and the frequency of intercourse. Postpartum amenorrhea and abstinence affect the interval between births. Menopause is important because it marks the end of a woman's period of exposure to the risk of pregnancy. None of these determining factors are independent; they interact and influence each other and affect fertility levels and trends. Their contribution varies from person to person, from region to region, and from time to time.

7.1 MARITAL STATUS

Table 7.1 and Figure 7.1 show the distribution of all women age 15-49 by current marital status at the time of the survey. The term "married" refers to legal or formal marriages (civil or religious), while "living together" refers to informal unions. In subsequent tables, these two categories are merged and referred to collectively as "currently married." Persons who are widowed, divorced, or separated are considered to be "formerly married." According to the 2005 ADHS, a majority of women (62 percent) are either formally married or cohabiting, 5 percent are either divorced or separated, and 2 percent are widowed. Thirty-one percent of women have never been married.

Table 7.1 Current marital status

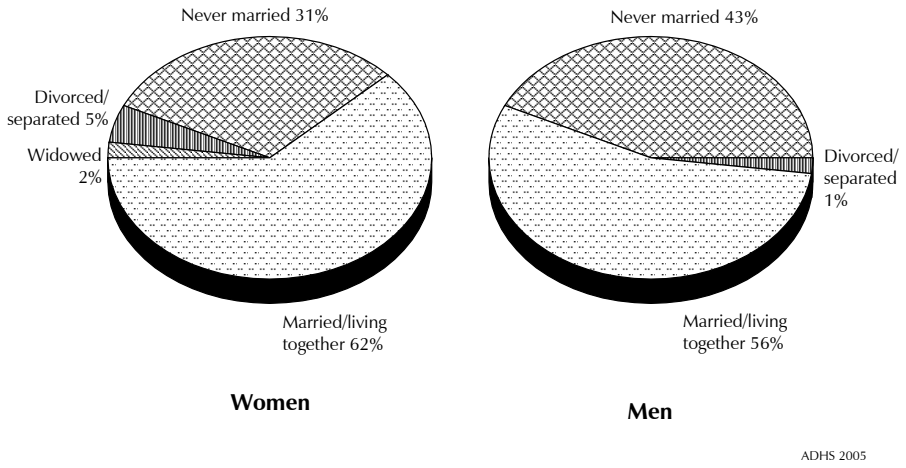
Percent distribution of women and men age 15-49 by current marital status, according to age, Armenia 2005

Age	Marital status							Number of respondents
	Never married	Married	Living together	Divorced	Separated	Widowed	Total	
				WOMEN				
15-19	92.9	6.8	0.2	0.1	0.0	0.0	100.0	1,123
20-24	54.2	43.9	0.7	1.1	0.1	0.0	100.0	1,131
25-29	21.2	74.4	0.4	2.8	1.0	0.3	100.0	929
30-34	9.0	79.9	0.3	5.5	2.1	3.3	100.0	749
35-39	4.6	83.6	1.0	6.6	2.3	1.9	100.0	711
40-44	4.6	84.1	1.2	5.1	1.0	4.0	100.0	965
45-49	4.6	76.0	1.4	6.8	3.4	7.9	100.0	958
Total	31.1	60.8	0.7	3.7	1.3	2.4	100.0	6,566
				MEN				
15-19	100.0	0.0	0.0	0.0	0.0	0.0	100.0	292
20-24	79.0	18.8	2.2	0.0	0.0	0.0	100.0	237
25-29	37.3	52.8	9.7	0.0	0.2	0.0	100.0	202
30-34	12.8	79.5	4.8	2.3	0.5	0.0	100.0	156
35-39	13.1	73.9	12.1	0.8	0.0	0.0	100.0	150
40-44	7.4	78.7	11.7	2.3	0.0	0.0	100.0	199
45-49	3.0	82.7	11.3	0.9	0.0	2.1	100.0	211
Total	42.5	49.6	6.7	0.8	0.1	0.3	100.0	1,447

These data confirm the near universality of marriage in Armenia. The proportion of women currently married increases with age up to age 40-44 and then declines among the oldest women as the likely proportions of women widowed, divorced, or separated increase. Among women age 45-49, only 5 percent have never married, 77 percent are married or cohabiting with a man, and 18 percent are formerly married. The main reason for marital disruption among this age group is widowhood (8 percent).

Table 7.1 shows that, compared with women, men are more likely to have never married (43 percent of men and 31 percent of women). This difference is largely explained by the tendency of men to marry at later ages. For example, 45 percent of women between the ages of 20 and 24 are in union compared with 21 percent of men of the same age.

Figure 7.1 **Marital Status of Respondents**



7.2 AGE AT FIRST MARRIAGE AND SEXUAL INTERCOURSE

Marriage is an important demographic and social indicator; it generally marks the point in a person's life when parenthood becomes welcome. Information on age at first marriage was obtained by asking all ever-married respondents the month and year they started living together with their first spouse. The ADHS also asked women to state the age at which they first had sexual intercourse.

Overall, the 2005 ADHS results indicate that among Armenian women, age at first marriage and age at first intercourse correspond almost exactly. Tables 7.2 and 7.3 indicate that by age 20 virtually the same proportion have married (42 percent) as has had sexual intercourse (43 percent). By age 25, 80 percent of women have married and the same proportion has had sexual intercourse. The relationship between first marriage and first sexual intercourse is observed among women of all ages. The median age of both first marriage and first intercourse appears to be increasing among younger women (age 25-29) after having decreased slightly from just over 21 among women age 45-49 to just under 20 among women age 30-34. Among all women age 25-49, the median age at both first marriage and first intercourse was 20.7 years.

Unlike women, it is common for Armenian men to report having sexual intercourse before marriage. For example, although very few men are married by age 20 (just 3 percent), more than half (53 percent) have had sexual intercourse by the same age. The median age at first intercourse among men age 30-34 is six years older than median age at first marriage (26 versus 20).

Table 7.2 Age at first marriage

Percentage of women and men age 15-49 who were first married by specific exact ages, percentage who never married, and median age at first marriage, by current age, Armenia 2005

Current age	Percentage of respondents who were first married by exact age: 15	18	20	22	25	Percentage never married	Number of respondents	Median age at first marriage[1]
				WOMEN				
15-19	0.3	na	na	na	na	92.9	1,123	a
20-24	0.3	9.9	26.8	na	na	54.2	1,131	a
25-29	0.9	20.6	39.7	57.3	72.4	21.2	929	21.2
30-34	0.3	23.9	52.7	67.6	80.6	9.0	749	19.8
35-39	0.7	17.5	49.8	69.8	87.1	4.6	711	20.0
40-44	0.2	11.4	40.8	65.2	81.7	4.6	965	20.7
45-49	0.6	10.8	32.7	55.6	78.6	4.6	958	21.5
25-49	0.5	16.4	42.3	62.5	79.7	8.9	4,312	20.7
				MEN				
15-19	0.0	na	na	na	na	100.0	292	a
20-24	0.0	0.2	1.6	na	na	79.0	237	a
25-29	0.0	1.3	2.4	13.0	41.1	37.3	202	a
30-34	0.0	1.1	6.1	16.2	37.7	12.8	156	25.9
35-39	0.0	0.0	2.2	14.5	41.6	13.1	150	25.9
40-44	0.0	1.4	3.3	19.1	49.9	7.4	199	25.0
45-49	0.0	0.0	1.2	20.0	49.8	3.0	211	25.0
25-49	0.0	0.8	2.9	16.7	44.5	14.8	918	a

na = Not applicable due to censoring
a = Omitted because less than 50 percent of the respondents married for the first time before reaching the beginning of the age group
[1]The median is the midpoint of the distribution of respondents by exact age at first marriage

Table 7.3 Age at first sexual intercourse

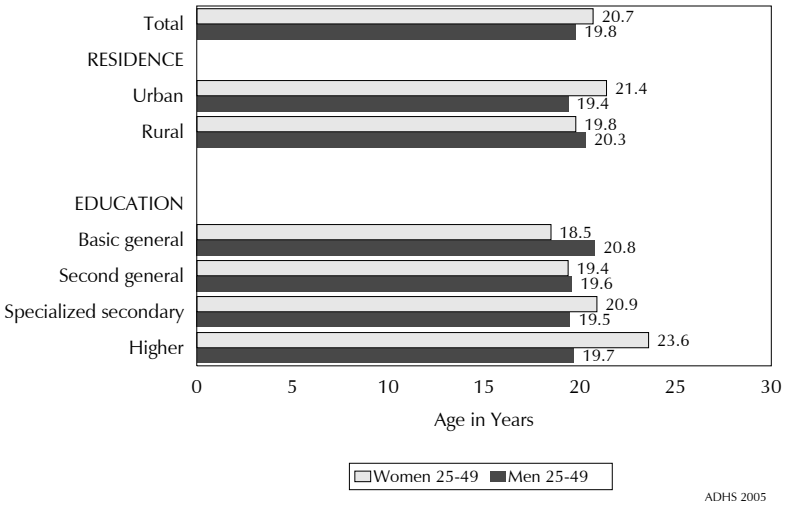
Percentage of women and men age 15-49 who had first sexual intercourse by specific exact ages, percentage who never had intercourse, and median age at first intercourse, according to current age, Armenia 2005

Current age	Percentage of respondents who had first sexual intercourse by exact age: 15	18	20	22	25	Percentage who never had intercourse	Number of respondents	Median age at first intercourse[1]
				WOMEN				
15-19	0.3	na	na	na	na	92.9	1,123	a
20-24	0.2	9.0	26.2	na	na	54.2	1,131	a
25-29	0.9	20.1	39.2	56.6	73.0	20.4	929	21.2
30-34	0.3	22.9	52.4	65.9	79.8	8.3	749	19.8
35-39	0.4	16.9	50.8	69.8	86.4	4.4	711	20.0
40-44	0.2	11.5	41.6	63.2	82.0	3.8	965	20.7
45-49	0.7	10.7	34.1	57.1	79.5	4.3	958	21.4
25-49	0.5	16.0	42.8	62.0	79.9	8.4	4,312	20.7
				MEN				
15-19	2.6	na	na	na	na	86.6	292	a
20-24	3.0	29.5	56.1	na	na	26.4	237	19.4
25-29	0.8	24.9	50.5	72.9	86.2	7.9	202	19.9
30-34	2.2	27.4	54.8	71.8	83.9	0.3	156	19.6
35-39	0.4	21.9	56.9	76.8	88.4	1.6	150	19.6
40-44	0.4	20.8	49.6	68.5	87.3	0.5	199	20.0
45-49	0.9	19.6	52.7	73.4	89.4	0.2	211	19.7
25-49	0.9	22.7	52.6	72.5	87.2	2.2	918	19.8

na = Not applicable due to censoring
a = Omitted because less than 50 percent of the respondents had had sexual intercourse before reaching the beginning of the age group
[1]The median is the midpoint of the distribution of respondents by exact age at first sexual intercourse.

The median age at first marriage by background characteristics is shown in Table 7.4 for women and men, and for women, by age group. The median age at first sexual intercourse is shown in Table 7.5 and Figure 7.2. Both medians are higher among urban women than rural women. As expected, there is a positive relationship between level of education and age at first marriage (and first intercourse); among women with a basic general education, the median age at first marriage is approximately 19. The median age increases steadily with increasing education to almost 24 among women with higher education.

Figure 7.2 **Median Age at First Sexual Intercourse among Respondents, by Residence and Education**



Median age at first marriage and first intercourse varies little by region. The highest median age for women is in Yerevan (21.8 for first marriage and first sexual intercourse) and the lowest is in Gegharkunik (19.6 for first marriage and 19.5 for first intercourse). There has been little change in age at first marriage or age at first intercourse among women over time.

Tables 7.4 and 7.5 show the median age at first marriage for men age 30-49 and the median age at first intercourse for men age 25-49. Because of the small number of men, data are not shown by age groups. Men in urban areas are more likely to have sex earlier than men in rural areas but get married later. Similarly, although the median age at first marriage is three years older among men with higher education than men with basic education, the most educated men have first sex one year before the least educated men. The median age at first sex for men varies significantly by region, from 17.8 in Ararat to 24.9 in Shirak.

Table 7.4 Median age at first marriage

Median age at first marriage among women 25-49 and men 30-49, by current age (women) and background characteristics, Armenia 2005

Background characteristic	Current age					Women age 25-49	Men age 30-49
	25-29	30-34	35-39	40-44	45-49		
Residence							
Urban	22.1	21.0	20.5	21.3	21.8	21.4	26.1
Rural	19.6	18.8	19.6	20.0	21.1	19.8	24.5
Region							
Yerevan	22.4	21.8	20.8	21.9	22.1	21.8	27.4
Aragatsotn	20.2	18.8	19.7	20.4	21.4	20.3	24.9
Ararat	20.2	19.6	20.3	20.9	20.9	20.3	24.7
Armavir	19.6	18.5	19.6	20.2	22.0	20.0	24.1
Gegharkunik	18.7	18.9	19.4	19.6	20.9	19.6	25.1
Lori	20.1	19.3	(19.8)	19.8	20.9	20.0	23.3
Kotayk	20.4	19.8	19.5	19.9	20.0	19.9	24.7
Shirak	22.5	18.8	20.4	20.9	21.5	20.8	24.4
Syunik	21.8	20.4	19.9	20.7	21.1	20.8	24.2
Vayots Dzor	(21.3)	(19.2)	(19.6)	20.7	21.6	20.5	24.3
Tavush	20.1	19.4	19.7	20.3	21.3	20.3	24.5
Education							
Basic general	17.0	(17.7)	(17.9)	(18.8)	(20.2)	18.6	24.2
Secondary general	18.8	18.4	18.8	19.7	20.4	19.3	24.5
Specialized secondary	22.4	19.7	20.3	20.9	21.3	20.8	25.4
Higher	24.0	23.3	23.0	23.7	24.1	23.6	27.4
Wealth quintile							
Lowest	18.9	18.5	19.6	20.2	21.5	19.8	24.4
Second	20.4	19.2	19.8	20.1	21.6	20.2	25.4
Middle	20.9	20.4	19.9	20.9	21.1	20.8	25.5
Fourth	22.3	20.1	20.2	21.0	21.0	21.0	25.6
Highest	22.5	21.8	20.9	21.5	22.3	21.8	26.7
Total women	21.2	19.8	20.0	20.7	21.5	20.7	na
Total men	a	25.9	25.9	25.0	25.0	na	25.5

Note: The median is the midpoint of the distribution of respondents by exact age at first marriage. Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable
a = Omitted because less than 50 percent of respondents had married before reaching the beginning of the age group

Table 7.5 Median age at first sexual intercourse

Median age at first sexual intercourse among women and men age 25-49 years, by current age (women) and background characteristics, Armenia 2005

Background characteristic	Current age 25-29	30-34	35-39	40-44	45-49	Women age 25-49	Men age 25-49
Residence							
Urban	22.1	21.0	20.4	21.3	21.5	21.4	19.4
Rural	19.7	18.8	19.6	20.0	21.2	19.8	20.3
Region							
Yerevan	22.4	22.0	20.8	22.1	21.7	21.8	18.8
Aragatsotn	20.2	18.7	20.2	20.6	21.4	20.4	20.2
Ararat	20.3	19.9	20.2	21.2	21.5	20.6	17.8
Armavir	19.6	18.5	19.5	20.0	21.6	19.9	20.0
Gegharkunik	18.7	18.8	19.3	19.5	20.6	19.5	21.6
Lori	20.1	19.3	(19.7)	19.8	21.2	20.0	20.1
Kotayk	20.5	20.0	19.5	19.9	19.6	19.9	19.4
Shirak	22.6	19.1	20.3	21.0	21.6	20.8	24.9
Syunik	21.8	20.5	19.9	20.7	21.3	20.8	22.5
Vayots Dzor	(22.0)	(20.1)	(19.7)	20.8	21.6	20.6	19.0
Tavush	20.1	19.4	19.7	20.3	21.3	20.3	22.2
Education							
Basic general	17.0	(17.6)	(18.4)	(18.8)	(19.6)	18.5	20.8
Secondary general	19.0	18.5	18.8	19.7	20.2	19.4	19.6
Specialized secondary	22.5	19.8	20.2	21.0	21.4	20.9	19.5
Higher	23.9	23.3	23.1	23.7	24.0	23.6	19.7
Wealth quintile							
Lowest	19.0	18.6	19.6	20.4	21.4	19.8	21.0
Second	20.5	19.3	19.7	19.9	21.5	20.1	19.7
Middle	20.8	20.7	19.9	21.0	21.0	20.8	19.8
Fourth	22.3	20.1	20.2	20.9	20.9	20.9	18.9
Highest	22.7	22.0	20.8	21.6	22.3	21.9	19.2
Total women	21.2	19.8	20.0	20.7	21.4	20.7	na
Total men	19.9	19.6	19.6	20.0	19.7	na	19.8

Note: The median is the midpoint of the distribution of respondents by exact age at first marriage. Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable

7.3 RECENT SEXUAL ACTIVITY

In the absence of contraceptive use, frequency of sexual intercourse is a direct determinant of pregnancy; therefore, knowledge of frequency is a useful indicator of exposure to pregnancy. The 2005 ADHS asked women the timing of their last sexual intercourse. Table 7.6.1 shows the percent distribution of women by time since their last sexual intercourse. Respondents were considered to be sexually active if they had sexual intercourse at least once in the four weeks prior to the survey.

In the four weeks preceding the survey, approximately half of women were sexually active (49 percent). Ten percent of women had sexual intercourse in the year preceding the survey, but not in the month before the survey, and 9 percent reported sexual intercourse more than a year before. At the time of the survey, 31 percent of all female respondents had never had sexual intercourse. Among married women, some of the lack of recent sexual activity may be attributed to the fact that approximately 14 percent of married women reported that their husbands were residing elsewhere (data not shown).

The proportion of women who were recently sexually active increases with age to peak at 70 percent among women age 35-39 and then declines to 55 percent among women age 45-49. Only 6 percent of women age 15-19 reported recent sexual activity; the majority (93 percent) have never had sexual intercourse. As previously noted, very few women reported sexual activity outside of marriage: 99 percent of never-married women reported that they never had intercourse.

Women with a basic general education are the least likely to have been sexually active in the recent period (35 percent) and women with a specialized secondary education the most likely (54 percent). There are differences in recent sexual activity by region. Less than half of women in Yerevan, Gegharkunik, Lori, and Shirak had sexual intercourse during the four weeks preceding the survey, compared with six in ten women in Ararat and Syunik.

Overall, men are more likely to have had recent sexual intercourse than women (Table 7.6.2). Sixty-three percent had sexual intercourse in the four weeks before the survey, 11 percent had sexual intercourse in the past year but not in the previous four weeks, 3 percent had sex one or more years ago, and 23 percent have never had sexual intercourse. Men's sexual activity increases with age. Among men age 30 and older, close to nine in ten had sex in the month preceding the interview, compared with 6 percent of men age 15-19 and 49 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: 94 percent compared with 23 percent of never married men. Variations in sexual activity are observed at the regional level. The proportion of men who had sex in the past four weeks ranges from 53 percent in Shirak to 71 percent in Aragatsotn.

Table 7.6.1 Recent sexual activity: Women

Percent distribution of women age 15-49 by timing of last sexual intercourse, according to background characteristics, Armenia 2005

Background characteristic	Timing of last sexual intercourse: Within the past 4 weeks	Within 1 year[1]	One or more years ago	Missing	Never had sexual intercourse	Total	Number of women
Age							
15-19	5.5	1.2	0.0	0.4	92.9	100.0	1,123
20-24	36.7	7.1	1.0	1.1	54.2	100.0	1,131
25-29	63.7	10.4	3.7	1.8	20.4	100.0	929
30-34	67.4	12.2	9.9	2.2	8.3	100.0	749
35-39	69.7	11.4	13.4	1.2	4.4	100.0	711
40-44	65.3	16.8	13.8	0.3	3.8	100.0	965
45-49	55.1	16.2	22.5	1.9	4.3	100.0	958
Marital status							
Never married	0.4	0.6	0.2	0.0	98.8	100.0	2,043
Currently married	79.0	15.5	4.5	1.0	0.0	100.0	4,044
Formerly married	4.9	8.1	79.2	7.8	0.0	100.0	479
Marital duration[2]							
Married only once							
0-4 years	82.2	13.7	1.2	2.9	0.0	100.0	732
5-9 years	83.7	12.9	1.9	1.5	0.0	100.0	591
10-14 years	85.8	10.4	3.4	0.5	0.0	100.0	649
15-19 years	79.1	15.6	4.6	0.7	0.0	100.0	676
20-24 years	71.1	20.1	8.6	0.2	0.0	100.0	784
25+ years	72.1	21.2	6.4	0.3	0.0	100.0	548
Married more than once	82.5	8.0	7.3	2.2	0.0	100.0	64
Residence							
Urban	47.7	8.7	9.9	1.2	32.5	100.0	4,194
Rural	51.7	13.2	6.3	1.3	27.5	100.0	2,372
Region							
Yerevan	46.7	7.5	10.6	1.3	33.9	100.0	2,468
Aragatsotn	51.7	13.0	4.9	1.2	29.2	100.0	292
Ararat	58.6	2.5	9.3	2.5	27.1	100.0	462
Armavir	55.7	8.0	8.7	0.7	27.0	100.0	567
Gegharkunik	45.0	22.0	5.8	0.4	26.9	100.0	443
Lori	47.1	13.7	7.8	0.5	30.9	100.0	537
Kotayk	50.8	12.3	6.7	0.9	29.4	100.0	563
Shirak	41.3	17.8	6.8	2.6	31.5	100.0	563
Syunik	58.6	6.6	6.7	0.9	27.2	100.0	281
Vayots Dzor	51.2	6.8	7.3	1.7	33.1	100.0	107
Tavush	51.9	11.7	9.2	0.2	27.1	100.0	285
Education							
Basic general	34.6	8.9	6.8	2.2	47.5	100.0	529
Secondary general	51.6	12.5	8.3	1.3	26.2	100.0	2,440
Specialized secondary	54.1	11.3	10.0	1.1	23.5	100.0	1,997
Higher	43.9	6.4	7.8	0.9	41.0	100.0	1,600
Wealth quintile							
Lowest	50.8	12.5	8.9	1.7	26.1	100.0	1,164
Second	47.7	12.7	8.5	1.0	30.0	100.0	1,284
Middle	47.6	11.9	9.7	1.1	29.6	100.0	1,303
Fourth	50.4	8.1	9.7	1.3	30.6	100.0	1,375
Highest	49.3	7.3	6.3	1.0	36.2	100.0	1,440
Total	49.1	10.4	8.6	1.2	30.7	100.0	6,566

Note: Currently married includes women in consensual union (living together). Formerly married includes divorced, separated, or widowed women.

[1]Excludes women who had sexual intercourse in the past 4 weeks

[2]Excludes women who are not currently married

Table 7.6.2 Recent sexual activity: Men

Percent distribution of men age 15-49 by timing of last sexual intercourse, according to background characteristics, Armenia 2005

Background characteristic	Timing of last sexual intercourse: Within the past 4 weeks	Within 1 year[1]	One or more years ago	Missing	Never had sexual intercourse	Total	Number of men
Age							
15-19	5.6	6.7	1.1	0.0	86.6	100.0	292
20-24	49.3	16.2	8.1	0.0	26.4	100.0	237
25-29	68.2	20.2	2.9	0.8	7.9	100.0	202
30-34	88.8	10.0	0.9	0.0	0.3	100.0	156
35-39	89.7	7.4	1.3	0.0	1.6	100.0	150
40-44	90.3	5.0	4.1	0.1	0.5	100.0	199
45-49	86.1	8.1	4.5	1.1	0.2	100.0	211
Marital status							
Never married	22.8	16.6	6.1	0.0	54.5	100.0	615
Currently married	93.5	5.2	0.8	0.5	0.0	100.0	815
Formerly married	*	*	*	*	*	*	17
Marital duration[2]							
Married only once							
0-4 years	89.6	9.5	0.1	0.9	0.0	100.0	190
5-9 years	93.2	6.0	0.8	0.0	0.0	100.0	141
10-14 years	99.7	0.3	0.0	0.0	0.0	100.0	137
15-19 years	95.0	3.2	1.8	0.0	0.0	100.0	152
20-24 years	90.8	5.9	1.3	2.0	0.0	100.0	123
25+ years	93.8	6.0	0.0	0.2	0.0	100.0	54
Married more than once	*	*	*	*	*	*	17
Residence							
Urban	63.0	12.6	3.4	0.2	20.8	100.0	913
Rural	61.9	7.0	3.4	0.4	27.3	100.0	534
Region							
Yerevan	65.0	14.2	3.5	0.0	17.2	100.0	547
Aragatsotn	70.7	4.5	6.0	0.0	18.7	100.0	71
Ararat	63.6	7.6	1.5	0.2	27.0	100.0	110
Armavir	65.0	12.1	2.7	0.0	20.1	100.0	139
Gegharkunik	63.1	8.7	5.8	0.0	22.4	100.0	81
Lori	58.8	6.4	4.1	2.0	28.7	100.0	87
Kotayk	56.8	13.5	3.6	1.1	25.0	100.0	151
Shirak	53.4	2.6	2.5	0.0	41.6	100.0	98
Syunik	57.9	7.2	3.3	0.0	31.6	100.0	67
Vayots Dzor	59.9	6.8	0.9	1.9	30.5	100.0	31
Tavush	63.7	6.0	2.4	0.0	27.9	100.0	64
Education							
Basic general	39.9	16.3	4.3	0.9	38.6	100.0	205
Secondary general	56.4	10.2	3.4	0.4	29.7	100.0	586
Specialized secondary	83.6	6.8	2.0	0.1	7.6	100.0	310
Higher	67.5	11.2	4.2	0.0	17.1	100.0	346
Wealth quintile							
Lowest	63.0	7.1	4.2	0.2	25.6	100.0	261
Second	63.4	5.9	3.5	0.0	27.2	100.0	264
Middle	58.4	12.0	3.1	0.6	25.9	100.0	326
Fourth	57.7	13.7	3.8	0.6	24.2	100.0	316
Highest	71.6	12.9	2.5	0.0	13.0	100.0	280
Total	62.6	10.5	3.4	0.3	23.2	100.0	1,447

Note: Currently married includes men in consensual union (living together). Formerly married includes divorced, separated, or widowed men. 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 in the past 4 weeks

[2]Excludes men who are not currently married

7.4 POSTPARTUM AMENORRHEA, ABSTINENCE, AND INSUSCEPTIBILITY

Postpartum amenorrhea refers to the interval between childbirth and the return of menstruation. During this period, the risk of pregnancy is reduced. The duration of reduced risk of conception largely depends on two factors: the length and intensity of breastfeeding, which tends to suppress the resumption of ovulation, and the length of time before the resumption of sexual intercourse. Women who are either amenorrheic or abstaining (or both) are considered insusceptible to the risk of pregnancy.

Among births that occurred in the three years preceding the survey, the percentage of mothers who were postpartum amenorrheic, abstaining, or insusceptible at the time of the survey is shown in Table 7.7. At the time of the survey, 18 percent of women who had given birth during the three years preceding the survey were amenorrheic and 8 percent were abstaining. Overall, 20 percent of these women were insusceptible to the risk of pregnancy.

During the first year after birth, there is a rapid decline in postpartum amenorrhea from 94 percent during the first two months after birth to 20 percent of women 10 to 11 months after giving birth. Postpartum abstinence declines rapidly after birth from 77 percent of women in the first two months to 26 percent of women after 2-3 months to less than 1 percent of women after 10-11 months. Overall, the median duration of insusceptibility after birth is 5 months.

Table 7.7 Postpartum amenorrhea, abstinence, and insusceptibility

Percentage of births in the three years preceding the survey for which the mother is postpartum amenorrheic, abstaining, and insusceptible, by number of months since birth, and median and mean durations, Armenia 2005

Months since birth	Percentage of births for which the mother is: Amenorrheic	Abstaining	Insusceptible[1]	Number of births
<2	(93.8)	(76.8)	(97.2)	42
2-3	60.3	26.3	67.4	64
4-5	(47.9)	(6.9)	(54.8)	51
6-7	(33.1)	(20.0)	(33.1)	51
8-9	(16.7)	(5.8)	(22.5)	59
10-11	(20.4)	(0.3)	(20.7)	54
12-13	(4.7)	(2.9)	(7.6)	53
14-15	(7.8)	(2.9)	(7.8)	41
16-17	(2.7)	(3.4)	(6.1)	42
18-19	0.9	0.3	0.9	63
20-21	(4.1)	(7.3)	(11.4)	45
22-23	0.0	1.5	1.5	64
24-25	0.6	0.0	0.6	76
26-27	15.3	1.6	15.3	58
28-29	(4.3)	(2.6)	(4.3)	47
30-31	(3.9)	(0.0)	(3.9)	51
32-33	6.5	5.7	12.3	36
34-35	(0.0)	(0.0)	(0.0)	45
12-15	6.0	2.9	7.7	94
16-19	1.6	1.5	3.0	105
20-23	1.7	3.9	5.6	109
24-29	6.3	1.2	6.3	181
30-35	3.3	1.6	4.9	133
Total	17.5	8.4	19.9	943
Median	4.3	1.8	4.9	na
Mean	7.1	3.9	8.2	na

Note: Estimates are based on status at the time of the survey. Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable
[1]Includes births for which mothers are either still amenorrheic or still abstaining (or both) following birth

7.5 MENOPAUSE

After age 30, the risk of pregnancy declines as increasing proportions of women become menopausal. Although the onset of menopause is difficult to determine for an individual woman, methods are available for estimating the proportion of women who are menopausal for the population as a whole. Table 7.8 shows data on the percentage of women age 30 and older who are menopausal, that is, who are not pregnant or postpartum amenorrheic and who have not menstruated for six months or longer in the period preceding the survey.

According to the 2005 ADHS, 10 percent of women age 30-49 are menopausal. The proportion of women menopausal increases with age from less than 2 percent of women age 30-34 to 31 percent of women age 48-49.

Table 7.8 Menopause

Percentage of women age 30-49 who are menopausal, Armenia 2005

Age	Percentage menopausal[1]	Number of women
30-34	1.5	749
35-39	2.6	711
40-41	3.9	345
42-43	10.6	416
44-45	14.4	418
46-47	19.7	423
48-49	30.6	321
Total	9.7	3,383

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

FERTILITY PREFERENCES 8

Insight into the fertility desires of a population is important both for predicting future fertility and for estimating the potential unmet need for family planning. This chapter presents data from the 2005 ADHS on the fertility intentions of Armenian women, the need for family planning services, and desired family size. It also considers the potential effect on fertility if unwanted pregnancies were prevented.

8.1 FERTILITY PREFERENCES

In the 2005 ADHS, women were asked a series of questions about their fertility preferences. Table 8.1 shows the future reproductive intentions of currently married women and men by number of living children (including any current pregnancy). The majority of married Armenian women express a desire to control their future fertility. Seven in ten respondents (70 percent) do not want to have any more children (Figure 8.1). The desire to limit fertility increases significantly by number of living children. For example, almost all married women with no children want to have a child; three-fourths say that they want to have a child soon. On the other hand, almost eight in ten women with two children say they want no more, as do nine in ten women with three or more children.

Table 8.1 Fertility preferences by number of living children

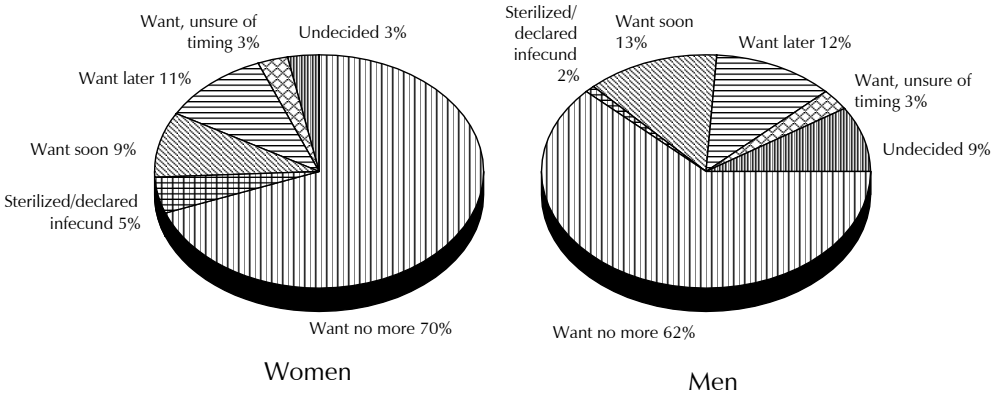
Percent distribution of currently married women and currently married men age 15-49 by desire for children, according to number of living children, Armenia 2005

	Number of living children[1]					
Desire for children	0	1	2	3	4+	Total
WOMEN						
Have another soon[2]	76.4	19.9	4.9	0.8	2.2	8.8
Have another later[3]	1.1	44.7	7.6	0.7	1.0	10.8
Have another, undecided when	7.7	8.2	1.8	0.8	0.0	2.6
Undecided	1.2	4.6	3.3	1.6	1.2	2.8
Want no more	0.9	18.2	78.9	89.8	90.6	70.1
Sterilized[4]	0.0	0.0	0.3	1.5	0.5	0.6
Declared infecund	12.5	4.2	2.9	4.8	4.5	4.1
Missing	0.3	0.0	0.4	0.1	0.0	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	159	624	1,923	1,076	263	4,044
MEN						
Have another soon[2]	(79.0)	26.6	7.6	1.7	(0.0)	13.1
Have another later[3]	(8.8)	42.6	5.6	2.6	(4.4)	11.5
Have another, undecided when	(4.7)	3.9	2.7	1.4	(0.0)	2.6
Undecided	(0.6)	10.0	11.7	5.8	(3.4)	8.9
Want no more	(2.3)	13.8	71.3	86.4	(89.5)	62.0
Sterilized[4]	(0.0)	1.9	0.0	0.4	(0.0)	0.4
Declared infecund	(2.3)	1.1	1.2	1.6	(0.6)	1.3
Missing	(2.2)	0.0	0.0	0.0	(2.2)	0.2
Total	(100.0)	100.0	100.0	100.0	(100.0)	100.0
Number of men	45	144	386	200	41	815

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Includes 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

Overall, men's fertility preferences are similar to women's. However, a lower proportion of men than women report that they want no more children (62 percent versus 70 percent).

Figure 8.1 Desire for More Children among Currently Married Women and Men



ADHS 2005

Since 2000, there has been little change in women's desires for future childbearing. The proportion of married women who say they want no more children or who are sterilized has declined slightly, from 74 percent in 2000 to 71 percent in 2005.

Table 8.2 shows the percentage of currently married women who want no more children, by number of living children and background characteristics. Women living in urban areas are less likely than those living in rural areas to want to stop childbearing (69 percent and 74 percent, respectively). The relationship between desire to stop childbearing and the woman's education is unclear. However, wealth status seems to have a negative association with the desire to limit childbearing. At parities two and higher, women in the highest wealth quintile are more likely than women in lower wealth quintiles to want to limit childbearing.

Table 8.2 Desire to limit childbearing

Percentage of currently married women age 15-49 who want no more children, by number of living children and background characteristics, Armenia 2005

	Number of living children[1]					
Desire for children	0	1	2	3	4+	Total
Residence						
Urban	0.5	17.7	79.6	91.8	95.1	68.5
Rural	1.4	19.5	78.3	90.8	89.0	74.1
Region						
Yerevan	(0.0)	17.6	81.2	94.5	*	67.7
Aragatsotn	*	(22.1)	75.8	92.0	(80.7)	73.0
Ararat	*	15.4	69.7	85.5	(74.0)	64.9
Armavir	*	(23.0)	81.0	93.7	(94.9)	77.3
Gegharkunik	*	(20.0)	82.3	95.1	(96.5)	77.3
Lori	*	(18.7)	81.8	84.9	*	72.9
Kotayk	*	19.8	73.1	93.0	(90.4)	68.3
Shirak	*	16.0	80.4	88.3	*	71.4
Syunik	*	10.0	71.3	91.4	*	68.0
Vayots Dzor	*	(4.5)	72.8	85.1	(80.4)	66.5
Tavush	*	(29.5)	81.8	90.5	(100.0)	78.8
Education						
Basic general	*	(33.7)	71.4	89.1	(80.1)	67.9
Secondary general	0.9	14.8	79.2	90.2	93.1	73.8
Specialized secondary	(0.0)	16.9	81.0	92.1	90.5	72.0
Higher	(2.2)	19.4	77.9	94.1	*	63.1
Wealth quintile						
Lowest	(0.0)	27.0	79.1	90.5	87.3	74.6
Second	(0.0)	17.2	77.0	90.7	86.3	72.8
Middle	(5.0)	22.4	82.3	88.9	99.4	73.5
Fourth	(0.0)	17.7	76.7	92.4	(100.0)	65.7
Highest	(0.0)	11.0	80.3	95.7	*	67.4
Total	0.9	18.2	79.2	91.3	91.0	70.7

Note: Women who have been sterilized are considered to want no more children. 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]Includes current pregnancy

8.2 NEED FOR FAMILY PLANNING

Maternal health care services are concerned with defining the size of the population of women who have a potential need for family planning services and identifying women whose need for contraception is not being met. Currently married fecund women who either want no more children or want to wait at least two years before having another child, but who are not using contraception, are considered to have an *unmet need* for family planning.[1] Current users of family planning methods are said to have a *met need* for family planning. The *total demand* for family planning is the sum of the met need and unmet need for family planning.

Table 8.3 shows the demand for family planning services by background characteristics. The total demand for family planning among all women is 67 percent, and 80 percent of the demand is satisfied. The demand for limiting purposes (52 percent) is higher than the demand for spacing purposes (15 percent). Compared with the 2000 ADHS, total demand for family planning has declined from 74 percent in 2000 to 67 percent in 2005; however, the percentage of demand satisfied has also declined slightly from 84 percent to 80 percent.

[1] For a description of the calculation, see footnote 1, Table 8.3.

Table 8.3 Need for family planning

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 demand satisfied, by background characteristics, Armenia 2005

Background characteristic	Unmet need for family planning[1]			Met need for family planning (currently using)[2]			Total demand for family planning[3]			Percentage of demand satisfied	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total		
Age											
15-19	19.2	0.0	19.2	14.6	1.9	16.5	33.8	1.9	35.7	46.1	78
20-24	13.3	6.1	19.4	27.9	15.0	42.9	42.1	21.1	63.3	69.3	504
25-29	5.8	12.2	18.0	24.0	37.7	61.7	30.7	50.2	80.9	77.8	695
30-34	2.5	9.8	12.3	13.8	53.5	67.3	16.3	63.4	79.7	84.5	601
35-39	0.9	10.6	11.5	7.3	55.1	62.4	8.2	65.7	73.9	84.5	602
40-44	0.1	11.6	11.7	1.5	54.4	55.9	1.6	66.2	67.8	82.8	824
45-49	0.2	7.8	8.0	0.3	33.2	33.5	0.5	41.0	41.5	80.8	741
Residence											
Urban	3.3	7.9	11.2	13.3	40.9	54.3	17.0	48.8	65.8	83.0	2,447
Rural	4.0	12.5	16.5	8.4	42.9	51.2	12.6	55.6	68.2	75.8	1,597
Region											
Yerevan	3.0	5.8	8.8	16.0	42.5	58.5	19.3	48.3	67.6	87.0	1,362
Aragatsotn	2.4	8.3	10.7	11.2	42.4	53.6	13.7	50.7	64.4	83.4	196
Ararat	4.4	10.8	15.3	7.2	33.9	41.1	11.6	44.7	56.4	72.9	307
Armavir	1.1	10.4	11.6	10.1	47.7	57.8	11.8	58.6	70.4	83.6	381
Gegharkunik	6.5	22.4	28.8	4.9	36.1	41.0	11.7	58.5	70.2	59.0	303
Lori	4.0	14.1	18.2	8.1	43.3	51.4	12.1	57.5	69.6	73.9	343
Kotayk	3.4	10.8	14.2	12.2	36.7	48.9	16.1	47.9	63.9	77.9	357
Shirak	5.2	8.4	13.6	4.6	37.0	41.7	10.1	45.4	55.5	75.5	357
Syunik	3.9	8.2	12.1	14.3	47.1	61.4	19.0	55.3	74.3	83.7	189
Vayots Dzor	3.5	3.6	7.1	13.5	53.4	66.9	17.3	57.1	74.3	90.4	65
Tavush	3.8	11.7	15.6	11.3	50.9	62.2	15.3	62.9	78.2	80.1	184
Education											
Basic general	4.5	13.8	18.4	8.2	33.3	41.6	12.7	48.0	60.8	69.8	235
Secondary general	3.3	11.2	14.5	9.3	43.0	52.3	12.8	54.4	67.2	78.4	1,629
Specialized secondary	2.8	9.4	12.2	11.2	41.3	52.5	14.2	50.7	64.9	81.1	1,353
Higher	5.1	5.9	11.0	16.6	42.2	58.8	22.3	48.1	70.4	84.3	828
Wealth quintile											
Lowest	3.6	12.2	15.7	7.6	43.2	50.8	11.2	55.6	66.8	76.4	764
Second	3.6	11.0	14.6	8.7	39.8	48.4	12.8	51.0	63.8	77.0	809
Middle	3.8	10.2	14.0	7.6	43.5	51.1	11.5	53.8	65.3	78.6	788
Fourth	3.7	8.5	12.2	14.8	39.9	54.7	18.7	48.4	67.1	81.8	841
Highest	3.2	6.8	10.0	17.5	42.3	59.8	21.2	49.2	70.4	85.8	842
Total	3.6	9.7	13.3	11.4	41.7	53.1	15.2	51.5	66.7	80.1	4,044

[1]*Unmet need for spacing* includes pregnant women whose pregnancy was mistimed, amenorrheic women who are not using family planning and whose last birth was mistimed, and fecund women who are neither pregnant nor amenorrheic and who are not using any method of family planning and say they want to wait two or more years for their next birth. Also included in unmet need for spacing are fecund women who are not using any method of family planning and say they are unsure whether they want another child or who want another child but are unsure when to have the birth.

Unmet need for limiting refers to pregnant women whose pregnancy was unwanted, amenorrheic women whose last child was unwanted, and to fecund women who are neither pregnant nor amenorrheic and who are not using any method of family planning and who want no more children. Excluded from the unmet need category are pregnant and amenorrheic women who became pregnant while using a method (these women are in need of better contraception).

[2]*Using for spacing* is defined as women who are using some method of family planning and say they want to delay their next child or are undecided whether to have another.

Using for limiting is defined as women who are using and who want no more children. Note that the specific methods used are not taken into account.

[3]Nonusers who are pregnant or amenorrheic and whose pregnancy was the result of a contraceptive failure are not included in the category of unmet need, but are included in the total demand for contraception (because they would have been using had their method not failed).

Overall, approximately 13 percent of married women have an unmet need for family planning, of which 4 percent is for spacing and 10 percent is for limiting. Unmet need is highest among the youngest women, among women with lower levels of educational attainment, and women living in less economically advantaged households. Unmet need for family planning ranges from a low of 7 percent in Vayots Dzor to a high of 29 percent in Gegharkunik. Unmet need has hardly changed since 2000, rising from 12 to 13 percent of married women.

8.3 FERTILITY PLANNING

In the 2005 ADHS, women were asked a series of questions about each of their children born in the five years preceding the survey—and, if pregnant, their current pregnancy—to determine whether the pregnancy was wanted *then* (planned), wanted *later* (mistimed), or *not* wanted (unplanned).

Table 8.4 shows the percent distribution of births in the five years before the survey by whether the birth was wanted then, wanted later, or not wanted. The data show that 82 percent of the births in the past five years were wanted at the time of conception. Ten percent of births were wanted later, and 7 percent of the births were not wanted at all at the time of conception. These proportions suggest that there has been no change in the level of unwanted and mistimed births in Armenia since 2000.

There is a strong relationship between planning status and birth order. For example, while 97 percent of first births were wanted at the time of conception, 39 percent of fourth and higher order births were not wanted at all. Younger women are more likely than older women to want their births at the time they were conceived, while older women are more likely than younger women to want no more children.

Table 8.4 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, Armenia 2005

Birth order and mother's age at birth	Planning status of birth			Missing	Total	Number of births
	Wanted then	Wanted later	Wanted no more			
Birth order						
1	96.5	1.3	0.2	2.0	100.0	816
2	73.7	22.0	3.6	0.7	100.0	581
3	64.6	8.0	24.8	2.6	100.0	211
4+	49.6	7.4	39.4	3.5	100.0	99
Age at birth						
<20	93.2	4.2	0.7	2.0	100.0	207
20-24	84.0	10.8	3.4	1.9	100.0	829
25-29	78.9	12.1	7.6	1.3	100.0	432
30-34	77.5	7.1	13.3	2.1	100.0	151
35-39	70.3	2.9	26.6	0.3	100.0	66
40-44	*	*	*	*	*	21
45-49	*	*	*	*	*	1
Total	82.1	9.5	6.7	1.7	100.0	1,708

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

8.4 IDEAL NUMBER OF CHILDREN

In the 2005 ADHS, respondents were asked what they considered the ideal family size. This information was obtained by asking the respondents two questions. Respondents who had no children were asked, "If you could choose exactly the number of children to have in your whole life, how many would that be?" For respondents who had children, the question was, "If you could go back to the time when 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?" 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 because respondents who want larger families have more children or because respondents adjust their ideal family size to match their actual family size or because of a combination of these factors. The percent distribution of women and men age 15-49 by ideal number of children is detailed in Table 8.5 according to the number of living children.

Table 8.5 Ideal number of 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, Armenia 2005

	Number of living children					
Ideal number of children	0	1	2	3	4+	Total
			WOMEN[1]			
0	2.1	0.5	0.3	0.5	0.8	1.0
1	5.4	6.0	1.9	1.9	1.5	3.6
2	64.1	60.5	54.3	18.6	22.4	50.8
3	17.5	21.9	27.6	56.1	14.9	27.9
4+	8.9	10.0	15.0	21.4	57.2	15.3
Non-numeric responses	1.9	1.1	0.9	1.4	3.2	1.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	2,245	786	2,111	1,144	281	6,566
Mean ideal number of children for: [2]						
All women	2.3	2.4	2.6	3.0	3.5	2.6
Number of women	2,202	777	2,091	1,127	272	6,470
Currently married women	2.2	2.4	2.6	3.0	3.5	2.7
Number of married women	159	618	1,905	1,065	254	4,000
			MEN[3]			
0	2.6	0.0	0.9	0.0	(0.0)	1.4
1	2.1	2.7	0.4	0.9	(2.0)	1.5
2	52.5	45.8	45.9	14.4	(13.5)	43.5
3	26.8	38.0	26.5	42.6	(27.1)	30.1
4+	6.6	12.4	24.3	40.1	(52.6)	18.0
Non-numeric responses	9.5	1.0	2.0	2.0	(4.7)	5.4
Total	100.0	100.0	100.0	100.0	(100.0)	100.0
Number of men	663	149	390	204	41	1,447
Mean ideal number of children for: [2]						
All men	2.4	2.6	3.0	3.7	(3.8)	2.8
Number of men	599	147	382	200	39	1,368
Currently married men	(2.2)	2.6	3.0	3.7	(3.9)	3.1
Number of married men	44	142	378	196	39	799

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1]Number of living children includes current pregnancy for women.
[2]Means are calculated excluding respondents who gave non-numeric responses.
[3]Number of living children includes wife's current pregnancy.

Virtually all Armenian women desire a family with several children. Half of all women (51 percent) say that two children are ideal and 28 percent say that three children are ideal. One in six women (15 percent) states that she prefers to have four or more children. Overall, the mean ideal number of children is 2.6 among all women and 2.7 among married women. There is a positive correlation between the actual and ideal number of children. Among all women, the mean ideal number of children increases from 2.3 among women with no children to 3.5 among women with four or more children.

The data do not indicate any substantial change in ideal family size among women since 2000; the mean number of children considered ideal was 2.7 among all women in 2000 and 2.6 in 2005.

Table 8.6 Mean ideal number of children

Mean ideal number of children for all women and men age 15-49, by background characteristics, Armenia 2005

Background characteristic	Women		Men	
	Mean	Number[1]	Mean	Number[1]
Age				
15-19	2.3	1,105	2.5	252
20-24	2.4	1,108	2.4	221
25-29	2.4	922	2.4	195
30-34	2.5	735	2.7	150
35-39	2.7	703	3.0	148
40-44	2.8	951	3.6	196
45-49	2.9	946	3.2	207
Residence				
Urban	2.5	4,117	2.7	870
Rural	2.6	2,353	2.9	499
Region				
Yerevan	2.5	2,413	2.8	542
Aragatsotn	2.7	292	3.5	71
Ararat	2.6	462	2.7	110
Armavir	2.5	566	2.6	129
Gegharkunik	2.5	438	2.6	81
Lori	2.4	530	3.0	75
Kotayk	2.7	551	3.1	125
Shirak	2.5	548	2.3	74
Syunik	2.8	281	2.7	67
Vayots Dzor	2.5	106	2.8	29
Tavush	2.7	284	3.2	64
Education				
Basic general	2.5	512	2.6	183
Secondary general	2.5	2,406	2.7	547
Specialized secondary	2.6	1,975	3.0	306
Higher	2.5	1,576	2.9	333
Wealth quintile				
Lowest	2.6	1,149	3.0	248
Second	2.6	1,261	2.8	245
Middle	2.5	1,285	2.8	301
Fourth	2.6	1,352	2.8	300
Highest	2.5	1,423	2.7	274
Total	2.6	6,470	2.8	1,368

[1]Respondents who gave a numeric response

In general, men want a slightly larger number of children than women. Forty-four percent of men say that two children are ideal, 30 percent say that three children are ideal, and 18 percent say that four or more children are ideal. Overall, the mean ideal number of children among all men is 2.8 children and among married men is 3.1 children. As in the case of women, there is a positive correlation between the actual and ideal number of children among men.

Table 8.6 shows the mean ideal number of children by background characteristics. In general, there are no significant variations in the mean ideal number of children by the woman's background characteristics. However, the mean ideal number of children among both women and men increases with age. For example, women age 15-19 want 2.3 children and women age 45-49 want 2.9 children. Among men, the differential is even greater. The mean ideal number of children increases from 2.5 among men age 15-19 to 3.2 among men age 45-49.

Among men, regional variation is striking: the ideal number of children ranges from a low of 2.3 in Shirak to 3.5 in Aragatsotn, a difference of more than one child.

8.5 WANTED AND UNWANTED FERTILITY

Table 8.7 presents *wanted fertility rates,* which indicate the theoretical level of fertility that would result if all unwanted births were prevented. Unwanted births are those that exceed the respondent's ideal number. The comparison of observed total fertility rates and wanted fertility rates indicates the extent to which couples in a population successfully control their fertility in a given period. In Armenia, there is little difference between the observed total fertility rate (1.7 children per woman) and the wanted total fertility rate (1.6 children per woman). Similarly, only minor differences exist between actual and wanted fertility for population subgroups.

Table 8.7 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by background characteristics, Armenia 2005

Background characteristic	Total wanted fertility rate	Total fertility rate
Residence		
Urban	1.6	1.6
Rural	1.6	1.8
Region		
Yerevan	1.7	1.7
Aragatsotn	2.1	2.5
Ararat	1.9	2.0
Armavir	1.6	1.7
Gegharkunik	1.9	2.1
Lori	1.1	(1.4)
Kotayk	1.7	1.8
Shirak	1.1	1.2
Syunik	1.7	1.8
Vayots Dzor	0.9	(0.9)
Tavush	1.5	1.6
Education		
Basic general	1.7	1.9
Secondary general	1.6	1.8
Specialized secondary	1.7	1.9
Higher	1.4	1.5
Wealth quintile		
Lowest	1.6	1.8
Second	1.9	2.0
Middle	1.7	1.9
Fourth	1.6	1.6
Highest	1.4	1.5
Total	1.6	1.7

Note: Rates are calculated based on births to women 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 4.2. Figures in parentheses are based on 250-499 unweighted women.

INFANT AND CHILD MORTALITY 9

This chapter presents information on mortality among children under five years of age. The rates shown provide information on the levels and trends in mortality as well as mortality differentials between population subgroups. Mortality differentials are useful because they identify population subgroups exposed to elevated risks of mortality.

The mortality rates presented in this chapter are expressed as deaths per 1,000 live births, except in the case of child mortality, which is expressed as deaths per 1,000 children surviving to age one. Rates are presented for the following age intervals:

- Neonatal mortality (NN): the probability of dying within the first month of life
- Postneonatal mortality (PNN): the difference between infant and neonatal mortality
- Infant mortality (${}_1q_0$): the probability of dying between birth and exact age one
- Child mortality (${}_4q_1$): the probability of dying between exact ages one and five
- Under-five mortality (${}_5q_0$): the probability of dying between birth and exact age five

The questionnaire for the 2005 ADHS included a reproductive history in which questions were asked about each of a woman's pregnancies. Respondents were asked to report the outcome of each pregnancy in terms of standard international definitions. A *live birth* was defined as any birth, irrespective of the duration of pregnancy, that after separation from the mother showed any sign of life (for example, breathing, beating of the heart, or movement of voluntary muscles). An *infant death* was defined as the death of a child under one year of age (WHO, 1993).

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). Thus, respondents were asked to report about events that occurred throughout their reproductive lives. For older respondents, women age 40 and over, this means events that occurred as long as 25 to 30 years ago. Mortality rates for specific periods preceding the survey were calculated using direct estimation procedures.

9.1 ASSESSMENT OF DATA QUALITY

The accuracy of mortality estimates from the ADHS depends on two factors: sampling error (i.e., variability) and non-sampling error (i.e., all sources of error other than sampling error, which primarily means the completeness and accuracy with which births and deaths are reported by respondents and recorded by interviewers).

Sampling variability arises because the mortality data are based on the births and deaths for a specific time period reported by women in the sampled households rather than on all births and deaths in the entire population during that period. If the sampling procedure had selected a different sample of households, a different set of births and deaths would have been reported on by different women and the mortality estimates would be different. The potential variability between mortality estimates from different samples is the source of sampling variability. Nevertheless, the estimated rates presented in this report are representative for Armenia. The sampling variability associated with each estimated rate is represented as a confidence interval within which there is a 95 percent confidence that the true rate resides. These 95 percent confidence intervals are measurable based on sampling theory. The 95 percent confidence intervals for mortality estimates for the total population and for its urban/rural components are presented in Appendix B of this report and are cited in this chapter where appropriate.

Non-sampling error arises primarily from errors in data collection. The most likely source of non-sampling error is the underreporting of deceased children. It is well established that underreporting of deceased children by survey respondents is most likely 1) for time periods more remote from the survey date and 2) for deaths that occurred in early infancy (i.e., in the neonatal period, before a child becomes fully integrated into the family). Underreporting of events that occurred in the more distant past is due either to forgetfulness or to conscious avoidance of recalling the tragedy of losing a child. In this report, the focus is on mortality rates for the 15-year period prior to the survey; rates for earlier time periods are not reported. This eliminates showing mortality estimates for the time periods most susceptible to respondent forgetfulness. Of course, this does not ensure that events occurring in the 15-year period prior to the survey are fully reported.

In the case of underreporting of early infant deaths, the data for the 15-year period prior to the survey can be assessed to determine whether significant underreporting of neonatal deaths occurred. Significant underreporting would result in an implausibly low value for the ratio of neonatal to infant mortality (United Nations, 1982). The assessment consists of comparing the neonatal/infant mortality ratios from the survey with values for national populations that have approximately the same level of infant mortality as observed in the survey and which are known to have relatively complete infant mortality data. In countries at a level of infant mortality of about 33 per 1,000 (the midpoint of the range of the infant mortality rates from the 2005 ADHS; see Table 9.1), the value of this ratio is typically 0.60 or higher.[1]

Table 9.1 shows neonatal and infant mortality rates from the 2005 ADHS for five-year time periods preceding the survey. The neonatal-to-infant mortality ratio for the periods 0-4 years (2001-2005), 5-9 years (1996-2000), and 10-14 years (1991-1995) preceding the survey are 0.65, 0.67, and 0.41, respectively. It can be concluded that there is no underreporting of neonatal deaths for the two time periods in the 10 years preceding the survey. However, the relatively low neonatal/infant mortality ratio of 0.40 for the period 10-14 years preceding the survey strongly suggests that there was underreporting of neonatal deaths for that period.

This analysis of data quality is based on the relative magnitude of the observed neonatal and infant mortality rates and does not preclude the possibility that there was underreporting of events for both the neonatal period and for all of the first year of life—an eventuality that would be undetected by this methodology. Nevertheless, based on this analysis, it is reasonable to conclude that the reporting of neonatal deaths was not a significant problem in the 10-year period immediately preceding the survey but that it was a problem for the period 10-14 years preceding the survey. Accordingly, much greater confidence can be placed in the estimates for 1996-2000 and 2001-2005 than in the estimate for 1991-1995.

9.2 Levels and Trends in Childhood Mortality

Table 9.1 shows infant and child mortality estimates based on data from the 2005 ADHS. For the five years preceding the survey (2001-2005), the infant mortality estimate is 26 per 1,000 live births. The estimates of neonatal and postneonatal mortality are 17 and 9 per 1,000, respectively. The estimate of child mortality (age one to four) is much lower: 4 per 1,000. The overall under-five mortality rate for the period is 30 per 1,000.

[1] For example, see the neonatal and infant mortality rates for Austria (1960), Canada (1953), Belgium (1957), Republic of Germany (1959), Ireland (1957), and Scotland (1952) in the *U.N. Demographic Yearbook, 1961* (Table 13), and Cuba (1968) and Puerto Rico (1965) in the *U.N. Demographic Yearbook, 1974* (Table 22).

Trends in mortality over the 15-year period prior to the survey can also be examined from Table 9.1. The data suggest that mortality has decreased substantially over the past 15 years. In the case of infant mortality, the estimated rates show a decline by 37 percent over the 10-year interval from the midpoint of the 1991-1995 estimate of infant mortality (41 per 1,000) to the midpoint of the 2001-2005 estimate (26 per 1,000) or by about 3.7 percent per year. The actual pace of the mortality decline was probably greater than this because, as indicated above, the rate estimated for 1991-1995 is likely to be an underestimate. Over the 10-year interval, neonatal mortality was stable at 17 per 1,000 and postneonatal mortality declined by 63 percent (24 per 1,000 to 9 per 1,000).

No doubt many factors have contributed to the observed mortality decline in Armenia between 1991-1995 and 2001-2005. To some degree, the decline was probably hastened by health interventions initiated by the MOH in 1994 (i.e., programs in the case management of diarrhea and acute respiratory infection [ARI] as well as programs in support of breastfeeding). These programs are likely to have had more impact on postneonatal mortality than on neonatal mortality, which is consistent with the observed mortality declines in those subintervals of infancy.

Table 9.1 Early childhood mortality rates

Neonatal, postneonatal, infant, child, and under-five mortality rates for five-year periods preceding the survey, Armenia 2005

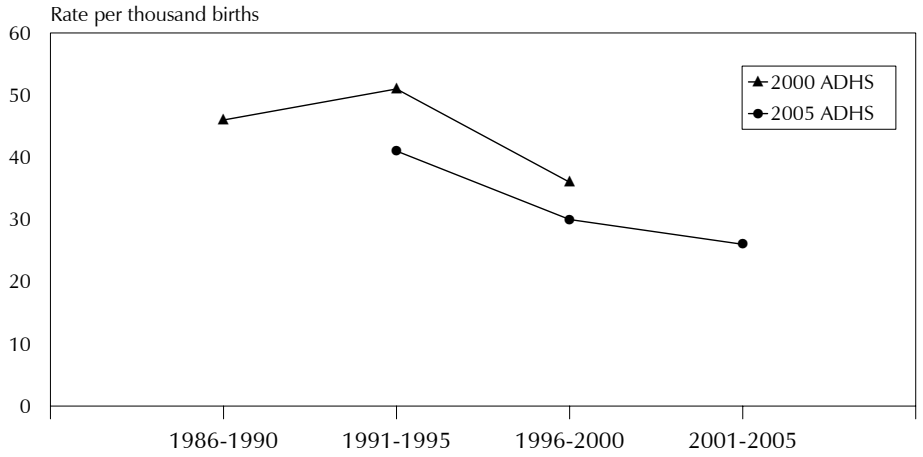
Years preceding the survey	Approximate calendar period[1]	Neonatal mortality (NN)	Postneonatal mortality[2] (PNN)	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
0-4	2001-2005	17	9	26	4	30
5-9	1996-2000	20	10	30	7	36
10-14	1991-1995	17	24	41	7	48

[1]Because survey fieldwork began in early September 2005 and was completed by early December 2005, the rates for the five-year period 2001-2005 actually apply approximately to the calendar period from October 2000 to September 2005. Similarly for the other five-year periods.
[2]Computed as the difference between the infant and the neonatal mortality rates.

Comparison with the results of the 2000 ADHS also suggests a significant decline in the infant mortality rate (IMR). Figure 9.1 shows the infant mortality rates for the 15-year period preceding each survey. Overall, the infant mortality estimates across both surveys show a clear and sustained trend of declining mortality. It should be noted that the 2005 ADHS infant mortality estimates of 41 per 1,000 (1991-1995) and 30 per 1,000 (1996-2000) are lower than the estimates from the 2000 ADHS for the same time periods (51 per 1,000 and 36, per 1,000, respectively).[2]

[2] The differences between the 2000 ADHS and the 2005 ADHS in the IMR estimates for 1991-1995 and 1996-2000 are not statistically significant as indicated by the fact that the 95 percent confidence intervals of the rates for the same time period overlap. For example, for the period 1996-2000, the IMR estimate from the 2000 ADHS is 36, with a 95 percent confidence interval from 25 to 47, and the IMR estimate from the 2005 ADHS is 30 with a 95 percent confidence interval from 21 to 39, which means that the confidence intervals overlap. Nevertheless, the fact that the estimates for both time periods (1991-1995 and 1996-2000) are lower in the 2005 ADHS is convincing evidence of underreporting of deaths in the 2005 ADHS. The large confidence intervals associated with each estimated rate is due to the relatively small number of observed births on which the estimates are based (between 1,500 and 2,500 for the various time periods; see Appendix B, Estimates of Sampling Errors, for the number of births on which specific estimates are based). Indeed, the large confidence intervals associated with infant and childhood mortality rates in most surveys can only be substantially narrowed by considerable increases in sample size, especially in low-fertility countries such as Armenia.

Figure 9.1 Trends in Infant Mortality, According to 2000 ADHS and 2005 ADHS



Note: Rates are means for four-year periods.

9.3 INFANT MORTALITY RATES FROM THE NATIONAL STATISTICAL SERVICE AND THE ADHS

Armenia has a long history of demographic and health data collection—primarily through the use of national registration systems. In the case of births and infant deaths, the National Statistical Service collects the data through a system in which reports from local health officials—which primarily document events occurring in health facilities—are forwarded up the reporting hierarchy to the regional *(marz)* level and to the NSS and ultimately to the MOH. Official government statistics on infant mortality based on these administrative records are published in the annual statistical reports of the NSS.

Prior to 1995, live births and infant deaths in Armenia were defined according to protocols established during the time of the former Soviet Union. The criteria for classifying pregnancy outcomes in the Soviet protocols differed from those recommended by the World Health Organization (WHO). The most important difference relates to pregnancies ending at a gestational age of less than 28 weeks. The Soviet protocols classify such pregnancies as miscarriages (even if signs of life are present at the time of delivery) unless the child survives for seven days.[3] Alternatively, WHO defines a birth showing any sign of life (i.e., breathing, beating of the heart, or movement of voluntary muscles) as a live birth, irrespective of the gestational age at delivery (WHO, 1993). There is also a difference for pregnancies terminating at 28 or more weeks of gestation. The Soviet system classifies such events as live births if the child breathes and as stillbirths if breathing is not evident at delivery. WHO defines these events as live births if any sign of life is present at delivery and otherwise as stillbirths.

In 1995, Armenia officially changed to the WHO definitions of live birth and infant death. However, it is thought that many maternity wards have not fully converted to the new definitions and are still using the Soviet-era definitions (Government of Armenia et al., 1999), which would cause neonatal mortality rates reported by the NSS to be less than the neonatal rates reported in the 2005 ADHS.

[3] In cases in which the gestational age is unknown, fetuses that weigh less than 1,000 grams or measure less than 35 centimeters in length are considered premature and are classified as miscarriages.

Subsequent to the 2000 ADHS and based on the analysis of infant mortality rates from the 2000 ADHS and NSS, a new package of infant mortality rate norms and instructions was developed in Armenia with the aim of improving the registration of infant mortality cases. The package was approved and adopted by the government and introduced in November 2005. According to the new norms, Armenia in late 2005, on the federal level, fully introduced the International Classification of Diseases (IDC-10) recommended by the WHO. Following these recommendations, the perinatal period is determined as starting at 22 weeks, and all newborns over 500 grams are to be registered and the data to be reflected in the official statistics. This is expected to overcome the above-mentioned confusion with definitions of live births. Despite the fact that the listed changes are not reflected in this analysis of the ADHS and NSS infant mortality rates (the survey was conducted in the autumn of 2005), it is necessary to present the new rules pertinent to the registration of infant deaths.

Table 9.2 and Figure 9.2 show infant mortality rates reported by NSS and the 2005 ADHS over the past 15 years. For all three time periods shown, the NSS estimates of infant mortality are substantially less than 2005 ADHS estimates: 49 percent less for the periods 2001-2005 and 1996-2000, and 60 percent less for the period 1991-1995. A thorough investigation of the differences between the two sets of estimates is beyond the scope of this report. However, it is clear that the differences in infant mortality rates arise from both the neonatal and postneonatal periods. For example, the difference between the 2001-2005 rates (12.9 deaths per 1,000) is due to the difference between neonatal and postneonatal rates (8.2 and 4.7 deaths per 1,000, respectively).

The fact that differences exist between postneonatal as well as neonatal rates has important implications for evaluating the completeness of the registration system. While differences in the definitions of pregnancy outcomes can contribute to the differences in the neonatal estimates, they do not affect the postneonatal estimates. Under the reasonable assumption that survey respondents have not overreported postneonatal deaths, it appears that defects in the registration, which are distinct from the definitional problems associated with the reporting of neonatal deaths, are resulting in the underreporting of postneonatal deaths in the registration system. Accordingly, it is likely the case that underreporting of neonatal deaths in the registration system is the joint result of some level of generalized underreporting of events and definitions of live births that have not been fully implemented, and that the postneonatal rates suffer from the problem of generalized underreporting of events. Official government statistics on infant mortality based on these administrative records are published in the annual statistical reports of the NSS.

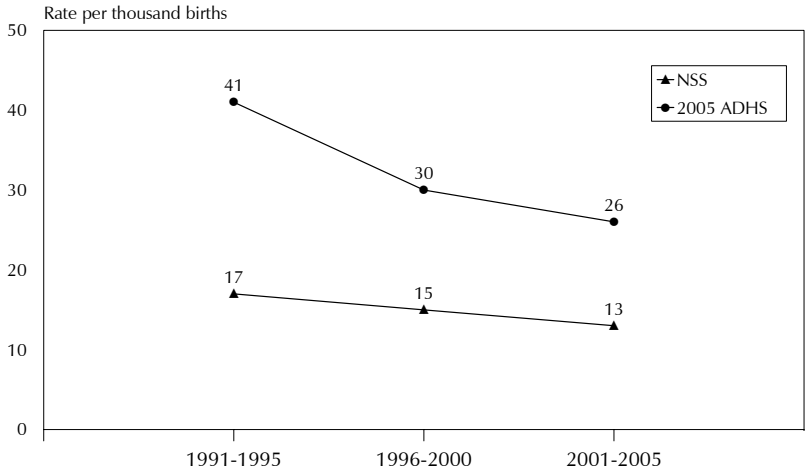
Table 9.2 Comparison of infant mortality rates

Neonatal, postneonatal, and infant mortality rates for five-year periods preceding the survey, National Statistical Service (NSS) and 2005 ADHS

Approximate calendar period[1]	Neonatal mortality[2]		Postneonatal mortality[3]		Infant mortality		
	NSS	ADHS	NSS	ADHS	NSS	ADHS	Shortfall[4]
2001-2005	8.8	17	4.3	9	13.1	26	49
1996-2000	9.1	20	6.2	10	15.3	30	49
1991-1995	8.0	17	8.5	24	16.5	41	60

Source: NSS (2006)
[1]Because survey fieldwork began in early September 2005 and was completed by early December 2005, the rates for the five-year period 2001-2005 actually apply approximately to the calendar period from October 2000 to September 2005. Similarly for the other five-year periods.
[2]Neonatal mortality estimates are based on deaths under 27 days for NSS rates and under one month for ADHS rates.
[3]Computed as the difference between the infant and the neonatal mortality rates
[4]Percent shortfall: NSS relative to ADHS

Figure 9.2 **Trends in Infant Mortality Based on Estimates from the National Statistical Service (NSS) and the 2005 ADHS**



9.4 SOCIOECONOMIC DIFFERENTIALS IN CHILDHOOD MORTALITY

Table 9.3 shows infant and child mortality estimates for the 10-year period preceding the survey, by socioeconomic variables (urban-rural residence, education, and wealth quintile). A 10-year period is used to calculate the rates for population subgroups to reduce sampling variability. The infant mortality rates are shown in Figure 9.3 by urban-rural residence and wealth quintile.

As is the case in most countries, mortality rates in infancy and early childhood are higher in rural areas than in urban areas (31 per 1,000 versus 25 per 1,000). Most of this difference arises from the post-neonatal rates. In the case of child mortality, rural rates (11 per 1,000) are five times the level of urban rates (2 per 1,000). In terms of under-five mortality, rural children have higher rates (42 per 1,000) than urban children (26 per 1,000) by a factor of 1.6.

Overall, under-five mortality levels decline as the mother's education increases, although the relatively small numbers of cases in each education subgroup means that large confidence intervals are associated with these estimates. Differentials by education can be seen most clearly at the postneonatal level. Levels of neonatal mortality seem curiously low among women with either a basic general or a secondary general education compared with more educated women. This could indicate some misreporting of early deaths or recall problems among women with lower levels of education.

As expected, mortality rates are highest among children born to women residing in households in the lowest wealth quintile. Mortality rates are higher among the lowest wealth quintile than among any other socioeconomic characteristic.

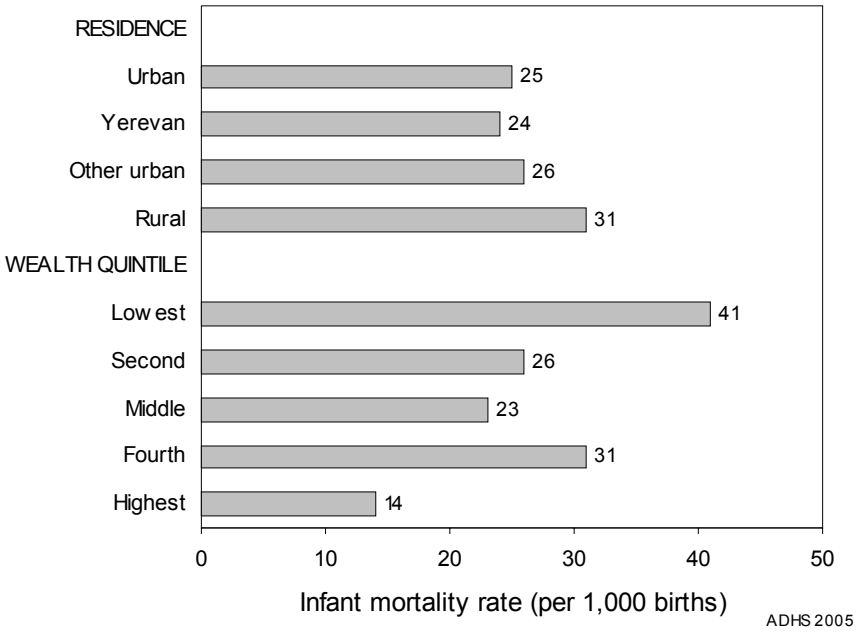
Table 9.3 Early childhood mortality rates by socioeconomic characteristics

Neonatal, postneonatal, infant, child, and under-five mortality rates for the 10-year period preceding the survey, by socioeconomic characteristics, Armenia 2005

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality[1] (PNN)	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
Residence					
Urban	18	7	25	2	26
Yerevan	19	5	24	3	26
Other urban	16	10	26	1	27
Rural	19	12	31	11	42
Education					
Basic general	(14)	(28)	(43)	(0)	(43)
Secondary general	14	10	24	9	33
Specialized secondary	25	7	32	3	35
Higher	21	2	22	5	27
Wealth quintile					
Lowest	24	17	41	11	52
Second	18	8	26	5	30
Middle	17	6	23	1	24
Fourth	19	12	31	2	33
Highest	14	0	14	9	23

Note: Rates are expressed per 1,000 births. Rates based on 250 to 499 exposed children are in parentheses.
[1]Computed as the difference between the infant and neonatal mortality rates

Figure 9.3 **Infant Mortality Rates for the 10-year Period Preceding the Survey, by Residence and Wealth Quintile**



9.6 DEMOGRAPHIC DIFFERENTIALS IN CHILDHOOD MORTALITY

Table 9.4 shows the relationship between early childhood mortality and demographic variables. As was the case with the socioeconomic differentials, the rates are shown for the 10-year period preceding the survey. There has been a consistent fertility pattern in Armenia over the last decade by which a large majority of births occur to women in their twenties, and there are relatively few births of birth order 4 and higher or at birth intervals of two and three years. Accordingly, the rates in Table 9.4 for women less than 20 years of age, 40-49 years of age, birth order 4 and higher, and birth intervals of two and three years are based on fewer than 500 births and must be interpreted with caution.

As expected, mortality rates are generally higher for boys than for girls. There appear to be substantial differences in mortality risks associated with mother's age, birth order, and previous birth interval. Some of these differentials are surprising. For example, infant and child mortality are higher among births that are spaced after the longest interval (four or more years) than births that are spaced the closest together (less than two years). This is an interesting result because while the risks of having a short birth interval are well documented, the potential risks of having children spaced too far apart are currently being studied by experts.

Table 9.4 Early childhood mortality rates by demographic characteristics

Neonatal, postneonatal, infant, child, and under-five mortality rates for the 10-year period preceding the survey, by demographic characteristics, Armenia 2005

Demographic characteristic	Neonatal mortality (NN)	Postneonatal mortality[1] (PNN)	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-five mortality ($_5q_0$)
Child's sex					
Male	21	8	29	8	37
Female	16	10	26	3	29
Mother's age at birth					
<20	(13)	(4)	(18)	(3)	
20-29	17	7	24	3	27
30-39	30	13	43	19	61
40-49	*	*	*	*	*
Birth order					
1	19	2	21	0	21
2-3	17	10	27	6	33
4+	(24)	(43)	(67)	(34)	(99)
Previous birth interval[2]					
<2 years	11	16	27	6	33
2 years	(27)	(9)	(36)	(13)	
3 years	(1)	(13)	(15)	(4)	
4+ years	24	16	39	15	54
Birth size[3]					
Small/very small	(0)	(44)	(44)	na	na
Average or larger	4	4	8	na	na

Note: Rates are expressed per 1,000 births. Rates in parentheses are based on 250 to 499 exposed children. An asterisk indicates that a rate is based on fewer than 250 exposed children 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 are for births occurring during the five-year period before the survey.

9.6 PERINATAL MORTALITY

Perinatal mortality rates indicate the level of mortality from the time of prenatal viability (i.e., the late fetal period beginning at the 28th week of gestation) through labor, delivery, and the early neonatal period of life (i.e., the 0-6 day period after birth). Pregnancies that terminate without signs of life after the 28th week of gestation are referred to as stillbirths. Stillbirths and early neonatal deaths share many of the same underlying causes leading to mortality (e.g., congenital malformations), and for this reason these events are aggregated into the perinatal mortality rate.

Table 9.5 shows perinatal mortality rates per 1,000 pregnancies by selected background characteristics. Perinatal mortality rates are reported for the five-year period preceding the survey. It should be noted that data quality is always an issue when considering perinatal mortality rates, as both stillbirths and early neonatal deaths are susceptible to underreporting. Moreover, in general, there are too few cases by subcategories of background characteristics to produce reliable perinatal mortality rates.

Table 9.5 Perinatal mortality

Number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the five-year period preceding the survey, by selected background characteristics, Armenia 2005

Background characteristic	Number of stillbirths[1]	Number of early neonatal deaths[2]	Perinatal mortality rate[3]	Number of pregnancies of 7 or more months duration
Mother's age at birth				
<20	2	0	*	192
20-29	7	11	16	1,120
30-39	3	5	*	192
40-49	0	0	*	20
Previous pregnancy interval in months				
First pregnancy	4	9	19	651
<15	4	2	*	182
15-26	1	1	9	293
27-38	0	3	*	131
39+	3	1	(18)	267
Residence				
Urban	5	11	17	935
Rural	7	6	22	589
Education				
Basic general	3	0	*	140
Secondary general	5	6	19	584
Specialized secondary	3	2	(12)	451
Higher	2	8	(28)	349
Wealth quintile				
Lowest	6	5	(38)	292
Second	1	0	(3)	295
Middle	1	2	(9)	290
Fourth	4	8	(37)	339
Highest	0	2	(6)	308
Total	12	16	19	1,524

Note: Rates in parentheses are based on 250-499 exposed children. An asterisk indicates that a rate is based on fewer than 250 exposed children and has been suppressed.
[1]Stillbirths are fetal deaths in pregnancies lasting seven or more months.
[2]Early neonatal deaths are deaths among live-born children age 0 to 6 days.
[3]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.

The overall perinatal mortality rate is 19 per 1,000. Stillbirths and early neonatal deaths (deaths under seven days) contributed almost equally to the overall perinatal rate, with neonatal deaths being slightly higher than stillbirths. Although research has not yet established a firm relationship between the two components of the perinatal mortality rate, a number of countries with perinatal mortality rates between 20 and 30 per 1,000 have reported stillbirth and early neonatal mortality rates of approximately the same order of magnitude (Hoffman et al., 1984).

As was the case with overall infant mortality, the estimates of perinatal mortality from the survey are higher than the rate based on data from the MOH, which, for the period 2001-2005, was 15.6 per 1,000.

9.7 HIGH-RISK FERTILITY BEHAVIOR

Previous research has shown a strong relationship between the fertility patterns of women and the mortality risks of their children. Typically, mortality risks are greater for children who are born to mothers who are too young or too old, who are born after a short birth interval, or who have a high birth order. In this analysis, a mother is classified as *too young* if she is younger than 18 years of age and *too old* if she is older than 34 years of age. A *short birth interval* is defined as a birth occurring within 24 months of the previous birth, and a child is of *high birth order* if the mother had already given birth to three or more children.

Table 9.6 shows the distribution of children born in the five years before the survey by risk category (see also Figure 9.4). Although first births to women age 18-34 are considered an unavoidable risk, they are included in the analysis and are shown as a separate risk category. Column 1 of Table 9.6 shows that in the five-year period before the survey, 23 percent of births were in a single high-risk category and 4 percent were in a multiple high-risk category. Column 2 shows risk ratios for births in various high-risk categories relative to births not having any high-risk characteristics. Overall, the risk ratio for children in any high-risk category (1.4) was about 40 percent higher than for children who were not in any high-risk category.

Table 9.6 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 the percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Armenia 2005

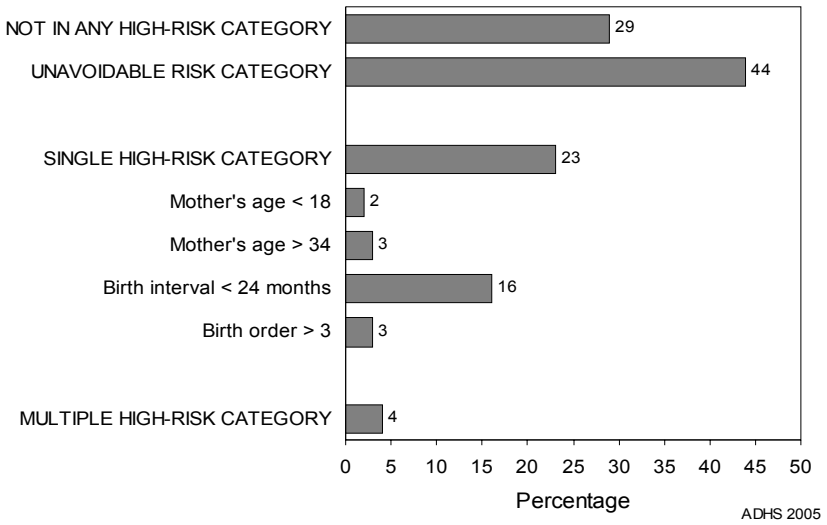
Risk category	Births in the 5 years preceding the survey		Percentage of currently married women[1]
	Percentage of births	Risk ratio	
Not in any high-risk category	29.2	1.00	23.9[a]
Unavoidable risk category			
First order births between ages 18 and 34 years	44.3	0.95	5.4
In any avoidable high-risk category	26.5	1.87	70.8
Single high-risk category	22.8	1.35	39.8
Mother's age <18	1.7	0.00	0.1
Mother's age >34	2.8	0.00	25.9
Birth interval <24 months	15.5	0.77	7.6
Birth order >3	2.8	6.82	6.1
Multiple high-risk category	3.7	5.06	31.0
Age <18 & birth interval <24 months[2]	0.1	0.00	0.0
Age >34 & birth interval <24 months	0.1	0.00	0.2
Age >34 & birth order >3	2.5	6.07	29.2
Age >34 & birth interval <24 months & birth order >3	0.0	*	0.2
Birth interval <24 months & birth order >3	1.0	3.69	1.4
Total	100.0	na	100.0
Number of births/women	1,512	na	4,044

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* (first row). An asterisk indicates that the value cannot be calculated.
na = Not applicable
[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 occurred less than 15 months ago, or latest birth being of order 3 or higher.
[2] Includes the combined categories age <18 & birth order >3
[a] Includes sterilized women

Column 3 looks to the future and addresses the question of how many currently married women have the potential for having a high-risk birth. The results were obtained by simulating the risk category into which a birth to a currently married woman would fall if she were to become pregnant at the time of the survey. For example, a woman who was 37 years old at the time of the survey and had three previous births, the last of which occurred three years earlier, would be classified in the multiple high-risk category for being too old (35 or older) and at risk of having a high order birth (greater than three).

Overall, 71 percent of married women have the potential to give birth to a child with an elevated risk of mortality. It should be noted that this figure is hypothetical and based on all women who could potentially have a high-risk birth if they were to become pregnant as of the date of being interviewed. However, this is quite unlikely to occur as some of the potentially at-risk women are practicing contraception and some have passed menopause and are infecund.

Figure 9.4 **Births in the Last Five Years in Categories of High-Risk Fertility Behavior**



REPRODUCTIVE HEALTH 10

Reproductive and maternal health care in Armenia is implemented through an extensive system of ambulatory polyclinics and hospitals. The network of ambulatory health care is organized around geographical regions and is offered through women's consultation polyclinics and rural health facilities. Obstetric care is offered at hospital obstetric-gynecological departments, regional delivery hospitals located in urban areas, and at republican centers for specialized (tertiary) care.

This chapter presents findings on several areas of importance to reproductive and maternal health: antenatal, delivery, and postnatal care; visits to the gynecologist; and breast exams. These data are of great value in identifying subgroups of women who do not utilize or receive specific health services and is useful in planning for improvements in service delivery.

10.1 ANTENATAL CARE

The health care that a mother receives during pregnancy and at the time of delivery is important for the survival and well-being of both the mother and the child. Antenatal care (ANC) is described according to the type of provider, number of ANC visits, stage of pregnancy at the time of the first visits, and number of visits, as well as the services and information provided during ANC.

Antenatal Care Provider

Table 10.1 presents data on the utilization of different types of antenatal care providers. Overall, the 2005 ADHS found that 93 percent of women who had a live birth in the five years preceding the survey received antenatal care at least once from a doctor (90 percent) or a nurse or trained midwife (3 percent) (Figure 10.1). In urban areas, 94 percent of care was provided by doctors and 2 percent was provided by nurses or trained midwives. In rural areas, 83 percent of women received antenatal care from a doctor and 6 percent from a nurse or a midwife.

In almost all regions, at least nine in ten mothers received antenatal care from a trained professional. However, antenatal care from a health professional (doctor, nurse, or midwife) is received by only 78 percent of mothers in Shirak and 74 percent in Gegharkunik.

In the five years since the 2000 ADHS, a significant change has taken place in the coverage of antenatal care. Antenatal care by a doctor has increased from 84 percent to 90 percent, while care by a nurse or a midwife decreased from 9 percent to 3 percent.

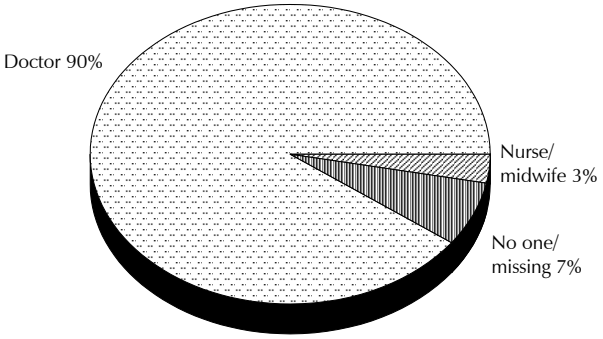
Table 10.1 Antenatal care

Percent distribution of women who had a live birth in the five years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth, according to background characteristics, Armenia 2005

Background characteristic	Doctor	Nurse/ midwife	Other	No one	Missing	Total	Number of women
Age at birth							
<20	86.6	3.4	0.5	9.5	0.0	100.0	111
20-34	90.3	3.4	0.2	5.6	0.5	100.0	991
35-49	88.2	0.2	0.0	11.7	0.0	100.0	74
Birth order							
1	94.2	3.1	0.2	2.5	0.0	100.0	455
2-3	88.9	3.6	0.2	6.9	0.3	100.0	638
4+	73.2	0.7	0.0	22.8	3.4	100.0	82
Residence							
Urban	93.7	1.9	0.1	4.2	0.1	100.0	736
Rural	83.4	5.5	0.4	9.9	0.9	100.0	440
Region							
Yerevan	95.4	1.8	0.0	2.8	0.0	100.0	456
Aragatsotn	92.8	0.8	0.0	6.4	0.0	100.0	59
Ararat	87.3	5.6	0.0	7.1	0.0	100.0	102
Armavir	88.9	4.0	0.5	6.6	0.0	100.0	95
Gegharkunik	65.9	8.0	0.0	24.4	1.7	100.0	87
Lori	83.0	9.7	1.5	5.8	0.0	100.0	76
Kotayk	96.6	0.0	0.0	2.3	1.2	100.0	104
Shirak	76.7	1.7	0.9	18.8	1.8	100.0	72
Syunik	95.7	2.2	0.0	1.1	0.9	100.0	50
Vayots Dzor	88.1	6.7	3.2	1.9	0.0	100.0	16
Tavush	93.4	2.7	0.0	4.0	0.0	100.0	61
Education							
Basic general	79.9	1.8	0.0	16.4	1.8	100.0	99
Secondary general	87.2	2.8	0.3	9.1	0.6	100.0	442
Specialized secondary	91.8	3.4	0.4	4.3	0.0	100.0	359
Higher	95.0	4.1	0.0	0.9	0.0	100.0	276
Wealth quintile							
Lowest	80.9	3.7	0.2	13.3	1.9	100.0	212
Second	83.2	4.3	0.8	11.5	0.2	100.0	229
Middle	91.8	3.4	0.2	4.6	0.0	100.0	224
Fourth	93.5	3.6	0.0	2.9	0.0	100.0	265
Highest	98.0	1.2	0.0	0.8	0.0	100.0	245
Total	89.8	3.2	0.2	6.3	0.4	100.0	1,176

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation.

Figure 10.1 **Antenatal Care Provider**



Note: Refers to most recent birth in the five years before the survey

ADHS 2005

Number and Timing of ANC Visits

The prevention of complications during pregnancy and delivery and the successful outcome of the pregnancy for both mother and child is associated with the quality of antenatal care, the number of visits, and the timing of the first visit. In terms of timing, the Ministry of Health recommends the first visit by 12 weeks of gestation. The Ministry of Health has adopted the World Health Organization guideline of at least four to six antenatal care visits for a normal pregnancy.

Seventy-one percent of women who had a live birth in the five years preceding the survey made four or more antenatal care visits (Table 10.2) for their most recent birth. There is a significant urban-rural differential. The percentage of women who make four or more antenatal care visits in rural areas is much lower than that in urban areas (53 percent compared with 82 percent).

In general, urban women appears to make their first ANC visit earlier than rural women; more than half of urban women (51 percent) have their first antenatal visit in the first four months of pregnancy, compared with 43 percent of rural women. However, there is virtually no difference between urban and rural women in the median number of months pregnant at time of first visit (4.0 and 4.1 months, respectively).

Table 10.2 Number of antenatal care visits and timing of first visit

Percent distribution of women who had a live birth in the five years preceding the survey by number of antenatal care (ANC) visits for the most recent birth, and by the timing of the first visit; and among women with ANC, median months pregnant at first visit, according to residence, Armenia 2005

	Residence		
Number and timing of ANC visits	Urban	Rural	Total
Number of ANC visits			
None	4.2	9.9	6.3
1	1.9	4.6	2.9
2-3	11.8	28.5	18.1
4+	81.6	53.0	70.9
Don't know/missing	0.4	4.0	1.7
Total	100.0	100.0	100.0
Number of months pregnant at time of first ANC visit			
No antenatal care	4.2	9.9	6.3
<4	51.4	42.9	48.2
4-5	35.1	39.3	36.6
6-7	7.5	4.4	6.4
8+	1.6	0.5	1.2
Don't know/missing	0.2	3.0	1.2
Total	100.0	100.0	100.0
Number of women	736	440	1,176
Median months pregnant at first visit (for those with ANC)	4.0	4.1	4.0
Number of women with ANC	704	393	1,097

Antenatal Care Content

Determining the extent of care given during antenatal visits is important in judging the value of antenatal care services. In Armenia, antenatal care should include the testing of blood and urine samples; a bacterioscopic vaginal examination; and height, weight, and blood pressure measurement. Additional examinations are performed on pregnant women who are ill or at higher risk of complications. Finally, antenatal care includes the health education of pregnant women, which informs them about pregnancy complications.

Table 10.3 presents information on the percentage of women who were informed about the signs of pregnancy complications and who received routine antenatal care procedures during their last pregnancy in the five years preceding the survey, by background characteristics. These procedures are helpful in the early diagnosis of pregnancy complications, which are important sources of maternal and child mortality and morbidity.

Table 10.3 Components of antenatal care

Percentage of women with a live birth in the five years preceding the survey who received antenatal care (ANC) for the most recent birth, by content of ANC, and percentage of women with a live birth in the five years preceding the survey who received iron tablets or syrup for the most recent birth, according to background characteristics, Armenia 2005

	Among women who received ANC for their most recent birth in the past 5 years, percentage who received specific services						Women with a live birth in the past five years	
Background characteristic	Informed of signs of pregnancy complications	Weight measured	Blood pressure measured	Urine sample taken	Blood sample taken	Number of women with ANC	Percentage who received iron tablets or syrup	Number of women
Age at birth								
<20	45.0	94.6	93.7	95.6	95.6	100	15.0	111
20-34	44.8	98.6	98.9	98.5	98.7	931	18.6	991
35-49	68.4	100.0	100.0	100.0	100.0	65	12.5	74
Birth order								
1	46.3	98.6	98.5	99.2	99.2	444	18.9	455
2-3	44.6	98.1	98.4	97.7	97.9	592	17.9	638
4+	61.6	98.2	100.0	98.2	98.2	61	12.4	82
Residence								
Urban	50.7	99.4	99.2	99.1	99.4	704	21.1	736
Rural	38.2	96.4	97.3	97.1	96.7	393	12.7	440
Region								
Yerevan	54.0	99.3	99.1	98.8	99.3	443	23.3	456
Aragatsotn	51.6	88.5	93.0	94.8	92.5	55	21.7	59
Ararat	7.6	100.0	100.0	100.0	100.0	94	8.6	102
Armavir	52.3	99.5	99.5	100.0	100.0	89	11.0	95
Gegharkunik	64.5	93.0	93.0	93.0	93.0	64	10.4	87
Lori	41.4	98.4	98.4	98.4	98.4	71	32.1	76
Kotayk	51.8	98.9	99.1	100.0	100.0	100	16.2	104
Shirak	14.1	100.0	100.0	98.9	98.9	57	8.1	72
Syunik	48.3	100.0	100.0	100.0	100.0	49	8.6	50
Vayots Dzor	23.7	100.0	100.0	100.0	100.0	15	17.3	16
Tavush	47.6	97.5	97.5	94.0	94.5	58	15.3	61
Education								
Basic general	41.9	94.8	94.8	92.6	92.6	81	5.5	99
Secondary general	42.7	97.3	98.0	98.3	98.0	399	14.3	442
Specialized secondary	44.7	99.3	99.6	99.3	99.3	343	16.9	359
Higher	54.7	99.7	99.0	99.0	99.9	273	29.6	276
Wealth quintile								
Lowest	37.1	94.4	95.7	95.1	94.5	180	11.7	212
Second	40.6	99.2	99.3	99.0	99.0	202	13.6	229
Middle	45.1	97.5	97.6	98.2	98.2	214	16.6	224
Fourth	46.4	100.0	100.0	100.0	100.0	258	18.8	265
Highest	58.6	99.5	99.2	98.6	99.5	243	27.5	245
Total	46.2	98.3	98.5	98.4	98.5	1,097	17.9	1,176

Overall, virtually all women who had a live birth in the five years preceding the survey in Armenia received all of the specified procedures. However, less than half of these women were informed of the signs of pregnancy complications. The proportion of women who were given information about pregnancy complications has declined from 57 percent in 2000 to 46 percent in 2005. Women in Ararat and Shirak are the least likely to be informed of potential complications during pregnancy (8 percent and 14 percent, respectively).

Older women and urban women are slightly more likely than other women to have received the specified antenatal care procedures. Similarly, better educated women and women living in more economically advantaged households are slightly more likely to receive all of the specified antenatal care services—especially information about pregnancy complications—than women with less education or lower wealth status.

Iron Supplements

Mothers are recommended to take iron supplements during pregnancy because maternal anemia is a principal cause of both maternal and neonatal mortality. Table 10.3 shows that less than one-fifth of mothers (18 percent) received iron supplementation during pregnancy. Coverage varies as expected by residence and education. Mothers who live in urban areas are more likely to take iron supplements than women in rural areas (21 and 13 percent, respectively). Prevalence also increases significantly with increasing education; 30 percent of women with higher education take iron supplements during pregnancy, compared with only 6 percent with general basic education.

10.2 Assistance and Medical Care at Delivery

Hygienic conditions during delivery and supervision of delivery by trained medical staff reduce the risk of infections and ensure that complications of delivery are effectively handled. The 2005 ADHS collected information on the place of delivery for all children born in the five years preceding the survey and the type of medical staff assisting during delivery.

Table 10.4 indicates that almost all births (97 percent) were delivered at a health facility. The proportion of births delivered at home has declined from 9 percent in 2000 to 2 percent in 2005. Home deliveries are more likely to occur among higher order births, births in rural areas, births to the least educated women, and to women in the lowest wealth quintile. The highest percentage of home delivery is among births with no antenatal care visit (18 percent).

There is considerable variation by region in the extent of home delivery. While in most regions, only about 1 percent or less of births are delivered at home, this proportion is 14 percent in Gegharkunik and 11 percent in Aragatsotn. The large proportion of home deliveries in Gegharkunik could be due to a variety of factors, including greater distances to health facilities and financial constraints among the population, a significant percentage of whom are refugees from Azerbaijan. Nonetheless, Gegharkunik shows a large decline in home deliveries, from 41 percent of births in 2000 to 14 percent in 2005.

Assistance at delivery from a health professional is nearly universal in Armenia (Table 10.5). Ninety-eight percent of live births during the five years preceding the survey were attended by a doctor (93 percent) or nurse or trained midwife (4 percent). There are significant variations by region. In Gegharkunik, for example, only 71 percent of births were assisted by a doctor, compared with 98 percent in Syunik. The role of nurses and midwives in assisting deliveries is prominent in Gegharkunik and Vayots Dzor (20 percent and 17 percent, respectively).

Table 10.4 Place of delivery

Percent distribution of live births in the five years preceding the survey by place of delivery, according to background characteristics, Armenia 2005

Background characteristic	Health facility: Public sector	Health facility: Private sector	Home	Other	Missing	Total	Number of births
Mother's age at birth							
<20	98.6	0.8	0.6	0.0	0.0	100.0	190
20-34	95.3	0.7	2.3	0.3	1.4	100.0	1,241
35-49	95.7	0.0	4.3	0.0	0.0	100.0	82
Birth order							
1	97.3	1.1	0.3	0.3	0.9	100.0	716
2-3	96.2	0.3	2.4	0.2	1.0	100.0	702
4+	80.5	0.0	15.8	0.0	3.7	100.0	94
Antenatal care visits[1]							
None	80.5	0.0	17.8	1.6	0.0	100.0	75
1-3	98.2	0.0	1.8	0.0	0.0	100.0	247
4+	98.0	1.0	0.7	0.3	0.0	100.0	834
Residence							
Urban	97.6	1.0	0.2	0.2	1.0	100.0	930
Rural	92.8	0.2	5.5	0.2	1.3	100.0	582
Region							
Yerevan	97.5	0.7	0.0	0.4	1.5	100.0	584
Aragatsotn	87.9	0.6	11.4	0.0	0.2	100.0	83
Ararat	98.3	0.0	1.7	0.0	0.0	100.0	127
Armavir	97.4	0.0	1.2	0.0	1.5	100.0	125
Gegharkunik	84.2	0.0	13.5	1.0	1.2	100.0	120
Lori	97.5	0.0	2.5	0.0	0.0	100.0	96
Kotayk	95.2	1.8	1.1	0.0	1.9	100.0	129
Shirak	96.0	1.8	0.7	0.0	1.4	100.0	90
Syunik	95.5	2.6	0.0	0.0	1.9	100.0	63
Vayots Dzor	100.0	0.0	0.0	0.0	0.0	100.0	19
Tavush	100.0	0.0	0.0	0.0	0.0	100.0	75
Mother's education							
Basic general	92.2	2.0	4.9	0.0	0.9	100.0	138
Secondary general	94.4	0.2	4.2	0.6	0.7	100.0	579
Specialized secondary	98.1	0.4	0.6	0.0	0.8	100.0	448
Higher	96.4	1.3	0.0	0.0	2.3	100.0	347
Wealth quintile							
Lowest	86.5	0.4	9.9	0.4	2.7	100.0	286
Second	97.1	0.3	1.5	0.0	1.1	100.0	294
Middle	98.9	1.1	0.0	0.0	0.0	100.0	289
Fourth	96.6	0.6	0.4	0.6	1.8	100.0	335
Highest	99.1	0.9	0.0	0.0	0.0	100.0	308
Total	95.8	0.7	2.2	0.2	1.1	100.0	1,512

Note: Totals include cases with missing information.
[1]Includes only the most recent birth in the five years preceding the survey

Table 10.5 presents information on the extent of caesarean delivery. According to the World Health Organization, the caesarean delivery rate should not exceed 10 percent. In Armenia, 9 percent of babies are delivered by caesarean section. Caesarean deliveries increase with the woman's age, education, and wealth quintile. First births are more likely to be delivered by caesarean section than higher order births. Women living in urban areas are more likely to have caesarean deliveries. Delivery by caesarean section ranges from 1 percent in Gegharkunik to 14 percent in Tavush and 15 percent in Lori.

Table 10.5 Assistance during delivery

Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery and the percentage delivered by caesarean section, according to background characteristics, Armenia 2005

Background characteristic	Doctor	Nurse/ midwife	Other health worker	Relative/ other	Don't know/ missing	Total	Percentage delivered by caesarean section	Number of births
Mother's age at birth								
<20	94.6	5.4	0.0	0.0	0.0	100.0	2.1	190
20-34	93.3	4.2	0.8	0.2	1.5	100.0	8.7	1,241
35-49	92.8	4.7	0.0	2.5	0.0	100.0	28.5	82
Birth order								
1	95.7	2.9	0.2	0.0	1.2	100.0	10.8	716
2-3	92.0	6.2	0.6	0.2	1.0	100.0	7.1	702
4+	86.8	1.6	4.4	3.6	3.7	100.0	8.7	94
Residence								
Urban	96.0	2.6	0.0	0.1	1.2	100.0	10.7	930
Rural	89.2	7.1	1.6	0.7	1.3	100.0	6.1	582
Region								
Yerevan	97.1	1.1	0.0	0.0	1.8	100.0	11.2	584
Aragatsotn	94.8	3.5	0.0	1.6	0.2	100.0	7.5	83
Ararat	94.9	4.5	0.4	0.0	0.0	100.0	4.5	127
Armavir	94.2	4.4	0.0	0.0	1.5	100.0	6.7	125
Gegharkunik	70.6	19.6	7.4	1.1	1.2	100.0	1.1	120
Lori	90.8	9.2	0.0	0.0	0.0	100.0	15.0	96
Kotayk	94.9	2.1	0.0	1.1	1.9	100.0	9.6	129
Shirak	93.3	4.6	0.0	0.7	1.4	100.0	5.7	90
Syunik	98.1	0.0	0.0	0.0	1.9	100.0	8.1	63
Vayots Dzor	83.5	16.5	0.0	0.0	0.0	100.0	5.5	19
Tavush	95.8	4.2	0.0	0.0	0.0	100.0	13.9	75
Mother's education								
Basic general	89.7	5.7	2.6	1.0	0.9	100.0	3.0	138
Secondary general	92.3	5.1	1.0	0.6	1.0	100.0	5.9	579
Specialized secondary	94.8	4.4	0.0	0.0	0.8	100.0	10.1	448
Higher	94.9	2.7	0.0	0.0	2.3	100.0	14.9	347
Wealth quintile								
Lowest	86.0	6.8	2.8	1.6	2.7	100.0	5.5	286
Second	93.0	5.3	0.5	0.0	1.1	100.0	4.7	294
Middle	94.0	6.0	0.0	0.0	0.0	100.0	10.3	289
Fourth	93.6	4.0	0.0	0.0	2.4	100.0	9.8	335
Highest	99.9	0.1	0.0	0.0	0.0	100.0	14.0	308
Total	93.4	4.4	0.6	0.3	1.3	100.0	9.0	1,512

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation.

10.3 POSTNATAL CARE

The postnatal period is defined as the time between the delivery of the placenta and 42 days after delivery. Postnatal care is important both for the mother and for the child to treat complications arising from the delivery as well as to provide the mother with important information on how to care for herself and her child. Because most maternal and neonatal deaths occur during the first few days after delivery, the timing of postnatal care is important.

Table 10.6 presents information on the timing of postnatal care after the most recent birth for women who gave birth in the five years preceding the survey. The data show that 16 percent of these women did not receive a postnatal checkup. Younger women, women with higher parity, and rural women are less likely than other women to receive postnatal care. The likelihood of receiving postnatal care increases with the woman's education and wealth status. For example, 21 percent of women with basic general education had no postnatal care compared with 10 percent of women with higher than secondary education. Across regions, almost half of women in Ararat (47 percent) had no postnatal care, while in Armavir this proportion is only 4 percent.

Almost four in five women (79 percent) have a postnatal care checkup within the recommended two days after delivery. Women in Syunik are the most likely to receive postnatal care within two days after delivery (94 percent), while only half of women in Ararat received postnatal care in the recommended time period (50 percent).

Table 10.7 shows the type of health care provider who performed the postnatal care after the most recent birth for women who gave birth in the five years preceding the survey. Overall, 78 percent of women receive postnatal care from a doctor and 6 percent from a nurse or a midwife. Doctors are more likely to provide postnatal care to older women and women in urban areas. The chance that postnatal care is performed by a doctor increases with the woman's education and wealth status. Across regions, 90 percent or more of women in Armavir, Syunik, and Vayots Dzor received a postnatal care checkup by a doctor. On the other hand, doctors perform postnatal checkups for only 53 percent of women in Ararat and 56 percent of women in Gegharkunik.

Table 10.6 Timing of postnatal checkup

Among women giving birth in the five years preceding the survey, percent distribution by timing of the mother's first postnatal checkup for the last live birth, according to background characteristics, Armenia 2005

Background characteristic	Timing of first postnatal checkup					Did not receive postnatal checkup[1]	Total	Number of women
	Less than 4 hours	4-23 hours	2 days	3-41 days	Don't know/ missing			
Age at birth								
<20	60.1	17.7	4.3	1.9	0.0	16.0	100.0	111
20-34	56.0	22.6	2.0	1.3	1.7	16.4	100.0	991
35-49	73.4	16.4	0.6	0.0	1.1	8.5	100.0	74
Birth order								
1	57.4	23.2	2.1	2.1	0.4	14.9	100.0	455
2-3	57.4	21.7	2.1	0.9	2.5	15.3	100.0	638
4+	58.0	14.5	2.4	0.0	0.0	25.2	100.0	82
Residence								
Urban	61.1	21.8	2.0	1.0	2.4	11.7	100.0	736
Rural	51.3	21.7	2.4	1.8	0.0	22.8	100.0	440
Region								
Yerevan	61.2	22.1	2.4	0.9	2.9	10.6	100.0	456
Aragatsotn	48.1	20.0	5.3	5.7	0.5	20.4	100.0	59
Ararat	39.8	9.8	0.0	2.7	0.6	47.0	100.0	102
Armavir	38.7	51.3	3.9	1.8	0.0	4.3	100.0	95
Gegharkunik	57.2	12.5	0.0	0.0	0.0	30.2	100.0	87
Lori	81.2	8.0	2.6	0.0	1.5	6.8	100.0	76
Kotayk	66.3	20.6	1.3	2.2	1.6	7.9	100.0	104
Shirak	52.1	14.8	1.7	0.0	1.1	30.3	100.0	72
Syunik	54.4	39.3	0.0	0.0	0.0	6.3	100.0	50
Vayots Dzor	33.0	49.3	7.0	4.1	0.0	6.7	100.0	16
Tavush	68.0	14.5	2.9	0.4	0.4	13.7	100.0	61
Education								
Basic general	58.9	14.7	3.1	1.4	0.6	21.4	100.0	99
Secondary general	55.5	20.4	2.5	0.8	1.2	19.6	100.0	442
Specialized secondary	56.0	25.6	2.3	1.0	0.5	14.6	100.0	359
Higher	62.0	21.5	0.9	2.4	3.8	9.5	100.0	276
Wealth quintile								
Lowest	45.4	22.6	4.0	0.2	0.2	27.5	100.0	212
Second	59.2	19.4	3.0	2.9	0.1	15.4	100.0	229
Middle	59.1	23.2	1.5	0.3	5.3	10.5	100.0	224
Fourth	56.5	21.5	1.6	2.7	1.1	16.6	100.0	265
Highest	65.7	22.2	1.0	0.0	1.0	10.1	100.0	245
Total	57.5	21.8	2.1	1.3	1.5	15.8	100.0	1,176

[1]Includes women who received the first postnatal checkup after 41 days

Table 10.7 Provider at first postnatal checkup

Among women who gave birth in the five years preceding the survey, percent distribution by type of provider at first postnatal checkup for the last live birth, according to background characteristics, Armenia 2005

Background characteristic	Provider at first postnatal checkup			Did not receive postnatal checkup[1]	Total	Number of women
	Doctor	Nurse/ midwife	Missing			
Age at birth						
<20	76.5	7.5	0.0	16.0	100.0	111
20-34	77.1	5.9	0.6	16.4	100.0	991
35-49	88.1	3.4	0.0	8.5	100.0	74
Birth order						
1	79.4	5.7	0.0	14.9	100.0	455
2-3	77.3	6.4	1.0	15.3	100.0	638
4+	72.6	2.2	0.0	25.2	100.0	82
Residence						
Urban	83.2	4.5	0.7	11.7	100.0	736
Rural	68.8	8.2	0.3	22.8	100.0	440
Region						
Yerevan	85.6	2.8	1.0	10.6	100.0	456
Aragatsotn	72.7	4.6	2.3	20.4	100.0	59
Ararat	52.6	0.0	0.4	47.0	100.0	102
Armavir	90.0	5.7	0.0	4.3	100.0	95
Gegharkunik	55.6	14.2	0.0	30.2	100.0	87
Lori	79.6	13.6	0.0	6.8	100.0	76
Kotayk	83.1	9.0	0.0	7.9	100.0	104
Shirak	60.1	9.6	0.0	30.3	100.0	72
Syunik	93.7	0.0	0.0	6.3	100.0	50
Vayots Dzor	90.0	3.2	0.0	6.7	100.0	16
Tavush	71.8	14.5	0.0	13.7	100.0	61
Education						
Basic general	69.7	8.5	0.4	21.4	100.0	99
Secondary general	74.1	5.9	0.5	19.6	100.0	442
Specialized secondary	79.3	5.7	0.3	14.6	100.0	359
Higher	84.5	5.0	1.0	9.5	100.0	276
Wealth quintile						
Lowest	65.7	6.6	0.2	27.5	100.0	212
Second	75.5	8.6	0.5	15.4	100.0	229
Middle	81.9	6.8	0.8	10.5	100.0	224
Fourth	76.2	6.2	1.0	16.6	100.0	265
Highest	88.3	1.5	0.0	10.1	100.0	245
Total	77.8	5.9	0.5	15.8	100.0	1,176

[1]Includes women who received the first postnatal checkup after 41 days

10.4 WOMEN'S HEALTH CARE

Visits to the Gynecologist

Regular gynecological examinations are an important part of a woman's reproductive health. In a routine exam, the doctor checks for abnormalities in the uterus, vagina, ovaries, fallopian tubes, bladder, etc. In Western Europe and the United States, yearly routine gynecological exams are recommended for women in the reproductive ages.

In Armenia, almost one-third of women (30 percent) visited a gynecologist in the 12 months preceding the survey (Table 10.8). Women in the middle of their reproductive ages (25-34) are the most likely to have visited a gynecologist in the past 12 months. There are slight variations by other background characteristics.

Table 10.8 Last visit to gynecologist

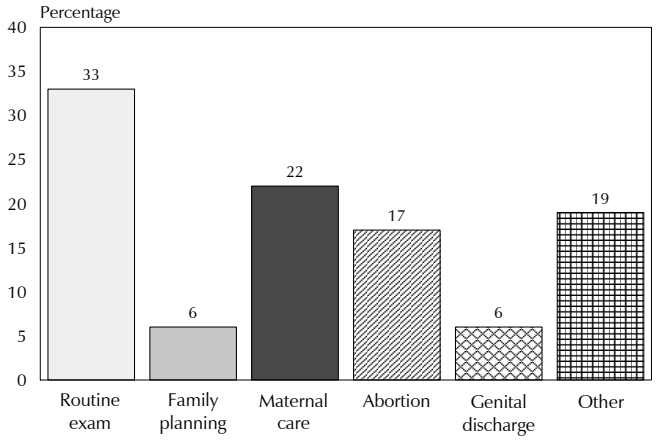
Percent distribution of women by time since last visit to a gynecologist, according to background characteristics, Armenia 2005

Background characteristic	Time since last visit to a gynecologist						Total	Number of women
	Never visited	0-11 months	12-23 months	24-35 months	36-59 months	5+ years		
Age								
15-19	90.2	8.1	0.8	0.4	0.5	0.1	100.0	1,123
20-24	54.7	38.2	5.0	0.9	0.6	0.4	100.0	1,131
25-29	21.6	52.5	9.6	6.3	6.0	3.7	100.0	929
30-34	10.7	45.8	10.5	6.2	9.0	17.7	100.0	749
35-39	6.9	29.4	14.5	6.6	11.2	31.4	100.0	711
40-44	6.4	23.6	8.0	7.6	10.7	43.8	100.0	965
45-49	9.3	17.9	6.3	4.7	8.2	53.7	100.0	958
Residence								
Urban	32.7	30.3	7.4	4.2	6.0	19.3	100.0	4,194
Rural	31.2	29.1	6.8	4.7	6.0	22.2	100.0	2,372
Region								
Yerevan	33.3	32.7	7.2	4.2	5.4	17.3	100.0	2,468
Aragatsotn	33.7	33.9	4.8	3.0	4.7	19.9	100.0	292
Ararat	37.2	23.1	5.4	3.8	7.7	22.7	100.0	462
Armavir	28.6	29.0	6.7	6.2	5.9	23.6	100.0	567
Gegharkunik	30.3	35.2	8.0	4.8	5.8	15.9	100.0	443
Lori	31.6	26.0	7.2	4.3	3.9	26.6	100.0	537
Kotayk	29.0	32.7	9.7	3.6	7.4	17.7	100.0	563
Shirak	34.8	23.4	5.9	3.8	8.2	24.0	100.0	563
Syunik	28.5	27.7	7.3	5.9	8.3	22.1	100.0	281
Vayots Dzor	35.4	26.1	8.1	6.0	7.5	16.9	100.0	107
Tavush	27.4	24.2	10.2	4.4	5.2	28.5	100.0	285
Education								
Basic general	50.9	21.7	5.2	4.4	4.6	13.2	100.0	529
Secondary general	27.7	30.5	6.8	4.2	7.3	23.4	100.0	2,440
Specialized secondary	25.5	32.2	7.6	4.9	5.6	24.3	100.0	1,997
Higher	41.2	28.7	8.0	3.9	5.1	13.0	100.0	1,600
Wealth quintile								
Lowest	30.2	26.2	6.9	4.4	6.2	26.1	100.0	1,164
Second	32.3	29.2	5.9	4.0	5.6	22.8	100.0	1,284
Middle	31.3	27.4	7.0	4.5	6.7	23.1	100.0	1,303
Fourth	31.8	32.6	7.3	4.8	6.3	17.2	100.0	1,375
Highest	34.8	33.1	8.8	4.0	5.5	13.8	100.0	1,440
Total	32.2	29.9	7.2	4.3	6.0	20.3	100.0	6,566

Overall, 32 percent of women have never visited a gynecologist and one in five women has not been seen by a gynecologist in the past five years. As expected, the coverage of gynecological visit varies by the woman's age. While nine in ten women age 15-19 have never visited a gynecologist, only 9 percent of women 45-49 have never had a gynecological examination. On the other hand, 54 percent of women 45-49 last saw a gynecologist five or more years ago.

Even among women who have been to a gynecologist recently, only one-third say that having a routine exam was at least one of the reasons for the visit (Figure 10.2). Over one in five women said that they went to a gynecologist for maternal care and almost one in five went for an abortion. Only 6 percent of women said they visited a gynecologist for family planning.

Figure 10.2 **Reasons for Gynecological Visit**



Breast Examination

Breast cancer is the most common type of cancer among Armenian women. Although the exact causes of breast cancer have not been identified, it is known that the risk of breast cancer increases as a woman ages. Breast self-examinations (BSEs)—physical examinations of the breasts performed by women themselves—as well as examinations by medical professionals and mammography are methods for the early detection of breast cancer.

BSE is a simple procedure that can be performed monthly by a woman to check for any changes in her breasts. Until recently, there has been little information among the general Armenian public about the importance of BSE. Even gynecologists were not trained in the techniques for BSE (Government of Armenia et al., 1999). In the past few years, however, there have been various public health initiatives targeted at increasing awareness of BSE techniques.

According to Table 10.9, 81 percent of Armenian women do not know about BSE. Among women who reported that they know how to give themselves a breast examination, approximately half (10 percent overall) performed a BSE within the three months preceding the survey. Knowledge of BSE and the likelihood of having recently performed a BSE increases with the woman's age, urban residence, educational attainment, and wealth status. Women in Yerevan and Kotayk are the most likely to have performed a recent BSE, while women in Ararat, Gegarkunik, Shirak, and Vayots Dzor are the least likely.

One in ten women reported that a health care provider had ever given them a breast exam. It should be noted that although 30 percent of women reported that they had visited a gynecologist in the past 12 months (Table 10.8), only 1 percent of women reported that a health care provider had given them a breast exam during the same period.

Table 10.9 Last breast examination

Percent distribution of women by time since last breast self-exam (BSE) and time since last breast exam by health provider, according to background characteristics, Armenia 2005

	Last time performed BSE					Time since last exam by a health provider					
Background characteristic	Does not know about self-exam	Never	Within past 3 months	Three+ months ago	Total	Never	Within past year	More than one year ago	Missing	Total	Nuber of women
Age											
15-19	97.2	1.7	0.8	0.3	100.0	98.6	0.2	1.1	0.1	100.0	1,123
20-24	87.9	5.4	5.7	0.9	100.0	93.3	1.6	5.1	0.0	100.0	1,131
25-29	78.1	6.9	9.7	5.3	100.0	90.0	0.9	9.0	0.1	100.0	929
30-34	74.8	5.1	13.9	6.2	100.0	85.2	1.5	12.9	0.4	100.0	749
35-39	74.1	7.2	14.7	4.0	100.0	86.6	0.7	12.4	0.3	100.0	711
40-44	75.1	6.1	15.8	2.9	100.0	86.9	1.5	11.0	0.6	100.0	965
45-49	74.2	6.3	15.1	4.4	100.0	85.9	2.1	11.5	0.5	100.0	958
Residence											
Urban	78.0	6.4	11.8	3.7	100.0	88.5	1.3	9.8	0.3	100.0	4,194
Rural	87.0	3.5	7.4	2.2	100.0	92.8	1.0	6.0	0.2	100.0	2,372
Region											
Yerevan	72.8	8.8	14.3	4.2	100.0	86.7	1.6	11.5	0.2	100.0	2,468
Aragatsotn	85.3	4.0	8.8	1.9	100.0	89.8	1.4	8.1	0.7	100.0	292
Ararat	93.3	1.6	4.6	0.5	100.0	98.2	0.6	1.2	0.0	100.0	462
Armavir	87.1	3.6	7.3	2.0	100.0	92.7	0.5	6.8	0.0	100.0	567
Gegharkunik	88.5	5.4	4.4	1.7	100.0	93.6	1.5	4.8	0.1	100.0	443
Lori	81.0	3.8	10.8	4.3	100.0	92.8	1.1	6.1	0.0	100.0	537
Kotayk	79.2	2.0	14.6	4.0	100.0	85.3	1.8	11.3	1.5	100.0	563
Shirak	91.9	2.9	3.0	2.2	100.0	96.7	0.0	3.3	0.0	100.0	563
Syunik	83.3	5.2	7.2	4.2	100.0	86.1	1.4	12.2	0.2	100.0	281
Vayots Dzor	94.6	1.0	3.0	1.4	100.0	97.6	0.7	1.4	0.2	100.0	107
Tavush	84.1	3.3	10.2	2.5	100.0	87.9	0.9	10.9	0.3	100.0	285
Education											
Basic general	91.7	1.6	3.9	2.8	100.0	92.7	1.2	6.1	0.0	100.0	529
Secondary general	88.1	2.8	6.6	2.4	100.0	92.0	1.0	6.6	0.3	100.0	2,440
Specialized secondary	78.5	5.9	12.0	3.6	100.0	89.2	1.0	9.6	0.2	100.0	1,997
Higher	70.7	9.8	15.5	3.9	100.0	87.4	1.8	10.6	0.3	100.0	1,600
Wealth quintile											
Lowest	90.4	2.4	5.1	2.1	100.0	93.2	0.9	5.7	0.2	100.0	1,164
Second	86.9	3.8	6.3	2.8	100.0	93.5	0.8	5.3	0.4	100.0	1,284
Middle	84.5	5.4	8.3	1.8	100.0	91.2	1.4	7.2	0.2	100.0	1,303
Fourth	78.0	6.6	11.8	3.6	100.0	88.4	1.2	10.1	0.3	100.0	1,375
Highest	68.8	8.0	17.9	5.2	100.0	85.2	1.7	13.0	0.2	100.0	1,440
Total	81.2	5.4	10.2	3.2	100.0	90.1	1.2	8.5	0.3	100.0	6,566

CHILD HEALTH 11

This chapter presents the 2005 ADHS findings on child health in Armenia. Topics discussed include birth weight, immunizations, and common childhood illnesses and their treatment. Combined with information on childhood mortality, these data can be used to plan interventions to improve child health. The results presented in the following sections are based on data collected from mothers on all live births that occurred in the five years preceding the survey.

11.1 CHARACTERISTICS OF DELIVERY

Infants with a low birth weight have a higher mortality risk. For births in the five years preceding the survey, the birth weight was recorded from child health cards maintained at the local health facility. Information on birth weight was obtained for 98 percent of all births.

Of those babies weighed, 93 percent were reported to have a weight of at least 2.5 kilograms (Table 11.1). Newborns at higher birth orders, those in Aragatsotn, and those with mothers 35 or older are more likely than other newborns to weigh less than 2.5 kilograms.

11.2 VACCINATION COVERAGE

Armenia's Ministry of Health (MOH) has adopted World Health Organization (WHO) guidelines for childhood immunizations that call for all children to receive 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. In Armenia, measles is given in the form of an MMR vaccination at 12 months of age to protect against measles, mumps, and rubella. In addition to these standard recommendations, since late 1999 the MOH recommends that children receive three doses of the hepatitis vaccine.

Information on vaccination coverage was collected in the 2005 ADHS for all children under five years of age. In Armenia, child health cards are maintained in the local health care facilities. Immunization passports (cards kept by the child's parent/guardian) were made available in 1995 (MOH and UNICEF, 1999). In this survey, data were collected from both sources, when available. If the mother did not have an immunization passport, she was asked to recall her child's immunizations. After all the interviews in a cluster were completed, the supervisor was in charge of going to the local clinic to record information from the health cards of the children in the sample. Health facility cards were found for almost all children age 12-23 months (92 percent). Among those children for whom immunization information was not found at a health facility, very few had immunization passports that were seen at home.

The data indicate that availability of immunization passports has decreased during the past five years in both urban and rural areas. In 2005, only 12 percent of children age 12-23 months had an immunization passport available at home, compared with 33 percent in 2000. Similarly, only 13 percent of mothers in rural areas and 11 percent in urban areas were able to show the interviewer an immunization passport in the 2005 survey, compared with 27 and 22 percent, respectively, in 2000 (data not shown).

Table 11.1 Child's birth weight and size at birth

Among live births in the five years preceding the survey with a reported birth weight, percentage with a birth weight less than 2.5 kilograms, and percent distribution of all live births in the five years preceding the survey by mother's estimate of babys size at birth, according to background characteristics, Armenia 2005

	Among children with a reported birth weight[1]		Percent distribution of all live births by size of child at birth					
Background characteristic	Percentage less than 2.5 kg	Number of births	Very small	Smaller than average	Average or larger	Don't know/ missing	Total	Number of births
Mother's age at birth								
<20	8.6	189	0.5	15.6	83.4	0.5	100.0	190
20-34	6.6	1,212	2.5	8.5	86.6	2.5	100.0	1,241
35-49	18.6	80	13.6	14.7	71.7	0.0	100.0	82
Birth order								
1	7.3	704	1.6	10.6	85.7	2.1	100.0	716
2-3	7.0	690	3.3	8.3	86.9	1.6	100.0	702
4-5	12.1	76	10.2	11.5	71.6	6.7	100.0	82
6+	*	*	*	*	*	*	*	13
Residence								
Urban	8.8	913	3.6	12.2	82.2	2.0	100.0	930
Rural	5.4	568	1.7	5.7	90.5	2.2	100.0	582
Region								
Yerevan	9.2	571	4.4	11.6	81.5	2.5	100.0	584
Aragatsotn	13.9	83	3.5	9.8	86.6	0.2	100.0	83
Ararat	5.3	125	0.3	4.4	94.4	0.9	100.0	127
Armavir	3.2	124	1.3	4.3	93.0	1.5	100.0	125
Gegharkunik	3.4	116	0.5	6.5	91.7	1.2	100.0	120
Lori	6.6	94	2.4	16.9	78.8	1.9	100.0	96
Kotayk	8.5	122	2.2	11.4	82.7	3.7	100.0	129
Shirak	5.5	89	3.3	7.9	86.4	2.4	100.0	90
Syunik	9.7	62	3.2	14.2	77.7	4.9	100.0	63
Vayots Dzor	6.3	19	0.0	5.8	93.2	1.0	100.0	19
Tavush	5.2	75	1.9	5.7	92.4	0.0	100.0	75
Mother's education								
Basic general	3.9	135	1.5	4.4	91.9	2.2	100.0	138
Secondary general	7.6	569	3.4	8.0	87.4	1.2	100.0	579
Specialized secondary	7.7	439	2.2	10.3	85.2	2.3	100.0	448
Higher	8.6	338	3.2	14.0	79.7	3.2	100.0	347
Wealth quintile								
Lowest	6.1	275	2.4	6.8	87.3	3.5	100.0	286
Second	5.0	289	2.4	8.1	87.9	1.6	100.0	294
Middle	7.1	287	1.2	11.8	86.4	0.7	100.0	289
Fourth	10.9	324	5.2	11.0	80.0	3.7	100.0	335
Highest	8.0	306	2.6	10.6	86.0	0.7	100.0	308
Total	7.5	1,481	2.8	9.7	85.4	2.1	100.0	1,512

[1] Based on written record or mother's recall

Thus, while most of the data in this section are based on health facility cards, in the case of children for whom a facility card was not located, the data are based on the mother's recall.

Information on vaccination coverage among children age 12-23 months is shown in Table 11.2 by source of information used to determine coverage (i.e., facility card or mother's report). The third row of the table shows the proportion of children who were immunized at any age up to the time of the survey,

the fourth row shows the proportion who were vaccinated by age 12 months, and the fifth row shows the proportion who were vaccinated by age 18 months.

At the time of the interview, almost all children age 12-23 months (at least 95 percent) had received vaccinations for BCG and the first doses of polio, DPT, and hepatitis. However, the proportion of children receiving the second and third doses of polio, DPT, and hepatitis is lower, as is the proportion receiving MMR. For example, 95 percent of children received the first dose of DPT, compared with 71 percent who received the third dose. Thus, the dropout rate—the percentage of those who receive the first dose who do not receive the third dose—is 24 percent for DPT. The corresponding dropout rates for polio and hepatitis are 21 percent and 23 percent, respectively.

Overall, the data show that just 60 percent of children 12-23 months of age had received all basic WHO-recommended vaccinations by the date of the interview. This represents a significant decline from the 2000 ADHS estimate of 76 percent. A slightly lower proportion of children (56 percent) received the entire course of MOH-recommended vaccinations, which includes hepatitis. In terms of timely vaccination coverage, 54 percent of children in the sample received all WHO-recommended vaccinations by 18 months of age.

Table 11.3 shows vaccination rates among all children age 12-23 months according to background characteristics. There is significant variation by residence in the proportion of children who are fully immunized. Surprisingly, children living in rural areas are more likely than children living in urban areas to be fully immunized. The reason for this differential is explained by the larger dropout rates among children with urban mothers. For example, the dropout rate between the first and third doses of DPT is 28 percent among urban children, compared with 20 percent among rural children.

The number of children is too small for many of the other categories to make strong conclusions. For example, data are not available by region except for Yerevan.

Table 11.2 Vaccinations by source of information

Percentage of children age 12-23 months who received specific vaccines at any time before the survey by source of information (health facility card or mother's report), and percentage vaccinated by 12 and 18 months of age, Armenia 2005

Source of information	BCG	DPT			Polio			MMR	Basic		Hepatitis				Number of children
		1	2	3+	1	2	3+		All[1]	None	1	2	3	All	
Vaccinated at any time before survey															
Health facility card[2]	90.4	87.4	79.3	68.2	89.9	84.5	72.5	69.2	59.4	0.4	90.3	84.5	71.9	55.3	277
Mother's report	7.7	7.1	3.4	3.2	7.5	4.9	4.3	3.1	0.3	0.5	7.1	4.6	3.5	0.3	25
Either source	98.1	94.5	82.7	71.4	97.5	89.5	76.9	72.3	59.7	0.9	97.5	89.1	75.4	55.7	302
Vaccinated by 12 months of age[3]	97.9	86.7	70.6	44.8	92.8	73.9	41.6	2.9	1.8	1.0	97.3	85.3	66.5	1.8	302
Vaccinated by 18 months of age	98.1	93.7	82.1	69.3	96.6	87.4	73.5	69.0	54.4	0.9	97.5	88.9	74.0	49.8	302
Valid dates[4]	93.7	89.6	82.7	72.7	93.3	89.1	76.2	65.0	60.0	5.2	93.8	88.9	76.8	56.4	277

Note: Information was obtained from the health facility card/immunization passport or, if there was no written record, from the mother.
[1]BCG, MMR (measles, mumps, and rubella), and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)
[2]Includes immunization passports kept by the parent/guardian
[3]For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccinations.
[4]Vaccination date follows date of birth but not by more than two years.

Table 11.3 Vaccinations by background characteristics

Percentage of children age 12-23 months who received specific vaccines at any time before the survey (according to the health facility card or the mother's report), and percentage with a heath facility card or immunization passport, by background characteristics, Armenia 2005

Background characteristic	BCG	DPT 1	DPT 2	DPT 3+	Polio 1	Polio 2	Polio 3+	MMR	Basic All[1]	Basic None	Hepatitis 1	Hepatitis 2	Hepatitis 3	Hepatitis All	All[2]+ Hep	Percentage with a health facility card seen[3]	Number of children
Sex																	
Male	98.3	92.6	80.8	69.0	96.2	89.1	74.3	71.4	58.7	1.4	96.1	85.4	69.9	54.4	54.4	93.6	177
Female	97.8	97.2	85.3	74.9	99.3	90.1	80.5	73.5	61.2	0.2	99.4	94.5	83.2	57.5	57.5	89.2	125
Birth order																	
1	98.4	94.1	88.2	76.8	98.7	90.7	81.5	75.6	64.6	0.9	97.1	87.4	75.3	58.9	54.8	94.1	146
2-3	97.6	94.3	76.3	67.5	95.9	88.5	74.3	70.5	54.8	1.1	97.5	91.9	76.3	52.0	57.9	88.9	138
4+	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	18
Residence																	
Urban	99.2	94.1	81.3	68.1	98.4	90.7	77.6	67.0	55.7	0.2	97.8	87.9	74.5	51.3	51.3	92.3	183
Rural	96.4	95.2	84.8	76.5	96.0	87.6	75.6	80.4	65.9	2.1	96.9	91.1	76.9	62.4	62.4	90.9	119
Region																	
Yerevan	100.0	94.5	79.6	62.0	98.6	91.9	74.9	59.3	47.0	0.0	97.4	84.8	71.1	42.5	(42.5)	92.1	112
Other	97.0	94.6	84.5	77.0	96.8	88.1	78.0	80.0	67.2	1.5	97.5	91.7	78.0	63.5	63.5	91.6	189
Mother's education																	
Basic general	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	*	28
Secondary general	98.5	92.9	84.7	72.5	96.0	89.3	76.2	70.8	57.7	1.1	97.8	87.6	73.7	56.2	56.2	93.4	122
Specialized secondary	100.0	94.6	77.4	68.7	99.4	88.5	73.5	73.8	64.1	0.0	98.8	85.6	71.5	59.1	59.1	91.8	96
Higher	96.6	97.3	89.7	70.2	98.5	93.2	80.1	79.4	65.6	0.5	95.3	95.1	82.7	57.9	57.9	96.3	56
Wealth quintile																	
Lowest	92.5	93.5	79.9	68.9	93.5	81.5	70.6	71.6	59.0	4.4	93.5	91.4	75.2	56.8	*	90.6	56
Second	98.8	89.8	80.1	69.6	96.6	83.3	67.3	74.2	55.6	0.4	99.2	85.0	66.0	49.3	*	91.9	70
Middle	98.3	93.9	80.3	78.9	96.5	88.7	82.1	86.5	73.1	0.0	98.9	88.7	87.0	73.1	*	96.3	44
Fourth	100.0	96.5	82.5	69.1	100.0	95.9	79.2	71.1	62.6	0.0	100.0	87.5	70.1	58.6	*	92.8	76
Highest	(100.0)	(99.3)	(91.1)	(73.4)	(100.0)	(97.2)	(87.8)	(60.7)	(50.8)	(0.0)	(94.6)	(94.6)	(85.6)	(44.6)	*	(87.7)	55
Total	98.1	94.5	82.7	71.4	97.5	89.5	76.9	72.3	59.7	0.9	97.5	89.1	75.4	55.7	55.7	91.8	302

Note: Information was obtained from the health facility card, immunization passport, or, if there was no written record, from the mother. 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] BCG, MMR (measles, mumps, and rubella), and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth)

[2] BCG, measles, and three does each of DPT and polio vaccine

[3] Includes immunization passports kept by the parent/guardian

11.3 ACUTE RESPIRATORY INFECTION

In Armenia, about 11 percent of all infant deaths in 2005 were attributed to acute respiratory infection (NSS, 2006). Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths caused by ARI. In the 2005 ADHS, the prevalence of ARI was estimated by asking mothers whether their children under age five had been ill with a cough accompanied by short, rapid breathing in the two weeks preceding the survey. These symptoms are consistent with ARI. It should be noted that the morbidity data collected are subjective in the sense that they are based on a mother's perception of illness without validation by medical personnel. Furthermore, prevalence of ARI is subject to seasonality; the fieldwork for the ADHS took place in September through December when rates tend to be high.

Table 11.4 shows that in the two weeks preceding the survey, 8 percent of children experienced symptoms of ARI. There is little variation by background characteristics.

Figure 11.1 shows that among those children who experienced symptoms of ARI, treatment was sought from a health facility or health care provider for over one-third (36 percent). Antibiotics were given to approximately one in ten sick children. Surprisingly, male children were more than twice as likely as female children to be taken to a health facility (52 percent versus 24 percent). Boys were also more likely than girls to receive antibiotics. There is also a large difference by residence in the likelihood of being taken to a health facility or provider: treatment was sought for 46 percent of sick rural children and 30 percent of urban children. These conclusions should be viewed cautiously, given the small numbers of children reported to have symptoms of ARI.

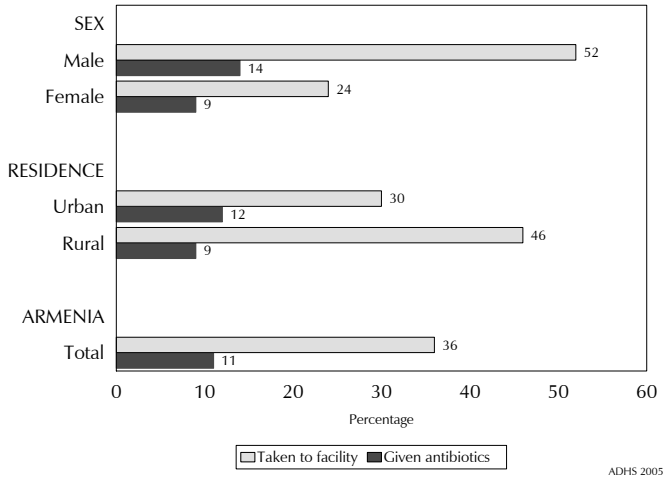
Table 11.4 Prevalence of acute respiratory infection

Among children under age five, the percentage who had symptoms of acute respiratory infection, (ARI) in the two weeks preceding the survey, by background characteristics, Armenia 2005

Background characteristic	Percentage of children with symptoms of ARI	Number of children under five
Age of child in months		
<6	5.9	163
6-11	10.0	162
12-23	8.0	302
24-35	6.3	311
36-47	10.3	275
48-59	7.5	257
Sex		
Male	6.5	807
Female	9.8	663
Cooking fuel		
Electricity	5.8	204
LPG/natural gas	8.3	1,207
Other/missing	9.5	58
Residence		
Urban	7.6	908
Rural	8.5	562
Region		
Yerevan	8.1	566
Other	7.9	904
Mother's education		
Basic general	8.6	135
Secondary general	8.6	563
Specialized secondary	6.7	436
Higher	8.3	335
Wealth quintile		
Lowest	10.9	271
Second	5.7	288
Middle	5.7	286
Fourth	6.8	319
Highest	10.9	305
Total	8.0	1,470

Note: Symptoms of ARI (cough accompanied by short, rapid breathing that is chest-related) are considered a proxy for pneumonia.
LPG: Liquid petroleum gas

Figure 111.1 **Treatment of Acute Respiratory Infection among Children Under Five**



11.4 FEVER

Table 11.5 shows the percentage of children less than five years of age who had fever in the two weeks preceding the survey. Sixteen percent were reported to have had a fever. There are no clear patterns in morbidity by background characteristics with the exception of age. Children less than 6 months of age are less likely to have been sick with a fever and children age 6-11 months are the most likely.

Table 11.5 also shows data on treatment of fever among those children who were sick in the two weeks preceding the survey. Treatment was sought from a health facility or health care provider for 22 percent of sick children and antibiotics were given to 11 percent. Differences by background characteristics are not large and are based on small numbers for many categories.

11.5 DIARRHEA

Dehydration caused by severe diarrhea is a major cause of morbidity among young children and an important cause of infant and child death. In Armenia, about 7 percent of all infant deaths are attributed to diarrheal diseases (NSS, 2006).

Table 11.6 indicates that 17 percent of children under five had diarrhea in the two weeks preceding the survey. This is approximately twice the prevalence estimated in the 2000 ADHS (8 percent). Less than 1 percent of young children had diarrhea with blood, a symptom associated with more serious dysentery.

The age pattern of diarrhea increases substantially at 6-11 months of age (i.e., around the time when a child begins to crawl and experience more exposure to the environment). Morbidity by region ranges from a high of 26 percent in Armavir to a low of 8 percent in Shirak.

Table 11.5 Prevalence and treatment of fever

Among children under age five, the percentage who had a fever in the two weeks preceding the survey; and among children with fever, the percentage of children for whom treatment was sought from a health facility or provider and the percentage who took antibiotic drugs, by background characteristics, Armenia 2005

	Children under five		Children under five with fever		
Background characteristic	Percentage with fever	Number of children	Percentage for whom treatment was sought from a health facility or provider[1]	Percentage who took antibiotic drugs	Number of children with fever
Age of child in months					
<6	6.3	163	*	*	10
6-11	21.0	162	(38.0)	(4.8)	34
12-23	17.2	302	(18.8)	(9.8)	52
24-35	13.8	311	(28.3)	(17.6)	43
36-47	18.8	275	(7.0)	(8.4)	52
48-59	14.7	257	(24.1)	(15.1)	38
Sex					
Male	16.8	807	22.9	9.8	136
Female	14.0	663	21.2	13.8	93
Residence					
Urban	17.1	908	22.3	10.1	155
Rural	13.1	562	22.0	14.3	74
Region					
Yerevan	19.9	566	(20.9)	(4.6)	113
Other	12.8	904	23.5	18.0	116
Mother's education					
Basic general	14.2	135	*	*	19
Secondary general	17.3	563	20.5	16.3	97
Specialized secondary	13.9	436	25.7	10.1	61
Higher	15.4	335	(29.5)	(7.2)	52
Wealth quintile					
Lowest	15.7	271	(22.2)	(8.7)	42
Second	9.1	288	(7.7)	(11.6)	26
Middle	17.6	286	(25.3)	(11.1)	50
Fourth	19.9	319	(18.1)	(8.9)	64
Highest	15.2	305	(32.7)	(17.5)	46
Total	15.6	1,470	22.2	11.4	229

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.
[1] Excludes pharmacy, shop, and traditional practitioner

A prompt increase in a child's fluid intake is a simple and effective procedure to prevent diarrhea from developing into a life-threatening illness. Oral rehydration therapy (ORT) may include the use of a solution prepared from packets of oral rehydration salts (ORS). In addition, it is recommended that food intake should not be decreased for children suffering from diarrhea.

To ascertain how widespread knowledge of ORS is in Armenia, female respondents were asked if they knew about ORS packets. Table 11.7 shows that the majority of women who gave birth in the five years before the survey (70 percent) know about ORS packets. As expected, mothers living in rural areas are less likely to know about ORS than urban mothers (64 percent versus 73 percent). Knowledge of ORS packets increases as the educational level of the mother increases.

Table 11.8 provides insight into the use of ORS packets, as well as other kinds of treatment for diarrhea. Among children with diarrhea, 32 percent were taken to a health facility but just 25 percent were given ORS. However, approximately two-thirds of children with diarrhea (65 percent) were at least treated with ORT, whether it was solution prepared from ORS packets, a recommended homemade solution, or simply extra fluids. There is little variation in diarrhea treatment by residence; however, urban children are more likely than rural children to be taken to a health facility for treatment. (Interestingly, this is the opposite of the care-seeking pattern observed for ARI/fever.) Also notable, boys seem to be substantially more likely to receive ORT than girls.

Other treatments were given to sick children, with the most common being antibiotics (22 percent) and other pills or syrups (19 percent). It is disturbing to note that 17 percent of all children suffering from diarrhea were not taken to a provider, not treated with oral rehydration therapy, and not given any other kind of treatment.

Table 11.6 Prevalence of diarrhea

Percentage of children under five years who had diarrhea in the two weeks preceding the survey, by background characteristics, Armenia 2005

Background characteristic	Diarrhea in the two weeks preceding the survey: All diarrhea	Diarrhea with blood	Number of children
Age of child in months			
<6	8.5	0.0	163
6-11	22.6	3.9	162
12-23	23.6	0.2	302
24-35	17.2	1.6	311
36-47	15.5	0.8	275
48-59	10.6	0.0	257
Sex			
Male	18.9	1.2	807
Female	14.0	0.6	663
Source of drinking water[1]			
Improved	16.6	0.9	1,405
Not improved	(19.5)	(2.0)	64
Toilet facility[2]			
Improved, not shared	17.1	1.0	1,366
Not improved	11.2	0.0	104
Residence			
Urban	15.0	0.8	908
Rural	19.5	1.1	562
Region			
Yerevan	15.0	1.0	566
Aragatsotn	19.6	0.0	82
Ararat	13.1	0.0	122
Armavir	25.7	3.7	124
Gegharkunik	21.3	0.0	117
Lori	10.5	1.2	93
Kotayk	24.2	1.1	123
Shirak	7.8	0.0	88
Syunik	15.3	1.9	62
Vayots Dzor	12.4	1.3	19
Tavush	18.2	0.0	73
Mother's education			
Basic general	11.2	1.4	135
Secondary general	17.1	0.8	563
Specialized secondary	19.1	0.1	436
Higher	15.2	2.0	335
Wealth quintile			
Lowest	19.5	0.7	271
Second	16.9	1.4	288
Middle	17.8	0.8	286
Fourth	16.8	1.7	319
Highest	12.9	0.0	305
Total	16.7	0.9	1,470

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1]See Table 2.7 for definition of categories.
[2]See Table 2.8 for definition of categories.

Besides being asked about what was done to treat children with diarrhea, mothers were specifically asked whether they gave the child more or less fluids and foods than usual. Table 11.9 provides information on feeding practices among children under five who had diarrhea in the two weeks before the survey. The data indicate that 43 percent of all sick children were given more liquids than usual. This is a substantially lower proportion than the 52 percent estimated in the 2000 ADHS. There is a significant difference between the prevalence of the practice of offering more liquid by residence: 50 percent of urban mothers offered more liquids, as opposed to 34 percent of rural mothers. More important, almost one-quarter of rural mothers engage in the dangerous practice of curtailing fluid intake when their children have diarrhea. More than half of all children were offered less than the usual amount to eat, which could exacerbate the child's illness.

Table 11.7 Knowledge of ORS packets

Percentage of mothers who gave birth in the five years preceding the survey who know about ORS packets (Rehydron) for treatment of diarrhea in children, by background characteristics, Armenia 2005

Background characteristic	Percentage of mothers who know about ORS packets	Number of mothers
Mother's age		
15-19	*	27
20-24	68.6	392
25-34	70.8	624
35-49	70.4	107
Residence		
Urban	73.3	724
Rural	63.6	427
Region		
Yerevan	71.7	447
Other	68.4	703
Education		
Basic general	51.5	97
Secondary general	62.6	430
Specialized secondary	73.8	352
Higher	82.0	272
Wealth quintile		
Lowest	48.3	204
Second	73.1	225
Middle	67.2	223
Fourth	76.2	256
Highest	79.8	243
Total	69.7	1,150

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

Table 11.8 Diarrhea treatment

Among children under age five who had diarrhea in the two weeks preceding the survey, the percentage who were taken for treatment to a health provider, the percentage given oral rehydration therapy (ORT), the percentage given increased fluids, the percentage given ORT or increased fluids, and the percentage who were given other treatments, by background characteristics, Armenia 2005

		Received oral rehydration therapy (ORT)					Received other treatments							
Sex/residence	Percentage taken to a health provider[1]	ORS packets	RHF	Either ORS or RHF	Increased fluids	ORS, RHF, or increased fluids	Antibiotic drugs	Other pill or syrup	Injection	Intravenous solution	Home remedy/ other	Don't know/ missing	No treatment	Number of children with diarrhea
Sex														
Male	32.6	25.9	28.5	44.8	46.9	70.4	21.9	24.2	6.1	1.8	6.2	1.1	10.7	153
Female	30.5	23.3	18.9	37.0	35.8	56.9	23.3	10.8	1.3	0.0	4.5	0.0	28.3	93
Residence														
Urban	35.9	22.2	23.1	37.2	49.5	66.1	22.1	22.3	3.1	2.0	3.8	1.2	17.6	136
Rural	26.8	28.2	27.0	47.7	34.2	64.3	22.8	15.3	5.7	0.0	7.7	0.0	17.0	110
Total	31.8	24.9	24.8	41.9	42.7	65.3	22.4	19.1	4.3	1.1	5.5	0.7	17.3	245

Note: Oral rehydration therapy (ORT) includes solution prepared from oral rehydration salts (ORS) packets, recommended home fluids (RHF), or increased fluids.
[1]Excludes pharmacy, shop, and traditional practitioner

Table 11.9 Feeding practices during diarrhea

Percent distribution of children under age five who had diarrhea in the two weeks preceding the survey by amount of liquids and food offered compared with normal practice, by background characteristics, Armenia 2005

	Amount of liquid given							Amount of food given							Number of children with diarrhea
Sex/residence	More	Same as usual	Somewhat less	Much less	None	Don't know/ missing	Total	More	Same as usual	Somewhat less	Much less	None	Never gave food	Total	
Sex															
Male	46.9	41.7	7.5	1.6	0.9	1.4	100.0	2.2	39.7	46.2	9.5	1.2	1.1	100.0	153
Female	35.8	34.4	15.6	4.9	8.8	0.5	100.0	2.4	53.8	36.2	4.9	0.0	2.3	100.0	93
Residence															
Urban	49.5	36.9	3.3	2.4	6.0	1.8	100.0	3.7	46.3	42.9	5.0	0.4	1.3	100.0	136
Rural	34.2	41.5	19.7	3.3	1.3	0.0	100.0	0.5	43.5	41.8	11.2	1.2	1.8	100.0	110
Total	42.7	39.0	10.6	2.8	3.9	1.0	100.0	2.3	45.0	42.4	7.8	0.7	1.6	100.0	245

Note: Total includes a small number with don't know/missing for amount of food offered, which is not shown separately.

11.6 Disposal of Children's Stools

Poor hygiene, which includes improper disposal of fecal matte, contributes to the spread of disease, especially diarrhea. In the 2005 ADHS, mothers of children under three years were asked what was done to dispose of the child's stools the last time they passed stools. Table 11.10 shows that the most commonly used method of disposal of young children's stools is throwing them into a toilet or latrine (58 percent). Almost one-quarter of mothers said the child used the toilet, while 11 percent said they used disposable diapers.

The largest differences occur by age of the child. As expected, younger children are more likely than older ones to be using disposable diapers, while children age 35-59 months are more likely to use the toilet themselves. Use of disposable diapers is higher among urban mothers, those in Yerevan, those with more education, and those in higher wealth quintiles.

Table 11.10 Disposal of children's stools

Percent distribution of mothers whose youngest child under age five is living with her, by the manner of disposing of the child's last fecal matter, and according to background characteristics, Armenia 2005

Background characteristic	Child used toilet/ latrine	Thrown into toilet/ latrine	Put/ rinsed into drain/ditch	Thrown into garbage	Dispos-able diapers	Other	Don't know/ missing	Total	Number of mothers
Age of child in months									
<6	3.9	41.2	2.8	9.8	39.8	2.6	0.0	100.0	157
6-11	4.2	66.3	0.4	8.1	16.7	2.4	1.9	100.0	162
12-17	10.7	68.3	4.8	1.4	14.9	0.0	0.0	100.0	128
18-23	16.5	73.9	2.8	3.4	2.5	0.0	1.0	100.0	147
24-35	29.7	64.3	1.4	0.6	3.4	0.0	0.6	100.0	240
36-59	50.0	45.0	1.7	0.9	1.8	0.0	0.5	100.0	319
Toilet facility									
Improved, not shared[1]	24.3	58.0	2.1	2.8	11.4	0.7	0.7	100.0	1,071
Non-improved	26.2	55.0	1.6	11.9	5.3	0.0	0.0	100.0	83
Residence									
Urban	25.7	54.3	0.0	4.2	15.0	0.6	0.1	100.0	723
Rural	22.2	63.6	5.5	2.1	4.0	0.9	1.7	100.0	430
Region									
Yerevan	27.2	47.0	0.0	5.6	19.6	0.6	0.0	100.0	445
Other	22.7	64.6	3.4	2.1	5.5	0.8	1.1	100.0	708
Mother's education									
Basic general	27.9	55.8	3.7	2.1	9.0	1.0	0.5	100.0	98
Secondary general	24.8	59.6	2.9	2.9	7.6	1.0	1.1	100.0	431
Specialized secondary	22.2	57.2	1.6	5.0	12.6	0.7	0.7	100.0	352
Higher	25.2	56.4	0.8	2.8	14.7	0.0	0.0	100.0	273
Wealth quintile									
Lowest	24.1	58.5	7.6	2.7	4.3	0.5	2.3	100.0	205
Second	20.4	65.4	3.0	4.5	5.3	0.6	0.8	100.0	225
Middle	19.6	64.9	0.7	2.4	9.7	2.1	0.5	100.0	223
Fourth	24.4	49.8	0.0	3.6	22.2	0.0	0.0	100.0	256
Highest	32.8	51.9	0.0	3.9	11.1	0.4	0.0	100.0	244
Total	24.4	57.8	2.1	3.5	10.9	0.7	0.7	100.0	1,153

[1]Non-shared facilities include those that flush or pour flush into a piped sewer system/septic tank/pit latrine, ventilated improved pit (VIP) latrine, pit latrine with a slab, and a composting toilet.

NUTRITION 12

This chapter covers two topics: nutritional status of women and children under five and infant feeding practices. Nutritional status is reported in terms of the height and weight of women and children and the prevalence of anemia. Infant feeding is described in terms of breastfeeding practices, supplementary feeding practices, and the use of bottles for supplementary feeding.

12.1 NUTRITIONAL STATUS OF CHILDREN

Anthropometry provides one of the most important indicators of children's nutritional status. Height and weight measurements were obtained for children under five in the household.[1] The data on height and weight were used to compute three summary indices of nutritional status: height-for-age, weight-for-height, and weight-for-age. These three indices indicate children's susceptibility to diseases and their chances of survival.

The nutritional indices are expressed as percentages that fall between standard deviation units from the median for the international reference population recommended by the World Health Organization (WHO). Children who fall more than two standard deviations below the reference median are regarded as undernourished, while those who fall more than three standard deviations below the reference median are considered severely undernourished.

In the survey, children under five years of age in the household were eligible for height and weight measurements. Of the 1,419 children eligible for measurement (i.e., age 0-59 months at the time of the survey), 92 percent were measured, and almost all of these children had valid measurements recorded (i.e., not implausibly high or low). Table 12.1 shows the nutritional status for all children with valid measurements by demographic and other background characteristics.

Children whose height-for-age is below minus two standard deviations from the median of the reference population are considered stunted or short for their age. Stunting is the outcome of failure to receive adequate nutrition over an extended period and is affected by recurrent or chronic illness. Overall, there has not been any change in stunting since 2000: 13 percent of children under age five are stunted, including 3 percent severely stunted. Analysis of the indicator by various age groups shows that during the first year, stunting increases from 7 percent for children under six months to 12 percent for those 9-11 months. Stunting peaks in the age groups 12-17 and 18-23 months—one in five children is stunted—and then stabilizes at around 12 percent among older children.

In general, children born to mothers with less education are more likely to be stunted. Urban children are just slightly more likely to be stunted than their rural counterparts (14 and 12 percent, respectively). There is substantial regional variation in the prevalence of stunted children, ranging from a low of 5 percent in Armavir to a high of 19 percent in Aragatsotn.

[1] Height was measured standing up for children age two years and above and lying down for children under two years using Shorr Boards. Weight was measured using electronic Seca scales.

Table 12.1 Nutritional status of children

Percentage of children under five years classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, Armenia 2005

Background characteristic	Height-for-age (stunted)			Weight-for-height (wasted)			Weight-for-age (underweight)			Number of children
	Percentage below -3 SD	Percentage below -2 SD[1]	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[1]	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[1]	Mean Z-score (SD)	
Age of child in months										
<6	1.9	6.6	-0.1	0.0	2.8	0.5	0.0	0.3	0.4	120
6-8	1.8	7.8	-0.3	0.0	1.4	0.4	0.0	4.8	0.0	69
9-11	1.5	11.6	-0.5	0.0	3.7	0.7	0.0	3.2	0.1	76
12-17	2.1	19.8	-0.5	2.5	7.2	0.1	0.2	2.2	-0.3	131
18-23	3.0	20.2	-0.7	0.7	11.0	-0.1	0.4	7.0	-0.4	139
24-35	3.2	12.2	-0.4	0.4	4.4	0.2	0.3	6.2	-0.1	285
36-47	4.0	11.3	-0.5	0.7	7.0	0.1	0.0	5.0	-0.3	255
48-59	2.0	12.9	-0.4	0.0	1.6	0.4	0.0	1.5	0.0	217
Sex										
Male	2.3	12.9	-0.4	0.9	4.9	0.3	0.0	2.4	-0.0	706
Female	3.3	13.1	-0.5	0.2	5.2	0.2	0.3	6.0	-0.2	587
Birth interval in months[2]										
First birth[3]	2.9	12.2	-0.4	0.7	5.0	0.3	0.1	3.9	-0.1	1,005
<24	2.5	12.3	-0.1	0.7	7.5	0.1	0.0	4.8	-0.0	58
24-47	3.5	23.9	-1.0	0.0	1.2	0.6	0.0	6.3	-0.2	69
48+	0.8	12.8	-0.5	0.0	6.7	0.1	0.6	4.2	-0.2	149
Size at birth[2]										
Very small	(8.9)	(15.5)	(-0.5)	(0.0)	(2.7)	(0.1)	(0.0)	(1.9)	(-0.4)	32
Small	1.4	18.3	-0.7	1.8	2.2	0.3	0.0	4.9	-0.3	121
Average or larger	2.6	12.3	-0.4	0.5	5.5	0.3	0.2	4.1	-0.1	1,120
Mother's nutritional status[4]										
Underweight (BMI <18.5)	2.3	5.2	-0.5	0.0	1.3	0.0	0.0	2.6	-0.3	68
Normal (BMI 18.5-24.9)	3.1	15.5	-0.5	0.4	5.5	0.2	0.1	4.9	-0.2	807
Overweight (BMI >= 25)	0.9	8.4	-0.2	1.0	5.2	0.4	0.2	2.8	0.2	390
Residence										
Urban	2.6	14.0	-0.3	0.8	6.0	0.2	0.2	3.8	-0.0	752
Rural	2.9	11.5	-0.6	0.2	3.7	0.3	0.1	4.3	-0.2	541
Region										
Yerevan	3.2	17.7	-0.3	0.8	4.8	0.3	0.0	3.0	0.0	432
Aragatsotn	6.4	18.9	-0.9	0.1	0.1	0.5	0.0	1.7	-0.2	70
Ararat	2.3	13.6	-0.8	0.0	3.8	0.3	0.0	7.4	-0.3	128
Armavir	0.8	4.5	-0.3	0.0	1.6	0.1	0.0	0.4	-0.1	122
Gegharkunik	4.9	16.0	-1.0	0.4	1.4	0.5	0.0	5.1	-0.2	111
Lori	0.0	8.6	-0.5	0.0	4.7	0.2	0.0	2.0	-0.1	94
Kotayk	1.8	7.6	-0.6	0.0	2.1	0.5	0.0	0.7	-0.0	106
Shirak	3.8	11.1	0.5	4.5	32.6	-0.9	1.1	17.6	-0.5	78
Syunik	2.8	7.2	-0.6	0.0	0.7	0.5	0.0	1.9	-0.0	63
Vayots Dzor	4.8	6.9	0.6	0.0	24.2	-0.5	3.5	11.3	-0.1	16
Tavush	0.4	9.2	-0.4	0.0	0.3	0.5	0.3	4.1	0.1	74
Mother's education[5]										
Basic general	3.1	19.9	-0.8	0.0	4.5	0.0	0.2	7.4	-0.5	122
Secondary general	3.3	14.2	-0.5	0.5	6.3	0.2	0.1	4.1	-0.2	514
Specialized secondary	2.3	12.7	-0.4	0.8	4.7	0.4	0.2	4.7	-0.0	377
Higher	1.7	7.3	-0.0	0.6	3.6	0.4	0.0	1.6	0.2	273
Wealth quintile										
Lowest	3.8	14.9	-0.6	0.5	4.5	0.2	0.0	4.6	-0.3	263
Second	1.1	6.7	-0.4	1.0	3.9	0.2	0.2	3.6	-0.1	259
Middle	3.4	13.1	-0.6	0.6	8.1	0.3	0.4	4.0	-0.2	264
Fourth	4.8	21.3	-0.7	0.0	2.6	0.5	0.0	6.5	-0.1	269
Highest	0.2	8.1	0.3	0.8	6.3	0.1	0.0	1.1	0.2	238
Total	2.7	13.0	-0.4	0.6	5.1	0.3	0.1	4.0	-0.1	1,293

Note: Table is based on children who stayed in the household the night before the interview. Each of the indices is expressed in standard deviation units (SD) 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.
[1]Includes children who are below –3 standard deviations (SD) from the International Reference Population median
[2]Excludes children whose mothers were not interviewed
[3]First born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.
[4]Mother's nutritional status in terms of BMI (body mass index) is presented in Table 12.11.
[5]For women who were not interviewed, information was taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

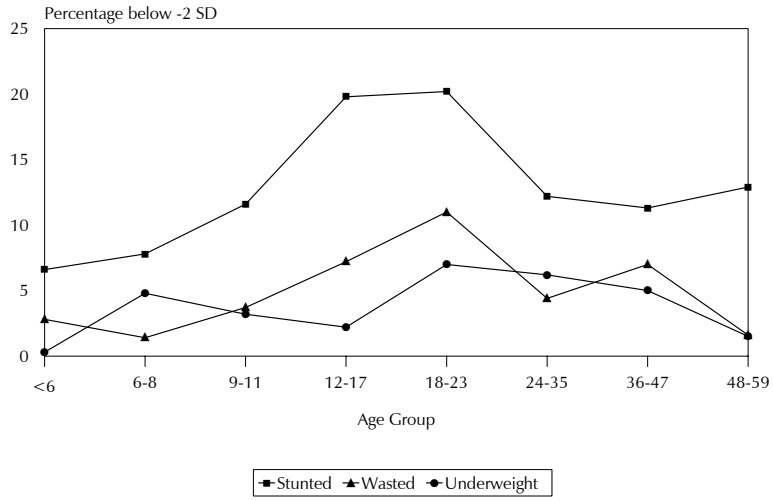
Children whose weight-for-height is below minus two standard deviations from the median of the reference population are considered wasted (or thin). Wasting represents the failure to receive adequate nutrition in the period immediately before the survey and often is a result of recent illness, especially diarrhea, or of a rapid deterioration in food supplies. In Armenia, 5 percent of children were wasted at the time of the survey, up from 2 percent in 2000. Less than 1 percent were severely wasted. Although the overall prevalence of wasting is low, there is considerable variation by background characteristics. Prevalence is particularly high in Shirak and Vayots Dzor regions (33 percent and 24 percent of children, respectively).

Children whose weight-for-age is below minus two standard deviations from the median of the reference population are considered underweight. This measure reflects the effects of both acute and chronic undernutrition. The weight-for-age index does not distinguish between chronic malnutrition (stunting) and acute malnutrition (wasting). A child can be underweight for age because of stunting, because of wasting, or because of both stunting and wasting. Weight-for-age is a good overall indicator of a population's general health.

Overall, 4 percent of children are underweight, signifying that Armenian children are slightly more likely to be underweight than the international reference population.

The nutritional status of children varies with age, as shown in Figure 12.1. The proportion of children more than two standard deviations below the mean for the reference population is highest between 18 and 23 months on all anthropometric measures. Nutritional status then improves generally during 24-35 months of age.

Figure 12.1 **Nutrition Status of Children Under Age Five**



ADHS 2005

Figure 12.2 **Trends in Nutritional Status of Children Under Five**

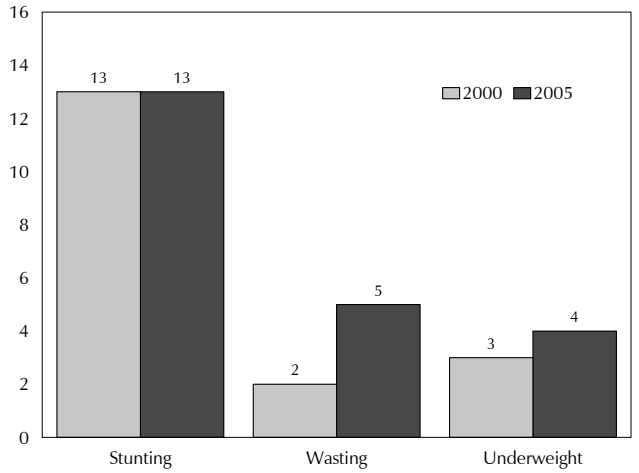


Figure 12.2 compares data on anthropometric measures in the 2000 and 2005 ADHS surveys. There has been no improvement in stunting of children under age five, whereas the children with low weight-for-height and weight-for-age have gotten slightly worse.

Analysis of trends in nutritional status of children by region show odd patterns. For example, the proportion of children who are stunted has doubled in some regions like Yerevan and Aragatsotn, while it has been cut in half in other regions, most notably Gegharkunik where the proportion stunted has declined from 32 percent in 2000 to 16 percent in 2005. Trends by region in the proportion of children who are wasted are also erratic. For example, the proportion of children in Shirak who are wasted has increased from 2 percent to 33 percent between 2000 and 2005. Small numbers of children in some regions may cause large fluctuations; however, the possibility of some errors in recording heights and weights cannot be ruled out.

12.2 BREASTFEEDING AND SUPPLEMENTATION

The pattern of infant feeding has an important influence on the health of children. Feeding practices are the principal determinant of a young child's nutritional status, and poor nutritional status has been shown to increase the risk of illness and death among children. Breastfeeding practices also have an effect on the mother's fertility. Frequent breastfeeding for long durations is associated with longer periods of postpartum amenorrhea and thus longer birth intervals and lower fertility.

Optimal infant feeding is defined by WHO and UNICEF as follows:

- Initiation of breastfeeding within about 30 to 60 minutes of birth and frequent, on-demand feeding (including night feeds);
- Exclusive breastfeeding (defined as breast milk only and no other foods or liquids) until the infant is six months of age;

- Timely, adequate, safe, and appropriate complementary food and feeding starting after six months;
- Increased breastfeeding during illness and recovery; and
- Continued breastfeeding well into the second year of life and beyond.

The importance and necessity of breastfeeding is well recognized in Armenia, and in 1993 the MOH adopted the State Program on Breastfeeding. This program is supported by UNICEF, WHO, and other international organizations. In conjunction with the state program, reforms also occurred in maternity hospitals as part of the Baby Friendly Hospital Initiative (BFHI). Examples of these reforms include the immediate contact between mother and newborn after delivery, early initiation of breastfeeding (in the first 30 to 60 minutes after birth), allowing the mother and newborn to stay in the same hospital room, breastfeeding the baby on demand, and other baby-friendly practices. The BFHI Program has expanded since 2000 and currently 15 maternity hospitals— which 30 percent of children are delivered annually— currently have Baby Friendly status.

In July 2005, UNICEF and the Ministry of Health of Armenia in partnership with governmental and non-governmental organizations organized an international seminar on "Protecting Breastfeeding through Implementation of the International Code of Marketing of Breast milk Substitutes" where they called for increased commitment in promoting and protecting early and exclusive breastfeeding.

In the 2005 ADHS, for each child born in the five years preceding the survey, mothers were asked whether they had breastfed the child and, if so, how long after delivery breastfeeding was initiated. Women were also asked whether their children were still breastfeeding and the age at which supplemental feeding began. Finally, for children not currently breastfeeding, the age at which they stopped breastfeeding was obtained.

Initiation of Breastfeeding

The early initiation of breastfeeding is important for a number of reasons. First, it takes advantage of the newborn's suckling reflex and alertness immediately postpartum. Early suckling also benefits mothers because it stimulates breast milk production and releases a hormone that helps the uterus to contract 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 fosters bonding between mother and child.

Table 12.2 shows that 97 percent of all children born in the five years before the survey were breastfed. This is a substantial increase over the 2000 ADHS in which only 88 percent of children were reported as ever breastfed. There is little variation by background characteristics, with the sole exception of region. All children were breastfed in Aragatsotn, Shirak, and Syunik regions, and the lowest percentage of 94 percent was in Kotayk and Vayots Dzor. Overall, 28 percent of children were breastfed within one hour of birth and 62 percent were breastfed within 24 hours of birth. There are substantial variations by region. Fifty-six percent of children in Shirak region began breastfeeding within one hour of birth, compared with just 11 percent in Aragatsotn. Armavir region has the lowest percentage of children who started breastfeeding within one day of birth.

Prelacteal feeding is the practice of giving other liquids to a child during the period after birth before the mother's milk is flowing freely. Overall, 8 percent of children were given a prelacteal meal. Re-

gional variations in giving prelacteal feeding are notable, ranging from a high of 19 percent in Armavir to no prelacteal feeding in Ararat.

Table 12.2 Initial breastfeeding

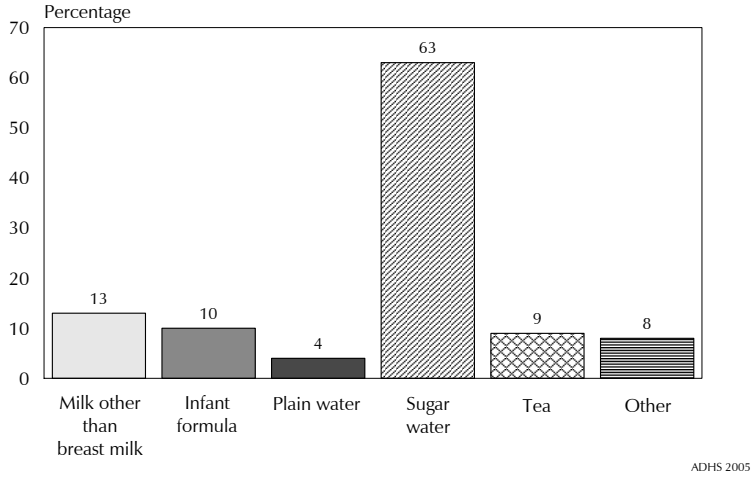
Percentage of children born in the five years preceding the survey who were ever breastfed, and among the last-born children ever breastfed, the percentage who started breastfeeding within one hour and within one day of birth, and percentage who received a prelacteal feed, by background characteristics, Armenia 2005

	Children under five		Last-born children ever breastfed			
Background characteristic	Percentage ever breastfed	Number of children	Percentage who started breastfeeding within 1 hour of birth	Percentage who started breastfeeding within 1 day of birth[1]	Percentage who received a prelacteal feed[2]	Number of children ever breastfed
Sex						
Male	96.4	835	28.0	63.3	8.1	805
Female	97.1	676	26.8	60.8	7.8	657
Residence						
Urban	97.0	930	27.6	62.0	8.0	902
Rural	96.2	582	27.4	62.3	8.0	560
Region						
Yerevan	96.0	584	25.6	58.1	8.5	560
Aragatsotn	100.0	83	10.8	60.4	9.8	83
Ararat	95.6	127	19.2	74.5	0.0	121
Armavir	95.6	125	15.0	46.1	19.0	120
Gegharkunik	96.6	120	41.9	71.7	5.1	116
Lori	97.1	96	26.1	66.7	3.4	93
Kotayk	94.4	129	33.8	61.8	5.1	122
Shirak	100.0	90	56.0	74.8	10.3	90
Syunik	100.0	63	27.6	69.0	2.1	63
Vayots Dzor	93.6	19	19.2	60.5	7.3	18
Tavush	99.7	75	29.8	59.6	14.4	75
Mother's education						
Basic general	90.9	138	25.9	60.2	5.4	125
Secondary general	97.5	579	23.2	59.3	6.0	564
Specialized secondary	97.3	448	31.8	66.4	10.8	436
Higher	96.8	347	29.7	62.1	8.6	336
Wealth quintile						
Lowest	94.1	286	23.5	60.3	9.3	269
Second	98.2	294	27.1	63.0	7.7	289
Middle	99.0	289	32.1	60.4	7.7	286
Fourth	95.4	335	28.2	66.5	7.8	320
Highest	96.9	308	26.2	60.1	7.4	299
Total	96.7	1,512	27.5	62.2	8.0	1,462

Note: Table is based on all births in the past five years whether the children were living or dead at the time of interview.
[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 before the mother started breastfeeding regularly

Figure 12.3 shows that most children who receive prelacteal feeding receive sugar water (63 percent), while 13 percent receive milk other than breast milk, 10 percent receive infant formula, and 9 percent receive tea.

Figure 12.3 **Among Last-Born Children in the Five Years Prior to the Survey Who Ever Received a Prelacteal Liquid, Percentage Given Specific Liquids**



Breastfeeding Patterns by Age

Breast milk is the optimal source of nutrients for infants. Children who are exclusively breastfed receive only breast milk. Exclusive breastfeeding is recommended during the first six months of a child's life because it limits exposure to disease agents and provides all of the nutrients that are required for a baby. As the infant grows, breast milk alone no longer provides sufficient nourishment and other liquids and foods need to be added to a child's diet.

Table 12.3 and Figure 12.4 present the infant feeding practices of Armenian mothers. Among children under six months of age, a large majority are breastfed (84 percent). However, just one-third are exclusively breastfed, as recommended. In addition to breast milk, 11 percent are given other milk, 21 percent are given water or other liquids, and 20 percent are given solid or mushy food. Although almost half of Armenian children continue to breastfeed through age 9-11 months, almost all receive supplements in addition to breast milk.

Table 12.3 Breastfeeding status by age

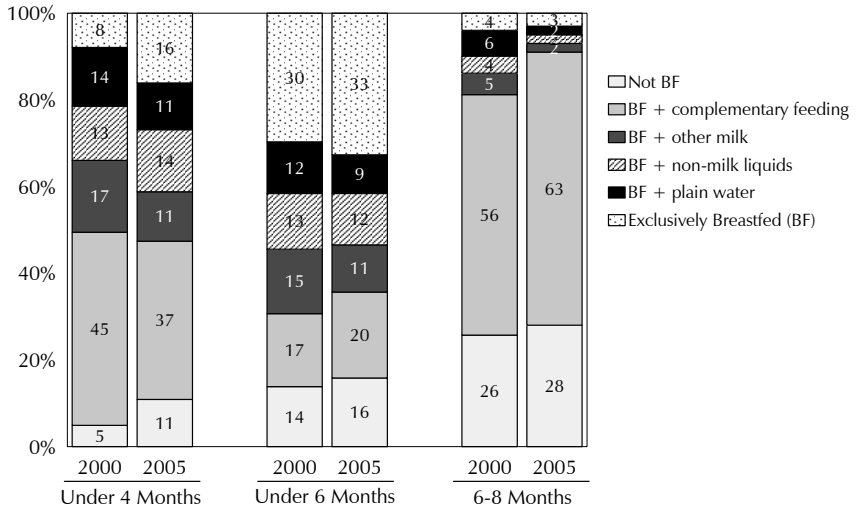
Percent distribution of youngest children under three years living with the mother by breastfeeding status and percentage of children under three years using a bottle with a nipple, according to age in months, Armenia 2005

	Percent distribution of youngest children under three living with the mother by breastfeeding status								All children under three	
			Breastfeeding and consuming:							
Age in months	Not breast-feeding	Exclu-sively breast-fed	Plain water only	Non-milk liquids/ juice	Other milk	Comple-mentary foods	Total	Number of children	Percentage using a bottle with a nipple	Number of living children
<2	(2.8)	(55.4)	(3.7)	(16.1)	(9.9)	(12.0)	(100.0)	42	(12.5)	46
2-3	16.1	24.2	16.5	13.2	11.4	18.7	100.0	64	49.9	66
4-5	(25.9)	(24.0)	(4.3)	(6.0)	(10.3)	(29.5)	(100.0)	51	(53.3)	51
6-8	28.2	3.4	2.0	1.7	1.8	62.9	100.0	73	47.7	73
9-11	53.2	1.3	0.0	0.0	0.3	45.1	100.0	87	62.0	89
12-17	66.1	0.0	0.0	0.0	0.0	33.9	100.0	128	57.4	134
18-23	80.6	0.6	0.0	0.0	0.4	18.4	100.0	147	33.9	168
24-35	94.4	0.0	0.0	0.0	0.0	5.6	100.0	241	20.4	311
<4	10.9	36.5	11.4	14.3	10.8	16.1	100.0	106	34.6	112
<6	15.7	32.5	9.1	11.6	10.6	20.4	100.0	157	40.4	163
6-9	37.2	2.3	1.3	1.1	1.5	56.5	100.0	108	51.5	108
12-23	73.9	0.3	0.0	0.0	0.2	25.6	100.0	275	44.4	302

Note: Breastfeeding status refers to a 24-hour period (yesterday and the past 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; and breastfeeding and consuming plain water, non-milk liquids/juice, 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 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. Figures in parentheses are based on 25-49 unweighted cases.

When comparing the results of the 2005 ADHS to the 2000 ADHS in Figure 12.4, it should be noted that the recommended duration of exclusive breastfeeding has changed. In 2005, the MOH officially recommended that mothers breastfeed exclusively for six months, instead of the four months that had been previously recommended. Also, to make the data comparable across both surveys, the data refer to the youngest child living with the mother.

Figure 12.4 **Trends in Infant Feeding Practices of Children Under 4 months, Under 6 Months, and 6-8 Months**



Since 2000, among children under six months of age, breastfeeding at the time of the survey practically has not changed (86 and 84 percent, respectively, in 2000 and 2005). Exclusive breastfeeding, as recommended by the MOH, shows a slight positive trend towards increasing in this age group (30 percent in 2000 compared with 33 percent in 2005). On the other hand, the proportion of children under six months receiving breast milk and complementary foods increased from 17 percent in 2000 to 20 percent in this survey, an undesirable trend.

Among children 6-8 months, weaning at an early age has hardly changed; 26 percent of these children are not breastfed, compared to 28 percent in 2000. Sixty-three percent of children age 6-8 months received breast milk and complementary foods in 2005, indicating an increase of seven percentage points since 2000 (56 percent).

There is an apparent decline in exclusive breastfeeding among youngest children less than four months of age from 45 percent in the 2000 ADHS to 37 percent in the 2005 survey. Although this difference could be due to a real decline, it should also be noted that the questionnaire methodology changed slightly between the two surveys. Specifically, the 2005 survey asked mothers about more kinds of complementary foods that could have been given to the child than were asked in the previous survey.

Use of bottles with nipples is rather high: among children under six months of age, 40 percent use a bottle, and among children age 6-9 months, the proportion increases to 52 percent. These data show that improvements must be made before Armenian children are breastfed according to international standards.

Table 12.4 shows that the median duration of any breastfeeding is 10.5 months; the duration of exclusive and predominant breastfeeding (breastfeeding plus plain water, water-based liquids, or juice), however, is short (less than one month and three months, respectively). These figures indicate that levels of complete breastfeeding in Armenia are lower than optimal. Nevertheless, median duration of any breastfeeding has increased from 9 months in the 2000 ADHS.

There is substantial variation by background characteristics. Median duration of breastfeeding is 10 months among children residing in urban areas and 12 months among those in rural areas. Breastfeeding duration also varies by region, from a low of 5 months in Aragatsotn to three times as high in Gegharkunik. The relationship between breastfeeding and education is mixed. Women with basic general, specialized secondary, and higher education tend to breastfeed their children 9 to 10 months on average, whereas women who have attained up to secondary general breastfeed their children for a median of 13 months.

More than nine in ten breastfeeding children under 6 months of age were breastfed at least six times in the 24 hours preceding the survey (Table 12.5). According to the ADHS, the mean number of daytime feeds is six and the mean number of nighttime feeds is three; the resulting nine feeds are considered sufficient for a 24-hour period.

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, Armenia 2005

Background characteristic	Median duration (months) of breastfeeding among last-born children in the past three years[1]			
	Any breast-feeding	Exclusive breast-feeding	Predo-minant breast-feeding[2]	Number of children
Sex				
Male	12.8	0.8	2.7	533
Female	9.0	0.7	2.6	426
Residence				
Urban	9.7	1.2	2.5	598
Rural	11.9	0.6	2.9	361
Region				
Yerevan	9.0	1.3	2.2	378
Aragatsotn	5.3	0.4	0.4	57
Ararat	11.7	1.5	2.8	89
Armavir	8.9	0.4	3.3	76
Gegharkunik	15.0	0.8	4.2	73
Lori	8.1	1.4	1.5	60
Kotayk	14.3	0.7	0.7	84
Shirak	5.9	1.3	2.0	53
Syunik	11.0	4.8	5.5	40
Vayots Dzor	7.1	0.4	0.6	9
Tavush	13.4	1.1	5.7	39
Mother's education				
Basic general	8.7	1.5	3.0	75
Secondary general	12.7	0.6	2.4	355
Specialized secondary	8.4	0.6	0.7	307
Higher	9.9	1.8	3.0	222
Wealth quintile				
Lowest	8.5	0.7	3.4	174
Second	12.7	0.7	0.7	200
Middle	10.3	0.5	3.3	184
Fourth	8.9	2.1	2.3	215
Highest	10.2	0.7	1.5	187
Total	10.5	0.8	2.6	959
Mean for all children	12.2	2.8	3.9	na

Note: Medians are based on current status. Includes children living and deceased at the time of the survey.
na = Not applicable
[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, water-based liquids, and/or juice only (excludes other milk)

Table 12.5 Frequency of breastfeeding

Percentage of breastfeeding children under six months of age living with the mother who were breastfed six or more times in the 24 hours preceding the survey, and mean number of feeds (day/night), by child's sex and residence, Armenia 2005

Background characteristic	Percentage breastfed 6+ times in past 24 hours	Mean number of day feeds	Mean number of night feeds	Number of children
Sex				
Male	95.2	5.7	3.4	63
Female	92.4	5.7	3.0	67
Residence				
Urban	92.0	5.6	3.1	84
Rural	(96.9)	(5.9)	(3.3)	46
Total	93.7	5.7	3.2	130

Note: Excludes children who do not have a valid answer on the number of times breastfed. Figures in parentheses are based on 25-49 unweighted cases.

Supplemental Foods

The nutritional requirements of young children are more likely to be met if they are fed a variety of foods from six months of age. The 2005 ADHS asked women with a child under age three living with them what that child ate in the 24 hours before the interview. Interviewers read a list of specific foods and asked the mother to report whether or not the child received each food. The foods given to a child are not mutually exclusive; therefore, a child could be reported as receiving several types of food.

Table 12.6 shows that during the 24 hours preceding the interview, 4 percent of breastfeeding children under six months received infant formula, 21 percent received other milk, and 68 percent—or two in three children—received cheese, yogurt or another milk product. Sixteen percent ate some solid or semisolid food. These data indicate that breastfeeding practices in Armenia should be improved because giving supplemental foods to children under six months of age can be detrimental to the child's health. Among breastfeeding children age six months and older, the percentage receiving complementary foods steadily increases. Among breastfeeding children age 6-11 months, 90 percent consumed solid or semi-solid food.

The most common foods among breastfeeding children age 6-23 months are foods made from grains, followed by foods made from roots or tubers. Four in ten ate fruits and vegetables rich in vitamin A and more than half ate meat, fish, shellfish, poultry, or eggs.

Among nonbreastfeeding children age 6-23 months, proportions consuming various foods are higher than among breastfeeding children. More than nine in ten received foods made from grains, more than eight in ten ate foods made from roots or tubers, and three-fourths ate meat, fish, shellfish, poultry, or eggs. More than half (55 percent) of nonbreastfeeding children consumed fruits and vegetables rich in vitamin A.

Table 12.6 Foods consumed by children in the day or night preceding the interview

Percentage of youngest children under three years of age living with the mother who consumed specific foods in the day or night preceding the interview, by breastfeeding status and age, Armenia 2005

	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 vegetables rich in vitamin A[4]	Other fruits/ vegetables	Food made from roots/ tubers	Food made from legumes and nuts	Meat/ fish/ shellfish/ poultry/ eggs	Cheese, yogurt, other milk product	Any solid or semi-solid food	Food made with oil/fat/ butter	Number of children
BREASTFEEDING CHILDREN														
<6	4.3	21.4	35.0	9.0	11.3	13.3	8.5	1.0	0.0	0.7	67.9	15.5	2.4	132
6-11	22.3	39.5	78.4	19.5	74.7	38.1	44.6	59.8	8.0	40.2	62.8	0.2	57.6	93
12-23	6.7	33.7	88.0	9.6	93.3	46.4	85.2	90.5	18.2	74.9	58.5	96.0	75.5	72
24-35	*	*	*	*	*	*	*	*	*	*	*	*	*	14
6-23	15.5	37.0	82.6	15.2	82.8	41.7	62.2	73.2	12.4	55.4	60.9	92.7	65.4	165
Total	10.8	30.2	62.4	11.9	53.1	30.7	40.9	42.9	7.6	33.2	63.8	60.0	39.2	311
NONBREASTFEEDING CHILDREN														
<6	*	*	*	*	*	*	*	*	*	*	*	*	*	25
6-11	55.9	65.7	80.4	47.1	90.4	64.5	66.1	80.8	9.3	52.8	59.1	98.0	67.5	67
12-23	10.9	52.9	85.4	7.0	95.0	51.9	84.0	85.4	25.3	81.6	59.7	95.6	86.7	203
24-35	4.5	47.6	87.4	6.9	94.6	67.8	89.1	88.6	43.8	89.8	68.5	95.8	82.2	228
6-23	22.0	56.1	84.2	16.9	93.9	55.0	79.5	84.2	21.3	74.5	59.5	96.2	81.9	270
Total	16.6	52.0	85.1	14.9	92.9	59.2	80.7	82.8	30.1	78.0	62.9	94.8	78.8	522

Note: Breastfeeding status and food consumed refer to a 24-hour period (yesterday and the past night). An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[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 pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, green leafy vegetables, mango, papaya, and other locally grown fruits and vegetables that are rich in vitamin A

Table 12.7 presents a combined indicator of appropriate feeding practices for children age 6-23 months. This indicator is calculated taking into account guidelines for the number of food groups a child should eat and the number of times a child should eat each day. The guidelines for appropriate feeding practices change depending on whether or not the child is breastfed and the age of the child. According to the WHO, breastfed children should receive foods from three or more food groups every day in order to obtain all of the micronutrients they need. Breastfed children who are age 6-8 months should be fed solid or semisolid foods at least 2-3 times per day. Children age 9-23 months should be fed at least 3-4 times per day (PAHO/WHO, 2003). Nonbreastfed children should receive foods from at least four food groups and should receive solid or semisolid food 4-5 times a day (WHO, 2005a).

Table 12.7 looks at feeding practices by age, breastfeeding status, and background characteristics. Appropriate feeding of young children is low in Armenia. Overall, only 27 percent of children age 6-23 months receive appropriate feeding. Those age 6-8 months are least likely to receive appropriate feeding (4 percent). Appropriate feeding practices increase steadily with age to 32 percent among children 18-23 months. Inadequate number of feedings is the most common problem with feeding practices. Only 37 percent of children 6-23 months are fed solid or semisolid foods the minimum recommended number of times each day. There is very little difference in feeding practices for girls and boys. However, rural children are more likely to have appropriate feeding practices than urban children (32 versus 24 percent).

Table 12.7 Appropriate infant and young child feeding (IYCF) practices

Percentage of youngest children age 6-23 months living with the mother who are fed with appropriate feeding practices based on number of food groups and number of times they are fed during the day or night preceding the survey, by breastfeeding status and background characteristics, Armenia 2005

	Among breastfed children 6-23 months, percentage fed:				Among nonbreasfed children 6-23 months, percentage fed:					Among all children 6-23 months, percentage fed:				
Background characteristic	3+ food groups[1]	Minimum times or more[2]	3+ food groups and minimum times or more	Number of children	Appropriate breast milk substitutes[3]	4+ food groups[4]	4+ times or more	With 3 appropriate IYCF practices[5]	Number of children	Breast milk or appropriate breast milk substitutes[3]	3+ or 4+ food groups[6]	Minimum times or more[7]	With 3 appropriate IYCF practices	Number of children
Age in months														
6-8	(55.2)	(33.4)	(5.5)	52	*	*	*	*	21	100.0	60.1	25.6	3.9	73
9-11	(93.5)	(23.9)	(17.4)	41	97.3	81.4	66.4	51.2	46	98.6	87.1	29.1	24.2	87
12-17	(87.8)	(37.4)	(26.0)	43	92.3	90.5	50.1	43.8	85	94.9	89.6	45.6	36.5	128
18-23	(95.0)	(31.7)	(26.8)	28	95.0	93.1	60.2	57.7	118	96.0	93.5	38.2	32.0	147
Sex														
Male	76.3	37.1	20.1	100	95.5	88.1	55.9	51.8	146	97.3	83.3	40.3	28.5	246
Female	86.0	23.6	13.5	65	94.3	89.4	59.1	50.1	124	96.2	88.3	31.4	25.2	188
Residence														
Urban	80.7	29.2	13.9	92	94.3	90.0	61.1	53.3	165	96.4	86.7	33.1	23.5	258
Rural	79.3	35.1	22.2	72	95.8	86.7	51.5	47.5	104	97.5	83.7	41.5	32.2	177
Total	80.1	31.8	17.5	165	94.9	88.7	57.4	51.1	270	96.8	85.5	36.5	27.0	435

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.

[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 (and red palm oil); d) other fruits and vegetables; e) eggs; f) meat, poultry, fish, and shellfish (and organ meats); g) legumes and nuts; and h) foods made with oil, fat, or butter.

[2]At least twice a day for infants 6-8 months and at least three times a day for children 9-23 months

[3]Appropriate breast milk substitutes: commercial infant formula; fresh, tinned, and powdered animal milk; and cheese, yogurt, and other milk products

[4] Including breast milk substitutes

[5]Nonbreastfed children ages 6-23 months are considered to be fed with three appropriate feeding practices if they receive appropriate breast milk substitutes and are fed at least the minimum number of times per day with at least the minimum number of food groups.

[6]Three or more food groups for breastfed children and 4+ food groups for non-breastfed children

[7]Fed solid or semi-solid food at least twice a day for infants 6-8 months, 3+ times for other breastfed children, and 4+ times for non-breastfed children

12.3 ANEMIA IN CHILDREN

Anemia is a condition characterized by a decrease in the concentration of hemoglobin in the blood. Hemoglobin is necessary for transporting oxygen to tissues and organs in the body. The reduction in oxygen available to organs and tissues when hemoglobin levels are low is responsible for many of the symptoms experienced by anemic persons. The consequences of anemia include general body weakness, frequent tiredness, and lowered resistance to disease. It is of concern in children because anemia is associated with impaired mental and physical development. Overall, morbidity and mortality risks increase for individuals suffering from anemia.

Determining anemia levels among women and their children under five years of age was one component of the ADHS. Anemia levels were determined by measuring the level of hemoglobin in the blood, a decreased concentration of which characterizes anemia. For hemoglobin measurement, capillary blood was taken from the finger using HemoCue safety lancets (i.e., sterile, disposable instruments that allow a relatively painless skin puncture). Hemoglobin was measured in the blood using the HemoCue system. As described in Chapter 1, medically trained personnel assigned to each of the ADHS teams conducted the testing. Out of 1,333 eligible children, hemoglobin measurements were obtained from 83 percent.

Levels of anemia were classified as severe, moderate, and mild based on the hemoglobin concentration in the blood and according to criteria developed by the WHO (DeMaeyer et al., 1989). Because hemoglobin levels vary by altitude, the measurements presented here have been 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

Table 12.8 presents the anemia rates for children 6-59 months of age. Thirty-seven percent of children suffer from anemia; one-half of these have moderate anemia and 1 percent have severe anemia. Prevalence of anemia tends to decline among older children. Although children in urban areas are only slightly more likely to have anemia than children in rural areas, an urban child is twice as likely to have moderate anemia as a rural child. There are substantial differences in anemia rates among children by region. The prevalence of anemia among children ranges from a low of 7 percent in Vayots Dzor to a high of 63 percent in Gegharkunik. Contrary to expectations, anemia seems to increase with education of the mother and with wealth quintile of mothers. The reversed relationship of the higher rates of anemia among more educated and wealthy women is somewhat puzzling. It appears that these relationships are influenced by the high rates of anemia noticed in Yerevan and Gegharkunik (see below).

A comparison of the data from the 2000 and 2005 ADHS surveys would suggest that anemia rates among children have increased by 50 percent over the last five years (mainly due to the increase in a moderate level of anemia). According to the 2000 ADHS survey, 24 percent of Armenian children age 6-59 months had any anemia, compared to 37 percent in 2005. This apparent increase is even more surprising given that fieldwork for the 2005 survey took place during September through December, following the harvest season, when anemia is expected to be lower than at other times during the year. Yerevan and Gegharkunik show the largest increases between 2000 and 2005. For example, the proportion of children with any anemia has tripled in Yerevan, from 13 percent in 2000 to 45 percent in 2005. Similarly, in Gegharkunik, the proportion of children with any anemia doubled from 32 percent to 63 percent in 2005. Such large increases are unlikely. Although migration of poorer families to the city might help to explain the seemingly anomalous anemia results for Yerevan and Gegharkunik, it is also possible that data collection errors occurred, such as poor techniques with reading the test results or problems with the reagents or supplies used for the anemia testing. When tables on anemia are produced without Yerevan and Gegharkunik, there is no increase in anemia prevalence over time and the relationship between anemia prevalence and education of the mother reverses, so that anemia is higher among children of mothers with less education.

Table 12.8 Prevalence of anemia in children

Percentage of children age 6-59 months classified as having anemia, by background characteristics, Armenia 2005

Background characteristic	Anemia status by hemoglobin level: Any anemia (<11 g/dl)	Mild (10.0-10.9 g/dl)	Moderate (7.0-9.9 g/dl)	Severe (below 7.0 g/dl)	Number of children
Age in months					
6-8	(77.3)	(45.6)	(27.5)	(4.2)	49
9-11	67.9	20.9	39.5	7.5	71
12-17	52.6	20.6	30.5	1.5	123
18-23	37.7	18.4	18.4	1.0	127
24-35	32.4	14.4	17.6	0.3	267
36-47	22.5	10.6	11.0	0.9	243
48-59	28.2	14.5	13.7	0.0	225
Sex					
Male	35.6	14.3	19.8	1.6	616
Female	37.6	19.4	17.4	0.7	490
Children of interviewed mothers	36.7	16.7	18.7	1.2	1,094
Residence					
Urban	37.8	14.0	22.6	1.2	666
Rural	34.6	20.4	12.9	1.2	440
Region					
Yerevan	44.7	11.7	31.5	1.4	403
Aragatsotn	26.5	16.3	3.1	7.1	43
Ararat	30.6	27.9	2.7	0.0	107
Armavir	43.6	23.1	20.5	0.0	95
Gegharkunik	62.5	26.2	32.3	4.0	93
Lori	17.9	8.6	9.3	0.0	77
Kotayk	31.2	21.1	10.1	0.0	81
Shirak	17.9	12.8	4.2	0.9	74
Syunik	24.8	16.7	8.1	0.0	53
Vayots Dzor	(6.9)	(4.9)	(0.0)	(2.0)	10
Tavush	19.6	14.4	5.3	0.0	70
Mother's education[1]					
Basic general	30.0	17.6	11.4	1.1	115
Secondary general	37.9	15.8	20.9	1.2	423
Specialized secondary	32.3	18.5	13.5	0.3	325
Higher	43.6	15.0	25.9	2.7	239
Wealth quintile					
Lowest	32.0	17.6	11.8	2.6	218
Second	33.2	19.5	13.4	0.3	208
Middle	29.3	15.9	13.2	0.1	234
Fourth	40.6	18.6	21.6	0.4	233
Highest	47.7	11.1	34.0	2.7	214
Total	36.5	16.5	18.7	1.2	1,106

Note: Table is based on children who stayed in the household the night before the interview. Prevalence is adjusted for altitude using formulas published by the Centers for Disease Control and Prevention (CDC, 1998). Hemoglobin in grams per deciliter (g/dl).

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

[1]For women who were not interviewed, information was taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

12.4 MICRONUTRIENT INTAKE IN CHILDREN

Micronutrient deficiencies are major contributors to childhood morbidity and mortality. Table 12.9 shows information on several important micronutrients including vitamin A, iron, and iodine. Consuming fruits and vegetables rich in vitamin A prevents vitamin A deficiency, which increases the risk of severe illness and can cause visual impairment.

Fewer than six in ten (56 percent) children 6-35 months consumed vitamin A-rich fruits and vegetables in the 24 hours preceding the interview. Consumption of fruits and vegetables high in vitamin A and C along with foods rich in iron reduces the risk of anemia. Three in four children 6-35 months consumed iron-rich foods in the day or night before the interview. Nonbreastfeeding children are more likely to receive vitamin A-rich and iron-rich foods than breastfeeding children. Mother's education and wealth index are positively associated with children consuming these foods providing important micronutrients. The survey results indicate that among regions, Ararat and Shirak had the lowest proportions of children consuming vitamin A- and iron-rich foods, while Aragatsotn and Vayots Dzor had the highest, though interpretation is hampered by small numbers of children in some regions.

Intestinal worms can contribute to both anemia and vitamin A deficiency. Therefore, mothers of children 6-59 months were asked whether their children were taking iron supplements and whether they were given deworming medication in the last six months. The results show that only 2 percent of children were taking iron supplements and 18 percent of children were given deworming medication in the six months preceding the survey (Table 12.9).

Insufficient iodine in the diet can also lead to serious health deficiencies. In the ADHS, cooking salt in households was tested for the presence of iodine. Salt testing kits supplied by UNICEF were used to measure the level of iodine. Salt that contains at least 15 parts per million (ppm) of iodine is considered adequately iodized. According to the data in Table 12.9, nearly all children in Armenia (98 percent) live in households with adequately iodized salt. One regional exception to this finding is Lori, where only 84 percent of children live in households with adequately iodized salt.

Salt testing was conducted in almost every household in the survey. Table 12.10 shows that most Armenian households have adequately iodized salt (97 percent). This finding represents a notable improvement over the 2000 ADHS, in which only 84 percent of households had adequately iodized salt. In most regions, 99 to 100 percent of households have adequately iodized salt according to the 2005 ADHS. Lori region had the lowest percentage of households with adequately iodized salt—82 percent.

Table 12.9 Micronutrient intake among children

Percentage of youngest children age 6-35 months living with their mother who consumed fruits and vegetables rich in vitamin A and fruits and vegetables rich in iron in the 24 hours preceding the survey, and percentage of children 6-59 months currently taking iron supplements and percentage given deworming medication in the past six months, and among children age 6-35 months in households with salt tested for iodine, percentage living in households using adequately iodized salt, by background characteristics, Armenia 2005

	Last-born children age 6-35 months			Children age 6-59 months			Children age 6-59 months in household with salt tested	
Background characteristic	Percentage who consumed fruits and vegetables rich in vitamin A in past 24 hours[1]	Percentage who consumed fruits and vegetables rich in iron in past 24 hours[2]	Number of children	Percentage currently taking iron supplements	Percentage given deworming medication in past 6 months[3]	Number of children	Percentage living in households using adequately iodized salt[4]	Number of children
Age in the months								
6-8	34.4	25.1	73	1.9	22.1	73	100.0	71
9-11	61.5	62.6	87	5.5	21.3	89	100.0	89
12-17	44.1	75.5	128	0.7	27.1	134	96.9	134
18-23	56.0	83.7	147	1.2	18.6	168	100.0	167
24-35	67.7	89.3	241	1.7	20.4	311	97.5	309
36-47	na	na	na	2.4	13.7	275	97.7	275
48-59	na	na	na	2.0	13.7	257	98.9	256
Sex								
Male	58.2	72.7	392	1.3	19.0	729	98.4	727
Female	53.7	78.4	284	2.9	17.4	578	98.4	573
Breastfeeding status								
Breastfeeding	43.6	57.2	178	2.9	19.5	186	99.4	185
Not breastfeeding	60.7	81.4	495	1.9	18.3	1,106	98.2	1,101
Mother's age at birth								
<20	46.2	78.7	70	2.9	13.4	179	97.6	177
20-24	58.6	76.7	315	2.1	17.2	630	97.9	628
25-29	54.1	70.5	187	1.8	20.3	317	98.8	316
30-34	54.3	75.4	63	1.5	20.0	107	100.0	107
35-49	(69.2)	(77.2)	42	0.7	28.5	73	100.0	73
Residence								
Urban	60.1	78.5	422	2.4	19.2	798	97.9	796
Rural	50.0	69.5	254	1.3	16.9	509	99.2	504
Region								
Yerevan	64.8	83.3	269	2.1	21.1	500	98.4	500
Aragatsotn	73.4	84.5	42	2.0	13.3	76	99.9	75
Ararat	23.1	60.5	55	1.0	14.8	101	100.0	101
Armavir	48.4	67.3	56	0.0	20.5	113	100.0	113
Gegharkunik	46.2	70.4	49	3.8	15.3	109	100.0	106
Lori	(64.6)	(71.3)	40	5.2	25.2	78	83.9	76
Kotayk	62.4	71.8	56	0.9	21.6	104	99.3	104
Shirak	(31.4)	(48.5)	40	2.0	9.5	82	100.0	81
Syunik	45.7	74.5	29	2.4	13.0	57	100.0	57
Vayots Dzor	(68.7)	(89.2)	7	5.6	8.7	18	100.0	18
Tavush	66.7	81.2	31	0.4	14.3	70	100.0	70
Mother's education								
Basic general	(36.6)	(75.9)	52	0.0	10.9	122	100.0	118
Secondary general	50.7	73.2	246	2.1	18.6	501	97.4	500
Specialized secondary	59.7	73.3	214	1.8	19.6	384	99.7	383
Higher	66.6	79.9	164	2.9	19.2	299	97.6	299
Wealth quintile								
Lowest	48.5	68.0	121	1.8	18.2	251	99.1	245
Second	48.2	75.0	138	3.5	15.0	252	98.2	252
Middle	55.9	63.7	131	1.7	17.2	252	98.4	252
Fourth	54.9	81.3	155	1.5	12.3	283	100.0	283
Highest	74.3	85.9	130	1.6	28.7	269	96.2	269
Total	56.3	75.1	676	2.0	18.3	1,307	98.4	1,301

Note: Information on vitamin A and iron supplements and deworming medication is based on mother's recall. Total includes 14 cases with missing information on breastfeeding status. Figures in parentheses are based on 25-49 unweighted cases.
na = Not applicable
[1]Includes pumpkin, red or yellow yams or squash, carrots, red sweet potatoes, green leafy vegetables, mango, papaya, 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]Salt containing 15 parts per million (ppm) of iodine or more. Excludes children in households in which salt was not tested.

Table 12.10 Presence of iodized salt in household

Percent distribution of households with salt tested for iodine content, by level of iodine in salt (parts per million), according to background characteristics, Armenia 2005

Background characteristic	Level of iodine in household salt			Total	Number of households with salt tested
	None (0 ppm)	Inadequate (<15 ppm)	Adequate (15+ ppm)		
Residence					
Urban	0.2	2.8	97.0	100.0	4,399
Rural	0.6	1.9	97.5	100.0	2,257
Region					
Yerevan	0.2	1.8	98.1	100.0	2,530
Aragatsotn	1.4	1.9	96.7	100.0	248
Ararat	0.0	0.0	100.0	100.0	491
Armavir	0.5	0.0	99.5	100.0	533
Gegharkunik	0.4	0.3	99.3	100.0	391
Lori	1.4	16.5	82.0	100.0	595
Kotayk	0.8	1.8	97.4	100.0	501
Shirak	0.0	0.4	99.6	100.0	608
Syunik	0.0	0.0	100.0	100.0	319
Vayots Dzor	0.0	0.0	100.0	100.0	115
Tavush	0.1	1.3	98.6	100.0	325
Wealth quintile					
Lowest	0.7	2.6	96.7	100.0	1,300
Second	0.3	3.1	96.7	100.0	1,375
Middle	0.6	3.1	96.3	100.0	1,442
Fourth	0.2	1.6	98.2	100.0	1,324
Highest	0.1	1.9	98.0	100.0	1,216
Total	0.4	2.5	97.1	100.0	6,656

Note: Total excludes 51 households with no salt.
ppm = parts per million

12.5 NUTRITIONAL STATUS OF WOMEN

The ADHS also collected anthropometric data from all women age 15-49. Women's nutritional status is important both as an indicator of overall health and as a predictor of pregnancy outcome for both mother and child. Two indices of women's nutritional status are presented in Table 12.11—height and body mass index (BMI).

Maternal height is a measure of past nutritional status and reflects in part the cumulative effect of social and economic outcomes on access to nutritional foods during childhood and adolescence. It can be used to predict the risks associated with difficult deliveries because small stature is often associated with small pelvis size and a greater likelihood of obstructed labor. Short stature is also correlated with low birth weight in infants, high risk of stillbirths, and high rates of miscarriage. The height below which a woman is considered to be at nutritional risk is in the range of 140 to 150 centimeters. In the 2005 ADHS, 93 percent of eligible women were measured. Only 1 percent of women are below 145 centimeters in height. This percentage varies little by background characteristics.

Table 12.11 Nutritional status of women by background characteristics

Among women age 15-49, the percentage with height under 145 cm, mean body mass index (BMI), and percentage with specific BMI levels, by background characteristics, Armenia 2005

	Height		BMI[1] (kg/m²)								
				Normal	Thin			Overweight/obese			
Background characteristic	Percentage below 145 cm	Number of women	Mean BMI	18.5-24.9 (Total normal)	<18.5 (Total thin)	17.0-18.4 (Mildly thin)	<17.0 (Moderately and severely thin)	≥25.0 (Overweight/ obese)	25.0-29.9 (Over-weight)	30.0 or higher (Obese)	Number of women
Age											
15-19	0.9	1,068	21.6	77.8	10.2	7.4	1.3	12.0	10.4	1.6	1,040
20-29	0.9	1,956	22.9	68.1	8.8	6.7	0.4	23.1	17.2	5.9	1,775
30-39	0.8	1,409	25.8	47.0	2.0	1.4	0.1	51.0	35.4	15.6	1,380
40-49	1.1	1,833	28.4	26.6	1.2	1.0	0.0	72.2	39.5	32.6	1,821
Residence											
Urban	0.7	3,969	24.9	53.7	5.5	4.4	0.3	40.8	25.2	15.6	3,801
Rural	1.3	2,295	25.2	50.3	4.6	3.0	0.4	45.2	29.9	15.3	2,215
Region											
Yerevan	0.3	2,281	24.4	56.0	6.7	5.6	0.4	37.3	24.2	13.1	2,181
Aragatsotn	1.0	284	25.4	48.9	4.1	2.7	0.0	47.1	28.1	18.9	276
Ararat	1.0	448	25.5	51.5	6.2	3.5	0.6	42.3	24.6	17.7	429
Armavir	0.4	557	25.6	51.9	3.2	2.0	0.4	44.9	25.0	19.9	537
Gegharkunik	1.8	416	24.3	57.4	4.3	2.4	0.6	38.3	30.3	8.0	405
Lori	2.2	526	25.8	47.6	4.0	3.6	0.2	48.4	26.1	22.3	501
Kotayk	2.5	532	25.8	47.5	4.5	3.5	0.4	48.0	25.7	22.3	508
Shirak	0.0	561	24.5	50.9	3.4	1.8	0.5	45.8	41.1	4.7	535
Syunik	1.1	278	25.7	46.0	5.7	4.7	0.2	48.3	27.5	20.9	269
Vayots Dzor	0.9	100	24.1	63.1	3.4	2.1	1.1	33.5	24.0	9.5	96
Tavush	1.9	283	26.3	46.1	4.7	3.2	0.0	49.2	26.5	22.8	278
Education											
Basic general	1.9	512	24.3	53.6	9.0	5.3	1.3	37.3	23.9	13.4	491
Secondary general	0.9	2,351	25.2	50.9	4.1	3.0	0.5	45.0	28.1	16.9	2,249
Specialized secondary	1.2	1,906	25.8	46.7	4.3	3.2	0.2	49.0	30.0	19.1	1,838
Higher	0.3	1,495	23.9	61.8	6.6	5.8	0.2	31.6	22.2	9.4	1,439
Wealth quintile											
Lowest	1.6	1,136	24.7	53.3	4.5	2.9	0.6	42.2	30.3	11.9	1,095
Second	1.1	1,251	25.4	50.8	4.0	2.8	0.2	45.1	27.2	17.9	1,203
Middle	1.3	1,247	25.6	52.7	3.6	3.0	0.1	43.8	25.7	18.1	1,190
Fourth	0.7	1,279	25.1	51.0	5.6	3.9	0.8	43.5	25.3	18.1	1,223
Highest	0.2	1,352	24.2	54.3	7.9	6.6	0.2	37.8	26.5	11.3	1,305
Total	0.9	6,265	25.0	52.4	5.2	3.9	0.4	42.4	26.9	15.5	6,016

Note: BMI is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m²).
[1] Excludes pregnant women and women with a birth in the preceding two months

The BMI, which utilizes both height and weight and provides a better measure of thinness and obesity than weight alone, is defined as weight in kilograms divided by the square of the height in meters (kg/m²). For the BMI, a cutoff of 18.5 has been recommended for indicating chronic energy deficiency among nonpregnant women. To avoid bias in the measurement of women's nutritional status, pregnant women and women who had given birth in the two months preceding the survey were excluded from the calculation of weight and body mass measures. Table 12.11 shows that 5 percent of Armenian women are undernourished or have a BMI less than 18.5, indicating a slight increase over the 4 percent reported in

the 2000 ADHS. The most notable increase is among teenagers with a BMI below 18.5, from 6 percent in 2002 to 10 percent in 2005.

The BMI can also be used to evaluate the percentage of women who are overweight and obese. A cutoff point of 25.0 has been recommended for defining "overweight," while 30.0 is used as the cutoff point for defining "obese." According to the findings of the ADHS, approximately four in ten Armenian women have a BMI of 25.0 or higher: 27 percent are overweight and 16 percent are obese. Obesity among women has increased slightly, from 14 percent in 2000 to 16 percent in 2005; however, the proportion overweight has remained the same. There is a strong relationship between age and overweight and obesity. For example, only 2 percent of women age 15-19 are obese, compared to one-third (33 percent) of women age 40-49. Although women in urban and rural areas are equally likely to be obese, those in rural areas are slightly more likely to be overweight.

12.6 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 2005 ADHS were offered an anemia test. Prior to participating in the study, 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 her children. Ninety-one percent of eligible women participated in the hemoglobin measurement.

Table 12.12 presents the anemia rates for women. Twenty-five percent of Armenian women suffer from some degree of anemia; most (21 percent of women) have mild anemia, while 3 percent have moderate anemia and less than 1 percent have severe anemia. Anemia rates increase with age; the prevalence of anemia is higher among older women than among younger women. By parity, the women who had no births are less likely to be anemic than those who had six or more births. Women in urban areas are more likely to have anemia than those who live in rural areas. The prevalence by region ranges from a low of 14 percent in Tavush to a high of 33 percent in Gegharkunik.

During the last five years, the prevalence of anemia among women has doubled from 12 percent in 2000 to 25 percent in 2005, mainly due to an increase in the mild forms of anemia. Although almost all regions show an increase in anemia among women, the increase is largest for women in Yerevan and Gegharkunik, the same two regions that showed the largest increase in anemia among children. When Yerevan and Gegharkunik are removed from the analysis, the difference in anemia rates between 2000 and 2005 surveys narrows to 5 percentage points (16 percent with anemia in 2000 to 21 percent in 2005). It is possible that errors in anemia testing, especially in Yerevan and Gegharkunik, account for some of the apparent increase in anemia among women.

Table 12.12 Prevalence of anemia in women

Percentage of women age 15-49 with anemia, by background characteristics, Armenia 2005

Background characteristic	Anemia status by hemoglobin level				Number of women
	Any anemia (<12 g/dl)[1]	Mild (10.0-11.9 g/dl)[2]	Moderate (7.0-9.9 g/dl)	Severe (below 7.0 g/dl)	
Age					
15-19	21.4	17.3	3.3	0.7	1,025
20-29	22.6	19.9	2.3	0.4	1,884
30-39	25.2	21.3	3.4	0.5	1,371
40-49	28.0	23.2	4.2	0.6	1,800
Number of children ever born[3]					
0	21.2	18.2	2.6	0.4	2,091
1	28.0	23.1	3.7	1.2	682
2-3	25.6	21.9	3.3	0.5	2,887
4-5	27.9	21.4	6.4	0.2	385
6+	34.6	29.5	1.6	3.5	34
Maternity status[3]					
Pregnant	38.6	26.5	11.6	0.6	176
Breastfeeding	23.9	20.7	3.0	0.2	294
Neither	24.2	20.6	3.0	0.6	5,609
Using IUD[3]					
Yes	29.8	25.5	3.8	0.5	367
No	24.2	20.5	3.2	0.5	5,713
Residence					
Urban	26.9	23.1	3.3	0.6	3,851
Rural	20.5	16.7	3.2	0.5	2,229
Region					
Yerevan	28.8	25.0	3.3	0.5	2,192
Aragatsotn	17.3	11.9	4.4	1.1	253
Ararat	21.7	18.8	2.4	0.4	434
Armavir	22.2	16.8	4.9	0.5	554
Gegharkunik	33.1	28.4	4.4	0.3	413
Lori	19.0	15.2	3.6	0.2	527
Kotayk	21.0	17.5	3.1	0.3	518
Shirak	26.5	24.6	1.0	0.9	547
Syunik	20.6	15.5	4.2	0.9	277
Vayots Dzor	17.8	14.7	1.2	2.0	81
Tavush	14.1	11.4	2.6	0.1	283
Education[4]					
Basic general	20.4	16.6	3.1	0.7	498
Secondary general	25.2	21.3	3.2	0.7	2,291
Specialized secondary	24.9	21.1	3.2	0.5	1,858
Higher	24.7	20.8	3.6	0.2	1,433
Wealth quintile					
Lowest	21.9	17.3	4.2	0.4	1,101
Second	23.0	19.1	3.1	0.7	1,220
Middle	24.6	20.8	2.8	0.9	1,223
Fourth	25.8	23.4	2.0	0.4	1,249
Highest	27.2	22.6	4.3	0.3	1,287
Total	24.6	20.8	3.3	0.5	6,080

Note: Table is based on women who stayed in the household the night before the interview. Prevalence is adjusted for altitude and for smoking status using formulas published by the CDC (1998). Hemoglobin level in g/dl (grams per deciliter).

[1]For pregnant women, hemoglobin level is <11.0 g/dl

[2]For pregnant women, hemoglobin level is 10-10.9 g/dl

[3]Excludes women who were not interviewed

[4]For women who were not interviewed, information is taken from the Household Questionnaire.

12.7 MICRONUTRIENT INTAKE IN WOMEN

A mother's nutritional status during pregnancy is important both for the child's intrauterine development and for protection against maternal morbidity and mortality. Nightblindness is an indicator of severe vitamin A deficiency, and pregnant women are especially prone to suffer from it. Table 12.13 shows that 3 percent of women reported having nightblindness during the pregnancy of their last child born in the five years preceding the survey. After adjusting for women who also reported vision problems during the day, an estimated 1 percent of women suffered from nightblindness, the same level found in the 2000 ADHS. The small percentages make it impossible to examine variation among subgroups of Armenia's population.

Table 12.13 Micronutrient intake among mothers

Percentage of women age 15-49 who, during pregnancy for the last child born in the five years preceding the survey, suffered from nightblindness, and percentage who took iron tablets or syrup for specific numbers of days, by background characteristics, Armenia 2005

	For the last child born in the past five years							
	Percentage of women who suffered nightblindness during pregnancy		Number of days women took iron tablets or syrup during pregnancy					
Background characteristic	Reported	Adjusted[1]	None	<60	60-89	90+	Don't know/ missing	Number of women
Age								
15-19	*	*	*	*	*	*	*	27
20-29	2.3	0.6	79.9	13.9	0.2	1.0	4.9	846
30-39	4.1	0.4	76.2	12.6	1.7	2.7	6.8	257
40-49	(15.0)	(11.5)	(89.3)	(0.8)	(3.6)	(0.0)	(6.3)	46
Residence								
Urban	3.6	1.3	76.8	14.8	1.1	1.9	5.3	736
Rural	2.6	0.5	84.4	10.2	0.0	0.3	5.2	440
Region								
Yerevan	3.7	1.2	74.3	14.8	1.6	2.7	6.6	456
Aragatsotn	9.5	2.2	78.3	16.5	0.0	0.2	4.9	59
Ararat	0.7	0.4	83.2	6.2	0.0	0.0	10.7	102
Armavir	1.0	0.0	88.1	8.4	0.0	0.0	3.4	95
Gegharkunik	4.3	0.0	86.4	7.6	0.0	0.0	6.0	87
Lori	3.6	2.4	67.9	29.6	0.9	1.6	0.0	76
Kotayk	2.9	0.0	80.1	11.8	0.0	1.2	7.0	104
Shirak	0.0	0.0	90.0	8.1	0.0	0.0	1.8	72
Syunik	3.9	3.0	91.4	7.7	0.0	0.0	0.9	50
Vayots Dzor	2.1	0.0	82.7	17.3	0.0	0.0	0.0	16
Tavush	3.0	2.1	84.1	14.3	0.0	0.6	1.0	61
Education								
Basic general	0.8	0.3	84.8	4.0	0.0	0.0	11.2	99
Secondary general	4.2	2.0	84.6	10.4	0.4	0.0	4.6	442
Specialized secondary	1.0	0.5	82.2	13.0	0.0	1.9	2.9	359
Higher	5.4	0.2	66.6	20.7	2.2	3.1	7.4	276
Wealth quintile								
Lowest	4.9	1.6	82.6	8.9	0.0	0.0	8.5	212
Second	0.3	0.0	85.7	12.9	0.0	0.7	0.8	229
Middle	5.0	1.0	80.7	14.7	0.0	0.6	4.0	224
Fourth	3.9	2.2	80.6	11.3	1.0	1.0	6.1	265
Highest	2.1	0.0	69.6	17.4	2.2	3.9	6.9	245
Total	3.2	1.0	79.7	13.1	0.7	1.3	5.3	1,176

Note: For women with two or more live births in the five-year period, data refer to the most recent birth. 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]Women who reported nightblindness but did not report difficulty with vision during the day

Iron-deficiency anemia is a major threat to maternal health; it contributes to low birth weight infants, lowered resistance to infection in both mother and child, poor cognitive development in children, and decreased work capacity in adulthood. Further, anemia increases the risk associated with morbidity from infections because it adversely affects the body's immune response. In the ADHS, women who had a birth in the five years preceding the survey were asked whether they received or purchased any iron tablets during the pregnancy for their last birth. If she did, the woman was asked to report the number of days that the tablets were actually taken during that pregnancy.

Table 12.13 shows that eight in ten women did not take any iron tablets or syrups during the pregnancy for their last birth in the five years preceding the survey. One percent of women reported taking iron supplements for the recommended minimum of 90 days during the pregnancy, the same level as reported in the 2000 ADHS.

HIV/AIDS AND SEXUALLY TRANSMITTED INFECTIONS 13

Acquired immune deficiency syndrome (AIDS) is caused by a human immunodeficiency virus (HIV) that weakens the immune system, making the body susceptible to and unable to recover from other diseases. HIV/AIDS is an international pandemic, with cases reported from every country. The United Nations Program on AIDS (UNAIDS) estimates that in 2005, 38.6 million people worldwide were living with HIV, 4.1 million became newly infected with HIV, and 2.8 million lost their lives to AIDS (UNAIDS, 2006).

From 1988 to 31 August 2006, 436 HIV cases had been registered in the Republic of Armenia, of which 415 represent Armenian citizens. A majority of the reported HIV cases (77 percent) are among men, while women account for only 23 percent. Eight of the reported cases of HIV infection (2 percent) are children. The overwhelming majority of the registered HIV-infected individuals (75 percent) belong to the 20-39 age group. Half of the registered HIV cases are from the capital city of Yerevan. The second highest number is from Shirak region, constituting 9 percent of all registered cases (National Center for AIDS Prevention [NCAP], 2006).

A large proportion of the registered HIV cases were recently registered. For example, in 2005, 78 new cases of HIV infection were registered, while 54 new cases were registered during 2006. In the Republic of Armenia the main modes of HIV transmission are injecting drug use (53 percent) and heterosexual relations (39 percent).

A total of 145 people have been diagnosed with AIDS in Armenia, of which 25 are women and 4 are children. Of those registered AIDS cases, 41 were diagnosed in 2005 and 40 in 2006. From the beginning of the epidemic, 92 deaths have been registered among HIV/AIDS patients, including 18 women and 3 children. (NCAP, 2006).

The 2005 ADHS collected information from women and men on HIV/AIDS and other sexually transmitted infections (STIs), such as syphilis, gonorrhea, and chlamydia, which are known to be important predisposing factors for HIV epidemics. This chapter summarizes information on knowledge, perceptions, and behaviors at the national level and within geographic and socioeconomic subgroups of the population.

13.1 KNOWLEDGE OF HIV/AIDS AND METHODS OF HIV PREVENTION

Table 13.1 shows the percentage of women and men age 15-49 who have heard of AIDS, by background characteristics. Knowledge of AIDS in Armenia—although not universal—is extremely high; in 2005, 95 percent of women and 92 percent of men reported that they have heard of HIV/AIDS, compared with 94 and 97 percent, respectively, in 2000. At least 85 percent of women and men of all background characteristics have heard of HIV/AIDS, with the exception of women and men with basic education (80 percent), men age 15-19 (82 percent), and men living in Shirak (79 percent) and Syunik (70 percent) regions.

Table 13.1 Knowledge of AIDS

Percentage of women and men age 15-49 who have heard of AIDS, by background characteristics, Armenia 2005

Background characteristic	Women: Has heard of AIDS	Women: Number of women	Men: Has heard of AIDS	Men: Number of men
Age				
15-19	90.8	1,123	81.6	292
20-24	95.9	1,131	94.4	237
25-29	97.5	929	96.3	202
30-39	97.5	1,460	94.8	306
40-49	95.3	1,922	94.9	410
15-24	93.4	2,254	87.3	529
Marital status				
Never married	92.9	2,043	88.2	615
Ever had sex	*	25	95.4	280
Never had sex	92.8	2,017	82.1	336
Currently married	96.6	4,044	95.7	815
Formerly married	96.3	479	*	17
Residence				
Urban	97.6	4,194	92.8	913
Rural	91.6	2,372	91.5	534
Region				
Yerevan	99.1	2,468	92.6	547
Aragatsotn	87.2	292	99.8	71
Ararat	93.0	462	99.6	110
Armavir	92.4	567	97.4	139
Gegharkunik	94.2	443	90.2	81
Lori	96.6	537	92.4	87
Kotayk	92.9	563	97.9	151
Shirak	90.3	563	79.4	98
Syunik	96.7	281	69.8	67
Vayots Dzor	98.8	107	89.6	31
Tavush	94.6	285	91.9	64
Education				
Basic general	80.0	529	80.0	205
Secondary general	94.1	2,440	92.5	586
Specialized secondary	98.0	1,997	94.1	310
Higher	99.4	1,600	97.5	346
Wealth quintile				
Lowest	87.5	1,164	88.6	261
Second	93.8	1,284	89.5	264
Middle	97.1	1,303	93.8	326
Fourth	97.9	1,375	93.5	316
Highest	99.5	1,440	95.3	280
Total	95.4	6,566	92.3	1,447

Note: Currently married includes respondents in consensual union (living together). Formerly married includes divorced/separated/widowed. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

AIDS prevention programs focus their messages and efforts on three important aspects of behavior: condom use, limiting the number of sexual partners or staying faithful to one partner, and delaying the first sexual intercourse in young persons (i.e., abstinence). Table 13.2 and Figure 13.1 show the percentage of women and men who in response to prompted questions give positive responses to specific ways to avoid AIDS. Overall, the most often mentioned way of avoiding AIDS is by limiting sex to one partner who has not been infected with AIDS (80 percent of women and 86 percent of men). Abstaining from sex is cited by almost the same proportion of women and men (almost eight in ten respondents) and the use of condoms is cited by 72 percent of women and 81 percent of men. Two-thirds of women and more than three-fourths of men (78 percent) mentioned using condoms *and* limiting sex to one uninfected partner. Knowledge of HIV prevention methods when prompted, but not when mentioned spontaneously, has improved significantly during the last five years among both women and men compared with the 2000 ADHS.

Younger and never-married respondents (especially men who never had sex) are less likely than older respondents and ever-married respondents to know ways to avoid getting the AIDS virus. Urban women are more likely to be aware of safe sexual practices than rural women. There is a strong positive relationship between the respondent's education and wealth status and his/her knowledge of ways to prevent HIV. For example, 54 percent of women with basic education say that the risk of getting the AIDS virus can be reduced by abstaining from sex, compared with 90 percent of women with higher than secondary education. Among men with basic education, almost two-thirds say that the risk of getting AIDS can be reduced by using condoms, compared with more than 90 percent of men with higher than secondary education.

Figure 13.1 **Knowledge of Specific Ways to Avoid AIDS among Women and Men Age 15-49**

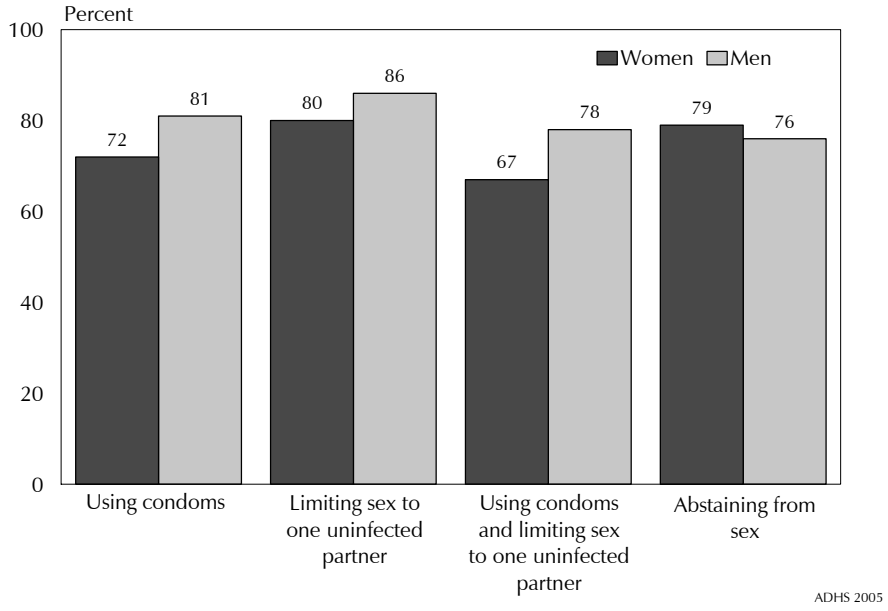


Table 13.2 Knowledge of HIV prevention methods

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, by having just one sex partner who is not infected and has no other partners, and by abstaining from sexual intercourse, by background characteristics, Armenia 2005

	Women					Men				
Background characteristic	Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Using condoms and limiting sexual inter-course to one uninfected partner	Ab-staining from sexual intercourse	Number of women	Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Using condoms and limiting sexual inter-course to one uninfected partner	Ab-staining from sexual intercourse	Number of men
Age										
15-19	55.1	65.4	50.4	65.4	1,123	64.2	69.6	59.9	65.7	292
20-24	72.9	80.8	67.3	80.4	1,131	81.3	87.0	78.8	80.1	237
25-29	78.3	85.7	74.5	81.9	929	88.3	91.4	84.6	76.1	202
30-39	76.3	85.2	71.8	84.8	1,460	87.4	91.3	84.7	81.2	306
40-49	74.4	80.9	69.5	80.8	1,922	84.2	89.8	81.8	82.3	410
15-24	64.1	73.1	58.9	72.9	2,254	71.9	77.4	68.4	72.1	529
Marital status										
Never married	64.4	73.4	59.2	73.1	2,043	74.4	79.2	70.5	72.4	615
Ever had sex	*	*	*	*	25	90.4	91.1	87.4	80.4	280
Never had sex	64.2	73.1	58.9	72.7	2,017	61.2	69.3	56.5	65.8	336
Currently married	75.7	82.8	70.9	81.9	4,044	86.0	90.9	83.5	81.8	815
Formerly married	70.8	82.5	68.6	82.2	479	*	*	*	*	17
Residence										
Urban	76.2	85.2	71.6	83.5	4,194	80.9	87.6	78.8	75.6	913
Rural	64.1	70.4	59.0	71.4	2,372	81.0	82.8	76.3	80.8	534
Region										
Yerevan	78.3	89.9	74.0	86.7	2,468	83.6	88.0	81.2	73.0	547
Aragatsotn	58.6	62.2	48.9	70.2	292	83.3	95.8	81.6	90.5	71
Ararat	69.5	70.3	65.3	76.9	462	95.1	94.0	92.9	88.7	110
Armavir	72.5	76.8	69.2	76.5	567	96.5	97.4	96.5	97.0	139
Gegharkunik	72.7	79.2	68.4	70.6	443	85.7	83.4	79.9	85.4	81
Lori	61.4	68.2	50.5	71.0	537	84.2	86.4	80.2	85.9	87
Kotayk	58.8	69.8	53.6	68.8	563	83.2	83.2	73.4	79.7	151
Shirak	73.6	80.8	73.1	80.7	563	31.1	66.8	31.1	45.1	98
Syunik	84.4	88.4	81.6	90.1	281	57.1	60.8	56.4	57.8	67
Vayots Dzor	85.6	89.2	82.1	85.1	107	68.6	71.2	66.3	69.4	31
Tavush	54.7	62.1	48.0	64.2	285	88.3	87.3	84.1	87.3	64
Education										
Basic general	46.2	51.8	42.1	54.0	529	65.0	68.9	60.6	63.6	205
Secondary general	64.6	73.5	58.6	74.7	2,440	79.2	85.2	75.3	81.4	586
Specialized secondary	77.1	85.3	72.6	83.0	1,997	82.5	86.6	79.7	82.2	310
Higher	84.7	92.1	81.3	89.5	1,600	91.9	96.1	90.9	75.0	346
Wealth quintile										
Lowest	57.9	63.5	52.2	66.3	1,164	70.2	78.3	66.1	76.1	261
Second	66.5	74.9	62.1	74.2	1,284	76.2	81.6	72.7	76.9	264
Middle	73.4	80.9	67.4	81.7	1,303	81.8	84.7	77.1	82.0	326
Fourth	76.6	87.1	72.6	84.6	1,375	85.0	88.5	82.3	79.5	316
Highest	81.8	89.6	77.9	86.4	1,440	89.8	94.9	89.7	71.8	280
Total	71.8	79.9	67.1	79.1	6,566	80.9	85.8	77.9	77.5	1,447

Note: Currently married includes respondents in consensual union (living together). Formerly married includes divorced, separated, and widowed. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Every time they have sexual intercourse

[2] Who has no other partners

13.2 Rejection of Misconceptions About AIDS Transmission and Comprehensive Knowledge of AIDS

In addition to knowing about effective ways to avoid contacting HIV/AIDS, it is also useful to identify incorrect beliefs about AIDS in order to eliminate misconceptions. Common misconceptions about AIDS transmission include the belief that HIV-infected people appear ill and the belief that the virus can be transmitted through mosquito bites, from coughing, by sharing food with someone who is infected, or by witchcraft or other supernatural means. Respondents who have heard of HIV/AIDS were asked about four misconceptions.[1] The information is presented in Tables 13.3.1 and 13.3.2.

Sixty-three percent of women and 64 percent of men know that it is possible for a healthy-looking person to have the AIDS virus, slightly more than in 2000 (56 and 58 percent, respectively). Among women, the same proportion rejects the misconception that the AIDS virus can be transmitted by coughing and sharing food with a person who has AIDS. Men are less likely than women to say that AIDS cannot be transmitted by coughing or sharing food with someone with AIDS. Almost half of women and one-third of men know that AIDS cannot be transmitted by mosquito bites. In general, younger respondents, those residing in rural areas, and those who never had sex are less likely than other respondents to refute these misconceptions. The variations are more pronounced by region. For example, while 74 percent of women in Syunik region say that a healthy-looking person can have HIV, only 23 percent of women in Ararat region give the same answer. Eighty percent of men in Tavush region say that a healthy-looking person can have HIV, compared with 16 percent of men in Shirak region.

The summary indicator in Tables 13.3.1 and 13.3.2 is the percentage of women and men who have a comprehensive knowledge of AIDS. These are respondents who say that using a condom during every sexual intercourse and having just one uninfected and faithful partner can reduce the chance of getting the AIDS virus, who say that a healthy-looking person can have the AIDS virus, and who reject the two most common local misconceptions. In Armenia, the two most common misconceptions are transmission of HIV/AIDS by mosquito bites and sharing food with a person who is infected with AIDS. Only about one in four respondents (26 percent of women and 24 percent of men) has a comprehensive knowledge of AIDS. This proportion varies by the respondent's background characteristics. As in the case of individual aspects of AIDS transmission, young women, women who have never married, women with lower levels of education, and women in the lower wealth quintiles are less likely than other women to have a comprehensive knowledge of AIDS. Comprehensive knowledge of HIV also varies widely by region, ranging from 43 percent among women in Syunik to 12 percent in Ararat. Table 13.3.2 shows much wider variations by region among men. Comprehensive knowledge of AIDS ranges from 48 percent of men in Vayots Dzor to 4 percent in Shirak.

[1] Tables 13.3.1 and 13.3.2 do not include results on misconceptions about transmission of the virus by witchcraft or other supernatural means because only 1 percent of women and an even smaller proportion of men said the AIDS virus can be transmitted by these means.

Table 13.3.1 Misconceptions and 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 AIDS transmission, and the percentage with a comprehensive knowledge about AIDS, by background characteristics, Armenia 2005

Background characteristic	Percentage of women who say that: A healthy-looking person can have the AIDS virus	AIDS cannot be transmitted by mosquito bites	AIDS cannot be transmitted by coughing	A person cannot become infected by sharing food with someone with AIDS	Percentage who say that a healthy-looking person can have the AIDS virus and who reject the two most common misconceptions[1]	Percentage with a comprehensive knowledge about AIDS[2]	Number of women
Age							
15-19	56.0	40.3	52.9	50.9	23.8	19.3	1,123
20-24	62.4	50.0	61.4	62.4	30.4	26.0	1,131
25-29	68.6	52.2	65.5	63.5	29.5	26.9	929
30-39	67.7	49.2	66.1	66.6	33.1	29.4	1,460
40-49	62.6	47.5	62.6	63.1	28.8	25.9	1,922
15-24	59.2	45.2	57.2	56.7	27.1	22.6	2,254
Marital status							
Never married	61.7	45.2	59.5	59.3	28.4	23.6	2,043
Ever had sex	*	*	*	*	*	*	25
Never had sex	61.4	45.1	59.3	59.0	28.4	23.5	2,017
Currently married	63.8	49.7	63.7	63.2	30.0	27.0	4,044
Formerly married	67.4	41.8	57.1	59.6	27.0	23.1	479
Residence							
Urban	69.2	48.5	66.4	65.9	32.7	28.9	4,194
Rural	53.3	46.4	54.0	54.4	23.3	20.0	2,372
Region							
Yerevan	70.8	49.1	67.3	66.3	33.4	29.8	2,468
Aragatsotn	55.7	49.9	55.7	48.1	23.9	17.6	292
Ararat	23.1	74.3	67.6	70.7	14.3	11.8	462
Armavir	64.9	47.2	55.0	63.2	32.4	30.2	567
Gegharkunik	61.5	52.2	56.5	58.4	32.9	30.2	443
Lori	69.4	38.3	57.3	52.9	22.6	16.0	537
Kotayk	61.0	31.3	46.4	43.8	18.1	13.4	563
Shirak	66.1	46.2	70.7	72.7	38.7	36.4	563
Syunik	74.4	58.8	74.9	71.3	44.3	42.8	281
Vayots Dzor	48.0	29.5	56.2	58.4	16.2	15.4	107
Tavush	56.7	33.8	46.0	45.5	18.1	13.7	285
Education							
Basic general	36.1	30.0	37.6	38.7	13.8	10.5	529
Secondary general	54.6	40.8	54.5	52.5	20.1	17.0	2,440
Specialized secondary	66.6	52.4	64.8	65.1	32.1	29.0	1,997
Higher	82.0	58.3	77.7	79.2	45.0	39.9	1,600
Wealth quintile							
Lowest	47.6	38.2	44.7	46.8	19.0	15.8	1,164
Second	58.0	47.2	58.5	59.2	26.4	22.9	1,284
Middle	63.4	49.3	67.0	62.8	29.0	25.2	1,303
Fourth	70.6	47.7	65.4	65.8	30.6	27.4	1,375
Highest	74.3	54.4	71.0	71.1	39.2	35.1	1,440
Total	63.4	47.7	61.9	61.7	29.3	25.7	6,566

Note: Currently married includes women in consensual union (living together). Formerly married includes divorced, separated, and widowed. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] The two most common local misconceptions involve transmission by mosquito bites and by sharing food with someone with AIDS.

[2] Comprehensive knowledge means knowing that use of a condom during every sexual intercourse and having just one uninfected and 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 (transmission by mosquito bites and by sharing food with someone with AIDS).

Table 13.3.2 Misconceptions and 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 AIDS transmission, and the percentage with a comprehensive knowledge about AIDS, by background characteristics, Armenia 2005

Background characteristic	Percentage of men who say that: A healthy-looking person can have the AIDS virus	AIDS cannot be transmitted by mosquito bites	AIDS cannot be transmitted by coughing	A person cannot become infected by sharing food with someone with AIDS	Percentage who say that a healthy-looking person can have the AIDS virus and who reject the two most common misconceptions[1]	Percentage with a comprehensive knowledge about AIDS[2]	Number of men
Age							
15-19	44.1	18.5	39.3	30.2	7.1	6.7	292
20-24	69.9	32.8	52.6	53.4	25.6	25.4	237
25-29	72.5	41.3	64.8	59.4	31.3	31.1	202
30-39	70.0	43.3	60.5	53.8	29.9	29.1	306
40-49	66.5	37.8	57.5	55.1	30.1	29.3	410
15-24	55.6	24.9	45.3	40.6	15.4	15.1	529
Marital status							
Never married	57.0	28.1	47.0	42.5	17.5	17.2	615
Ever had sex	74.6	38.1	56.3	50.4	27.0	26.9	280
Never had sex	42.3	19.7	39.2	36.0	9.6	9.1	336
Currently married	69.5	39.8	60.4	55.7	30.3	29.5	815
Formerly married	*	*	*	*	*	*	17
Residence							
Urban	66.4	35.7	58.0	52.5	25.6	25.0	913
Rural	60.2	33.2	48.9	46.0	23.7	23.2	534
Region							
Yerevan	70.1	38.0	60.1	53.1	29.4	28.8	547
Aragatsotn	73.8	65.5	83.2	79.4	49.7	47.3	71
Ararat	51.4	28.4	32.4	30.2	19.1	18.7	110
Armavir	79.1	39.7	53.1	44.9	30.7	29.8	139
Gegharkunik	50.7	39.6	45.7	44.0	21.2	21.2	81
Lori	61.3	26.4	46.6	48.5	11.0	11.0	87
Kotayk	68.6	32.5	40.1	42.6	17.3	16.6	151
Shirak	16.0	5.6	60.8	51.3	3.9	3.9	98
Syunik	58.0	21.0	33.7	35.0	16.7	16.7	67
Vayots Dzor	69.8	55.8	57.7	66.8	49.8	48.3	31
Tavush	79.5	32.3	86.8	71.6	25.9	25.9	64
Education							
Basic general	51.3	23.7	42.4	38.3	14.9	13.3	205
Secondary general	60.4	27.9	46.4	39.9	18.4	18.2	586
Specialized secondary	65.2	38.1	55.3	55.5	29.0	27.8	310
Higher	77.0	49.8	75.3	69.4	38.0	37.9	346
Wealth quintile							
Lowest	52.9	28.2	47.7	45.1	19.6	18.9	261
Second	56.5	27.8	52.8	45.8	19.2	18.5	264
Middle	62.1	32.8	48.2	48.9	21.2	20.9	326
Fourth	68.8	39.1	58.4	51.4	29.1	28.5	316
Highest	78.9	44.8	66.2	58.8	34.6	34.1	280
Total	64.1	34.7	54.7	50.1	24.9	24.3	1,447

Note: Currently married includes men in consensual union (living together). Formerly married includes divorced, separated, and widowed. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] The two most common local misconceptions involve transmission by mosquito bites and by sharing food with someone with AIDS.

[2] Comprehensive knowledge means knowing that use of a condom during every sexual intercourse and having just one uninfected and 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 (transmission by mosquito bites and by sharing food with someone with AIDS).

13.3 SOCIAL ASPECTS OF HIV/AIDS

Social aspects of HIV/AIDS include, among others, negative repercussions for those who contract the illness. The stigma is related to the public's perception of HIV/AIDS as associated with marginalized groups such as injecting drug users, sex workers, and homosexuals. The stigma is sometimes expressed by open discrimination, which is of concern because it affects HIV/AIDS prevention efforts. More importantly, stigma may lead to secrecy and denial that hinders people from seeking counseling and testing for HIV.

In the 2005 ADHS, to gauge the level of stigma associated with AIDS, respondents who had heard of HIV/AIDS were asked questions about their attitudes towards people with HIV. These questions included whether respondents would be willing to care for a family member with HIV/AIDS at home, whether they would buy fresh vegetables from shopkeepers who have the AIDS virus, and whether they believe an HIV-positive female teacher should be allowed to continue teaching.

Table 13.4.1 shows that 15 percent of women say that they are willing to care at home for a relative who is sick with HIV/AIDS and 7 percent of women would buy fresh vegetables from a shopkeeper or vendor who has the AIDS virus. Nine percent of women say that an HIV-positive female teacher should be allowed to continue teaching, the same as in 2000. Overall, 35 percent of women would not want a family member's HIV-positive status to remain a secret, a significant decline compared with 75 percent of women in 2000. When taking into account all four stigmas toward persons with AIDS, only 1 percent of women express accepting attitudes on all indicators.

The attitudes of women toward persons infected with HIV vary across subgroups. In general, better-educated women, women in higher wealth quintiles, and urban women are more likely to have accepting attitudes on all four indicators toward persons with HIV/AIDS than other women. Across regions, women in Lori are the most likely to be willing to take care of a relative with HIV/AIDS at home and, after women in Yerevan, are most likely to not want a family member's HIV positive status to remain secret. Women in Ararat, on the other hand, are the least likely to accept persons with HIV/AIDS.

Table 13.4.2 shows similar patterns among men. Fifteen percent of men, the same percentage as among women, say that they are willing to care at home for a relative who is sick with the AIDS virus, and 6 percent would buy fresh vegetables from a person who has HIV/AIDS, about the same proportion as women. On the other two attitudinal questions, men show lower acceptance than women. Only 6 percent say that an HIV-positive female teacher should be allowed to continue teaching, and 30 percent say that they would not want to keep a family member's HIV-positive status a secret, indicating a decline in both perceptions during the past five years (13 and 65 percent, respectively in 2000). As in the case of women, better-educated men and men in higher wealth quintiles are slightly more likely than other men to accept persons with HIV/AIDS. Men in Ararat region also are less likely to accept persons with HIV/AIDS than men in other regions. However, men are much more likely than women to not want to keep secret a family member's HIV status in some regions; 80 percent of men in Lori and 65 percent in Armavir would not want to keep a family member's HIV-positive status a secret—twice the corresponding percentages for women.

Table 13.4.1 Accepting attitudes toward those living with HIV: Women

Among women age 15-49 who have heard of AIDS, percentage expressing specific accepting attitudes toward people with HIV, by background characteristics, Armenia 2005

Background characteristic	Percentage of women who: Are willing to care for a relative sick with the AIDS virus in the respondent's home	Would buy fresh vegetables from a shopkeeper with the AIDS virus	Say that a female teacher with the AIDS virus and who is not sick should be allowed to keep teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Percentage expressing accepting attitudes on all four indicators	Number of women who have heard of AIDS
Age						
15-19	15.2	6.7	12.0	34.8	1.0	1,020
20-24	15.0	7.1	9.8	36.3	1.8	1,084
25-29	15.1	6.8	9.8	37.2	1.7	906
30-39	15.9	7.8	9.4	34.9	1.2	1,423
40-49	12.6	5.2	7.5	32.9	1.4	1,833
15-24	15.1	6.9	10.9	35.6	1.4	2,105
Marital status						
Never married	17.6	7.9	13.1	38.0	1.6	1,898
Ever had sex	*	*	*	*	*	25
Never had sex	17.4	7.8	12.9	37.9	1.7	1,872
Currently married	13.0	5.9	7.5	33.4	1.2	3,907
Formerly married	15.5	6.7	10.1	34.1	1.7	462
Residence						
Urban	16.7	7.5	10.8	38.1	1.6	4,093
Rural	10.6	4.9	6.7	28.8	1.0	2,174
Region						
Yerevan	19.3	7.6	12.2	44.3	2.1	2,446
Aragatsotn	9.7	1.3	5.3	25.3	0.1	255
Ararat	1.6	1.5	1.6	32.8	0.0	430
Armavir	14.8	5.4	8.5	23.3	0.3	524
Gegharkunik	11.3	13.0	16.0	33.8	2.8	417
Lori	24.9	10.5	9.7	39.2	1.4	518
Kotayk	12.3	8.5	9.5	32.3	1.9	523
Shirak	6.3	1.9	2.9	30.7	0.0	509
Syunik	3.9	3.8	5.8	3.0	0.0	271
Vayots Dzor	16.2	0.8	1.5	7.3	0.0	105
Tavush	12.2	6.2	10.5	33.7	1.6	269
Education						
Basic general	10.8	3.9	6.4	26.3	0.0	424
Secondary general	11.2	4.1	6.2	31.8	1.0	2,295
Specialized secondary	13.4	6.1	8.4	33.4	1.0	1,957
Higher	21.9	11.6	16.1	43.5	2.8	1,591
Wealth quintile						
Lowest	10.4	5.1	5.3	27.8	0.6	1,019
Second	11.0	3.7	6.5	29.8	0.5	1,204
Middle	15.8	7.1	10.8	39.7	1.8	1,266
Fourth	14.8	7.1	8.9	35.4	1.7	1,346
Highest	19.3	9.2	14.0	39.5	2.0	1,432
Total	14.6	6.6	9.4	34.9	1.4	6,267

Note: Currently married includes women in consensual union (living together). Formerly married includes divorced, separated, or widowed. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

Table 13.4.2 Accepting attitudes toward those living with HIV: Men

Among men age 15-49 who have heard of HIV/AIDS, percentage expressing specific accepting attitudes toward people with HIV, by background characteristics, Armenia 2005

Background characteristic	Percentage of men who: Are willing to care for a relative sick with the AIDS virus in the respondent's home	Would buy fresh vegetables from a shopkeeper with the AIDS virus	Say that a female teacher with the AIDS virus and who is not sick should be allowed to keep teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Percentage expressing accepting attitudes on all four indicators	Number of men who have heard of AIDS
Age						
15-19	14.0	4.0	5.2	37.1	0.9	238
20-24	16.9	6.3	7.0	28.3	0.3	223
25-29	14.5	4.1	2.9	25.4	0.2	195
30-39	17.5	4.2	3.7	24.7	0.0	290
40-49	13.6	9.7	8.9	31.3	1.3	389
15-24	15.4	5.1	6.1	32.8	0.6	462
Marital status						
Never married	17.3	5.1	5.1	30.4	0.5	543
Ever had sex	22.4	5.2	4.5	28.7	0.1	267
Never had sex	12.4	5.0	5.8	32.0	0.8	276
Currently married	13.6	6.6	6.3	28.8	0.7	780
Formerly married	*	*	*	*	*	13
Residence						
Urban	17.3	7.1	5.9	29.0	0.5	847
Rural	11.6	4.4	6.0	30.4	0.8	489
Region						
Yerevan	22.1	7.5	5.9	26.2	0.4	506
Aragatsotn	21.8	4.5	10.8	16.4	0.3	71
Ararat	1.0	0.0	2.4	1.0	0.0	110
Armavir	2.5	1.9	0.9	65.4	0.9	136
Gegharkunik	9.3	10.3	12.1	30.4	0.7	73
Lori	13.5	8.7	2.1	80.0	2.1	81
Kotayk	19.6	4.5	7.8	28.2	0.0	148
Shirak	0.0	8.8	1.1	13.9	0.0	78
Syunik	6.1	6.4	1.0	7.5	0.0	47
Vayots Dzor	4.9	3.2	2.6	6.0	0.8	28
Tavush	35.0	10.3	22.9	26.8	4.3	59
Education						
Basic general	13.9	4.5	4.4	30.1	0.0	164
Secondary general	12.8	4.6	5.0	30.0	0.8	542
Specialized secondary	14.6	6.5	9.2	29.0	0.7	292
Higher	20.2	8.9	5.2	28.9	0.6	338
Wealth quintile						
Lowest	11.5	3.4	3.3	30.8	0.1	231
Second	12.2	7.3	9.8	27.2	1.4	236
Middle	13.6	4.9	8.0	31.0	0.8	306
Fourth	14.3	7.4	4.6	30.2	0.1	295
Highest	24.0	7.2	3.7	28.0	0.8	267
Total	15.2	6.1	5.9	29.5	0.6	1,336

Note: Currently married includes men in consensual union (living together). Formerly married includes divorced, separated, or widowed. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

13.4 MULTIPLE SEXUAL PARTNERSHIPS

In the context of prevention of HIV/AIDS and other sexually transmitted infections (STIs), limiting the number of sexual partners and having protected sex are crucial to the fight against the epidemic. Condom use is an important tool in the fight to curtail the spread of HIV/AIDS. Although truly effective protection would require condom use at every sexual encounter, the most important encounters in which to use condoms are considered "higher-risk." In the ADHS, women and men who ever had sexual intercourse were asked questions about the number of partners with whom they had sexual intercourse in the 12 months preceding the survey, type of partner with whom they had sexual intercourse, and the number of sexual partners in their whole life. In this survey, higher-risk intercourse is defined as sexual intercourse with a non-marital, non-cohabitating partner in the 12 months preceding the survey.

Tables 13.5.1 and 13.5.2 show among women and men who had sexual intercourse in the past 12 months the percentage who had more than one sexual partner in the 12 months preceding the survey. Almost no women who had sexual intercourse in the 12 months before the survey reported having two or more sexual partners in the reference period and very few had engaged in higher-risk sex. While less than 1 percent of women had two or more sexual partners in the past year, the corresponding proportion for men is 12 percent. Only 1 percent of women report having had higher-risk sex in the 12 months before the survey, compared with almost three in ten men (28 percent).

Among men who have had sex in the last 12 months, those under age 25 are the most likely to be engaged in higher-risk sex (Table 13.5.2). For example, four in ten men age 20-24 have had two or more sexual partners in the last 12 months and 73 percent of these men had high-risk sexual intercourse. The percentage of men who had multiple partners in the last 12 months increases with the wealth quintile to peak at the middle category of the index. Having higher-risk sex is associated with the man's marital status; among men who have had sex in the last 12 months, never-married men are the most likely to have multiple partners (34 percent) and almost all of them engage in higher-risk sex (98 percent). The latter finding is hardly surprising, because never-married men who have had sex in the last year by definition have had sex with a non-marital partner; the only reason it is not 100 percent is that a few men who reported never having married reported a sexual partner who was a wife or live-in partner.

Seventy-six percent of men who had higher-risk sexual encounters in the 12 months preceding the survey reported using a condom at the last higher-risk sexual intercourse, a significant increase from 43 percent in 2000. Protected higher-risk sex in the last 12 months was least likely among men age 25-29 and those with specialized secondary education, less than two-thirds of whom used a condom at the last high-risk sex.

Among those who ever had sexual intercourse, the mean number of lifetime sexual partners is 1.0 for women and 5.6 for men. Even teenage men report that they had 5.5 sexual partners in their life. The mean number of lifetime sexual partners increases with education, from 4.6 partners for men with basic general education to 6.4 partners for those with higher than specialized education. Although men in the highest wealth quintile have the highest mean number of sexual partners in their lifetime, the association between wealth index and number of lifetime sexual partners is not linear. Across regions, men in Armavir report having the highest number of lifetime sexual partners (8.8), while men in Shirak report having the lowest (1.0).

Table 13.5.1 Multiple sexual partners and higher-risk sexual intercourse: Women

Among women age 15-49 who had sexual intercourse in the past 12 months, the percentage who had intercourse with more than one partner and the percentage who had higher-risk sexual intercourse in the past 12 months, and the mean number of sexual partners during their lifetime for women who ever had sexual intercourse, by background characteristics, Armenia 2005

	Multiple sexual partners and higher-risk intercourse in the past 12 months			Mean number of sexual partners in lifetime	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Percentage who had higher-risk intercourse in the past 12 months[1]	Number of women who had sexual intercourse	Mean number	Number of women who ever had intercourse
Age					
15-19	0.0	0.0	78	1.0	79
20-24	0.0	0.4	505	1.0	518
25-29	0.0	1.3	694	1.0	737
30-39	0.2	1.9	1,180	1.1	1,366
40-49	0.0	1.4	1,473	1.0	1,834
15-24	0.0	0.4	583	1.0	597
Marital status					
Never married	*	*	19	*	25
Currently married	0.0	0.1	3,848	1.0	4,033
Formerly married	3.3	50.7	64	1.3	476
Residence					
Urban	0.1	2.2	2,375	1.1	2,818
Rural	0.0	0.2	1,555	1.0	1,717
Region					
Yerevan	0.2	2.8	1,341	1.1	1,623
Aragatsotn	0.0	0.0	190	1.0	207
Ararat	0.0	0.4	288	1.0	337
Armavir	0.0	0.7	361	1.0	414
Gegharkunik	0.0	0.1	297	1.0	324
Lori	0.0	0.0	328	1.0	369
Kotayk	0.0	2.2	357	1.0	395
Shirak	0.0	0.8	341	1.0	384
Syunik	0.0	0.0	184	1.0	203
Vayots Dzor	0.0	0.8	62	1.0	71
Tavush	0.0	0.7	181	1.1	208
Education					
Basic general	0.0	0.9	234	1.1	277
Secondary general	0.0	1.5	1,575	1.1	1,794
Specialized secondary	0.2	1.2	1,315	1.0	1,522
Higher	0.0	1.6	807	1.1	941
Wealth quintile					
Lowest	0.0	1.1	747	1.0	857
Second	0.0	1.5	781	1.0	897
Middle	0.0	1.6	775	1.1	917
Fourth	0.0	1.4	806	1.0	950
Highest	0.3	1.2	822	1.0	913
Total	0.1	1.4	3,931	1.0	4,534

Note: Currently married includes women in consensual union (living together). Formerly married includes divorced, separated, or widowed. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Sexual intercourse with a partner who was neither a spouse nor who lived with the respondent.

Table 13.5.2 Multiple sexual partners and higher-risk sexual intercourse: Men

Among men age 15-49 who had sexual intercourse in the past 12 months, the percentage who had intercourse with more than one partner and the percentage who had higher-risk sexual intercourse in the past 12 months; and among those having higher-risk intercourse in the last 12 months, the percentage reporting that a condom was used at last higher-risk intercourse, and the mean number of sexual partners during their lifetime for men who ever had sexual intercourse, by background characteristics, Armenia 2005

	Multiple sexual partners and higher-risk intercourse in the past 12 months			Condom use at last higher-risk intercourse in the past12 months		Mean number of sexual partners in lifetime	
Background characteristic	Percentage who had 2+ partners in the past 12 months	Percentage who had higher-risk intercourse in the past 12 months[1]	Number of men who had sexual intercourse	Percentage who reported condom use at last higher-risk intercourse	Number of men who had higher-risk intercourse	Mean number	Number of men who ever had intercourse
Age							
15-19	(17.3)	(100.0)	36	(84.2)	36	(5.5)	39
20-24	38.8	73.0	155	87.1	113	5.8	168
25-29	16.0	35.2	179	64.6	63	5.0	182
30-39	7.7	17.7	300	(80.4)	53	4.8	283
40-49	3.5	6.9	389	*	27	6.4	368
15-24	34.8	78.1	191	86.4	149	5.8	208
Marital status							
Never married	33.5	98.2	242	77.8	238	6.7	267
Currently married	6.3	6.0	804	(72.0)	48	5.2	758
Formerly married	*	*	12	*	6	*	16
Residence							
Urban	13.2	31.1	690	78.1	215	6.0	668
Rural	11.1	20.9	368	71.8	77	4.9	374
Region							
Yerevan	13.4	35.3	433	80.8	153	6.6	424
Aragatsotn	1.4	12.5	53	*	7	4.0	53
Ararat	5.9	26.4	79	*	21	5.7	78
Armavir	18.9	31.7	108	(68.6)	34	8.8	94
Gegharkunik	15.6	23.4	58	*	14	4.4	60
Lori	(5.4)	(9.1)	57	*	5	(7.0)	57
Kotayk	31.1	44.8	106	70.0	48	4.8	106
Shirak	0.0	0.0	55	na	0	1.0	57
Syunik	0.0	10.0	44	*	4	2.7	45
Vayots Dzor	2.1	10.9	21	*	2	4.9	21
Tavush	4.5	9.5	45	*	4	2.3	46
Education							
Basic general	10.5	38.0	115	67.9	44	4.6	117
Secondary general	13.0	30.1	390	82.0	117	5.2	390
Specialized secondary	8.3	18.5	280	(62.5)	52	5.8	261
Higher	16.7	28.9	273	82.0	79	6.4	274
Wealth quintile							
Lowest	4.9	11.3	183	*	21	5.0	187
Second	8.9	18.6	183	(79.9)	34	5.4	183
Middle	20.1	40.2	230	72.7	92	5.9	223
Fourth	12.7	33.4	226	81.5	75	5.2	216
Highest	13.2	29.3	236	82.1	69	6.4	232
Total	12.4	27.6	1,058	76.4	292	5.6	1,042

Note: Currently married includes men in consensual union (living together). 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.
na = Not applicable
[1] Sexual intercourse with a partner who was neither a spouse nor who lived with the respondent

13.5 PAID SEX

Male respondents in the 2005 ADHS were asked whether they had paid money in exchange for sex in the 12 months preceding the survey. The findings are reported in Table 13.6. Among men age 15-49, 2 percent reported paying for sex in the last 12 months. There is no clear pattern of this practice by age and education. However, men age 20-24 and those with basic general education are most likely to have sex with prostitutes (4 percent). Differentials by region indicate that at least 4 percent of men had paid sex in the last 12 months in Ararat, Gegharkunik, and Kotayk regions. In contrast, none of the men interviewed in Lori, Shirak, Vayots Dzor, and Tavush regions reported having paid for sex in the last 12 months. The association between payment for sexual relations and wealth index is not clear.

Table 13.6 Payment for sexual intercourse

Percentage of men age 15-49 reporting payment for sexual intercourse in the past 12 months, by background characteristics, Armenia 2005

Background characteristic	Percentage reporting sex with prostitute in the past 12 months	Number of men
Age		
15-19	2.2	292
20-24	4.3	237
25-29	2.3	202
30-39	0.1	306
40-49	0.4	410
15-24	3.2	529
Marital status		
Never married	3.4	615
Currently married	0.3	815
Residence		
Urban	1.3	913
Rural	2.1	534
Region		
Yerevan	0.8	547
Aragatsotn	0.6	71
Ararat	4.5	110
Armavir	2.1	139
Gegharkunik	4.4	81
Lori	0.0	87
Kotayk	4.2	151
Shirak	0.0	98
Syunik	0.6	67
Vayots Dzor	0.0	31
Tavush	0.0	64
Education		
Basic general	3.9	205
Secondary general	1.2	586
Specialized secondary	0.1	310
Higher	2.3	346
Wealth quintile		
Lowest	1.1	261
Second	2.0	264
Middle	2.4	326
Fourth	0.1	316
Highest	2.4	280
Total	1.6	1,447

13.6 PREVALENCE OF SEXUALLY TRANSMITTED INFECTIONS

Both female and male respondents were asked whether they had a sexually transmitted infection (STI) or had experienced symptoms of an STI in the 12 months preceding the survey. It is important to note that these data are likely to underestimate the true prevalence of STIs for a number of reasons. First, if symptoms are not obvious or prolonged, they may not be recognized as an STI. Furthermore, health care may not be sought for STIs because of the embarrassment or the presumed stigma associated with such infections, and they may go undiagnosed. Even if an individual knows she/he has an STI, there may be a reluctance to report the infection during an interview.

Table 13.7 shows that, as in 2000, less than 1 percent of women and men reported having an STI in the past 12 months. These results suggest underreporting of STIs. However, when asked whether they had experienced an abnormal genital discharge in the last 12 months, 7 percent of women reported that they had. To the extent that women may report normal genital discharge as abnormal, this may be an overestimate of any serious STI. One percent of women reported a genital sore or ulcer, which is of concern in the context of evidence that sores or ulcers (whether an actual STI or not) may facilitate transmission of HIV, especially if left untreated. Overall, 8 percent of women reported having an STI, genital discharge, or genital sore or ulcer, substantially less than in 2000, when one-quarter of women who ever had sex reported having these symptoms or an STI. Prevalence of STIs or

their symptoms is twice as common as the national average among women with the lowest education; it is also higher among rural women and poor women than other women. The survey results indicate significant regional variation in the prevalence of STIs or symptoms of STIs among women, from a low of less than 1 percent in Shirak to a high of 20 percent in Gegharkunik.

Table 13.7 Self-reported prevalence of sexually transmitted infections (STIs) and STI symptoms

Among women and men age 15-49 who ever had sexual intercourse, the percentage self-reporting having an STI and/or symptoms of an STI in the past 12 months, by background characteristics, Armenia 2005

	Women					Men				
Background characteristic	Percentage with an STI	Percentage with abnormal genital discharge	Percentage with genital sore/ulcer	Percentage with STI/ discharge/ genital sore/ ulcer	Number of women who ever had sexual intercourse	Percentage with an STI	Percentage with abnormal genital discharge	Percentage with genital sore/ulcer	Percentage with STI/ discharge/ genital sore/ ulcer	Number of men who ever had sexual intercourse
Age										
15-19	0.0	12.8	0.0	12.8	79	(0.0)	(2.9)	(0.0)	(2.9)	39
20-24	0.6	9.0	1.6	9.4	518	0.0	0.0	0.0	0.0	174
25-29	2.0	10.9	1.0	11.5	740	0.6	0.6	0.1	0.6	186
30-39	1.4	7.7	1.4	8.1	1,367	0.0	0.0	0.0	0.0	303
40-49	0.2	4.7	1.3	5.7	1,844	0.0	0.0	1.4	1.4	409
15-24	0.6	9.5	1.3	9.8	598	0.0	0.5	0.0	0.5	213
Marital status										
Never married	*	*	*	*	25	0.0	0.4	0.0	0.4	280
Currently married	0.8	7.5	1.4	8.2	4,044	0.1	0.1	0.7	0.8	815
Formerly married	0.9	4.9	0.4	5.1	479	*	*	*	*	17
Residence										
Urban	1.2	6.5	1.3	7.2	2,830	0.1	0.3	0.6	0.9	723
Rural	0.5	8.5	1.3	9.1	1,719	0.0	0.0	0.4	0.4	388
Region										
Yerevan	1.8	7.1	1.0	7.7	1,630	0.0	0.0	0.0	0.0	452
Aragatsotn	0.1	6.3	2.2	7.5	207	0.0	0.0	0.3	0.3	58
Ararat	0.0	0.4	0.7	1.1	337	0.0	0.0	0.0	0.0	80
Armavir	0.7	7.6	1.8	7.9	414	0.0	0.0	0.0	0.0	111
Gegharkunik	1.2	18.6	1.7	19.8	324	0.0	0.0	0.0	0.0	63
Lori	0.0	8.9	1.5	8.9	371	(0.0)	(0.0)	(8.9)	(8.9)	62
Kotayk	1.0	9.3	3.9	11.9	397	0.9	1.9	0.0	1.9	113
Shirak	0.0	0.3	0.0	0.3	386	(0.0)	(0.0)	(0.0)	(0.0)	57
Syunik	0.0	3.3	0.0	3.3	204	0.0	0.0	0.0	0.0	46
Vayots Dzor	0.7	1.0	0.1	1.9	71	0.0	0.0	0.0	0.0	21
Tavush	0.0	14.0	0.1	14.0	208	0.0	0.0	0.0	0.0	46
Education										
Basic general	1.9	15.2	0.0	15.2	278	0.0	0.0	0.0	0.0	126
Secondary general	0.9	8.4	1.1	8.8	1,800	0.3	0.3	0.3	0.5	412
Specialized secondary	0.9	5.9	1.6	6.7	1,527	0.0	0.0	1.2	1.2	287
Higher	0.4	5.1	1.4	6.0	944	0.0	0.4	0.4	0.8	287
Wealth quintile										
Lowest	0.7	9.9	2.0	10.2	860	0.0	0.0	0.1	0.1	194
Second	0.9	8.8	1.0	9.5	898	0.0	0.0	0.9	0.9	192
Middle	0.7	8.9	1.1	9.3	917	0.0	0.0	0.0	0.0	242
Fourth	1.5	4.7	1.1	5.4	954	0.4	0.4	0.0	0.4	239
Highest	0.6	4.3	1.2	5.4	919	0.0	0.5	1.6	2.0	243
Total	0.9	7.3	1.3	7.9	4,549	0.1	0.2	0.5	0.7	1,111

Note: Currently married includes respondents in consensual union (living together). Formerly married includes divorced, separated, or widowed. 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.

As in the 2000 ADHS, almost no men interviewed in the 2005 ADHS reported having had an STI, an abnormal genital discharge, or a genital sore or ulcer.

If respondents reported an STI or an STI symptom (i.e., genital discharge or sore or ulcer) in the past 12 months, they were asked questions about their actions in response to the illness or symptom. Due to the small number of men reporting an STI or STI symptoms, only the data on women are meaningful. Slightly more than half of the women (52 percent) who reported an STI or STI symptoms in the past 12 months sought advice or treatment. Among women who sought treatment, almost all went to a medical facility or a health professional. However, 35 percent of women with an STI or STI symptoms did not solicit advice or seek treatment (data not shown in a table).

13.7 PREVALENCE OF INJECTIONS

Respondents in the 2005 ADHS were asked if they had any injections from a doctor, nurse, pharmacist, dentist, or health worker in the 12 months preceding the survey and, if so, how many such injections (medical injections) they received in that period, and who gave the last of these injection. It should be noted that medical injections that are self-administered (e.g., insulin for diabetes) are not considered medical injections.

Table 13.8 shows the percentage of women and men age 15-49 who received a medical injection and whether the syringe and needle used were taken from an unopened package or not. Data in Table 13.8 show that 13 percent of women and 9 percent of men report having received an injection in the 12 months preceding the survey, with an average of 1.9 injections for women and 1.8 injections for men in the last 12 months. Older women are more likely than younger women to report getting an injection, with an average of 2.6 injections in the past 12 months. Women in Armavir, Lori, Kotayk, Gegharkunik, and Tavush regions report getting more injections (average of 2.7 to 3.1) than those in other regions.

When asked whether the syringe used in the last medical injection came from a new unopened package, 98 percent of women gave a positive response. There are small variations in this proportion across subgroups of population. Overall, 97 percent of men said that for the last medical injection they received, the syringe was taken from a new, unopened package.

Table 13.8 Prevalence of medical injections

Percentage of women and men age 15-49 who received at least one medical injection in the past 12 months, the average number of medical injections per person in the past 12 months, and among women 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 characteristic, Armenia 2005

	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 the last medical injection, syringe and needle taken from a new, unopened package	Number of women who received a medical injection 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
Age								
15-19	6.4	0.5	1,123	98.6	72	7.9	0.5	292
20-24	12.2	1.1	1,131	94.0	138	9.0	2.8	237
25-29	15.3	2.1	929	100.0	142	5.5	0.8	202
30-39	16.3	2.6	1,460	99.1	237	6.5	1.1	306
40-49	14.8	2.6	1,922	98.9	285	12.7	3.2	410
15-24	9.3	0.8	2,254	95.5	210	8.4	1.5	529
Residence								
Urban	12.6	1.7	4,194	98.8	527	7.1	1.2	913
Rural	14.7	2.3	2,372	97.6	348	11.7	2.8	534
Region								
Yerevan	11.8	1.4	2,468	98.4	291	3.7	0.8	547
Aragatsotn	14.9	1.9	292	96.5	43	16.1	1.9	71
Ararat	8.3	0.9	462	100.0	38	2.4	2.0	110
Armavir	18.7	2.8	567	97.4	106	14.9	2.7	139
Gegharkunik	11.9	3.1	443	95.2	53	6.8	1.1	81
Lori	12.9	2.8	537	96.9	69	21.6	5.4	87
Kotayk	21.7	2.7	563	99.3	122	24.1	4.4	151
Shirak	10.7	1.3	563	100.0	60	4.6	0.3	98
Syunik	8.4	1.4	281	(100.0)	24	2.2	0.4	67
Vayots Dzor	8.8	1.4	107	(98.0)	9	3.7	1.6	31
Tavush	20.7	3.1	285	99.6	59	7.1	2.0	64
Education								
Basic general	12.7	1.2	529	98.8	67	8.7	1.5	205
Secondary general	14.3	2.4	2,440	98.3	349	7.8	1.5	586
Specialized secondary	14.9	2.2	1,997	98.8	298	13.2	3.8	310
Higher	10.0	1.1	1,600	97.2	160	6.8	0.7	346
Wealth quintile								
Lowest	14.2	2.6	1,164	97.8	165	8.3	1.5	261
Second	14.7	2.0	1,284	97.7	189	9.6	1.8	264
Middle	12.8	1.8	1,303	100.0	167	11.5	3.3	326
Fourth	13.4	1.9	1,375	97.3	184	6.9	1.5	316
Highest	11.8	1.4	1,440	98.9	170	7.6	0.7	280
Total	13.3	1.9	6,566	98.3	875	8.8	1.8	1,447

Note: Medical injections are those given by a doctor, nurse, pharmacist, dentist, or any other health worker. Figures in parentheses are based on 25-49 unweighted cases.

13.8 HIV/AIDS-Related Knowledge and Behavior among Youth

This section addresses knowledge of HIV/AIDS issues and related sexual behavior among youths age 15-24. This age group is of particular interest for HIV/AIDS programs. The period between initiation of sexual activity and marriage is often a time of sexual experimentation, but it may also involve risky behaviors. Comprehensive knowledge of HIV/AIDS transmission and prevention and knowledge of sources of condoms among youth is analyzed in this section. Issues such as abstinence, age at sexual debut, age differences between partners, and condom use are also covered. Young respondents in the 2005 ADHS were asked the same set of questions as older respondents about whether condom use and limiting number of partners to one uninfected partner can help protect against getting the AIDS virus, and whether a healthy-looking person can have the AIDS virus (see Tables 13.3.1 and 13.3.2).

The data in Table 13.9 show the level of comprehensive knowledge among young people. The table shows the proportion who, in response to prompted questions, answer in affirmative that people can reduce their chances of getting the AIDS virus by having sex with only one uninfected, faithful partner and by using condoms consistently; who know that a healthy-looking person can have the AIDS virus; and who know that HIV cannot be transmitted by mosquito bites or by sharing food with a person who is infected with the AIDS virus.

Only 23 percent of young women and 15 percent of young men have a comprehensive knowledge about HIV/AIDS. However, young women and men age 20-24 have virtually the same level of knowledge. The level of knowledge increases with education. The comprehensive knowledge of AIDS is much higher among urban young women than their rural counterparts, but the difference by residence among young men is rather small. Interestingly, never-married young women are as likely as those who have been married to have comprehensive knowledge about HIV/AIDS. Young men age 15-24 who never had sex are least likely to have comprehensive knowledge about HIV/AIDS and there is virtually no difference between never-married young men who ever had sex and those who are married. Regional differences among young women are notable, ranging from 9 percent in Tavush to 34 percent in Syunik. Differentials in comprehensive knowledge of HIV/AIDS among young men are less pronounced than among young women.

Seven in ten young women and a slightly lower percentage of young men know a condom source. Women age 20-24 are more likely than those age 15-19 to know of a condom source. The relationship between age and knowing a condom source is reversed among young men. Five in ten men age 20-24 and more than seven in ten younger men know a condom source. Young women in urban areas are more likely to know a condom source than those who live in rural areas, but among young men, there is no such differential. Among women, the knowledge of a condom source increases with education and wealth index, but for men these two background characteristics show no clear relationships. The variation in knowledge of a condom source by region is greater for women than for men; knowledge of a condom source ranges between 32 and 88 percent for young women, and 44 and 85 percent for young men.

Table 13.9 Comprehensive knowledge about AIDS and of a source for 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, Armenia 2005

	Women age 15-24			Men age 15-24		
Background characteristic	Percentage with comprehensive knowledge of AIDS[1]	Percentage who know a condom source[2]	Number of women	Percentage with comprehensive knowledge of AIDS[1]	Percentage who know a condom source[2]	Number of men
Age						
15-19	19.3	56.7	1,123	6.7	71.6	292
15-17	15.7	46.8	683	7.0	73.1	220
18-19	24.8	72.0	440	5.9	67.0	72
20-24	26.0	81.1	1,131	25.4	51.0	237
20-22	24.1	78.4	735	26.5	53.5	151
23-24	29.5	86.0	396	23.5	46.5	86
Marital status						
Never married	22.7	65.3	1,657	13.9	60.4	479
Ever had sex	na	na	0	25.0	19.3	164
Never had sex	22.7	65.3	1,656	8.1	81.7	315
Currently married	22.7	79.4	582	(26.5)	(82.1)	50
Residence						
Urban	25.7	80.3	1,433	14.4	62.1	311
Rural	17.3	49.1	821	16.1	62.8	217
Region						
Yerevan	27.1	87.9	857	13.0	60.2	180
Aragatsotn	18.7	32.0	100	43.9	54.8	22
Ararat	11.8	51.7	152	15.7	70.7	55
Armavir	26.3	65.9	196	18.0	73.0	55
Gegharkunik	27.2	37.4	158	(14.4)	(67.8)	29
Lori	10.6	69.2	194	*	*	34
Kotayk	12.1	67.2	201	15.8	60.1	64
Shirak	31.4	61.3	190	(0.0)	(44.1)	37
Syunik	34.0	58.4	82	(13.7)	(54.5)	21
Vayots Dzor	16.4	60.4	38	(20.8)	(85.2)	12
Tavush	9.4	51.4	85	(19.6)	(82.0)	19
Education						
Basic general	8.8	42.8	292	9.0	57.5	115
Secondary general	16.6	56.7	828	14.9	65.9	265
Specialized secondary	26.5	81.3	529	12.1	55.7	41
Higher	34.2	87.4	606	23.2	61.6	108
Wealth quintile						
Lowest	11.9	36.4	377	15.9	63.9	87
Second	21.9	60.8	436	8.1	64.4	96
Middle	26.0	75.0	460	13.9	63.6	138
Fourth	21.1	75.5	451	18.1	62.7	123
Highest	29.3	87.9	530	19.6	56.2	84
Total 15-24	22.6	68.9	2,254	15.1	62.4	529

Note: The total includes 15 young women who were divorced, separated, or widowed. 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.
na = Not applicable
[1] Comprehensive knowledge means knowing that use of condoms 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 (transmission by mosquito bites and by sharing food with someone with AIDS).
[2] Friends, family members, and home are not considered sources for condoms.

13.9 AGE AT FIRST SEX AMONG YOUTH AND CONDOM USE

This section discusses the initiation of sex, premarital and other higher-risk sex, and condom use among young women and young men. Overall, a few women and a small proportion of men age 15-24 in Armenia have had sex by age 15 (Table 13.10). By age 18, however, 9 percent of women and 28 percent of men have started their sexual debut. Never-married young women report never having any sexual relations. The initiation to sex varies according to the respondent's education, wealth status, and residence. Women with less education and those in the lowest wealth quintile are much more likely to start having sexual intercourse at an earlier age than other women. For example, 32 percent of women with basic general education started having sexual intercourse before age 18, compared with only 3 percent of those with higher than specialized secondary education. Across regions, women in Gegharkunik start having sex at an earlier age than women in other regions; 20 percent of women age 15-24 in Gegharkunik have had sex by age 18. On the other hand, only 5 percent of women in Aragatsotn region and 6 percent of women in Armavir and Vayots Dzor regions have had sex by that age.

Men show less definite differentials than women. Variations by education and wealth quintile show few distinct patterns. Regional differentials are also less clear, especially because of the small number of men who have had sex by the specified ages.

It is worth noting that women and men who know a source for condoms are less likely to have had sex at an early age than those who do not. The differences are more pronounced for young men; those who do not know a condom source are almost four times as likely to have had sexual intercourse by age 18 as young men who know a condom source.

Table 13.11 shows, among women and men age 15-24 who have ever had sex, the percentage who used a condom at their first sexual encounter. Almost no young woman report using a condom when she had her first sexual intercourse. More than half of young men report using a condom at their first sex (55 percent). Young men who now know a condom source are less likely to have used a condom at first sex than those who do not know a condom source. The use of condom at first sex by men in urban and rural areas is about the same at just over 50 percent each. Discussion on differentials in using a condom at first sex by young men is limited due to the small number of cases.

Table 13.10 Age at first sexual intercourse among young women and men

Percentage of young women and young men age 15-24 who had sexual intercourse by exact ages 15 and 18, by background characteristics, Armenia 2005

Background characteristic	Women age 15-24		Women age 18-24		Men age 15-24		Men age 18-24	
	Percentage who had sexual intercourse before exact age 15	Number of women	Percentage who had sexual intercourse before exact age 18	Number of women	Percentage who had sexual intercourse before exact age 15	Number of men	Percentage who had sexual intercourse before exact age 18	Number of men
Age								
15-19	0.3	1,123	na	na	2.6	292	na	na
15-17	0.0	683	na	na	2.3	220	na	na
18-19	0.7	440	7.2	440	3.3	72	21.4	72
20-24	0.2	1,131	9.0	1,131	3.0	237	29.5	237
20-22	0.3	735	9.7	735	2.9	151	30.6	151
23-24	0.1	396	7.8	396	3.2	86	27.5	86
Marital status								
Never married	0.0	1,657	0.0	990	2.8	479	26.0	259
Currently married	0.9	582	22.7	566	(2.3)	50	(35.9)	50
Formerly married	*	15	*	15	nc	0	nc	0
Knows a condom source[1]								
Yes	0.1	1,554	8.0	1,234	0.6	330	12.1	169
No	0.5	700	10.6	337	6.3	199	46.4	140
Residence								
Urban	0.1	1,433	6.5	1,026	2.6	311	27.3	191
Rural	0.5	821	12.3	545	3.0	217	28.1	117
Region								
Yerevan	0.0	857	6.6	628	3.7	180	32.9	117
Aragatsotn	0.0	100	5.4	62	9.8	22	(37.0)	11
Ararat	0.0	152	8.7	113	0.0	55	(44.9)	30
Armavir	0.2	196	6.0	126	0.0	55	(30.8	30
Gegharkunik	0.9	158	19.5	109	(4.0)	29	(19.6)	18
Lori	0.0	194	8.0	133	*	34	*	19
Kotayk	0.7	201	10.9	142	6.8	64	(23.9)	41
Shirak	0.7	190	8.0	121	(0.0)	37	*	17
Syunik	0.7	82	11.4	53	(0.0)	21	16.5	12
Vayots Dzor	0.0	38	6.0	27	(0.0)	12	*	7
Tavush	0.3	85	12.1	57	(1.2)	19	*	7
Education								
Basic general	1.3	292	32.0	102	2.5	115	19.1	58
Secondary general	0.2	828	13.5	476	2.9	265	33.8	125
Specialized secondary	0.0	529	5.0	478	6.6	41	(38.7)	31
Higher	0.0	606	2.5	515	1.2	108	20.8	94
Wealth quintile								
Lowest	0.3	377	15.2	238	2.3	87	17.0	46
Second	0.4	436	8.4	302	3.0	96	30.3	41
Middle	0.5	460	10.6	328	3.1	138	21.0	90
Fourth	0.0	451	5.1	317	0.0	123	38.4	77
Highest	0.0	530	5.5	385	6.3	84	(30.1)	55
Total	0.2	2,254	8.5	1,571	2.8	529	27.6	308

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.
na = Not applicable
nc = No cases
[1] Friends, family members, and home are not considered sources for condoms.

Table 13.11 Condom use at first sexual intercourse among youth

Among young women and young men age 15-24 who have ever had sexual intercourse, the percentage who used a condom the first time they had sexual intercourse, by background characteristics, Armenia 2005

Background characteristic	Women age 15-24		Men age 15-24	
	Percentage who used a condom at first sexual intercourse	Number of women who have ever had sexual intercourse	Percentage who used a condom at first sexual intercourse	Number of men who have ever had sexual intercourse
Age				
15-19	0.0	79	(80.1)	39
15-17	*	17	*	18
18-19	0.0	63	*	21
20-24	0.4	518	48.8	174
20-22	0.2	290	54.8	98
23-24	0.7	228	41.0	76
Marital status				
Never married	na	0	57.9	164
Currently married	0.4	582	(43.5)	50
Formerly married	*	15	na	0
Knows a condom source[1]				
Yes	0.3	471	48.0	72
No	0.4	126	57.9	141
Residence				
Urban	0.3	335	53.3	134
Rural	0.4	263	56.6	79
Education				
Basic general	0.0	64	(46.3)	40
Secondary general	0.6	268	58.3	99
Specialized secondary	0.1	178	*	21
Higher	0.4	88	(57.5)	53
Wealth quintile				
Lowest	0.0	118	(53.8)	26
Second	0.8	120	56.6	29
Middle	0.4	129	40.7	57
Fourth	0.5	127	(62.5)	51
Highest	0.0	103	(61.2)	51
Total 15-24	0.4	598	54.5	213

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.
na = Not applicable
[1] Friends, family members, and home are not considered sources for condoms.

The most common means of HIV transmission in many countries is unprotected sex with an infected person. To prevent HIV transmission, it is important that young people practice safe sex through the advocated "ABC" methods (abstinence, being faithful to one uninfected partner, and condom use).

Table 13.12 is confined to young men age 15-24 because, as mentioned before, young women in this age group report having sex only after marriage (Table 13.11). Table 13.12 shows the percentage of never-married young men who had never had sex, the percentage who had sex in the 12 months preceding the survey, and the percentage who used a condom the last time they had sex. Overall, 66 percent of never-married men 15-24 report that they have never had sex, 30 percent had sex in the 12 months preceding the survey, and, of these men, 88 percent used a condom at their last sexual intercourse. The proportion of never-married young men who have never had sex drops rapidly with increasing age and education. For instance, 92 percent of never-married men age 15-17 have never had sex compared with 17 percent of men age 23-24. Sexual initiation by household wealth shows a pattern similar to that of level of education. Less than half (47 percent) of young men in the highest wealth quintile have never had sex, compared with three-quarters (77 percent) of young men in the lowest wealth quintile.

Table 13.12 Premarital sexual intercourse and condom use during premarital sexual intercourse among young men

Among never-married men age 15-24, percentage who have never had sexual intercourse, percentage who had sexual intercourse in the past 12 months and, among those who had premarital sexual intercourse in the past 12 months, percentage who used a condom at last sexual intercourse, by background characteristics, Armenia 2005

Background characteristic	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 who had sexual intercourse in the past 12 months
Age					
15-19	86.6	12.3	292	(84.2)	36
15-17	91.6	7.6	220	*	17
18-19	71.1	26.5	72	*	19
20-24	33.4	56.3	187	88.7	105
20-22	40.5	48.1	130	87.3	63
23-24	17.0	75.3	57	(90.9)	43
Knows a condom source[1]					
Yes	89.1	5.5	289	*	16
No	30.5	66.0	190	98.7	125
Residence					
Urban	61.0	35.6	291	89.1	104
Rural	73.4	19.9	188	(83.3)	38
Education					
Basic general	73.3	23.6	102	*	24
Secondary general	66.6	27.4	248	85.0	68
Specialized secondary	(60.2)	(34.6)	34	*	12
Higher	57.7	39.5	94	(88.9)	37
Wealth quintile					
Lowest	76.9	15.1	80	*	12
Second	78.7	18.8	84	*	16
Middle	64.5	31.5	126	(84.1)	40
Fourth	62.1	32.5	116	(92.8)	38
Highest	46.7	49.6	72	(89.7)	36
Total	65.8	29.5	479	87.6	141

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.
[1] Friends, family members, and home are not considered sources for condoms.

ADULT HEALTH 14

From an epidemiological point of view, Armenia has features of both developed and developing countries. The average life expectancy of a person born in Armenia in 2003 is 68 years—72 years for women and 65 for men (WHO, 2006a). The major causes of death are similar to those of industrialized countries: cardiovascular disease, cancer, and accidents. At the same time, there is a rising incidence of certain infectious diseases, such as tuberculosis (Ministry of Statistics and United Nations Development Program, 1998). This chapter presents information on various aspects of adult health in Armenia, including health care access and barriers to care, visits to an eye doctor, smoking, knowledge of tuberculosis, and prevalence of hypertension.

14.1 Access to and Utilization of Health Care Services

Health Facility Visits and Consultations

Utilization of health care services in Armenia declined during the 1990s (Government of Armenia et al., 1999). One goal of the 2005 ADHS was to provide insight into health care utilization patterns in Armenia. The ADHS asked questions to examine utilization of health care and to identify barriers to health care access. All respondents age 15-49 were asked about their experiences utilizing health care in the three months preceding the survey. First, respondents were asked whether in the three months preceding the survey they had an illness, an accident, or a chronic health problem. Respondents who said that they did have such a problem were asked whether they visited a health facility or consulted a medical professional. Respondents who had not visited a facility or consulted with a health professional were asked why they did not seek medical attention.

Table 14.1 shows that, according to the reports of the respondents, more than one in ten women, men, and children under age five had a health problem in the three months preceding the survey. However, not everyone who reported a health problem had contact with a health care provider. Eight percent of women, 6 percent of men, and 10 percent of children visited a health facility or had a consultation with a health professional in the three months preceding the survey. Less than one percent of respondents reported having had an operation in the three months prior to the survey (data not shown). There is little variation by urban-rural residence.

Table 14.1 also shows hospitalization rates for the one year preceding survey. Two percent of women (excluding births), 3 percent of men, and 6 percent of children were hospitalized in the year preceding the survey. Because of the low percentages of women, men, and children who were hospitalized, it is difficult to analyze by background characteristics.

Table 14.1 Utilization of the health system

Percentage of women and men age 15-49 and children under five who had an illness, accident, or chronic health problem in the three months preceding the survey, percentage who visited a health facility or consulted a health professional in the three months preceding the survey, and percentage of women, men, and children who were hospitalized during the year preceding the survey, by background characteristic, Armenia 2005

Background characteristic	Percentage with problem in past 3 months	Percentage who got consultation in past 3 months	Percentage hospitalized in past year[1]	Number
WOMEN				
Residence				
Urban	13.6	8.0	2.2	4,194
Rural	14.0	7.4	2.5	2,372
Education				
General basic	14.3	6.2	2.0	529
Secondary general	14.1	8.1	2.2	2,440
Specialized secondary	15.4	8.8	2.6	1,997
Higher	11.1	6.4	2.3	1,600
Total	13.8	7.8	2.3	6,566
MEN				
Residence				
Urban	10.3	5.6	2.4	913
Rural	12.7	6.7	2.8	534
Education				
General basic	16.8	7.3	1.7	205
Secondary general	8.3	3.9	2.0	586
Specialized secondary	18.6	11.3	4.3	310
Higher	6.1	4.0	2.5	346
Total	11.2	6.0	2.6	1,447
CHILDREN				
Residence				
Urban	12.7	9.8	6.9	908
Rural	14.6	10.0	5.1	562
Mother's education				
General basic	9.0	4.6	2.2	135
Secondary general	12.6	8.3	7.4	563
Specialized secondary	14.8	12.0	5.9	436
Higher	14.7	11.8	6.2	335
Total	13.4	9.9	6.2	1,470

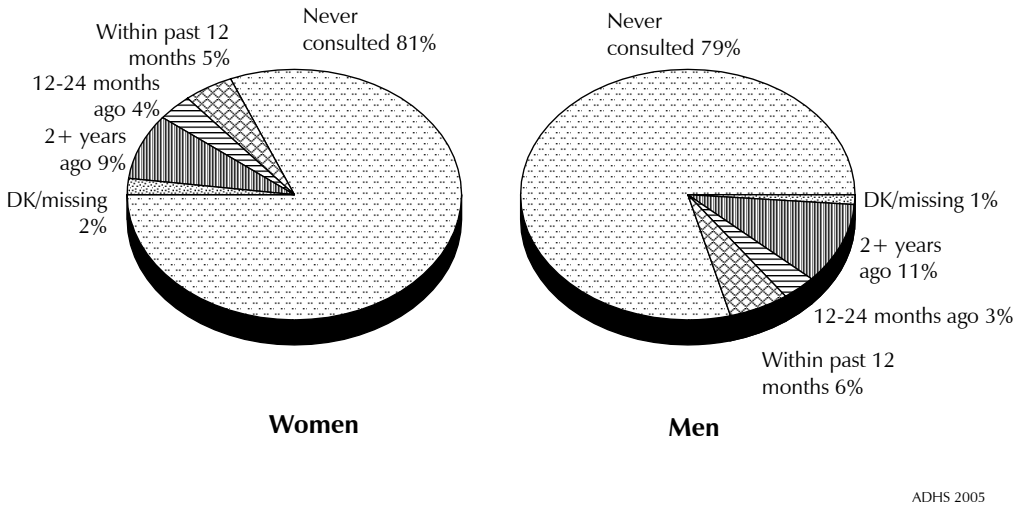
[1] Excludes hospitalization for births

Eye Health

As a population ages, eye health becomes increasingly important for maintenance of a good quality of life, as well as for productive work. Early detection of glaucoma, cataracts, retinal disorders, and eye complications of diabetes are vital for preserving good vision. All women and men interviewed in the ADHS were asked if they ever visited an eye doctor and, if yes, what was the reason for the consultation and what diagnosis, if any, was given.

Eight out of 10 respondents had never consulted an eye doctor (Figure 14.1). Less than one in ten respondents had consulted a doctor during the last two years. Among them, about half of respondents said that the reason for the visit was either a mandatory eye examination or a check up. In addition, about 30 percent of women and about 20 percent of men said that they needed new glasses or had blurry vision. This was confirmed by the doctor's diagnosis: over 40 percent of women and about 20 percent of men were prescribed glasses for reading or for distance (Table 14.2).

Figure 14.1 Consultation with Eye Doctor



Among those who had a visit to an eye doctor during the last five years, only 1 percent or less were diagnosed with a cataract, glaucoma, or a diabetic eye disease; the one exception is among men who visited an eye doctor, 5 percent of whom were diagnosed with cataracts. Half of men and about 40 percent of women were given no diagnosis (Table 14.2). As expected, among those who visited an eye doctor in the five years before the survey, the need for glasses is highest among those over 45 years old; however, almost one-third of women age 15-19 who visited an eye doctor needed glasses for distance or for reading.

Table 14.2 Results of consultation with an eye doctor

Among women and men age 15-49 who had a consultation with an eye doctor during the five years preceding the survey, percentage who received specific diagnoses from an eye doctor, by background characteristics, Armenia 2005

Background characteristic	No diagnosis	Amblyopia	Cataract	Diabetic eye disease	Corneal eye disease	Glaucoma	Retinal disorder	Need glasses for distance	Need glasses for reading	Other	Number of women/men
Age											
15-19	54.7	0.0	1.2	0.0	1.1	0.0	0.0	22.9	8.1	15.4	193
20-24	35.2	0.0	1.2	1.5	5.5	0.0	0.0	34.5	4.9	16.9	162
25-29	44.5	0.0	0.4	0.8	1.4	0.0	0.0	34.0	5.2	16.5	91
30-34	39.8	2.6	4.5	0.0	0.7	0.0	2.3	37.7	3.8	12.2	90
35-39	43.3	0.0	0.2	0.0	3.7	1.8	1.1	23.9	5.1	21.9	84
40-44	39.5	0.0	1.1	0.4	3.5	1.7	0.2	32.2	6.5	16.9	135
45-49	22.6	0.2	1.1	2.6	0.2	4.2	0.0	37.6	33.3	5.9	174
Education											
Basic general	47.8	0.0	0.0	1.6	3.4	0.0	0.4	23.2	3.0	20.2	76
Secondary general	44.7	0.9	1.2	1.5	1.1	1.7	1.2	29.1	9.8	13.6	249
Specialized secondary	39.2	0.0	2.0	1.3	4.5	2.8	0.0	29.0	11.8	12.7	244
Higher	34.6	0.1	1.2	0.0	1.3	0.0	0.0	36.9	13.1	15.1	360
Residence											
Urban	35.2	0.4	1.3	0.8	2.4	1.0	0.3	35.2	11.0	15.4	736
Rural	56.2	0.0	1.3	1.3	1.8	1.9	0.5	18.1	11.2	11.1	192
Region											
Yerevan	29.9	0.5	1.2	0.4	2.8	1.5	0.4	38.1	11.9	17.1	484
Aragatsotn	70.1	0.0	0.5	0.0	0.0	0.0	1.2	11.3	7.9	7.6	24
Ararat	(43.8)	(0.0)	(0.0)	(0.0)	(10.0)	(0.0)	(0.0)	(23.9)	(22.0)	(1.2)	32
Armavir	47.5	0.0	0.0	1.6	0.0	0.0	0.0	21.8	6.3	24.9	63
Gegharkunik	(41.8)	(1.7)	(1.4)	(0.9)	(11.1)	(7.1)	(0.0)	(25.5)	((1.8)	(8.8)	21
Lori	46.6	0.0	0.0	4.1	1.2	3.9	0.0	31.6	10.9	0.0	57
Kotayk	55.3	0.0	2.9	2.4	1.2	0.0	0.0	23.1	9.7	10.2	109
Shirak	61.7	0.0	1.0	0.0	0.0	0.0	0.0	21.2	10.9	8.7	62
Syunik	42.1	0.0	2.8	0.0	0.0	0.0	0.0	36.9	13.2	6.2	39
Vayots Dzor	(41.3)	(0.0)	(9.2)	(0.0)	(0.0)	(0.0)	(0.0)	(46.1)	(3.3)	(0.0)	6
Tavush	29.1	0.0	1.9	0.0	0.0	0.0	3.1	19.2	8.9	42.0	31
Wealth quintile											
Lowest	44.8	0.0	1.7	1.5	4.3	3.3	0.0	24.1	7.6	14.7	79
Second	53.6	0.0	1.8	2.1	0.5	5.4	0.2	18.5	11.2	12.4	118
Middle	47.0	0.0	1.9	0.6	1.0	0.0	0.5	35.6	6.3	9.3	185
Fourth	31.7	1.0	0.5	0.3	3.4	0.9	0.9	31.3	11.9	20.3	235
Highest	34.5	0.1	1.4	0.8	2.4	0.0	0.0	36.3	14.1	13.9	312
Total women	39.6	0.3	1.3	0.9	2.3	1.2	0.4	31.6	11.0	14.5	929
Total men	54.8	0.0	5.0	0.7	3.1	0.8	0.0	15.6	6.9	12.9	217

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

Perceived Barriers to Health Care

The 2005 ADHS included a series of questions designed to obtain information on the problems women perceive that they face in obtaining health care for themselves. This information is particularly important in understanding and addressing the barriers women may face in seeking care. To obtain this information, women age 15-49 were asked whether each of the following factors would be a big problem or not a big problem for them in obtaining health services: getting permission to go, getting money for treatment, the distance to the health facility, the cost of transportation, having to take transportation, not wanting to go alone, concern that there may not be a female provider, concern that there may not be any health provider, concern that the provider will be unfriendly, concern that no drugs will be available, and concern that the service will be poor. Table 14.3 shows the percentage of women who consider each of the individual factors to be a big problem and the percentage reporting at least one of the specified items to be a big problem, according to background characteristics.

Most women (89 percent) reported at least one factor or circumstance as a big problem. The major perceived barrier to women's access to health services is financial. Two-thirds of respondents (66 percent) believe that getting money for treatment is a big problem. Additionally, one-quarter (26 percent) cite the cost of transportation.

Women also report barriers to obtaining health care that are associated with quality of care: more than half (58 percent) report that poor service is a big problem and 44 percent cite concern that the provider may be unfriendly. Over one-third mentioned that availability of either a provider or drugs is a big problem (36 and 35 percent, respectively).

Personal reasons can also affect women's access to health care. Four in ten women cite not wanting to go alone to the health facility as a big problem, while 24 percent are concerned that there may not be a female provider and 19 percent say that getting permission to seek treatment is a big problem.

The proportion of women who say that at least one of the specified factors is a big problem is generally high across all background characteristics. Regional variation is the most significant, ranging from a low of 77 percent of women in Lori to a high of 100 percent in Syunik.

Table 14.3 Problems in accessing health care

Percentage of women age 15-49 who reported they have big problems in accessing health care for themselves when they are sick, by type of problem and background characteristics, Armenia 2005

	Problems in accessing health care												
Background Characteristic	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Cost of trans-portation	Having to take transpor-tation	Not wanting to go alone	Concern there may not be a female provider	Concern no pro-vider available	Concern provider unfriendly	Concern no drugs available	Concern service poor	Any of the specified problems	Number of women
Age													
15-19	34.9	59.6	21.7	26.5	18.2	58.4	43.4	37.4	43.7	35.0	57.5	87.8	1,123
20-34	20.7	62.6	18.3	23.0	15.8	42.1	24.2	36.4	44.5	35.4	60.5	89.4	2,810
35-49	11.1	71.1	21.9	28.5	18.9	28.7	15.5	35.9	42.9	34.0	56.1	89.9	2,633
Number of living children													
0	25.7	60.0	19.2	23.6	16.3	49.9	34.3	35.3	42.6	33.5	57.2	87.5	2,352
1-2	15.8	66.2	18.0	24.5	15.5	32.7	17.1	35.2	42.7	34.2	58.4	88.7	2,812
3+	15.3	73.5	26.9	32.1	23.3	35.8	20.5	40.5	47.7	38.1	59.7	93.5	1,402
Marital status													
Never married	26.5	60.2	19.4	23.6	16.7	50.8	35.3	35.0	42.3	33.9	57.4	88.0	2,043
Currently married	17.3	66.6	20.7	25.7	17.1	35.8	19.5	37.3	44.9	35.6	59.6	89.9	4,044
Formerly married	5.0	79.1	20.8	36.0	23.7	22.7	13.5	34.7	40.0	31.5	49.9	90.0	479
Employment													
Not employed	22.7	67.0	20.5	25.8	17.6	42.9	26.3	36.8	43.9	35.7	57.5	89.8	4,645
Working for cash	9.5	59.1	16.3	21.2	13.9	27.1	15.7	34.0	42.9	31.8	59.0	87.1	1,615
Not working for cash	19.0	77.2	39.3	50.8	34.0	52.9	31.7	43.5	45.2	37.2	64.9	93.8	301
Education													
Basic general	28.6	74.8	28.2	39.1	27.7	54.2	35.0	38.7	47.6	40.7	62.5	93.3	529
Secondary general	24.0	72.8	26.2	31.6	21.5	43.3	27.1	36.9	43.2	36.0	57.0	92.3	2,440
Specialized secondary	15.3	66.8	18.8	24.8	16.0	35.7	21.8	38.4	45.1	35.4	59.3	89.0	1,997
Higher	13.9	49.8	10.7	13.9	9.7	33.6	18.4	32.4	41.6	30.3	57.4	84.0	1,600
Residence													
Urban	16.7	63.5	12.6	19.8	11.2	35.5	20.6	33.7	40.7	32.3	56.1	87.9	4,194
Rural	23.9	69.2	34.1	36.5	28.4	46.5	29.9	41.1	49.1	39.3	61.9	91.9	2,372
Region													
Yerevan	18.8	62.4	9.6	19.6	9.7	36.0	18.1	31.8	37.4	30.4	55.0	88.5	2,468
Aragatsotn	37.1	57.9	42.1	44.2	42.9	49.4	40.0	52.4	50.2	41.7	57.1	94.2	292
Ararat	36.6	73.1	39.7	57.5	37.6	73.8	30.7	57.3	40.9	40.4	63.6	99.3	462
Armavir	10.3	72.4	32.1	34.6	26.9	39.4	40.5	48.6	77.8	54.9	92.1	96.4	567
Gegharkunik	32.0	58.8	29.0	26.5	22.4	43.4	30.0	42.9	56.5	46.0	78.8	90.7	443
Lori	5.6	60.1	10.9	21.3	9.6	26.5	14.9	14.8	21.1	17.2	28.0	77.1	537
Kotayk	22.0	65.0	9.2	10.4	9.4	38.7	22.2	14.8	30.3	26.6	43.5	84.8	563
Shirak	14.0	72.8	17.9	9.3	11.2	30.3	18.0	42.4	49.6	36.6	51.8	88.9	563
Syunik	19.9	78.8	51.2	52.4	34.9	47.6	51.4	90.7	89.8	60.6	95.7	99.8	281
Vayots Dzor	12.5	84.3	72.1	79.7	55.7	37.3	26.7	52.5	53.7	62.4	64.0	95.1	107
Tavush	7.2	61.7	17.6	16.0	11.0	35.7	9.9	3.5	17.6	9.7	38.4	79.6	285
Total	19.3	65.5	20.3	25.8	17.4	39.5	24.0	36.4	43.7	34.8	58.2	89.3	6,566

Note: Currently married includes respondents in consensual union (living together). Formerly married includes divorced/separated/widowed. Total includes 4 women with missing information on employment, who are not shown separately.

Cost of Consultation

As was mentioned above, the major perceived barrier to women's access to health services is financial. The 2005 ADHS included a series of questions designed to obtain information on the actual cost of the respondent's last visit to a health care provider.

All respondents who visited a health facility or consulted a health professional during the three months preceding the survey were asked a series of questions including how much was officially paid for their last visit to a heath care provider, how much they paid in additional expenses, how much was paid for round-trip transportation, and how much was paid for the medicine they obtained as a result of the visit.

A large majority of respondents had to pay for some of the components of the visit, with the median total cost ranging from 1,497 *drams* (US$3) that was paid for children's visits, 4,997 *drams* (US$10) paid for women's visits, and 6,598 *drams* (US$15) paid for men's visits. About one-third of respondents paid for their own or their children's medicine (Table 14.4).

Table 14.4 Cost of consultation

Among women and men age 15-49 and children under five who visited a health facility or consulted a health professional in the three months preceding the survey, percentage who did not pay and median cost for those who paid, Armenia 2005

Component costs	Women	Men	Children
Official cost for visit			
No payment	31.8	50.2	65.4
Cost not known/missing	10.6	8.2	6.9
Median cost in *drams*	4,994	4,999	998
Additional cost for visit			
No payment	70.5	58.5	77.6
Cost not known/missing	12.7	11.1	10.4
Median cost in *drams*	4,995	5,993	1,994
Cost for transport			
No payment	46.8	64.4	69.4
Cost not known/missing	1.2	0.0	0.0
Median cost in *drams*	250	399	200
Cost for medicine			
No medicine	70.5	67.5	48.2
No payment	2.4	3.6	15.5
Cost not known/missing	2.8	1.4	3.7
Median cost in *drams*	250	500	200
Total cost for visit			
No payment	13.5	20.3	24.9
Cost not known/missing	17.5	13.5	13.5
Median cost for all components in *drams*	4,997	6,598	1,497
Number of respondents with any consultation	1,104	127	485

Knowledge of and Attitude Toward Family Medicine Program

In 1997, the MOH introduced the family medicine program. The purpose of the program is to strengthen primary health care in Armenia by registering all family members with a doctor who can provide ongoing care for people of all ages and be the point of entry into the health care system. Since 1999, implementation of this program has extended coverage to the *marz* and community levels.

Table 14.5 shows the percent distribution of women and men who have heard of the family medicine program (or "family doctors"), by background characteristics. Although a majority of respondents have heard of the program, women are more likely than men to report knowledge (73 and 53 percent, respectively). The youngest women and men are the least likely to have heard of the program. Urban dwellers are more likely to have heard of family medicine than their rural counterparts; the differential is especially large among women. Regional variation is substantial. There is a positive relationship between educational attainment and exposure to the program. For example, women with higher education are twice as likely to have heard of family medicine as women with general basic education (89 and 45 percent, respectively).

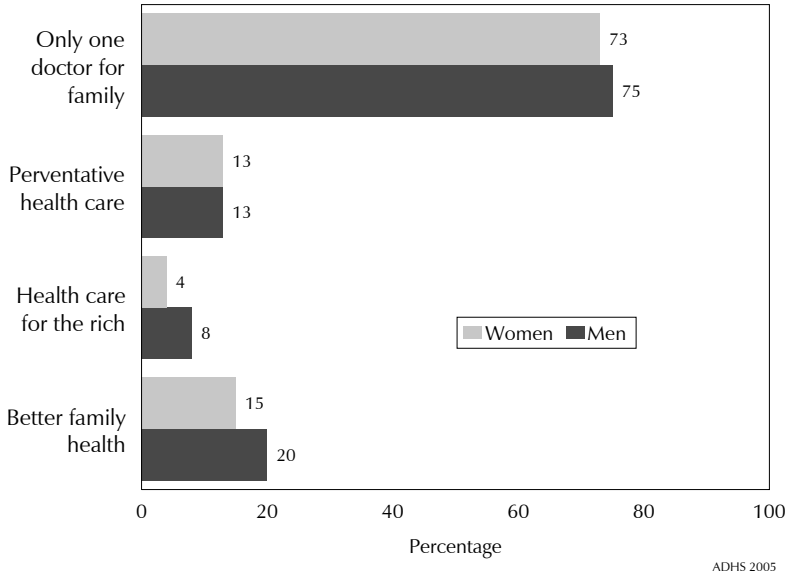
Table 14.5 Knowledge of the family medicine program

Percentage of women and men who have heard of "family medicine" or "family doctors," by background characteristics, Armenia 2005

	Women		Men	
Background characteristic	Percentage	Number of women	Percentage	Number of men
Age				
15-19	57.7	1,123	28.8	292
20-24	74.0	1,131	49.3	237
25-29	78.0	929	58.8	202
30-34	77.7	749	58.8	156
35-39	77.5	711	59.9	150
40-44	73.0	965	63.3	199
45-49	76.7	958	63.7	211
Education				
General basic	44.7	529	31.6	205
Secondary general	63.8	2,440	41.1	586
Specialized secondary	78.8	1,997	61.4	310
Higher	88.5	1,600	76.8	346
Residence				
Urban	79.2	4,194	54.5	913
Rural	61.6	2,372	49.4	534
Region				
Yerevan	82.8	2,468	57.4	547
Aragatsotn	71.2	292	71.9	71
Ararat	54.1	462	39.4	110
Armavir	66.0	567	69.4	139
Gegharkunik	59.1	443	33.8	81
Lori	85.2	537	58.4	87
Kotayk	74.1	563	56.7	151
Shirak	56.3	563	28.6	98
Syunik	69.4	281	34.7	67
Vayots Dzor	56.6	107	14.1	31
Tavush	70.1	285	57.4	64
Total	72.8	6,566	52.6	1,447

Those respondents who had heard of family medicine were asked what the term meant to them (Figure 14.2). The majority of respondents—more than seven in ten—said that the term meant "only one doctor for the family." Other common answers were "preventative health care" and "better family health."

Figure 14.2 **Meaning of "Family Medicine"**



Among those respondents who had heard of family medicine, more than half think that it is appropriate for Armenia (Figure 14.3). However, a sizable proportion of respondents state that they either do not approve or that they are unsure of their attitude toward the program. Less than six percent of respondents who heard about the family medicine program reported having been registered with a family medicine provider at any point during the last 36 months prior to the survey (data not shown).

Figure 14.3 **Approval of Family Medicine Program**

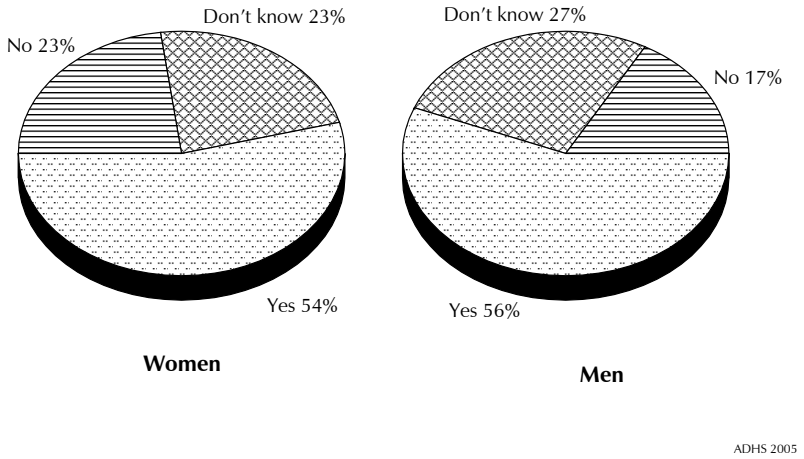


Table 14.6 shows the reasons for not approving of the family medicine program among respondents who said that the family medicine program is not appropriate for Armenia. The most common reason is the belief that family medicine is "expensive." Other reasons were also given; for the most part, these concerns indicate an uncertainty that a single family doctor has enough professional knowledge to treat the entire family.

Table 14.6 Reasons for not approving of family medicine

Among women and men who have heard of family medicine and who say they do not approve of family medicine, percentage citing specific reasons for disapproval, for all men and for women by background characteristics, Armenia 2005

Background characteristic	Doctors not professional	Doctors less knowledgeable	Doctors have no specific knowledge	Do not Trust doctors	Prefer old system	Expensive	Other	Don't know	Number of respondents
Age									
15-19	7.0	9.2	12.6	15.7	7.0	53.7	1.6	5.1	131
20-24	3.9	11.5	12.0	15.5	12.4	53.0	1.9	4.7	188
25-29	5.2	12.7	11.6	18.2	14.4	51.5	0.5	3.3	151
30-34	10.4	11.5	13.1	16.5	19.3	50.9	2.2	6.0	120
35-39	6.5	9.0	14.2	14.9	16.6	63.2	0.0	0.0	127
40-44	5.1	11.2	10.5	13.1	11.4	62.8	1.2	1.7	171
45-49	7.5	14.3	12.4	9.4	14.2	60.0	1.9	0.0	191
Education									
General basic	(5.4)	(8.6)	(1.6)	(23.6)	(3.0)	(66.4)	(0.0)	(0.0)	35
Secondary general	4.0	11.9	5.1	14.5	13.4	60.5	1.4	4.2	322
Specialized secondary	7.1	9.6	12.2	12.9	9.5	64.2	1.0	1.7	352
Higher	7.7	13.4	19.5	15.1	18.3	45.2	1.8	3.0	371
Residence									
Urban	6.9	10.2	14.1	14.7	15.1	55.9	1.6	2.5	807
Rural	4.7	15.5	6.6	14.0	8.7	58.7	0.8	3.9	273
All women	6.3	11.6	12.2	14.5	13.5	56.6	1.4	2.8	1,080
All men	8.3	22.4	17.8	16.3	23.1	36.1	3.8	3.2	131

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

14.2 USE OF SMOKING TOBACCO

Smoking tobacco has a negative impact on the smoker's health status. Increased levels of lung cancer, emphysema, and other respiratory illnesses are caused by tobacco use. Lung cancer is the most prevalent type of cancer among Armenian males. Furthermore, smoking is believed to contribute to the risk of cardiovascular diseases (Government of Armenia et al., 1999). It may also have an impact on individuals who are exposed to secondhand smoke. For example, inhaling secondhand smoke may adversely affect children's growth and cause childhood illness, especially respiratory diseases.

Since the mid-1990s, a number of tobacco control measures have been put into effect in Armenia. Advertising of tobacco products is banned in the mass media; however, there is no control over Russian or any other foreign television programs widely seen in Armenia. Recently, Armenia has introduced legislation regarding health warnings and tar and nicotine content labeling as well as prohibiting the sale of cigarettes to minors under 18 years old. Since 2005, smoking is restricted in main public areas, in government and health facilities, in restaurants and bars, in indoor workplaces and offices, and in methods of public transportation, such as buses, taxis, and trains.

Overall, very few women interviewed in the ADHS reported that they currently smoke (2 percent). It is possible that some female respondents were reluctant to report that they smoke because of the traditional Armenian prohibition against women smoking. Urban dwellers, women residing in Yerevan, women age 35-49, more educated women, and women in the highest wealth quintile are the most likely to smoke (3-4 percent) (data not shown).

Although smoking among women does not appear to be a pressing public health issue at this time, efforts should be made to discourage women from smoking and to encourage smoking women to quit. It is highly desirable for health reasons that cigarette smoking does not become popular among the women of Armenia. The possibility of an increasing use of cigarettes by women should be closely monitored so that appropriately targeted health education programs can be initiated in a timely manner, should that become necessary.

Smoking is considerably more common among men (Table 14.7). Three-fifths of men report that they are smokers, a slight decline from 67 percent of men 15-49 in 2000. Among current smokers, over 90 percent reported that they smoked 10 or more cigarettes during the last 24 hours. As with women, the likelihood that a man is a smoker increases with age. There is no significant difference by residence.

Table 14.7 Use of tobacco: men

Percentage of men who smoke cigarettes or tobacco or use other tobacco products and percent distribution of cigarette smokers by number of cigarettes smoked in preceding 24 hours, according to background characteristics, Armenia 2005

Background characteristic	Uses tobacco			Does not use tobacco	Number of men	Number of cigarettes						Number of cigarette smokers
	Cigarettes	Pipe	Other tobacco			1-2	3-5	6-9	10+	Don't know/ missing	Total	
Age												
15-19	15.6	0.7	0.1	84.4	292	(6.9)	(5.7)	(9.4)	(69.4)	(8.6)	(100.0)	46
20-34	69.9	0.1	2.6	30.1	594	0.2	4.1	3.2	91.8	0.8	100.0	415
35-49	73.9	1.9	4.0	26.1	561	0.1	2.3	1.6	94.0	2.1	100.0	414
Residence												
Urban	60.3	1.5	2.7	39.6	913	0.5	3.5	2.4	92.3	1.4	100.0	551
Rural	60.7	0.0	2.6	39.3	534	0.5	3.0	3.3	90.7	2.5	100.0	324
Region												
Yerevan	61.5	1.8	3.6	38.5	547	0.6	4.0	1.0	93.3	1.2	100.0	336
Aragatsotn	64.9	0.0	0.3	34.9	71	3.4	0.7	0.7	84.7	10.5	100.0	46
Ararat	65.4	0.3	2.5	34.6	110	0.0	3.3	3.4	93.0	0.3	100.0	72
Armavir	62.0	0.0	0.0	38.0	139	0.0	4.5	4.4	91.1	0.0	100.0	86
Gegharkunik	68.3	0.3	5.3	31.4	81	0.0	2.4	4.8	92.7	0.0	100.0	55
Lori	46.6	2.0	2.0	53.4	87	(0.0)	(0.0)	(6.9)	(93.1)	(0.0)	(100.0)	41
Kotayk	57.3	0.6	0.0	42.7	151	0.0	6.2	7.2	80.6	6.0	100.0	87
Shirak	55.2	0.0	0.0	44.8	98	0.0	0.0	0.0	98.2	1.8	100.0	54
Syunik	63.8	0.0	0.0	36.2	67	1.0	3.1	1.0	95.0	0.0	100.0	43
Vayots Dzor	52.3	0.0	32.4	47.7	31	2.9	0.0	9.0	85.4	2.7	100.0	16
Tavush	60.5	0.0	0.0	39.5	64	0.0	2.2	1.2	96.6	0.0	100.0	39
Education												
Basic general	56.6	0.9	2.6	43.4	205	0.0	3.7	2.2	91.6	2.5	100.0	116
Secondary general	58.5	1.6	2.9	41.4	586	0.8	4.7	3.1	89.0	2.5	100.0	343
Specialized secondary	71.4	0.0	2.8	28.6	310	0.0	1.4	2.6	94.5	1.5	100.0	222
Higher	56.3	0.7	2.2	43.6	346	0.9	2.8	2.5	93.4	0.4	100.0	195
Wealth quintile												
Lowest	64.8	0.0	3.2	35.2	261	0.3	1.3	4.1	91.8	2.5	100.0	169
Second	59.6	0.0	4.1	40.4	264	1.0	3.1	0.7	93.3	1.9	100.0	157
Middle	59.2	0.1	0.7	40.8	326	1.2	3.4	2.1	90.5	2.8	100.0	193
Fourth	54.2	0.7	1.7	45.7	316	0.0	3.8	4.5	90.5	1.2	100.0	171
Highest	65.9	3.9	4.3	34.1	280	0.0	4.7	2.2	92.6	0.4	100.0	184
Total	60.5	0.9	2.7	39.5	1,447	0.5	3.3	2.7	91.7	1.8	100.0	875

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

Comparison of international statistics on prevalence of smoking is difficult because of differences in definitions and age groups in the published results. Nevertheless, the current cigarette smoking rate for men in the 2005 ADHS (61 percent) is high relative to rates from other studies in Eastern and Western Europe, with the exception of the Russian Federation, Ukraine, and Byelorussia where the rates are similar to those in Armenia (WHO, 2005b).

Among all smoking-related diseases, lung cancer is considered to be the best indicator of the long-term exposure to tobacco smoke. According to the World Health Organization (WHO), Armenia is in the "intermediate and increasing rate" country category based on the standard death rate for cancer of the trachea, bronchus, and lung that is attributable to tobacco use (53 per 100,000 population of men and women age 0-64 years in 2003). For males alone, the standard death rate estimate for 2003 is 65 per 100,000 population (WHO, 2005b). Because smoking is an acquired behavior, which is chosen by an individual, all morbidity and mortality due to smoking are preventable. The life expectancy of individuals who quit smoking before age 35 does not differ significantly from that of lifelong nonsmokers (Doll et al., 1994). Health education programs that promote the benefits of not starting smoking as well as those of stopping should be targeted toward men.

14.3 TUBERCULOSIS

Tuberculosis (TB) is caused by bacteria called *Mycobacterium tuberculosis.* The disease usually affects the lungs, although other organs are involved in up to one-third of cases. If properly treated, TB caused by drug-susceptible strains is curable in virtually all cases. If untreated, more than half the cases may be fatal within five years. Transmission is usually airborne through the spread of droplets produced when patients with infectious pulmonary tuberculosis cough.

TB is a major global health problem and is currently responsible for the deaths of approximately two million people each year. Of great public health concern in countries of the former Soviet Union is the increasing prevalence of TB caused by strains of bacteria that are resistant to all major anti-TB drugs, in particular isoniazid and rifampicin. Contributing factors to multidrug-resistant TB (MDR-TB) include patients failing to take their drugs regularly and for the required length of time, doctors and health workers prescribing the wrong treatment regimens, and unreliable drug supplies. While MDR-TB is treatable, it requires extensive chemotherapy, which may be prohibitively expensive and is more toxic to patients.

TB is a significant public health problem in Armenia. According to information reported to the "Health for All database" for the European region of the WHO for 2004, the estimated annual TB incidence rate in Armenia is 52 per 100,000 population (WHO, 2006b). This estimate represents a substantial increase since 1998, when the estimated incidence rate was 43 per 100,000 (WHO, 2006b). According to official country statistics, the number of cases of active TB was 3,205 (92.8 per 100,000 population) in 1988, compared with 6,455 cases (200.5 per 100,000 population) in 2005. Similarly, the number of new cases of TB in 1988 was 642 (18.6 per 100,000 population) and in 2005 it had risen to 2006 new cases (62.3 per 100,000 population) (MOH, 2006).

The WHO recommends a TB control strategy known as DOTS (directly observed treatment, short-course) that combines: 1) case detection by sputum smear microscopy among symptomatic patients who self-report to health services; 2) standardized short-course chemotherapy with directly observed treatment; and 3) a standardized recording and reporting system that tracks the treatment of each patient and in turn provides data to the TB control program. In Armenia, coverage for the DOTS program had reached 100 percent of the population by the end of 2002.

In the ADHS, women and men were asked a series of questions about their knowledge of TB symptoms, its mode of transmission, and proper treatment of TB. This section summarizes the information at the national level and for geographic and socioeconomic subgroups of the population.

Knowledge of TB and Mode of Transmission

In the ADHS, women and men were asked questions on whether they had heard of an illness called tuberculosis and, if so, how they perceive the illness is transmitted from person to person.

As shown in Table 14.8, the majority of adults have heard of TB (92 percent of women and 87 percent of men), but there is some variability by background characteristics. Among both women and men, awareness of TB increases with both education and age. Unlike men, female urban dwellers are more likely than rural dwellers to have heard of TB. This is consistent with regional breakdowns, which show the highest awareness rates among women living in Yerevan (97 percent of women). Among men the lowest awareness rates are in Syunik (40 percent) and Lori (73 percent). Practically all men (99 percent) in Aragatsotn and Armavir have heard about TB. Around half of respondents were able to correctly identify the mode of TB transmission (through the air when coughing), about the same as in 2000.

Further examination of knowledge about modes of transmission by subgroups reveals patterns similar to those for TB awareness. For both women and men, the correct knowledge that TB is transmitted through the air when coughing increases with both level of education (68 percent among those with higher education) and age (over 61 percent among those age 40-49 years). Residents of urban areas are more likely to give this response than residents of rural areas. Regionally, the percentage with correct knowledge about transmission of TB varies considerably, ranging from 26 to 72 percent among women and 5 to 91 percent among men. The lowest percentages for men are found in Ararat (5 percent) and Shirak (6 percent). Over 20 percent of women and 30 percent of men have either never heard about TB or do not know how it is transmitted.

Knowledge of Symptoms of TB

In the ADHS, women and men were asked the following question: "What are the signs or symptoms that would lead you to think that a person has tuberculosis?" Tables 14.9.1 and 14.9.2 show the distributions of signs and symptoms of TB as reported by women and men, respectively. Nonspecific coughing, fever, and paleness are the most frequently named symptoms among women, ranging from 61 to 31 percent, together with coughing with sputum production (29 percent) and blood in sputum (26 percent), while nighttime sweating and chest pain are the least frequently named symptoms.

Table 14.8 Knowledge of tuberculosis

Percentage of women and men who have heard of tuberculosis (TB) and the percent distribution by knowledge of the way TB is spread, according to background characteristics, Armenia 2005

	Women							Men						
		Knowledge of ways TB spreads							Knowledge of ways TB spreads					
Background characteristic	Ever heard of TB	Through the air when coughing	Reported other ways of TB spread	Does not know how TB spreads	Never heard of TB	Total	Number of women	Ever heard of TB	Through the air when coughing	Reported other ways of TB spread	Does not know how TB spreads	Never heard of TB	Total	Number of men
Age														
15-19	81.6	41.4	18.5	21.7	18.4	100.0	1,123	74.1	32.4	9.9	31.8	25.9	100.0	292
20-24	92.4	52.9	22.4	17.2	7.6	100.0	1,131	89.7	53.7	17.1	18.9	10.3	100.0	237
25-29	91.6	61.3	18.6	11.7	8.4	100.0	929	87.5	59.9	14.4	13.2	12.5	100.0	202
30-34	95.4	60.5	23.5	11.3	4.6	100.0	749	91.6	68.0	9.0	14.6	8.4	100.0	156
35-39	95.0	60.0	24.6	10.4	5.0	100.0	711	87.9	59.6	19.9	8.4	12.1	100.0	150
40-44	94.2	60.8	22.9	10.4	5.8	100.0	965	91.9	56.2	20.3	15.4	8.1	100.0	199
45-49	94.9	61.2	23.4	10.4	5.1	100.0	958	93.8	63.5	18.0	12.3	6.2	100.0	211
Residence														
Urban	94.9	60.2	21.9	12.7	5.1	100.0	4,194	86.0	56.4	15.7	13.9	14.0	100.0	913
Rural	86.1	48.9	21.5	15.7	13.9	100.0	2,372	89.2	50.5	14.5	24.2	10.8	100.0	534
Region														
Yerevan	96.9	63.6	21.3	12.0	3.1	100.0	2,468	84.4	62.9	12.3	9.2	15.6	100.0	547
Aragatsotn	89.2	56.9	13.8	18.5	10.8	100.0	292	99.0	91.0	3.7	4.3	1.0	100.0	71
Ararat	90.4	55.6	21.8	13.0	9.6	100.0	462	94.8	4.5	34.0	56.2	5.2	100.0	110
Armavir	88.1	55.5	15.8	16.7	11.9	100.0	567	98.8	89.9	3.0	5.9	1.2	100.0	139
Gegharkunik	73.1	26.1	30.9	16.2	26.9	100.0	443	86.4	47.1	14.0	25.4	13.6	100.0	81
Lori	90.9	71.7	10.1	9.0	9.1	100.0	537	73.3	32.2	11.9	29.2	26.7	100.0	87
Kotayk	94.6	54.3	19.3	21.0	5.4	100.0	563	98.1	65.7	10.7	21.7	1.9	100.0	151
Shirak	89.9	33.0	38.2	18.7	10.1	100.0	563	92.5	6.4	45.3	40.7	7.5	100.0	98
Syunik	80.9	69.3	8.2	3.4	19.1	100.0	281	39.9	30.6	3.5	5.8	60.1	100.0	67
Vayots Dzor	94.4	54.2	33.9	6.3	5.6	100.0	107	90.4	20.5	54.7	15.2	9.6	100.0	31
Tavush	96.2	47.3	34.3	14.6	3.8	100.0	285	93.3	72.7	12.0	8.6	6.7	100.0	64
Education														
Basic general	74.5	34.3	18.1	22.1	25.5	100.0	529	75.2	46.6	7.7	20.8	24.8	100.0	205
Secondary general	89.1	48.5	23.2	17.4	10.9	100.0	2,440	87.7	46.6	18.3	22.8	12.3	100.0	586
Specialized secondary	94.9	61.5	22.5	10.9	5.1	100.0	1,997	89.1	58.2	14.7	16.2	10.9	100.0	310
Higher	97.3	68.3	19.9	9.1	2.7	100.0	1,600	91.6	67.9	15.0	8.6	8.4	100.0	346
Wealth quintile														
Lowest	82.9	41.1	22.5	19.3	17.1	100.0	1,164	89.1	51.2	14.2	23.7	10.9	100.0	261
Second	89.6	52.7	21.7	15.2	10.4	100.0	1,284	89.9	43.9	22.3	23.7	10.1	100.0	264
Middle	93.3	56.1	24.3	12.8	6.7	100.0	1,303	88.3	52.7	17.3	18.4	11.7	100.0	326
Fourth	94.4	62.2	21.0	11.3	5.6	100.0	1,375	85.5	61.1	13.5	10.9	14.5	100.0	316
Highest	96.6	65.6	19.6	11.4	3.4	100.0	1,440	83.4	60.7	9.4	13.4	16.6	100.0	280
Total	91.7	56.1	21.8	13.8	8.3	100.0	6,566	87.2	54.2	15.3	17.7	12.8	100.0	1,447

Table 14.9.1 Knowledge of symptoms of tuberculosis: Women

Among women who have heard of TB, percentage who know specific symptoms of TB, according to background characteristics, Armenia 2005

Background characteristic	Non-specific coughing	Coughing with sputum	Coughing for a few weeks	Any coughing	Fever	Blood in sputum	Loss of appetite	Night sweating	Pain in chest	Tiredness/ fatigue	Weight loss	Paleness	Other	Don't know	Number of women
Age															
15-19	55.4	21.2	6.2	68.2	23.3	19.4	3.7	4.3	3.4	5.9	9.1	27.8	1.2	21.9	917
20-24	59.5	27.6	8.1	77.7	26.6	23.7	5.1	3.3	4.4	5.5	15.2	35.0	1.2	13.0	1,045
25-29	60.4	29.6	7.8	77.7	29.4	26.9	6.0	5.4	5.4	10.7	12.8	36.1	1.3	14.6	851
30-34	62.0	28.6	9.6	81.7	35.6	25.2	9.3	6.8	6.5	10.4	16.6	41.0	0.4	10.1	715
35-39	64.3	34.6	9.7	84.9	37.7	33.2	8.9	5.4	7.0	11.1	18.3	39.2	1.0	7.6	676
40-44	61.6	30.9	12.0	82.2	32.4	31.1	7.7	6.2	5.7	9.6	16.7	40.1	1.2	9.0	909
45-49	66.4	31.8	10.2	83.3	37.2	26.7	6.9	6.5	5.7	10.9	16.3	41.5	1.6	8.2	909
Residence															
Urban	64.7	28.6	10.3	81.9	32.2	25.3	7.2	6.2	6.3	9.8	16.9	37.2	1.3	10.4	3,979
Rural	54.3	29.6	6.5	73.6	29.4	28.3	5.5	3.6	3.4	7.2	10.9	36.7	0.9	15.9	2,042
Region															
Yerevan	68.0	30.8	11.0	84.7	34.5	24.0	8.1	7.9	6.3	10.9	19.9	32.6	1.7	8.9	2,391
Aragatsotn	63.1	34.4	3.4	71.3	22.6	7.0	8.5	5.6	0.4	3.0	7.2	16.8	1.0	17.5	261
Ararat	16.3	50.8	3.8	65.6	59.3	58.0	3.6	6.0	3.7	4.3	17.2	22.0	0.0	14.5	418
Armavir	67.7	19.7	4.4	77.0	22.9	20.1	1.8	0.3	2.0	2.0	7.2	42.9	1.1	17.1	499
Gegharkunik	24.5	21.4	17.8	59.7	26.6	26.8	11.4	7.1	2.0	21.1	16.8	44.5	0.0	19.0	324
Lori	71.0	30.9	21.3	86.6	35.5	39.6	15.4	7.2	9.1	12.8	22.3	63.1	0.0	10.7	488
Kotayk	60.3	10.0	0.4	67.4	15.1	9.1	1.0	1.0	6.1	3.8	8.7	40.8	3.2	16.4	532
Shirak	61.2	32.9	5.4	74.1	24.0	42.8	4.9	4.1	10.0	6.1	9.6	43.8	0.0	18.1	507
Syunik	51.2	49.1	16.4	94.5	42.8	35.7	5.0	1.9	2.3	19.9	6.6	55.1	0.0	3.5	227
Vayots Dzor	86.2	36.3	3.4	93.3	39.0	6.8	1.8	0.9	1.8	0.9	8.5	13.3	0.0	3.9	101
Tavush	83.3	6.5	1.5	85.3	14.8	5.9	0.6	0.0	0.7	5.3	3.7	24.7	1.9	11.7	274
Education															
Basic general	45.7	21.4	7.8	63.7	20.5	15.5	4.4	1.7	3.2	7.7	7.3	27.5	1.8	27.4	394
Secondary general	58.3	24.4	6.8	74.4	27.0	22.8	5.5	4.8	4.3	6.4	11.0	33.4	1.0	16.5	2,174
Specialized secondary	63.2	31.7	10.7	81.8	33.9	29.6	7.6	5.9	6.1	10.6	15.4	39.3	0.7	9.4	1,896
Higher	66.7	33.9	10.4	86.2	36.8	30.1	7.5	6.2	6.3	10.8	21.4	41.6	1.8	6.0	1,557
Wealth quintile															
Lowest	58.1	24.8	5.5	71.6	22.0	22.2	4.1	3.8	3.6	6.0	9.5	31.9	0.4	20.3	964
Second	57.6	30.1	6.6	76.6	32.2	29.8	5.0	3.8	4.1	6.6	10.7	35.1	1.0	13.8	1,150
Middle	57.7	29.9	10.1	77.9	31.6	29.3	7.2	6.0	6.7	9.5	13.0	36.3	2.0	11.5	1,216
Fourth	64.1	29.2	10.5	82.4	33.2	24.7	8.0	5.9	6.0	11.4	18.3	42.9	0.7	10.6	1,299
Highest	66.6	29.8	11.3	84.3	34.9	25.1	7.8	6.4	5.7	10.1	20.5	37.2	1.5	7.7	1,391
Total	61.2	28.9	9.0	79.1	31.3	26.3	6.6	5.3	5.3	8.9	14.8	37.0	1.2	12.3	6,021

The percentage of women naming coughing of any kind as a symptom increases with age, from 68 percent in the lowest age group to 83 percent in the oldest age group, and with level of education, from 64 percent in the lowest level to 86 percent in the highest level of education. Coughing of any kind is more frequently cited by women in urban areas (82 percent) than in rural areas (74 percent). There are large differences among regions in the reporting of coughing of any kind, non-specific coughing, and coughing with sputum. It is notable that both coughing with sputum and persistent coughing, which are more specific symptoms than coughing, are cited least frequently by Kotayk and Tavush women.

Table 14.9.2 Knowledge of symptoms of tuberculosis: Men

Among men who have heard of TB, percentage who know specific symptoms of TB, according to background characteristics, Armenia 2005

Background characteristic	Non-specific coughing	Coughing with sputum	Coughing for a few weeks	Any coughing	Fever	Blood in sputum	Loss of appetite	Night sweating	Pain in chest	Tiredness/ fatigue	Weight loss	Paleness	Other	Don't know	Number of men
Age															
15-19	39.9	19.1	15.1	55.4	13.7	22.0	5.6	6.5	5.4	5.4	6.8	18.7	0.4	40.2	217
20-24	51.4	35.5	17.4	75.5	19.9	37.3	2.9	3.1	5.2	6.4	8.1	28.7	0.5	18.9	212
25-29	55.1	43.4	18.5	84.1	22.3	33.4	2.7	3.5	3.7	5.5	10.8	31.3	1.9	11.8	177
30-34	62.6	52.0	10.1	84.2	23.4	35.1	3.3	10.8	3.1	3.5	9.5	31.7	0.0	14.3	143
35-39	49.9	37.7	23.1	85.4	28.1	47.0	2.0	4.9	8.2	4.4	13.3	32.1	1.3	9.3	132
40-44	57.3	30.6	13.4	77.8	25.9	32.9	5.8	8.1	5.9	6.5	14.8	38.4	0.5	15.9	183
45-49	49.9	39.0	21.1	80.9	15.8	39.5	4.7	9.0	6.7	4.2	14.4	23.3	1.2	14.0	198
Residence															
Urban	50.6	45.9	22.2	80.1	17.7	39.9	3.1	6.2	6.8	6.2	12.8	27.3	0.5	15.3	785
Rural	53.4	19.0	8.2	70.5	25.5	25.9	5.5	6.9	3.2	3.7	7.8	30.7	1.3	24.7	476
Region															
Yerevan	51.7	63.6	29.7	88.0	13.7	48.0	2.3	7.7	9.4	5.2	9.4	18.7	0.0	9.0	461
Aragatsotn	87.6	9.6	8.5	90.6	53.0	10.1	16.6	33.3	13.3	8.1	13.1	38.7	0.3	5.6	70
Ararat	20.6	30.4	24.0	58.5	42.9	33.5	3.2	3.6	0.0	0.2	0.3	14.9	0.0	38.8	104
Armavir	72.7	3.4	1.0	73.4	10.4	33.6	5.6	1.3	1.9	3.2	17.4	64.0	3.4	21.7	138
Gegharkunik	48.2	25.1	7.9	70.9	12.6	13.0	3.6	2.2	1.0	12.6	6.7	25.3	0.0	24.6	70
Lori	(30.5)	(25.3)	(2.8)	(44.6)	(9.4)	(22.3)	(2.8)	(8.0)	(7.7)	(5.5)	(8.4)	(7.6)	(6.7)	(47.4)	64
Kotayk	76.7	8.2	0.7	79.5	13.3	23.5	1.3	3.0	2.2	11.1	15.6	36.1	0.7	14.3	148
Shirak	10.1	28.5	11.6	50.3	41.5	24.6	0.0	1.0	1.6	0.0	11.8	29.5	0.0	43.1	91
Syunik	7.0	61.2	44.3	82.0	19.6	75.3	3.4	0.0	4.1	3.5	46.3	72.0	0.0	12.3	27
Vayots Dzor	14.7	32.5	42.2	63.0	72.3	44.6	29.7	16.3	0.9	6.0	2.3	3.6	0.0	16.6	28
Tavush	80.0	27.8	3.2	86.0	5.6	22.6	2.3	0.4	2.5	0.8	6.5	33.9	0.0	9.9	60
Education															
Basic general	49.4	24.3	13.9	69.1	15.8	25.0	3.0	4.0	4.7	1.7	9.1	26.2	2.1	25.2	154
Secondary general	45.5	26.4	16.6	69.8	21.6	31.9	4.1	5.7	5.1	4.9	7.1	25.6	0.6	24.2	514
Specialized secondary	56.5	37.5	17.1	79.3	23.4	36.5	4.5	7.9	6.7	5.1	9.3	30.9	0.4	15.0	277
Higher	58.6	54.8	18.7	88.3	19.0	42.0	3.8	7.6	5.2	7.7	19.5	32.6	0.8	10.3	317
Wealth quintile															
Lowest	54.4	15.9	8.5	68.5	24.1	21.8	5.4	9.1	3.8	2.6	9.7	27.1	2.3	27.0	233
Second	48.1	27.0	15.2	73.1	24.5	27.2	5.0	4.2	3.7	4.3	7.6	35.6	0.0	22.1	238
Middle	43.3	30.8	21.5	74.0	21.8	41.9	4.4	7.5	3.5	6.4	10.3	27.1	0.3	21.6	288
Fourth	52.2	48.1	26.1	82.3	21.0	45.2	3.6	6.8	9.1	4.6	12.6	32.4	0.8	10.8	270
Highest	62.4	56.2	10.8	84.1	11.7	33.7	1.4	4.4	6.9	8.2	14.2	20.4	0.7	13.2	233
Total	51.7	35.7	16.9	76.5	20.7	34.6	4.0	6.4	5.4	5.2	10.9	28.6	0.8	18.8	1,261

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

Among men, nonspecific coughing, coughing with sputum production, and blood in sputum are the most frequently named symptoms (52, 36, and 35 percent, respectively), followed by paleness (29 percent), fever (21 percent), and persistent coughing (17 percent). Nighttime sweating, tiredness or fatigue, chest pain, loss of appetite, and weight loss are the least frequently named symptoms among men. Consistent with the patterns described for women, the percentage of men naming coughing of any kind as a symptom increases significantly with age and education, and is higher in urban versus rural areas. Again, the reporting of these symptoms by men varies considerably by region.

Since 2000, both women and men have become more aware of symptoms of TB. For example, the number of men who mentioned non-specific coughing as a symptom of TB has doubled (25 percent in 2000 and 52 percent in 2005).

Knowledge That TB Is Curable and Willingness to Keep Secret a Family Member's TB Status

Respondents were also asked if they knew that TB can be completely cured with proper medication. Table 14.10 shows that half of women and three-fifths of men who have heard of TB know that it can be cured completely, a decline from about 70 percent of women and men in 2000. Urban dwellers, more educated respondents, and those from the highest wealth index are more likely to know that TB can be completely cured. The percent aware of a positive prognosis varies widely by region. Among women, knowledge that TB can be cured ranges from a low of 28 percent in Vayots Dzor to a high of 60-62 percent in Yerevan and Armavir regions; the range is even wider for men. Notably, men are significantly more likely than women to be aware of a positive prognosis, while the opposite is true of men in Gegharkunik and Shirak.

These same respondents were also asked if a member of their family got TB, whether they would want it to remain a secret or not. Less than 20 percent of respondents said they would want a family member's TB status kept secret, indicating that a majority of women and men in Armenia have open attitudes toward TB. This positive response implies an absence of stigma attached to TB and a general belief that, following hospital treatment, a diseased individual is no longer able to spread the bacteria.

Women living in urban settings, better educated women, and those from the higher wealth quintiles are more likely than their less fortunate counterparts to want to keep secret the fact that a relative has TB. Unlike women, men in these same categories are least likely to respond affirmatively to this question. Responses vary across subgroups and by region without any noticeable pattern; in Yerevan, 25 percent of women and 6 percent of men say they would want to keep a family member's TB status secret, while in Armavir, 17 percent of women and 46 percent of men responded affirmatively to this question.

TB is an entirely curable disease that primarily strikes adults under age 45 (i.e., a population group that is less likely than children or older adults to have frequent contact with health care providers, apart from women in antenatal care). Hence, education of the public with regard to TB transmission, symptoms, treatment, and prognosis is an important part of a TB control program.

Table 14.10 Knowledge that tuberculosis can be cured and attitude towards a family member's TB

Among women and men who have heard of TB, the percentage reporting that TB can be completely cured and the percentage reporting a desire to keep secret the fact that a member of a family has TB, according to background characteristics, Armenia 2005

	Women			Men		
Background characteristic	Knows that TB can be completely cured	Would want a family member's TB kept secret	Number of women	Knows that TB can be completely cured	Would want a family member's TB kept secret	Number of men
Age						
15-19	36.9	19.7	917	43.7	22.3	217
20-24	48.0	19.1	1,045	57.3	10.1	212
25-29	50.4	20.3	851	61.1	12.8	177
30-34	54.4	19.5	715	69.4	12.8	143
35-39	51.8	19.8	676	66.9	9.9	132
40-44	57.5	18.6	909	62.5	16.1	183
45-49	61.4	18.4	909	70.3	15.8	198
Residence						
Urban	54.8	21.1	3,979	63.1	10.0	785
Rural	44.5	15.9	2,042	56.7	22.3	476
Region						
Yerevan	60.1	24.7	2,391	67.4	6.4	461
Aragatsotn	52.0	24.5	261	57.8	34.0	70
Ararat	40.2	4.9	418	55.0	0.0	104
Armavir	61.7	17.1	499	75.3	45.7	138
Gegharkunik	34.7	31.0	324	28.3	15.3	70
Lori	48.1	15.7	488	(79.3)	(45.4)	64
Kotayk	53.2	24.1	532	59.3	11.6	148
Shirak	28.5	2.2	507	17.0	0.9	91
Syunik	35.6	1.5	227	46.8	3.5	27
Vayots Dzor	27.8	10.6	101	78.2	4.5	28
Tavush	56.7	26.4	274	74.6	13.1	60
Education						
Basic general	29.5	14.7	394	48.4	22.3	154
Secondary general	41.9	18.5	2,174	55.3	12.3	514
Specialized secondary	55.1	19.2	1,896	59.8	15.1	277
Higher	65.3	21.7	1,557	76.2	14.1	317
Wealth quintile						
Lowest	37.7	14.8	964	48.2	22.1	233
Second	42.5	16.5	1,150	51.3	14.7	238
Middle	51.9	22.2	1,216	62.2	12.2	288
Fourth	55.7	19.7	1,299	66.6	13.5	270
Highest	63.3	21.9	1,391	73.8	11.4	233
Total	51.3	19.3	6,021	60.7	14.6	1,261

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

14.4 HYPERTENSION

As in most countries of the world, cardiovascular diseases are the leading cause of death in Armenia, where they accounted for 58 percent of all deaths in 2003 (WHO, 2006a). Mortality rates for cardiovascular diseases differ between males and females. Standardized death rates for all circulatory system causes for males exceeded that for females by 40 percent in 2003 (536 versus 751 per 100,000) (WHO, 2006b).

The National Statistical Service (NSS) data for persons age 15-49 indicate that 27 percent of all deaths in Armenia in 2005 were related to the diseases of the circulatory system and the rate for males was over 10 percent greater than the rate for females (NSS, personal correspondence).

One of the objectives of the ADHS was to provide information on cardiovascular risk factors (hypertension, smoking, and nutritional status), based on data representative of the general population, as opposed to clinic-based data.

Measurement Procedures

The Women's and Men's Questionnaires for the 2005 ADHS included questions to determine if the respondent had been diagnosed as hypertensive and if she/he was taking medication to control blood pressure. Respondents were also asked if their blood pressure could be measured as part of the survey. Approximately 94 percent of women and 83 percent of men had valid blood pressure measurements taken as part of the survey.

Health technicians, who were mostly physicians, made the blood pressure measurements. Prior to fieldwork, they were given refresher training in measurement procedures in nonclinical settings using oscillometric, digital, self-inflated blood pressure monitors (Samsung Model HD-503 with adjustable inflation), according to the manufacturer's recommended protocol. Three measurements of systolic and diastolic blood pressure (measured in millimeters of mercury, mmHg) were made, with an interval of at least five minutes between measurements.

The average of the second and third measurements was used to classify individuals with respect to hypertension according to the following internationally recommended categories (WHO, 1999):

Level of hypertension	Systolic (mmHg)	Diastolic (mmHg)
Optimal	<120	<80
Normal	120-129	80-84
High-normal	130-139	85-89
Stage 1, mildly elevated	140-159	90-99
Stage 2, moderately elevated	160-179	100-109
Stage 3, severely elevated	180+	110+

Individuals were classified as hypertensive if they were taking antihypertensive drugs, if their systolic blood pressure was ≥ 140 mmHg, or if their diastolic blood pressure was ≥ 90 mmHg.

Levels of Hypertension

Tables 14.11.1 and 14.11.2 show hypertension prevalence rates for women and men. Among women, 22 percent are classified as hypertensive. One percent of all women are taking antihypertensive medication, 15 percent are classified as stage 1 hypertensive, 4 percent are stage 2, and 2 percent are stage 3.

Among men, 27 percent are classified as hypertensive. Less than 1ne percent of men are classified with hypertension controlled by medication, 23 percent are stage 1 hypertensive, 2 percent are stage 2, and 2 percent are stage 3.

The Armenian statistics can be placed in context by reference to strictly comparable international statistics.[1] A literature review found comparable statistics for the age range 35-44 for the United States (National Center for Health Statistics, 2004). Armenian hypertensive rates over this age range are 31 percent for women (same if inclusive and exclusive of pregnant women) and 36 percent for men. In comparison with the United States (15 percent for non-pregnant women and 17 percent for men), the rates in Armenia are substantially higher for both women and men, indicating that hypertension is a serious public health problem in Armenia.

Differentials

Comparison of gender-specific rates of hypertension indicates little difference between women (22 percent) and men (27 percent) (Tables 14.1.1 and 14.1.2), with men more likely to develop mild forms of hypertension compared with women (23 and 15 percent, respectively). However, more differences exist in the distributions between women and men across the three categories of optimal, normal, and high-normal blood pressure categories. Thirty-seven percent of women recorded optimal blood pressure levels, while 41 percent were in the normal or high-normal range. The distribution for men is less favorable, with 19 percent in the optimal range and 53 percent in the normal or high-normal range.

Epidemiological studies have shown that hypertension is positively associated with age, a finding confirmed by the 2005 ADHS. Nearly half of men and women age 45 and older are suffering from any form of hypertension, indicating that hypertension is a serious health problem in Armenia. For women, rates of hypertension increase from about 8 percent (women under age 25) to 49 percent (age 45-49). Similarly for men, the rates increase about four times from 13 percent (age 15-19) to 47 percent (age 45-49). The age-specific rates of hypertension were lower for women than for men below age 45 and higher at older ages.

Hypertension prevalence is slightly higher in men with more education. However, education in women has no clear pattern; women with secondary-general or specialized secondary education are more likely to be hypertensive (24 percent each) compared with women with no education or with higher education (16 percent each), respectively.

Differentials in hypertension rates by urban-rural residence are modest for women, but not for men. There are relatively fewer urban than rural men with hypertension (25 versus 32 percent) and relatively more urban than rural men in the optimal category (22 versus 15 percent). The highest prevalence of hypertension is found in Lori for both women (38 percent) and for men (53 percent).

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[1] General population statistics, pertaining to a specific age range, which classify persons as hypertensive if they were taking antihypertensive medication or if their blood pressure was ≥ 140/90 mmHg.

Significant differences in the prevalence of hypertension are found among respondents classified by their body mass index (BMI). As expected, hypertension levels are higher among overweight/obese subjects compared with those of normal weight. The hypertensive rate among obese women (BMI ≥ 30) is 50 percent, compared with 8 and 12 percent, respectively, among women who were thin (BMI < 18.5) or normal weight (BMI 18.5-24.9). The same pattern was found in men; the hypertensive rate among obese men is 62 percent, compared with 8 and 23 percent, respectively, among men who were thin or normal weight.

Hypertension is slightly higher among smokers in both women and men. To be married or living in union has a positive impact on prevention of hypertension. Women who are currently married or living together are less likely to have hypertension compared with those who are separated, widowed, or divorced (25 percent compared with 33 percent, respectively).

To be employed is positively correlated with hypertension, especially in men; 32 percent of men who were currently working were hypertensive, compared with 19 percent of men who were not working.

In general, rates of hypertension were positively associated with age and being overweight/obese, and with education, employment, and urban residence in men. Hypertension is a serious health problem in Armenia with nearly half of surveyed men and women age 45 and older found hypertensive.

Awareness and Control of Hypertension

Figure 14.4 shows awareness of hypertension and treatment status among hypertensive women and men age 15-49. Four out of five hypertensive women and men are unaware of their condition (82 and 81 percent, respectively). Only 7 percent of women and 2 percent of men with high blood pressure are aware of their hypertension and are treating it. Surprisingly, 11 percent of men and 5 percent of women are aware that they are hypertensive but are not treating it.

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. Population education concerning the adverse consequences of hypertension and promotion of blood pressure measurement, particularly targeted at older individuals and men, are areas in which health programs could be strengthened.

Figure 14.4 **Awareness of Hypertension and Treatment Status**

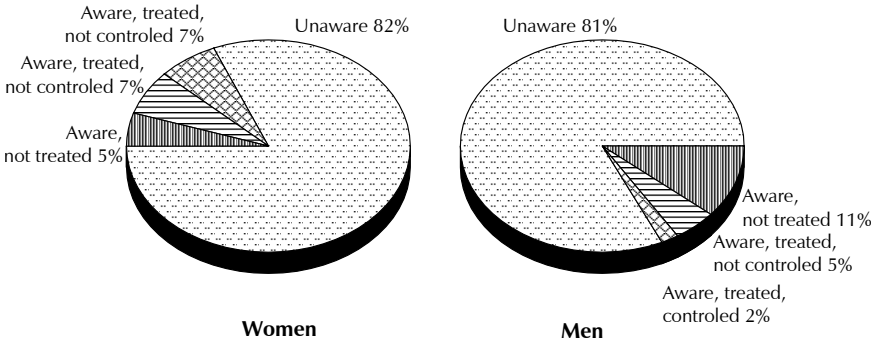

Table 14.11.1 Levels of hypertension: Women

Prevalence of hypertension among women and percent distribution of women by blood pressure (BP) status, according to background characteristics, Armenia 2005

Background characteristic	Prevalence of hyper-tension[1]	Classification of BP: Optimal	Normal	High normal	Mildly elevated (stage 1)	Moderately elevated (stage 2)	Severely elevated (stage 3)	Normal BP and taking medications	Total	Number of women
Age										
15-19	8.4	58.6	24.3	8.7	6.6	1.5	0.2	0.1	100.0	1,055
20-24	8.1	51.3	27.6	13.0	7.4	0.2	0.5	0.1	100.0	1,059
25-29	13.3	45.7	27.5	13.4	11.3	0.9	0.4	0.7	100.0	889
30-34	18.2	32.5	28.7	20.6	12.9	2.4	0.8	2.1	100.0	702
35-39	24.9	29.8	24.2	21.1	18.9	3.3	2.1	0.5	100.0	684
40-44	34.8	19.4	22.6	23.2	19.2	10.5	2.4	2.7	100.0	914
45-49	49.4	14.4	17.5	18.8	29.1	11.9	4.3	4.0	100.0	879
Marital status										
Never married	11.9	52.9	25.2	10.0	9.1	2.0	0.5	0.2	100.0	1,900
Currently married	25.2	30.7	24.3	19.7	16.6	5.2	1.9	1.5	100.0	3,827
Formerly married	33.4	26.7	24.8	15.1	20.0	6.1	1.9	5.4	100.0	453
Working status										
Currently working	25.4	30.7	25.1	18.9	16.7	4.7	1.6	2.3	100.0	1,668
Worked in the past year	18.8	36.8	31.5	12.9	12.6	2.1	0.0	4.1	100.0	134
Not working	20.4	39.8	24.2	15.6	13.8	4.2	1.5	1.0	100.0	4,379
Smoking										
Yes	26.4	36.7	29.0	7.9	9.4	10.7	1.6	4.7	100.0	103
No	21.7	37.3	24.5	16.6	14.6	4.2	1.5	1.3	100.0	6,078
Body mass index (BMI)										
<18.5 (thin)	8.3	62.1	19.0	10.6	5.7	2.6	0.0	0.0	100.0	312
18.5-24.9 (normal)	11.8	48.3	26.8	13.1	8.6	1.7	0.4	1.1	100.0	3,239
25.0-29.9 (overweight)	28.7	24.1	25.4	21.8	20.0	5.2	1.6	1.9	100.0	1,656
≥30 (obese)	50.0	12.2	17.4	20.4	29.4	12.8	5.6	2.1	100.0	919
Residence										
Urban	21.1	39.1	24.9	14.9	13.7	4.5	1.6	1.3	100.0	3,932
Rural	22.8	34.0	24.0	19.2	16.0	4.0	1.3	1.6	100.0	2,249
Region										
Yerevan	17.1	45.7	24.7	12.5	11.4	3.6	0.9	1.2	100.0	2,265
Aragatsotn	23.1	37.8	20.2	18.9	14.2	3.8	2.9	2.1	100.0	281
Ararat	29.9	16.0	30.1	24.0	21.7	5.1	1.2	1.9	100.0	442
Armavir	14.0	42.8	29.0	14.2	10.9	1.8	0.3	1.1	100.0	551
Gegharkunik	10.2	55.7	21.2	13.0	5.7	1.5	0.2	2.7	100.0	398
Lori	37.8	22.5	20.1	19.6	22.1	9.6	5.4	0.8	100.0	524
Kotayk	19.9	33.9	26.6	19.6	13.1	3.6	2.1	1.2	100.0	525
Shirak	31.9	23.5	25.4	19.1	22.0	7.2	1.4	1.3	100.0	550
Syunik	17.7	44.0	19.6	18.7	12.2	3.2	1.3	1.0	100.0	277
Vayots Dzor	37.8	21.9	21.3	19.0	30.7	5.0	2.1	0.0	100.0	93
Tavush	28.8	23.4	24.6	23.2	20.0	5.3	0.6	2.9	100.0	275
Education										
Basic general	16.2	43.4	24.6	15.7	10.5	3.2	0.9	1.6	100.0	501
Secondary general	24.3	33.8	25.2	16.8	16.7	4.2	1.6	1.7	100.0	2,314
Specialized secondary	24.5	33.8	23.4	18.3	16.4	4.7	1.8	1.6	100.0	1,879
Higher	16.2	44.9	25.2	13.8	10.2	4.3	0.9	0.7	100.0	1,487
Wealth quintile										
Lowest	23.5	33.6	23.8	19.0	16.1	4.0	1.0	2.4	100.0	1,113
Second	26.2	31.5	24.7	17.6	18.4	4.6	2.0	1.2	100.0	1,230
Middle	23.9	34.9	24.2	17.0	17.8	4.1	1.3	0.7	100.0	1,231
Fourth	20.2	39.0	24.0	16.8	11.6	4.7	1.6	2.3	100.0	1,262
Highest	15.6	46.0	26.1	12.3	9.5	4.1	1.4	0.6	100.0	1,345
Total	21.7	37.2	24.6	16.4	14.6	4.3	1.5	1.4	100.0	6,181

Note: When systolic and diastolic blood pressures fall into different categories, the higher category determines the individual's status. Currently married includes respondents in consensual union (living together). Formerly married includes divorced/separated/widowed. Figures in parentheses are based on 25-49 unweighted cases.

[1] Blood pressure ≥140/90 mmHg or currently taking antihypertensive medication

Table 14.11.2 Levels of hypertension: Men

Prevalence of hypertension among men and percent distribution of men by blood pressure (BP) status, according to background characteristics, Armenia 2005

Background characteristic	Prevalence of hypertension[1]	Classification of BP: Optimal	Normal	High normal	Mildly elevated (stage 1)	Moderately elevated (stage 2)	Severely elevated (stage 3)	Normal BP and taking medications	Total	Number of men
Age										
15-19	13.2	36.3	37.4	13.1	13.1	0.1	0.0	0.0	100.0	246
20-24	18.7	20.9	41.5	18.9	17.4	0.0	1.3	0.0	100.0	196
25-29	27.4	17.1	30.8	24.6	25.2	2.2	0.0	0.0	100.0	164
30-34	22.5	14.2	31.8	31.6	18.1	2.9	1.5	0.0	100.0	135
35-39	29.6	13.9	27.3	29.3	27.1	2.5	0.0	0.0	100.0	118
40-44	40.0	12.1	23.4	24.5	30.1	3.7	4.7	1.6	100.0	168
45-49	46.9	11.2	17.5	24.4	35.3	6.1	3.0	2.5	100.0	173
Marital status										
Never married	16.1	28.3	38.6	16.9	15.1	0.6	0.4	0.0	100.0	505
Currently married	35.2	13.3	25.3	26.2	28.9	3.5	2.0	0.7	100.0	682
Formerly married	*	*	*	*	*	*	*	*	*	14
Working status										
Currently working	32.0	15.6	28.0	24.4	28.5	1.7	1.5	0.5	100.0	601
Worked in the past year	30.4	12.6	33.7	23.3	21.8	4.7	4.0	0.0	100.0	193
Not working	18.8	28.6	33.2	19.5	15.3	2.1	0.3	1.0	100.0	404
Smoking										
Yes	29.5	16.3	28.5	25.8	24.7	2.3	1.9	0.7	100.0	729
No	23.9	24.3	34.2	17.5	20.3	2.3	0.9	0.4	100.0	471
Body mass index (BMI)										
<18.5 (thin)	(8.2)	(35.1)	(52.7)	(3.9)	(8.2)	(0.0)	(0.0)	(0.0)	(100.0)	38
18.5-24.9 (normal)	22.8	22.5	31.9	22.8	20.1	1.5	0.7	0.5	100.0	796
25.0-29.9 (overweight)	35.0	9.9	26.8	28.3	30.0	2.5	2.2	0.3	100.0	273
≥30 (obese)	62.4	6.1	20.9	10.6	40.4	10.5	8.5	3.0	100.0	76
Residence										
Urban	24.7	21.9	32.4	21.0	20.9	1.8	1.6	0.4	100.0	780
Rural	32.1	14.9	27.6	25.4	26.9	3.1	1.2	0.9	100.0	421
Region										
Yerevan	20.3	26.4	34.5	18.9	18.9	0.4	0.7	0.3	100.0	489
Aragatsotn	38.9	10.6	21.1	29.4	27.8	3.5	4.4	3.2	100.0	61
Ararat	40.8	6.2	18.3	34.7	35.7	5.1	0.0	0.0	100.0	103
Armavir	28.8	12.8	31.8	26.6	26.2	2.0	0.0	0.6	100.0	135
Gegharkunik	10.4	39.4	33.7	16.6	9.6	0.7	0.0	0.0	100.0	55
Lori	52.9	14.7	19.2	13.2	35.9	7.9	9.0	0.0	100.0	81
Kotayk	20.1	19.5	37.5	22.9	15.2	3.4	0.8	0.8	100.0	99
Shirak	24.5	12.5	35.6	27.4	21.8	1.8	0.9	0.0	100.0	83
Syunik	(5.9)	(21.1)	(31.7)	(41.2)	(5.9)	(0.0)	(0.0)	(0.0)	(100.0)	14
Vayots Dzor	41.0	18.7	19.0	21.3	34.6	3.8	2.6	0.0	100.0	19
Tavush	43.2	7.6	27.0	22.2	31.4	5.0	4.1	2.7	100.0	61
Education										
Basic general	24.1	27.5	30.6	17.8	22.6	1.5	0.0	0.0	100.0	175
Secondary general	26.2	19.9	29.1	24.8	21.3	2.1	2.0	0.8	100.0	494
Specialized secondary	30.1	15.9	31.5	22.5	25.0	3.5	0.4	1.1	100.0	260
Higher	28.7	16.9	33.0	21.3	24.3	2.0	2.4	0.1	100.0	271
Wealth quintile										
Lowest	32.8	18.8	21.9	26.5	28.2	2.1	1.6	0.9	100.0	215
Second	30.9	14.8	33.3	21.0	25.5	3.6	1.8	0.0	100.0	220
Middle	26.8	18.8	30.5	23.8	21.8	2.7	1.6	0.8	100.0	279
Fourth	21.8	19.5	36.9	21.9	17.6	1.8	1.3	1.1	100.0	254
Highest	25.4	25.1	30.0	19.4	23.0	1.3	1.2	0.0	100.0	233
Total	27.3	19.4	30.7	22.5	23.0	2.3	1.5	0.6	100.0	1,200

Note: When systolic and diastolic blood pressures fall into different categories, the higher category determines the individual's status. Currently married includes respondents in consensual union (living together). Formerly married includes divorced/separated/widowed. Figures in parentheses are based on 25-49 unweighted cases. An asterisk indicates that the figure is based on fewer than 25 unweighted cases and has been suppressed.

[1] Blood pressure ≥140/90 mmHg or currently taking antihypertensive medication

WOMEN'S EMPOWERMENT AND DEMOGRAPHIC AND HEALTH OUTCOMES

15

This chapter presents information on indicators of women's empowerment, develops three empowerment indices, and relates those indices to select demographic and health outcomes.

The ADHS Women's Questionnaire collected data on the general background characteristics of female respondents (e.g., age, education, wealth quintile, employment status) and also data more specific to women's empowerment such as receipt of cash earnings, the magnitude of a woman's earnings relative to those of her husband/partner, and control over the use of her own earnings and those of her husband/partner. This chapter tabulates and presents the indicators of woman's empowerment according to the general background characteristics of female respondents. The ADHS Women's Questionnaire also collected data on a woman's participation in household decisionmaking, on the circumstances under which she feels that a woman is justified in refusing to have sexual intercourse with her husband/partner, and on her attitude toward wife beating. Three separate indices of empowerment are developed based on the number of household decisions in which the respondent participates, her opinion on the number of circumstances for which a woman is justified in refusing to have sexual intercourse with her husband/partner, and her opinion on the number of reasons that justify wife beating. The ranking of women on these three indices is then related to selected demographic and health outcomes including contraceptive use, ideal family size and unmet need for contraception. In addition, survivorship of children is presented by the ranking of their mothers on the indices.

15.1 EMPLOYMENT AND CASH EARNINGS

In the ADHS, respondents were asked a number of questions to determine their employment status at the time of the survey and continuity of employment in the 12 months prior to the survey. They were also asked about the form of payment for their work. Table 15.1 shows the percentage of currently married women who were employed at any time during the 12 months preceding the survey and the percent distribution of those employed in the 12 months preceding the survey by the type of earnings they received (cash, in-kind, or both).

According to the ADHS data, 30 percent of currently married women were employed in the preceding 12 months. Younger women, especially those age 15-19 and 20-24, were less likely to be employed than women in other age groups, possibly due to their being in school or in training rather than in the job market. As women get older, their likelihood of being employed increases. Of those who had been employed within the preceding 12 months, about three-fourths (73 percent) received only cash for their work, while one in five (20 percent) did not receive any payment at all. Six percent of women received cash and in-kind earnings for their work in the last 12 months, while less than 1 percent received payment in-kind only. The proportion of currently married women employed in the preceding 12 months has decreased somewhat from 36 percent in 2000 ADHS to the current level of 30 percent.

Table 15.1 Employment and cash earnings of currently married women

Percentage of currently married women age 15-49 who were employed at any time in the last 12 months and the percent distribution of currently married women employed in the last 12 months by type of earnings, according to age, Armenia 2005

	Employment		Percent distribution by type of earnings for currently married women employed in last 12 months						
Age	Percentage employed	Number of currently married women	Cash only	Cash and in-kind	In-kind only	Not paid	Missing / do not know	Total	Number of women employed
15-19	6.4	78	*	*	*	*	*	*	5
20-24	11.2	504	(73.9)	(3.1)	(0.0)	(22.1)	(0.9)	(100.0)	56
25-29	18.2	695	71.4	3.3	0.0	23.8	1.5	100.0	127
30-34	31.0	601	77.8	4.4	0.7	17.1	0.0	100.0	186
35-39	37.7	602	72.5	6.1	0.8	20.5	0.0	100.0	227
40-44	39.4	824	72.8	7.5	0.5	19.2	0.0	100.0	325
45-49	40.8	741	72.1	5.2	1.3	21.4	0.0	100.0	303
Total	30.4	4,044	73.2	5.6	0.7	20.2	0.2	100.0	1,229

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.

15.2 USE OF EARNINGS

Currently married women who were employed in the last 12 months and who earned cash for their work were asked the relative magnitude of their earnings in comparison to their husband/partner's earnings. In addition, they were asked who the main decisionmaker is with regard to the use of their earnings. This information has implications for the empowerment of women. It is expected that employment and earnings are more likely to empower women if women themselves control their own earnings and perceive their earnings as significant relative to those of their husband/partner.

Table 15.2 shows how women's control over their own earnings and their perception of the magnitude of their earnings relative to those of their husband/partner varies by background characteristics. Among married women receiving cash earnings, about one in four (23 percent) decide mainly themselves how to use the money, while seven in ten (70 percent) decide jointly with their husband/partner. Six percent say that mainly their husband decides on the allocation of the woman's earnings. More educated women, those with fewer children, urban women, and women in the higher wealth quintiles are more likely to decide mainly themselves on how their earning are used when compared with other groups. Among regions, women's independence in decisionmaking on use of their earnings ranges from a low of 7 percent in Ararat to a high of 37 percent in Syunik.

Comparing the results from the 2000 and 2005 ADHS surveys, there has been a decrease in the percentage of currently married women who decide mainly themselves how to use their cash (36 percent in 2000 compared with 23 percent in 2005) and an increase in the percentage who decide jointly with their husband/partner (52 percent compared with 70 percent).

Table 15.2 also shows that a large majority of married women (67 percent) report that they earn less than their husband/partner for their work, while 13 percent earn the same amount. Only one in ten women report earning more cash than their husband/partner for their work.

Table 15.2 Control over women's 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 cash earnings are used and by whether she earned more or less than her husband/partner, according to background characteristics, Armenia 2005

	Person who decides how cash earnings are used					Women's cash earnings compared to husband/partner's earnings						
Background characteristic	Mainly respondent	Respondent and husband/partner jointly	Mainly husband/partner	Other	Total	More	Less	Same	Husband/partner has no earnings	Do not know/missing	Total	Number of women
Age												
15-19	*	*	*	*	*	*	*	*	*	*	*	5
20-24	(19.8)	(71.1)	(6.0)	(3.1)	(100.0)	(10.1)	(79.3)	(3.9)	(0.0)	(6.7)	(100.0)	43
25-29	23.1	69.3	4.4	3.1	100.0	7.8	77.6	10.8	2.0	1.7	100.0	94
30-34	21.8	67.9	6.8	3.5	100.0	8.8	74.0	11.7	3.4	2.1	100.0	153
35-39	23.5	69.6	4.7	2.3	100.0	6.6	67.7	15.6	7.1	3.0	100.0	179
40-44	19.9	72.8	5.4	1.9	100.0	13.7	63.2	15.3	5.7	2.1	100.0	261
45-49	26.6	67.7	5.0	0.7	100.0	11.8	61.0	12.8	10.6	3.8	100.0	234
Number of living children												
0	31.6	52.6	13.6	2.3	100.0	6.5	75.5	11.5	4.3	2.3	100.0	61
1-2	24.9	68.5	4.6	2.0	100.0	9.6	68.8	12.1	6.8	2.7	100.0	578
3+	17.2	74.3	6.1	2.3	100.0	12.4	63.5	15.2	5.7	3.1	100.0	331
Residence												
Urban	26.2	67.3	4.3	2.1	100.0	9.8	67.4	13.3	7.0	2.4	100.0	676
Rural	14.5	74.5	8.9	2.1	100.0	11.6	67.3	12.8	4.4	3.7	100.0	294
Region												
Yerevan	28.9	64.6	5.5	1.1	100.0	9.4	70.9	11.3	6.9	1.4	100.0	386
Aragatsotn	24.9	55.0	20.1	0.0	100.0	17.7	63.9	13.9	0.7	3.7	100.0	32
Ararat	6.5	82.9	9.7	0.9	100.0	13.8	68.3	11.7	2.2	4.1	100.0	43
Armavir	13.4	71.6	13.1	1.9	100.0	6.7	65.5	18.4	8.3	1.1	100.0	132
Gegharkunik	15.4	84.0	0.0	0.6	100.0	10.6	74.4	7.6	6.4	1.0	100.0	62
Lori	10.6	82.9	0.0	6.6	100.0	10.2	61.1	14.9	5.5	8.4	100.0	60
Kotayk	21.6	73.1	2.0	3.3	100.0	9.3	62.2	11.2	12.0	5.2	100.0	89
Shirak	22.7	68.3	3.8	5.3	100.0	17.1	48.5	19.0	6.5	8.8	100.0	48
Syunik	36.6	56.6	2.4	4.4	100.0	10.5	68.3	17.7	0.0	3.6	100.0	69
Vayots Dzor	11.1	81.2	7.7	0.0	100.0	8.1	83.0	6.8	2.1	0.0	100.0	11
Tavush	20.2	78.0	0.8	1.0	100.0	17.1	68.8	11.7	1.4	0.9	100.0	37
Education												
Basic general	(26.6)	(56.3)	(9.9)	(7.2)	(100.0)	(5.7)	(53.7)	(13.8)	(20.5)	(6.3)	(100.0)	37
Secondary general	18.5	69.3	9.0	3.1	100.0	11.6	57.9	20.4	7.5	2.6	100.0	224
Specialized secondary	23.6	68.8	5.5	2.0	100.0	8.7	70.9	9.1	8.2	3.1	100.0	348
Higher	24.0	71.6	3.4	1.0	100.0	11.7	71.3	12.6	2.2	2.3	100.0	361
Wealth quintile												
Lowest	13.2	70.4	12.4	4.0	100.0	17.2	53.5	19.7	6.3	3.3	100.0	127
Second	18.0	70.3	9.1	2.6	100.0	10.0	65.1	13.9	5.6	5.3	100.0	139
Middle	19.1	74.9	4.0	2.0	100.0	7.4	63.0	14.8	11.6	3.2	100.0	193
Fourth	28.5	64.6	5.3	1.6	100.0	11.8	70.2	11.4	5.3	1.4	100.0	223
Highest	27.1	68.9	2.5	1.4	100.0	8.4	75.5	10.1	3.7	2.2	100.0	286
Total	22.7	69.5	5.7	2.1	100.0	10.4	67.4	13.2	6.3	2.8	100.0	969

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 15.3 shows, for currently married women who earned cash in the past 12 months, the person who decides how their cash earnings are used and for all currently married women whose husbands earned cash in the past 12 months, the person who decides how their husband's cash earnings are used, according to the relative magnitude of the earnings of women and their husband or partner. In particular,

it shows whether the person who decides how the woman's own earnings are used and the person who decides how her partner's earnings are used are each affected and vary by whether the woman works and by the magnitude of women's earnings relative to those of her husband. As expected, women are more likely to decide mainly themselves how their cash earnings are used if they earn more than their husband/partner for their work and if their husband/partner makes no earnings or did not work in the preceding 12 months. Furthermore, women are also more likely to be the main decision-makers on how their husband/partner's earning are used if they make more cash for their work.

Table 15.3 Women's control over their own earnings and over those of their husband/partner

Percent distribution of currently married women who received cash earnings for employment in the 12 months preceding the survey by person who decides how the woman's cash earnings are used and the percent distribution of currently married women whose husband/partner has cash earnings by who decides how the husband/partner's earnings are used, according to the relationship between the woman's and husband's earnings, Armenia 2005

	Person who decides how earnings are used						Person who decides how husband/partner's earnings are used						
Women's earnings relative to husband/ partner's earnings	Respondent only	Respondent and husband/ partner jointly	Husband/ partner only	Other/ missing	Total	Number of women	Respondent only	Respondent and husband/ partner jointly	Husband/ partner only	Other	Missing	Total	Number of women
More than husband/ partner	30.4	63.5	6.1	0.0	100.0	101	16.0	54.5	12.2	16.5	0.9	100.0	101
Less than husband/partner	20.1	73.2	5.2	1.5	100.0	653	8.9	80.4	8.8	1.7	0.1	100.0	653
Same as husband/partner	16.8	73.2	9.9	0.0	100.0	128	4.9	80.7	14.5	0.0	0.0	100.0	128
Husband/partner has no cash earnings/did not work	48.6	47.0	1.3	3.1	100.0	63	na	na	na	na	na	na	0
Woman has no cash earnings	na	na	na	na	na	0	10.0	78.4	5.1	5.7	0.9	100.0	257
Woman did not work in past 12 months	na	na	na	na	na	0	7.9	67.0	13.5	11.5	0.2	100.0	2,815
Total	22.7	70.4	5.7	1.2	100.0	944	8.3	70.1	12.1	9.2	0.3	100.0	3,953

na=Not applicable

15.3 HOUSEHOLD DECISIONMAKING

In order to assess women's decisionmaking autonomy, information was collected in the ADHS survey on women's participation in four different types of decisions: on the respondent's own health care, on making large household purchases, on making household purchases for daily needs, and on visits to family friends or relatives. Table 15.4 shows the percent distribution of currently married women according to the person in the household who usually makes decisions concerning these matters. The ability of women to make decisions that affect the circumstances of their own lives is an essential aspect of empowerment.

According to the data, one-third of married women make decisions on their own about their own health care, about six in ten (57 percent) decide jointly with their husband/partner, while one in ten currently married women have no say in decisions about their own health care. Almost one-fourth (23 percent) of currently married women decide mainly themselves about the purchase of large household items, more than half (54 percent) decide jointly with their husband, while more than one-fifth (22 percent) have no say in these matters. Married women are more likely than their husbands to make decisions about daily household purchases, while decisions about visits to family or relatives are mostly made jointly (74 percent).

A substantial increase between the 2000 and 2005 surveys is observed in the proportion of currently married women who decide mainly themselves about the purchase of large household items (10 percent versus 23 percent). Overall, between the two surveys, there has been an increase in the proportion of women who decide jointly with their husbands/partners about each of the household decisions and a decrease in the proportion whose husbands/partners alone decide about such decisions.

Table 15.4 Women's participation in decisionmaking

Percent distribution of currently married women age 15-49 by person who usually makes decisions on four specific issues in the household, Armenia 2005

Decision	Mainly woman	Woman and husband/ partner jointly	Mainly husband/ partner	Someone else	Other	Missing	Total
Own health care	33.3	56.6	7.6	2.1	0.2	0.2	100.0
Major household purchases	23.0	53.9	12.3	10.1	0.6	0.2	100.0
Daily household purchases	41.1	37.5	9.1	11.5	0.7	0.2	100.0
Visits to family or relatives	12.7	74.3	7.1	5.4	0.4	0.2	100.0

Table 15.5 shows how participation in decisionmaking varies by background characteristics. In general, a large majority of married women either make household decisions themselves or participate in the decision jointly with their husband or partner. Overall, nine in ten women participate in the decision about their own health care, while about eight in ten are involved in decisionmaking about daily and large household purchases. Eighty-seven percent of women report that they participate in the decision on visits to family and friends. About seven in ten (68 percent) married women participate in all four specified household decisions, while 5 percent report having no say in any household decisions (Figure 15.1)

Figure 15.1 **Percentage of Currently Married Women Who (Alone or Jointly with Husband/partner) Make Specific Household Decisions**

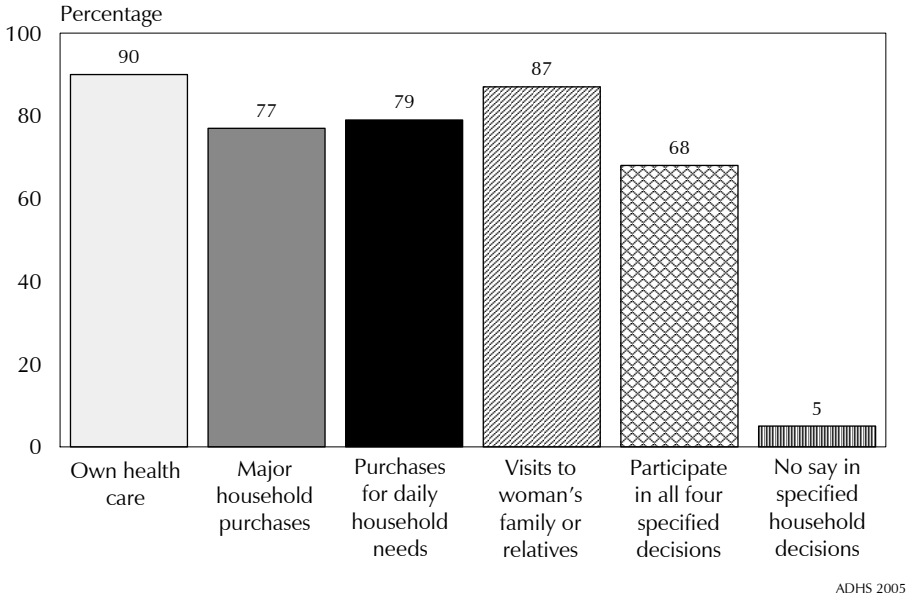

Table 15.5 Women's participation in decisionmaking by background characteristics

Percentage of currently married women age 15-49 who usually make decisions on four specific issues in the household either by themselves or jointly with their husband/partner, by background characteristics, Armenia 2005

Background characteristic	Alone or jointly has final say in: Own health care	Making major household purchases	Making purchases for daily household needs	Visits to her family or relatives	Percentage who participate in all four decisions	Percentage who participate in none of the four decisions	Number of women
Age							
15-19	66.0	35.9	31.6	59.5	28.0	27.0	78
20-24	83.5	54.5	50.8	74.2	43.2	12.9	504
25-29	87.3	65.9	67.7	82.6	54.9	5.0	695
30-34	91.1	77.6	80.8	87.1	68.8	3.2	601
35-39	92.5	84.6	86.7	89.7	77.8	2.9	602
40-44	92.5	86.8	90.2	92.7	79.4	2.3	824
45-49	93.1	88.5	91.2	94.1	80.9	1.8	741
Employment in the last 12 months							
Not employed	89.1	73.6	75.8	85.2	65.3	5.5	2,906
Employed for cash	92.4	86.4	86.1	92.4	76.6	2.5	895
Employed not for cash	91.6	80.7	83.3	89.2	71.8	2.7	240
Number of living children							
0	82.8	60.4	59.3	74.5	50.8	13.0	265
1-2	90.6	74.8	76.8	87.1	66.5	4.4	2,458
3+	89.9	83.9	85.6	89.4	74.7	3.6	1,321
Residence							
Urban	91.7	78.9	79.9	89.6	69.8	2.9	2,447
Rural	87.1	73.7	76.4	83.0	65.7	7.4	1,597
Region							
Yerevan	93.0	78.4	80.0	91.0	69.8	2.1	1,362
Aragatsotn	85.1	71.8	77.3	78.8	60.4	9.5	196
Ararat	92.5	75.7	78.8	88.3	74.3	6.3	307
Armavir	85.7	69.5	73.8	82.7	62.5	11.3	381
Gegharkunik	78.4	69.2	73.7	79.2	57.7	6.5	303
Lori	95.6	88.2	86.3	94.7	79.4	1.7	343
Kotayk	90.7	75.5	76.8	85.0	67.8	5.5	357
Shirak	92.2	77.0	77.3	83.2	72.9	4.9	357
Syunik	76.9	81.0	75.2	84.3	51.6	2.0	189
Vayots Dzor	83.7	73.4	75.4	86.9	64.7	10.5	65
Tavush	93.9	78.4	82.4	85.3	71.9	4.1	184
Education							
Basic general	80.4	64.0	69.1	76.4	59.3	14.0	235
Secondary general	88.8	74.4	76.8	84.5	66.5	5.4	1,629
Specialized secondary	91.0	79.6	80.3	88.7	70.0	3.7	1,353
Higher	92.9	80.7	81.7	92.0	71.1	2.3	828
Wealth quintile							
Lowest	85.3	73.3	74.0	78.8	63.4	9.7	764
Second	89.0	75.6	78.8	87.8	68.6	5.0	809
Middle	91.4	78.8	81.3	87.9	71.8	3.4	788
Fourth	88.7	74.2	77.6	87.2	65.7	4.7	841
Highest	94.7	82.0	80.8	92.5	71.1	1.1	842
Total	89.9	76.8	78.5	87.0	68.2	4.7	4,044

There is a strong correlation between age and decisionmaking. The percentage of women participating in all decisions increases from 28 percent among women 15-19 to 81 percent among women age 45-49. Furthermore, the proportion of women participating in decisionmaking increases with women's education. Fifty-nine percent of women with basic education participate in all specified decisions, compared with 71 percent of women with higher than secondary education. The proportion of currently married women participating in all decisions varies significantly among regions: it ranges from 52 percent in Syunik to 79 percent in Lori.

15.4 ATTITUDES TOWARDS WIFE BEATING

The ADHS gathered information on women's attitudes toward wife beating, a proxy for women's perception of their status. Women who believe that a husband is justified in hitting or beating his wife for any of the specified reasons may believe themselves to be low in status both absolutely and relative to men. Such a perception could act as a barrier to accessing health care for themselves and their children, affect their attitude toward contraceptive use, and impact their general wellbeing. Women were asked whether a husband is justified in beating his wife under a series of circumstances: if the wife burns the food, argues with him, goes out without telling him, neglects the children, and refuses sexual relations. Table 15.6.1 summarizes women's attitudes toward wife beating in these five specific circumstances.

Twenty-two percent of women agree with at least one of the specified reasons justifying a husband beating his wife. Seventeen percent agree that a husband is justified in beating his wife if she neglects their children, 15 percent agree if she argues with him, 10 percent agree if she goes out without telling him, 4 percent agree if she refuses sexual relations with him, and 2 percent agree if she burns the food. The percentage of women who agree with at least one of the specified reasons justifying a husband beating his wife has decreased from 32 percent in 2000 to the current level of 22 percent.

Women with higher education are less likely to agree with any of the specified reasons, as are women who are employed for cash. Twenty-five percent of women who are currently married agree with at least one reason justifying a man beating his wife; this is a higher percentage than for never-married women or formerly married women (18 and 19 percent, respectively). About one-third of rural women (34 percent) agree with at least one reason justifying a wife's beating, compared with 15 percent of urban women. The proportion of women agreeing with at least one of the given reasons varies by region, from 7 percent in Syunik to 47 percent in Armavir. Women in the lowest wealth quintile are much more likely to agree with at least one of the specified reasons than women in the highest quintile (41 percent versus 10 percent).

Men were also asked about their opinion on the justification of wife beating under certain circumstances. As shown in Table 15.6.2, men are more likely to agree with one of the reasons justifying a husband's beating of his wife (31 percent compared with 22 percent of women). About one-fourth of men agree that a husband has the right to beat his wife if she either neglects the children or argues with him. Fourteen percent agree that a man is justified in hitting or beating his wife if she goes out without telling him, 5 percent of men agree if she refuses to have sex with him, while 1 percent believe he may beat her if she burns the food. Similar to women, the proportion of men who agree with at least one of the specified reasons justifying a husband beating his wife has decreased from 42 percent in the 2000 ADHS to 31 percent.

Table 15.6.1 Attitudes toward wife beating: Women

Percentage of women 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, according to background characteristics, Armenia 2005

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 sex with him	Percentage who agree with at least one specified reason	Number of women
Age							
15-19	1.6	15.3	10.2	17.5	3.0	22.0	1,123
20-24	2.4	13.9	9.1	15.6	3.0	20.2	1,131
25-29	1.0	15.0	10.0	16.3	4.2	21.8	929
30-34	2.6	14.2	10.5	18.8	3.2	23.5	749
35-39	1.9	13.7	11.1	16.7	4.1	22.3	711
40-44	2.6	15.7	11.5	20.4	5.7	25.0	965
45-49	2.5	15.2	10.3	16.8	3.1	20.8	958
Employment in the last 12 months							
Not employed	2.1	16.0	11.7	18.5	3.9	23.6	4,789
Employed for cash	1.6	10.2	6.4	12.6	2.9	16.1	1,488
Employed not for cash	3.9	17.8	7.5	23.4	5.0	28.4	282
Number of living children							
0	1.4	12.4	7.9	14.8	2.7	18.8	2,352
1-2	1.9	14.1	9.4	15.2	3.5	20.4	2,812
3+	3.7	20.0	16.1	26.2	5.9	31.1	1,402
Marital status							
Never married	1.4	11.8	7.5	14.2	2.4	17.9	2,043
Currently married	2.5	16.5	12.1	19.4	4.1	24.7	4,044
Formerly married	1.5	12.5	7.0	13.6	6.2	18.5	479
Residence							
Urban	1.2	9.9	5.7	11.3	2.4	15.2	4,194
Rural	3.7	23.3	18.4	28.2	5.9	34.3	2,372
Region							
Yerevan	1.1	6.7	3.0	6.9	1.6	10.0	2,468
Aragatsotn	7.7	32.5	23.1	33.5	10.5	45.9	292
Ararat	0.0	8.8	3.6	15.8	1.3	16.9	462
Armavir	4.1	36.1	20.2	38.2	5.2	47.2	567
Gegharkunik	3.7	24.1	26.9	31.9	3.1	38.0	443
Lori	1.3	19.3	9.4	14.7	3.7	24.6	537
Kotayk	3.1	21.8	17.4	23.8	8.3	29.5	563
Shirak	1.5	12.1	18.1	24.7	6.8	25.9	563
Syunik	0.6	3.9	2.7	6.1	1.7	7.3	281
Vayots Dzor	0.0	9.2	2.9	8.3	1.8	11.8	107
Tavush	4.3	14.3	8.3	22.8	4.3	28.2	285
Education							
Basic general	4.0	21.5	16.2	22.4	5.8	28.3	529
Secondary general	2.9	20.2	15.1	24.1	5.5	29.4	2,440
Specialized secondary	1.6	14.5	8.8	16.5	3.1	22.2	1,997
Higher	0.8	4.6	3.0	6.5	1.1	8.8	1,600
Wealth quintile							
Lowest	4.8	29.2	21.6	32.8	7.7	41.1	1,164
Second	2.8	19.1	15.7	23.4	4.5	28.8	1,284
Middle	1.2	11.6	8.4	15.0	3.7	18.7	1,303
Fourth	1.6	10.9	5.5	11.7	2.3	16.0	1,375
Highest	0.5	5.7	2.8	7.1	1.1	9.7	1,440
Total	2.1	14.8	10.3	17.4	3.7	22.1	6,566

Note: Currently married includes respondents in consensual union (living together). Formerly married includes divorced/separated/widowed.

Table 15.6.2 Attitudes toward wife beating: Men

Percentage of men 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, according to background characteristics, Armenia 2005

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 sex with him	Percentage who agree with at least one specified reason	Number of men
Age							
15-19	1.4	22.5	13.0	23.5	11.2	30.5	292
20-24	0.1	27.8	13.6	26.1	3.8	38.3	237
25-29	2.6	21.6	11.5	19.1	4.9	28.8	202
30-34	0.6	21.9	17.9	21.1	3.9	26.4	156
35-39	0.7	17.7	14.5	22.9	1.3	28.8	150
40-44	1.5	24.4	18.4	28.6	4.5	34.0	199
45-49	0.2	13.4	12.0	19.4	3.4	24.4	211
Employment in the last 12 months							
Not employed	1.4	22.4	13.8	22.8	7.6	31.9	716
Employed for cash	0.8	19.3	13.4	21.9	2.9	28.1	666
Employed not for cash	0.0	39.4	27.3	39.3	2.8	41.4	60
Number of living children							
0	1.2	24.6	14.3	23.7	7.3	33.1	688
1-2	0.7	16.0	11.9	21.0	2.2	26.3	519
3+	1.4	25.1	18.7	25.9	5.8	32.1	240
Marital status							
Never married	1.1	26.1	14.7	25.2	7.6	35.3	615
Currently married	1.0	18.4	13.7	21.4	3.4	26.9	815
Formerly married	2.5	14.7	22.5	27.5	6.8	27.5	17
Residence							
Urban	0.4	16.4	10.2	20.8	4.2	27.0	913
Rural	2.2	30.5	21.0	27.1	7.0	36.5	534
Region							
Yerevan	0.0	13.3	7.9	19.3	2.6	24.9	547
Aragatsotn	5.2	54.6	33.7	35.4	10.6	57.9	71
Ararat	0.0	6.5	4.0	2.5	0.0	6.5	110
Armavir	1.0	34.0	23.0	36.3	2.8	40.8	139
Gegharkunik	3.0	49.1	32.3	36.5	3.6	57.1	81
Lori	1.6	12.1	7.8	18.2	1.6	22.3	87
Kotayk	0.0	31.0	17.0	26.8	9.8	38.3	151
Shirak	0.0	1.0	0.0	3.0	0.0	3.9	98
Syunik	4.7	47.6	37.9	64.1	30.3	73.1	67
Vayots Dzor	0.0	11.5	13.9	13.3	4.7	13.9	31
Tavush	4.6	20.6	20.8	21.4	14.0	29.7	64
Education							
Basic general	2.4	28.7	24.1	32.7	10.9	40.9	205
Secondary general	1.1	25.1	13.2	25.1	4.8	33.4	586
Specialized secondary	0.6	20.4	16.1	24.0	4.5	29.9	310
Higher	0.5	12.6	8.3	13.2	3.3	20.1	346
Wealth quintile							
Lowest	3.2	34.7	26.6	32.6	8.8	42.3	261
Second	1.2	22.5	17.0	22.8	6.0	31.0	264
Middle	0.7	20.6	13.7	23.5	3.7	31.4	326
Fourth	0.2	19.8	10.8	25.3	4.2	32.4	316
Highest	0.3	11.9	4.5	11.5	4.2	15.8	280
Total	1.0	21.6	14.2	23.1	5.2	30.5	1,447

Note: Currently married includes respondents in consensual union (living together). Formerly married includes divorced/separated/widowed.

Men who are either employed for cash or have a higher level of education are less likely to agree with any of the stated reasons. Men in rural areas are more likely than those from urban areas to agree with at least one reason justifying a man beating his wife (37 percent versus 27 percent). The percentage of men agreeing with at least one of these reasons is highest in Syunik (73 percent) and lowest in Shirak (4 percent). It is worth noting that while women residing in Syunik are the least likely to agree with any of the given reasons for wife beating (7 percent), men residing in the same region are the most likely to do so (73 percent).

15.5 Attitudes towards Refusing Sexual Relations

The extent of control women have over when they have sexual intercourse has important implications for demographic and health outcomes. It is also an indicator of women's empowerment because it measures women's degree of acceptance of norms in certain societies that socialize women into believing that a woman does not have the right to refuse to have sexual intercourse with her husband for any reason.

The ADHS survey included a question on whether the respondent thinks that a wife is justified in refusing to have sexual intercourse with her husband under three circumstances: she knows her husband has a sexually transmitted infection (STI); she knows her husband has sexual intercourse with other women; and when she is tired or not in the mood. These three circumstances for which women's opinions are sought have been chosen because they are effective in combining issues of women's rights and consequences for women's health. Table 15.7.1 shows the percentages of women who say that a wife is justified in refusing to have sexual intercourse with her husband for these reasons according to background characteristics.

Overall, 56 percent of women in Armenia agree that a woman is justified in refusing to have sex with her husband for all three of the selected reasons. Specifically, 88 percent of women said that a woman can refuse to have sex with her husband if they know the husband has an STI, 82 percent said they can refuse if they know that the husband is having sexual relations with another woman, and 59 percent said they can refuse if she is not in the mood or is tired.

Overall, only one in ten women do not agree with any of the given reasons for a wife to refuse sex with her husband. Younger women are more likely not to agree with any of the reasons; 28 percent of women 15-19 do not feel that a woman is justified in refusing sex with her husband in any of the specified circumstances, compared with 9 percent or less in other age groups. Twenty-nine percent of women with basic education and 12 percent of women with a secondary general education disagree with all of the scenarios, as opposed to 7 percent of women with a specialized secondary education and 6 percent of women with a higher education. Among unemployed women, 12 percent do not agree with any of the reasons compared with 5 percent of women employed for cash. Women who have never been married or have no children are also more likely not to agree with any of the specified reasons. Rural women tend to disagree more with any of the reasons than urban women (14 percent versus 9 percent). The proportion of women who do not agree with any of the given reasons for a wife to refuse sex with her husband decreases with increasing wealth.

Table 15.7.2 shows the percentage of men who say that women are justified in refusing sex with their husband by background characteristics. Men are about as likely as women to agree with all three of the selected reasons for a wife to withhold sex from her husband (55 percent). Specifically, 92 percent of men said that she can refuse if she knows that her husband has an STI, 74 percent agree that a woman can refuse to have sex with her husband if she is not in the mood or is tired, and 62 percent said she can refuse if she knows that her husband is having sexual relations with another woman.

Table 15.7.1 Attitudes toward refusing sexual intercourse with husband: Women

Percentage of women age 15-49 who believe that a wife is justified in refusing to have sexual intercourse with her husband in specific circumstances, by background characteristics, Armenia 2005

Background characteristic	Wife is justified in refusing sex with her husband if she: Knows husband has a sexually transmitted infection	Knows husband has sex with other women	Is tired or not in the mood	Percentage who agree with all of the specified reasons	Percentage who agree with none of the specified reasons	Number of women
Age						
15-19	71.1	65.5	44.2	42.6	27.6	1,123
20-24	89.5	84.2	59.8	57.3	8.9	1,131
25-29	90.8	86.1	60.4	57.6	7.2	929
30-34	92.4	85.2	61.1	55.7	4.8	749
35-39	92.9	85.4	65.9	62.0	5.7	711
40-44	91.8	86.2	63.1	59.5	6.2	965
45-49	91.5	84.0	62.9	59.3	7.1	958
Employment in the past 12 months						
Not employed	86.2	80.6	57.5	54.5	12.1	4,789
Employed for cash	93.6	87.6	66.6	63.2	5.1	1,488
Employed not for cash	86.3	71.1	43.8	38.9	8.4	282
Number of living children						
0	79.4	73.7	50.6	48.7	19.3	2,352
1-2	93.9	87.6	65.3	61.6	4.6	2,812
3+	90.0	83.6	60.3	55.9	6.9	1,402
Marital status						
Never married	77.5	72.3	49.8	48.2	21.2	2,043
Currently married	92.9	86.5	62.6	58.8	5.0	4,044
Formerly married	89.8	82.4	67.0	62.7	9.7	479
Residence						
Urban	90.0	85.8	62.1	59.3	8.5	4,194
Rural	84.1	74.7	53.4	49.5	13.6	2,372
Region						
Yerevan	91.4	89.1	67.2	64.6	7.3	2,468
Aragatsotn	62.3	58.2	54.3	46.5	32.6	292
Ararat	78.4	55.8	28.8	27.8	20.9	462
Armavir	93.8	88.4	79.0	74.8	5.7	567
Gegharkunik	83.2	76.4	54.5	50.0	12.9	443
Lori	84.1	76.2	44.4	42.5	14.8	537
Kotayk	82.2	76.2	53.2	45.9	13.0	563
Shirak	94.8	90.3	65.1	64.6	5.0	563
Syunik	98.0	95.2	36.7	36.1	2.0	281
Vayots Dzor	88.0	69.3	37.7	36.8	11.8	107
Tavush	88.6	76.6	65.1	59.0	7.7	285
Education						
Basic general	67.4	62.7	45.1	41.0	29.0	529
Secondary general	85.4	79.1	54.2	51.1	12.2	2,440
Specialized secondary	91.7	83.9	63.0	59.2	7.0	1,997
Higher	93.5	89.6	65.7	63.5	5.6	1,600
Wealth quintile						
Lowest	82.1	75.4	54.1	50.2	15.0	1,164
Second	84.5	76.5	53.9	50.6	13.5	1,284
Middle	90.4	81.0	59.2	55.7	8.5	1,303
Fourth	89.4	85.3	60.3	57.1	8.7	1,375
Highest	91.7	89.1	66.0	63.7	7.1	1,440
Total	87.9	81.8	59.0	55.8	10.4	6,566

Table 15.7.2 Attitudes toward refusing sexual intercourse with husband: Men

Percentage of men age 15-49 who believe that a wife is justified in refusing to have sexual intercourse with her husband in specific circumstances and percentage who say a woman is justified in asking her husband to use condoms if she knows he has a sexually transmitted infection (STI), by background characteristics, Armenia 2005

Background characteristic	Wife is justified in refusing sex with her husband if she: Knows husband has a sexually transmitted infection	Knows husband has sex with other women	Is tired or not in the mood	Percentage who agree with all of the specified reasons	Percentage who agree with none of the specified reasons	Percentage who say a wife is justified in asking husband to use condoms if he has an STI	Number of men
Age							
15-19	70.2	41.6	44.2	31.3	26.8	72.8	292
20-24	95.7	53.4	76.8	49.9	3.4	92.0	237
25-29	98.5	72.8	82.3	63.9	1.5	94.9	202
30-34	99.1	66.8	83.5	60.3	0.9	96.2	156
35-39	95.9	67.4	81.6	62.4	2.9	93.2	150
40-44	98.3	71.1	81.7	61.3	1.0	89.9	199
45-49	99.2	71.7	87.1	66.3	0.8	93.7	211
Employment in the past 12							
Not employed	86.8	57.7	66.4	50.0	11.7	84.0	716
Employed for cash	97.6	68.2	82.3	61.1	1.9	94.0	666
Employed not for cash	96.1	39.7	80.8	36.0	3.9	94.7	60
Number of living children							
0	85.0	52.8	64.2	45.2	13.2	84.4	688
1-2	98.2	73.9	83.4	66.5	1.6	93.0	519
3+	100.0	60.9	84.2	55.0	0.0	93.9	240
Marital status							
Never married	83.3	51.3	61.5	43.3	14.7	83.2	615
Currently married	98.8	69.6	84.3	62.8	1.1	93.6	815
Formerly married	100.0	60.6	68.2	60.6	0.0	83.7	17
Residence							
Urban	93.0	70.7	78.4	63.0	5.7	91.7	913
Rural	90.7	46.4	67.6	39.9	8.7	84.6	534
Region							
Yerevan	94.6	79.5	85.2	73.3	3.9	96.5	547
Aragatsotn	96.7	37.7	88.7	35.3	3.3	97.3	71
Ararat	76.4	39.7	67.3	38.5	21.7	71.9	110
Armavir	100.0	41.9	85.1	37.4	0.0	100.0	139
Gegharkunik	88.6	38.3	55.5	31.9	11.0	93.3	81
Lori	93.9	65.7	59.6	57.2	4.8	87.0	87
Kotayk	94.3	53.1	62.6	45.5	5.0	95.5	151
Shirak	84.3	68.9	43.3	42.5	15.7	29.1	98
Syunik	82.7	65.4	58.5	53.0	17.3	83.2	67
Vayots Dzor	87.3	33.3	81.6	31.5	12.7	95.2	31
Tavush	98.3	61.6	87.9	57.0	0.0	99.3	64
Education							
Basic general	86.0	47.5	64.3	43.3	10.8	84.8	205
Secondary general	89.8	56.1	67.9	46.1	9.1	85.9	586
Specialized secondary	96.2	68.5	84.5	62.6	3.6	92.0	310
Higher	96.2	73.7	82.3	67.8	3.5	94.4	346
Wealth quintile							
Lowest	90.3	48.7	66.9	40.2	9.5	79.9	261
Second	88.6	53.5	71.5	45.9	9.6	82.4	264
Middle	91.5	62.7	72.1	55.1	7.3	88.6	326
Fourth	94.3	64.7	78.1	58.0	5.1	95.2	316
Highest	95.8	77.1	82.6	71.1	3.2	97.6	280
Total	92.2	61.7	74.4	54.5	6.8	89.1	1,447

Overall, only 7 percent of men do not agree with any of the three reasons given for a wife to refuse to have sex with her husband. Similar patterns among men and women are seen as to which groups are more likely not to agree with any of the given reasons. Younger men age 15-19 (27 percent), men with only a basic general education (11 percent), never-married men (15 percent), men with no children (13 percent), those residing in rural areas (9 percent), and unemployed men (12 percent) all have a higher than average likelihood of not agreeing with any reason given for a wife to withhold sex from her husband. As with women, the proportion of men who do not agree with any of the given reasons for a wife to refuse sex with her husband is reversely related with wealth.

Since 2000, there have not been significant changes in the attitudes of women or men with regard to the issue of a wife's justification in refusing to have sexual intercourse with her husband.

In addition, men were asked if they thought a woman is justified in asking that they use condoms if she knows that her husband has an STI. The results show that almost 90 percent of men agree. Younger men, those in the lower wealth quintiles, and those in Shirak region are less likely than other men to agree that a wife is justified in asking that they use condoms in such a case.

15.6 INDICATORS OF WOMEN'S EMPOWERMENT

The three sets of empowerment indicators, namely women's participation in making household decisions, their attitudes toward women's ability to refuse sexual intercourse with their husband/partner, and their attitudes toward wife beating can be summarized into three separate indices. The first index shows the number of decisions (see Table 15.5 for the list of decisions) in which women participate alone or jointly with their husband/partner. This index ranges in value from 0 to 4 and is positively related to women's empowerment. It reflects the degree of decisionmaking control that women are able to exercise in areas that affect their own lives and environments. The second indicator, which ranges in value from 0 to 3, is the number of circumstances (see Table 15.7.1 for the list of the circumstances) in which the respondent feels that a woman is justified in refusing sexual intercourse with her husband or partner. This indicator reflects perceptions of sexual roles and women's rights over their bodies and relates positively to women's sense of self and empowerment. The final indicator, which ranges in value from 0 to 5, is the total number of reasons (see Table 15.6.1 for the list of reasons) for which the respondent feels that a husband is justified in beating his wife. A lower score on this indicator is interpreted as reflecting a greater sense of entitlement and self-esteem and a higher status of women.

Table 15.8 shows how these three indicators relate to each other for female respondents. In general, the expectation is that women who participate in making household decisions are also more likely to have gender-egalitarian beliefs. The data show that there is a direct relationship between woman's participation in decisionmaking and number of reasons to refuse sex with husband. For example, the proportion of women who participate in the household decisionmaking increases from 22 percent among those who do not agree with any of the reasons for a wife to refuse sex with her husband to 46 percent among women who agree with all three reasons.

Generally, there is a positive relationship between number of decisions in which the woman participates and the proportion who agree with none of the given reasons for a husband to beat his wife. Sixty-one 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 76 percent among those who participate in three to four decisions. There is no clear relationship between the proportion who disagree with all of the reasons to justify wife beating and number of reasons to refuse sex with the husband.

Table 15.8 Indicators of women's empowerment

Percentage of women age 15-49 who participate in making all specified household decisions, percentage who disagree with all reasons for justifying wife beating, and percentage who agree with all reasons for refusing sexual intercourse with husband/partner, by value on each of the indicators of women's empowerment, Armenia 2005

Empowerment indicator	Percentage who participate in all decisionmaking[1]	Percentage who agree with all of the reasons for refusing sexual intercourse with husband/partner	Percentage who disagree with all of the reasons justi-fying wife beating	Number of women
Number of decisions in which woman participates[1]				
0	na	63.8	60.6	182
1-2	na	55.6	74.3	629
3-4	na	59.1	76.4	3,233
Number of reasons to refuse sexual intercourse with husband[2]				
0	22.0	na	82.4	681
1-2	44.2	na	73.5	2,223
3	45.9	na	79.7	3,662
Number of reasons for which wife beating is justified[3]				
0	42.2	57.1	na	5,114
1-2	45.9	47.9	na	942
3-4	42.5	57.3	na	457
5	52.1	58.1	na	53

na = Not applicable

[1] Restricted to currently married women. See Table 15.5 for the list of decisions.
[2] See Table 15.7.1 for reasons.
[3] See Table 15.6.1 for reasons.

15.7 Current Use of Contraception by Women's Status

A woman's ability to control her fertility and the contraceptive method she chooses are likely to be affected by her status, self-image, and sense of empowerment. A woman who feels that she is unable to control other aspects of her life may be less likely to feel she can make and carry out decisions on her fertility. She may also feel the need to choose methods that are less likely to be evident or which do not depend on her husband's cooperation. The ADHS collected information on three indicators of women's empowerment: number of decisions in which the respondent participates, the number of reasons for which a woman can refuse to have sexual relations with her husband, and the number of reasons for which the respondent feels a husband is justified in beating his wife. This section focuses on the relationship between contraceptive use and women's status.

Table 15.9 shows the relationship of each of these three indicators of women's empowerment with current use of contraceptive methods by currently married women age 15-49. Overall, women who are more empowered (i.e., respondents with higher scores on the first two indicators of status and a lower score on the third indicator of women's status) are more likely to be using a modern method of contraception. For example, 43 percent of women who do not participate in any of the household decisions are using a method of contraception, as opposed to almost 54 percent of women who participate in three or four of the specified decisions. Results of the second indicator (number of reasons to refuse sexual intercourse with husband) follow the same pattern. Forty-six percent of women who do not agree with any of the

given reasons for refusing sex with husband are using a method of contraception as opposed to 53 percent of women who agree with all three reasons. Although the third indicator (number of reasons for which wife beating is justified) appears to have no discernable relationship to contraceptive use, these results suggest that, overall, different dimensions of women's empowerment are positively associated with women's use of contraception in Armenia.

Table 15.9 Current use of contraception by women's status

Percent distribution of currently married women by contraceptive method currently used, according to selected indicators of women's status, Armenia 2005

Empowerment indicator	Any method	Modern method: Any modern method	Modern method: Temporary female methods[1]	Modern method: Male condom	Any traditional method	Not currently using method	Total	Number of women
Number of decisions in which woman participates[2]								
0	42.8	11.3	6.3	5.0	31.5	57.2	100.0	182
1-2	50.7	17.3	9.5	7.8	33.4	49.3	100.0	629
3-4	54.1	20.4	12.1	8.3	33.7	45.9	100.0	3,233
Number of reasons given for refusing to have sexual intercourse with husband[3]								
0	45.9	13.8	8.2	5.5	32.2	54.1	100.0	202
1-2	53.5	18.1	11.1	7.1	35.3	46.5	100.0	1,465
3	53.4	20.8	11.9	8.9	32.7	46.6	100.0	2,377
Number of reasons for which wife-beating is justified[4]								
0	53.3	20.4	11.5	8.9	32.9	46.7	100.0	3,047
1-2	54.0	18.8	12.4	6.3	35.2	46.0	100.0	633
3-4	49.4	13.6	8.3	5.3	35.8	50.6	100.0	319
5	52.1	9.8	9.8	0.0	42.3	47.9	100.0	45
Total	53.1	19.5	11.4	8.1	33.6	46.9	100.0	4,044

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] Restricted to currently married women. See Table 15.5 for the list of decisions.
[3] See Table 15.7.1 for the list of reasons.
[4] See Table 15.6.1 for the list of reasons.

15.8 Women's Status and Ideal Family Size and Unmet Need

An increase in women's status and empowerment is recognized as important for efforts to reduce fertility through at least two main pathways: 1) desired family size decreases as women become more empowered and 2) empowerment increases a woman's ability to meet family-size goals through the effective use of contraception. Table 15.10 shows how women's ideal family size and their unmet need for family planning vary by the three indicators of women's empowerment—number of decisions in which the respondent has the final say, number of reasons for which the respondent feels a husband is justified in beating his wife, and number of reasons for which a woman can refuse to have sexual intercourse with her husband.

Table 15.10 Ideal number of children and unmet need for family planning by women's empowerment

Mean ideal number of children and the percentage of women with an unmet need for family planning, by indicators of women's empowerment, Armenia 2005

Empowerment indicator	Mean ideal number of children[1]	Number of women	Percentage of women with an unmet need for family planning[2]			Number of women
			For spacing	For limiting	Total	
Number of decisions in which woman participates[3]						
0	2.5	182	7.0	12.5	19.5	182
1-2	2.6	619	7.4	11.0	18.4	629
3-4	2.7	3,198	2.6	9.3	11.9	3,233
Number of reasons given for refusing to have sexual intercourse with husband[4]						
0	2.3	660	1.1	3.2	4.3	681
1-2	2.6	2,199	2.3	5.9	8.2	2,223
3	2.6	3,611	2.4	6.9	9.3	3,662
Number of reasons for which wife-beating is justified[5]						
0	2.5	5,027	2.3	5.9	8.1	5,114
1-2	2.6	936	1.8	7.6	9.4	942
3-4	2.7	455	2.6	6.7	9.3	457
5	(2.6)	52	1.8	6.4	8.2	53
Total	2.6	6,470	2.2	6.2	8.4	6,566

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Mean excludes respondents who gave non-numeric responses.
[2] See Table 7.3 for definition of unmet need for family planning.
[3] Restricted to currently married women. See Table 15.5 for the list of decisions.
[4] See Table 15.7.1 for the list of reasons.
[5] See Table 15.6.1 for the list of reasons.

The data show that there is no clear pattern in the relationship of women's empowerment indicators and the mean ideal number of children. On the other hand, the unmet need for family planning, both for spacing and limiting, is related to the women's participation in decisionmaking. For example, the total unmet need for family planning is lower for women who participate in three to four decisions when compared with those who participate in none (12 percent versus 20 percent). The pattern is not clear when looking at the effect of the other two indicators of women's empowerment (reasons to refuse sex with husband and reasons for which wife beating is justified).

15.9 Women's Status and Reproductive Health Care

A woman's status and level of self-respect can be major determinants of a woman's ability to obtain adequate health care for herself. Table 15.11 examines whether women's use of antenatal, delivery, and postnatal care services from health workers varies by their level of empowerment as measured by the three indicators of empowerment. In societies where health care is widespread, women's empowerment may not affect their access to reproductive health services; in other societies, however, increased empowerment of women is likely to increase their ability to seek out and use health services to better meet their own reproductive health goals, including the goal of safe motherhood.

Table 15.11 Reproductive health care by women's empowerment

Percentage of women with a live birth in the five years preceding the survey who received antenatal care, delivery assistance, and postnatal care from a health worker for the most recent birth, by indicators of women's empowerment, Armenia 2005

Empowerment indicator	Received antenatal care from a health professional	Received delivery assistance from a health professional	Received postnatal care from a health professional within 2 days of delivery[1]	Number of births
Number of decisions in which woman participates[2]				
0	87.8	100.0	97.3	87
1-2	92.2	99.5	99.0	292
3-4	94.2	98.7	96.6	746
Number of reasons given for refusing to have sexual intercourse with husband[3]				
0	82.6	95.8	93.9	63
1-2	92.5	98.2	95.9	359
3	94.5	99.7	98.4	754
Number of reasons for which wife-beating is justified[4]				
0	95.6	99.2	98.5	894
1-2	88.7	99.2	96.9	176
3-4	79.5	97.0	89.4	88
5	85.7	100.0	85.5	19
Total	93.2	99.1	97.4	1,176

Note: Health personnel includes doctor, nurse, or midwife.
[1] Pertains to all recent deliveries, including those delivered in a health facility
[2] Restricted to currently married women. See Table 15.5 for the list of decisions.
[3] See Table 15.7.1 for the list of reasons.
[4] See Table 15.6.1 for the list of reasons.

The data indicate that there is a relationship between each of the selected indicators of women's status and women's utilization of antenatal care, suggesting that in Armenia, as women's status increases, so does their access to reproductive health care from a professional. For example, among women who participate in all of the specified household decisions, 94 percent received antenatal care from a trained health professional, compared with 88 percent of women who do not participate in any decisions. Similarly, the proportion of women who received antenatal care from a health professional increases with the number of reasons women feel justified in refusing sex with their husband. Finally, the percentage of women with professional antenatal care declines as the number of reasons justifying wife beating increases.

Virtually all Armenian women receive delivery care from a health professional (99 percent) or receive postnatal care from a health professional within two days of delivery (97 percent). Therefore, there is less variation in these two components of reproductive health care by women's status. In summary, the data suggest that a woman's status and empowerment has a positive relationship with access to quality health care.

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SAMPLE DESIGN

Appendix **A**

Table A.1 Sample implementation: Women

Percent distribution of households and eligible women by results of the household and individual interviews, and household, eligible women and overall response rates, according to urban-rural residence and region, Armenia 2005

	Residence		Region											
Result	Urban	Rural	Yerevan	Aragatsotn	Ararat	Armavir	Gegharkunik	Lori	Kotayk	Shirak	Syunik	Vayots Dzor	Tavush	Total
Selected households														
Completed (C)	88.2	89.7	87.0	88.4	83.1	90.6	83.4	81.5	83.4	96.5	99.0	87.4	98.2	88.7
Household present but no competent respondent at home (HP)	2.0	1.6	3.8	1.0	4.6	0.6	1.5	3.1	2.6	0.2	0.0	0.0	0.5	1.9
Refused (R)	1.9	1.6	3.3	1.9	1.6	2.6	2.2	0.8	2.6	1.2	0.0	2.2	0.2	1.9
Dwelling not found (DNF)	0.2	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.8	0.0	0.0	1.2	0.0	0.2
Household absent (HA)	6.6	6.1	5.0	6.5	10.2	4.6	10.9	13.2	9.4	1.2	1.0	9.0	0.8	6.4
Dwelling vacant/address not a dwelling (DV)	1.0	0.8	0.9	2.2	0.4	1.5	2.0	0.9	1.2	0.8	0.0	0.2	0.3	1.0
Dwelling destroy (DD)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.2	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	100.0	100.0
Number of sampled households	5,446	2,119	1,353	585	676	650	650	650	650	650	600	500	601	7,565
Household response rate (HRR)[1]	95.5	96.4	92.5	96.8	93.0	96.6	95.8	95.2	93.3	98.6	100.0	96.3	99.3	95.8
Eligible women														
Completed (EWC)	97.0	96.7	95.4	96.3	97.3	99.0	99.2	98.7	89.6	99.0	99.4	97.4	97.6	96.9
Not at home (EWNH)	1.5	1.8	2.5	1.6	2.3	0.2	0.2	0.4	6.7	0.0	0.4	0.0	1.2	1.6
Postponed (EWP)	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Refused (EWR)	1.0	0.8	1.4	0.9	0.4	0.6	0.3	0.2	3.0	0.5	0.0	1.4	0.5	0.9
Partly completed (EWPC)	0.2	0.0	0.5	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.1
Incapacitated (EWI)	0.3	0.7	0.1	1.0	0.0	0.0	0.3	0.6	0.6	0.5	0.2	1.2	0.5	0.4
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	100.0	100.0
Number of women	4,732	2,041	1,196	574	560	619	598	470	627	589	540	418	582	6,773
Eligible women response rate (EWRR)[2]	97.0	96.7	95.4	96.3	97.3	99.0	99.2	98.7	89.6	99.0	99.4	97.4	97.6	96.9
Overall response rate (ORR)[3]	92.7	93.3	88.2	93.3	90.6	95.6	95.0	93.9	83.6	97.6	99.4	93.7	96.9	92.8

[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.2 Sample implementation: Men

Percent distribution of households and eligible men by results of the household and individual interviews, and household, eligible men and overall response rates, according to urban-rural residence and region Armenia 2005

	Residence		Region											
Result	Urban	Rural	Yerevan	Aragatsotn	Ararat	Armavir	Gegharkunik	Lori	Kotayk	Shirak	Syunik	Vayots Dzor	Tavush	Total
Selected households														
Completed (C)	87.5	88.9	85.7	84.6	83.3	88.0	82.7	82.2	83.2	96.2	98.5	88.0	98.5	87.9
Household present but no competent respondent at home (HP)	1.7	1.9	3.4	0.5	5.1	0.0	1.9	4.3	0.5	0.0	0.0	0.0	0.5	1.8
Refused (R)	2.4	2.0	4.3	2.6	0.9	4.8	1.0	0.5	3.8	1.4	0.0	2.9	0.5	2.3
Dwelling not found (DNF)	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.5	1.0	0.0	0.0	0.0	0.0	0.1
Household absent (HA)	7.4	6.2	5.8	9.2	10.3	5.8	13.0	11.5	10.1	1.9	1.5	9.1	0.5	7.0
Dwelling vacant/address not a dwelling (DV)	0.9	1.0	0.9	3.1	0.4	1.4	1.4	1.0	1.4	0.5	0.0	0.0	0.0	0.9
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	100.0	100.0
Number of sampled households	1,816	696	468	195	234	208	208	208	208	208	200	175	20	2,512
Household response rate (HRR)[1]	95.4	95.8	91.8	96.5	93.3	94.8	96.6	94.0	94.0	98.5	100.0	96.9	99.0	95.5
Eligible men														
Completed (EMC)	88.7	88.9	89.7	92.8	85.7	93.0	89.1	69.1	72.3	95.7	100.0	86.9	97.7	88.8
Not at home (EMNH)	6.3	7.3	7.5	4.6	11.1	1.3	3.6	24.7	17.5	0.9	0.0	3.3	1.6	6.6
Refused (EMR)	3.2	3.0	1.4	2.0	1.6	5.1	5.1	3.7	7.3	0.0	0.0	9.0	0.0	3.1
Partly completed (EMPC)	0.6	0.2	0.3	0.0	1.6	0.0	1.4	0.0	1.1	0.0	0.0	0.8	0.0	0.5
Incapacitated (EMI)	1.2	0.6	1.0	0.7	0.0	0.6	0.7	2.5	1.7	3.4	0.0	0.0	0.8	1.0
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	100.0	100.0
Number of men	1,126	504	292	153	126	157	138	81	177	117	139	122	128	1,630
Eligible men response rate (EMRR)[2]	88.7	88.9	89.7	92.8	85.7	93.0	89.1	69.1	72.3	95.7	100.0	86.9	97.7	88.8
Overall response rate (ORR)[3]	84.6	85.2	82.3	89.6	80.0	88.2	86.1	65.0	68.0	94.3	100.0	84.2	96.7	84.8

[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 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 derived from a sample survey are affected by two types of errors: 1) non-sampling errors, and 2) sampling errors. Non-sampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 2005 Armenia DHS (2005 ADHS) to minimize this type of error, non-sampling 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 2005 ADHS is only one of many samples that could have been selected from the same population, using the same design and expected 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 between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

A 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 2005 ADHS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use a more complex formula. The computer software used to calculate sampling errors for the 2005 ADHS is the sampling error module in ISSA (Integrated System for Survey Analysis). This module uses the Taylor linearization method of variance estimation for survey estimates that are means or proportions. Another approach, 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:

$$SE^2(r) = var(r) = \frac{1-f}{x^2}\sum_{h=1}^{H}\left[\frac{m_h}{m_{h-1}}\left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h}\right)\right]$$

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 is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and 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 2005 ADHS, there were 308 non-empty clusters. Hence, 308 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 308 clusters,
$r_{(i)}$ is the estimate computed from the reduced sample of 307 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 errors and confidence limits for the estimates are also computed.

Sampling errors for the 2005 ADHS are calculated for selected variables considered to be of primary interest for the women's and men's samples. The results are presented in this appendix for the country as a whole, for urban and rural areas, and for 11 regions. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1.1 for women and in Table B.1.2 for men. Tables B.2.1 to B.15.2 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 the selected variables including fertility and mortality rates. The sampling errors for mortality rates are presented for the ten-year period preceding the survey. 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 age 40-49) can be interpreted as follows: the overall average from the national sample is 2.5 and its standard error is 0.036. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate (i.e., 2.527 ± 2×0.036). There is a high probability (95 percent) that the true average number of children ever born to all women aged 40 to 49 is between 2.454 and 2.599.

Table B.1.1 List of selected variables for sampling errors, Armenia 2005: Women

Variable	Estimate	Base population
Urban residence	Proportion	All women
Literate	Proportion	All women
No education	Proportion	All women
Secondary education or higher	Proportion	All women
Never married	Proportion	All women
Currently married/in union	Proportion	All women
Married before age 20	Proportion	Women age 20-49
Currently pregnant	Proportion	All women
Children ever born	Mean	All women
Children surviving	Mean	All women
Children ever born to women age 40-49	Mean	Women age 40-49
Knows any contraceptive method	Proportion	Currently married women
Currently using any contraceptive method	Proportion	Currently married women
Currently using a modern method	Proportion	Currently married women
Currently using pill	Proportion	Currently married women
Currently using IUD	Proportion	Currently married women
Currently using female sterilization	Proportion	Currently married women
Currently using rhythm	Proportion	Currently married women
Obtained method from public sector source	Proportion	Current users of modern method
Want no more children	Proportion	Currently married women
Want to delay birth at least 2 years	Proportion	Currently married women
Ideal family size	Mean	All women
Mother received medical assistance at delivery	Proportion	Births occurring 1-59 months before interview
Child had diarrhea in the two weeks before survey	Proportion	Children age 0-59 months
Treated with oral rehydration salts (ORS)	Proportion	Children with diarrhea in two weeks before interview
Taken to a health provider	Proportion	Children with diarrhea in two weeks before interview
Vaccination card seen	Proportion	Children age 12-23 months
Received BCG	Proportion	Children age 12-23 months
Received DPT (3 doses)	Proportion	Children age 12-23 months
Received polio (3 doses)	Proportion	Children age 12-23 months
Received measles	Proportion	Children age 12-23 months
Fully immunized	Proportion	Children age 12-23 months
Height-for-age (below -2SD)	Proportion	Children age 0-59 months
Weight-for-height (below -2SD)	Proportion	Children age 0-59 months
Weight-for-age (below -2SD)	Proportion	Children age 0-59 months
Anemia in children	Proportion	Children age 6-59 months
Anemia in women	Proportion	All women
Body mass index (BMI) <18.5	Proportion	All women
Prevalence of hypertension	Proportion	All women
Has heard of HIV/AIDS	Proportion	All women
Knows about condoms	Proportion	All women
Knows about limiting partners	Proportion	All women
Had two or more sexual partners in past 12 months	Proportion	All women who had sex in the past 12 months
Had higher-risk sexual intercourse in the past 12 months[1]	Proportion	All women who had sex in the past 12 months
Condom use at last higher-risk sexual intercourse (all)	Proportion	All women 15-49 who had higher-risk sex in the past 12 months
Abstinence among youth (never had sexual intercourse)	Proportion	All women 15-24 who never had intercourse
Sexual activity in past 12 months among never-married	Proportion	Never-married women
Accepting attitudes towards people with HIV[2]	Proportion	All women who have heard of HIV/AIDS
Fertility	Rate	Births to all women in the 3 years preceding the survey[3]
Perinatal mortality (0-4 years)	Ratio	Number of pregnancies of 7+ months
Neonatal mortality	Rate	Births in 10 years preceding the survey
Postneonatal mortality	Rate	Births in 10 years preceding the survey
Infant mortality	Rate	Births in 10 years preceding the survey
Child mortality	Rate	Births in 10 years preceding the survey
Under-five mortality	Rate	Births in 10 years preceding the survey

[1]Sexual intercourse with a nonmarital, noncohabiting partner
[2]Four accepting attitudes: willing to care for a family member with the AIDS virus in the respondent's home; would buy fresh vegetables from shopkeeper with AIDS; say that a female teacher with the AIDS virus and who is not sick should be allowed to keep teaching; and would not want to keep secret that a family member got infected with the AIDS virus.
[3]Births occurring 1-35 months before interview

Table B.1.2 List of selected variables for sampling errors, Armenia 2005: Men

Variable	Estimate	Base population
Urban residence	Proportion	All men
Literate	Proportion	All men
No education	Proportion	All men
Secondary education or higher	Proportion	All men
Never married	Proportion	All men
Currently married/in union	Proportion	All men
Married before age 20	Proportion	Men age 20-49
Want no more children	Proportion	Currently married men
Want to delay birth at least 2 years	Proportion	Currently married men
Ideal family size	Mean	All men
Has heard of HIV/AIDS	Proportion	All men
Knows about condoms	Proportion	All men
Knows about limiting partners	Proportion	All men
Had two or more sexual partners in the past 12 months	Proportion	All men who had sex in the past 12 months
Had higher-risk intercourse in the past 12 months (15-59)[1]	Proportion	All men age 15-49 who had sex in the past 12 months
Condom use at last higher-risk intercourse (15-49)	Proportion	All men age 15-49 who had higher-risk sex in the past 12 months
Abstinence among youth (never had sexual intercourse)	Proportion	All men age 15-24 who never had intercourse
Sexually active in the past 12 months among never-married	Proportion	Never-married men
Paid for sexual intercourse in the past 12 months	Proportion	All men
Accepting attitudes towards people with HIV[2]	Proportion	All men who have heard of HIV/AIDS

[1]Sexual intercourse with a nonmarital, noncohabiting partner

[2]Four accepting attitudes: willing to care for a family member with the AIDS virus in the respondent's home; would buy fresh vegetables from shopkeeper with AIDS; say that a female teacher with the AIDS virus and who is not sick should be allowed to keep teaching; and would not want to keep secret that a family member got infected with the AIDS virus.

Table B.2.1 Sampling errors for the national sample, Armenia 2005: Women

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.639	0.013	6,566	6,566	2.217	0.021	0.612	0.665
Literate	0.995	0.001	6,566	6,566	1.575	0.001	0.992	0.997
Secondary education or higher	0.919	0.005	6,566	6,566	1.344	0.005	0.910	0.928
Never married	0.311	0.006	6,566	6,566	1.124	0.021	0.298	0.324
Currently married/in union	0.616	0.008	6,566	6,566	1.278	0.012	0.601	0.631
Married before age 20	0.391	0.008	5,430	5,443	1.258	0.021	0.374	0.408
Currently pregnant	0.030	0.002	6,566	6,566	1.149	0.081	0.025	0.035
Children ever born	1.518	0.018	6,566	6,566	1.023	0.012	1.483	1.553
Children surviving	1.440	0.017	6,566	6,566	1.043	0.011	1.407	1.473
Children ever born to women age 40-49	2.527	0.036	2,024	1,922	1.346	0.014	2.454	2.600
Knows any contraceptive method	0.989	0.002	4,112	4,044	1.310	0.002	0.985	0.993
Ever using contraceptive method	0.755	0.009	4,112	4,044	1.377	0.012	0.736	0.773
Currently using any contraceptive method	0.531	0.012	4,112	4,044	1.485	0.022	0.508	0.554
Currently using pill	0.008	0.002	4,112	4,044	1.123	0.191	0.005	0.012
Currently using IUD	0.094	0.007	4,112	4,044	1.438	0.070	0.081	0.107
Currently using female sterilization	0.006	0.002	4,112	4,044	1.414	0.292	0.002	0.009
Currently using rhythm method	0.038	0.005	4,112	4,044	1.566	0.123	0.029	0.047
Obtained method from public sector source	0.528	0.026	761	791	1.419	0.049	0.476	0.579
Want no more children	0.707	0.009	4,112	4,044	1.300	0.013	0.688	0.725
Want to delay birth at least 2 years	0.108	0.007	4,112	4,044	1.390	0.062	0.095	0.122
Ideal family size	2.559	0.012	6,493	6,470	1.075	0.005	2.535	2.584
Mother received medical assistance at delivery	0.978	0.006	1,430	1,512	1.495	0.007	0.965	0.991
Child had diarrhea in two weeks before survey	0.167	0.014	1,397	1,470	1.369	0.084	0.139	0.195
Treated with oral rehydration salts (ORS)	0.249	0.037	224	245	1.277	0.148	0.175	0.323
Taken to a health provider	0.318	0.045	224	245	1.444	0.142	0.228	0.409
Vaccination card seen	0.918	0.024	278	302	1.521	0.026	0.869	0.966
Received BCG	0.981	0.008	278	302	0.980	0.008	0.965	0.996
Received DPT (3 doses)	0.714	0.036	278	302	1.360	0.050	0.643	0.786
Received polio (3 doses)	0.769	0.041	278	302	1.645	0.053	0.688	0.850
Received measles	0.723	0.034	278	302	1.301	0.047	0.655	0.791
Fully immunized	0.597	0.037	278	302	1.288	0.062	0.523	0.670
Height-for-age (below -2SD)	0.130	0.019	1,254	1,293	1.862	0.146	0.092	0.167
Weight-for-height (below -2SD)	0.051	0.010	1,254	1,293	1.504	0.194	0.031	0.070
Weight-for-age (below -2SD)	0.040	0.007	1,254	1,293	1.228	0.178	0.026	0.055
Anemia in children	0.365	0.028	1,037	1,106	1.841	0.077	0.309	0.421
Anemia in women	0.246	0.010	6,134	6,080	1.783	0.040	0.226	0.265
Body mass index (BMI) <18.5	0.052	0.004	6,083	6,016	1.409	0.078	0.044	0.060
Prevalence of hypertension	0.217	0.009	6,216	6,181	1.641	0.039	0.200	0.234
Has heard of HIV/AIDS	0.954	0.004	6,566	6,566	1.404	0.004	0.947	0.962
Knows about condoms	0.718	0.010	6,566	6,566	1.817	0.014	0.698	0.738
Knows about limiting partners	0.799	0.008	6,566	6,566	1.590	0.010	0.783	0.814
Had 2+ sexual partners in past 12 months	0.001	0.001	3,961	3,931	1.459	1.001	0.000	0.002
Had higher-risk intercourse in past 12 months	0.014	0.002	3,961	3,931	1.265	0.170	0.009	0.019
Accepting attitudes towards people with HIV	0.014	0.002	6,245	6,267	1.548	0.165	0.009	0.019
Total fertility rate (past 3 years)	1.710	0.067	na	18,633	1.283	0.039	1.576	1.844
Perinatal mortality (0-4 years)	18.907	5.305	1,443	1,524	1.288	0.281	8.298	29.517
Neonatal mortality (past 5 years)	16.882	5.223	1,447	1,526	1.397	0.309	6.436	27.328
Postneonatal mortality (past 5 years)	8.676	3.876	1,448	1,526	1.593	0.447	0.923	16.429
Infant mortality (past 5 years)	25.558	6.148	1,448	1,526	1.387	0.241	13.262	37.853
Child mortality (past 5 years)	4.351	2.037	1,448	1,527	1.201	0.468	0.278	8.424
Under-five mortality (past 5 years)	29.798	6.292	1,449	1,527	1.344	0.211	17.214	42.381

na = Not applicable

Table B.2.2 Sampling errors for the national sample, Armenia 2005: Men

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.631	0.017	1,447	1,447	1.318	0.027	0.598	0.664
Literate	0.995	0.002	1,447	1,447	1.308	0.002	0.990	1.000
No education	0.004	0.002	1,447	1,447	1.385	0.579	0.000	0.009
Secondary education or higher	0.995	0.002	1,447	1,447	1.308	0.002	0.990	1.000
Never married	0.425	0.014	1,447	1,447	1.069	0.033	0.397	0.453
Currently married/in union	0.563	0.014	1,447	1,447	1.049	0.024	0.536	0.590
Married before age 20	0.029	0.007	913	918	1.189	0.228	0.016	0.042
Want no more children	0.624	0.023	815	815	1.355	0.037	0.578	0.670
Want to delay birth at least 2 years	0.118	0.017	815	815	1.475	0.141	0.085	0.152
Ideal family size	2.808	0.042	1,369	1,368	1.083	0.015	2.725	2.892
Has heard of HIV/AIDS	0.923	0.011	1,447	1,447	1.572	0.012	0.901	0.945
Knows about condoms	0.809	0.015	1,447	1,447	1.429	0.018	0.780	0.839
Knows about limiting partners	0.858	0.015	1,447	1,447	1.603	0.017	0.829	0.888
Had 2+ sexual partners in the past 12 months	0.124	0.015	1,021	1,058	1.468	0.122	0.094	0.155
Higher-risk intercourse in past 12 months (15-49)	0.276	0.018	1,021	1,058	1.253	0.064	0.241	0.311
Condom use at past higher-risk intercourse (15-49)	0.794	0.038	256	292	1.494	0.048	0.719	0.870
Abstinence among youth (never intercourse)	0.658	0.033	489	479	1.518	0.050	0.593	0.724
Sexually active in past 12 months among never-married	0.295	0.029	489	479	1.402	0.098	0.237	0.352
Paid for sexual intercourse in the past 12 months	0.034	0.006	1,447	1,447	1.340	0.188	0.021	0.047

na = Not applicable

Table B.3.1 Sampling errors for the urban sample, Armenia 2005: Women

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	1.000	0.000	4,592	4,194	na	0.000	1.000	1.000
Literate	0.996	0.001	4,592	4,194	1.681	0.001	0.993	0.999
Secondary education or higher	0.939	0.005	4,592	4,194	1.480	0.006	0.928	0.949
Never married	0.331	0.008	4,592	4,194	1.219	0.026	0.314	0.348
Currently married/in union	0.583	0.010	4,592	4,194	1.353	0.017	0.564	0.603
Married before age 20	0.333	0.010	3,820	3,510	1.353	0.031	0.312	0.353
Currently pregnant	0.031	0.003	4,592	4,194	1.184	0.098	0.025	0.037
Children ever born	1.361	0.021	4,592	4,194	1.143	0.016	1.318	1.403
Children surviving	1.299	0.019	4,592	4,194	1.099	0.015	1.261	1.337
Children ever born to women age 40-49	2.343	0.039	1,434	1,218	1.349	0.017	2.265	2.422
Knows any contraceptive method	0.996	0.001	2,784	2,447	0.976	0.001	0.994	0.999
Ever using contraceptive method	0.765	0.012	2,784	2,447	1.480	0.016	0.742	0.789
Currently using any contraceptive method	0.543	0.014	2,784	2,447	1.490	0.026	0.514	0.571
Currently using pill	0.010	0.002	2,784	2,447	1.180	0.225	0.005	0.014
Currently using IUD	0.098	0.009	2,784	2,447	1.612	0.093	0.079	0.116
Currently using female sterilization	0.007	0.002	2,784	2,447	1.599	0.367	0.002	0.012
Currently using rhythm method	0.047	0.007	2,784	2,447	1.706	0.146	0.033	0.060
Obtained method from public sector source	0.483	0.033	550	545	1.557	0.069	0.417	0.549
Want no more children	0.685	0.012	2,784	2,447	1.417	0.018	0.660	0.710
Want to delay birth at least 2 years	0.115	0.010	2,784	2,447	1.574	0.083	0.096	0.134
Ideal family size	2.529	0.015	4,535	4,117	1.140	0.006	2.499	2.559
Mother received medical assistance at delivery	0.987	0.007	958	930	1.711	0.007	0.972	1.000
Child had diarrhea in two weeks before survey	0.150	0.019	941	908	1.594	0.128	0.111	0.188
Treated with oral rehydration salts (ORS)	0.222	0.049	141	136	1.347	0.220	0.124	0.320
Taken to a health provider	0.359	0.065	141	136	1.565	0.182	0.229	0.489
Vaccination card seen	0.923	0.033	182	183	1.738	0.035	0.858	0.989
Received BCG	0.992	0.005	182	183	0.800	0.005	0.981	1.000
Received DPT (3 doses)	0.681	0.044	182	183	1.329	0.064	0.594	0.769
Received polio (3 doses)	0.776	0.057	182	183	1.936	0.074	0.662	0.891
Received measles	0.670	0.044	182	183	1.324	0.066	0.582	0.759
Fully immunized	0.557	0.047	182	183	1.344	0.085	0.462	0.652
Height-for-age (below -2SD)	0.140	0.029	826	752	2.158	0.205	0.083	0.198
Weight-for-height (below -2SD)	0.060	0.015	826	752	1.713	0.252	0.030	0.091
Weight-for-age (below -2SD)	0.038	0.007	826	752	0.978	0.183	0.024	0.052
Anemia in children	0.378	0.044	693	666	2.326	0.116	0.290	0.465
Anemia in women	0.269	0.014	4,289	3,851	2.020	0.051	0.242	0.297
Body mass index (BMI) <18.5	0.055	0.006	4,236	3,801	1.610	0.103	0.044	0.067
Prevalence of hypertension	0.211	0.011	4,347	3,932	1.760	0.052	0.189	0.233
Has heard of HIV/AIDS	0.976	0.002	4,592	4,194	1.091	0.003	0.971	0.981
Knows about condoms	0.762	0.013	4,592	4,194	2.005	0.017	0.737	0.787
Knows about limiting partners	0.852	0.007	4,592	4,194	1.415	0.009	0.837	0.867
Had 2+ sexual partners in past 12 months	0.001	0.001	2,664	2,375	1.541	1.002	0.000	0.003
Had higher-risk intercourse in past 12 months	0.022	0.004	2,664	2,375	1.335	0.173	0.014	0.029
Accepting attitudes towards people with HIV	0.016	0.003	4,427	4,093	1.707	0.201	0.010	0.023
Total fertility rate (past 3 years)	1.646	0.083	na	11,942	1.373	0.050	1.480	1.812
Perinatal mortality (0-4 years)	17.268	7.294	966	935	1.495	0.422	2.681	31.856
Neonatal mortality (past 10 years)	17.912	4.468	1,947	1,805	1.339	0.249	8.976	26.849
Postneonatal mortality (past 10 years)	6.890	3.007	1,948	1,806	1.644	0.436	0.877	12.903
Infant mortality (past 10 years)	24.802	4.867	1,948	1,806	1.287	0.196	15.068	34.536
Child mortality (past 10 years)	1.689	1.432	1,949	1,808	1.693	0.848	0.000	4.554
Under-five mortality (past 10 years)	26.450	5.726	1,950	1,809	1.491	0.216	14.998	37.902

na = Not applicable

Table B.3.2 Sampling errors for the urban sample, Armenia 2005: Men

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	1.000	0.000	999	913	na	0.000	1.000	1.000
Literate	0.994	0.003	999	913	1.364	0.003	0.987	1.000
No education	0.004	0.003	999	913	1.480	0.704	0.000	0.011
Secondary education or higher	0.994	0.003	999	913	1.364	0.003	0.987	1.000
Never married	0.439	0.016	999	913	0.998	0.036	0.407	0.470
Currently married/in union	0.547	0.016	999	913	1.009	0.029	0.515	0.579
Married before age 20	0.018	0.006	636	602	1.204	0.349	0.006	0.031
Want no more children	0.570	0.033	543	499	1.563	0.058	0.504	0.637
Want to delay birth at least 2 years	0.139	0.025	543	499	1.703	0.182	0.088	0.190
Ideal family size	2.748	0.061	948	870	1.355	0.022	2.626	2.869
Has heard of HIV/AIDS	0.928	0.015	999	913	1.827	0.016	0.898	0.958
Knows about condoms	0.809	0.019	999	913	1.533	0.024	0.771	0.847
Knows about limiting partners	0.876	0.018	999	913	1.731	0.021	0.840	0.912
Had 2+ sexual partners in the past 12 months	0.132	0.022	709	690	1.720	0.166	0.088	0.175
Higher-risk intercourse in past 12 months (15-49)	0.311	0.021	709	690	1.216	0.068	0.269	0.354
Condom use at last higher-risk intercourse (15-49)	0.804	0.042	199	215	1.486	0.052	0.720	0.888
Abstinence among youth (never intercourse)	0.610	0.042	340	291	1.583	0.069	0.526	0.693
Sexuallyl active in past 12 months among never-married	0.356	0.040	340	291	1.524	0.111	0.277	0.436
Paid for sexual intercourse in the past 12 months	0.035	0.009	999	913	1.500	0.250	0.018	0.052

na = Not applicable

Table B.4.1 Sampling errors for the rural sample, Armenia 2005: Women

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.000	0.000	1,974	2,372	na	na	0.000	0.000
Literate	0.991	0.003	1,974	2,372	1.443	0.003	0.985	0.997
Secondary education or higher	0.885	0.008	1,974	2,372	1.177	0.010	0.868	0.902
Never married	0.275	0.010	1,974	2,372	1.000	0.037	0.255	0.295
Currently married/in union	0.673	0.011	1,974	2,372	1.040	0.016	0.651	0.695
Married before age 20	0.497	0.014	1,610	1,933	1.112	0.028	0.469	0.525
Currently pregnant	0.028	0.004	1,974	2,372	1.094	0.146	0.020	0.036
Children ever born	1.797	0.032	1,974	2,372	0.914	0.018	1.734	1.861
Children surviving	1.688	0.031	1,974	2,372	0.974	0.018	1.626	1.750
Children ever born to women age 40-49	2.844	0.064	590	704	1.153	0.023	2.715	2.972
Knows any contraceptive method	0.977	0.005	1,328	1,597	1.273	0.005	0.967	0.988
Ever using contraceptive method	0.739	0.014	1,328	1,597	1.193	0.019	0.710	0.768
Currently using any contraceptive method	0.512	0.019	1,328	1,597	1.415	0.038	0.474	0.551
Currently using pill	0.006	0.002	1,328	1,597	1.027	0.358	0.002	0.011
Currently using IUD	0.089	0.009	1,328	1,597	1.155	0.101	0.071	0.107
Currently using female sterilization	0.004	0.002	1,328	1,597	1.012	0.439	0.000	0.007
Currently using rhythm method	0.025	0.005	1,328	1,597	1.237	0.214	0.014	0.035
Obtained method from public sector source	0.626	0.038	211	247	1.144	0.061	0.550	0.702
Want no more children	0.741	0.014	1,328	1,597	1.148	0.019	0.713	0.768
Want to delay birth at least 2 years	0.098	0.009	1,328	1,597	1.099	0.092	0.080	0.116
Ideal family size	2.613	0.022	1,958	2,353	0.979	0.008	2.570	2.656
Mother received medical assistance at delivery	0.964	0.012	472	582	1.245	0.012	0.940	0.987
Child had diarrhea in two weeks before survey	0.195	0.019	456	562	0.990	0.096	0.158	0.232
Treated with oral rehydration salts (ORS)	0.282	0.056	83	110	1.142	0.197	0.171	0.394
Taken to a health provider	0.268	0.058	83	110	1.190	0.216	0.152	0.384
Vaccination card seen	0.909	0.035	96	119	1.203	0.038	0.839	0.979
Received BCG	0.964	0.018	96	119	0.941	0.018	0.929	1.000
Received DPT (3 doses)	0.765	0.060	96	119	1.368	0.079	0.644	0.886
Received polio (3 doses)	0.756	0.053	96	119	1.191	0.070	0.650	0.863
Received measles	0.804	0.050	96	119	1.193	0.062	0.705	0.903
Fully immunized	0.659	0.056	96	119	1.151	0.085	0.546	0.771
Height-for-age (below -2SD)	0.115	0.021	428	541	1.273	0.178	0.074	0.156
Weight-for-height (below -2SD)	0.037	0.010	428	541	1.041	0.270	0.017	0.057
Weight-for-age (below -2SD)	0.043	0.014	428	541	1.378	0.326	0.015	0.071
Anemia in children	0.346	0.024	344	440	0.887	0.068	0.298	0.393
Anemia in women	0.205	0.011	1,845	2,229	1.154	0.053	0.183	0.226
Body mass index (BMI) <18.5	0.046	0.005	1,847	2,215	1.006	0.107	0.036	0.055
Prevalence of hypertension	0.228	0.014	1,869	2,249	1.433	0.061	0.200	0.256
Has heard of HIV/AIDS	0.916	0.008	1,974	2,372	1.354	0.009	0.899	0.933
Knows about condoms	0.641	0.017	1,974	2,372	1.576	0.027	0.607	0.675
Knows about limiting partners	0.704	0.017	1,974	2,372	1.627	0.024	0.670	0.737
Had 2+ sexual partners in past 12 months	0.000	0.000	1,297	1,555	na	na	0.000	0.000
Had higher-risk intercourse in past 12 months	0.002	0.001	1,297	1,555	0.893	0.608	0.000	0.004
Accepting attitudes towards people with HIV	0.010	0.003	1,818	2,174	1.082	0.253	0.005	0.015
Total fertility rate (past 3 years)	1.837	0.111	na	6,690	1.144	0.060	1.615	2.059
Perinatal mortality (0-4 years)	21.510	7.278	477	589	0.959	0.338	6.954	36.066
Neonatal mortality (past 10 years)	19.395	4.183	1,119	1,350	0.970	0.216	11.029	27.761
Postneonatal mortality (past 10 years)	12.068	3.307	1,119	1,350	1.070	0.274	5.454	18.682
Infant mortality (past 10 years)	31.464	4.870	1,119	1,350	0.918	0.155	21.723	41.204
Child mortality (past 10 years)	10.938	3.725	1,119	1,350	1.170	0.341	3.488	18.387
Under-five mortality (past 10 years)	42.057	5.312	1,119	1,350	0.882	0.126	31.433	52.681

na = Not applicable

Table B.4.2 Sampling errors for the rural sample, Armenia 2005: Men

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.000	0.000	448	534	na	na	0.000	0.000
Literate	0.997	0.003	448	534	1.194	0.003	0.991	1.000
No education	0.003	0.003	448	534	1.194	1.006	0.000	0.009
Secondary education or higher	0.997	0.003	448	534	1.194	0.003	0.991	1.000
Never married	0.402	0.026	448	534	1.119	0.064	0.350	0.454
Currently married/in union	0.591	0.025	448	534	1.063	0.042	0.541	0.640
Married before age 20	0.049	0.015	277	317	1.133	0.300	0.020	0.079
Want no more children	0.709	0.029	272	315	1.043	0.041	0.651	0.766
Want to delay birth at least 2 years	0.085	0.016	272	315	0.943	0.188	0.053	0.117
Ideal family size	2.914	0.045	421	499	0.616	0.016	2.823	3.005
Has heard of HIV/AIDS	0.915	0.015	448	534	1.173	0.017	0.884	0.946
Knows about condoms	0.810	0.023	448	534	1.246	0.029	0.763	0.856
Knows about limiting partners	0.828	0.025	448	534	1.426	0.031	0.777	0.878
Had 2+ sexual partners in the past 12 months	0.111	0.014	312	368	0.799	0.128	0.082	0.139
Higher-risk intercourse in past 12 months (15-49)	0.209	0.028	312	368	1.229	0.136	0.152	0.265
Condom use at last higher-risk intercourse (15-49)	0.767	0.080	57	77	1.420	0.105	0.606	0.927
Abstinence among youth (never intercourse)	0.734	0.051	149	188	1.400	0.069	0.632	0.835
Sexuallyl active in past 12 months among never-married	0.199	0.040	149	188	1.213	0.200	0.120	0.279
Paid for sexual intercourse in the past 12 months	0.032	0.009	448	534	1.049	0.272	0.015	0.050

na = Not applicable

Table B.5.1 Sampling errors for the Yerevan sample, Armenia 2005: Women

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	1.000	0.000	1,141	2,468	na	0.000	1.000	1.000
Literate	0.997	0.002	1,141	2,468	1.443	0.002	0.992	1.000
Secondary education or higher	0.941	0.008	1,141	2,468	1.196	0.009	0.924	0.958
Never married	0.348	0.014	1,141	2,468	0.960	0.039	0.321	0.375
Currently married/in union	0.552	0.015	1,141	2,468	1.004	0.027	0.522	0.582
Married before age 20	0.296	0.016	951	2,082	1.075	0.054	0.265	0.328
Currently pregnant	0.029	0.004	1,141	2,468	0.862	0.148	0.020	0.037
Children ever born	1.254	0.034	1,141	2,468	0.976	0.027	1.185	1.322
Children surviving	1.200	0.030	1,141	2,468	0.911	0.025	1.140	1.260
Children ever born to women age 40-49	2.167	0.056	308	671	0.936	0.026	2.055	2.278
Knows any contraceptive method	0.998	0.002	636	1,362	0.990	0.002	0.995	1.000
Ever using contraceptive method	0.786	0.018	636	1,362	1.135	0.023	0.749	0.823
Currently using any contraceptive method	0.585	0.021	636	1,362	1.084	0.036	0.543	0.628
Currently using pill	0.011	0.004	636	1,362	0.861	0.327	0.004	0.018
Currently using IUD	0.105	0.014	636	1,362	1.164	0.135	0.077	0.133
Currently using female sterilization	0.009	0.004	636	1,362	1.137	0.472	0.001	0.018
Currently using rhythm method	0.058	0.011	636	1,362	1.223	0.195	0.036	0.081
Obtained method from public sector source	0.443	0.046	161	359	1.168	0.104	0.351	0.535
Want no more children	0.677	0.021	636	1,362	1.137	0.031	0.635	0.719
Want to delay birth at least 2 years	0.116	0.016	636	1,362	1.260	0.138	0.084	0.148
Ideal family size	2.514	0.023	1,117	2,413	0.874	0.009	2.469	2.560
Mother received medical assistance at delivery	0.982	0.012	258	584	1.172	0.012	0.958	1.000
Had diarrhea in two weeks before survey	0.150	0.029	252	566	1.205	0.190	0.093	0.207
Treated with oral rehydration salts (ORS)	0.148	0.067	38	85	1.066	0.455	0.013	0.283
Taken to a health provider	0.424	0.097	38	85	1.147	0.229	0.230	0.618
Vaccination card seen	0.921	0.051	48	112	1.375	0.056	0.818	1.000
Received BCG	1.000	0.000	48	112	na	0.000	1.000	1.000
Received DPT (3 doses)	0.620	0.066	48	112	0.981	0.106	0.488	0.752
Received polio (3 doses)	0.749	0.090	48	112	1.502	0.121	0.569	0.930
Received measles	0.593	0.066	48	112	0.963	0.111	0.461	0.724
Fully immunized	0.470	0.069	48	112	0.996	0.147	0.332	0.608
Height-for-age (below -2SD)	0.177	0.047	191	432	1.549	0.266	0.083	0.272
Weight-for-height (below -2SD)	0.048	0.020	191	432	1.190	0.417	0.008	0.088
Weight-for-age (below -2SD)	0.030	0.008	191	432	0.612	0.280	0.013	0.047
Anemia in children	0.447	0.069	173	403	1.797	0.154	0.309	0.585
Anemia in women	0.288	0.022	1,010	2,192	1.554	0.077	0.244	0.332
Body mass index (BMI) <18.5	0.067	0.009	997	2,181	1.185	0.139	0.048	0.086
Prevalence of hypertension	0.171	0.017	1,038	2,265	1.494	0.102	0.136	0.206
Has heard of HIV/AIDS	0.991	0.002	1,141	2,468	0.813	0.002	0.987	0.996
Knows about condoms	0.783	0.020	1,141	2,468	1.655	0.026	0.743	0.824
Knows about limiting partners	0.899	0.010	1,141	2,468	1.083	0.011	0.879	0.918
Had 2+ sexual partners in past 12 months	0.002	0.002	621	1,341	0.992	1.005	0.000	0.005
Had higher-risk intercourse in past 12 months	0.028	0.006	621	1,341	0.902	0.212	0.016	0.041
Accepting attitudes towards people with HIV	0.021	0.005	1,131	2,446	1.187	0.238	0.011	0.032
Total fertility rate (past 3 years)	1.708	0.123	na	7045	1.000	0.072	1.462	1.954
Perinatal mortality (0-4 years)	15.960	10.653	258	584	1.118	0.667	0.000	37.265
Neonatal mortality (past 10 years)	19.059	7.108	480	1,065	1.030	0.373	4.842	33.275
Postneonatal mortality (past 10 years)	4.913	4.930	480	1,065	1.564	1.003	0.000	14.774
Infant mortality (past 10 years)	23.972	7.654	480	1,065	1.017	0.319	8.663	39.281
Child mortality (past 10 years)	2.507	2.521	481	1,067	1.124	1.006	0.000	7.550
Under-five mortality (past 10 years)	26.420	9.270	481	1,067	1.186	0.351	7.879	44.960

na = Not applicable

Table B.5.2 Sampling errors for the Yerevan sample, Armenia 2005: Men

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	1.000	0.000	262	547	na	0.000	1.000	1.000
Literate	0.996	0.004	262	547	1.023	0.004	0.988	1.000
No education	0.004	0.004	262	547	1.023	0.987	0.000	0.012
Secondary education or higher	0.996	0.004	262	547	1.023	0.004	0.988	1.000
Never married	0.461	0.023	262	547	0.734	0.049	0.416	0.506
Currently married/in union	0.526	0.023	262	547	0.756	0.044	0.480	0.573
Married before age 20	0.017	0.010	179	367	0.995	0.572	0.000	0.036
Want no more children	0.505	0.053	137	288	1.243	0.106	0.398	0.611
Want to delay birth at least 2 years	0.174	0.043	137	288	1.316	0.246	0.088	0.259
Ideal family size	2.757	0.091	260	542	1.017	0.033	2.576	2.938
Has heard of HIV/AIDS	0.926	0.023	262	547	1.446	0.025	0.879	0.973
Knows about condoms	0.836	0.029	262	547	1.250	0.034	0.779	0.893
Knows about limiting partners	0.880	0.028	262	547	1.408	0.032	0.824	0.937
Had 2+ sexual partners in the past 12 months	0.134	0.033	208	433	1.388	0.245	0.068	0.200
Higher-risk intercourse in past 12 months (15-49)	0.353	0.030	208	433	0.908	0.085	0.293	0.414
Condom use at last higher-risk intercourse (15-49)	0.832	0.054	75	153	1.254	0.065	0.723	0.941
Abstinence among youth (never intercourse)	0.531	0.067	79	169	1.192	0.127	0.396	0.666
Sexuallyl active in past 12 months among never-married	0.441	0.064	79	169	1.141	0.145	0.313	0.569
Paid for sexual intercourse in the past 12 months	0.030	0.013	262	547	1.216	0.429	0.004	0.056

na = Not applicable

Table B.6.1 Sampling errors for the Aragatsotn sample, Armenia 2005: Women

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.175	0.018	553	292	1.085	0.100	0.140	0.210
Literate	1.000	0.000	553	292	0.465	0.000	0.999	1.000
Secondary education or higher	0.931	0.010	553	292	0.948	0.011	0.910	0.951
Never married	0.293	0.016	553	292	0.823	0.054	0.261	0.325
Currently married/in union	0.671	0.015	553	292	0.758	0.023	0.641	0.701
Married before age 20	0.443	0.032	460	236	1.373	0.072	0.379	0.506
Currently pregnant	0.026	0.009	553	292	1.333	0.348	0.008	0.044
Children ever born	1.847	0.081	553	292	1.175	0.044	1.685	2.009
Children surviving	1.740	0.097	553	292	1.549	0.056	1.546	1.934
Children ever born to women age 40-49	2.969	0.056	181	88	0.706	0.019	2.857	3.081
Knows any contraceptive method	0.861	0.036	362	196	1.959	0.041	0.790	0.933
Ever using contraceptive method	0.644	0.048	362	196	1.895	0.074	0.548	0.739
Currently using any contraceptive method	0.536	0.047	362	196	1.787	0.088	0.442	0.630
Currently using pill	0.015	0.009	362	196	1.429	0.609	0.000	0.033
Currently using IUD	0.118	0.030	362	196	1.753	0.253	0.058	0.177
Currently using female sterilization	0.015	0.009	362	196	1.462	0.622	0.000	0.034
Currently using rhythm method	0.025	0.007	362	196	0.834	0.275	0.011	0.038
Obtained method from public sector source	0.608	0.038	82	43	0.709	0.063	0.531	0.685
Want no more children	0.730	0.020	362	196	0.853	0.027	0.690	0.770
Want to delay birth at least 2 years	0.146	0.012	362	196	0.668	0.085	0.121	0.171
Ideal family size	2.716	0.059	551	292	1.157	0.022	2.598	2.833
Mother received medical assistance at delivery	0.983	0.015	136	83	1.489	0.016	0.952	1.000
Child had diarrhea in two weeks before survey	0.196	0.035	135	82	1.134	0.181	0.125	0.267
Treated with oral rehydration salts (ORS)	0.258	0.078	24	16	0.986	0.304	0.101	0.415
Taken to a health provider	0.370	0.104	24	16	1.185	0.282	0.162	0.579
Vaccination card seen	0.932	0.052	28	23	1.357	0.056	0.828	1.000
Received BCG	1.000	0.000	28	23	na	0.000	1.000	1.000
Received DPT (3 doses)	0.866	0.086	28	23	1.658	0.099	0.695	1.000
Received polio (3 doses)	0.866	0.066	28	23	1.285	0.077	0.733	0.999
Received measles	0.950	0.051	28	23	1.541	0.053	0.849	1.000
Fully immunized	0.814	0.059	28	23	1.000	0.072	0.696	0.932
Height-for-age (below -2SD)	0.189	0.084	122	70	2.521	0.442	0.022	0.356
Weight-for-height (below -2SD)	0.001	0.001	122	70	0.434	1.011	0.000	0.004
Weight-for-age (below -2SD)	0.017	0.018	122	70	1.644	1.059	0.000	0.052
Anemia in children	0.265	0.046	93	43	0.874	0.175	0.172	0.358
Anemia in women	0.173	0.023	504	253	1.344	0.134	0.127	0.220
Body mass index (BMI) <18.5	0.041	0.013	525	276	1.502	0.319	0.015	0.067
Prevalence of hypertension	0.231	0.026	535	281	1.428	0.113	0.179	0.283
Has heard of HIV/AIDS	0.872	0.028	553	292	1.961	0.032	0.816	0.927
Knows about condoms	0.586	0.032	553	292	1.519	0.054	0.522	0.649
Knows about limiting partners	0.622	0.034	553	292	1.639	0.054	0.555	0.690
Had 2+ sexual partners in past 12 months	0.000	0.000	345	190	na	na	0.000	0.000
Had higher-risk intercourse in past 12 months	0.000	0.000	345	190	0.398	1.002	0.000	0.001
Accepting attitudes towards people with HIV	0.001	0.001	506	255	0.582	0.720	0.000	0.003
Total fertility rate (past 3 years)	2.472	0.268	na	808	1.376	0.109	1.935	3.009
Perinatal mortality (0-4 years)	16.834	14.607	137	85	1.479	0.868	0.000	46.049
Neonatal mortality (past 10 years)	5.773	6.002	288	174	1.468	1.040	0.000	17.776
Postneonatal mortality (past 10 years)	10.732	8.029	288	174	1.668	0.748	0.000	26.790
Infant mortality (past 10 years)	16.505	9.065	288	174	1.483	0.549	0.000	34.635
Child mortality (past 10 years)	22.769	10.729	288	174	1.376	0.471	1.311	44.226
Under-five mortality (past 10 years)	38.898	14.280	288	174	1.305	0.367	10.339	67.457

na = Not applicable

Table B.6.2 Sampling errors for the Aragatsotn sample, Armenia 2005: Men

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.180	0.023	142	71	0.716	0.129	0.134	0.227
Literate	1.000	0.000	142	71	na	0.000	1.000	1.000
No education	0.000	0.000	142	71	na	na	0.000	0.000
Secondary education or higher	1.000	0.000	142	71	na	0.000	1.000	1.000
Never married	0.323	0.048	142	71	1.209	0.147	0.228	0.419
Currently married/in union	0.674	0.047	142	71	1.194	0.070	0.580	0.768
Married before age 20	0.031	0.019	89	49	1.016	0.606	0.000	0.068
Want no more children	0.806	0.065	81	48	1.470	0.081	0.676	0.936
Want to delay birth at least 2 years	0.101	0.022	81	48	0.642	0.214	0.058	0.144
Ideal family size	3.471	0.131	140	71	0.561	0.038	3.208	3.734
Has heard of HIV/AIDS	0.998	0.002	142	71	0.526	0.002	0.994	1.000
Knows about condoms	0.833	0.049	142	71	1.566	0.059	0.735	0.932
Knows about limiting partners	0.958	0.021	142	71	1.255	0.022	0.915	1.000
Had 2+ sexual partners in the past 12 months	0.014	0.008	99	53	0.642	0.542	0.000	0.029
Higher-risk intercourse in past 12 months (15-49)	0.125	0.022	99	53	0.658	0.176	0.081	0.169
Condom use at last higher-risk intercourse (15-49)	0.738	0.113	21	7	1.150	0.153	0.512	0.964
Abstinence among youth (never intercourse)	0.608	0.072	51	22	1.046	0.119	0.463	0.752
Sexuallyl active in past 12 months among never-married	0.264	0.059	51	22	0.949	0.224	0.146	0.383
Paid for sexual intercourse in the past 12 months	0.043	0.021	142	71	1.205	0.477	0.002	0.085

na = Not applicable

Table B.7.1 Sampling errors for the Ararat sample, Armenia 2005: Women

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.264	0.032	545	462	1.701	0.122	0.200	0.328
Literate	0.999	0.001	545	462	0.624	0.001	0.998	1.000
Secondary education or higher	0.898	0.021	545	462	1.646	0.024	0.855	0.940
Never married	0.271	0.018	545	462	0.961	0.068	0.234	0.307
Currently married/in union	0.664	0.021	545	462	1.033	0.031	0.623	0.706
Married before age 20	0.427	0.026	459	396	1.126	0.061	0.375	0.479
Currently pregnant	0.025	0.006	545	462	0.863	0.233	0.013	0.036
Children ever born	1.713	0.041	545	462	0.682	0.024	1.630	1.795
Children surviving	1.641	0.046	545	462	0.799	0.028	1.548	1.733
Children ever born to women age 40-49	2.816	0.131	173	135	1.400	0.047	2.553	3.078
Knows any contraceptive method	0.980	0.014	351	307	1.935	0.015	0.952	1.000
Ever using contraceptive method	0.631	0.032	351	307	1.224	0.050	0.568	0.694
Currently using any contraceptive method	0.411	0.050	351	307	1.892	0.121	0.311	0.510
Currently using pill	0.003	0.001	351	307	0.341	0.309	0.001	0.006
Currently using IUD	0.088	0.010	351	307	0.689	0.119	0.067	0.108
Currently using female sterilization	0.002	0.002	351	307	0.755	0.817	0.000	0.006
Currently using rhythm method	0.038	0.016	351	307	1.608	0.435	0.005	0.070
Obtained method from public sector source	0.682	0.037	48	44	0.540	0.054	0.609	0.756
Want no more children	0.649	0.052	351	307	2.019	0.079	0.546	0.752
Want to delay birth at least 2 years	0.108	0.025	351	307	1.535	0.236	0.057	0.158
Ideal family size	2.587	0.056	545	462	1.726	0.022	2.474	2.699
Mother received medical assistance at delivery	0.994	0.005	138	127	0.785	0.005	0.984	1.000
Child had diarrhea in two weeks before survey	0.131	0.031	133	122	1.113	0.238	0.069	0.193
Treated with oral rehydration salts (ORS)	0.930	0.045	14	16	0.767	0.048	0.841	1.000
Taken to a health provider	0.315	0.195	14	16	1.823	0.620	0.000	0.705
Vaccination card seen	0.872	0.099	28	26	1.645	0.114	0.674	1.000
Received BCG	0.989	0.012	28	26	0.621	0.012	0.965	1.000
Received DPT (3 doses)	0.823	0.116	28	26	1.680	0.140	0.592	1.000
Received polio (3 doses)	0.854	0.098	28	26	1.547	0.115	0.657	1.000
Received measles	0.811	0.119	28	26	1.682	0.147	0.573	1.000
Fully immunized	0.576	0.171	28	26	1.917	0.296	0.235	0.918
Height-for-age (below -2SD)	0.136	0.037	127	128	1.333	0.269	0.063	0.209
Weight-for-height (below -2SD)	0.038	0.025	127	128	1.570	0.657	0.000	0.088
Weight-for-age (below -2SD)	0.074	0.044	127	128	2.035	0.590	0.000	0.161
Anemia in children	0.306	0.050	103	107	1.172	0.164	0.205	0.406
Anemia in women	0.217	0.031	518	434	1.681	0.141	0.155	0.278
Body mass index (BMI) <18.5	0.062	0.010	506	429	0.926	0.160	0.042	0.082
Prevalence of hypertension	0.299	0.043	526	442	2.130	0.142	0.214	0.384
Has heard of HIV/AIDS	0.930	0.024	545	462	2.226	0.026	0.881	0.979
Knows about condoms	0.695	0.029	545	462	1.447	0.041	0.638	0.752
Knows about limiting partners	0.703	0.032	545	462	1.642	0.046	0.639	0.767
Had 2+ sexual partners in past 12 months	0.000	0.000	325	288	na	na	0.000	0.000
Had higher-risk intercourse in past 12 months	0.004	0.001	325	288	0.374	0.349	0.001	0.006
Accepting attitudes towards people with HIV	0.000	0.000	504	430	na	na	0.000	0.000
Total fertility rate (past 3 years)	2.008	0.187	na	1,319	1.101	0.093	1.634	2.383
Perinatal mortality (0-4 years)	10.530	6.829	141	128	0.829	0.649	0.000	24.187
Neonatal mortality (past 10 years)	20.075	10.435	268	260	1.213	0.520	0.000	40.944
Postneonatal mortality (past 10 years)	3.903	2.554	268	260	0.707	0.654	0.000	9.010
Infant mortality (past 10 years)	23.978	10.955	268	260	1.129	0.457	2.067	45.889
Child mortality (past 10 years)	4.527	4.157	268	260	na	0.918	0.000	12.841
Under-five mortality (past 10 years)	28.396	10.620	268	260	1.129	0.374	7.155	49.637

na = Not applicable

Table B.7.2 Sampling errors for the Ararat sample, Armenia 2005: Men

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.206	0.039	108	110	1.003	0.190	0.128	0.284
Literate	0.985	0.016	108	110	1.325	0.016	0.953	1.000
No education	0.015	0.016	108	110	1.325	1.031	0.000	0.047
Secondary education or higher	0.985	0.016	108	110	1.325	0.016	0.953	1.000
Never married	0.455	0.061	108	110	1.269	0.134	0.333	0.577
Currently married/in union	0.545	0.061	108	110	1.269	0.112	0.423	0.667
Married before age 20	0.078	0.051	58	55	1.423	0.646	0.000	0.180
Want no more children	0.636	0.036	61	60	0.580	0.057	0.564	0.708
Want to delay birth at least 2 years	0.039	0.038	61	60	1.505	0.960	0.000	0.115
Ideal family size	2.717	0.074	108	110	0.701	0.027	2.568	2.865
Has heard of HIV/AIDS	0.996	0.004	108	110	0.652	0.004	0.988	1.000
Knows about condoms	0.951	0.025	108	110	1.196	0.026	0.901	1.000
Knows about limiting partners	0.940	0.032	108	110	1.396	0.034	0.876	1.000
Had 2+ sexual partners in the past 12 months	0.059	0.014	77	79	0.535	0.244	0.030	0.088
Higher-risk intercourse in past 12 months (15-49)	0.264	0.073	77	79	1.450	0.278	0.117	0.410
Condom use at last higher-risk intercourse (15-49)	0.902	0.085	19	21	1.220	0.095	0.731	1.000
Abstinence among youth (never intercourse)	0.656	0.113	43	45	1.538	0.172	0.430	0.881
Sexuallyl active in past 12 months among never-married	0.307	0.103	43	45	1.446	0.335	0.101	0.513
Paid for sexual intercourse in the past 12 months	0.045	0.029	108	110	1.446	0.645	0.000	0.103

na = Not applicable

Table B.8.1 Sampling errors for the Armavir sample, Armenia 2005: Women

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.344	0.030	613	567	1.540	0.086	0.285	0.403
Literate	0.984	0.009	613	567	1.854	0.010	0.965	1.000
Secondary education or higher	0.874	0.018	613	567	1.350	0.021	0.837	0.910
Never married	0.270	0.029	613	567	1.616	0.107	0.212	0.328
Currently married/in union	0.673	0.032	613	567	1.671	0.047	0.609	0.736
Married before age 20	0.476	0.018	497	453	0.813	0.038	0.439	0.512
Currently pregnant	0.029	0.011	613	567	1.667	0.392	0.006	0.051
Children ever born	1.738	0.092	613	567	1.555	0.053	1.555	1.921
Children surviving	1.654	0.089	613	567	1.624	0.054	1.475	1.832
Children ever born to women age 40-49	2.682	0.119	206	179	1.443	0.044	2.445	2.920
Knows any contraceptive method	0.997	0.003	402	381	1.145	0.003	0.990	1.000
Ever using contraceptive method	0.794	0.026	402	381	1.267	0.032	0.743	0.846
Currently using any contraceptive method	0.578	0.029	402	381	1.179	0.050	0.519	0.636
Currently using pill	0.000	0.000	402	381	na	na	0.000	0.000
Currently using IUD	0.070	0.015	402	381	1.205	0.219	0.039	0.101
Currently using female sterilization	0.000	0.000	402	381	na	na	0.000	0.000
Currently using rhythm method	0.012	0.006	402	381	1.166	0.529	0.000	0.025
Obtained method from public sector source	0.605	0.068	57	48	1.037	0.112	0.469	0.741
Want no more children	0.773	0.026	402	381	1.246	0.034	0.721	0.825
Want to delay birth at least 2 years	0.092	0.016	402	381	1.126	0.176	0.060	0.125
Ideal family size	2.542	0.023	611	566	0.556	0.009	2.496	2.588
Mother received medical assistance at delivery	0.985	0.013	132	125	1.319	0.014	0.959	1.000
Child had diarrhea in two weeks before survey	0.257	0.052	131	124	1.395	0.201	0.153	0.361
Treated with oral rehydration salts (ORS)	0.236	0.090	31	32	1.255	0.382	0.056	0.416
Taken to a health provider	0.084	0.051	31	32	1.086	0.615	0.000	0.187
Vaccination card seen	0.980	0.020	23	23	0.720	0.021	0.940	1.000
Received BCG	0.943	0.049	23	23	1.052	0.052	0.844	1.000
Received DPT (3 doses)	0.809	0.098	23	23	1.230	0.121	0.613	1.000
Received polio (3 doses)	0.826	0.095	23	23	1.230	0.115	0.636	1.000
Received measles	0.809	0.098	23	23	1.230	0.121	0.613	1.000
Fully immunized	0.809	0.098	23	23	1.230	0.121	0.613	1.000
Height-for-age (below -2SD)	0.045	0.020	124	122	1.118	0.447	0.005	0.085
Weight-for-height (below -2SD)	0.016	0.015	124	122	1.370	0.947	0.000	0.045
Weight-for-age (below -2SD)	0.004	0.004	124	122	0.774	1.037	0.000	0.013
Anemia in children	0.436	0.041	93	95	0.820	0.093	0.355	0.517
Anemia in women	0.222	0.021	594	554	1.260	0.096	0.179	0.265
Body mass index (BMI) <18.5	0.032	0.008	584	537	1.146	0.262	0.015	0.049
Prevalence of hypertension	0.140	0.022	595	551	1.515	0.154	0.097	0.183
Has heard of HIV/AIDS	0.924	0.015	613	567	1.399	0.016	0.895	0.954
Knows about condoms	0.725	0.046	613	567	2.547	0.063	0.633	0.817
Knows about limiting partners	0.768	0.045	613	567	2.643	0.059	0.678	0.858
Had 2+ sexual partners in past 12 months	0.000	0.000	377	361	na	na	0.000	0.000
Had higher-risk intercourse in past 12 months	0.007	0.003	377	361	0.818	0.517	0.000	0.013
Accepting attitudes towards people with HIV	0.003	0.002	572	524	0.727	0.583	0.000	0.006
Total fertility rate (last 3 years)	1.742	0.206	na	1,601	1.147	0.118	1.330	2.154
Perinatal mortality (0-4 years)	17.935	16.371	133	128	1.469	0.913	0.000	50.677
Neonatal mortality (past 10 years)	5.909	6.026	268	278	1.387	1.020	0.000	17.962
Postneonatal mortality (past 10 years)	7.898	8.057	268	278	1.616	1.020	0.000	24.013
Infant mortality (past 10 years)	13.807	9.387	268	278	1.443	0.680	0.000	32.581
Child mortality (past 10 years)	12.033	12.215	268	278	2.090	1.015	0.000	36.463
Under-five mortality (past 10 years)	25.674	12.884	268	278	1.575	0.502	0.000	51.442

na = Not applicable

Table B.8.2 Sampling errors for the Armavir sample, Armenia 2005: Men

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.310	0.044	146	139	1.138	0.141	0.223	0.398
Literate	1.000	0.000	146	139	na	0.000	1.000	1.000
No education	0.000	0.000	146	139	na	na	0.000	0.000
Secondary education or higher	1.000	0.000	146	139	na	0.000	1.000	1.000
Never married	0.402	0.052	146	139	1.275	0.129	0.298	0.506
Currently married/in union	0.576	0.045	146	139	1.088	0.078	0.486	0.665
Married before age 20	0.073	0.031	87	85	1.108	0.426	0.011	0.135
Want no more children	0.640	0.078	82	80	1.459	0.122	0.485	0.796
Want to delay birth at least 2 years	0.082	0.041	82	80	1.338	0.499	0.000	0.163
Ideal family size	2.629	0.078	133	129	0.841	0.030	2.472	2.786
Has heard of HIV/AIDS	0.974	0.019	146	139	1.437	0.020	0.935	1.000
Knows about condoms	0.965	0.024	146	139	1.571	0.025	0.917	1.000
Knows about limiting partners	0.974	0.019	146	139	1.437	0.020	0.935	1.000
Had 2+ sexual partners in the past 12 months	0.189	0.034	115	108	0.940	0.182	0.120	0.258
Higher-risk intercourse in past 12 months (15-49)	0.317	0.068	115	108	1.561	0.215	0.181	0.453
Condom use at last higher-risk intercourse (15-49)	0.744	0.075	42	34	1.102	0.101	0.594	0.894
Abstinence among youth (never intercourse)	0.564	0.114	51	48	1.620	0.201	0.337	0.791
Sexuallyl active in past 12 months among never-married	0.367	0.096	51	48	1.410	0.262	0.175	0.559
Paid for sexual intercourse in the past 12 months	0.041	0.014	146	139	0.830	0.334	0.014	0.068

na = Not applicable

Table B.9.1 Sampling errors for the Gegharkunik sample, Armenia 2005: Women

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.314	0.028	593	443	1.451	0.088	0.259	0.369
Literate	0.996	0.004	593	443	1.489	0.004	0.989	1.000
Secondary education or higher	0.880	0.012	593	443	0.923	0.014	0.855	0.904
Never married	0.270	0.025	593	443	1.378	0.093	0.219	0.320
Currently married/in union	0.684	0.022	593	443	1.177	0.033	0.639	0.729
Married before age 20	0.553	0.027	483	359	1.191	0.049	0.499	0.607
Currently pregnant	0.021	0.005	593	443	0.926	0.258	0.010	0.032
Children ever born	1.836	0.055	593	443	0.845	0.030	1.726	1.945
Children surviving	1.707	0.053	593	443	0.889	0.031	1.602	1.812
Children ever born to women age 40-49	2.814	0.070	184	134	0.635	0.025	2.674	2.955
Knows any contraceptive method	0.996	0.004	394	303	1.239	0.004	0.988	1.000
Ever using contraceptive method	0.720	0.024	394	303	1.058	0.033	0.672	0.768
Currently using any contraceptive method	0.410	0.036	394	303	1.440	0.087	0.339	0.482
Currently using pill	0.009	0.006	394	303	1.200	0.645	0.000	0.020
Currently using IUD	0.064	0.016	394	303	1.257	0.242	0.033	0.095
Currently using female sterilization	0.007	0.005	394	303	1.276	0.768	0.000	0.018
Currently using rhythm method	0.029	0.017	394	303	1.942	0.562	0.000	0.063
Obtained method from public sector source	0.486	0.121	68	48	1.974	0.248	0.245	0.727
Want no more children	0.773	0.027	394	303	1.300	0.036	0.718	0.828
Want to delay birth at least 2 years	0.097	0.022	394	303	1.498	0.230	0.052	0.142
Ideal family size	2.541	0.055	585	438	1.410	0.022	2.431	2.651
Mother received medical assistance at delivery	0.902	0.045	140	120	1.761	0.050	0.812	0.991
Child had diarrhea in two weeks before survey	0.213	0.036	137	117	0.962	0.167	0.142	0.284
Treated with oral rehydration salts (ORS)	0.040	0.030	24	25	0.888	0.761	0.000	0.100
Taken to a health provider	0.234	0.150	24	25	1.957	0.642	0.000	0.534
Vaccination card seen	0.697	0.101	27	20	1.110	0.145	0.495	0.898
Received BCG	0.940	0.055	27	20	1.203	0.059	0.830	1.000
Received DPT (3 doses)	0.467	0.129	27	20	1.283	0.277	0.208	0.725
Received polio (3 doses)	0.481	0.132	27	20	1.304	0.274	0.217	0.745
Received measles	0.560	0.131	27	20	1.281	0.234	0.298	0.822
Fully immunized	0.467	0.129	27	20	1.283	0.277	0.208	0.725
Height-for-age (below -2SD)	0.160	0.056	123	111	1.530	0.348	0.049	0.271
Weight-for-height (below -2SD)	0.014	0.012	123	111	1.241	0.820	0.000	0.038
Weight-for-age (below -2SD)	0.051	0.035	123	111	1.634	0.676	0.000	0.120
Anemia in children	0.625	0.068	100	93	1.524	0.109	0.489	0.762
Anemia in women	0.331	0.032	556	413	1.614	0.098	0.266	0.395
Body mass index (BMI) <18.5	0.043	0.009	544	405	1.002	0.204	0.025	0.060
Prevalence of hypertension	0.102	0.018	539	398	1.378	0.177	0.066	0.138
Has heard of HIV/AIDS	0.942	0.007	593	443	0.687	0.007	0.929	0.955
Knows about condoms	0.727	0.024	593	443	1.304	0.033	0.679	0.774
Knows about limiting partners	0.792	0.017	593	443	0.995	0.021	0.759	0.825
Had 2+ sexual partners in past 12 months	0.000	0.000	382	297	na	na	0.000	0.000
Had higher-risk intercourse in past 12 months	0.001	0.001	382	297	0.600	1.004	0.000	0.003
Accepting attitudes towards people with HIV	0.028	0.006	562	417	0.925	0.232	0.015	0.040
Total fertility rate (past 3 years)	2.075	0.298	na	1,245	1.320	0.144	1.479	2.671
Perinatal mortality (0-4 years)	12.354	12.135	140	120	1.389	0.982	0.000	36.624
Neonatal mortality (past 10 years)	26.638	9.366	306	259	1.035	0.352	7.907	45.369
Postneonatal mortality (past 10 years)	20.027	9.660	306	259	1.452	0.482	0.707	39.347
Infant mortality (past 10 years)	46.665	10.909	306	259	0.916	0.234	24.848	68.483
Child mortality (past 10 years)	0.000	0.000	306	259	na	na	0.000	0.000
Under-five mortality (past 10 years)	46.665	10.909	306	259	0.916	0.234	24.848	68.483

na = Not applicable

Table B.9.2 Sampling errors for the Gegharkunik sample, Armenia 2005: Men

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.401	0.042	123	81	0.950	0.105	0.317	0.486
Literate	1.000	0.000	123	81	na	0.000	1.000	1.000
No education	0.000	0.000	123	81	na	na	0.000	0.000
Secondary education or higher	1.000	0.000	123	81	na	0.000	1.000	1.000
Never married	0.359	0.057	123	81	1.320	0.160	0.244	0.473
Currently married/in union	0.622	0.054	123	81	1.227	0.087	0.515	0.730
Married before age 20	0.038	0.032	76	52	1.477	0.861	0.000	0.103
Want no more children	0.634	0.062	70	51	1.063	0.097	0.511	0.757
Want to delay birth at least 2 years	0.119	0.038	70	51	0.986	0.323	0.042	0.196
Ideal family size	2.629	0.158	123	81	1.493	0.060	2.313	2.946
Has heard of HIV/AIDS	0.902	0.042	123	81	1.553	0.046	0.818	0.986
Knows about condoms	0.857	0.059	123	81	1.848	0.068	0.739	0.974
Knows about limiting partners	0.834	0.059	123	81	1.749	0.071	0.717	0.952
Had 2+ sexual partners in the past 12 months	0.156	0.034	85	58	0.850	0.216	0.089	0.224
Higher-risk intercourse in past 12 months (15-49)	0.234	0.043	85	58	0.933	0.184	0.148	0.320
Condom use at last higher-risk intercourse (15-49)	0.704	0.177	24	14	1.857	0.251	0.350	1.000
Abstinence among youth (never intercourse)	0.708	0.082	42	25	1.157	0.116	0.543	0.872
Sexuallyl active in past 12 months among never-married	0.179	0.063	42	25	1.050	0.351	0.053	0.305
Paid for sexual intercourse in the past 12 months	0.044	0.024	123	81	1.281	0.540	0.000	0.092

na = Not applicable

Table B.10.1 Sampling errors for the Lori sample, Armenia 2005: Women

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.550	0.037	464	537	1.618	0.068	0.475	0.625
Literate	0.997	0.003	464	537	0.957	0.003	0.991	1.000
Secondary education or higher	0.954	0.010	464	537	1.017	0.010	0.934	0.973
Never married	0.309	0.020	464	537	0.939	0.065	0.269	0.349
Currently married/in union	0.639	0.021	464	537	0.954	0.033	0.597	0.682
Married before age 20	0.464	0.038	383	441	1.489	0.082	0.388	0.540
Currently pregnant	0.042	0.011	464	537	1.201	0.267	0.019	0.064
Children ever born	1.581	0.052	464	537	0.782	0.033	1.477	1.684
Children surviving	1.464	0.045	464	537	0.745	0.030	1.374	1.553
Children ever born to women age 40-49	2.597	0.124	147	173	1.215	0.048	2.348	2.846
Knows any contraceptive method	1.000	0.000	297	343	na	0.000	1.000	1.000
Ever using contraceptive method	0.790	0.037	297	343	1.566	0.047	0.716	0.864
Currently using any contraceptive method	0.514	0.042	297	343	1.444	0.082	0.430	0.598
Currently using pill	0.015	0.008	297	343	1.111	0.530	0.000	0.030
Currently using IUD	0.140	0.027	297	343	1.357	0.196	0.085	0.194
Currently using female sterilization	0.000	0.000	297	343	na	na	0.000	0.000
Currently using rhythm method	0.026	0.011	297	343	1.155	0.409	0.005	0.048
Obtained method from public sector source	0.648	0.061	65	76	1.019	0.094	0.527	0.770
Want no more children	0.729	0.020	297	343	0.766	0.027	0.689	0.768
Want to delay birth at least 2 years	0.095	0.016	297	343	0.937	0.168	0.063	0.127
Ideal family size	2.435	0.028	458	530	0.746	0.012	2.379	2.491
Mother received medical assistance at delivery	1.000	0.000	84	96	na	0.000	1.000	1.000
Child had diarrhea in two weeks before survey	0.105	0.031	81	93	0.931	0.294	0.043	0.167
Treated with oral rehydration salts (ORS)	0.556	0.182	8	10	1.062	0.327	0.193	0.920
Taken to a health provider	0.488	0.187	8	10	1.084	0.383	0.114	0.861
Vaccination card seen	1.000	0.000	18	24	na	0.000	1.000	1.000
Received BCG	0.953	0.048	18	24	1.024	0.050	0.857	1.000
Received DPT (3 doses)	0.897	0.089	18	24	1.324	0.099	0.720	1.000
Received polio (3 doses)	0.834	0.063	18	24	0.766	0.076	0.707	0.960
Received measles	0.950	0.045	18	24	0.943	0.048	0.859	1.000
Fully immunized	0.734	0.081	18	24	0.830	0.111	0.571	0.896
Height-for-age (below -2SD)	0.086	0.028	80	94	0.907	0.322	0.031	0.142
Weight-for-height (below -2SD)	0.047	0.029	80	94	1.264	0.621	0.000	0.105
Weight-for-age (below -2SD)	0.020	0.020	80	94	1.248	0.963	0.000	0.060
Anemia in children	0.179	0.041	66	77	0.832	0.227	0.097	0.260
Anemia in women	0.190	0.019	457	527	1.026	0.099	0.153	0.228
Body mass index (BMI) <18.5	0.040	0.007	436	501	0.777	0.182	0.026	0.055
Prevalence of hypertension	0.378	0.028	455	524	1.238	0.074	0.322	0.435
Has heard of HIV/AIDS	0.966	0.012	464	537	1.476	0.013	0.941	0.991
Knows about condoms	0.614	0.027	464	537	1.176	0.043	0.561	0.667
Knows about limiting partners	0.682	0.036	464	537	1.685	0.054	0.609	0.755
Had 2+ sexual partners in past 12 months	0.000	0.000	283	328	na	na	0.000	0.000
Had higher-risk intercourse in past 12 months	0.000	0.000	283	328	na	na	0.000	0.000
Accepting attitudes towards people with HIV	0.014	0.007	447	518	1.183	0.466	0.001	0.028
Total fertility rate (past 3 years)	1.401	0.202	na	1,519	1.236	0.144	0.996	1.806
Perinatal mortality (0-4 years)	23.491	17.629	86	98	1.074	0.750	0.000	58.749
Neonatal mortality (past 10 years)	9.685	6.748	219	250	1.016	0.697	0.000	23.181
Postneonatal mortality (past 10 years)	20.043	8.516	219	250	0.914	0.425	3.010	37.076
Infant mortality (past 10 years)	29.728	10.067	219	250	0.895	0.339	9.595	49.861
Child mortality (past 10 years)	0.000	0.000	219	250	na	na	0.000	0.000
Under-five mortality (past 10 years)	29.728	10.067	219	250	0.895	0.339	9.595	49.861

na = Not applicable

Table B.10.2 Sampling errors for Lori Armenia 2005: Men

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.535	0.090	56	87	1.333	0.167	0.356	0.715
Literate	0.980	0.020	56	87	1.056	0.021	0.939	1.000
No education	0.020	0.020	56	87	1.056	0.987	0.000	0.061
Secondary education or higher	0.980	0.020	56	87	1.056	0.021	0.939	1.000
Never married	0.375	0.080	56	87	1.219	0.212	0.216	0.534
Currently married/in union	0.613	0.079	56	87	1.202	0.129	0.455	0.771
Married before age 20	0.032	0.032	37	53	1.096	1.008	0.000	0.096
Want no more children	0.770	0.097	37	54	1.388	0.126	0.576	0.965
Want to delay birth at least 2 years	0.000	0.000	37	54	na	na	0.000	0.000
Ideal family size	3.021	0.146	50	75	0.985	0.048	2.729	3.314
Has heard of HIV/AIDS	0.924	0.033	56	87	0.919	0.036	0.859	0.990
Knows about condoms	0.842	0.057	56	87	1.164	0.068	0.728	0.957
Knows about limiting partners	0.864	0.037	56	87	0.794	0.042	0.791	0.938
Had 2+ sexual partners in the past 12 months	0.054	0.038	40	57	1.041	0.699	0.000	0.129
Higher-risk intercourse in past 12 months (15-49)	0.091	0.050	40	57	1.076	0.545	0.000	0.190
Condom use at last higher-risk intercourse (15-49)	0.752	0.229	4	5	0.917	0.304	0.295	1.000
Abstinence among youth (never intercourse)	0.796	0.150	17	31	1.488	0.189	0.496	1.000
Sexuallyl active in past 12 months among never-married	0.090	0.071	17	31	0.998	0.793	0.000	0.233
Paid for sexual intercourse in the past 12 months	0.075	0.030	56	87	0.858	0.407	0.014	0.136

na = Not applicable

Table B.11.1 Sampling errors for the Kotayk sample, Armenia 2005: Women

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.567	0.049	562	563	2.349	0.087	0.469	0.665
Literate	0.994	0.004	562	563	1.206	0.004	0.986	1.000
Secondary education or higher	0.904	0.016	562	563	1.258	0.017	0.872	0.935
Never married	0.298	0.011	562	563	0.574	0.037	0.276	0.320
Currently married/in union	0.634	0.018	562	563	0.877	0.028	0.598	0.669
Married before age 20	0.462	0.021	460	458	0.915	0.046	0.420	0.505
Currently pregnant	0.036	0.006	562	563	0.782	0.172	0.023	0.048
Children ever born	1.588	0.050	562	563	0.798	0.031	1.489	1.688
Children surviving	1.495	0.042	562	563	0.743	0.028	1.412	1.579
Children ever born to women age 40-49	2.756	0.150	165	165	1.483	0.054	2.456	3.055
Knows any contraceptive method	0.988	0.006	353	357	1.066	0.006	0.975	1.000
Ever using contraceptive method	0.779	0.026	353	357	1.157	0.033	0.728	0.830
Currently using any contraceptive method	0.489	0.032	353	357	1.192	0.065	0.425	0.552
Currently using pill	0.007	0.003	353	357	0.742	0.485	0.000	0.013
Currently using IUD	0.049	0.017	353	357	1.462	0.343	0.015	0.083
Currently using female sterilization	0.005	0.004	353	357	1.022	0.744	0.000	0.013
Currently using rhythm method	0.040	0.012	353	357	1.163	0.304	0.016	0.064
Obtained method from public sector source	0.476	0.096	42	40	1.228	0.201	0.284	0.667
Want no more children	0.683	0.019	353	357	0.776	0.028	0.645	0.722
Want to delay birth at least 2 years	0.122	0.021	353	357	1.208	0.173	0.080	0.164
Ideal family size	2.671	0.049	551	551	1.094	0.018	2.572	2.769
Mother received medical assistance at delivery	0.970	0.021	125	129	1.088	0.022	0.928	1.000
Child had diarrhea in two weeks before survey	0.242	0.047	120	123	1.187	0.193	0.149	0.336
Treated with oral rehydration salts (ORS)	0.218	0.087	28	30	1.129	0.397	0.045	0.392
Taken to a health provider	0.414	0.088	28	30	0.917	0.213	0.238	0.591
Vaccination card seen	0.883	0.054	27	28	0.871	0.061	0.775	0.990
Received BCG	0.974	0.025	27	28	0.832	0.026	0.923	1.000
Received DPT (3 doses)	0.720	0.107	27	28	1.209	0.148	0.506	0.933
Received polio (3 doses)	0.720	0.107	27	28	1.209	0.148	0.506	0.933
Received measles	0.835	0.088	27	28	1.220	0.105	0.660	1.000
Fully immunized	0.693	0.104	27	28	1.145	0.150	0.485	0.902
Height-for-age (below -2SD)	0.076	0.028	112	106	1.182	0.374	0.019	0.133
Weight-for-height (below -2SD)	0.021	0.014	112	106	1.068	0.683	0.000	0.049
Weight-for-age (below -2SD)	0.007	0.006	112	106	0.841	0.962	0.000	0.019
Anemia in children	0.312	0.061	85	81	1.246	0.196	0.190	0.435
Anemia in women	0.210	0.015	518	518	0.813	0.069	0.181	0.239
Body mass index (BMI) <18.5	0.045	0.012	510	508	1.278	0.261	0.022	0.069
Prevalence of hypertension	0.199	0.023	524	525	1.319	0.116	0.153	0.245
Has heard of HIV/AIDS	0.929	0.014	562	563	1.291	0.015	0.901	0.957
Knows about condoms	0.588	0.033	562	563	1.602	0.057	0.521	0.654
Knows about limiting partners	0.698	0.026	562	563	1.320	0.037	0.647	0.750
Had 2+ sexual partners in past 12 months	0.000	0.000	351	357	na	na	0.000	0.000
Had higher-risk intercourse in past 12 months	0.022	0.009	351	357	1.123	0.397	0.005	0.040
Accepting attitudes towards people with HIV	0.019	0.007	524	523	1.226	0.382	0.005	0.034
Total fertility rate (past 3 years)	1.756	0.218	na	1608	1.185	0.124	1.320	2.193
Perinatal mortality (0-4 years)	33.553	16.931	126	129	0.858	0.505	0.000	67.414
Neonatal mortality (past 10 years)	37.963	12.637	277	281	0.962	0.333	12.689	63.237
Postneonatal mortality (past 10 years)	8.491	5.993	277	281	1.091	0.706	0.000	20.477
Infant mortality (past 10 years)	46.454	12.496	277	281	0.889	0.269	21.461	71.447
Child mortality (past 10 years)	5.445	5.479	277	281	1.190	1.006	0.000	16.404
Under-five mortality (past 10 years)	51.646	12.600	277	281	0.857	0.244	26.447	76.845

na = Not applicable

Table B.11.2 Sampling errors for the Kotayk sample, Armenia 2005: Men

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.522	0.059	128	151	1.335	0.113	0.403	0.640
Literate	0.993	0.007	128	151	0.969	0.007	0.978	1.000
No education	0.000	0.000	128	151	na	na	0.000	0.000
Secondary education or higher	0.993	0.007	128	151	0.969	0.007	0.978	1.000
Never married	0.462	0.028	128	151	0.637	0.061	0.406	0.518
Currently married/in union	0.538	0.028	128	151	0.637	0.052	0.482	0.594
Married before age 20	0.000	0.000	76	87	na	na	0.000	0.000
Want no more children	0.575	0.055	70	81	0.928	0.096	0.464	0.685
Want to delay birth at least 2 years	0.176	0.034	70	81	0.736	0.192	0.109	0.244
Ideal family size	3.065	0.105	105	125	0.774	0.034	2.854	3.275
Has heard of HIV/AIDS	0.979	0.014	128	151	1.067	0.014	0.952	1.000
Knows about condoms	0.832	0.049	128	151	1.478	0.059	0.734	0.930
Knows about limiting partners	0.832	0.061	128	151	1.851	0.074	0.709	0.954
Had 2+ sexual partners in the past 12 months	0.311	0.053	92	106	1.099	0.171	0.205	0.418
Higher-risk intercourse in past 12 months (15-49)	0.448	0.062	92	106	1.190	0.138	0.324	0.572
Condom use at last higher-risk intercourse (15-49)	0.745	0.101	41	48	1.461	0.135	0.544	0.946
Abstinence among youth (never intercourse)	0.642	0.052	47	57	0.740	0.081	0.538	0.747
Sexuallyl active in past 12 months among never-married	0.306	0.041	47	57	0.605	0.134	0.224	0.389
Paid for sexual intercourse in the past 12 months	0.047	0.018	128	151	0.970	0.386	0.011	0.084

na = Not applicable

Table B.12.1 Sampling errors for the Shirak sample, Armenia 2005: Women

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.495	0.028	583	563	1.327	0.056	0.440	0.550
Literate	0.991	0.004	583	563	1.011	0.004	0.983	0.999
Secondary education or higher	0.904	0.011	583	563	0.943	0.013	0.881	0.927
Never married	0.316	0.011	583	563	0.591	0.036	0.294	0.339
Currently married/in union	0.635	0.015	583	563	0.762	0.024	0.604	0.665
Married before age 20	0.392	0.027	465	447	1.206	0.070	0.337	0.446
Currently pregnant	0.039	0.008	583	563	1.011	0.207	0.023	0.056
Children ever born	1.549	0.047	583	563	0.800	0.031	1.454	1.644
Children surviving	1.468	0.047	583	563	0.867	0.032	1.373	1.563
Children ever born to women age 40-49	2.664	0.109	166	160	1.153	0.041	2.445	2.882
Knows any contraceptive method	0.994	0.000	367	357	0.072	0.000	0.994	0.995
Ever using contraceptive method	0.644	0.025	367	357	1.015	0.039	0.593	0.695
Currently using any contraceptive method	0.417	0.030	367	357	1.163	0.072	0.357	0.477
Currently using pill	0.005	0.004	367	357	1.018	0.735	0.000	0.013
Currently using IUD	0.107	0.019	367	357	1.188	0.179	0.069	0.146
Currently using female sterilization	0.003	0.003	367	357	1.123	0.991	0.000	0.010
Currently using rhythm method	0.015	0.006	367	357	0.958	0.401	0.003	0.028
Obtained method from public sector source	0.681	0.074	61	59	1.229	0.109	0.533	0.829
Want no more children	0.714	0.015	367	357	0.648	0.021	0.683	0.744
Want to delay birth at least 2 years	0.066	0.012	367	357	0.928	0.182	0.042	0.091
Ideal family size	2.549	0.022	566	548	0.548	0.009	2.505	2.593
Mother received medical assistance at delivery	0.978	0.017	93	90	1.124	0.017	0.944	1.000
Child had diarrhea in two weeks before survey	0.078	0.050	91	88	1.539	0.641	0.000	0.177
Treated with oral rehydration salts (ORS)	0.182	0.061	6	7	0.405	0.335	0.060	0.303
Taken to a health provider	0.000	0.000	6	7	na	na	0.000	0.000
Vaccination card seen	1.000	0.000	22	22	na	0.000	1.000	1.000
Received BCG	1.000	0.000	22	22	na	0.000	1.000	1.000
Received DPT (3 doses)	0.917	0.069	22	22	1.201	0.075	0.779	1.000
Received polio (3 doses)	0.970	0.030	22	22	0.834	0.031	0.910	1.000
Received measles	0.970	0.030	22	22	0.834	0.031	0.910	1.000
Fully immunized	0.917	0.069	22	22	1.201	0.075	0.779	1.000
Height-for-age (below -2SD)	0.111	0.048	77	78	1.236	0.430	0.015	0.206
Weight-for-height (below -2SD)	0.326	0.084	77	78	1.457	0.257	0.159	0.493
Weight-for-age (below -2SD)	0.176	0.034	77	78	0.793	0.192	0.108	0.244
Anemia in children	0.179	0.052	73	74	1.108	0.288	0.076	0.282
Anemia in women	0.265	0.033	566	547	1.764	0.123	0.200	0.331
Body mass index (BMI) <18.5	0.034	0.012	553	535	1.546	0.352	0.010	0.057
Prevalence of hypertension	0.319	0.020	569	550	1.014	0.062	0.280	0.359
Has heard of HIV/AIDS	0.903	0.016	583	563	1.330	0.018	0.870	0.936
Knows about condoms	0.736	0.022	583	563	1.187	0.029	0.692	0.779
Knows about limiting partners	0.808	0.024	583	563	1.474	0.030	0.759	0.856
Had 2+ sexual partners in past 12 months	0.000	0.000	351	341	na	na	0.000	0.000
Had higher-risk intercourse in past 12 months	0.008	0.008	351	341	1.680	1.007	0.000	0.024
Accepting attitudes towards people with HIV	0.000	0.000	529	509	na	na	0.000	0.000
Total fertility rate (past 3 years)	1.170	0.172	na	1,575	1.151	0.147	0.827	1.514
Perinatal mortality (0-4 years)	45.377	30.155	97	95	1.046	0.665	0.000	105.687
Neonatal mortality (past 10 years)	3.573	3.593	242	231	0.932	1.005	0.000	10.758
Postneonatal mortality (past 10 years)	14.637	8.183	243	232	1.081	0.559	0.000	31.003
Infant mortality (past 10 years)	18.210	8.688	243	232	1.033	0.477	0.835	35.585
Child mortality (past 10 years)	14.075	10.042	242	231	1.087	0.713	0.000	34.159
Under-five mortality (past 10 years)	32.029	11.513	243	232	0.980	0.359	9.003	55.055

na = Not applicable

Table B.12.2 Sampling errors for the Shirak sample, Armenia 2005: Men

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.642	0.036	112	98	0.799	0.057	0.569	0.715
Literate	1.000	0.000	112	98	na	0.000	1.000	1.000
No education	0.000	0.000	112	98	na	na	0.000	0.000
Secondary education or higher	1.000	0.000	112	98	na	0.000	1.000	1.000
Never married	0.416	0.048	112	98	1.030	0.116	0.319	0.512
Currently married/in union	0.559	0.045	112	98	0.948	0.080	0.470	0.649
Married before age 20	0.015	0.014	70	61	0.977	0.965	0.000	0.043
Want no more children	0.751	0.050	63	55	0.911	0.067	0.651	0.851
Want to delay birth at least 2 years	0.086	0.034	63	55	0.965	0.399	0.017	0.155
Ideal family size	2.312	0.071	84	74	0.861	0.031	2.171	2.453
Has heard of HIV/AIDS	0.794	0.039	112	98	1.007	0.049	0.716	0.871
Knows about condoms	0.311	0.043	112	98	0.984	0.139	0.225	0.398
Knows about limiting partners	0.668	0.040	112	98	0.893	0.060	0.588	0.748
Had 2+ sexual partners in the past 12 months	0.000	0.000	63	55	na	na	0.000	0.000
Condom use at last higher-risk intercourse (15-49)	0.000	0.000	0	0	na	na	0.000	0.000
Abstinence among youth (never intercourse)	1.000	0.000	39	34	na	0.000	1.000	1.000
Sexuallyl active in past 12 months among never-married	0.000	0.000	39	34	na	na	0.000	0.000
Paid for sexual intercourse in the past 12 months	0.000	0.000	112	98	na	na	0.000	0.000

na = Not applicable

Table B.13.1 Sampling errors for the Syunik sample, Armenia 2005: Women

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.634	0.033	537	281	1.601	0.053	0.567	0.701
Literate	0.991	0.004	537	281	0.884	0.004	0.983	0.998
Secondary education or higher	0.933	0.009	537	281	0.822	0.010	0.915	0.951
Never married	0.272	0.022	537	281	1.155	0.082	0.227	0.316
Currently married/in union	0.673	0.024	537	281	1.168	0.035	0.625	0.720
Married before age 20	0.379	0.026	449	235	1.146	0.069	0.327	0.432
Currently pregnant	0.027	0.007	537	281	0.931	0.240	0.014	0.040
Children ever born	1.676	0.059	537	281	0.986	0.035	1.558	1.795
Children surviving	1.597	0.062	537	281	1.100	0.039	1.473	1.721
Children ever born to women age 40-49	2.725	0.091	185	98	1.045	0.033	2.543	2.907
Knows any contraceptive method	1.000	0.000	359	189	na	0.000	1.000	1.000
Ever using contraceptive method	0.823	0.017	359	189	0.830	0.020	0.789	0.856
Currently using any contraceptive method	0.614	0.029	359	189	1.113	0.047	0.557	0.672
Currently using pill	0.005	0.004	359	189	0.980	0.704	0.000	0.013
Currently using IUD	0.119	0.026	359	189	1.499	0.216	0.068	0.170
Currently using female sterilization	0.009	0.005	359	189	0.989	0.563	0.000	0.018
Currently using rhythm method	0.021	0.009	359	189	1.127	0.408	0.004	0.038
Obtained method from public sector source	0.851	0.063	53	30	1.270	0.074	0.726	0.977
Want no more children	0.680	0.026	359	189	1.054	0.038	0.628	0.732
Want to delay birth at least 2 years	0.146	0.016	359	189	0.837	0.107	0.115	0.178
Ideal family size	2.753	0.044	537	281	1.143	0.016	2.665	2.841
Mother received medical assistance at delivery	0.981	0.013	119	63	1.047	0.013	0.955	1.000
Child had diarrhea in two weeks before survey	0.153	0.040	117	62	1.095	0.261	0.073	0.232
Treated with oral rehydration salts (ORS)	0.504	0.152	18	9	1.156	0.301	0.201	0.807
Taken to a health provider	0.101	0.078	18	9	1.081	0.768	0.000	0.257
Vaccination card seen	0.918	0.057	20	11	0.952	0.062	0.803	1.000
Received BCG	0.898	0.062	20	11	0.938	0.069	0.773	1.000
Received DPT (3 doses)	0.643	0.100	20	11	0.951	0.155	0.443	0.842
Received polio (3 doses)	0.693	0.082	20	11	0.816	0.119	0.528	0.858
Received measles	0.359	0.089	20	11	0.848	0.248	0.181	0.537
Fully immunized	0.307	0.096	20	11	0.953	0.314	0.114	0.499
Height-for-age (below -2SD)	0.072	0.024	115	63	1.044	0.335	0.024	0.121
Weight-for-height (below -2SD)	0.007	0.007	115	63	0.929	1.044	0.000	0.021
Weight-for-age (below -2SD)	0.019	0.012	115	63	0.974	0.634	0.000	0.044
Anemia in children	0.248	0.049	97	53	1.079	0.198	0.150	0.347
Anemia in women	0.206	0.020	531	277	1.146	0.098	0.166	0.246
Body mass index (BMI) <18.5	0.057	0.013	515	269	1.271	0.229	0.031	0.083
Prevalence of hypertension	0.177	0.019	530	277	1.166	0.109	0.138	0.216
Has heard of HIV/AIDS	0.967	0.007	537	281	0.956	0.008	0.952	0.982
Knows about condoms	0.844	0.019	537	281	1.240	0.023	0.805	0.883
Knows about limiting partners	0.884	0.016	537	281	1.163	0.018	0.852	0.916
Had 2+ sexual partners in past 12 months	0.000	0.000	351	184	na	na	0.000	0.000
Had higher-risk intercourse in past 12 months	0.000	0.000	351	184	na	na	0.000	0.000
Accepting attitudes towards people with HIV	0.000	0.000	521	271	na	na	0.000	0.000
Total fertility rate (past 3 years)	1.792	0.196	na	793	1.024	0.109	1.399	2.184
Perinatal mortality (0-4 years)	19.186	12.775	119	63	1.047	0.666	0.000	44.736
Neonatal mortality (past 10 years)	22.955	10.123	265	140	0.970	0.441	2.709	43.200
Postneonatal mortality (past 10 years)	3.418	3.437	265	140	0.968	1.006	0.000	10.292
Infant mortality (past 10 years)	26.372	10.580	265	140	0.964	0.401	5.213	47.532
Child mortality (past 10 years)	5.126	3.841	265	140	0.976	0.749	0.000	12.809
Under-five mortality (past 10 years)	31.363	10.851	265	140	0.950	0.346	9.662	53.064

na = Not applicable

Table B.13.2 Sampling errors for the Syunik sample, Armenia 2005: Men

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.554	0.050	139	67	1.172	0.090	0.454	0.653
Literate	0.994	0.006	139	67	0.911	0.006	0.982	1.000
No education	0.000	0.000	139	67	na	na	0.000	0.000
Secondary education or higher	0.994	0.006	139	67	0.911	0.006	0.982	1.000
Never married	0.414	0.051	139	67	1.220	0.124	0.312	0.516
Currently married/in union	0.572	0.050	139	67	1.184	0.087	0.472	0.672
Married before age 20	0.046	0.021	95	46	0.976	0.460	0.004	0.088
Want no more children	0.761	0.050	79	38	1.044	0.066	0.660	0.862
Want to delay birth at least 2 years	0.093	0.041	79	38	1.254	0.444	0.010	0.175
Ideal family size	2.652	0.103	139	67	0.917	0.039	2.446	2.858
Has heard of HIV/AIDS	0.698	0.075	139	67	1.930	0.108	0.547	0.849
Knows about condoms	0.571	0.073	139	67	1.738	0.128	0.424	0.717
Knows about limiting partners	0.608	0.090	139	67	2.172	0.148	0.427	0.788
Had 2+ sexual partners in the past 12 months	0.000	0.000	90	44	na	na	0.000	0.000
Higher-risk intercourse in past 12 months (15-49)	0.100	0.039	90	44	1.233	0.393	0.021	0.178
Condom use at last higher-risk intercourse (15-49)	0.414	0.164	9	4	0.941	0.396	0.086	0.741
Abstinence among youth (never intercourse)	0.900	0.052	41	20	1.091	0.057	0.797	1.000
Sexuallyl active in past 12 months among never-married	0.077	0.046	41	20	1.095	0.598	0.000	0.170
Paid for sexual intercourse in the past 12 months	0.020	0.015	139	67	1.270	0.763	0.000	0.050

na = Not applicable

Table B.14.1 Sampling errors for the Vayots Dzor, Armenia 2005: Women

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.369	0.031	407	107	1.313	0.085	0.306	0.432
Literate	0.995	0.005	407	107	1.432	0.005	0.985	1.000
Secondary education or higher	0.941	0.010	407	107	0.887	0.011	0.921	0.962
Never married	0.333	0.009	407	107	0.403	0.028	0.314	0.352
Currently married/in union	0.607	0.020	407	107	0.826	0.033	0.567	0.647
Married before age 20	0.402	0.034	338	88	1.290	0.086	0.334	0.471
Currently pregnant	0.029	0.007	407	107	0.869	0.249	0.015	0.043
Children ever born	1.647	0.069	407	107	0.918	0.042	1.510	1.785
Children surviving	1.538	0.058	407	107	0.841	0.038	1.422	1.654
Children ever born to women age 40-49	2.815	0.071	131	31	0.630	0.025	2.672	2.958
Knows any contraceptive method	0.988	0.009	239	65	1.267	0.009	0.970	1.000
Ever using contraceptive method	0.796	0.038	239	65	1.473	0.048	0.719	0.873
Currently using any contraceptive method	0.669	0.068	239	65	2.240	0.102	0.532	0.806
Currently using pill	0.012	0.008	239	65	1.134	0.659	0.000	0.028
Currently using IUD	0.028	0.012	239	65	1.100	0.419	0.005	0.052
Currently using female sterilization	0.000	0.000	239	65	na	na	0.000	0.000
Currently using rhythm method	0.050	0.020	239	65	1.394	0.396	0.010	0.089
Obtained method from public sector source	0.173	0.057	54	12	1.094	0.329	0.059	0.286
Want no more children	0.665	0.043	239	65	1.415	0.065	0.578	0.751
Want to delay birth at least 2 years	0.134	0.025	239	65	1.129	0.186	0.084	0.184
Ideal family size	2.542	0.052	406	106	0.934	0.021	2.437	2.646
Mother received medical assistance at delivery	1.000	0.000	68	19	na	0.000	1.000	1.000
Child had diarrhea in two weeks before survey	0.124	0.034	67	19	0.898	0.272	0.057	0.191
Treated with oral rehydration salts (ORS)	0.545	0.202	10	2	1.207	0.370	0.142	0.949
Taken to a health provider	0.447	0.183	10	2	1.094	0.409	0.082	0.812
Vaccination card seen	0.978	0.023	14	4	0.628	0.023	0.933	1.000
Received BCG	1.000	0.000	14	4	na	0.000	1.000	1.000
Received DPT (3 doses)	0.665	0.219	14	4	1.881	0.329	0.227	1.000
Received polio (3 doses)	0.548	0.177	14	4	1.447	0.324	0.194	0.903
Received measles	0.592	0.109	14	4	0.898	0.184	0.375	0.810
Fully immunized	0.382	0.157	14	4	1.311	0.411	0.068	0.696
Height-for-age (below -2SD)	0.069	0.040	53	16	1.179	0.575	0.000	0.148
Weight-for-height (below -2SD)	0.242	0.082	53	16	1.354	0.337	0.079	0.405
Weight-for-age (below -2SD)	0.113	0.066	53	16	1.288	0.589	0.000	0.246
Anemia in children	0.069	0.037	35	10	0.933	0.539	0.000	0.143
Anemia in women	0.178	0.028	320	81	1.292	0.158	0.122	0.235
Body mass index (BMI) <18.5	0.034	0.007	362	96	0.701	0.195	0.021	0.048
Prevalence of hypertension	0.378	0.030	360	93	1.153	0.078	0.319	0.437
Has heard of HIV/AIDS	0.988	0.007	407	107	1.303	0.007	0.973	1.000
Knows about condoms	0.856	0.014	407	107	0.816	0.017	0.828	0.885
Knows about limiting partners	0.892	0.009	407	107	0.593	0.010	0.874	0.911
Had 2+ sexual partners in past 12 months	0.000	0.000	231	62	na	na	0.000	0.000
Had higher-risk intercourse in past 12 months	0.008	0.004	231	62	0.607	0.447	0.001	0.015
Accepting attitudes towards people with HIV	0.000	0.000	404	105	na	na	0.000	0.000
Total fertility rate (past 3 years)	0.918	0.191	na	303	1.445	0.208	0.535	1.300
Perinatal mortality (0-4 years)	10.241	10.052	68	19	0.856	0.982	0.000	30.346
Neonatal mortality (past 10 years)	25.832	15.601	147	45	1.294	0.604	0.000	57.035
Postneonatal mortality (past 10 years)	10.606	10.868	147	45	1.414	1.025	0.000	32.341
Infant mortality (past 10 years)	36.438	24.122	147	45	1.715	0.662	0.000	84.682
Child mortality (past 10 years)	1.984	2.037	148	45	0.677	1.027	0.000	6.058
Under-five mortality (past 10 years)	38.350	24.028	148	45	1.676	0.627	0.000	86.406

na = Not applicable

Table B.14.2 Sampling errors for the Vayots Dzor sample, Armenia 2005: Men

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.280	0.040	106	31	0.914	0.143	0.200	0.361
Literate	1.000	0.000	106	31	na	0.000	1.000	1.000
No education	0.000	0.000	106	31	na	na	0.000	0.000
Secondary education or higher	1.000	0.000	106	31	na	0.000	1.000	1.000
Never married	0.383	0.036	106	31	0.751	0.093	0.311	0.454
Currently married/in union	0.602	0.034	106	31	0.709	0.056	0.534	0.670
Married before age 20	0.036	0.028	61	19	1.147	0.768	0.000	0.091
Want no more children	0.777	0.065	58	19	1.186	0.084	0.646	0.907
Want to delay birth at least 2 years	0.018	0.012	58	19	0.707	0.700	0.000	0.042
Ideal family size	2.826	0.089	103	29	0.904	0.031	2.649	3.004
Has heard of HIV/AIDS	0.896	0.049	106	31	1.649	0.055	0.798	0.994
Knows about condoms	0.686	0.048	106	31	1.067	0.070	0.590	0.783
Knows about limiting partners	0.712	0.035	106	31	0.790	0.049	0.642	0.782
Had 2+ sexual partners in the past 12 months	0.021	0.021	65	21	1.198	1.026	0.000	0.064
Higher-risk intercourse in past 12 months (15-49)	0.109	0.042	65	21	1.089	0.389	0.024	0.194
Condom use at last higher-risk intercourse (15-49)	0.533	0.223	9	2	1.266	0.419	0.086	0.980
Abstinence among youth (never intercourse)	0.820	0.065	43	11	1.102	0.080	0.689	0.950
Sexuallyl active in past 12 months among never-married	0.167	0.066	43	11	1.141	0.394	0.035	0.298
Paid for sexual intercourse in the past 12 months	0.014	0.014	106	31	1.225	1.006	0.000	0.042

na = Not applicable

Table B.15.1 Sampling errors for the Tavush sample, Armenia 2005: Women

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.383	0.035	568	285	1.707	0.091	0.313	0.453
Literate	0.988	0.012	568	285	2.665	0.013	0.963	1.000
Secondary education or higher	0.885	0.026	568	285	1.944	0.029	0.833	0.937
Never married	0.273	0.016	568	285	0.866	0.059	0.240	0.305
Currently married/in union	0.647	0.021	568	285	1.037	0.032	0.605	0.689
Married before age 20	0.432	0.023	485	248	1.020	0.053	0.386	0.478
Currently pregnant	0.016	0.007	568	285	1.412	0.471	0.001	0.030
Children ever born	1.707	0.061	568	285	1.041	0.036	1.584	1.829
Children surviving	1.635	0.052	568	285	0.952	0.032	1.532	1.739
Children ever born to women age 40-49	2.493	0.162	178	88	1.582	0.065	2.169	2.817
Knows any contraceptive method	0.999	0.001	352	184	0.670	0.001	0.996	1.000
Ever using contraceptive method	0.842	0.023	352	184	1.184	0.027	0.796	0.888
Currently using any contraceptive method	0.622	0.050	352	184	1.927	0.080	0.522	0.721
Currently using pill	0.008	0.005	352	184	1.139	0.680	0.000	0.019
Currently using IUD	0.075	0.019	352	184	1.378	0.259	0.036	0.113
Currently using female sterilization	0.000	0.000	352	184	na	na	0.000	0.000
Currently using rhythm method	0.046	0.011	352	184	1.012	0.246	0.023	0.069
Obtained method from public sector source	0.435	0.126	70	32	2.107	0.289	0.184	0.687
Want no more children	0.788	0.024	352	184	1.088	0.030	0.741	0.836
Want to delay birth at least 2 years	0.092	0.016	352	184	1.038	0.174	0.060	0.124
Ideal family size	2.653	0.063	566	284	1.788	0.024	2.527	2.779
Mother received medical assistance at delivery	1.000	0.000	137	75	na	0.000	1.000	1.000
Child had diarrhea in two weeks before survey	0.182	0.019	133	73	0.587	0.104	0.144	0.220
Treated with oral rehydration salts (ORS)	0.139	0.073	23	13	1.079	0.523	0.000	0.284
Taken to a health provider	0.260	0.062	23	13	0.683	0.239	0.136	0.385
Vaccination card seen	0.974	0.028	23	9	0.723	0.028	0.918	1.000
Received BCG	1.000	0.000	23	9	na	0.000	1.000	1.000
Received DPT (3 doses)	0.612	0.089	23	9	0.759	0.145	0.435	0.789
Received polio (3 doses)	0.700	0.087	23	9	0.789	0.124	0.527	0.873
Received measles	0.610	0.088	23	9	0.758	0.145	0.433	0.787
Fully immunized	0.457	0.109	23	9	0.913	0.238	0.239	0.675
Height-for-age (below -2SD)	0.092	0.017	130	74	0.681	0.184	0.058	0.126
Weight-for-height (below -2SD)	0.003	0.004	130	74	0.701	1.028	0.000	0.011
Weight-for-age (below -2SD)	0.041	0.022	130	74	1.318	0.545	0.000	0.086
Anemia in children	0.196	0.040	119	70	1.154	0.202	0.117	0.276
Anemia in women	0.141	0.011	560	283	0.753	0.078	0.119	0.164
Body mass index (BMI) <18.5	0.047	0.016	551	278	1.760	0.337	0.015	0.079
Prevalence of hypertension	0.288	0.020	545	275	1.020	0.069	0.248	0.328
Has heard of HIV/AIDS	0.946	0.007	568	285	0.711	0.007	0.933	0.960
Knows about condoms	0.547	0.020	568	285	0.954	0.036	0.507	0.587
Knows about limiting partners	0.621	0.030	568	285	1.482	0.049	0.560	0.681
Had 2+ sexual partners in past 12 months	0.000	0.000	344	181	na	na	0.000	0.000
Had higher-risk intercourse in past 12 months	0.007	0.003	344	181	0.704	0.444	0.001	0.014
Accepting attitudes towards people with HIV	0.016	0.005	545	269	0.883	0.300	0.006	0.025
Total fertility rate (past 3 years)	1.616	0.191	na	813	0.992	0.118	1.233	1.998
Perinatal mortality (0-4 years)	8.021	5.461	138	76	0.760	0.681	0.000	18.943
Neonatal mortality (past 10 years)	30.466	10.524	306	171	1.189	0.345	9.419	51.513
Postneonatal mortality (past 10 years)	9.206	5.136	306	171	1.015	0.558	0.000	19.478
Infant mortality (past 10 years)	39.671	11.264	306	171	1.129	0.284	17.144	62.198
Child mortality (past 10 years)	5.492	5.596	306	171	1.438	1.019	0.000	16.684
Under-five mortality (past 10 years)	44.945	13.766	306	171	1.171	0.306	17.413	72.478

na = Not applicable

Table B.15.2 Sampling errors for the Tavush sample, Armenia 2005: Men

Variable	Value (R)	Standard error (SE)	Number of cases: Unweighted (N)	Number of cases: Weighted (WN)	Design effect (DEFT)	Relative error (SE/R)	Confidence intervals: Value-2SE (R-2SE)	Confidence intervals: Value+2SE (R+2SE)
Urban residence	0.324	0.031	125	64	0.737	0.096	0.262	0.386
Literate	1.000	0.000	125	64	na	0.000	1.000	1.000
No education	0.000	0.000	125	64	na	na	0.000	0.000
Secondary education or higher	1.000	0.000	125	64	na	0.000	1.000	1.000
Never married	0.345	0.044	125	64	1.041	0.129	0.256	0.434
Currently married/in union	0.651	0.044	125	64	1.027	0.067	0.563	0.739
Married before age 20	0.025	0.020	85	45	1.163	0.794	0.000	0.064
Want no more children	0.721	0.062	77	42	1.207	0.086	0.597	0.846
Want to delay birth at least 2 years	0.088	0.027	77	42	0.844	0.311	0.033	0.143
Ideal family size	3.243	0.132	124	64	0.930	0.041	2.979	3.507
Has heard of HIV/AIDS	0.919	0.041	125	64	1.656	0.044	0.838	1.000
Knows about condoms	0.883	0.025	125	64	0.865	0.028	0.834	0.933
Knows about limiting partners	0.873	0.016	125	64	0.543	0.019	0.841	0.906
Had 2+ sexual partners in the past 12 months	0.045	0.032	87	45	1.440	0.717	0.000	0.109
Higher-risk intercourse in past 12 months (15-49)	0.095	0.037	87	45	1.176	0.391	0.021	0.170
Condom use at last higher-risk intercourse (15-49)	0.826	0.086	12	4	0.757	0.105	0.653	0.999
Abstinence among youth (never intercourse)	0.916	0.030	36	17	0.637	0.033	0.856	0.976
Sexuallyl active in past 12 months among never-married	0.071	0.026	36	17	0.603	0.369	0.019	0.123
Paid for sexual intercourse in the past 12 months	0.000	0.000	125	64	na	na	0.000	0.000

na = Not applicable

DATA QUALITY TABLES

Appendix **C**

Table C.1 Household age distribution

Single-year age distribution of the de facto household population by sex (weighted), Armenia 2005

	Women		Men			Women		Men	
Age	Number	Percent	Number	Percent	Age	Number	Percent	Number	Percent
0	173	1.6	165	1.2	36	109	1.0	143	1.1
1	183	1.6	127	1.0	37	115	1.0	144	1.1
2	176	1.6	143	1.1	38	103	0.9	175	1.3
3	160	1.4	124	0.9	39	146	1.3	168	1.3
4	140	1.3	121	0.9	40	145	1.3	196	1.5
5	150	1.4	105	0.8	41	135	1.2	174	1.3
6	161	1.4	150	1.1	42	151	1.4	190	1.4
7	192	1.7	151	1.1	43	175	1.6	232	1.7
8	206	1.8	179	1.3	44	159	1.4	212	1.6
9	166	1.5	175	1.3	45	178	1.6	229	1.7
10	212	1.9	181	1.4	46	142	1.3	233	1.8
11	207	1.9	190	1.4	47	162	1.5	211	1.6
12	228	2.0	198	1.5	48	139	1.2	182	1.4
13	237	2.1	234	1.8	49	153	1.4	140	1.1
14	236	2.1	269	2.0	50	176	1.6	282	2.1
15	279	2.5	252	1.9	51	120	1.1	142	1.1
16	248	2.2	252	1.9	52	122	1.1	201	1.5
17	254	2.3	228	1.7	53	133	1.2	209	1.6
18	143	1.3	203	1.5	54	125	1.1	151	1.1
19	107	1.0	258	1.9	55	136	1.2	172	1.3
20	187	1.7	263	2.0	56	99	0.9	140	1.0
21	207	1.9	263	2.0	57	91	0.8	110	0.8
22	205	1.8	232	1.7	58	102	0.9	115	0.9
23	203	1.8	210	1.6	59	63	0.6	109	0.8
24	167	1.5	203	1.5	60	68	0.6	96	0.7
25	173	1.6	190	1.4	61	44	0.4	48	0.4
26	152	1.4	198	1.5	62	51	0.5	47	0.4
27	170	1.5	220	1.7	63	71	0.6	66	0.5
28	149	1.3	196	1.5	64	76	0.7	100	0.8
29	146	1.3	154	1.2	65	139	1.2	173	1.3
30	122	1.1	165	1.2	66	106	1.0	110	0.8
31	120	1.1	137	1.0	67	90	0.8	156	1.2
32	118	1.1	159	1.2	68	94	0.8	110	0.8
33	128	1.1	153	1.2	69	71	0.6	115	0.9
34	114	1.0	158	1.2	70+	787	7.1	1,270	9.5
35	137	1.2	147	1.1	Don't know/missing	0	0.0	2	0.0
					Total	11,134	100.0	13,304	100.0

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 percentage of eligible women who were interviewed (weighted), by five-year age groups, Armenia 2005

Age group	Household population of women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed
		Number	Percent	
10-14	1,072	na	na	na
15-19	1,192	1,148	17.3	96.3
20-24	1,171	1,132	17.1	96.7
25-29	958	942	14.2	98.3
30-34	772	749	11.3	97.0
25-39	777	728	11.0	93.7
40-44	1,005	979	14.8	97.4
45-49	994	955	14.4	96.1
50-54	985	na	na	na
15-49	6,869	6,633	100.0	96.6

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 schedule.
na = Not applicable

Table C.2.2 Age distribution of eligible and interviewed men

De facto household population of men age 10-54, interviewed men age 15-49, and percentage of eligible men who were interviewed (weighted), by five-year age groups, Armenia 2005

Age group	Household population of men age 10-54	Interviewed men age 15-49		Percentage of eligible men interviewed
		Number	Percent	
10-14	344	na	na	na
15-19	305	288	20.0	94.3
20-24	270	232	16.2	86.2
25-29	219	203	14.1	92.4
30-34	177	156	10.8	87.9
25-39	175	155	10.8	88.3
40-44	229	190	13.2	82.9
45-49	252	214	14.9	84.9
50-54	197	na	na	na
15-49	1,628	1,438	100.0	88.3

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 schedule.
na = Not applicable

Table C.3 Completeness of reporting

Percentage of cases missing information on selected demographic and health data (weighted), Armenia 2005

Subject	Reference group	Percentage with missing information	Number of cases
Birth date	Births in the 15 years preceding the survey		
Month only		0.0	5,177
Month and year		0.0	5,177
Age at death	Dead children born in the 15 years preceding the survey	1.0	201
Age/date at first union[1]	Ever-married women age 15-49	0.1	4,523
Respondent's education	All women age 15-49	0.1	6,566
Diarrhea in past 2 weeks	Living children age 0-59 months	0.7	1,470
Anthropometry[2]			
Children	Living children age 0-59 months		
Height		7.7	1,501
Weight		8.1	1,501
Height or weight		8.2	1,501
Women	All women age 15-49		
Height		6.8	6,869
Weight		7.1	6,869
Height or weight		7.2	6,869
Anemia[2]			
Children	Living children age 6-59 months	17.1	1,333
Women	All women age 15-49	9.6	6,869

[1] Both year and age missing
[2] Information taken from Household Questionnaire

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), Armenia 2005

Calendar year	Number of births			Percentage with complete birth date			Sex ratio at birth			Calendar year ratio		
	L	D	T	L	D	T	L	D	T	L	D	T
2005	256	11	267	100.0	100.0	100.0	98.6	36.6	94.8	na	na	na
2004	241	4	245	100.0	100.0	100.0	157.8	48.3	154.5	na	na	na
2003	286	6	292	100.0	100.0	100.0	131.4	251.1	133.0	103.2	106.6	103.2
2002	314	7	321	100.0	100.0	100.0	118.2	404.5	121.0	96.7	77.2	96.1
2001	364	12	376	100.0	100.0	100.0	113.9	180.1	115.5	109.0	87.6	108.1
2000	353	21	374	100.0	100.0	100.0	111.9	128.7	112.8	98.9	133.5	100.3
1999	351	19	370	99.7	100.0	99.7	100.2	102.1	100.3	100.6	91.8	100.1
1998	345	20	366	100.0	100.0	100.0	114.0	122.3	114.4	95.8	101.8	96.2
1997	369	21	391	100.0	100.0	100.0	123.3	169.2	125.4	96.7	104.8	97.1
1996	419	20	439	100.0	100.0	100.0	108.2	71.5	106.1	106.5	84.6	105.3
2001-2005	1,461	41	1,501	100.0	100.0	100.0	121.3	119.2	121.3	na	na	na
1996-2000	1,838	102	1,939	99.9	100.0	99.9	111.2	114.7	111.4	na	na	na
1991-1996	2,098	116	2,214	99.7	98.1	99.7	104.5	202.5	108.1	na	na	na
1986-1990	1,873	135	2,007	99.9	100.0	99.9	102.6	122.5	103.8	na	na	na
< 1986	1,013	94	1,106	99.9	98.3	99.8	106.4	193.1	111.7	na	na	na
All	8,282	487	8,769	99.9	99.2	99.9	108.6	147.4	110.4	na	na	na

na = Not applicable

[1] Replace with calendar years in stub. For example, if survey takes place in 2000, 0 becomes 2000, 1 becomes 1999, etc.

[2] Both year and month of birth given

[3] (Bm/Bf)x100, where Bm and Bf are the numbers of male and female births, respectively

[4] [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 one month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0-6 days, for five-year periods preceding the survey (weighted), Armenia 2005

Age at death (days)	Number of years preceding the survey				Total
	0-4	5-9	10-14	15-19	0-19
<1	6	9	3	16	33
1	0	7	8	14	29
2	4	5	3	1	14
3	1	2	6	6	15
4	2	2	3	0	7
5	3	1	6	4	13
6	0	0	2	0	2
7	3	2	0	2	7
8	1	0	0	0	1
10	2	2	0	3	8
11	0	0	0	1	1
12	1	0	0	0	1
14	2	0	1	0	3
15	0	0	2	1	2
20	0	0	0	3	3
25	0	0	3	2	6
27	0	0	1	0	1
28	0	1	0	0	1
30	0	0	1	0	1
31+	0	0	1	1	2
Total 0-30	26	31	38	52	147
Percent early neonatal[1]	64.4	81.4	77.9	78.5	76.5

[1] ≤6 days /≤30 days

Table C.6 Reporting of age at death in months

Distribution of reported deaths under two years of age by age at death in months and the percentage of infant deaths reported to occur at age under one month, for five-year periods preceding the survey, Armenia 2005

Age at death (months)	Number of years preceding the survey				Total
	0-4	5-9	10-14	15-19	0-19
<1[a]	26	31	38	52	147
1	3	2	10	2	16
2	1	1	2	5	8
3	1	5	12	2	21
4	1	2	6	4	12
5	0	2	2	1	5
6	6	1	6	4	17
7	0	0	3	5	8
8	1	0	5	5	11
10	0	0	1	2	3
11	0	1	0	1	2
12	0	4	1	0	5
13	0	1	0	0	1
16	0	2	0	0	2
18	1	0	0	2	4
20	0	0	1	0	1
1 Year	2	0	1	3	6
Total 0-11	38	45	84	84	252
Percent neonatal	66.8	69.5	45.1	62.4	58.5

[a] Includes deaths under one month reported in days
[1] Under one month/under one year

PERSONS INVOLVED IN THE 2005 ARMENIA DEMOGRAPHIC AND HEALTH SURVEY

Appendix **D**

National Director
Gagik Gevorgyan, Member of the State Council on Statistics of RA

National Director for Medical Affairs
Tatul Hakobyan, Deputy Minister of Health

National Statistical Service
Araik Hayrapetyan, Head of staff of NSS of RA
Diana Martirosova, Head of Household Survey Division, NSS of RA
Karine Kuyumjyan, Head of Census and Demography Division, NSS of RA
Lusine Kalantaryan, Head of Labour Market Statistics Division, NSS of RA
Nelli Baghdasaryan, Head of Social Sphere and Environment Statistics Division, NSS of RA
Anahit Manandyan, Main auditor of NSS of RA

Ministry of Health
Karine Saribekyan, Head of Mother and Child Health Care Unit
Razmik Abrahamyan, Director of the Institute of Perinatalogy, Obstetrics and Gynecology
Mariam Artsruni, National Expert in ADHS
Gayane Avagyan, Chief Specialist of Mother and Child Health Care Unit
Ruzanna Yuzbashyan, Head of Medical Care Coordination Unit
Elvira Mirzoyan, Supervisor of Medical Technician Personnel
Konstantin Ter-Voskanyan, National Institute of Health, Head of Pediatrics Department
Armen Blbulyan, Institute of Perinatalogy, Obstertrics and Gynecology, Head of Obstetrics Department

Armenia Demographic and Health Survey
Vardan Gevorgyan, Project Associate
Anahit Khangeldyan, Project Accountant
Davit Azizyan/Vahan Hovsepyan, Project Assistant

United Nations Population Fund
Garik Hayrapetyan, UNFPA Assistant Representative
Anna Hovhannisyan, Population and Development Strategy Project Officer
Zara Mkrtchyan, Project Expert in ADHS

ORC Macro

Holly A. Newby
Alex Izmukhambetov
Alfredo Aliaga
Dean Garrett
Gulnara Semenov
Luis Ochoa
Anne R. Cross
Joy Fishel
Jeremiah M. Sullivan
Sri Poedjastoeti
Zhuzhi Moore
Kiersten Johnson
Melissa McCormick
John Chang
Sidney Moore

BUSINESS CONSULT CJSC - Financial Management Services Provider

Parandzem Gevorgyan, Managing Partner/Financial Manager for the Project
Karine Arakelyan, Chief Accountant
Rita Grigoryan, Accountant/Cashier
Armen Abovyan, Legal Adviser

FIELD STAFF

Yerevan 1

Melkonyan Haykush, Superviser
Egoryan Khachatur, Editor
Khachatryan Haykuhi, Interviewer
Bareghamyan Alina, Interviewer
Ghazaryan Armine, Interviewer
Zohrabyan Anzhela, Interviewer
Sahakyan Artur, Interviewer
Melkumyan Armine, Medical technician
Alxanyan Nune, Medical technician

Yerevan 2

Markosyan Gayane, Superviser
Chakhoyan Lusine, Editor
Kochoyan Hasmik, Interviewer
Artsruni Gayane, Interviewer
Simonyan Hripsime, Interviewer
Ghazaryan Lida, Interviewer
Zakaryan Vardan, Interviewer
Sahakyan Diana, Medical technician

Yerevan 3
Abelyan Tigran, Superviser
Chakhoyan Narine, Editor
Hovhannisyan Svetlana, Interviewer
Aleksandryan Janna, Interviewer
Kotolyan Ruzanna, Interviewer
Abrahamyan Svetlana, Interviewer
Khachatryan Karen, Interviewer
Antonyan Karine, Medical technician

Aragatsotn
Poghosyan Susanna, Superviser
Hepoyan Armine, Editor
Nshanyan Lusya, Interviewer
Hovsepyan Ani, Interviewer
Mkrtchyan Irina, Interviewer
Poghosyan Shoghakat, Interviewer
Grigoryan Aghasi, Interviewer
Ghazaryan Armine, Medical technician

Ararat
Muradyan Armen, Superviser
Vardanyan Mane, Editor
Ghazaryan Silva, Interviewer
Zakaryan Haykush, Interviewer
Khachatryan Neva, Interviewer
Margaryan Margarita, Interviewer
Hakobyan Armen, Interviewer
Sahakyan Anushik, Medical technician

Armavir
Samvelyan Ruzanna, Superviser
Poghosyan Lusine, Editor
Abrahamyan Anahit, Interviewer
Hovhannisyan Tereza, Interviewer
Grigoryan Anahit, Interviewer
Ginosyan Melanya, Interviewer
Margaryan Jirayr, Interviewer
Kirakosyan Marine, Medical technician

Gegharkunik
Karapetyan Varazdat, Superviser
Grigoryan Hasmik, Editor
Khanamiryan Gayane, Interviewer
Manukyan Anush, Interviewer
Shahinyan Varduhi, Interviewer
Rapyan Ruzanna, Interviewer
Kolozyan Ashot, Interviewer
Ordyan Mariam, Medical technician

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Pepanyan Levon, Superviser
Sargsyan Anna, Editor
Kocharyan Melanya, Interviewer
Antonyan Svetlana, Interviewer
Hoveyan Anush, Interviewer
Matevosyan Gayane, Interviewer
Matevosyan Armen, Interviewer
Gevorgyan Susanna, Medical technician

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Zohrabyan Gohar, Superviser
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Andreasyan Susanna, Interviewer
Zohrabyan Ruzanna, Interviewer
Karakhanyan Kristine, Interviewer
Andreasyan Armine, Interviewer
Soghomonyan Mekhak, Interviewer
Babayan Gohar, Medical technician

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Harutyunyan Geghecik, Superviser
Khachatryan Gayane, Editor
Galstyan Susanna, Interviewer
Zazyan Hasmik, Interviewer
Martirosyan Susanna, Interviewer
Kaghzvantsyan Armenuhi, Interviewer
Khachatryan Varuzhan, Interviewer
Davtyan Hasmik, Medical technician

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Navasardyan Silva, Interviewer
Hakobyan Anzhela, Interviewer
Grigoryan Anna, Interviewer
Hambardzumyan Artur, Interviewer
Rafaelyan Margarita, Medical technician

Vayots Dzor
Tarverdyan Ishkhan, Superviser
Martirosyan Serine, Editor
Vardanyan Alina, Interviewer
Ghazaryan Karine, Interviewer
Vardanyan Lorik, Interviewer
Tumanyan Meri, Interviewer
Stepanyan Manuk, Interviewer
Ghambaryan Marianna, Medical technician

Tavush
Achinyan Lyudmila, Superviser
Abovyan Hasmik, Editor
Harutyunyan Hasmik, Interviewer
Antonyan Ovsanna, Interviewer
Ulikhanyan Nara, Interviewer
Melikyan Aghavni, Interviewer
Adamyan Ruben, Interviewer
Djhanvelyan Rita, Medical technician

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Hakobyan Elza
Terzikyan Armine
Gevorgyan Naira
Chakhoyan Magda
Eseybekyan Raisa
Arustamyan Svetlana
Sargsyan Karine
Matevosyan Anahit
Abrahamyan Andranik

Listers and Mapers

Zakaryan Mkrtich
Hayrapetyan Artak
Martirosyan Serine
Melikyan Ashot
Poghosyan Lusine
Nikoghosyan Anush
Manukyan Anush
Khanamiryan Gayane
Hakobyan Narek
Pepanyan Levon
Ghavalyan Vahe
Davtyan Alina
Harutyunyan Armenak
Malkhasyan Armine
Aghayan Davi
Hambardzumyan Artur
Mehrabyan Anna
Achinyan Lyudmila
Poghosyan Marat
Tarverdyan Ishkhan
Harutyunyan Susanna
Hakobyan Svetlana
Shamamyan Sergey
Sukiasyan Armen
Hovhannisyan Tatevik
Ekdibaryan Lusine

Regional Chiefs of NSS

Vredz Avetisyan, Chief of Yerevan agency
Levon Movsisyan, Chief of Aragatsotn marz agency
Levon Davtyan, Chief of Ararat marz agency
Ishkhan Sargsyan, Chief of Armavir marz agency
Hakob Badalyan, Chief of Gegharkunik marz agency
Anahit Matevosyan, Chief of Lori marz agency
Vahagn Davtyan, Chief of Kotayq marz agency
Vardan Malkhasyan, Chief of Shirak marz agency
Volodya Grigoryan, Chief of Syunik marz agency
A.Ghazaryan, Chief of Vayots Dzor marz agency
Aida Achinyan, Chief of Tavush marz agency

Experts

Astghik Gyulbekyan
Sergey Torosyan
Garnik Hovakimyan

Contributors

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Karine Kuyumjyan
Karine Saribekyan
Vardan Gevorgyan
Mariam Artsruni
Zara Mkrtchyan
Davit Azizyan/Vahan Hovsepyan

QUESTIONNAIRES

Appendix **E**

2005 ARMENIA DEMOGRAPHIC AND HEALTH SURVEY
HOUSEHOLD QUESTIONNAIRE

REPUBLIC OF ARMENIA
NATIONAL STATISTICAL SERVICE
MINISTRY OF HEALTH

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . .

HOUSEHOLD NUMBER . . . . . .

REGION . . . . . .

LARGE CITY/SMALL CITY/TOWN/RURAL . . . . . .
(LARGE CITY=1, SMALL CITY=2, TOWN=3, RURAL=4)

MEN'S QUESTIONNAIRE (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

HEALTH TECHNICIAN VISITS

DATE				BIOMARKER RESULT
NOTES:				

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____		
DATE _____	DATE _____		

HOUSEHOLD SCHEDULE

Now we would like some information about the people who usually live in your household or who are staying with you now.

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	ELIGIBILITY		
	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.	What is the relationship of (NAME) to the head of the household?*	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME) in completed years?	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF ALL MEN AGE 15-49	CIRCLE LINE NUMBER OF ALL CHILDREN UNDER AGE 6
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(8A)	(9)
			M F	YES NO	YES NO	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
11 = OTHER RELATIVE
12 = ADOPTED/FOSTER/STEPCHILD
13 = NOT RELATED
98 = DON'T KNOW

LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EDUCATION						BIRTH REGIS-TRATION
	IF AGE 0-17 YEARS				IF AGE 5 YEARS OR OLDER		IF AGE 5-24 YEARS				IF AGE 0-4
	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother live in this house-hold? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER**	Is (NAME)'s natural father alive?	Does (NAME)'s natural father live in this house-hold? IF YES: What is his name? RECORD FATHER'S LINE NUMBER**	Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended?*** What is the highest grade/class (NAME) completed at that level?***	Did (NAME) attend school at any time during the 2005 - 2006 school year?	During that school year, what level and grade/class was (NAME) attending?***	Did (NAME) attend school at any time during the previous school year, that is, 2004 - 2005?	During that school year, what level and grade/class did (NAME) attend?***	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been regis-tered with the civil authority? ****
	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	Y N DK		Y N DK		YES NO	LEVEL GRADE	YES NO	LEVEL GRADE	YES NO	LEVEL GRADE	C R N DK
01	1 2 8 GO TO 12		1 2 8 GO TO 14		1 2 NEXT LINE		1 2 GO TO 18		1 2 NEXT LINE		1 2 3 8
02	1 2 8 GO TO 12		1 2 8 GO TO 14		1 2 NEXT LINE		1 2 GO TO 18		1 2 NEXT LINE		1 2 3 8
03	1 2 8 GO TO 12		1 2 8 GO TO 14		1 2 NEXT LINE		1 2 GO TO 18		1 2 NEXT LINE		1 2 3 8
04	1 2 8 GO TO 12		1 2 8 GO TO 14		1 2 NEXT LINE		1 2 GO TO 18		1 2 NEXT LINE		1 2 3 8
05	1 2 8 GO TO 12		1 2 8 GO TO 14		1 2 NEXT LINE		1 2 GO TO 18		1 2 NEXT LINE		1 2 3 8
06	1 2 8 GO TO 12		1 2 8 GO TO 14		1 2 NEXT LINE		1 2 GO TO 18		1 2 NEXT LINE		1 2 3 8
07	1 2 8 GO TO 12		1 2 8 GO TO 14		1 2 NEXT LINE		1 2 GO TO 18		1 2 NEXT LINE		1 2 3 8
08	1 2 8 GO TO 12		1 2 8 GO TO 14		1 2 NEXT LINE		1 2 GO TO 18		1 2 NEXT LINE		1 2 3 8
09	1 2 8 GO TO 12		1 2 8 GO TO 14		1 2 NEXT LINE		1 2 GO TO 18		1 2 NEXT LINE		1 2 3 8
10	1 2 8 GO TO 12		1 2 8 GO TO 14		1 2 NEXT LINE		1 2 GO TO 18		1 2 NEXT LINE		1 2 3 8

**Qs. 11 AND 13
RECORD '00' IF PARENT NOT LISTED IN THE HOUSEHOLD SCHEDULE.

***CODES FOR Qs. 15, 17 AND 19
EDUCATION LEVEL:
1 = PRIMARY/SECONDARY (1-10)
2 = SECONDARY-SPECIAL
3 = HIGHER
8 = DON'T KNOW

EDUCATION GRADE:
00 = LESS THAN 1 YEAR COMPLETED (FOR Q. 15 ONLY. THIS CODE IS NOT ALLOWED FOR Qs. 17 AND 19.)
98 = DON'T KNOW

****CODES FOR Q.20
C = CERTIFICATE
R = REGISTRATION
N = NEITHER
DK = DON'T KNOW

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	ELIGIBILITY		
	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.	What is the relationship of (NAME) to the head of the household?*	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME) in completed years?	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF ALL MEN AGE 15-49	CIRCLE LINE NUMBER OF ALL CHILDREN UNDER AGE 6
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(8A)	(9)
			M F	YES NO	YES NO	IN YEARS			
11			1 2	1 2	1 2		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

*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
11 = OTHER RELATIVE
12 = ADOPTED/FOSTER/STEPCHILD
13 = NOT RELATED
98 = DON'T KNOW

**Qs.11 AND 13 RECORD '00' IF PARENT NOT LISTED IN THE HOUSEHOLD SCHEDULE.

***CODES FOR Qs.15, 17, AND 19
EDUCATION LEVEL:
1 = PRIMARY/SECONDARY (1-10)
2 = SECONDARY-SPECIAL
3 = HIGHER
8 = DON'T KNOW
EDUCATION GRADE:
00 = LESS THAN 1 YEAR COMPLETED (FOR Q. 15 ONLY. THIS CODE IS NOT ALLOWED FOR Qs. 17 AND 19.)
98 = DON'T KNOW

****CODES FOR Q.20
C = CERTIFICATE
R = REGISTRATION
N = NEITHER
DK = DON'T KNOW

LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EDUCATION						BIRTH REGIS-TRATION
	IF AGE 0-17 YEARS				IF AGE 5 YEARS OR OLDER		IF AGE 5-24 YEARS				IF AGE 0-4
	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother live in this house-hold? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER**	Is (NAME)'s natural father alive?	Does (NAME)'s natural father live in this house-hold? IF YES: What is his name? RECORD FATHER'S LINE NUMBER**	Has (NAME) ever attended school?	What is the highest level of school (NAME) has attended?*** What is the highest grade/class (NAME) completed at that level?***	Did (NAME) attend school at any time during the 2005 - 2006 school year?	During that school year, what level and grade/class was (NAME) attending?***	Did (NAME) attend school at any time during the previous school year, that is, 2004 - 2005?	During that school year, what level and grade/class did (NAME) attend?***	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been regis-tered with the civil authority? ****
	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)
	Y N DK		Y N DK		YES NO	LEVEL GRADE	YES NO	LEVEL GRADE	YES NO	LEVEL GRADE	C R N DK
11	1 2 8 GO TO 12		1 2 8 GO TO 14		1 2 NEXT LINE		1 2 GO TO 18		1 2 NEXT LINE		1 2 3 8
12	1 2 8 GO TO 12		1 2 8 GO TO 14		1 2 NEXT LINE		1 2 GO TO 18		1 2 NEXT LINE		1 2 3 8
13	1 2 8 GO TO 12		1 2 8 GO TO 14		1 2 NEXT LINE		1 2 GO TO 18		1 2 NEXT LINE		1 2 3 8
14	1 2 8 GO TO 12		1 2 8 GO TO 14		1 2 NEXT LINE		1 2 GO TO 18		1 2 NEXT LINE		1 2 3 8
15	1 2 8 GO TO 12		1 2 8 GO TO 14		1 2 NEXT LINE		1 2 GO TO 18		1 2 NEXT LINE		1 2 3 8
16	1 2 8 GO TO 12		1 2 8 GO TO 14		1 2 NEXT LINE		1 2 GO TO 18		1 2 NEXT LINE		1 2 3 8
17	1 2 8 GO TO 12		1 2 8 GO TO 14		1 2 NEXT LINE		1 2 GO TO 18		1 2 NEXT LINE		1 2 3 8
18	1 2 8 GO TO 12		1 2 8 GO TO 14		1 2 NEXT LINE		1 2 GO TO 18		1 2 NEXT LINE		1 2 3 8
19	1 2 8 GO TO 12		1 2 8 GO TO 14		1 2 NEXT LINE		1 2 GO TO 18		1 2 NEXT LINE		1 2 3 8
20	1 2 8 GO TO 12		1 2 8 GO TO 14		1 2 NEXT LINE		1 2 GO TO 18		1 2 NEXT LINE		1 2 3 8

TICK HERE IF CONTINUATION SHEET USED ☐

Just to make sure that I have a complete household listing:

1) Are there any other persons such as small children or infants that we have not listed? YES ☐ → ENTER EACH IN TABLE NO ☐

2) 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 ☐ → ENTER EACH IN TABLE NO ☐

3) Are there any guests or temporary visitors staying here, or anyone else who slept here last night, who have not been listed? YES ☐ → ENTER EACH IN TABLE NO ☐

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
21	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 DUG WELL PROTECTED WELL ..... 31 UNPROTECTED WELL ..... 32 WATER FROM SPRING ..... 41 RAINWATER ..... 51 TANKER TRUCK ..... 61 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL) .... 81 IRRICATION WATER ..... 82 BOTTLED WATER ..... 91 OTHER _____ 96 (SPECIFY)	11, 12 → 26 13 → 24 31, 32, 41, 81, 82 → 23 51 → 26 61 → 24 96 → 23
22	What is the main source of water used by your household for other purposes such as handwashing?	PIPED WATER PIPED INTO DWELLING ..... 11 PIPED TO YARD/PLOT ..... 12 PUBLIC TAP/STANDPIPE ..... 13 DUG WELL PROTECTED WELL ..... 31 UNPROTECTED WELL ..... 32 WATER FROM SPRING ..... 41 RAINWATER ..... 51 TANKER TRUCK ..... 61 SURFACE WATER (RIVER/DAM/ LAKE/POND/STREAM/CANAL/ .... 81 IRRIGATION WATER .... 82 BOTTLED WATER ..... 91 OTHER _____ 96 (SPECIFY)	11, 12 → 26 51 → 26
23	Where is that water source located?	IN OWN YARD/PLOT ..... 1 ELSEWHERE 2	1 → 26
24	How long does it take to go there, get water, and come back?	MINUTES ..... [ ][ ][ ] ON PREMISES ..... 996 DON'T KNOW 998	996 → 26
25	Who usually goes to this source to fetch the water for your household?	ADULT WOMAN ..... 1 ADULT MAN ..... 2 FEMALE CHILD UNDER 15 YEARS OLD ..... 3 MALE CHILD UNDER 15 YEARS OLD ..... 4 OTHER _____ 6 (SPECIFY)	
26	Do you treat your water in any way to make it safer to drink?	YES ..... 1 NO ..... 2 DON'T KNOW 8	8 → 28
27	What do you usually do to the water to make it safer to drink? Anything else? RECORD ALL MENTIONED.	BOIL ..... A STRAIN THROUGH A CLOTH ..... C USE WATER FILTER ..... D LET IT STAND AND SETTLE ..... F OTHER _____ X (SPECIFY) DON'T KNOW ..... Z	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
28	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 BUCKET TOILET . . . . . 41 NO FACILITY/BUSH/FIELD . . . . . 61 OTHER _____ 96 (SPECIFY)	→ 31
29	Do you share this toilet facility with other households?	YES . . . . . 1 NO 2	→ 31
30	How many households use this toilet facility?	NO. OF HOUSEHOLDS IF LESS THAN 10 . . . . . [0][ ] 10 OR MORE HOUSEHOLDS . . . 95 DON'T KNOW 98	
31	Does your household have: Electricity? A radio? A black and white television? A color television? A washing machine? A vacuum cleaner? A computer? A mobile telephone? A non-mobile telephone? A refrigerator? A camera?	YES NO ELECTRICITY . . . . . 1 2 RADIO . . . . . 1 2 B&W TELEVISION . . . . . 1 2 COLOR TV . . . . . 1 2 WASHING MACHINE . . . . . 1 2 VACUUM CLEANER . . . . . 1 2 COMPUTER . . . . . 1 2 MOBILE TELEPHONE . . . . . 1 2 NON-MOBILE TELEPHONE . . . 1 2 REFRIGERATOR . . . . . 1 2 CAMERA 1 2	
32	What type of fuel does your household mainly use for cooking?	ELECTRICITY . . . . . 01 LPG . . . . . 02 NATURAL GAS . . . . . 03 KEROSENE . . . . . 05 COAL, LIGNITE . . . . . 06 CHARCOAL . . . . . 07 WOOD/TWIGS . . . . . 08 ANIMAL DUNG . . . . . 11 OTHER _____ 96 (SPECIFY)	→ 34
33	In this household, is food cooked on a stove or an open fire? PROBE FOR TYPE.	OPEN FIRE OR STOVE WITHOUT CHIMNEY/HOOD . . . . . 1 OPEN FIRE OR STOVE WITH CHIMNEY/HOOD . . . . . 2 CLOSED STOVE WITH CHIMNEY . . . 3 OTHER _____ 6 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
34	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)	→ 36
35	Do you have a separate room which is used as a kitchen?	YES . . . . . 1 NO 2	
36	MAIN MATERIAL OF THE FLOOR. RECORD OBSERVATION.	NATURAL FLOOR EARTH/SAND . . . . . 11 UNFINISHED FLOOR WOOD PLANKS . . . . . 21 FINISHED FLOOR PARQUET OR POLISHED WOOD . . . . . 31 VINYL OR LINOLEUM . . . . . 32 CERAMIC/MARBLE TILES . . . 33 CEMENT . . . . . 34 OTHER _____ 96 (SPECIFY)	
40	How many rooms in this household are used for sleeping?	ROOMS . . . . . [ ][ ]	
41	Does any member of this household own: A watch? A bicycle? A motorcycle or motor scooter? An animal-drawn cart? A car or truck? A boat with a motor?	YES NO WATCH . . . . . 1 2 BICYCLE . . . . . 1 2 MOTORCYCLE/SCOOTER . . . 1 2 ANIMAL-DRAWN CART . . . . . 1 2 CAR/TRUCK . . . . . 1 2 BOAT WITH MOTOR 1 2	
42	Does any member of this household <u>own</u> any land that can be used for agriculture?	YES . . . . . 1 NO 2	→ 44
43	How many hectares of agricultural land do members of this household <u>own</u>?	HECTARES . . . . . [ ][ ] 95 OR MORE HECTARES . . . 95 DON'T KNOW 98	
44	Does this household <u>own</u> any livestock, herds, or farm animals?	YES . . . . . 1 NO 2	→ 46

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
45	How many of the following animals does this household own? Cattle, i.e. cows, bulls and etc.? Horses, donkeys, or mules? Goats? Sheep? Fowl? Pigs? Rabbits? IF NONE, ENTER '00'. IF MORE THAN 95, ENTER '95'. IF UNKNOWN, ENTER '98'.	CATTLE . . . . . [ ][ ] HORSES/DONKEYS/MULES . [ ][ ] GOATS . . . . . [ ][ ] SHEEP . . . . . [ ][ ] FOWL . . . . . [ ][ ] PIGS . . . . . [ ][ ] RABBITS . . . . . [ ][ ]	
46	Does any member of this household have a bank account, irrespective of amount, opened since 1991?	YES . . . . . 1 NO 2	
46A	During the last year, did you or any members of your household go on a vacation of at least one week?	YES . . . . . 1 NO 2	
46B	If you consider your current income, are you and your household able to make ends meet with: great difficulty, some difficulty, a little difficulty, fairly easily, easily, or very easily?	GREAT DIFFICULTY . . . . . 1 SOME DIFFICULTY . . . . . 2 A LITTLE DIFFICULTY . . . . . 3 FAIRLY EASILY . . . . . 4 EASILY . . . . . 5 VERY EASILY . . . . . 6 DON'T KNOW 8	
46C	Has your household had problems paying the bill for electricity or gas during the last 12 months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
46D	During the last 12 months, have you or your household been forced to borrow money from friends or relatives to make ends meet?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
46E	If you were in a situation where you had to get 30,000 drams in one week, would you manage to do that?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 49
46F	How? RECORD ALL MENTIONED.	OWN SAVINGS . . . . . A BORROW FROM FAMILY . . . . . B BORROW FROM FRIENDS/NEIGHBORS RELATIVES . . . . . C BORROW FROM BANK . . . . . D BY WORKING . . . . . E OTHER _____ X (SPECIFY)	
49	ASK RESPONDENT FOR A TEASPOONFUL OF COOKING SALT. TEST SALT FOR IODINE. RECORD PPM (PARTS PER MILLION)	0 PPM (NO IODINE) . . . . . 1 <15 PPM . . . . . 2 >15 PPM . . . . . 3 NO SALT IN HH . . . . . 5 SALT NOT TESTED _____ 6 (SPECIFY REASON)	

WEIGHT, HEIGHT AND HEMOGLOBIN MEASUREMENT

CHECK COLUMNS (8) AND (9): RECORD THE LINE NUMBER, NAME AND AGE OF ALL MEN AND WOMEN AGE 15-49 AND ALL CHILDREN UNDER AGE 6.

MEN 15-49				WEIGHT AND HEIGHT MEASUREMENT OF MEN 15-49			
LINE NO. FROM COL. (8)	NAME FROM COL. (2)	AGE FROM COL. (7)	What is (NAME'S) date of birth?	WEIGHT (KILOGRAMS)	HEIGHT (CENTIMETERS)	MEASURED LYING DOWN OR STANDING UP	RESULT 1 MEASURED 2 NOT PRESENT 3 REFUSED 6 OTHER
(50)	(51)	(52)	(53)	(54)	(55)	(56)	(57)
		YEARS		.	.		
				.	.		
				.	.		

WOMEN 15-49				WEIGHT AND HEIGHT MEASUREMENT OF WOMEN 15-49			
LINE NO. FROM COL. (8)	NAME FROM COL. (2)	AGE FROM COL. (7)	What is (NAME'S) date of birth?	WEIGHT (KILOGRAMS)	HEIGHT (CENTIMETERS)	MEASURED LYING DOWN OR STANDING UP	RESULT 1 MEASURED 2 NOT PRESENT 3 REFUSED 6 OTHER
(50)	(51)	(52)	(53)	(54)	(55)	(56)	(57)
		YEARS		.	.		
				.	.		
				.	.		

CHILDREN UNDER AGE 6				WEIGHT AND HEIGHT MEASUREMENT OF CHILDREN BORN IN 2000 OR LATER			
LINE NO. FROM COL. (9)	NAME FROM COL. (2)	AGE FROM COL. (7)	What is (NAME'S) date of birth?*	WEIGHT (KILOGRAMS)	HEIGHT (CENTIMETERS)	MEASURED LYING DOWN OR STANDING UP	RESULT 1 MEASURED 2 NOT PRESENT 3 REFUSED 6 OTHER
			DAY MONTH YEAR			LYING STAND.	
				0 .	.	1 2	
				0 .	.	1 2	
				0 .	.	1 2	
				0 .	.	1 2	
				0 .	.	1 2	
				0 .	.	1 2	

TICK HERE IF CONTINUATION SHEET USED ☐

* COPY MONTH AND YEAR FROM 215 IN THE MOTHER'S BIRTH HISTORY AND ASK DAY. FOR CHILDREN NOT INCLUDED IN ANY BIRTH HISTORY, ASK DAY, MONTH, AND YEAR.

* CONSENT STATEMENT

As part of this survey, we are studying anemia among women and children. 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 request that you (and all children born in 2000 or later) participate in the anemia testing part of this survey and give a few drops of blood from a finger. The test uses disposable sterile instruments that are clean and completely safe. The blood will be analyzed with new equipment. As another part of this survey, we are measuring blood pressure among women and men. This will be will be an easy test. The results of boththe anemia and blood pressure tests will be given to you immediately. The results will be kept confidential.

May I now ask that you (and NAME OF CHILD[REN]) participate in the anemia test. Also I will ask you participate in the blood pressure measurement. However, if you decide not to have the tests done, it is your right and we will respect your decision. Now please tell me if you agree to have the tests done.

HEMOGLOBIN MEASUREMENT OF WOMEN 15-49					
CHECK COLUMN (52):	LINE NO. OF PARENT/ RESPONSIBLE ADULT. RECORD '00' IF NOT LISTED IN HOUSEHOLD SCHEDULE	READ CONSENT STATEMENT TO WOMAN/PARENT/RESPONSIBLE ADULT* CIRCLE CODE (AND SIGN)**	HEMOGLOBIN LEVEL (G/DL)	CURRENTLY PREGNANT	RESULT 1 MEASURED 2 NOT PRESENT 3 REFUSED 6 OTHER
(58)	(59)	(60)	(61)	(62)	(63)
AGE 15-17 AGE 18-49 1 2 GO TO 60 ↵		GRANTED REFUSED 1 2 SIGN _____ NEXT LINE ↵	.	YES NO/DK 1 2	
1 2 GO TO 60 ↵		1 2 SIGN _____ NEXT LINE ↵	.	1 2	
1 2 GO TO 60 ↵		1 2 SIGN _____ NEXT LINE ↵	.	1 2	

HEMOGLOBIN MEASUREMENT OF CHILDREN BORN IN 2000 OR LATER					
CHECK COLUMN (53): BORN IN MONTH OF INTERVIEW OR PREVIOUS 5 MONTHS OTHER	LINE NO. OF PARENT/ RESPONSIBLE ADULT. RECORD '00' IF NOT LISTED IN HOUSEHOLD SCHEDULE	READ CONSENT STATEMENT TO PARENT/RESPONSIBLE ADULT* CIRCLE CODE (AND SIGN)	HEMOGLOBIN LEVEL (G/DL)		RESULT 1 MEASURED 2 NOT PRESENT 3 REFUSED 6 OTHER
1 2 ↳ NEXT CHILD		GRANTED REFUSED 1 2 SIGN _____ NEXT LINE ↵	.		
1 2 ↳ NEXT CHILD		1 2 SIGN _____ NEXT LINE ↵	.		
1 2 ↳ NEXT CHILD		1 2 SIGN _____ NEXT LINE ↵	.		
1 2 ↳ NEXT CHILD		1 2 SIGN _____ NEXT LINE ↵	.		
1 2 ↳ NEXT CHILD		1 2 SIGN _____ NEXT LINE ↵	.		
1 2 ↳ NEXT CHILD		1 2 SIGN _____ NEXT LINE ↵	.		

** For women age 15-17, circle code '1' (granted) only if both the respondent and the parents/responsible adult agree that the minor can be treated.

Note: In countries where some enumeration areas are higher than 1,000 meters, altitude information should be collected on a separate form for each enumeration area higher than 1,000 meters so that the anemia estimates can be adjusted appropriately.

64	CHECK 61 AND 62: NUMBER OF PERSONS WITH HEMOGLOBIN LEVEL BELOW THE CUTOFF POINT* ONE OR MORE ☐ → GIVE EACH WOMAN/PARENT/RESPONSIBLE ADULT RESULT OF HEMOGLOBIN MEASUREMENT AND CONTINUE WITH 65.** NONE ☐ → GIVE EACH WOMAN/PARENT/RESPONSIBLE ADULT RESULT OF HEMOGLOBIN MEASUREMENT AND END INTERVIEW.
65	We detected a low level of hemoglobin in (your blood/the blood of NAME OF CHILD(REN)). This indicates that (you/NAME OF CHILD(REN)) have developed severe anemia, which is a serious health problem. We would like to inform the doctor at _____ about (your condition/the condition of NAME OF CHILD(REN)). This will assist you in obtaining appropriate treatment for the condition. Do you agree that the information about the level of hemoglobin in (your blood/the blood of NAME OF CHILD(REN)) may be given to the doctor?

NAME OF PERSON WITH HEMOGLOBIN BELOW THE CUTOFF POINT	NAME OF PARENT/RESPONSIBLE ADULT	AGREES TO REFERRAL?
WOMEN AGE 18-49		
		YES . . . . . 1 NO 2
		YES . . . . . 1 NO 2
		YES . . . . . 1 NO 2
		YES . . . . . 1 NO 2
WOMEN AGE 15-17 AND CHILDREN		
		YES . . . . . 1 NO 2
		YES . . . . . 1 NO 2
		YES . . . . . 1 NO 2
		YES . . . . . 1 NO 2
		YES . . . . . 1 NO 2
		YES . . . . . 1 NO 2
		YES . . . . . 1 NO 2
		YES . . . . . 1 NO 2
		YES . . . . . 1 NO 2

* The cutoff point is 9 g/dl for pregnant women and 7 g/dl for children and for women who are not pregnant (or who don't know if they are pregnant).

** If more than one woman or child is below the cutoff point, read the statement in Q.65 to each woman who is below the cutoff point and to each parent/responsible adult of a child who is below the cutoff point.

2005 ARMENIA DEMOGRAPHIC AND HEALTH SURVEY
WOMAN'S QUESTIONNAIRE

Republic of Armenia
National Statistical Service
Ministry of Health

IDENTIFICATION

PLACE NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . .

HOUSEHOLD NUMBER . . . . . .

REGION . . . . . .

LARGE CITY/SMALL CITY/TOWN/RURAL . . . . . .
(LARGE CITY=1, SMALL CITY=2, TOWN=3, RURAL=4)

NAME AND LINE NUMBER OF WOMAN _____

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		

	ARMENIAN	RUSSIAN	OTHER
LANGUAGE OF INTERVIEW	1	2	3
NATIVE LANGUAGE OF RESPONDENT	1	2	3

	YES	NO
TRANSLATOR USED?	1	2

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____		
DATE _____	DATE _____		

SECTION 1. RESPONDENT'S BACKGROUND

INTRODUCTION AND CONSENT

INFORMED CONSENT

Hello. My name is _____ and I am working with RA NSS and RA MOH. We are conducting a national survey about the health of women and children. We would very much appreciate your participation in this survey. I would like to ask you about your health (and the health of your children). This information will help the government to plan health services. The interview will take some time. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?
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 . . . . . [ ][ ]	
102	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)? IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS . . . . . [ ][ ] ALWAYS . . . . . 95 VISITOR 96	→ 104
103	Just before you moved here, did you live in a city, in a town, or in the countryside?	CITY . . . . . 1 TOWN . . . . . 2 COUNTRYSIDE 3	
104	In what month and year were you born?	MONTH . . . . . [ ][ ] DON'T KNOW MONTH . . . . . 98 YEAR . . . . . [ ][ ][ ][ ] DON'T KNOW YEAR 9998	
105	How old were you at your last birthday? COMPARE AND CORRECT 104 AND/OR 105 IF INCONSISTENT.	AGE IN COMPLETED YEARS [ ][ ]	
106	Have you ever attended school?	YES . . . . . 1 NO 2	→ 113
107	What is the highest level of school you attended: primary/secondary, secondary special, or higher?	PRIMARY/SECONDARY (1-10) . . . . 1 SECONDARY SPECIAL . . . . . 2 HIGHER 3	
108	What is the highest (grade/form/year) you completed at that level?	GRADE . . . . . [ ][ ]	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
113	Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
114	Do you listen to the radio almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
115	Do you watch television almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
116	Now I would like to talk about the term "Quality of life," the definition of which is an individual's perception of their position in life in the context of their goals, expectations and physical health. How would you rate your quality of life?	VERY POOR . . . . . 1 POOR . . . . . 2 NEITHER POOR NOR GOOD . . . . . 3 GOOD . . . . . 4 VERY GOOD 5	
117	How satisfied are you with your health?	VERY DISSATISFIED . . . . . 1 DISSATISFIED . . . . . 2 NEITHER SATISFIED NOR DISSATISFIED . . . . . 3 SATISFIED . . . . . 4 VERY SATISFIED 5	
118	Do you have enough energy for everyday life?	NOT AT ALL . . . . . 1 A LITTLE . . . . . 2 MODERATELY . . . . . 3 MOSTLY . . . . . 4 COMPLETELY 5	
119	How satisfied are you with your ability to perform your daily living activities?	VERY DISSATISFIED . . . . . 1 DISSATISFIED . . . . . 2 NEITHER SATISFIED NOR DISSATISFIED . . . . . 3 SATISFIED . . . . . 4 VERY SATISFIED 5	
120	Have you enough money to meet your needs?	NOT AT ALL . . . . . 1 A LITTLE . . . . . 2 MODERATELY . . . . . 3 MOSTLY . . . . . 4 COMPLETELY 5	
121	How satisfied are you with the conditions of your living space?	VERY DISSATISFIED . . . . . 1 DISSATISFIED . . . . . 2 NEITHER SATISFIED NOR DISSATISFIED . . . . . 3 SATISFIED . . . . . 4 VERY SATISFIED 5	

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 do not live with you? How many daughters 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 . . . . . [ ][ ]	
209	CHECK 208: Just to make sure that I have this right: you have had in TOTAL _____ live 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 induced abortion, a spontaneous miscarriage, or a stillbirth. In total, how many abortions have you had?	TOTAL ABORTIONS . . . . . [ ][ ]	
209B	How many miscarriages?	TOTAL MISCARRIAGES . . . . . [ ][ ]	
209C	How many stillbirths?	TOTAL STILLBIRTHS . . . . . [ ][ ]	
209D	SUM ANSWERS TO 208, 209A, 209B, AND 209C, AND ENTER TOTAL. IF NO PREGNANCIES, RECORD '00'.	TOTAL . . . . . [ ][ ]	
210	CHECK 209D: ONE OR MORE PREGNANCIES [ ] ↓ NO PREGNANCIES [ ]		→ 226

211 Now I want to talk to you about each of your pregnancies, including those which ended in a live birth, an abortion, a miscarriage, or a stillbirth.
Starting with your last pregnancy, please tell me the following information.
RECORD ALL PREGNANCIES. RECORD TWINS AND TRIPLETS ON SEPARATE LINES.
(IF THERE ARE MORE THAN 14 PREGNANCIES, USE AN ADDITIONAL QUESTIONNAIRE).

212 Did your (last/ next-to-last/etc) pregnancy end in a live birth, an abortion, a miscarriage, or a stillbirth?	213 In what month and year was (this child born/ did this pregnancy end)?	214 Were there any other pregnancies between this and the pregnancy we were just talking about?	214A CHECK 212: RECORD SAME RESPONSE.	215 Was this a single or a multiple birth?	216 What name was given to this child?	217 Is (NAME) a boy or a girl?	218 Is (NAME) still alive?	219 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COMPLETED YEARS.	220 IF ALIVE: Is (NAME) living with you?	221 IF ALIVE: RECORD HOUSE-HOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSE-HOLD).	222 IF DEAD: 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.
01 LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4	MONTH [ ][ ] YR [ ][ ][ ][ ]		LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4 NEXT PREGNANCY	SINGLE . . . . 1 MULTIPLE . . . 2	(NAME) _____	BOY . . . 1 GIRL . . 2	YES . . . 1 NO . . . . 2 → 222	AGE IN YEARS [ ][ ]	YES . . . . 1 NO 2	LINE NUMBER [ ][ ] (NEXT LINE)	DAYS . . . 1 MONTH . . 2 YEARS . . 3 [ ][ ]
02 LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4	MONTH [ ][ ] YR [ ][ ][ ][ ]	YES . . . . 1 NO 2	LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4 NEXT PREGNANCY	SINGLE . . . . 1 MULTIPLE . . . 2	(NAME) _____	BOY . . . 1 GIRL . . 2	YES . . . 1 NO . . . . 2 → 222	AGE IN YEARS [ ][ ]	YES . . . . 1 NO 2	LINE NUMBER [ ][ ] (NEXT LINE)	DAYS . . . 1 MONTH . . 2 YEARS . . 3 [ ][ ]
03 LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4	MONTH [ ][ ] YR [ ][ ][ ][ ]	YES . . . . 1 NO 2	LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4 NEXT PREGNANCY	SINGLE . . . . 1 MULTIPLE . . . 2	(NAME) _____	BOY . . . 1 GIRL . . 2	YES . . . 1 NO . . . . 2 → 222	AGE IN YEARS [ ][ ]	YES . . . . 1 NO 2	LINE NUMBER [ ][ ] (NEXT LINE)	DAYS . . . 1 MONTH . . 2 YEARS . . 3 [ ][ ]
04 LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4	MONTH [ ][ ] YR [ ][ ][ ][ ]	YES . . . . 1 NO 2	LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4 NEXT PREGNANCY	SINGLE . . . . 1 MULTIPLE . . . 2	(NAME) _____	BOY . . . 1 GIRL . . 2	YES . . . 1 NO . . . . 2 → 222	AGE IN YEARS [ ][ ]	YES . . . . 1 NO 2	LINE NUMBER [ ][ ] (NEXT LINE)	DAYS . . . 1 MONTH . . 2 YEARS . . 3 [ ][ ]
05 LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4	MONTH [ ][ ] YR [ ][ ][ ][ ]	YES . . . . 1 NO 2	LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4 NEXT PREGNANCY	SINGLE . . . . 1 MULTIPLE . . . 2	(NAME) _____	BOY . . . 1 GIRL . . 2	YES . . . 1 NO . . . . 2 → 222	AGE IN YEARS [ ][ ]	YES . . . . 1 NO 2	LINE NUMBER [ ][ ] (NEXT LINE)	DAYS . . . 1 MONTH . . 2 YEARS . . 3 [ ][ ]

212 Did your (last/ next-to-last/etc) pregnancy end in a live birth, an abortion, a miscarriage, or a stillbirth?	213 In what month and year was (this child born/ did this pregnancy end)?	214 Were there any other pregnancies between this and the pregnancy we were just talking about?	214A CHECK 212: RECORD SAME RESPONSE.	215 Was this a single or a multiple birth?	216 What name was given to this child?	217 Is (NAME) a boy or a girl?	218 Is (NAME) still alive?	219 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COMPLETED YEARS.	220 IF ALIVE: Is (NAME) living with you?	221 IF ALIVE: RECORD HOUSE-HOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSE-HOLD).	222 IF DEAD: 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.
06 LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4	MONTH [ ][ ] YR [ ][ ][ ][ ]	YES . . . . 1 NO 2	LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4 NEXT PREGNANCY	SINGLE . . . . 1 MULTIPLE . . . 2	(NAME) _____	BOY . . . 1 GIRL . . 2	YES . . . 1 NO . . . . 2 → 222	AGE IN YEARS [ ][ ]	YES . . . . 1 NO 2	LINE NUMBER [ ][ ] (NEXT LINE)	DAYS . . . 1 MONTH . . 2 YEARS . . 3 [ ][ ]
07 LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4	MONTH [ ][ ] YR [ ][ ][ ][ ]	YES . . . . 1 NO 2	LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4 NEXT PREGNANCY	SINGLE . . . . 1 MULTIPLE . . . 2	(NAME) _____	BOY . . . 1 GIRL . . 2	YES . . . 1 NO . . . . 2 → 222	AGE IN YEARS [ ][ ]	YES . . . . 1 NO 2	LINE NUMBER [ ][ ] (NEXT LINE)	DAYS . . . 1 MONTH . . 2 YEARS . . 3 [ ][ ]
08 LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4	MONTH [ ][ ] YR [ ][ ][ ][ ]	YES . . . . 1 NO 2	LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4 NEXT PREGNANCY	SINGLE . . . . 1 MULTIPLE . . . 2	(NAME) _____	BOY . . . 1 GIRL . . 2	YES . . . 1 NO . . . . 2 → 222	AGE IN YEARS [ ][ ]	YES . . . . 1 NO 2	LINE NUMBER [ ][ ] (NEXT LINE)	DAYS . . . 1 MONTH . . 2 YEARS . . 3 [ ][ ]
09 LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4	MONTH [ ][ ] YR [ ][ ][ ][ ]	YES . . . . 1 NO 2	LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4 NEXT PREGNANCY	SINGLE . . . . 1 MULTIPLE . . . 2	(NAME) _____	BOY . . . 1 GIRL . . 2	YES . . . 1 NO . . . . 2 → 222	AGE IN YEARS [ ][ ]	YES . . . . 1 NO 2	LINE NUMBER [ ][ ] (NEXT LINE)	DAYS . . . 1 MONTH . . 2 YEARS . . 3 [ ][ ]
10 LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4	MONTH [ ][ ] YR [ ][ ][ ][ ]	YES . . . . 1 NO 2	LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4 NEXT PREGNANCY	SINGLE . . . . 1 MULTIPLE . . . 2	(NAME) _____	BOY . . . 1 GIRL . . 2	YES . . . 1 NO . . . . 2 → 222	AGE IN YEARS [ ][ ]	YES . . . . 1 NO 2	LINE NUMBER [ ][ ] (NEXT LINE)	DAYS . . . 1 MONTH . . 2 YEARS . . 3 [ ][ ]
11 LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4	MONTH [ ][ ] YR [ ][ ][ ][ ]	YES . . . . 1 NO 2	LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4 NEXT PREGNANCY	SINGLE . . . . 1 MULTIPLE . . . 2	(NAME) _____	BOY . . . 1 GIRL . . 2	YES . . . 1 NO . . . . 2 → 222	AGE IN YEARS [ ][ ]	YES . . . . 1 NO 2	LINE NUMBER [ ][ ] (NEXT LINE)	DAYS . . . 1 MONTH . . 2 YEARS . . 3 [ ][ ]

212 Did your (last/ next-to-last/etc) pregnancy end in a live birth, an abortion, a miscarriage, or a stillbirth?	213 In what month and year was (this child born/ did this pregnancy end)?	214 Were there any other pregnancies between this and the pregnancy we were just talking about?	214A CHECK 212: RECORD SAME RESPONSE.	215 Was this a single or a multiple birth?	216 What name was given to this child?	217 Is (NAME) a boy or a girl?	218 Is (NAME) still alive?	219 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COMPLETED YEARS.	220 IF ALIVE: Is (NAME) living with you?	221 IF ALIVE: RECORD HOUSE-HOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSE-HOLD).	222 IF DEAD: 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.
12 LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4	MONTH [ ][ ] YR [ ][ ][ ][ ]	YES . . . . 1 NO 2	LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4 NEXT PREGNANCY	SINGLE . . . . 1 MULTIPLE . . . 2	(NAME) _____	BOY . . . 1 GIRL . . 2	YES . . . 1 NO . . . . 2 → 222	AGE IN YEARS [ ][ ]	YES . . . . 1 NO 2	LINE NUMBER [ ][ ] (NEXT LINE)	DAYS . . . 1 [ ][ ] MONTH . . 2 [ ][ ] YEARS . . 3 [ ][ ]
13 LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4	MONTH [ ][ ] YR [ ][ ][ ][ ]	YES . . . . 1 NO 2	LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4 NEXT PREGNANCY	SINGLE . . . . 1 MULTIPLE . . . 2	(NAME) _____	BOY . . . 1 GIRL . . 2	YES . . . 1 NO . . . . 2 → 222	AGE IN YEARS [ ][ ]	YES . . . . 1 NO 2	LINE NUMBER [ ][ ] (NEXT LINE)	DAYS . . . 1 [ ][ ] MONTH . . 2 [ ][ ] YEARS . . 3 [ ][ ]
14 LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4	MONTH [ ][ ] YR [ ][ ][ ][ ]	YES . . . . 1 NO 2	LIVE BIRTH . . . 1 ABORTION . . . 2 MISCARRIAGE . . 3 STILLBIRTH . . . 4 NEXT PREGNANCY	SINGLE . . . . 1 MULTIPLE . . . 2	(NAME) _____	BOY . . . 1 GIRL . . 2	YES . . . 1 NO . . . . 2 → 222	AGE IN YEARS [ ][ ]	YES . . . . 1 NO 2	LINE NUMBER [ ][ ] (NEXT LINE)	DAYS . . . 1 [ ][ ] MONTH . . 2 [ ][ ] YEARS . . 3 [ ][ ]

223	COMPARE 209D WITH NUMBER OF PREGNANCIES IN HISTORY ABOVE AND MARK NUMBERS ARE SAME [ ] → ↓ NUMBERS ARE DIFFERENT [ ] → (PROBE AND RECONCILE) CHECK: FOR EACH PREGNANCY: YEAR OF BIRTH OR YEAR OF PREGNANCY IS RECORDED (Q.213). [ ] FOR EACH LIVING CHILD: CURRENT AGE IS RECORDED (Q.219). [ ] FOR EACH DEAD CHILD: AGE AT DEATH IS RECORDED (Q.222). [ ] FOR AGE AT DEATH 12 MONTHS OR 1 YEAR: PROBE TO DETERMINE EXACT NUMBER OF MONTHS (Q.222). [ ]
224	CHECK 213 AND ENTER THE NUMBER OF BIRTHS IN 2000 OR LATER (IN 212 CIRCLED CODE "1") IF NONE, RECORD '0'. [ ]

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
225	FOR EACH PREGNANCY THAT ENDED IN JANUARY 2000 **OR LATER**, ENTER THE CODE OF THE PREGNANCY OUTCOME IN THE MONTH THE PREGNANCY ENDED: • **'B'** FOR LIVE BIRTH, • **'D'** FOR INDUCED ABORTION, • **'V'** FOR MISCARRIAGE, • **'S'** FOR STILLBIRTH, THEN ASK THE NUMBER OF MONTHS EACH PREGNANCY LASTED. RECORD "P" IN EACH OF THE PRECEDING MONTHS OF THE CALENDAR 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.) FINALLY, FOR EACH BIRTH, WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'B' CODE.		
226	Are you pregnant now?	YES . . . . . 1 NO . . . . . 2 UNSURE 8	→ 229
227	How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS. ENTER 'P's IN COLUMN 1 OF CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS.	MONTHS . . . . . [ ][ ]	
228	At the time you became pregnant did you want to become pregnant <u>then</u>, did you want to wait until <u>later</u>, or did you not want to have any (more) children at all?	THEN . . . . . 1 LATER . . . . . 2 NOT AT ALL 3	
229	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 . . . . . 995 NEVER MENSTRUATED 996	
230	From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant if she has sexual relations?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 301
231	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	

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. CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN COLUMN 301, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 1 IF METHOD IS RECOGNIZED, AND CODE 2 IF NOT RECOGNIZED. THEN, FOR EACH METHOD WITH CODE 1 CIRCLED IN 301, ASK 302. Which ways or methods have you heard about? FOR METHODS NOT MENTIONED SPONTANEOUSLY, ASK: Have you ever heard of (METHOD)?		302 Have you ever used (METHOD)?
01	FEMALE STERILIZATION Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	Have you ever had an operation to avoid having any more children? YES . . . . . 1 NO 2
02	MALE STERILIZATION Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	Have you ever had a partner who had an operation to avoid having any more children? YES . . . . . 1 NO 2
03	PILL Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
04	IUD Women can have a spiral placed inside the cavity of the uterus by a doctor.	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
05	INJECTABLES Women can have a contraceptive injection by a health provider that stops them from becoming pregnant for 1 or more months.	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
06	IMPLANTS Women can have several small rods placed in their upper arm by a doctor which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
07	CONDOM Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
08	FEMALE CONDOM Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
09	DIAPHRAGM Women can place a thin flexible disk in their vagina before sexual intercourse.	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
10	SUPPOSITORY, FOAM, CREAM, OR JELLY Women can place a suppository, foam, jelly, cream, or jelly in their vagina before intercourse.	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
11	LACTATIONAL AMENORRHEA METHOD (LAM)	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
12	RHYTHM METHOD Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant.	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
13	WITHDRAWAL Men can be careful and pull out before climax.	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
14	EMERGENCY CONTRACEPTION Women can take pills up to five days after sexual intercourse to avoid becoming pregnant.	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
15	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES . . . . . 1 _____ (SPECIFY) _____ (SPECIFY) NO 2	YES . . . . . 1 NO . . . . . 2 YES . . . . . 1 NO 2
303	CHECK 302: NOT A SINGLE "YES" (NEVER USED) ☐ ↓ AT LEAST ONE "YES" (EVER USED) ☐ → 307		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
304	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→ 306
305	ENTER '0' IN COLUMN 1 OF CALENDAR IN EACH BLANK MONTH.		→ 331
306	What have you used or done? CORRECT 302 AND 303 (AND 301 IF NECESSARY).		
307	Now I would like to ask you about the first time that you did something or used a method to avoid getting pregnant. How many living children did you have at that time, if any? IF NONE, RECORD '00'.	NUMBER OF CHILDREN . . . . . [ ][ ]	
308	CHECK 302 (01): WOMAN NOT STERILIZED [ ] ↓ WOMAN STERILIZED [ ]		→ 311A
309	CHECK 226: NOT PREGNANT OR UNSURE [ ] ↓ PREGNANT [ ]		→ 322
310	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→ 322
311 311A	Which method are you using? CIRCLE ALL MENTIONED. IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD ON LIST. CIRCLE 'A' FOR FEMALE STERILIZATION.	FEMALE STERILIZATION . . . . . A MALE STERILIZATION . . . . . B PILL . . . . . C IUD . . . . . D INJECTABLES . . . . . E IMPLANTS . . . . . F CONDOM . . . . . G FEMALE CONDOM . . . . . H DIAPHRAGM . . . . . I SUPPOSITORY/FOAM/JELLY . . . . . J LACTATIONAL AMEN. METHOD . . . . . K RHYTHM METHOD . . . . . L WITHDRAWAL . . . . . M OTHER _____ X (SPECIFY)	A, B → 316 D, E, F → 315 H, I, J → 315 K, L, M, X → 319A

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
314	How many (pill cycles/condoms) did you get the last time?	NUMBER OF CYCLES/PACKAGES [ ][ ][ ] DON'T KNOW 998	
315	The last time you obtained (CURRENT METHOD IN 311), how much did you officially pay in total, including the cost of the method and any consultation you may have had?	COST [ ][ ][ ][ ][ ][ ] FREE . . . . . 000000 DON'T KNOW 999998	
315A	How much did you pay in additional expenses the last time you obtained (CURRENT METHOD IN 311)?	COST [ ][ ][ ][ ][ ][ ] NOTHING . . . . . 000000 DON'T KNOW 999998	→ 319A
316	In what facility did the sterilization take place? IF SOURCE IS ANY TYPE OF HEALTH FACILITY, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	PUBLIC SECTOR HOSPITAL . . . . . 11 CHILDREN'S HOSPITAL . . . . . 12 MATERNITY HOSPITAL . . . . . 13 POLICLINIC . . . . . 14 ABULATORY . . . . . 15 WOMEN'S HEALTH CONSULT CTR. 16 MEDICAL DIAGNOSTIC CENTER . . . 17 OTHER PUBLIC . . . . . 26 _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . 31 CHILDREN'S HOSPITAL . . . . . 32 MATERNITY HOSPITAL . . . . . 33 POLICLINIC . . . . . 34 ABULATORY . . . . . 35 WOMEN'S HEALTH CONSULT CTR. 36 MEDICAL DIAGNOSTIC CENTER . . . 37 OTHER PRIVATE . . . . . 46 _____ (SPECIFY) OTHER . . . . . 96 _____ (SPECIFY) DON'T KNOW 98	
317	CHECK 311/311A: CODE 'A' CIRCLED → Before your sterilization operation, were you told that you would not be able to have any (more) children because of the operation? CODE 'A' NOT CIRCLED → Before the sterilization operation, was your husband/partner told that he would not be able to have any (more) children because of the operation?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
318	How much did you pay in total for the sterilization, including any consultation you may have had?	COST [ ][ ][ ][ ][ ][ ][ ] FREE . . . . . 0000000 DON'T KNOW 9999998	
319	In what month and year was the sterilization performed?		
319A	In what month and year did you start using (CURRENT METHOD) continuously? PROBE: For how long have you been using (CURRENT METHOD) now without stopping?	MONTH . . . . . [ ][ ] YEAR . . . . . [ ][ ][ ][ ]	
320	CHECK 319/319A, 213 AND 226: ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 319/319A GO BACK TO 319/319A, PROBE AND RECORD MONTH AND YEAR AT START OF CONTINUOUS USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH OR PREGNANCY TERMINATION).	YES → ↓ NO → ↓	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
321	CHECK 319/319A: YEAR IS 2000 OR LATER ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN COLUMN 1 OF THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING. ENTER METHOD SOURCE CODE IN COLUMN 2 OF CALENDAR IN MONTH STARTED USING. THEN CONTINUE WITH 322.	YEAR IS 1999 OR EARLIER ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN COLUMN 1 OF THE CALENDAR AND EACH MONTH BACK TO JANUARY 2000. THEN SKIP TO → 329	
322	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 2000. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS. **IN COLUMN 1**, ENTER METHOD USE CODE OR '0' FOR NONUSE IN EACH BLANK MONTH. ILLUSTRATIVE QUESTIONS: COLUMN 1: * 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 METHOD SOURCE CODE IN FIRST MONTH OF EACH USE. ILLUSTRATIVE QUESTIONS: COLUMN 2: * Where did you obtain the method when you started using it? * Where did you get advice on how to use the method [for LAM or rhythm]? **IN COLUMN 3**, ENTER CODES FOR DISCONTINUATION NEXT TO LAST MONTH OF USE. NUMBER OF CODES IN COLUMN 3 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: COLUMN 3: * Why did you stop using the (METHOD)? * Did you become pregnant while using (METHOD), did you stop using 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.		
323	CHECK 311/311A: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 311/311A, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	NO CODE CIRCLED . . . . . 00 FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 PILL . . . . . 03 IUD . . . . . 04 INJECTABLES . . . . . 05 IMPLANTS . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 SUPPOSITORY/FOAM/JELLY . . . 10 LACTATIONAL AMEN. METHOD . . . 11 RHYTHM METHOD . . . . . 12 WITHDRAWAL . . . . . 13 OTHER METHOD 96	→ 331 → 333 → 330 → 327 → 328

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
324	You obtained (CURRENT METHOD) from (SOURCE OF METHOD FROM CALENDAR) in (DATE). At that time, were you told about side effects or problems you might have with the method?	YES . . . . . 1 NO 2	→ 326
325	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	→ 327
326	Were you told what to do if you experienced side effects or problems?	YES . . . . . 1 NO 2	
327	CHECK 324: 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 (SOURCE OF METHOD FROM CALENDAR) in (DATE), were you told about other methods of family planning that you could use?	YES . . . . . 1 NO 2	→ 329
328	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	
329	CHECK 311/311A: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 311/311A, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 PILL . . . . . 03 IUD . . . . . 04 INJECTABLES . . . . . 05 IMPLANTS . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 SUPPOSITORY/FOAM/JELLY . . . . . 10 LACTATIONAL AMEN. METHOD . . . 11 RHYTHM METHOD . . . . . 12 WITHDRAWAL . . . . . 13 OTHER METHOD 96	→ 333 → 330D

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
330	Where did you obtain (CURRENT METHOD) the last time? IF SOURCE IS ANY TYPE OF HEALTH FACILITY, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	PUBLIC SECTOR HOSPITAL . . . . . 11 CHILDREN'S HOSPITAL . . . . . 12 MATERNITY HOSPITAL . . . . . 13 POLICLINIC . . . . . 14 ABULATORY . . . . . 15 WOMEN'S HEALTH CONSULT CTR. 16 MEDICAL DIAGNOSTIC CENTER . . . 17 FAP . . . . . 18 OTHER PUBLIC . . . . . 26 _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . 31 CHILDREN'S HOSPITAL . . . . . 32 MATERNITY HOSPITAL . . . . . 33 POLICLINIC . . . . . 34 ABULATORY . . . . . 35 WOMEN'S HEALTH CONSULT CTR. 36 MEDICAL DIAGNOSTIC CENTER . . . 37 FAP . . . . . 38 OTHER PRIVATE . . . . . 46 _____ (SPECIFY) OTHER PHARMACY/SHOP . . . . . 51 NGO . . . . . 52 FRIEND/RELATIVE/NEIGHBOUR/HUS 53 OTHER . . . . . 96 _____ (SPECIFY) DON'T KNOW 98	→ 333
330A	When you obtained the (CURRENT METHOD) the last time, how did you get there?	BY FOOT . . . . . 01 TAXI . . . . . 02 MINI-BUS . . . . . 03 BUS/TROLLY/METRO . . . . . 04 HOUSEHOLD CAR . . . . . 05 OTHER CAR . . . . . 06 AMBULANCE . . . . . 07 OTHER _____ 96 (SPECIFY)	→ 330C → 330C → 330C → 330C
330B	Altogether, how much was paid for transportation, round-trip, to go to the (PLACE FROM Q330) the last time you obtained the (METHOD)?	COST [ ][ ][ ][ ][ ][ ] DON'T KNOW . . . . . .000000 DON'T KNOW 999998	
330C	How long did it take you to go to the (PLACE FROM Q330) when you last obtained the (METHOD)?	MINUTES . . . . . [ ][ ][ ] DON'T KNOW 998	→ 333
330D	Please tell me whether each of the following reasons was a factor at all in your decision to use (TRADTIONAL METHOD FROM Q329) instead of a modern method? a. Difficult to find/not available b. Cost of these modern methods c. Little knowledge of modern methods d. Fear of or experience with side effects e. Husband/partner choice f. Religious beliefs g. Doctor's recommendation h. Another person's advice	Yes No DIFFICULT TO GET . . . . . 1 2 COST . . . . . 1 2 LITTLE KNOWLEDGE . . . . . 1 2 SIDE EFFECTS . . . . . 1 2 HUSBAND/PARTNER . . . . . 1 2 RELIGIOUS BELIEFS . . . . . 1 2 DOCTOR . . . . . 1 2 OTHER ADVICE 1 2	
331	Do you know of a place where you can obtain a modern method of family planning?	YES . . . . . 1 NO 2	 → 333
332	Where is that? IF SOURCE IS ANY TYPE OF HEALTH FACILITY, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____	PUBLIC SECTOR HOSPITAL . . . . . B CHILDREN'S HOSPITAL . . . . . C MATERNITY HOSPITAL . . . . . D POLICLINIC . . . . . E ABULATORY . . . . . F WOMEN'S HEALTH CONSULT CTR. G MEDICAL DIAGNOSTIC CENTER . . . H FAP I	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	(NAME OF PLACE) Any other place? RECORD ALL PLACES MENTIONED.	OTHER PUBLIC . . . . . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K CHILDREN'S HOSPITAL . . . . . L MATERNITY HOSPITAL . . . . . M POLICLINIC . . . . . N ABULATORY . . . . . O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER . . . Q FAP . . . . . R OTHER PRIVATE . . . . . S _____ (SPECIFY) OTHER PHARMACY/SHOP . . . . . T NGO . . . . . U FRIEND/RELATIVE/NEIGHBOUR/HUS V OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z	
333	In the last 12 months, did you talk with any health worker about family planning?	YES . . . . . 1 NO 2	
334	In the last 12 months, have you visited a health facility for care for yourself (or your children)?	YES . . . . . 1 NO 2	→ 401
335	Did any staff member at the health facility speak to you about family planning methods?	YES . . . . . 1 NO 2	

SECTION 4. PREGNANCY, POSTNATAL CARE AND CHILDREN'S NUTRITION

401	CHECK 224: ONE OR MORE BIRTHS IN 2000 OR LATER ☐ ↓ / NO BIRTHS IN 2000 OR LATER ☐ →	550

402 ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2000 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).

Now I would like to ask you some questions about the health of all your children born in the last five years. (We will talk about each separately.)

		LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
403	LINE NUMBER FROM 212	LINE NUMBER . . . ☐☐	LINE NUMBER . . . ☐☐	LINE NUMBER . . . ☐☐
404	FROM 216 AND 218	NAME _____ LIVING ☐ DEAD ☐	NAME _____ LIVING ☐ DEAD ☐	NAME _____ LIVING ☐ DEAD ☐
405	At the time you became pregnant with (NAME), did you want to become pregnant then, did you want to wait until later, or did you not want to have any (more) children at all?	THEN . . . . . 1 (SKIP TO 407) LATER . . . . . 2 NOT AT ALL . . . . . 3 (SKIP TO 407)	THEN . . . . . 1 (SKIP TO 429) LATER . . . . . 2 NOT AT ALL . . . . . 3 (SKIP TO 429)	THEN . . . . . 1 (SKIP TO 429) LATER . . . . . 2 NOT AT ALL . . . . . 3 (SKIP TO 429)
406	How much longer would you have liked 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
407	Did you see anyone for antenatal care for this pregnancy? IF YES: Whom did you see? Anyone else? PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS SEEN.	HEALTH PROFESSIONAL DOCTOR . . . . . A NURSE/MIDWIFE . . B FELDSHER . . . . . C FAMILY NURSE . . . D OTHER PERSON RELATIVE/FRIEND E OTHER . . . . . X _____ (SPECIFY) NO ONE . . . . . Y (SKIP TO 421)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
408	Where did you receive antenatal care for this pregnancy? CIRCLE ALL MENTIONED. IF SOURCE IS ANY TYPE OF HEALTH FACILITY, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	HOME . . . . . A PUBLIC SECTOR HOSPITAL . . . . . B CHILDREN'S HOSP C MATERNITY HOSP D POLICLINIC . . . . . E ABULATORY . . . F WOMEN'S HEALTH CONSULT CTR. . G MEDICAL DIAGNOSTIC CENTER . . . . . H FAP . . . . . I OTHER PUBLIC . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K CHILDREN'S HOSPITAL . . . L MATERNITY HOSPITAL . . . M POLICLINIC . . . . . N ABULATORY . . . O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER . . . . . Q FAP . . . . . R OTHER PRIVATE . S _____ (SPECIFY) OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z		
408A	Did you or a family member pay anything for this pregnancy's antenatal care?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
409	How many months pregnant were you when you first received antenatal care for this pregnancy?	WEEKS 1 [ ][ ] MONTHS 2 [ ][ ] DON'T KNOW 998		
410	How many times did you receive antenatal care during this pregnancy?	NUMBER OF TIMES . [ ][ ] DON'T KNOW 98		
411	As part of your antenatal care during this pregnancy, were any of the following done at least once?	YES NO		
	Were you weighed?	WEIGHT . . . 1 2		
	Was your blood pressure measured?	BP 1 2		
	Did you give a urine sample?	URINE 1 2		
	Did you give a blood sample?	BLOOD 1 2		
412	During (any of) your antenatal care visit(s), were you told about the signs of pregnancy complications?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 421) ←┤ DON'T KNOW 8		
413	Were you told where to go if you had any of these complications?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
421	During this pregnancy, were you given or did you buy any iron tablets?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 423) ←┤ DON'T KNOW 8		
421A	Where did you obtain the iron	PUBLIC SECTOR		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
	tablets? RECORD ALL MENTIONED.	HOSPITAL . . . . . B CHILDREN'S HOSP C MATERNITY HOSP D POLICLINIC . . . . . E ABULATORY . . . F WOMEN'S HEALTH CONSULT CTR. . G MEDICAL DIAGNOSTIC CENTER . . . . . H FAP . . . . . I OTHER PUBLIC . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K CHILDREN'S HOSPITAL . . . L MATERNITY HOSPITAL . . . M POLICLINIC . . . . . N ABULATORY . . . O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER . . . . . Q FAP . . . . . R OTHER PRIVATE . S _____ (SPECIFY) OTHER PHARM/SHOP . . . T FRIEND/RELAT. . . V OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z		
421B	At any time during this pregnancy, did you pay for iron tablets?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
422	During the whole pregnancy, for how many days did you take the tablets? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.	NUMBER OF DAYS [ ][ ][ ] DON'T KNOW . . . 998		
423	During this pregnancy, did you have difficulty with your vision during daylight?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
424	During this pregnancy, did you suffer from night blindness [USE LOCAL TERM]?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
429	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
430	Was (NAME) weighed at birth?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 431A) ← DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 431A) ← DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 431A) ← DON'T KNOW 8
431	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 . . 99.998	KG FROM CARD 1 [ ] . [ ][ ][ ] KG FROM RECALL 2 [ ] . [ ][ ][ ] DON'T KNOW . . 99.998	KG FROM CARD 1 [ ] . [ ][ ][ ] KG FROM RECALL 2 [ ] . [ ][ ][ ] DON'T KNOW . . 99.998
431A	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority?	CERTIFICATE . . . . . 1 REGISTRATION . . . 2 NEITHER . . . . . 3 (SKIP TO 431C) ← DON'T KNOW 8	CERTIFICATE . . . . . 1 REGISTRATION . . . 2 NEITHER . . . . . 3 (SKIP TO 431C) ← DON'T KNOW 8	CERTIFICATE . . . . . 1 REGISTRATION . . . 2 NEITHER . . . . . 3 (SKIP TO 431C) ← DON'T KNOW 8
431B	In order to receive the birth certificate/registration for (NAME) was anything paid?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
431C	Did you receive your birth benefit for (NAME)?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
432	Who assisted with the delivery of (NAME)? Anyone else? PROBE FOR THE TYPE OF PERSON AND RECORD ALL PERSONS ASSISTING. IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY.	HEALTH PROFESSIONAL DOCTOR . . . . . A NURSE/MIDWIFE . . B FELDSHER . . . . . C FAMILY NURSE . . . D OTHER PERSON RELATIVE/FRIEND E OTHER . . . . . X _____ (SPECIFY) NO ONE . . . . . Y	HEALTH PROFESSIONAL DOCTOR . . . . . A NURSE/MIDWIFE . . B FELDSHER . . . . . C FAMILY NURSE . . . D OTHER PERSON RELATIVE/FRIEND E OTHER . . . . . X _____ (SPECIFY) NO ONE . . . . . Y	HEALTH PROFESSIONAL DOCTOR . . . . . A NURSE/MIDWIFE . . B FELDSHER . . . . . C FAMILY NURSE . . . D OTHER PERSON RELATIVE/FRIEND E OTHER . . . . . X _____ (SPECIFY) NO ONE . . . . . Y

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
433	Where did you give birth to (NAME)? IF SOURCE IS ANY TYPE OF HEALTH FACILITY, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	HOME . . . . . 01 (SKIP TO 440) PUBLIC SECTOR HOSPITAL . . . . . 11 CHILDREN'S HOSP 12 MATERNITY HOSP 13 POLICLINIC . . . . . 14 ABULATORY . . . 15 WOMEN'S HEALTH CONSULT CTR. . 16 MEDICAL DIAGNOSTIC CENTER . . . . . 17 FAP . . . . . 18 OTHER PUBLIC . 26 _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . 31 CHILDREN'S HOSPITAL . . . 32 MATERNITY HOSPITAL . . . 33 POLICLINIC . . . . . 34 ABULATORY . . . 35 WOMEN'S HEALTH CONSULT CTR. 36 MEDICAL DIAGNOSTIC CENTER . . . . . 37 FAP . . . . . 38 OTHER PRIVATE . 46 _____ (SPECIFY) OTHER . . . . . 96 _____ (SPECIFY) (SKIP TO 440) DON'T KNOW 98	HOME . . . . . 01 (SKIP TO 441) PUBLIC SECTOR HOSPITAL . . . . . 11 CHILDREN'S HOSP 12 MATERNITY HOSP 13 POLICLINIC . . . . . 14 ABULATORY . . . 15 WOMEN'S HEALTH CONSULT CTR. . 16 MEDICAL DIAGNOSTIC CENTER . . . . . 17 FAP . . . . . 18 OTHER PUBLIC . 26 _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . 31 CHILDREN'S HOSPITAL . . . 32 MATERNITY HOSPITAL . . . 33 POLICLINIC . . . . . 34 ABULATORY . . . 35 WOMEN'S HEALTH CONSULT CTR. 36 MEDICAL DIAGNOSTIC CENTER . . . . . 37 FAP . . . . . 38 OTHER PRIVATE . 46 _____ (SPECIFY) OTHER . . . . . 96 _____ (SPECIFY) (SKIP TO 441) DON'T KNOW 98	HOME . . . . . 01 (SKIP TO 441) PUBLIC SECTOR HOSPITAL . . . . . 11 CHILDREN'S HOSP 12 MATERNITY HOSP 13 POLICLINIC . . . . . 14 ABULATORY . . . 15 WOMEN'S HEALTH CONSULT CTR. . 16 MEDICAL DIAGNOSTIC CENTER . . . . . 17 FAP . . . . . 18 OTHER PUBLIC . 26 _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . 31 CHILDREN'S HOSPITAL . . . 32 MATERNITY HOSPITAL . . . 33 POLICLINIC . . . . . 34 ABULATORY . . . 35 WOMEN'S HEALTH CONSULT CTR. 36 MEDICAL DIAGNOSTIC CENTER . . . . . 37 FAP . . . . . 38 OTHER PRIVATE . 46 _____ (SPECIFY) OTHER . . . . . 96 _____ (SPECIFY) (SKIP TO 441) DON'T KNOW 98
433A	Did you or any family member pay anything for the delivery of (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 434) DON'T KNOW 8		
433B	Altogether, how much was officially paid for the delivery; including examination, laboratory tests, medicines, and staff fees?	[ ][ ][ ][ ][ ][ ][ ] FREE . . . . . 0000000 DON'T KNOW 9999998		
433C	How much was paid in additional expenses?	[ ][ ][ ][ ][ ][ ][ ] NOTHING . . . 0000000 DON'T KNOW 9999998		
434	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	HOURS 1 [ ][ ] DAYS 2 [ ][ ] WEEKS 3 [ ][ ] DON'T KNOW . . . 998	HOURS 1 [ ][ ] DAYS 2 [ ][ ] WEEKS 3 [ ][ ] DON'T KNOW . . . 998
435	Was (NAME) delivered by caesarean section?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
436	Before you were discharged after (NAME) was born, did a health professional check on your health?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 439) DON'T KNOW 8	YES . . . . . 1 (SKIP TO 451) NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 (SKIP TO 451) NO . . . . . 2 DON'T KNOW 8
437	How many hours, days or weeks after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS.	HOURS 1 [ ][ ] DAYS 2 [ ][ ] WEEKS 3 [ ][ ]		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
	IF LESS THAN ONE WEEK, RECORD DAYS.	DON'T KNOW . . . 998		
438	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	DOCTOR . . . . . 11 NURSE/MIDWIFE . . 12 FELDSHER . . . . . 13 FAMILY NURSE . . . 14 OTHER . . . . . 96 _____ (SPECIFY) (SKIP TO 450)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
439	After you were discharged, did a health professional or a traditional birth attendant check on your health?	YES . . . . . 1 (SKIP TO 442) NO . . . . . 2 (SKIP TO 450)	YES . . . . . 1 (SKIP TO 451) NO 2	YES . . . . . 1 (SKIP TO 451) NO 2
440	Why didn't you deliver in a health facility? PROBE: Any other reason? RECORD ALL MENTIONED.	SERVICE COST TOO MUCH . . . . . A FACILITY NOT OPEN . B COST OF TRANSPORT. . . . C TOO FAR/ NO TRANSPORT. . . . D DON'T TRUST FACILITY/POOR QUALITY SERVICE E NO FEMALE PROVIDER AT FACILITY . . F HUSBAND/FAMILY DID NOT ALLOW . . G NOT NECESSARY . . H NOT CUSTOMARY . . I DIDN'T HAVE ENOUGH TIME . . . . . J OTHER _____ (SPECIFY) X		
441	After (NAME) was born, did a health professional or a traditional birth attendant check on your health?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 445)	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
442	How many hours, days or weeks 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		
443	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	DOCTOR . . . . . 11 NURSE/MIDWIFE . . 12 FELDSHER . . . . . 13 FAMILY NURSE . . . 14 OTHER . . . . . 96 _____ (SPECIFY)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
444	Where did this first check take place? IF SOURCE IS ANY TYPE OF HEALTH FACILITY, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	HOME 01 PUBLIC SECTOR HOSPITAL . . . . . 11 CHILDREN'S HOSP 12 MATERNITY HOSP 13 POLICLINIC . . . . . 14 ABULATORY . . . 15 WOMEN'S HEALTH CONSULT CTR. . 16 MEDICAL DIAGNOSTIC CENTER . . . . . 17 FAP . . . . . 18 OTHER PUBLIC . 26 _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . 31 CHILDREN'S HOSPITAL . . . 32 MATERNITY HOSPITAL . . . 33 POLICLINIC . . . . . 34 ABULATORY . . . 35 WOMEN'S HEALTH CONSULT CTR. 36 MEDICAL DIAGNOSTIC CENTER . . . . . 37 FAP . . . . . 38 OTHER PRIVATE . 46 _____ (SPECIFY) OTHER . . . . . 96 _____ (SPECIFY) DON'T KNOW 98		
444A	CHECK 439:	YES ☐ → (SKIP TO 450) NOT ASKED ☐ →		
445	In the two months after (NAME) was born, did a health professional or traditional birth attendant check on his/her health?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 450) ← DON'T KNOW 8		
446	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		
447	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PROFESSIONAL DOCTOR . . . . . 11 NURSE/MIDWIFE . . 12 FELDSHER . . . . . 13 FAMILY NURSE . . . 14 OTHER . . . . . 96 _____ (SPECIFY)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
448	Where did this first check of (NAME) take place? IF SOURCE IS ANY TYPE OF HEALTH FACILITY, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	HOME 01 PUBLIC SECTOR HOSPITAL . . . . . 11 CHILDREN'S HOSP 12 MATERNITY HOSP 13 POLICLINIC . . . . . 14 ABULATORY . . . 15 WOMEN'S HEALTH CONSULT CTR. . 16 MEDICAL DIAGNOSTIC CENTER . . . . . 17 FAP . . . . . 18 OTHER PUBLIC . 26 _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . 31 CHILDREN'S HOSPITAL . . . 32 MATERNITY HOSPITAL . . . 33 POLICLINIC . . . . . 34 ABULATORY . . . 35 WOMEN'S HEALTH CONSULT CTR. 36 MEDICAL DIAGNOSTIC CENTER . . . . . 37 FAP . . . . . 38 OTHER PRIVATE . 46 _____ (SPECIFY) OTHER . . . . . 96 _____ (SPECIFY) DON'T KNOW 98		
450	Has your menstrual period returned since the birth of (NAME)?	YES . . . . . 1 (SKIP TO 452) NO . . . . . 2 (SKIP TO 453)		
451	Did your period return between the birth of (NAME) and your next pregnancy?		YES . . . . . 1 NO . . . . . 2 (SKIP TO 455)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 455)
452	For how many months after the birth of (NAME) did you <u>not</u> have a period?	MONTHS . . . [ ][ ] DON'T KNOW 98	MONTHS . . . [ ][ ] DON'T KNOW 98	MONTHS . . . [ ][ ] DON'T KNOW 98
453	CHECK 226: IS RESPONDENT PREGNANT?	NOT PREGNANT [ ] PREGNANT OR UNSURE [ ] (SKIP TO 455)		
454	Have you resumed sexual relations since the birth of (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 455A)		
455	For how many months after the birth of (NAME) did you <u>not</u> have sexual relations?	MONTHS . . . [ ][ ] DON'T KNOW 98	MONTHS . . . [ ][ ] DON'T KNOW 98	MONTHS . . . [ ][ ] DON'T KNOW 98
455A	Now I'd like to ask some more questions about your baby. After the birth, was (NAME) put directly on the bare skin of your chest?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
456	Did you ever breastfeed (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 463)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 463)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 463)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
457	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 [ ][ ]		
458	In the first three days after delivery, was (NAME) given anything to drink other than breast milk?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 460)		
459	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 HONEY . . . . . I OTHER _____ X (SPECIFY)		
460	CHECK 404: IS CHILD LIVING?	LIVING DEAD (SKIP TO 462)	LIVING DEAD (SKIP TO 462)	LIVING DEAD (SKIP TO 462)
461	Are you still breastfeeding (NAME)?	YES . . . . . 1 (SKIP TO 464) NO 2	YES . . . . . 1 (SKIP TO 466) NO 2	YES . . . . . 1 (SKIP TO 466) NO 2
462	For how many months did you breastfeed (NAME)?	MONTHS . . . [ ][ ] DON'T KNOW . . . 98	MONTHS . . . [ ][ ] DON'T KNOW . . . 98	MONTHS . . . [ ][ ] DON'T KNOW . . . 98
463	CHECK 404: IS CHILD LIVING?	LIVING DEAD (GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 468) (SKIP TO 466)	LIVING DEAD (GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 468) (SKIP TO 466)	LIVING DEAD (GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 468) (SKIP TO 466)
464	How many times did you breastfeed last night between sunset and sunrise? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER.	NUMBER OF NIGHTTIME FEEDINGS . [ ][ ]		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
465	How many times did you breastfeed yesterday during the daylight hours? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER.	NUMBER OF DAYLIGHT FEEDINGS . [ ][ ]		
466	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
467		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 468.	GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 468.	GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 468.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
468	CHECK 213 AND 220: HAS AT LEAST ONE CHILD BORN IN 2002 OR LATER AND LIVING WITH HER RECORD NAME OF YOUNGEST CHILD LIVING WITH HER (AND CONTINUE WITH 469) _____ (NAME)	DOES NOT HAVE ANY CHILDREN BORN IN 2002 OR LATER AND LIVING WITH HER	501
469	Now I would like to ask you about liquids (NAME FROM 468) drank yesterday during the day or at night. Did (NAME FROM 468) drink:	YES NO DK	
	Plain water?	PLAIN WATER 1 2 8	
	Commercially produced infant formula?	FORMULA 1 2 8	
	Any other milk such as tinned, powdered, or fresh animal milk?	MILK 1 2 8	
	Narine?	NARINE 1 2 8	
	Fruit juice?	JUICE 1 2 8	
	Tea or coffee?	TEA/COFFEE 1 2 8	
	Any other liquids?	OTHER LIQUIDS 1 2 8	
470	Now I would like to ask you about the food (NAME FROM 468) ate yesterday during the day or at night, either separately or combined with other foods. Did (NAME FROM 468) eat:	YES NO DK	
	a. Any baby food [CERELAC, HIPP, NESTLE, VINNY]?	a 1 2 8	
	b. Any bread, lavash, rice, noodles, biscuits, cookies, or any other foods made from grains?	b 1 2 8	
	c. Any white potatoes and any other foods made from roots?	c 1 2 8	
	d. Any pumpkin, carrots, squash or sweet potatoes that are yellow or orange inside?	d 1 2 8	
	e. Any dark green, leafy vegetables like parsley,spinach, or coriander?	e 1 2 8	
	f. Any apricot, mangos	f 1 2 8	
	g. Any other fruits or vegetables/ apples, strawberry, bananas curant, dates, grapes, cucumbers, eggplant, onion, tomatoe?	g 1 2 8	
	h Any liver, kidney, heart or other organ meats?	h 1 2 8	
	i. Any beef, pork, lamb, goat, rabbit?	i 1 2 8	
	j. Any chicken, duck or other fowl?	j 1 2 8	
	k. Any eggs?	k 1 2 8	
	l. Any fresh, tinned or dried fish or shellfish?	l 1 2 8	
	m. Any foods made from beans, peas, or lentils?	m 1 2 8	
	n. Any nuts?	n 1 2 8	
	o. Any cheese or yogurt?	o 1 2 8	
	p. Any food made with oil, fat, or butter?	p 1 2 8	
	q. Any other food?	q 1 2 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
471	CHECK 470: AT LEAST ONE "YES"	NOT A SINGLE "YES"	501
472	How many times did (NAME) eat solid, semisolid, or soft foods other than liquids yesterday during the day or at night? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES . . . . . . DON'T KNOW 8	

SECTION 5. IMMUNIZATION, HEALTH, AND WOMEN'S NUTRITION

501	ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2000 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	LINE NUMBER FROM 212	LAST BIRTH LINE NUMBER . . . . . [ ][ ]	NEXT-TO-LAST BIRTH LINE NUMBER . . . . . [ ][ ]	SECOND-FROM-LAST BIRTH LINE NUMBER . . . . . [ ][ ]
503	FROM 216 AND 218	NAME_____ LIVING [ ] DEAD [ ] (SKIP TO 506)	NAME_____ LIVING [ ] DEAD [ ] (SKIP TO 506)	NAME_____ LIVING [ ] DEAD [ ] (SKIP TO 506)
504	After death of (NAME), did you register the death with the civil authorities?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . . . 8 (GO TO 503 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 547)	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . . . 8 (GO TO 503 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 547)	YES . . . . . 1 NO . . . . . 2 DON'T KNOW . . . . . 8 (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE, OR IF NO MORE BIRTHS, GO TO 547)
506	Is (NAME) currently taking iron pills or capsules with iron?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
506 A	Has (NAME) taken any drug for intestinal parasites in the past 6 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
507	Do you have a card where (NAME'S) vaccinations are written down? IF YES: May I see it please?	YES, SEEN . . . . . 1 (SKIP TO 509) YES, NOT SEEN . . . . . 2 (SKIP TO 511) NO CARD 3	YES, SEEN . . . . . 1 (SKIP TO 509) YES, NOT SEEN . . . . . 2 (SKIP TO 511) NO CARD 3	YES, SEEN . . . . . 1 (SKIP TO 509) YES, NOT SEEN . . . . . 2 (SKIP TO 511) NO CARD 3
508	Did you ever have a vaccination card for (NAME)?	YES . . . . . 1 (SKIP TO 511) NO 2	YES . . . . . 1 (SKIP TO 511) NO 2	YES . . . . . 1 (SKIP TO 511) NO 2

509 (1) COPY VACCINATION DATE FOR EACH VACCINE FROM THE CARD.
(2) WRITE '44' IN 'DAY' COLUMN IF CARD SHOWS THAT A VACCINATION 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			
HEP 1				H1				H1			
HEP 2				H2				H2			
HEP 3				H3				H3			
POLIO 1				P1				P1			
POLIO 2				P2				P2			
POLIO 3				P3				P3			
DPT 1				D1				D1			
DPT 2				D2				D2			
DPT 3				D3				D3			
MMR				MMR				MMR			
VITAMIN A (MOST RECENT)				VIT A				VIT A			
VITAMIN A (2nd MOST RECENT)				VIT A				VIT A			

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
510	Has (NAME) received any vaccinations that are not recorded on this card? RECORD 'YES' ONLY IF RESPONDENT MENTIONS BCG, HEP 1-3, POLIO 0-3, DPT 1-3, AND/OR MEASLES VACCINES.	YES . . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 509) (SKIP TO 513) NO . . . . . 2 (SKIP TO 513) DON'T KNOW 8	YES . . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 509) (SKIP TO 513) NO . . . . . 2 (SKIP TO 513) DON'T KNOW 8	YES . . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 509) (SKIP TO 513) NO . . . . . 2 (SKIP TO 513) DON'T KNOW 8
511	Did (NAME) ever receive any vaccinations to prevent him/her from getting diseases?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 513) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 513) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 513) DON'T KNOW 8
512	Please tell me if (NAME) received any of the following vaccinations:			
512A	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
512B	A HEP-1,2,3 vaccine, which is realize in the thigh.	YES . . . . . 1 NO . . . . . 2 (SKIP TO 512D) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 512D) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 512D) DON'T KNOW 8
512C	How many times was the HEP-1,2,3 vaccine received?	NUMBER OF TIMES . . . . . [ ] DON'T KNOW 8	NUMBER OF TIMES . . . . . [ ] DON'T KNOW 8	NUMBER OF TIMES . . . . . [ ] DON'T KNOW 8
512D	Polio vaccine, that is, drops in the mouth?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 512F) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 512F) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 512F) DON'T KNOW 8
512E	How many times was the polio vaccine received?	NUMBER OF TIMES . . . . . [ ] DON'T KNOW 8	NUMBER OF TIMES . . . . . [ ] DON'T KNOW 8	NUMBER OF TIMES . . . . . [ ] DON'T KNOW 8
512F	A DPT vaccination, that is, an injection given in the thigh or buttocks, sometimes at the same time as polio drops?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 512H) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 512H) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 512H) DON'T KNOW 8
512G	How many times was a DPT vaccination received?	NUMBER OF TIMES . . . . . [ ] DON'T KNOW 8	NUMBER OF TIMES . . . . . [ ] DON'T KNOW 8	NUMBER OF TIMES . . . . . [ ] DON'T KNOW 8
512H	An injection to prevent measles? (MMR)	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
513	Has (NAME) had an illness, an accident, or suffered from a chronic health problem in the last three months?	YES . . . . . 1 (SKIP TO 513B) NO 2	YES . . . . . 1 (SKIP TO 513B) NO 2	YES . . . . . 1 (SKIP TO 513B) NO 2
513A	In the last three months, did (NAME) visit a health facility or consult with a health professional?	YES . . . . . 1 (SKIP TO 513E) NO . . . . . 2 (SKIP TO 513O)	YES . . . . . 1 (SKIP TO 513E) NO . . . . . 2 (SKIP TO 513O)	YES . . . . . 1 (SKIP TO 513E) NO . . . . . 2 (SKIP TO 513O)
513B	What kind of illness, accident or health problem? IF MORE THAN ONE, RECORD THE MOST RECENT.	ACCIDENT/INJURY . 01 CARDIOVASCULAR . 02 RESPIRATORY . . . 03 DIARRHEA . . . . . 04 FEVER . . . . . 05 OTHER ILLNESS . 06 OTHER 96 _____ (SPECIFY)	ACCIDENT/INJURY . 01 CARDIOVASCULAR . 02 RESPIRATORY . . . 03 DIARRHEA . . . . . 04 FEVER . . . . . 05 OTHER ILLNESS . 06 OTHER 96 _____ (SPECIFY)	ACCIDENT/INJURY . 01 CARDIOVASCULAR . 02 RESPIRATORY . . . 03 DIARRHEA . . . . . 04 FEVER . . . . . 05 OTHER ILLNESS . 06 OTHER 96 _____ (SPECIFY)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
513C	In the last three months, did (NAME) visit a health facilty or consult with a health professional?	YES . . . . . 1 (SKIP TO 513E) NO 2	YES . . . . . 1 (SKIP TO 513E) NO 2	YES . . . . . 1 (SKIP TO 513E) NO 2
513D	Why didn't (NAME) go to a health facility?	MINOR HEALTH PROBLEM . . . . . A GOOD CARE NOT AVAILABLE . . . B LONG WAIT AT PROVIDER . . . . . C LACK OF FUNDS FOR MED . . . . . D LACK OF FUNDS FOR TRAVE . . . . . E LONG DISTANCE TO FACILITY . . . F TRANSPORT UNAVAILABLE . G RESPONSIBILITIES AT HOME . . . . . H RESPONSIBILITIES AT WORK . . . . . I CONSULTED TRAD. PRACTITIONEI . . . J OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z (SKIP TO 513O)	MINOR HEALTH PROBLEM . . . . . A GOOD CARE NOT AVAILABLE . . . B LONG WAIT AT PROVIDER . . . . . C LACK OF FUNDS FOR MED . . . . . D LACK OF FUNDS FOR TRAVE . . . . . E LONG DISTANCE TO FACILITY . . . F TRANSPORT UNAVAILABLE . G RESPONSIBILITIES AT HOME . . . . . H RESPONSIBILITIES AT WORK . . . . . I CONSULTED TRAD. PRACTITIONEI . . . J OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z (SKIP TO 513O)	MINOR HEALTH PROBLEM . . . . . A GOOD CARE NOT AVAILABLE . . . B LONG WAIT AT PROVIDER . . . . . C LACK OF FUNDS FOR MED . . . . . D LACK OF FUNDS FOR TRAVE . . . . . E LONG DISTANCE TO FACILITY . . . F TRANSPORT UNAVAILABLE . G RESPONSIBILITIES AT HOME . . . . . H RESPONSIBILITIES AT WORK . . . . . I CONSULTED TRAD. PRACTITIONEI . . . J OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z (SKIP TO 513O)
513E	How many times did (NAME) visit health facilty or consult a health professional in the last three months?	NUMBER OF VISITS [ ][ ] DON'T KNOW . . . 98	NUMBER OF VISITS [ ][ ] DON'T KNOW . . . 98	NUMBER OF VISITS [ ][ ] DON'T KNOW . . . 98
513F	Now I am going to ask you about the (last) visit (NAME) made in the last three months. Where did the visit or consultation take place?	HOME . . . . . 01 (SKIP TO 513J) PUBLIC SECTOR HOSPITAL . . . . . 11 CHILDREN'S HOSP 12 MATERNITY HOSP 13 POLICLINIC . . . . . 14 ABULATORY . . . 15 WOMEN'S HEALTH CONSULT CTR. . 16 MEDICAL DIAGNOSTIC CENTER . . . . . 17 FAP . . . . . 18 OTHER PUBLIC . 26 _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . 31 CHILDREN'S HOSPITAL . . . 32 MATERNITY HOSPITAL . . . 33 POLICLINIC . . . . . 34 ABULATORY . . . 35 WOMEN'S HEALTH CONSULT CTR. 36 MEDICAL DIAGNOSTIC CENTER . . . . . 37 FAP . . . . . 38 OTHER PRIVATE . 46 _____ (SPECIFY) OTHER . . . . . 96 _____ (SPECIFY) DON'T KNOW . . . . . 98 (SKIP TO 513J)	HOME . . . . . 01 (SKIP TO 513J) PUBLIC SECTOR HOSPITAL . . . . . 11 CHILDREN'S HOSP 12 MATERNITY HOSP 13 POLICLINIC . . . . . 14 ABULATORY . . . 15 WOMEN'S HEALTH CONSULT CTR. . 16 MEDICAL DIAGNOSTIC CENTER . . . . . 17 FAP . . . . . 18 OTHER PUBLIC . 26 _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . 31 CHILDREN'S HOSPITAL . . . 32 MATERNITY HOSPITAL . . . 33 POLICLINIC . . . . . 34 ABULATORY . . . 35 WOMEN'S HEALTH CONSULT CTR. 36 MEDICAL DIAGNOSTIC CENTER . . . . . 37 FAP . . . . . 38 OTHER PRIVATE . 46 _____ (SPECIFY) OTHER . . . . . 96 _____ (SPECIFY) DON'T KNOW . . . . . 98 (SKIP TO 513J)	HOME . . . . . 01 (SKIP TO 513J) PUBLIC SECTOR HOSPITAL . . . . . 11 CHILDREN'S HOSP 12 MATERNITY HOSP 13 POLICLINIC . . . . . 14 ABULATORY . . . 15 WOMEN'S HEALTH CONSULT CTR. . 16 MEDICAL DIAGNOSTIC CENTER . . . . . 17 FAP . . . . . 18 OTHER PUBLIC . 26 _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . 31 CHILDREN'S HOSPITAL . . . 32 MATERNITY HOSPITAL . . . 33 POLICLINIC . . . . . 34 ABULATORY . . . 35 WOMEN'S HEALTH CONSULT CTR. 36 MEDICAL DIAGNOSTIC CENTER . . . . . 37 FAP . . . . . 38 OTHER PRIVATE . 46 _____ (SPECIFY) OTHER . . . . . 96 _____ (SPECIFY) DON'T KNOW . . . . . 98 (SKIP TO 513J)
513G	When (NAME) had the last visit/ consultation, how did he/she get there?	BY FOOT . . . . . 01 (SKIP TO 513I) TAXI . . . . . 02 MINI-BUS . . . . . 03 BUS/TROLLY/METRO 04 HOUSEHOLD CAR . 05	BY FOOT . . . . . 01 (SKIP TO 513I) TAXI . . . . . 02 MINI-BUS . . . . . 03 BUS/TROLLY/METRO 04 HOUSEHOLD CAR . 05	BY FOOT . . . . . 01 (SKIP TO 513I) TAXI . . . . . 02 MINI-BUS . . . . . 03 BUS/TROLLY/METRO 04 HOUSEHOLD CAR . 05

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
		(SKIP TO 513I) OTHER CAR ..... 06 (SKIP TO 513I) AMBULANCE ..... 07 (SKIP TO 513I) OTHER 96 _____ (SPECIFY)	(SKIP TO 513I) OTHER CAR ..... 06 (SKIP TO 513I) AMBULANCE ..... 07 (SKIP TO 513I) OTHER 96 _____ (SPECIFY)	(SKIP TO 513I) OTHER CAR ..... 06 (SKIP TO 513I) AMBULANCE ..... 07 (SKIP TO 513I) OTHER 96 _____ (SPECIFY)
513H	Altogether, how much was paid for transportation, round-trip, for the visit/consultation?	NOTHING . 00000 DON'T KNOW . 99998	NOTHING . 00000 DON'T KNOW . 99998	NOTHING . 00000 DON'T KNOW . 99998
513I	How long did it take to travel to (NAME OF PLACE FROM Q513F) for the last visit/consultation?	MINUTES DON'T KNOW 998	MINUTES DON'T KNOW 998	MINUTES DON'T KNOW 998
513J	Altogether, how much was officially paid for the visit; including examination, laboratory tests and staff fees?	FREE ..... 0000000 DON'T KNOW 9999998	FREE ..... 0000000 DON'T KNOW 9999998	FREE ..... 0000000 DON'T KNOW 9999998
513K	How much was paid in additional expenses?	NOTHING... 0000000 DON'T KNOW 9999998	NOTHING... 0000000 DON'T KNOW 9999998	NOTHING... 0000000 DON'T KNOW 9999998
513L	Did (NAME) receive any medicine as a result of the visit/consultation?	YES ..... 1 NO ..... 2 (SKIP TO 513O)	YES ..... 1 NO ..... 2 (SKIP TO 513O)	YES ..... 1 NO ..... 2 (SKIP TO 513O)
513M	Where were the medicines obtained?	HOME ..... A (SKIP TO 513O) PUBLIC SECTOR HOSPITAL ..... B CHILDREN'S HOSP C MATERNITY HOSP D POLICLINIC ..... E ABULATORY ... F WOMEN'S HEALTH CONSULT CTR. . G MEDICAL DIAGNOSTIC CENTER ..... H FAP ..... I OTHER PUBLIC . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL ..... K CHILDREN'S HOSPITAL ... L MATERNITY HOSPITAL ... M POLICLINIC ..... N ABULATORY ... O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER ..... Q FAP ..... R OTHER PRIVATE . S _____ (SPECIFY) OTHER PHARMACY/SHOP T NGO ..... U FRIEND/RELATIVE /NEIGHBOUR . V OTHER ..... X _____ (SPECIFY) DON'T KNOW ..... Z	HOME ..... A (SKIP TO 513O) PUBLIC SECTOR HOSPITAL ..... B CHILDREN'S HOSP C MATERNITY HOSP D POLICLINIC ..... E ABULATORY ... F WOMEN'S HEALTH CONSULT CTR. . G MEDICAL DIAGNOSTIC CENTER ..... H FAP ..... I OTHER PUBLIC . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL ..... K CHILDREN'S HOSPITAL ... L MATERNITY HOSPITAL ... M POLICLINIC ..... N ABULATORY ... O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER ..... Q FAP ..... R OTHER PRIVATE . S _____ (SPECIFY) OTHER PHARMACY/SHOP T NGO ..... U FRIEND/RELATIVE /NEIGHBOUR . V OTHER ..... X _____ (SPECIFY) DON'T KNOW ..... Z	HOME ..... A (SKIP TO 513O) PUBLIC SECTOR HOSPITAL ..... B CHILDREN'S HOSP C MATERNITY HOSP D POLICLINIC ..... E ABULATORY ... F WOMEN'S HEALTH CONSULT CTR. . G MEDICAL DIAGNOSTIC CENTER ..... H FAP ..... I OTHER PUBLIC . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL ..... K CHILDREN'S HOSPITAL ... L MATERNITY HOSPITAL ... M POLICLINIC ..... N ABULATORY ... O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER ..... Q FAP ..... R OTHER PRIVATE . S _____ (SPECIFY) OTHER PHARMACY/SHOP T NGO ..... U FRIEND/RELATIVE /NEIGHBOUR . V OTHER ..... X _____ (SPECIFY) DON'T KNOW ..... Z
513N	How much was paid the (last) time			

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
	the medicine was obtained?	FREE ..... 0000000 DON'T KNOW 9999998	FREE ..... 0000000 DON'T KNOW 9999998	FREE ..... 0000000 DON'T KNOW 9999998
513O	Has (NAME) received any (other) medicines during the last 3 months?	YES ..... 1 NO ..... 2 (SKIP TO 514)	YES ..... 1 NO ..... 2 (SKIP TO 514)	YES ..... 1 NO ..... 2 (SKIP TO 514)
513P	Where was the (other) medicine obtained?	HOME ..... A (SKIP TO 514) PUBLIC SECTOR HOSPITAL ..... B CHILDREN'S HOSP C MATERNITY HOSP D POLICLINIC ..... E ABULATORY ... F WOMEN'S HEALTH CONSULT CTR. . G MEDICAL DIAGNOSTIC CENTER ..... H FAP ..... I OTHER PUBLIC . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL ..... K CHILDREN'S HOSPITAL ... L MATERNITY HOSPITAL ... M POLICLINIC ..... N ABULATORY ... O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER ..... Q FAP ..... R OTHER PRIVATE . S _____ (SPECIFY) OTHER PHARMACY/SHOP T NGO ..... U FRIEND/RELATIVE /NEIGHBOUR . V OTHER ..... X _____ (SPECIFY) DON'T KNOW ..... Z	HOME ..... A (SKIP TO 514) PUBLIC SECTOR HOSPITAL ..... B CHILDREN'S HOSP C MATERNITY HOSP D POLICLINIC ..... E ABULATORY ... F WOMEN'S HEALTH CONSULT CTR. . G MEDICAL DIAGNOSTIC CENTER ..... H FAP ..... I OTHER PUBLIC . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL ..... K CHILDREN'S HOSPITAL ... L MATERNITY HOSPITAL ... M POLICLINIC ..... N ABULATORY ... O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER ..... Q FAP ..... R OTHER PRIVATE . S _____ (SPECIFY) OTHER PHARMACY/SHOP T NGO ..... U FRIEND/RELATIVE /NEIGHBOUR . V OTHER ..... X _____ (SPECIFY) DON'T KNOW ..... Z	HOME ..... A (SKIP TO 514) PUBLIC SECTOR HOSPITAL ..... B CHILDREN'S HOSP C MATERNITY HOSP D POLICLINIC ..... E ABULATORY ... F WOMEN'S HEALTH CONSULT CTR. . G MEDICAL DIAGNOSTIC CENTER ..... H FAP ..... I OTHER PUBLIC . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL ..... K CHILDREN'S HOSPITAL ... L MATERNITY HOSPITAL ... M POLICLINIC ..... N ABULATORY ... O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER ..... Q FAP ..... R OTHER PRIVATE . S _____ (SPECIFY) OTHER PHARMACY/SHOP T NGO ..... U FRIEND/RELATIVE /NEIGHBOUR . V OTHER ..... X _____ (SPECIFY) DON'T KNOW ..... Z
513Q	How much was paid the (last) time a medicine was obtained?	FREE ..... 0000000 DON'T KNOW 9999998	FREE ..... 0000000 DON'T KNOW 9999998	FREE ..... 0000000 DON'T KNOW 9999998
514	During the last 12 months, has (NAME) stayed overnight in a hospital?	YES ..... 1 NO ..... 2 (SKIP TO 515)	YES ..... 1 NO ..... 2 (SKIP TO 515)	YES ..... 1 NO ..... 2 (SKIP TO 515)
514A	During the last 12 months, on how many different occasions was (NAME) hospitalized?	NUMBER OF TIMES DON'T KNOW ... 98	NUMBER OF TIMES DON'T KNOW ... 98	NUMBER OF TIMES DON'T KNOW ... 98
514B	Now I'm going to ask you about the last time that (NAME) was hospitalized. The last time (NAME) was hospitalized, how did he/she get to the hospital?	BY FOOT ..... 01 (SKIP TO 514D) TAXI ..... 02 MINI-BUS ..... 03 BUS/TROLLY/METRO 04 HOUSEHOLD CAR . 05 (SKIP TO 514D) OTHER CAR ..... 06 (SKIP TO 514D) AMBULANCE ..... 07 (SKIP TO 514D)	BY FOOT ..... 01 (SKIP TO 514D) TAXI ..... 02 MINI-BUS ..... 03 BUS/TROLLY/METRO 04 HOUSEHOLD CAR . 05 (SKIP TO 514D) OTHER CAR ..... 06 (SKIP TO 514D) AMBULANCE ..... 07 (SKIP TO 514D)	BY FOOT ..... 01 (SKIP TO 514D) TAXI ..... 02 MINI-BUS ..... 03 BUS/TROLLY/METRO 04 HOUSEHOLD CAR . 05 (SKIP TO 514D) OTHER CAR ..... 06 (SKIP TO 514D) AMBULANCE ..... 07 (SKIP TO 514D)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
		OTHER 96 _____ (SPECIFY)	OTHER 96 _____ (SPECIFY)	OTHER 96 _____ (SPECIFY)
514C	Altogether, how much was paid for transportation, round trip, to get to the hospital that last time?	DON'T KNOW . 99998	DON'T KNOW . 99998	DON'T KNOW . 99998
514D	How long did it take to travel to the hospital that last time?	MINUTES DON'T KNOW 998	MINUTES DON'T KNOW 998	MINUTES DON'T KNOW 998
514E	Altogether, how much was officially paid for the hospitalization; including examination, laboratory tests, and staff fees?	FREE . . . . . 0000000 DON'T KNOW 9999998	FREE . . . . . 0000000 DON'T KNOW 9999998	FREE . . . . . 0000000 DON'T KNOW 9999998
514F	How much was paid in additional expenses?	NOTHING . . . 0000000 DON'T KNOW 9999998	NOTHING . . . 0000000 DON'T KNOW 9999998	NOTHING . . . 0000000 DON'T KNOW 9999998
514G	Did (NAME) receive any medicine as during the hospitalization?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 515)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 515)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 515)
514H	Where were the medicines obtained?	HOME . . . . . A (SKIP TO 515) PUBLIC SECTOR HOSPITAL . . . . . B CHILDREN'S HOSP C MATERNITY HOSP D POLICLINIC . . . . . E ABULATORY . . . F WOMEN'S HEALTH CONSULT CTR. . G MEDICAL DIAGNOSTIC CENTER . . . . . H FAP . . . . . I OTHER PUBLIC . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K CHILDREN'S HOSPITAL . . . L MATERNITY HOSPITAL . . . M POLICLINIC . . . . . N ABULATORY . . . O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER . . . . . Q FAP . . . . . R OTHER PRIVATE . S _____ (SPECIFY) OTHER PHARMACY/SHOP T NGO . . . . . U FRIEND/RELATIVE /NEIGHBOUR . V OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z	HOME . . . . . A (SKIP TO 515) PUBLIC SECTOR HOSPITAL . . . . . B CHILDREN'S HOSP C MATERNITY HOSP D POLICLINIC . . . . . E ABULATORY . . . F WOMEN'S HEALTH CONSULT CTR. . G MEDICAL DIAGNOSTIC CENTER . . . . . H FAP . . . . . I OTHER PUBLIC . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K CHILDREN'S HOSPITAL . . . L MATERNITY HOSPITAL . . . M POLICLINIC . . . . . N ABULATORY . . . O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER . . . . . Q FAP . . . . . R OTHER PRIVATE . S _____ (SPECIFY) OTHER PHARMACY/SHOP T NGO . . . . . U FRIEND/RELATIVE /NEIGHBOUR . V OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z	HOME . . . . . A (SKIP TO 515) PUBLIC SECTOR HOSPITAL . . . . . B CHILDREN'S HOSP C MATERNITY HOSP D POLICLINIC . . . . . E ABULATORY . . . F WOMEN'S HEALTH CONSULT CTR. . G MEDICAL DIAGNOSTIC CENTER . . . . . H FAP . . . . . I OTHER PUBLIC . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K CHILDREN'S HOSPITAL . . . L MATERNITY HOSPITAL . . . M POLICLINIC . . . . . N ABULATORY . . . O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER . . . . . Q FAP . . . . . R OTHER PRIVATE . S _____ (SPECIFY) OTHER PHARMACY/SHOP T NGO . . . . . U FRIEND/RELATIVE /NEIGHBOUR . V OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z
514I	How much was paid the (last) time the medicine was obtained?	FREE . . . . . 0000000 DON'T KNOW 9999998	FREE . . . . . 0000000 DON'T KNOW 9999998	FREE . . . . . 0000000 DON'T KNOW 9999998

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
515	Has (NAME) had diarrhea 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

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
516	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
517	Now I would like to know how much (NAME) was given to drink during the diarrhea. 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
518	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
519	Did you seek advice or treatment for the diarrhea from any source?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 524)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 524)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 524)
520	Where did you seek advice or treatment? IF SOURCE IS ANY TYPE OF HEALTH FACILITY, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE) Anywhere else? RECORD ALL PLACES MENTIONED.	HOME . . . . . A PUBLIC SECTOR HOSPITAL . . . . . B CHILDREN'S HOSP C MATERNITY HOSP D POLICLINIC . . . . . E ABULATORY . . . F WOMEN'S HEALTH CONSULT CTR. . G MEDICAL DIAGNOSTIC CENTER . . . . . H FAP . . . . . I OTHER PUBLIC . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K CHILDREN'S HOSPITAL . . . L MATERNITY HOSPITAL . . . M POLICLINIC . . . . . N ABULATORY . . . O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER . . . . . Q FAP . . . . . R OTHER PRIVATE . S _____ (SPECIFY) OTHER PHARMACY/SHOP T NGO . . . . . U FRIEND/RELATIVE /NEIGHBOUR . V OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z	HOME . . . . . A PUBLIC SECTOR HOSPITAL . . . . . B CHILDREN'S HOSP C MATERNITY HOSP D POLICLINIC . . . . . E ABULATORY . . . F WOMEN'S HEALTH CONSULT CTR. . G MEDICAL DIAGNOSTIC CENTER . . . . . H FAP . . . . . I OTHER PUBLIC . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K CHILDREN'S HOSPITAL . . . L MATERNITY HOSPITAL . . . M POLICLINIC . . . . . N ABULATORY . . . O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER . . . . . Q FAP . . . . . R OTHER PRIVATE . S _____ (SPECIFY) OTHER PHARMACY/SHOP T NGO . . . . . U FRIEND/RELATIVE /NEIGHBOUR . V OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z	HOME . . . . . A PUBLIC SECTOR HOSPITAL . . . . . B CHILDREN'S HOSP C MATERNITY HOSP D POLICLINIC . . . . . E ABULATORY . . . F WOMEN'S HEALTH CONSULT CTR. . G MEDICAL DIAGNOSTIC CENTER . . . . . H FAP . . . . . I OTHER PUBLIC . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K CHILDREN'S HOSPITAL . . . L MATERNITY HOSPITAL . . . M POLICLINIC . . . . . N ABULATORY . . . O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER . . . . . Q FAP . . . . . R OTHER PRIVATE . S _____ (SPECIFY) OTHER PHARMACY/SHOP T NGO . . . . . U FRIEND/RELATIVE /NEIGHBOUR . V OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z
521	CHECK 520:	TWO OR MORE CODES CIRCLED ONLY ONE CODE CIRCLED (SKIP TO 523)	TWO OR MORE CODES CIRCLED ONLY ONE CODE CIRCLED (SKIP TO 523)	TWO OR MORE CODES CIRCLED ONLY ONE CODE CIRCLED (SKIP TO 523)
522	Where did you first seek advice or treatment? USE LETTER CODE FROM 520.	FIRST PLACE . . .	FIRST PLACE . . .	FIRST PLACE . . .
523	How many days after the diarrhea			

328328

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
	began did you first seek advice or treatment for (NAME)? IF THE SAME DAY, RECORD '00'.	DAYS . . . . . [ ][ ]	DAYS . . . . . [ ][ ]	DAYS . . . . . [ ][ ]
524	Does (NAME) still have diarrhea?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
525	Was he/she given any of the following to drink at any time since he/she started having the diarrhea:	YES NO DK	YES NO DK	YES NO DK
a	A fluid made from a special packet called Regydron or ORS?	FLUID FROM ORS PKT 1 2 8	FLUID FROM ORS PKT 1 2 8	FLUID FROM ORS PKT 1 2 8
c	A homemade fluid recommended by a health professional?	HOMEMADE FLUID 1 2 8	HOMEMADE FLUID 1 2 8	HOMEMADE FLUID 1 2 8
526	Was anything (else) given to treat the diarrhea?	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
527	What (else) was given to treat the diarrhea? Anything else? RECORD ALL TREATMENTS GIVEN.	PILL OR SYRUP ANTIBIOTIC . . . . . A ANTIMOTILITY . . . B OTHER (NOT ANTI-BIOTIC, ANTI-MOTILITY . . . D UNKNOWN PILL OR SYRUP . . . E INJECTION ANTIBIOTIC . . . . . F NON-ANTIBIOTIC . G UNKNOWN INJECTION . . . H INTRAVENOUS . I HOME REMEDY/ HERBAL MED-ICINE . . . . . J OTHER _____ X (SPECIFY)	PILL OR SYRUP ANTIBIOTIC . . . . . A ANTIMOTILITY . . . B OTHER (NOT ANTI-BIOTIC, ANTI-MOTILITY . . . D UNKNOWN PILL OR SYRUP . . . E INJECTION ANTIBIOTIC . . . . . F NON-ANTIBIOTIC . G UNKNOWN INJECTION . . . H INTRAVENOUS . I HOME REMEDY/ HERBAL MED-ICINE . . . . . J OTHER _____ X (SPECIFY)	PILL OR SYRUP ANTIBIOTIC . . . . . A ANTIMOTILITY . . . B OTHER (NOT ANTI-BIOTIC, ANTI-MOTILITY . . . D UNKNOWN PILL OR SYRUP . . . E INJECTION ANTIBIOTIC . . . . . F NON-ANTIBIOTIC . G UNKNOWN INJECTION . . . H INTRAVENOUS . I HOME REMEDY/ HERBAL MED-ICINE . . . . . J OTHER _____ X (SPECIFY)
530	Has (NAME) been ill with a fever at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
531	Has (NAME) had an illness with a cough at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 534) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 534) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 534) DON'T KNOW 8
532	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 535) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 535) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 535) DON'T KNOW 8
533	When (NAME) had this illness, did he/she have a problem in the chest or a blocked or runny nose?	CHEST ONLY . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER _____ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 535)	CHEST ONLY . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER _____ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 535)	CHEST ONLY . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER _____ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 535)
534	CHECK 530: HAD FEVER?	YES NO OR DK [ ] [ ] (SKIP TO 546)	YES NO OR DK [ ] [ ] (SKIP TO 546)	YES NO OR DK [ ] [ ] (SKIP TO 546)
535	Now I would like to know how much (NAME) was given to drink 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	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

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
	given much less than usual to drink or somewhat less?			
536	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
537	Did you seek advice or treatment for the illness from any source?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 542)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 542)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 542)
538	Where did you seek advice or treatment? IF SOURCE IS ANY TYPE OF HEALTH FACILITY, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE) Anywhere else? RECORD ALL SOURCES MENTIONED.	HOME . . . . . A PUBLIC SECTOR HOSPITAL . . . . . B CHILDREN'S HOSP C MATERNITY HOSP D POLICLINIC . . . . . E ABULATORY . . . F WOMEN'S HEALTH CONSULT CTR. . G MEDICAL DIAGNOSTIC CENTER . . . . . H FAP . . . . . I OTHER PUBLIC . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K CHILDREN'S HOSPITAL . . . L MATERNITY HOSPITAL . . . M POLICLINIC . . . . . N ABULATORY . . . O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER . . . . . Q FAP . . . . . R OTHER PRIVATE . S _____ (SPECIFY) OTHER PHARMACY/SHOP T NGO . . . . . U FRIEND/RELATIVE /NEIGHBOUR . V OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z	HOME . . . . . A PUBLIC SECTOR HOSPITAL . . . . . B CHILDREN'S HOSP C MATERNITY HOSP D POLICLINIC . . . . . E ABULATORY . . . F WOMEN'S HEALTH CONSULT CTR. . G MEDICAL DIAGNOSTIC CENTER . . . . . H FAP . . . . . I OTHER PUBLIC . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K CHILDREN'S HOSPITAL . . . L MATERNITY HOSPITAL . . . M POLICLINIC . . . . . N ABULATORY . . . O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER . . . . . Q FAP . . . . . R OTHER PRIVATE . S _____ (SPECIFY) OTHER PHARMACY/SHOP T NGO . . . . . U FRIEND/RELATIVE /NEIGHBOUR . V OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z	HOME . . . . . A PUBLIC SECTOR HOSPITAL . . . . . B CHILDREN'S HOSP C MATERNITY HOSP D POLICLINIC . . . . . E ABULATORY . . . F WOMEN'S HEALTH CONSULT CTR. . G MEDICAL DIAGNOSTIC CENTER . . . . . H FAP . . . . . I OTHER PUBLIC . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K CHILDREN'S HOSPITAL . . . L MATERNITY HOSPITAL . . . M POLICLINIC . . . . . N ABULATORY . . . O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER . . . . . Q FAP . . . . . R OTHER PRIVATE . S _____ (SPECIFY) OTHER PHARMACY/SHOP T NGO . . . . . U FRIEND/RELATIVE /NEIGHBOUR . V OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z
539	CHECK 538:	TWO OR MORE CODES CIRCLED ONLY ONE CODE CIRCLED (SKIP TO 541)	TWO OR MORE CODES CIRCLED ONLY ONE CODE CIRCLED (SKIP TO 541)	TWO OR MORE CODES CIRCLED ONLY ONE CODE CIRCLED (SKIP TO 541)
540	Where did you first seek advice or treatment? USE LETTER CODE FROM 538.	FIRST PLACE . . .	FIRST PLACE . . .	FIRST PLACE . . .
541	How many days after the illness began did you first seek advice or treatment for (NAME)? IF THE SAME DAY, RECORD '00'.	DAYS	DAYS	DAYS . . . . .
542	Is (NAME) still sick with a (fever/cough)?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
543	At any time during the illness, did (NAME) take any drugs for the illness?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 546) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 546) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 546) DON'T KNOW 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
544	What drugs did (NAME) take? Any other drugs? RECORD ALL MENTIONED. IF BRAND NAME WRITE BELOW: _____ _____ _____	ANTIBIOTIC AMOX . . . . . E PENECELIN . . . . . F CEFAZOLIN . . . . . G OTHER ANTIBIOTIC . . . . H OTHER DRUGS ASPIRIN . . . . . I PARACETOMOL DOCTOR MOM/SEPTRIN/ STOPTUSIN/TONZILGON/ FERVEX/ COLDREX/ THERAFLU . . . . . J WOLTAREN/IBUPROFEN INDOMETACIN/ DICLOFENAC . . . . K OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	ANTIBIOTIC AMOX . . . . . E PENECELIN . . . . . F CEFAZOLIN . . . . . G OTHER ANTIBIOTIC . . . . H OTHER DRUGS ASPIRIN . . . . . I PARACETOMOL DOCTOR MOM/SEPTRIN/ STOPTUSIN/TONZILGON/ FERVEX/ COLDREX/ THERAFLU . . . . . J WOLTAREN/IBUPROFEN INDOMETACIN/ DICLOFENAC . . . . K OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	ANTIBIOTIC AMOX . . . . . E PENECELIN . . . . . F CEFAZOLIN . . . . . G OTHER ANTIBIOTIC . . . . H OTHER DRUGS ASPIRIN . . . . . I PARACETOMOL DOCTOR MOM/SEPTRIN/ STOPTUSIN/TONZILGON/ FERVEX/ COLDREX/ THERAFLU . . . . . J WOLTAREN/IBUPROFEN INDOMETACIN/ DICLOFENAC . . . . K OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z
544A	CHECK 544: ANY CODE E-K CIRCLED?	YES ☐ NO ☐ (SKIP TO 546)	YES ☐ NO ☐ (SKIP TO 546)	YES ☐ NO ☐ (SKIP TO 546)
545	Did you already have (NAME OF DRUG FROM 544) at home when the child became ill? IF YES, CIRCLE CODE FOR THAT DRUG. ASK SEPARATELY FOR EACH ANTIBIOTIC DRUG GIVEN IN 544.	NONE AT HOME . . . A ANTIBIOTIC AMOX . . . . . E PENECELIN . . . . . F CEFAZOLIN . . . . . G OTHER ANTIBIOTIC . . . . H OTHER DRUGS ASPIRIN . . . . . I PARACETOMOL DOCTOR MOM/SEPTRIN/ STOPTUSIN/TONZILGON/ FERVEX/ COLDREX/ THERAFLU . . . . . J WOLTAREN/IBUPROFEN INDOMETACIN/ DICLOFENAC . . . . K OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	NONE AT HOME . . . A ANTIBIOTIC AMOX . . . . . E PENECELIN . . . . . F CEFAZOLIN . . . . . G OTHER ANTIBIOTIC . . . . H OTHER DRUGS ASPIRIN . . . . . I PARACETOMOL DOCTOR MOM/SEPTRIN/ STOPTUSIN/TONZILGON/ FERVEX/ COLDREX/ THERAFLU . . . . . J WOLTAREN/IBUPROFEN INDOMETACIN/ DICLOFENAC . . . . K OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	NONE AT HOME . . . A ANTIBIOTIC AMOX . . . . . E PENECELIN . . . . . F CEFAZOLIN . . . . . G OTHER ANTIBIOTIC . . . . H OTHER DRUGS ASPIRIN . . . . . I PARACETOMOL DOCTOR MOM/SEPTRIN/ STOPTUSIN/TONZILGON/ FERVEX/ COLDREX/ THERAFLU . . . . . J WOLTAREN/IBUPROFEN INDOMETACIN/ DICLOFENAC . . . . K OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z
546		GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 547.	GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 547.	GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 547.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
547	CHECK 213 AND 220, ALL ROWS: NUMBER OF CHILDREN BORN IN 2000 OR LATER LIVING WITH THE RESPONDENT ONE OR MORE ☐ ↓	NONE ☐ →	550
548	The last time (NAME OF YOUNGEST CHILD) 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 DISPOSABLE DIAPERS . . . . . 07 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
549	CHECK 525(a), ALL COLUMNS: NO CHILD RECEIVED FLUID FROM ORS PACKET ☐ ↓	ANY CHILD RECEIVED FLUID FROM ORS PACKET ☐ →	601
550	Have you ever heard of a special product called Rehydron you can get for the treatment of diarrhea?	YES . . . . . 1 NO 2	

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	→ 605
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	→ 604
603	ENTER '0' IN COLUMN 4 OF CALENDAR IN THE MONTH OF INTERVIEW, AND IN EACH MONTH BACK TO #		→ 614
604	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	→ 610
605	Is your (husband/partner) living with you now or is he staying elsewhere?	LIVING WITH HER . . . . . 1 STAYING ELSEWHERE 2	
606	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. . . . . [ ][ ]	
610	Have you been married or lived with a man only once or more than once?	ONLY ONCE . . . . . 1 MORE THAN ONCE 2	
611	CHECK 610: 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 when you started living with your first husband/partner. In what month and year was that?	MONTH . . . . . [ ][ ] DON'T KNOW MONTH . . . . . 98 YEAR . . . . . [ ][ ][ ][ ] DON'T KNOW YEAR 9998	→ 613
612	How old were you when you first started living with him?	AGE . . . . . [ ][ ]	
613	DETERMINE MONTHS MARRIED OR LIVING WITH A MAN SINCE JANUARY 2000. ENTER 'X' IN COLUMN 4 OF CALENDAR FOR EACH MONTH MARRIED OR LIVING WITH A MAN, AND ENTER 'O' FOR EACH MONTH NOT MARRIED/NOT LIVING WITH A MAN, SINCE JANUARY 2000. FOR WOMEN WITH MORE THAN ONE UNION: PROBE FOR DATE WHEN CURRENT UNION STARTED AND, IF APPROPRIATE, FOR STARTING AND TERMINATION DATES OF ANY PREVIOUS UNIONS. FOR WOMEN NOT CURRENTLY IN UNION: PROBE FOR DATE WHEN LAST UNION STARTED AND FOR TERMINATION DATE AND, IF APPROPRIATE, FOR THE STARTING AND TERMINATION DATES OF ANY PREVIOUS UNIONS.		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
614	CHECK FOR THE PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
615	Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family 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	 → 617 → 617
616	Do you intend to wait until you get married to have sexual intercourse for the first time?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/UNSURE 8	→ 637
617	CHECK 105: 15-24 YEARS OLD [ ] ↓ 25-49 YEARS OLD [ ]		→ 622
618	The first time you had sexual intercourse, was a condom used?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/DON'T REMEMBER . . . 8	
619	How old was the person you first had sexual intercourse with?	AGE OF PARTNER . . . . . [ ][ ] DON'T KNOW 98	→ 622
620	Was this person older than you, younger than you, or about the same age as you?	OLDER . . . . . 1 YOUNGER . . . . . 2 ABOUT THE SAME AGE . . . . . 3 DON'T KNOW/DON'T REMEMBER . . . 8	→ 622
621	Would you say this person was ten or more years older than you or less than ten years older than you?	TEN OR MORE YEARS OLDER . . . . . 1 LESS THAN TEN YEARS OLDER . . . 2 OLDER, UNSURE HOW MUCH 3	
622	When was the last time you had sexual intercourse? RECORD 'YEARS AGO' ONLY IF LAST INTERCOURSE WAS ONE OR MORE YEARS AGO. IF 12 MONTHS OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 [ ][ ] WEEKS AGO . . . . . 2 [ ][ ] MONTHS AGO . . . . . 3 [ ][ ] YEARS AGO . . . . . 4 [ ][ ]	→ 624 → 636

NO.	QUESTIONS AND FILTERS	LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER
623	When was the last time you had sexual intercourse with this other person?		DAYS AGO . . . . . 1 WEEKS AGO . . . . 2 MONTHS AGO . . . 3
624	The last time you had sexual intercourse (with this other person), was a condom used?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 626)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 626)
625	Did you use a condom every time you had sexual intercourse with this person in the last 12 months?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
626	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 '02' IF NO, CIRCLE '03'	SPOUSE . . . . . 01 (SKIP TO 632) LIVE-IN PARTNER . . . . . 02 BOYFRIEND NOT LIVING WITH RESPONDENT . . . . . 03 CASUAL ACQUAINTANCE . . . . . 04 COMMERCIAL SEX WORKER . . . . . 05 OTHER _____ 96 (SPECIFY)	SPOUSE . . . . . 01 (SKIP TO 632) LIVE-IN PARTNER . . . . . 02 BOYFRIEND NOT LIVING WITH RESPONDENT . . . . . 03 CASUAL ACQUAINTANCE . . . . . 04 COMMERCIAL SEX WORKER . . . . . 05 OTHER _____ 96 (SPECIFY)
627	For how long (have you had/did you have) a sexual relationship with this person? IF ONLY HAD SEXUAL RELATIONS WITH THIS PERSON ONCE, RECORD '01' DAYS.	DAYS . . . . . 1 MONTHS . . . . . 2 YEARS 3	DAYS . . . . . 1 MONTHS . . . . . 2 YEARS 3
628	CHECK 105:	15 - 24 YEARS OLD 25 - 49 YEARS OLD (SKIP TO 632)	15 - 24 YEARS OLD 25 - 49 YEARS OLD (SKIP TO 632)
629	How old is this person?	AGE OF PARTNER . . . . . . (SKIP TO 632) DON'T KNOW 98	AGE OF PARTNER . . . . . . (SKIP TO 632) DON'T KNOW 98
630	Is this person older than you, younger than you, or about the same age?	OLDER . . . . . 1 YOUNGER . . . . . 2 ABOUT THE SAME AGE . 3 DON'T KNOW . . . . . 8 (SKIP TO 632)	OLDER . . . . . 1 YOUNGER . . . . . 2 ABOUT THE SAME AGE . 3 DON'T KNOW . . . . . 8 (SKIP TO 632)
631	Would you say this person is ten or more years older than you or less than ten years older than you?	TEN OR MORE YEARS OLDER . . . . . 1 LESS THAN TEN YEARS OLDER . . . . . 2 OLDER, UNSURE HOW MUCH 3	TEN OR MORE YEARS OLDER . . . . . 1 LESS THAN TEN YEARS OLDER . . . . . 2 OLDER, UNSURE HOW MUCH 3
632	The last time you had sexual intercourse (with this other person), did you or this person drink alcohol?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 634)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 635)

NO.	QUESTIONS AND FILTERS	LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER
633	Were you or your partner drunk at that time? IF YES: Who was drunk?	RESPONDENT ONLY . . . . . 1 PARTNER ONLY . . . . . 2 RESPONDENT AND PARTNER BOTH . . . . . 3 NEITHER 4	RESPONDENT ONLY . . . . . 1 PARTNER ONLY . . . . . 2 RESPONDENT AND PARTNER BOTH . . . . . 3 NEITHER 4
634	Apart from this person, have you had sexual intercourse with any other person in the last 12 months?	YES . . . . . 1 (GO BACK TO 623 IN NEXT COLUMN) NO . . . . . 2 (SKIP TO 636)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
635	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 GREATER THAN 95, WRITE '95.'	NUMBER OF PARTNERS LAST 12 MONTHS . . . . . [ ][ ] DON'T KNOW 98	
636	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 GREATER THAN 95, WRITE '95.'	NUMBER OF PARTNERS IN LIFETIME . . . . . [ ][ ] DON'T KNOW 98	
637	Do you know of a place where a person can get condoms?	YES . . . . . 1 NO 2	→ 640
638	Where is that? IF SOURCE IS ANY TYPE OF HEALTH FACILITY, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE) Any other place? RECORD ALL SOURCES MENTIONED.	PUBLIC SECTOR HOSPITAL . . . . . B CHILDREN'S HOSPITAL . . . . . C MATERNITY HOSPITAL . . . . . D POLICLINIC . . . . . E ABULATORY . . . . . F WOMEN'S HEALTH CONSULT CTR. G MEDICAL DIAGNOSTIC CENTER . . . H FAP . . . . . I OTHER PUBLIC . . . . . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K CHILDREN'S HOSPITAL . . . . . L MATERNITY HOSPITAL . . . . . M POLICLINIC . . . . . N ABULATORY . . . . . O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER . . . Q FAP . . . . . R OTHER PRIVATE . . . . . S _____ (SPECIFY) OTHER PHARMACY/SHOP . . . . . T NGO . . . . . U FRIEND/RELATIVE/NEIGHBOUR /HUSBAND . . . . . V OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z	
639	If you wanted to, could you yourself get a condom?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/UNSURE 8	
640	Do you know of a place where a person can get female condoms?	YES . . . . . 1 NO 2	→ 701

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
641	Where is that? IF SOURCE IS ANY TYPE OF HEALTH FACILITY, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE) Any other place? RECORD ALL SOURCES MENTIONED.	PUBLIC SECTOR HOSPITAL . . . . . B CHILDREN'S HOSPITAL . . . . . C MATERNITY HOSPITAL . . . . . D POLICLINIC . . . . . E ABULATORY . . . . . F WOMEN'S HEALTH CONSULT CTR. G MEDICAL DIAGNOSTIC CENTER . . . H FAP . . . . . I OTHER PUBLIC . . . . . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K CHILDREN'S HOSPITAL . . . . . L MATERNITY HOSPITAL . . . . . M POLICLINIC . . . . . N ABULATORY . . . . . O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER . . . Q FAP . . . . . R OTHER PRIVATE . . . . . S _____ (SPECIFY) OTHER PHARMACY/SHOP . . . . . T NGO . . . . . U FRIEND/RELATIVE/NEIGHBOUR . . . V OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z	
642	If you wanted to, could you yourself get a female condom?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/UNSURE 8	

SECTION 7. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	CHECK 311/311A: NEITHER STERILIZED ☐ HE OR SHE STERILIZED ☐		→ 713
702	CHECK 226: NOT PREGNANT OR UNSURE ☐ 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? PREGNANT ☐ 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 (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS SHE CAN'T GET PREGNANT . 3 UNDECIDED/DON'T KNOW: AND PREGNANT . . . . . 4 AND NOT PREGNANT OR UNSURE 5	 → 704 → 713 → 709 → 708
703	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	 → 708 → 713 → 708
704	CHECK 226: NOT PREGNANT OR UNSURE ☐ PREGNANT ☐		→ 709
705	CHECK 310: USING A CONTRACEPTIVE METHOD? NOT ASKED ☐ NOT CURRENTLY USING ☐ CURRENTLY USING ☐		→ 713
706	CHECK 703: NOT ASKED ☐ 24 OR MORE MONTHS OR 02 OR MORE YEARS ☐ 00-23 MONTHS OR 00-01 YEAR ☐		→ 709

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
707	CHECK 702: WANTS TO HAVE A/ANOTHER CHILD You have said that you do not want (a/another) child soon, but you are not using any method to avoid pregnancy. Can you tell me why you are not using a method? Any other reason? WANTS NO MORE/ NONE You have said that you do not want any (more) children, but you are not using any method to avoid pregnancy. Can you tell me why you are not using a method? Any other reason? RECORD ALL REASONS MENTIONED.	NOT MARRIED . . . . . A FERTILITY-RELATED REASONS NOT HAVING SEX . . . . . B INFREQUENT SEX . . . . . C MENOPAUSAL/HYSTERECTOMY . D SUBFECUND/INFECUND . . . . . E POSTPARTUM AMENORRHEIC . . . F BREASTFEEDING . . . . . G 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 HEALTH CONCERNS . . . . . O FEAR OF SIDE EFFECTS . . . . . P LACK OF ACCESS/TOO FAR . . . . . Q COSTS TOO MUCH . . . . . R INCONVENIENT TO USE . . . . . S INTERFERES WITH BODY'S NORMAL PROCESSES . . . . . T OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
708	CHECK 310: USING A CONTRACEPTIVE METHOD? NOT ASKED NO, NOT CURRENTLY USING YES, CURRENTLY USING		→ 713
709	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	→ 711
710	Which contraceptive method would you prefer to use?	FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 PILL . . . . . 03 IUD . . . . . 04 INJECTABLES . . . . . 05 IMPLANTS . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 SUPPOSITORY/FOAM/JELLY . . . . . 10 LACTATIONAL AMEN. METHOD . . . . . 11 RHYTHM METHOD . . . . . 12 WITHDRAWAL . . . . . 13 OTHER _____ 96 (SPECIFY) UNSURE 98	→ 713

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
711	What is the main reason that you think you will not use a contraceptive method at any time in the future?	NOT MARRIED . . . . . 11 FERTILITY-RELATED REASONS INFREQUENT SEX/NO SEX . . . 22 MENOPAUSAL/HYSTERECTOMY 23 SUBFECUND/INFECUND . . . . . 24 WANTS AS MANY CHILDREN AS POSSIBLE . . . . . 26 OPPOSITION TO USE RESPONDENT OPPOSED . . . . . 31 HUSBAND/PARTNER OPPOSED 32 OTHERS OPPOSED . . . . . 33 RELIGIOUS PROHIBITION . . . . . 34 LACK OF KNOWLEDGE KNOWS NO METHOD . . . . . 41 KNOWS NO SOURCE . . . . . 42 METHOD-RELATED REASONS HEALTH CONCERNS . . . . . 51 FEAR OF SIDE EFFECTS . . . . . 52 LACK OF ACCESS/TOO FAR . . . 53 COSTS TOO MUCH . . . . . 54 INCONVENIENT TO USE . . . . . 55 INTERFERES WITH BODY'S NORMAL PROCESSES . . . . . 56 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	→ 713
712	Would you ever use a contraceptive method if you were married?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
713	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)	→ 715 → 715
714	How many of these children would you like to be boys, how many would you like to be girls and for how many would the sex not matter?	BOYS GIRLS EITHER NUMBER ☐☐ ☐☐ ☐☐ OTHER _____ 96 (SPECIFY)	
715	In the last few months have you heard about family planning: On the radio? On the television? In a newspaper or magazine? In a pamphlet/poster/leaflets/booklets? At a community event?	YES NO RADIO . . . . . 1 2 TELEVISION . . . . . 1 2 NEWSPAPER OR MAGAZINE . . . 1 2 PAMPHLET, ETC. . . . . 1 2 COMMUNITY EVENT 1 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
717	CHECK 601: YES, CURRENTLY MARRIED ☐ ↓ YES, LIVING WITH A MAN ☐ ↓ NO, NOT IN UNION ☐		→ 723
718	CHECK 311/311A: NEITHER CODE B NOR CODE G CIRCLED, BUT SOME OTHER CODE(S) CIRCLED ☐ ↓ CODE B OR G CIRCLED ☐ NO CODE CIRCLED ☐		→ 720 → 722
719	Does your husband/partner know that you are using a method of family planning?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
720	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)	
721	CHECK 311/311A: NEITHER STERILIZED ☐ ↓ HE OR SHE STERILIZED ☐		→ 723
722	Do you think your husband/partner wants 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	
723	Husbands and wives do not always agree on everything. Please tell me if you think a wife is justified in refusing to have sex with her husband when: She knows her husband has a sexually transmitted disease? She knows her husband has sex with other women? She is tired or not in the mood?	YES NO DK HAS STD . . . . . 1 2 8 OTHER WOMEN . . . . . 1 2 8 TIRED/NOT IN MOOD 1 2 8	
724	Do you know how to give yourself a breast exam?	YES . . . . . 1 NO 2	→ 726
725	Have you ever given yourself a breast exam? IF YES: When was the last time that you gave yourself a breast exam?	MONTHS AGO . . . . . ☐☐ NEVER GAVE EXAM 95	
726	Has a health care provider ever given you a breast exam? IF YES: When was the last time a health care provider gave you a breast exam?	MONTHS AGO . . . . . ☐☐ NEVER RECEIVED EXAM 95	
727	Have you ever visited a gynocologist?	YES . . . . . 1 NO 2	→ 731
728	When was the last time you visited the gynocologist?	DAYS AGO . . . . . 1 ☐☐ WEEKS AGO . . . . . 2 ☐☐ MONTHS AGO . . . . . 3 ☐☐ YEARS AGO . . . . . 4 ☐☐	
729	CHECK 728 FIVE YEARS OR LESS ☐ MORE THAN FIVE YEARS ☐		→

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
			→ 731
730	Why did you visit the gynocologist?	ROUTINE VISITS ROUNTINE EXAMINATION . . . . . A FAMILY PLANNING . . . . . B PRENATAL CARE . . . . . C POSTNATAL CARE . . . . . D DELIVERY . . . . . E OTHER ROUTINE _____ F (SPECIFY) MEDICAL PROBLEMS GENITAL DISCHARGES . . . . . G GENITAL SORES/ULCERS . . . . . H GENITAL WARTS . . . . . I OPERATIONS . . . . . J STERILITY . . . . . K ABORTION . . . . . L OTHER PROBLEM _____ M (SPECIFY) OTHER _____ X (SPECIFY) DOESN'T REMEMBER . . . . . Z	
731	CHECK 209D: '00' PREGNANCIES ☐ ↓ '01' OR MORE PREGNANCIES ☐		→ 801
732	CHECK 226: NOT PREGNANT ☐ ↓ PREGNANT ☐		→ 801
733	You have already told me that you have never been pregnant. Please tell me, have you ever tried to get pregnant?	YES . . . . . 1 NO 2	→ 801
734	How old were you the first time you tried to get pregnant?	AGE . . . . . ☐☐ DON'T KNOW AGE 98	
735	How long were you trying to get pregnant?	LESS THAN 1 YEAR . . . . . 1 1 TO 3 YEARS . . . . . 2 3 TO 5 YEARS . . . . . 3 5 YEARS AND MORE 4	→ 801
736	Did you receive any examination to determine whether you have infertility?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 801
737	Where was the examination performed? RECORD ALL SOURCES MENTIONED.	PUBLIC SECTOR HOSPITAL . . . . . B CHILDREN'S HOSPITAL . . . . . C MATERNITY HOSPITAL . . . . . D POLICLINIC . . . . . E ABULATORY . . . . . F WOMEN'S HEALTH CONSULT CTR. G MEDICAL DIAGNOSTIC CENTER . . . H FAP . . . . . I OTHER PUBLIC . . . . . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K CHILDREN'S HOSPITAL . . . . . L MATERNITY HOSPITAL . . . . . M POLICLINIC . . . . . N	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
		ABULATORY . . . . . O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER . . . Q FAP . . . . . R OTHER PRIVATE . . . . . S _____ (SPECIFY) OTHER PHARMACY/SHOP . . . . . T NGO . . . . . U FRIEND/RELATIVE/NEIGHBOUR . . . V TRADITIONAL HEALER . . . . . W OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z	
738	What kind of exam did they do?	GENERAL GYNECOLOGY OBSERVATIOI A HORMONAL . . . . . B ECHOGRAPHY . . . . . C UTERUS AND TUBING XRAY . . . . . D LABORASCOPE . . . . . E EXAMINATION OF PAPSMEAR . . F EXAMINATION OF GENITAL INFECTIONS G ANY OTHER _____ X (SPECIFY) DK/DON'T REMEMBER Z	
739	Can you tell me what was diagnosed as the reason for the infertility? RECORD ALL MENTIONED.	SEXUAL FUNCTION DISORDER . . . A HIGH LEVELS OF BLOOD PROLACTIN . . . . . B OVULATION DISORDER . . . . . C UNILATERAL UTERO-TUBAL OCCLUSION . . . . . D BILATERAL UTERO-TUBAL OCCLUSION . . . . . E SMALL PELVIC CAVITY ADHESIONS F OVARIAN CYSTS . . . . . G ENDOMETRIOSIS . . . . . H UTERINE MYOMAS . . . . . I UTERO-CERVICAL ERASIONS . J OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
740	Have you had any treatment for infertility?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 801
741	Please, tell me, what kind of treatment did you get? RECORD ALL MENTIONED.	VITAMINS/BIOSTIMULATORS . . . . . A ANTIBIOTIC/SULFANILANIDNER . B HORMONE . . . . . C TRADITIONAL METHODS . . . . D PHYSICAL THERAPY . . . . . E ARTIFICIAL INSEMINATION . . . . F ARTIFICIAL FERTILISATION . . . . G OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	

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
804	What was the highest level of school he attended: primary/secondary, secondary special or higher?	PRIMARY/SECONDARY (1-10) . . . . 1 SECONDARY SPECIAL . . . . . 2 HIGHER . . . . . 3 DON'T KNOW 8	→ 806
805	What was the highest (grade/form/year) he completed at that level?	GRADE . . . . . ☐☐ DON'T KNOW 98	
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	→ 818
811	What is your occupation, that is, what kind of work do you mainly do?	_____ ☐☐ _____ _____	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
812	CHECK 811: WORKS IN AGRICULTURE ☐ DOES NOT WORK IN AGRICULTURE ☐		→ 814
813	Do you work mainly on your own land or on family land, or do you work on land that you rent from someone else, or do you work on someone else's land?	OWN LAND . . . . . 1 FAMILY LAND . . . . . 2 RENTED LAND . . . . . 3 SOMEONE ELSE'S LAND 4	
814	Who employs you for this work? 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	
815	Do you usually work at home or away from home?	HOME . . . . . 1 AWAY 2	
816	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	
817	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	
818	CHECK 601: CURRENTLY MARRIED/LIVING WITH A MAN ☐ NOT IN UNION ☐		→ 824
819	CHECK 817: CODE 1 OR 2 CIRCLED ☐ OTHER ☐		→ 822
820	Who decides how the money you earn will be used: mainly you, mainly your husband/partner, or you and your husband/partner jointly?	RESPONDENT . . . . . 1 HUSBAND/PARTNER . . . . . 2 RESPONDENT AND HUSBAND/PARTNER JOINTLY . . . 3 OTHER _____ 6 (SPECIFY)	
821	Would you say that the money that you bring into the household is more than what your husband/partner brings in, less than what he brings in, or about the same?	MORE THAN HIM . . . . . 1 LESS THAN HIM . . . . . 2 ABOUT THE SAME . . . . . 3 HUSBAND/PARTNER DOESN'T BRING IN ANY MONEY . . . . . 4 DON'T KNOW 8	→ 823

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
822	Who decides how your husband's/partner's earnings will be used: mainly you, mainly 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)	
823	Who usually makes decisions about health care for yourself: mainly you, mainly your husband/partner, you and your husband/partner jointly, or someone else? Who usually makes decisions about making major household purchases? Who usually makes decisions about making purchases for daily household needs? Who usually makes decisions about visits to your family or relatives?	RESPONDENT = 1 HUSBAND/PARTNER = 2 RESPONDENT & HUSBAND/PARTNER JOINTLY = 3 SOMEONE ELSE = 4 OTHER = 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5 1 2 3 4 5	
824	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 8 HUSBAND . . . . . 1 2 8 OTHER MALES . . . . . 1 2 8 OTHER FEMALES . . . 1 2 8	
825	Sometimes a husband is annoyed or angered by things that his wife does. 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 AND OTHER SEXUALLY TRANSMITTED INFECTIONS

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	→ 917
902	Can people reduce their chances of getting the AIDS virus by having just one sex partner who is not infected and who has no other 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 chances 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 reduce their chance of getting the AIDS virus by abstaining from sexual intercourse?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
907	Can people get the AIDS virus because of witchcraft or other supernatural means?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
907A	Can people get the AIDS virus from coughing?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
908	Is there anything else a person can do to avoid or reduce the chances of getting the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 910
909	What can a person do? Anything else? RECORD ALL WAYS MENTIONED.	ABSTAIN FROM SEX . . . . . A USE CONDOMS . . . . . B LIMIT SEX TO ONE PARTNER/STAY FAITHFUL TO ONE PARTNER . . . C LIMIT NUMBER OF SEXUAL PARTNERS . . . . . D AVOID SEX WITH PROSTITUTES . . . E AVOID SEX WITH PERSONS WHO HAVE MANY PARTNERS . . . . . F AVOID SEX WITH HOMOSEXUALS . G AVOID SEX WITH PERSONS WHO INJECT DRUGS . . . . . H AVOID BLOOD TRANSFUSIONS . . . . . I AVOID INJECTIONS . . . . . J AVOID SHARING RAZORS/BLADES . K AVOID KISSING . . . . . L AVOID MOSQUITO BITES . . . . . M SEEK PROTECTION FROM TRADITIONAL PRACTITIONER . . . N OTHER _____ W (SPECIFY) OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
910	Is it possible for a healthy-looking person to have the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
911	Do you know of a place where people can go to get tested for the virus that causes AIDS?	YES . . . . . 1 NO 2	→ 913
912	Where is that? IF SOURCE IS ANY TYPE OF HEALTH FACILITY, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. Any other place? RECORD ALL SOURCES MENTIONED. _____ (NAME OF PLACE)	PUBLIC SECTOR HOSPITAL . . . . . B CHILDREN'S HOSPITAL . . . . . C MATERNITY HOSPITAL . . . . . D POLICLINIC . . . . . E ABULATORY . . . . . F WOMEN'S HEALTH CONSULT CTR. G MEDICAL DIAGNOSTIC CENTER . . . H FAP . . . . . I OTHER PUBLIC . . . . . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K CHILDREN'S HOSPITAL . . . . . L MATERNITY HOSPITAL . . . . . M POLICLINIC . . . . . N ABULATORY . . . . . O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER . . . Q FAP . . . . . R OTHER PRIVATE . . . . . S _____ (SPECIFY) OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z	
913	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	
914	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	
915	If a relative of yours became sick with the virus that causes AIDS, would you be willing to care for her or him in your own household?	YES . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
916	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	
917	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	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
918	CHECK 615: HAS HAD SEXUAL INTERCOURSE ↓ HAS NOT HAD SEXUAL INTERCOURSE →		1001
919	CHECK 917: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES ↓ NO →		921
920	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	
921	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	
922	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	
923	CHECK 920, 921, AND 922: HAS HAD AN INFECTION (ANY 'YES') ↓ HAS NOT HAD AN INFECTION OR DOES NOT KNOW →		1001
924	The last time you had (PROBLEM FROM 920/921/922), did you seek any kind of advice or treatment?	YES . . . . . 1 NO 2	→ 1001
925	Where did you go? IF SOURCE IS ANY TYPE OF HEALTH FACILITY, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE) Any other place? RECORD ALL SOURCES MENTIONED.	PUBLIC SECTOR HOSPITAL . . . . . B CHILDREN'S HOSPITAL . . . . . C MATERNITY HOSPITAL . . . . . D POLICLINIC . . . . . E ABULATORY . . . . . F WOMEN'S HEALTH CONSULT CTR. G MEDICAL DIAGNOSTIC CENTER . . . H FAP . . . . . I OTHER PUBLIC . . . . . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K CHILDREN'S HOSPITAL . . . . . L MATERNITY HOSPITAL . . . . . M POLICLINIC . . . . . N ABULATORY . . . . . O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER . . . Q FAP . . . . . R OTHER PRIVATE . . . . . S _____ (SPECIFY) OTHER PHARMACY/SHOP . . . . . T NGO . . . . . U FRIEND/RELATIVE/NEIGHBOUR . . . V OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z	

SECTION 10. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1001	Have you had an illness, an accident, or suffered from a diagnosed chronic health problem in the last 3 months?	YES . . . . . 1 NO 2	→ 1005
1002	What kind of health problem? IF MORE THAN ONE, RECORD MOST RECENT PROBLEM.	ACCIDENT/INJURY . . . . . 01 CARDIOVASCULAR . . . . . 02 DIABETES . . . . . 03 KIDNEY DISORDER . . . . . 04 RESPIRATORY . . . . . 05 ABORTION . . . . . 06 PREGNANCY RELATED . . . . . 07 OTHER ILLNESS . . . . . 08 OTHER _____ 96 (SPECIFY)	
1003	In the last 3 months, did you visit a health facility or consult a health professional?	YES . . . . . 1 NO 2	→ 1006
1004	Why was nothing done?	MINOR HEALTH PROBLEM . . . . . A LONG DISTANCE TO PROVIDER . . . B GOOD CARE NOT AVAILABLE . . . C LONG WAIT AT PROVIDER . . . . . D LACK OF FUNDS FOR MEDICINE . . . E LACK OF FUNDS FOR TRAVEL . . . F TRANSPORT UNAVAILABLE . . . . . G RESPONSIBILITIES AT HOME . . . . . H RESPONSIBILITIES AT WORK . . . . . I CONSULTED TRADITIONAL PRACTITIONER . . . . . J OTHER X _____ (SPECIFY) DON'T KNOW . . . . . Z	→ 1006K
1005	In the last 3 months, did you visit a health facility or consult a health professional?	YES . . . . . 1 NO 2	→ 1006K
1006	In the last three months, how many times did you visit a health facility or consult with a health professional?	NUMBER OF TIMES [ ][ ]	
1006A	Now I'm going to ask you about the (last) visit you made in the last three months. Did you undergo an operation during that (last) visit?	YES . . . . . 1 NO 2	
1006B	Where did the (last) visit/consultation take place?	HOME . . . . . 01 PUBLIC SECTOR HOSPITAL . . . . . 11 CHILDREN'S HOSPITAL . . . . . 12 MATERNITY HOSPITAL . . . . . 13 POLICLINIC . . . . . 14 ABULATORY . . . . . 15 WOMEN'S HEALTH CONSULT CTR. 16 MEDICAL DIAGNOSTIC CENTER . . . 17 FAP . . . . . 18 OTHER PUBLIC . 26 _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . 31 CHILDREN'S HOSPITAL . 32 MATERNITY HOSPITAL . 33 POLICLINIC . 34 ABULATORY . 35 WOMEN'S HEALTH CONSULT CTR. 36	→ 1006F

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
		MEDICAL DIAGNOSTIC CENTER . . . 37 FAP . 38 OTHER PRIVATE . 46 _____ (SPECIFY) OTHER PHARMACY/SHOP . 51 NGO . 52 FRIEND/RELATIVE/NEIGHBOUR . . . 53 OTHER . 96 _____ (SPECIFY) DON'T KNOW . 98	→ 1006F
1006C	When you had the (last) visit/consultation, how did you get there?	BY FOOT . . . . . 01 TAXI . . . . . 02 MINI-BUS . . . . . 03 BUS/TROLLY/METRO . . . . . 04 HOUSEHOLD CAR . . . . . 05 OTHER CAR . . . . . 06 AMBULANCE . . . . . 07 OTHER _____ 96 (SPECIFY)	→ 1006E → 1006E → 1006E → 1006E
1006D	Altogether, how much was paid for transportation, round-trip, to go to the (PLACE FROM Q1006B) the last time had a visit/consultation?	COST [ ][ ][ ][ ][ ] NOTHING . . . . . 00000 DON'T KNOW 99998	
1006E	How long did it take you to go to the (PLACE FROM Q1006B) for the visit/consultation?	MINUTES . . . . . [ ][ ][ ] DON'T KNOW 998	
1006F	Altogether, how much was officially paid for your (last) visit?	COST [ ][ ][ ][ ][ ][ ][ ] FREE . . . . . 0000000 DON'T KNOW 9999998	
1006G	How much did you pay in additional expenses for that (last) visit?	COST [ ][ ][ ][ ][ ][ ][ ] NOTHING . . . . . 0000000 DON'T KNOW 9999998	
1006H	Did you obtain any medicine as a result of the visit/consultation?	YES . . . . . 1 NO 2	→ 1006K
1006I	Where did you obtain the medicine for that consultation?	HOME . . . . . A PUBLIC SECTOR HOSPITAL . . . . . B CHILDREN'S HOSPITAL . . . . . C MATERNITY HOSPITAL . . . . . D POLICLINIC . . . . . E ABULATORY . . . . . F WOMEN'S HEALTH CONSULT CTR. G MEDICAL DIAGNOSTIC CENTER . . . H FAP . . . . . I OTHER PUBLIC . . . . . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K CHILDREN'S HOSPITAL . . . . . L MATERNITY HOSPITAL . . . . . M POLICLINIC . . . . . N ABULATORY . . . . . O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER . . . Q FAP . . . . . R OTHER PRIVATE . . . . . S _____ (SPECIFY)	→ 1006K

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
		OTHER PHARMACY/SHOP . . . . . T NGO . . . . . U FRIEND/RELATIVE/NEIGHBOUR . . . V OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z	
1006J	How much was paid the (last) time the medicine was obtained?	COST [ ][ ][ ][ ][ ][ ][ ] FREE ..... 0000000 DON'T KNOW 9999998	
1006K	Have you taken any (other) medicines during the last 3 months?	YES . . . . . 1 NO 2	→ 1006N
1006L	Where did you obtain that (other) medicine the last time?	HOME . . . . . A PUBLIC SECTOR HOSPITAL . . . . . B CHILDREN'S HOSPITAL . . . . . C MATERNITY HOSPITAL . . . . . D POLICLINIC . . . . . E ABULATORY . . . . . F WOMEN'S HEALTH CONSULT CTR. G MEDICAL DIAGNOSTIC CENTER . . . H FAP . . . . . I OTHER PUBLIC . . . . . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K CHILDREN'S HOSPITAL . . . . . L MATERNITY HOSPITAL . . . . . M POLICLINIC . . . . . N ABULATORY . . . . . O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER . . . Q FAP . . . . . R OTHER PRIVATE . . . . . S _____ (SPECIFY) OTHER PHARMACY/SHOP . . . . . T NGO . . . . . U FRIEND/RELATIVE/NEIGHBOUR . . . V OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z	→ 1006N
1006M	How much was paid the (last) time you obtained the medicine?	COST [ ][ ][ ][ ][ ][ ][ ] FREE ..... 0000000 DON'T KNOW 9999998	
1006N	CHECK 1002 CODE '06' NOT CIRCLED ↓ CODE '06' CIRCLED →		1007
1006O	CHECK 212 AND 213 ANY ABORTION IN LAST 12 MONTHS ↓ NO ABORTION IN LAST 12 MONTHS →		1007
1006P	Where did your last abortion take place?	PUBLIC SECTOR HOSPITAL . 11 CHILDREN'S HOSPITAL . 12	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
		MATERNITY HOSPITAL . 13 POLICLINIC . 14 ABULATORY . 15 WOMEN'S HEALTH CONSULT CTR. 16 MEDICAL DIAGNOSTIC CENTER . . . 17 OTHER PUBLIC . 26 _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . 31 CHILDREN'S HOSPITAL . 32 MATERNITY HOSPITAL . 33 POLICLINIC . 34 ABULATORY . 35 WOMEN'S HEALTH CONSULT CTR. 36 MEDICAL DIAGNOSTIC CENTER . . . 37 OTHER PRIVATE . 46 _____ (SPECIFY) OTHER . 96 _____ (SPECIFY) DON'T KNOW . 98	
1006Q	The (last) time you had an abortion, how much did you officially pay in total, including any consultation, procedures, and follow-up?	COST [ ][ ][ ][ ][ ][ ][ ] FREE . . . . . 0000000 DON'T KNOW 9999998	
1006R	How much did you pay in additional expenses the (last) time you had an abortion?	COST [ ][ ][ ][ ][ ][ ][ ] NOTHING . . . . . 0000000 DON'T KNOW 9999998	
1007	CHECK 212 AND 213 ANY LIVE BIRTH IN LAST 12 MONTHS ↓ NO BIRTH IN LAST 12 MONTHS [ ] →		1007C
1007A	CHECK 433 LAST BIRTH IN HEALTH FACILITY ↓ LAST BIRTH IN OTHER PLACE [ ] →		1007C
1007B	Except for the birth of your last child, have you stayed overnight in a hospital in the 12 months for any reason concerning your own health?	YES . . . . . 1 NO 2	→ 1007D → 1008
1007C	Have you stayed overnight in a hospital in the last year for any reason concerning your own health?	YES . . . . . 1 NO 2	→ 1008
1007D	During the last 12 months, on how many different occasions were you hospitalized (excluding the birth)?	NUMBER OF TIMES [ ][ ]	
1007E	Now I'm going to ask you about the (last) time you were hospitalized. What health problem led you to be hospitalized?	ACCIDENT/INJURY . . . . . 01 CARDIOVASCULAR . . . . . 02 DIABETES . . . . . 03 KIDNEY DISORDER . . . . . 04 RESPIRATORY . . . . . 05 ABORTION . . . . . 06 PREGNANCY RELATED . . . . . 07 OTHER ILLNESS . . . . . 08 OTHER _____ 96 (SPECIFY)	
1007F	Did you undergo an operation during that (last) visit?	YES . . . . . 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1007G	When you had the (last) hospitalization, how did you get there?	BY FOOT . . . . . 01 TAXI . . . . . 02 MINI-BUS . . . . . 03 BUS/TROLLY/METRO . . . . . 04 HOUSEHOLD CAR . . . . . 05 OTHER CAR . . . . . 06 AMBULANCE . . . . . 07 OTHER _____ 96 (SPECIFY)	→ 1007I → 1007I → 1007I → 1007I
1007H	Altogether, how much was paid for transportation, round-trip, when you were (last) hospitalized?	COST [ ][ ][ ][ ][ ] NOTHING . . . . . .000000 DON'T KNOW 999998	
1007I	How long did it take you to go to the hospital the last time you were hospitalized?	MINUTES . . . . . [ ][ ][ ] DON'T KNOW 998	
1007J	Altogether, how much was officially paid for your (last) hospitalization?	COST [ ][ ][ ][ ][ ][ ][ ] FREE . . . . . 0000000 DON'T KNOW 9999998	
1007K	How much did you pay in additional expenses for that (last) hospitalization?	COST [ ][ ][ ][ ][ ][ ][ ] NOTHING. . . . . .0000000 DON'T KNOW 9999998	
1007L	Did you obtain any medicine during your hospitalization?	YES . . . . . .1 NO 2	 → 1008
1007M	Where did you obtain the medicine for the hospitalization?	HOME . . . . . A PUBLIC SECTOR HOSPITAL . . . . . B CHILDREN'S HOSPITAL . . . . . C MATERNITY HOSPITAL . . . . . D POLICLINIC . . . . . E ABULATORY . . . . . F WOMEN'S HEALTH CONSULT CTR. G MEDICAL DIAGNOSTIC CENTER . . . H FAP . . . . . I OTHER PUBLIC . . . . . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K CHILDREN'S HOSPITAL . . . . . L MATERNITY HOSPITAL . . . . . M POLICLINIC . . . . . N ABULATORY . . . . . O WOMEN'S HEALTH CONSULT CTR. P MEDICAL DIAGNOSTIC CENTER . . . Q FAP . . . . . R OTHER PRIVATE . . . . . S _____ (SPECIFY) OTHER PHARMACY/SHOP . . . . . T NGO . . . . . U FRIEND/RELATIVE/NEIGHBOUR . . . V OTHER. . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z	→ 1008
1007N	How much was paid the (last) time the medicine was obtained?	[ ][ ][ ][ ][ ][ ][ ]	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
		COST [ ][ ][ ][ ][ ][ ][ ] FREE ..... 0000000 DON'T KNOW 9999998	
1008	These next questions are about blood pressure. Has your blood pressure ever been checked by a doctor or other health professional?	YES . . . . . 1 NO 2	→ 1017
1009	When was the last time you had your blood pressure checked by a doctor or other health professional?	LESS THAN 6 MONTHS AGO . . . . . 1 6 - 11 MONTHS AGO . . . . . 2 1 - 5 YEARS AGO . . . . . 3 MORE THAN 5 YEARS AGO . . . . . 4 DON'T KNOW 8	
1010	Who took your blood pressure?	DOCTOR . . . . . 1 NURSE/MIDWIFE . . . . . 2 FELDSHER . . . . . 3 FAMILY NURSE . . . . . 4 OTHER _____ 6 (SPECIFY)	
1011	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	 → 1017 → 1017
1012	Were you told on 2 or more different visits that you had hypertension or high blood pressure?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1013	Did a doctor or other health professional tell you what to do about your hypertension or high blood pressure?	YES . . . . . 1 NO 2	 → 1017
1014	Who told you this?	DOCTOR . . . . . 1 NURSE/MIDWIFE . . . . . 2 FELDSHER . . . . . 3 FAMILY NURSE . . . . . 4 OTHER _____ 6 (SPECIFY)	
1015	Did the doctor or the other health professional tell you to: a. take prescribed oral medicine? . . . . . . b. receive an injection . . . . . . c. take asprin . . . . . . d. control your weight or lose weight? . . . . . . e. cut down on salt in your diet? . . . . . . f. exercise more? . . . . . . g. cut down on alcohol? . . . . . . h. stop smoking? . . . . . . i. do other things? . . . . . . PROBE: What other things?	YES NO TAKE MEDICINE . . . . . 1 2 INJECTION . . . . . 1 2 TAKE ASPRIN . . . . . 1 2 CONTROL WEIGHT . . . . . 1 2 CUT DOWN ON SALT . . . . . 1 2 EXERCISE . . . . . 1 2 CUT DOWN ALCOHOL . . . . . 1 2 STOP SMOKING . . . . . 1 2 DO OTHER THINGS . . . . . 1 2 ↓ _____ (SPECIFY)	
1016	To lower your hypertension or high blood pressure, are you now: a. taking prescribed oral medicine?. . . . . . b. take asprin . . . . . . c. controlling your weight or lose weight? . . . . . . d. cutting down on salt in your diet? . . . . . . e. exercising? . . . . . . f. cutting down on alcohol consumption? . . . . . . g. stopping smoking?	YES NO N/A TAKE MEDICINE . . . . . 1 2 3 TAKE ASPRIN . . . . . 1 2 3 CONTROL WEIGHT . . . 1 2 3 CUT DOWN ON SALT . . . 1 2 3 EXERCISE . . . . . 1 2 3 CUT DOWN ALCOHOL 1 2 3 STOP SMOKING 1 2 3	
1017	Now I would like to ask you some questions about any injections you have had in the last 12 months. 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 GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . [ ][ ] NONE 00	 → 1021

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1018	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 GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . [ ][ ] NONE 00	→ 1021
1019	The last time you had an injection given to you by a health worker, where did you go to get the injection? IF SOURCE IS ANY TYPE OF HEALTH FACILITY, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	HOME . . . . . 01 PUBLIC SECTOR HOSPITAL . . . . . 11 CHILDREN'S HOSPITAL . . . . . 12 MATERNITY HOSPITAL . . . . . 13 POLICLINIC . . . . . 14 ABULATORY . . . . . 15 WOMEN'S HEALTH CONSULT CTR. 16 MEDICAL DIAGNOSTIC CENTER . . . 17 FAP . . . . . 18 OTHER PUBLIC . . . . . 26 _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . 31 CHILDREN'S HOSPITAL . . . . . 32 MATERNITY HOSPITAL . . . . . 33 POLICLINIC . . . . . 34 ABULATORY . . . . . 35 WOMEN'S HEALTH CONSULT CTR. 36 MEDICAL DIAGNOSTIC CENTER . . . 37 FAP . . . . . 38 OTHER PRIVATE . . . . . 46 _____ (SPECIFY) OTHER PHARMACY/SHOP . . . . . 51 NGO . . . . . 52 FRIEND/RELATIVE/NEIGHBOUR . . . 53 OTHER . . . . . 96 _____ (SPECIFY) DON'T KNOW 98	
1020	Did the person who gave you that injection take the syringe and needle from a new, unopened package?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1021	Now I'd like to ask you about tobacco use. Have you smoked at least 100 cigarettes during your entire life?	YES . . . . . 1 NO 2	
1022	Do you currently smoke cigarettes?	YES . . . . . 1 NO 2	→ 1024
1023	In the last 24 hours, how many cigarettes did you smoke?	CIGARETTES . . . . . [ ][ ]	
1024	Do you currently smoke or use any other type of tobacco?	YES . . . . . 1 NO 2	→ 1026
1025	What (other) type of tobacco do you currently smoke or use? RECORD ALL MENTIONED.	PIPE . . . . . A CHEWING TOBACCO . . . . . B SNUFF . . . . . C OTHER _____ X (SPECIFY)	
1026	Do you live in a household in which (other) people smoke on a daily basis?	YES . . . . . 1 NO 2	
1027	Have you ever heard of an illness called tuberculosis or TB?	YES . . . . . 1 NO 2	→ 1033

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1028	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	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1029	What are the signs or symptoms would lead you to think that a person has tuberculosis? Any others? RECORD ALL MENTIONED?	COUGHING . . . . . A COUGHING WITH SPUTUM . . . . . B COUGHING 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 PALENESS . . . . . K OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
1030	Can tuberculosis be cured?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1031	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	
1032	Have you ever been told by a doctor or other health professional that you had tuberculosis?	YES . . . . . 1 NO 2	
1033	Now I would like to ask you some questions about medical care for you yourself. 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?	YES NO	
	Getting permission to go.	PERMISSION TO GO . . . 1 2	
	Getting money needed for treatment.	GETTING MONEY 1 2	
	The distance to the health facility.	DISTANCE 1 2	
	The cost of transport	COST 1 2	
	Having to take transport.	TAKING TRANSPORT . . . 1 2	
	Not wanting to go alone.	GO ALONE 1 2	
	Concern that there may not be a female health provider.	NO FEMALE PROV. 1 2	
	Concern that there may not be any health provider.	NO PROVIDER 1 2	
	Concern that the health care provider will be unfriendly	UNFRIENDLY PROV 1 2	
	Concern that there may be no drugs available.	NO DRUGS 1 2	
	Concern that medical service will be poor.	POOR SERVICE 1 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1034	Have you heard about "family medicine?" If not, how about a "family doctor?"	YES . . . . . 1 NO 2	→ 1042
1035	What does this term mean to you?	ONLY ONE DOCTOR FOR FAMILY . . . A PREVENTATIVE HEALTH CARE B FAMILY PLANNING . . . . . C INDIVIUAL'S CHOOSE . . . . . D HEALTH CARE FOR REACHERS . . . . . E BETTER FAMILY HEALTH . . . F NO MEANING . . . . . G OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
1036	Do you think that "family medicine" is appropriate for Armenia?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/UNSURE 8	→ 1038 → 1039
1037	Why do you think that it is appropriate?	CONVENIENT . . . . . A GOOD ADVICE . . . . . B CHEAP/ACCESSIBLE . . . . . C PRODUCTIVE . . . . . D OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	→ 1039
1038	Why do you think it is not appropriate?	NOT PROFESSIONAL . . . . . A LESS KNOWLEDGABLE . . . . . B NO SPECIFIC KNOWLEDGE . . . . . C DON'T TRUST DOCTOR . . . D PREFER OLD SYSTEM . . . . . E EXPENSIVE . . . . . F OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
1039	Have you ever been registered with a family doctor?	YES . . . . . 1 NO 2	→ 1042
1040	How long have you had a family doctor?	DAYS AGO . . . . . 1 [ ][ ] WEEKS AGO . . . . . 2 [ ][ ] MONTHS AGO . . . . . 3 [ ][ ] YEARS AGO . . . . . 4 [ ][ ]	
1041	Are you satisfied with your family doctor?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1042	Have you ever had a consultation with an eye doctor? IF YES: When was the last time you saw an eye doctor?	MONTHS AGO . . . . . 1 [ ][ ] YEARS AGO . . . . . 2 [ ][ ] NEVER . . . . . 995 DK/DON'T REMEMBER 998	→ 1045
1043	What was the reason for the visit?	IRRITATION IN EYES . . . . . 01 INFECTION . . . . . 02 EYE DISEASE . . . . . 03 CHECK UP . . . . . 04 BLURRY VISION . . . . . 05 NEW GLASSES/ CONTACTS PRESCRIPTION . . . 06 MANDATORY EXAMINATION . . . 07 OTHER _____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1044	Was any diagnosis given? IF YES: What was the diagnosis?	NO DIAGNOSIS . . . . . A AMBLYOPIA . . . . . B CATARACT . . . . . C DIABETIC EYE DISEASE . . . . . D CORNEAL EYE DISEASE . . . . . E GLAUCOMA . . . . . F MACULAR DISEASE . . . . . G RETINAL DISORDER OTHER THAN MACULA . . . . . H NEED GLASSES FOR DISTANCE . . . . . I READING . . . . . J OTHER _____ X (SPECIFY)	
1045	RECORD THE TIME.	HOUR . . . . . [ ][ ] MINUTES . . . . . [ ][ ]	

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: _____

INSTRUCTIONS:
ONLY ONE CODE SHOULD APPEAR IN ANY BOX.
FOR COLUMNS 1 AND 4, ALL MONTHS SHOULD BE FILLED IN.

INFORMATION TO BE CODED FOR EACH COLUMN

COL. 1: BIRTHS, PREGNANCIES, CONTRACEPTIVE USE **

- B BIRTHS
- P PREGNANCIES
- D INDUCED ABORTIONS
- V MISCARRIAGES
- S STILLBIRTHS

- 0 NO METHOD
- 1 FEMALE STERILIZATION
- 2 MALE STERILIZATION
- 3 PILL
- 4 IUD
- 5 INJECTABLES
- 6 IMPLANTS
- 7 CONDOM
- 8 FEMALE CONDOM
- 9 DIAPHRAGM
- J SUPPOSITORY, FOAM OR JELLY
- K LACTATIONAL AMENORRHEA METHOD
- L RHYTHM METHOD
- M WITHDRAWAL
- X OTHER _____ (SPECIFY)

COL. 2: SOURCE OF CONTRACEPTION

- 1 GOVT. HOSPITAL
- 2 GOVT. CHILDREN'S HOSPITAL
- 3 MATERNITY HOSPITAL
- 4 POLICLINIC
- 5 GOVT. MOBILE CLINIC
- 6 WOMEN'S HEALTH CONSULT CTR.
- 7 MEDICAL DIAGNOSTIC CENTER . .
- 8 FAP
- 9 OTHER PUBLIC
- A PRIVATE HOSPITAL
- B PRIVATE CHILDREN'S HOSPITAL
- C PRIVATE MATERNITY HOSPITAL
- D PRIVATE POLICLINIC
- E PRIVATE MOBILE CLINIC
- F PRIV WOMEN'S HEALTH CONSULT CTR.
- G PRIV MEDICAL DIAGNOSTIC CENTER
- H FAP
- K OTHER PRIVATE
- L PHARMACY
- M NGO
- N FRIENDS/RELATIVES/HUSBAND
- X OTHER _____ (SPECIFY)

COL. 3: 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 HEALTH CONCERNS
- 6 SIDE EFFECTS
- 7 LACK OF ACCESS/TOO FAR
- 8 COSTS TOO MUCH
- 9 INCONVENIENT TO USE
- H NOT AVAILABLE AT PHARMACY/SOURCE
- F FATALISTIC
- A DIFFICULT TO GET PREGNANT/MENOPAUSAL
- D MARITAL DISSOLUTION/SEPARATION
- X OTHER _____ (SPECIFY)
- Z DON'T KNOW

COL. 4: MARRIAGE/UNION

- X IN UNION (MARRIED OR LIVING TOGETHER)
- 0 NOT IN UNION

				1	2	3	4			
	12	DEC	01					01	DEC	
	11	NOV	02					02	NOV	
	10	OCT	03					03	OCT	
	09	SEP	04					04	SEP	
2	08	AUG	05					05	AUG	2
0	07	JUL	06					06	JUL	0
0	06	JUN	07					07	JUN	0
5	05	MAY	08					08	MAY	5
	04	APR	09					09	APR	
	03	MAR	10					10	MAR	
	02	FEB	11					11	FEB	
	01	JAN	12					12	JAN	
	12	DEC	13					13	DEC	
	11	NOV	14					14	NOV	
	10	OCT	15					15	OCT	
	09	SEP	16					16	SEP	
2	08	AUG	17					17	AUG	2
0	07	JUL	18					18	JUL	0
0	06	JUN	19					19	JUN	0
4	05	MAY	20					20	MAY	4
	04	APR	21					21	APR	
	03	MAR	22					22	MAR	
	02	FEB	23					23	FEB	
	01	JAN	24					24	JAN	
	12	DEC	25					25	DEC	
	11	NOV	26					26	NOV	
	10	OCT	27					27	OCT	
	09	SEP	28					28	SEP	
2	08	AUG	29					29	AUG	2
0	07	JUL	30					30	JUL	0
0	06	JUN	31					31	JUN	0
3	05	MAY	32					32	MAY	3
	04	APR	33					33	APR	
	03	MAR	34					34	MAR	
	02	FEB	35					35	FEB	
	01	JAN	36					36	JAN	
	12	DEC	37					37	DEC	
	11	NOV	38					38	NOV	
	10	OCT	39					39	OCT	
	09	SEP	40					40	SEP	
2	08	AUG	41					41	AUG	2
0	07	JUL	42					42	JUL	0
0	06	JUN	43					43	JUN	0
2	05	MAY	44					44	MAY	2
	04	APR	45					45	APR	
	03	MAR	46					46	MAR	
	02	FEB	47					47	FEB	
	01	JAN	48					48	JAN	
	12	DEC	49					49	DEC	
	11	NOV	50					50	NOV	
	10	OCT	51					51	OCT	
	09	SEP	52					52	SEP	
2	08	AUG	53					53	AUG	2
0	07	JUL	54					54	JUL	0
0	06	JUN	55					55	JUN	0
1	05	MAY	56					56	MAY	1
	04	APR	57					57	APR	
	03	MAR	58					58	MAR	
	02	FEB	59					59	FEB	
	01	JAN	60					60	JAN	
	12	DEC	61					61	DEC	
	11	NOV	62					62	NOV	
	10	OCT	63					63	OCT	
	09	SEP	64					64	SEP	
2	08	AUG	65					65	AUG	2
0	07	JUL	66					66	JUL	0
0	06	JUN	67					67	JUN	0
0	05	MAY	68					68	MAY	0
	04	APR	69					69	APR	
	03	MAR	70					70	MAR	
	02	FEB	71					71	FEB	
	01	JAN	72					72	JAN	

2005 ARMENIA DEMOGRAPHIC AND HEALTH SURVEY
MAN'S QUESTIONNAIRE

Republic of Armenia
National Statistical Service
Ministry of Health

IDENTIFICATION

LOCALITY NAME _____

NAME OF HOUSEHOLD HEAD _____

CLUSTER NUMBER . . . . . [ ][ ][ ]

HOUSEHOLD NUMBER . . . . . [ ][ ]

REGION . . . . . [ ][ ]

LARGE CITY/SMALL CITY/TOWN/RURAL . . . . . [ ]
(LARGE CITY=1, SMALL CITY=2, TOWN=3, RURAL=4)

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		

	ARMENIAN	RUSSIAN	OTHER
LANGUAGE OF INTERVIEW	1	2	3
NATIVE LANGUAGE OF RESPONDENT	1	2	3

	YES	NO
TRANSLATOR USED?	1	2

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____	[ ][ ]	[ ][ ]
DATE _____ [ ][ ]	DATE _____ [ ][ ]		

SECTION 1. RESPONDENT'S BACKGROUND AND WORK STATUS

INTRODUCTION

INFORMED CONSENT

Hello. My name is _____ and I am working with NSS and MOH. We are conducting a national survey about the health of men, women and children. We would very much appreciate your participation in this survey. I would like to ask you about your health. This information will help the government to plan health services. The interview will take some time. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

At this time, do you want to ask me anything about the survey?
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 . . . . . [ ][ ]	
102	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)? IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS . . . . . [ ][ ] ALWAYS . . . . . 95 VISITOR 96	→ 104
103	Just before you moved here, did you live in a city, in a town, or in the countryside?	CITY . . . . . 1 TOWN . . . . . 2 COUNTRYSIDE 3	
104	In what month and year were you born?	MONTH . . . . . [ ][ ] DON'T KNOW MONTH . . . . . 98 YEAR . . . . . [ ][ ][ ][ ] DON'T KNOW YEAR 9998	
105	How old were you at your last birthday? COMPARE AND CORRECT 104 AND/OR 105 IF INCONSISTENT.	AGE IN COMPLETED YEARS [ ][ ]	
106	Have you ever attended school?	YES . . . . . 1 NO 2	→ 113
107	What is the highest level of school you attended: primary/secondary, secondary special, or higher?	PRIMARY/SECONDARY (1-10) . . . . . 1 SECONDARY SPECIAL . . . . . 2 HIGHER 3	
108	What is the highest (grade/form/year) you completed at that level?	GRADE . . . . . [ ][ ]	
113	Do you read a newspaper or magazine almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
114	Do you listen to the radio almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	
115	Do you watch television almost every day, at least once a week, less than once a week or not at all?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 LESS THAN ONCE A WEEK . . . . . 3 NOT AT ALL 4	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
116	In the last 12 months, on how many separate occasions have you traveled away from your home community and slept away?	NUMBER OF TRIPS . . . . . [ ][ ] NONE 00	→ 118A
117	In the last 12 months, have you been away from your home community for more than one month at a time?	YES . . . . . 1 NO 2	
118A	Now I would like to talk about the term "Quality of life," the definition of which is an individual's perception of their position in life in the context of their goals, expectations and physical health. How would you rate your quality of life?	VERY POOR . . . . . 1 POOR . . . . . 2 NEITHER POOR NOR GOOD . . . . . 3 GOOD . . . . . 4 VERY GOOD 5	
118B	How satisfied are you with your health?	VERY DISSATISFIED . . . . . 1 DISSATISFIED . . . . . 2 NEITHER SATISFIED NOR DISSATISFIED . . . . . 3 SATISFIED . . . . . 4 VERY SATISFIED 5	
118C	Do you have enough energy for everyday life?	NOT AT ALL . . . . . 1 A LITTLE . . . . . 2 MODERATELY . . . . . 3 MOSTLY . . . . . 4 COMPLETELY 5	
118D	How satisfied are you with your ability to perform your daily living activities?	VERY DISSATISFIED . . . . . 1 DISSATISFIED . . . . . 2 NEITHER SATISFIED NOR DISSATISFIED . . . . . 3 SATISFIED . . . . . 4 VERY SATISFIED 5	
118E	Have you enough money to meet your needs?	NOT AT ALL . . . . . 1 A LITTLE . . . . . 2 MODERATELY . . . . . 3 MOSTLY . . . . . 4 COMPLETELY 5	
118F	How satisfied are you with the conditions of your living space?	VERY DISSATISFIED . . . . . 1 DISSATISFIED . . . . . 2 NEITHER SATISFIED NOR DISSATISFIED . . . . . 3 SATISFIED . . . . . 4 VERY SATISFIED 5	
120	Are you currently working?	YES . . . . . 1 NO 2	→ 123
121	Have you done any work in the last 12 months?	YES . . . . . 1 NO 2	→ 123

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
122	What have you been doing for most of the time over the last 12 months?	GOING TO SCHOOL/STUDYING . . . . . 01 LOOKING FOR WORK . . . . . 02 RETIRED . . . . . 03 TOO ILL TO WORK . . . . . 04 HANDICAPPED, CANNOT WORK . . . 05 HOUSEWORK/CHILD CARE . . . . . 06 OTHER _____ 96 (SPECIFY)	→201
123	What is your occupation, that is, what kind of work do you mainly do?	_____ ☐☐ _____ _____	
124	CHECK 123: WORKS IN AGRICULTURE ☐ ↓ DOES NOT WORK IN AGRICULTURE ☐		→ 126
125	Do you work mainly on your own land or on family land, or do you work on land that you rent from someone else, or do you work on someone else's land?	OWN LAND . . . . . 1 FAMILY LAND . . . . . 2 RENTED LAND . . . . . 3 SOMEONE ELSE'S LAND 4	
126	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	

SECTION 2. REPRODUCTION

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
201	Now I would like to ask about any children you have had. I am interested only in the children that are biologically yours. 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 you have fathered who are alive but do not live with you?	YES . . . . . 1 NO 2	→ 206
205	How many sons do not live with you? And how many daughters do not live with you? IF NONE, RECORD '00'.	SONS ELSEWHERE . . . . . [ ][ ] DAUGHTERS ELSEWHERE . [ ][ ]	
206	Have you ever fathered 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 . . . . . [ ][ ]	
208	(In addition to the children that you have just told me about), do you have: a) any other living sons or daughters who are biologically your children but who are not legally yours or do not have your name? b) any other sons or daughters who died who were biologically your children but who were not legally yours or did not have your name? NO TO BOTH → ↓ OTHER → PROBE AND CORRECT 201-207 AS NECESSARY.	YES . . . . . 1 NO 2	
209	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL . . . . . [ ][ ]	
210	CHECK 209: HAS HAD ONLY ONE CHILD → 213 HAS HAD MORE THAN ONE CHILD → ↓ HAS NOT HAD ANY CHILDREN → 214		
211	Do the children you have fathered all have the same biological mother?	YES . . . . . 1 NO 2	→ 213

212	In all how many women have you fathered children with?	NUMBER OF WOMEN . . . . . [ ][ ]	
213	How old were you when your (first) child was born?	AGE IN YEARS . . . . . [ ][ ]	
214	Are you the primary care giver for any children?	YES . . . . . 1 NO 2	→ 301
215	Are any of these children for whom you are the primary caregiver under the age of 18?	YES . . . . . 1 NO 2	→ 301
216	Have you made arrangements for someone to care for these children in the event that you fall sick or are unable to care for them?	YES . . . . . 1 NO . . . . . 2 UNSURE 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. CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN COLUMN 301, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 1 IF METHOD IS RECOGNIZED, AND CODE 2 IF NOT RECOGNIZED. THEN, FOR EACH METHOD WITH CODE 1 CIRCLED IN 301, ASK 302. Which ways or methods have you heard about? FOR METHODS NOT MENTIONED SPONTANEOUSLY, ASK: Have you ever heard of (METHOD)?		302 Have you ever used (METHOD)?
01	FEMALE STERILIZATION Women can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	
02	MALE STERILIZATION Men can have an operation to avoid having any more children.	YES . . . . . 1 NO 2	Have you ever had an operation to avoid having any more children? YES . . . . . 1 NO 2
03	PILL Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO 2	
04	IUD Women can have a spiral placed inside the cavity of the uterus by a doctor.	YES . . . . . 1 NO 2	
05	INJECTABLES Women can have a contraceptive injection by a health provider that stops them from becoming pregnant for 1 or more months.	YES . . . . . 1 NO 2	
06	IMPLANTS Women can have several small rods placed in their upper arm by a doctor which can prevent pregnancy for one or more years.	YES . . . . . 1 NO 2	
07	CONDOM Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
08	FEMALE CONDOM Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO 2	
09	DIAPHRAGM Women can place a thin flexible disk in their vagina before sexual intercourse.	YES . . . . . 1 NO 2	
10	SUPPOSITORY, FOAM, CREAM, OR JELLY Women can place a suppository, foam, cream or jelly in their vagina before sexual intercourse.	YES . . . . . 1 NO 2	
11	LACTATIONAL AMENORRHEA METHOD (LAM)	YES . . . . . 1 NO 2	
12	RHYTHM METHOD Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant.	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
13	WITHDRAWAL Men can be careful and pull out before climax.	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
14	EMERGENCY CONTRACEPTION Women can take pills up to five days after sexual intercourse to avoid becoming pregnant.	YES . . . . . 1 NO 2	
15	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
303	In the last 12 months, have you discussed the practice of family planning with a health worker or health professional?	YES . . . . . 1 NO 2	
304	Now I would like to ask you about when a woman is most likely to get pregnant. From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant if 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	Do you think that a woman who is breastfeeding her baby can get pregnant?	YES . . . . . 1 NO . . . . . 2 DEPENDS . . . . . 3 DON'T KNOW 8	
307	I will now read you some statements about contraception. Please tell me if you agree or disagree with each one. a) Contraception is women's business and a man should not have to worry about it? b) Women who use contraception may become promiscuous. c) A woman is the one who gets pregnant so she should be the one to get sterilized.	AGREE / DISAGREE / DK a) 1 2 8 b) 1 2 8 c) 1 2 8	

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	→ 411
403	What is your marital status now: are you widowed, divorced, or separated?	WIDOWED . . . . . 1 DIVORCED . . . . . 2 SEPARATED 3	→ 406
404	Is your wife/partner living with you now or is she staying elsewhere?	LIVING WITH HIM . . . . . 1 STAYING ELSEWHERE 2	→ 406
405	RECORD THE WIFE/PARTNER'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF SHE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME _____ LINE NUMBER . . . . . [ ][ ]	
406	Have you been married or lived with a woman only once or more than once?	ONLY ONCE . . . . . 1 MORE THAN ONCE 2	
407	CHECK 406: MARRIED/ LIVED WITH A WOMAN ONLY ONCE → In what month and year did you start living with your wife/partner? MARRIED/ LIVED WITH A WOMAN MORE THAN ONCE → Now I would like to ask about when you started living with your first wife/partner. In what month and year was that?	MONTH . . . . . [ ][ ] DON'T KNOW MONTH . . . . . 98 YEAR . . . . . [ ][ ][ ][ ] DON'T KNOW YEAR 9998	→ 411
410	How old were you when you first started living with her?	AGE . . . . . [ ][ ]	
411	CHECK FOR THE PRESENCE OF OTHERS. BEFORE CONTINUING, MAKE EVERY EFFORT TO ENSURE PRIVACY.		
412	Now I need to ask you some questions about sexual activity in order to gain a better understanding of some family life issues. How old were you when you had sexual intercourse for the very first time (if ever)?	NEVER . . . . . 00 AGE IN YEARS . . . . . [ ][ ] FIRST TIME WHEN STARTED LIVING WITH (FIRST) WIFE/PARTNER 95	→ 414 → 414
413	Do you intend to wait until you get married to have sexual intercourse for the first time?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/UNSURE 8	→ 443
414	CHECK 105: 15-24 YEARS OLD → 25-49 YEARS OLD		→ 419
415	The first time you had sexual intercourse, was a condom used?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/DON'T REMEMBER . . . 8	
419	When was the last time you had sexual intercourse? RECORD 'YEARS AGO' ONLY IF LAST INTERCOURSE WAS ONE OR MORE YEARS AGO. IF 12 MONTHS OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 [ ][ ] WEEKS AGO . . . . . 2 [ ][ ] MONTHS AGO . . . . . 3 [ ][ ] YEARS AGO . . . . . 4 [ ][ ]	→ 420 → 428

		LAST SEXUAL PARTNER	SECOND-TO-LAST SEXUAL PARTNER
419A	When was the last time you had sexual intercourse with this other person?		DAYS AGO . . . 1 [ ][ ] WEEKS AGO . . . 2 [ ][ ] MONTHS AGO . . . 3 [ ][ ]
420	The last time you had sexual intercourse with this (second) person was a condom used?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 422)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 422)
421	Did you use a condom every time you had intercourse with this person in the last 12 months?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
422	What was your relationship to this person with whom you had sexual intercourse? IF GIRLFRIEND: Were you living together as if married? IF YES, CIRCLE '02' IF NO, CIRCLE '03'	SPOUSE . . . . . 01 (SKIP TO 424) LIVE-IN PARTNER . . . . . 02 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . . 03 CASUAL ACQUAINTANCE . . . . 04 COMMERCIAL SEX WORKER . . . . . 05 OTHER _____ 96 (SPECIFY)	SPOUSE . . . . . 01 (SKIP TO 424) LIVE-IN PARTNER . . . . . 02 GIRLFRIEND NOT LIVING WITH RESPONDENT . . . . . 03 CASUAL ACQUAINTANCE . . . . 04 COMMERCIAL SEX WORKER . . . . . 05 OTHER _____ 96 (SPECIFY)
423	For how long (have you had/did you have) a sexual relationship with this person? IF ONLY HAD SEXUAL RELATIONS WITH THIS PERSON ONCE, RECORD '01' DAYS.	DAYS . . . 1 [ ][ ] MONTHS 2 [ ][ ] YEARS . . . 3 [ ][ ]	DAYS . . . 1 [ ][ ] MONTHS 2 [ ][ ] YEARS . . . 3 [ ][ ]
424	The last time you had sexual intercourse with this (second) person, did you or this person drink alcohol?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 426)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 426)
425	Were you or your partner drunk at that time? IF YES: Who was drunk?	RESPONDENT ONLY 1 PARTNER ONLY . . . 2 RESPONDENT AND PARTNER BOTH . 3 NEITHER 4	RESPONDENT ONLY 1 PARTNER ONLY . . . 2 RESPONDENT AND PARTNER BOTH . 3 NEITHER 4
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 419A IN NEXT COLUMN) NO . . . . . 2 (SKIP TO 428)	YES . . . . . 1 (GO TO 427 IN NEXT PAGE) NO . . . . . 2 (SKIP TO 428)

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
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 GREATER THAN 95, WRITE '95.'	NUMBER OF PARTNERS LAST 12 MONTHS . . . . . [ ][ ] DON'T KNOW 98	
428	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 GREATER THAN 95, WRITE '95.'	NUMBER OF PARTNERS IN LIFETIME . . . . . [ ][ ] DON'T KNOW 98	
429	CHECK 422 ALL COLUMNS: NO PARTNERS ARE COMMERCIAL SEX WORKERS [ ] AT LEAST ONE PARTNER A COMMERCIAL SEX WORKER [ ] Q. 422 NOT ASKED [ ]		431 443
430	In the last 12 months, did you pay anyone in exchange for sex?	YES . . . . . 1 NO 2	 433
431	The last time you paid someone in exchange for sex, was a condom used?	YES . . . . . 1 NO 2	 433
432	Was a condom used every time you paid someone in exchange for sex in the last 12 months?	YES . . . . . 1 NO . . . . . 2 DK 8	
433	CHECK 420 COLUMN 1 (CONDOM USE WITH LAST SEXUAL PARTNER) YES [ ] OTHER [ ]		 439
434	The last time you had intercourse you told me you used a condom. Did you or your partner obtain the condom?	MAN HIMSELF . . . . . 1 PARTNER . . . . . 2 SOMEONE ELSE 3	
438	From where did you (your partner) obtain the condom the last time? IF SOURCE IS ANY TYPE OF HEALTH FACILITY WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ _____ (NAME OF PLACE(S))	PUBLIC SECTOR HOSPITAL . . . . . 11 POLICLINIC . . . . . 14 ABULATORY . . . . . 15 WOMEN'S HEALTH CONSULT CTR. 16 MEDICAL DIAGNOSTIC CENTER . . . 17 FAP . . . . . 18 OTHER PUBLIC . . . . . 26 _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . 31 POLICLINIC . . . . . 34 ABULATORY . . . . . 35 WOMEN'S HEALTH CONSULT CTR. 36 MEDICAL DIAGNOSTIC CENTER . . . 37 FAP . . . . . 38 OTHER PRIVATE . . . . . 46 _____ (SPECIFY) OTHER PHARMACY/SHOP . . . . . 51 NGO . . . . . 52 FRIEND/RELATIVE/NEIGHBOUR/WIFE 53 OTHER . . . . . 96 _____ (SPECIFY) DON'T KNOW 98	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
439	CHECK 302 (02) USING MALE STERILIZATION NO ☐ YES ☐		→ 442
440	The last time you had sex did you (or your partner) use any method (other than the condom) to avoid or prevent a pregnancy?	YES . . . . . 1 NO . . . . . 2 DK 8	→ 442
441	What method did you (your partner) use? PROBE: Did you use any other method to prevent pregnancy?	FEMALE STERILIZATION . . . . . A PILL . . . . . C IUD . . . . . D INJECTION . . . . . E IMPLANT . . . . . F MALE CONDOM . . . . . G FEMALE CONDOM . . . . . H DIAPHRAGM . . . . . I FOAM/JELLY . . . . . J LACTATIONAL AMEN. METHOD . . . . . K RHYTHM METHOD . . . . . L WITHDRAWAL . . . . . M OTHER _____ X (SPECIFY)	
442	CHECK 420 COLUMN 1 (CONDOM USE WITH LAST SEXUAL PARTNER) NO/OTHER ☐ YES ☐		→ 447
443	CHECK 301 (07) KNOWS MALE CONDOM YES ☐ NO ☐		→ 501
444	Do you know of a place where a person can get condoms?	YES . . . . . 1 NO 2	→ 447
445	Where is that? IF SOURCE IS ANY TYPE OF HEALTH FACILITY, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE) Any other place? RECORD ALL SOURCES MENTIONED.	PUBLIC SECTOR HOSPITAL . . . . . B POLICLINIC . . . . . E ABULATORY . . . . . F MEDICAL DIAGNOSTIC CENTER . . . H FAP . . . . . I OTHER PUBLIC . . . . . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K POLICLINIC . . . . . N ABULATORY . . . . . O MEDICAL DIAGNOSTIC CENTER . . . Q FAP . . . . . R OTHER PRIVATE . . . . . S _____ (SPECIFY) OTHER PHARMACY/SHOP . . . . . T NGO . . . . . U FRIEND/RELATIVE/NEIGHBOUR/WIFE V OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z	
446	If you wanted to, could you yourself get a condom?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/UNSURE 8	
447	I will now read you some statements about the male condom. Please tell me if you agree or disagree with each statement. Condoms diminish a man's sexual pleasure. Condoms diminish a woman's pleasure. A condom is very inconvenient to use. A condom can be reused. Buying condoms is embarrasing.	YES NO DK DIMINISH MAN'S PLEASURE . 1 2 8 DIMINISH WOMAN'S PLEASURE . . . . . 1 2 8 INCONVENIENT . . . . . 1 2 8 REUSED . . . . . 1 2 8 EMBARRASING TO BUY 1 2 8	

SECTION 5. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
501	CHECK 401: CURRENTLY MARRIED OR LIVING WITH A WOMAN ↓	NOT IN UNION →	505
502	Is your wife/partner currently pregnant?	YES . . . . . 1 NO . . . . . 2 UNSURE 8	
503	CHECK 502: WIFE NOT PREGNANT OR UNSURE ↓ 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? WIFE PREGNANT ↓ 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 (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS WIFE CAN'T GET PREGNANT . . . . . 3 UNDECIDED/DON'T KNOW 8	→ 505
504	CHECK 502: WIFE NOT PREGNANT OR UNSURE ↓ How long would you like to wait from now before the birth of (a/another) child? WIFE 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 AFTER MARRIAGE . . . . . 995 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	
505	CHECK 202 AND 204: 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)	→ 507 → 507
506	How many of these children would you like to be boys, how many would you like to be girls and for how many would the sex not matter?	BOYS GIRLS EITHER NUMBER [ ][ ] [ ][ ] [ ][ ] OTHER _____ 96 (SPECIFY)	
507	In the last few months have you heard about family planning: On the radio? On the television? In a newspaper or magazine? In a pamphlet/poster/leaflets/booklets? At a community event?	YES NO RADIO . . . . . 1 2 TELEVISION . . . . . 1 2 NEWSPAPER OR MAGAZINE . . . 1 2 PAMPHLET, ETC. . . . . 1 2 COMMUNITY EVENT 1 2	
508	CHECK 401: CURRENTLY MARRIED OR LIVING WITH A WOMAN ↓	NOT IN UNION →	514
509	Is your wife/partner currently using a method of family planning?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
510	Would you say that using contraception is mainly your decision, mainly your wife's/partner's decision, or did you both decide together?	MAINLY RESPONDENT . . . . . 1 MAINLY WIFE/PARTNER . . . . . 2 JOINT DECISION . . . . . 3 OTHER _____ 6 (SPECIFY)	
511	Do you think your wife/partner wants the same number of children that you want, or does she want more or fewer than you want?	SAME NUMBER . . . . . 1 MORE CHILDREN . . . . . 2 FEWER CHILDREN . . . . . 3 DON'T KNOW 8	
512	Who decides how the money you earn will be used: mainly you, mainly your wife/partner, or you and your wife/partner jointly?	RESPONDENT . . . . . 1 WIFE/PARTNER . . . . . 2 RESPONDENT AND WIFE/PARTNER JOINTLY . . . . . 3 WIFE/PARTNER DOESN'T BRING IN ANY MONEY . . . . . 4 OTHER _____ 6 (SPECIFY)	
513	Would you say that the money that you bring into the household is more than what your wife/partner brings in, less than what she brings in, or about the same?	MORE THAN HER . . . . . 1 LESS THAN HER . . . . . 2 ABOUT THE SAME . . . . . 3 WIFE/PARTNER DOESN'T BRING IN ANY MONEY . . . . . 4 DON'T KNOW 8	
514	Now I would like to ask you a few questions regarding relationships between men and women. In a couple, who do you think should have the greater say in each of the following decisions: the husband, the wife or both equally:		

		HUS-BAND	WIFE	BOTH EQUAL-LY	DON'T KNOW, DEPENDS
a)	making large household purchases?	1	2	3	8
b)	making small daily household purchases?	1	2	3	8
c)	deciding when to visit family, friends or relatives?	1	2	3	8
d)	deciding what to do with the money she earns for her work?	1	2	3	8
e)	deciding how many children to have and when to have them?	1	2	3	8

515	Sometimes a husband is annoyed or angered by things that his wife does. In your opinion, is a husband justified in hitting or beating his wife in the following situations:		YES	NO	DK
	If she goes out without telling him?	GOES OUT	1	2	8
	If she neglects the children?	NEGL. CHILDREN . . .	1	2	8
	If she argues with him?	ARGUES	1	2	8
	If she refuses to have sex with him?	REFUSES SEX	1	2	8
	If she burns the food?	BURNS FOOD	1	2	8

516	Husbands and wives do not always agree on everything. Please tell me if you think a wife is justified in refusing to have sex with her husband when:		YES	NO	DK
	She knows her husband has a sexually transmitted disease?	HAS STD	1	2	8
	She knows her husband has sex with other women?	OTHER WOMEN	1	2	8
	She is tired or not in the mood?	TIRED/NOT IN MOOD	1	2	8

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES				SKIP
517	Do you think that if a woman refuses to have sex with her husband when he wants her to, he has the right to...		YES	NO	DON'T KNOW, DEPENDS	
	a) Get angry and reprimand her?	a)	1	2	8	
	b) Refuse to give her money or other means of financial support?	b)	1	2	8	
	c) Use force and have sex with her even if she doesn't want to?	c)	1	2	8	
	d) Go and have sex with another woman?	d)	1	2	8	
518	When a wife knows her husband has a disease that can be transmitted through sexual contact, is she justified in asking that they use a condom when they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8				

SECTION 6. HIV/AIDS AND OTHER SEXUALLY TRANSMITTED INFECTIONS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	Now I would like to talk about something else. Have you ever heard of an illness called AIDS?	YES . . . . . 1 NO 2	 → 617
602	Can people reduce their chances of getting the AIDS virus by having just one sex partner who is not infected and who has no other partners?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
603	Can people get the AIDS virus from mosquito bites?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
604	Can people reduce their chances of getting the AIDS virus by using a condom every time they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
605	Can people get the AIDS virus by sharing food with a person who has AIDS?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
606	Can people reduce their chance of getting the AIDS virus by abstaining from sexual intercourse?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
607	Can people get the AIDS virus because of witchcraft or other supernatural means?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
607A	Can people get the AIDS virus from coughing?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
608	Is there anything else a person can do to avoid or reduce the chances of getting the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	 → 610
609	What can a person do? Anything else? RECORD ALL WAYS MENTIONED.	ABSTAIN FROM SEX . . . . . A USE CONDOMS . . . . . B LIMIT SEX TO ONE PARTNER/STAY FAITHFUL TO ONE PARTNER . . . C LIMIT NUMBER OF SEXUAL PARTNERS . . . . . D AVOID SEX WITH PROSTITUTES . . . E AVOID SEX WITH PERSONS WHO HAVE MANY PARTNERS . . . . . F AVOID SEX WITH HOMOSEXUALS . G AVOID SEX WITH PERSONS WHO INJECT DRUGS . . . . . H AVOID BLOOD TRANSFUSIONS . . . . . I AVOID INJECTIONS . . . . . J AVOID SHARING RAZORS/BLADES . K AVOID KISSING . . . . . L AVOID MOSQUITO BITES . . . . . M SEEK PROTECTION FROM TRADITIONAL PRACTITIONER . . . N OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
610	Is it possible for a healthy-looking person to have the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
611	Do you know of a place where people can go to get tested for the virus that causes AIDS?	YES . . . . . 1 NO 2	→ 613
612	Where did you go? IF SOURCE IS ANY TYPE OF HEALTH FACILITY, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE) Any other place? RECORD ALL SOURCES MENTIONED.	PUBLIC SECTOR HOSPITAL . . . . . B POLICLINIC . . . . . E ABULATORY . . . . . F MEDICAL DIAGNOSTIC CENTER . . . H FAP . . . . . I OTHER PUBLIC . . . . . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K POLICLINIC . . . . . N ABULATORY . . . . . O MEDICAL DIAGNOSTIC CENTER . . . Q FAP . . . . . R OTHER PRIVATE . . . . . S _____ (SPECIFY) OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z	
613	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	
614	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	
615	If a relative of yours became sick with the virus that causes AIDS, would you be willing to care for her or him in your own household?	YES . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
616	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	
617	CHECK 601: 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	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
618	CHECK 412: HAS HAD SEXUAL INTERCOURSE ↓ HAS NOT HAD SEXUAL INTERCOURSE →		701
619	CHECK 617: HEARD ABOUT OTHER SEXUALLY TRANSMITTED INFECTIONS? YES ↓ NO →		621
620	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	
621	Sometimes men 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	
622	Sometimes men 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	
623	CHECK 620, 621, AND 622: HAS HAD AN INFECTION (ANY 'YES') ↓ HAS NOT HAD AN INFECTION OR DOES NOT KNOW →		701
624	The last time you had (PROBLEM FROM 620/621/622), did you seek any kind of advice or treatment?	YES . . . . . 1 NO 2	→ 701
625	Where did you go? IF SOURCE IS ANY TYPE OF HEALTH FACILITY, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE) Any other place? RECORD ALL SOURCES MENTIONED.	PUBLIC SECTOR HOSPITAL . . . . . B POLICLINIC . . . . . E ABULATORY . . . . . F MEDICAL DIAGNOSTIC CENTER . . . H FAP . . . . . I OTHER PUBLIC . . . . . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K POLICLINIC . . . . . N ABULATORY . . . . . O MEDICAL DIAGNOSTIC CENTER . . . Q FAP . . . . . R OTHER PRIVATE . . . . . S _____ (SPECIFY) OTHER PHARMACY/SHOP . . . . . T NGO . . . . . U FRIEND/RELATIVE/NEIGHBOUR . . . V OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z	

SECTION 7. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
701	Have you had an illness, an accident, or suffered from a diagnosted chronic health problem in the last 3 months?	YES . . . . . 1 NO 2	→ 705
702	What kind of health problem?	ACCIDENT/INJURY . . . . . 01 CARDIOVASCULAR . . . . . 02 DIABETES . . . . . 03 KIDNEY DISORDER . . . . . 04 RESPIRATORY . . . . . 05 OTHER ILLNESS . . . . . 08 OTHER _____ 96 (SPECIFY)	
703	In the last 3 months, did you visit a health facility or consult a health professional?	YES . . . . . 1 NO 2	→ 706
704	Why was nothing done?	MINOR HEALTH PROBLEM . . . . . A LONG DISTANCE TO PROVIDER . . . B GOOD CARE NOT AVAILABLE . . . C LONG WAIT AT PROVIDER . . . . . D LACK OF FUNDS FOR MEDICINE . . . E LACK OF FUNDS FOR TRAVEL . . . F TRANSPORT UNAVAILABLE . . . . . G RESPONSIBILITIES AT HOME . . . . . H RESPONSIBILITIES AT WORK . . . . . I CONSULTED TRADITIONAL PRACTITIONER . . . . . J OTHER X _____ (SPECIFY) DON'T KNOW . . . . . Z	→ 706K
705	In the last 3 months, did you visit a health facility or consult a health professional?	YES . . . . . 1 NO 2	→ 706K
706	In the last three months, how many times did you visit a health facility or consult with a health professional?	NUMBER OF TIMES [ ][ ]	
706A	Now I'm going to ask you about the (last) visit you made in the last three months. Did you undergo an operation during that (last) visit?	YES . . . . . 1 NO 2	
706B	Where did the visit/consultation take place?	HOME . . . . . 01 PUBLIC SECTOR HOSPITAL . . . . . 11 POLICLINIC . . . . . 14 ABULATORY . . . . . 15 MEDICAL DIAGNOSTIC CENTER . . . 17 FAP . . . . . 18 OTHER PUBLIC . 26 _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . 31 POLICLINIC . 34 ABULATORY . 35 MEDICAL DIAGNOSTIC CENTER . . . 37 FAP . . 38 OTHER PRIVATE . 46 _____ (SPECIFY) OTHER PHARMACY/SHOP . 51 NGO . 52 FRIEND/RELATIVE/NEIGHBOUR . . . 53 OTHER . 96 _____ (SPECIFY) DON'T KNOW . 98	→ 706F → 706F

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
706C	When you had the (last) visit/consultation, how did you get there?	BY FOOT . . . . . 01 TAXI . . . . . 02 MINI-BUS . . . . . 03 BUS/TROLLY/METRO . . . . . 04 HOUSEHOLD CAR . . . . . 05 OTHER CAR . . . . . 06 AMBULANCE . . . . . 07 OTHER _____ 96 (SPECIFY)	→ 706E → 706E → 706E → 706E
706D	Altogether, how much was paid for transportation, round-trip, to go to the (PLACE FROM Q1006B) the last time had a visit/consultation?	COST [ ][ ][ ][ ][ ] FREE . . . . . .00000 DON'T KNOW 99998	
706E	How long did it take you to go to the (PLACE FROM Q1006B) for the visit/consultation?	MINUTES . . . . . [ ][ ][ ] DON'T KNOW 998	
706F	Altogether, how much was officially paid for your (last) visit?	COST [ ][ ][ ][ ][ ][ ][ ] FREE . . . . . .0000000 DON'T KNOW 9999998	
706G	How much did you pay in additional expenses for that (last) visit?	COST [ ][ ][ ][ ][ ][ ][ ] NOTHING . . . . . .0000000 DON'T KNOW 9999998	
706H	Did you obtain any medicine as a result of the visit/consultation?	YES . . . . . 1 NO 2	 → 706K
706I	Where did you obtain the medicine for that consultation?	HOME . . . . . A PUBLIC SECTOR HOSPITAL . . . . . B POLICLINIC . . . . . E ABULATORY . . . . . F MEDICAL DIAGNOSTIC CENTER . . . H FAP . . . . . I OTHER PUBLIC . . . . . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K POLICLINIC . . . . . N ABULATORY . . . . . O MEDICAL DIAGNOSTIC CENTER . . . Q FAP . . . . . R OTHER PRIVATE . . . . . S _____ (SPECIFY) OTHER PHARMACY/SHOP . . . . . T NGO . . . . . U FRIEND/RELATIVE/NEIGHBOUR . . . V OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z	→ 706K
706J	How much was paid the (last) time the medicine was obtained?	COST [ ][ ][ ][ ][ ][ ][ ] FREE ..... 0000000 DON'T KNOW 9999998	
706K	Have you taken any (other) medicines during the last 3 months?	YES . . . . . 1 NO 2	 → 707C
706L	Where did you obtain that (other) medicine the last time?	HOME . . . . . A PUBLIC SECTOR HOSPITAL . . . . . B POLICLINIC . . . . . E ABULATORY . . . . . F MEDICAL DIAGNOSTIC CENTER . . . H FAP I	→ 707C

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
		OTHER PUBLIC . . . . . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K POLICLINIC . . . . . N ABULATORY . . . . . O MEDICAL DIAGNOSTIC CENTER . . . Q FAP . . . . . R OTHER PRIVATE . . . . . S _____ (SPECIFY) OTHER PHARMACY/SHOP . . . . . T NGO . . . . . U FRIEND/RELATIVE/NEIGHBOUR . . . V OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z	
706M	How much was paid the (last) time you obtained the medicine?	COST [ ][ ][ ][ ][ ][ ][ ] FREE ..... 0000000 DON'T KNOW 9999998	
707C	Have you stayed overnight in a hospital in the last year for reasons concerning your own health?	YES . . . . . 1 NO 2	→ 708
707D	During the last 12 months, on how many different occasions were you hospitalized?	NUMBER OF TIMES [ ][ ]	
707E	Now I'm going to ask you abou the (last) time you were hospitalized. What health problem led you to be hospitalized?	ACCIDENT/INJURY . . . . . 01 CARDIOVASCULAR . . . . . 02 DIABETES . . . . . 03 KIDNEY DISORDER . . . . . 04 RESPIRATORY . . . . . 05 OTHER ILLNESS . . . . . 08 OTHER _____ 96 (SPECIFY)	
707F	Did you undergo an operation during that (last) hospitalization?	YES . . . . . 1 NO 2	
707G	When you had the (last) hospitalization, how did you get there?	BY FOOT . . . . . 01 TAXI . . . . . 02 MINI-BUS . . . . . 03 BUS/TROLLY/METRO . . . . . 04 HOUSEHOLD CAR . . . . . 05 OTHER CAR . . . . . 06 AMBULANCE . . . . . 07 OTHER _____ 96 (SPECIFY)	→ 707I → 707I → 707I → 707I
707H	Altogether, how much was paid for transportation, round-trip, when you were (last) hospitalized?	COST [ ][ ][ ][ ][ ] NOTHING . . . . . .00000 DON'T KNOW 99998	
707I	How long did it take you to go to the hospital the last time you were hospitalized?	MINUTES . . . . . [ ][ ][ ] DON'T KNOW 998	
707J	Altogether, how much was officially paid for your (last) hospitalization?	COST [ ][ ][ ][ ][ ][ ][ ] FREE . . . . . .0000000 DON'T KNOW 9999998	
707K	How much did you pay in additional expenses for that (last) hospitalization?	COST [ ][ ][ ][ ][ ][ ][ ] NOTHING . . . . . .0000000 DON'T KNOW 9999998	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
707L	Did you obtain any medicine during your hospitalization?	YES . . . . . 1 NO 2	 → 708
707M	Where did you obtain the medicine for the hospitalization?	HOME . . . . . A PUBLIC SECTOR HOSPITAL . . . . . B POLICLINIC . . . . . E ABULATORY . . . . . F MEDICAL DIAGNOSTIC CENTER . . . H FAP . . . . . I OTHER PUBLIC . . . . . J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K POLICLINIC . . . . . N ABULATORY . . . . . O MEDICAL DIAGNOSTIC CENTER . . . Q FAP . . . . . R OTHER PRIVATE . . . . . S _____ (SPECIFY) OTHER PHARMACY/SHOP . . . . . T NGO . . . . . U FRIEND/RELATIVE/NEIGHBOUR . . . V OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z	→ 708
707N	How much was paid the (last) time the medicine was obtained?	COST [ ][ ][ ][ ][ ][ ][ ] FREE ..... 0000000 DON'T KNOW 9999998	
708	These next questions are about blood pressure. Has your blood pressure ever been checked by a doctor or other health professional?	YES . . . . . 1 NO 2	 → 717
709	When was the last time you had your blood pressure checked by a doctor or other health professional?	LESS THAN 6 MONTHS AGO . . . . . 1 6 - 11 MONTHS AGO . . . . . 2 1 - 5 YEARS AGO . . . . . 3 MORE THAN 5 YEARS AGO . . . . . 4 DON'T KNOW 8	
710	Who took your blood pressure?	DOCTOR . . . . . 1 NURSE . . . . . 2 FELDSHER . . . . . 3 FAMILY NURSE . . . . . 4 OTHER _____ 6 (SPECIFY)	
711	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	 → 717 → 717
712	Were you told on 2 or more different visits that you had hypertension or high blood pressure?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
713	Did a doctor or other health professional tell you what to do about your hypertension or high blood pressure?	YES . . . . . 1 NO 2	 → 717
714	Who told you this?	DOCTOR . . . . . 1 NURSE . . . . . 2 FELDSHER . . . . . 3 FAMILY NURSE . . . . . 4 OTHER _____ 6 (SPECIFY)	
715	Did the doctor or the other health professional tell you to: a. take prescribed oral medicine? . . . . . . b. receive an injection . . . . . . c. take asprin . . . . . . d. control your weight or lose weight? . . . . . . e. cut down on salt in your diet?	YES NO3 TAKE MEDICINE . . . . . 1 2 INJECTION . . . . . 1 2 TAKE ASPRIN . . . . . 1 2 CONTROL WEIGHT . . . . . 1 2 CUT DOWN ON SALT 1 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES			SKIP
	f. exercise more?	EXERCISE	1	2	
	g. cut down on alcohol?	CUT DOWN ALCOHOL	1	2	
	h. stop smoking?	STOP SMOKING	1	2	
	i. do other things?	DO OTHER THINGS	1	2	
	PROBE: What other things?	_____ (SPECIFY)			
716	To lower your hypertension or high blood pressure, are you now:		YES	NO	N/A
	a. taking prescribed oral medici	TAKE MEDICINE	1	2	3
	b. take asprin	TAKE ASPRIN	1	2	3
	c. controlling your weight or lose weight?	CONTROL WEIGHT	1	2	3
	d. cutting down on salt in your diet?	CUT DOWN ON SALT	1	2	3
	e. exercising?	EXERCISE	1	2	3
	f. cutting down on alcohol consumption?	CUT DOWN ALCOHOL	1	2	3
	g. stopping smoking?	STOP SMOKING	1	2	3
717	Now I would like to ask you some questions about any injections you have had in the last 12 months. 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 GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS NONE			00 → 721

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
718	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 GREATER THAN 90, OR DAILY FOR 3 MONTHS OR MORE, RECORD '90'. IF NON-NUMERIC ANSWER, PROBE TO GET AN ESTIMATE.	NUMBER OF INJECTIONS . . . [ ][ ] NONE 00	→ 721
719	The last time you had an injection given to you by a health worker, where did you go to get the injection? IF SOURCE IS ANY TYPE OF HEALTH FACILITY, WRITE THE NAME OF THE PLACE. PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. _____ (NAME OF PLACE)	HOME . . . . . 01 PUBLIC SECTOR HOSPITAL . . . . . 11 POLICLINIC . . . . . 14 ABULATORY . . . . . 15 MEDICAL DIAGNOSTIC CENTER . . . 17 FAP . . . . . 18 OTHER PUBLIC . . . . . 26 _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . 31 POLICLINIC . . . . . 34 ABULATORY . . . . . 35 MEDICAL DIAGNOSTIC CENTER . . . 37 FAP . . . . . 38 OTHER PRIVATE . . . . . 46 _____ (SPECIFY) OTHER PHARMACY/SHOP . . . . . 51 NGO . . . . . 52 FRIEND/RELATIVE/NEIGHBOUR . . . 53 OTHER . . . . . 96 _____ (SPECIFY) DON'T KNOW 98	
720	Did the person who gave you that injection take the syringe and needle from a new, unopened package?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
721	Now I'd like to ask you about tobacco use. Have you smoked at least 100 cigarettes during your entire life?	YES . . . . . 1 NO 2	
722	Do you currently smoke cigarettes?	YES . . . . . 1 NO 2	→ 724
723	In the last 24 hours, how many cigarettes did you smoke?	CIGARETTES . . . . . [ ][ ]	
724	Do you currently smoke or use any other type of tobacco?	YES . . . . . 1 NO 2	→ 726
725	What (other) type of tobacco do you currently smoke or use? RECORD ALL MENTIONED.	PIPE . . . . . A CHEWING TOBACCO . . . . . B SNUFF . . . . . C OTHER _____ X (SPECIFY)	
726	Do you live in a household in which (other) people smoke on a daily basis?	YES . . . . . 1 NO 2	
727	Have you ever heard of an illness called tuberculosis or TB?	YES . . . . . 1 NO 2	→ 733
728	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	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
729	What are the signs or symptoms would lead you to think that a person has tuberculosis? Any others? RECORD ALL MENTIONED?	COUGHING . . . . . A COUGHING WITH SPUTUM . . . . . B COUGHING 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 PALENESS . . . . . K OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
730	Can tuberculosis be cured?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
731	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	
732	Have you ever been told by a doctor or other health professional that you had tuberculosis?	YES . . . . . 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
733	Have you heard about "family medicine?" IF NOT, how about a "family doctor?"	YES . . . . . 1 NO 2	→ 741
734	What does this term mean to you?	ONLY ONE DOCTOR FOR FAMILY . . . A PREVENTATIVE HEALTH CARE . . . . . B FAMILY PLANNING . . . . . C INDIVIUAL'S CHOOSE . . . . . D HEALTH CARE FOR REACHERS E BETTER FAMILY HEALTH . . . . . F NO MEANING . . . . . G OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
735	Do you think that "family medicine" is appropriate for Armenia?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW/UNSURE 8	→ 737 → 738
736	Why do you think that it is appropriate?	CONVENIENT . . . . . A GOOD ADVICE . . . . . B CHEAP/ACCESSIBLE . . . . . C PRODUCTIVE . . . . . D OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	→ 738
737	Why do you think it is not appropriate?	NOT PROFESSIONAL . . . . . A LESS KNOWLEDGABLE . . . . . B NO SPECIFIC KNOWLEDGE . . . . . C DON'T TRUST DOCTOR . . . . . D PREFER OLD SYSTEM . . . . . E EXPENSIVE . . . . . F OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
738	Have you ever been registered with a family doctor?	YES . . . . . 1 NO 2	→ 741
739	How long have you had a family doctor?	DAYS AGO . . . . . 1 [ ][ ] WEEKS AGO . . . . . 2 [ ][ ] MONTHS AGO . . . . . 3 [ ][ ] YEARS AGO . . . . . 4 [ ][ ]	
740	Are you satisfied with your family doctor?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
741	Have you ever had a consultation with an eye doctor? IF YES: When was the last time you saw an eye doctor?	MONTHS AGO . . . . . 1 [ ][ ] YEARS AGO . . . . . 2 [ ][ ] NEVER . . . . . 995 DK/DON'T REMEMBER 998	→ 744

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
742	What was the reason for the visit?	IRRITATION IN EYES . . . . . 01 INFECTION . . . . . 02 EYE DISEASE . . . . . 03 CHECK UP . . . . . 04 BLURRY VISION . . . . . 05 NEW GLASSES/ CONTACTS PRESCRIPTION . . . 06 MANDATORY EXAMINATION . . . 07 OTHER _____ 96 (SPECIFY)	
743	Was any diagnosis given? IF YES: What was the diagnosis?	NO DIAGNOSIS . . . . . A AMBLYOPIA . . . . . B CATARACT . . . . . C DIABETIC EYE DISEASE . . . . . D CORNEAL EYE DISEASE . . . . . E GLAUCOMA . . . . . F MACULAR DISEASE . . . . . G RETINAL DISORDER OTHER THAN MACULA . . . . . H NEED GLASSES FOR DISTANCE . . . . . I READING . . . . . J OTHER _____ X (SPECIFY)	
744	CHECK 209: NO CHILD ☐ HAVE/HAD A CHILD ☐		→ 754
745	You have already told me, that you have never fathered a child. Please tell me, have you ever tried to father a child?	YES . . . . . 1 NO 2	→ 754
746	How old were you the first time you tried to fathered a child?	AGE . . . . . ☐☐ DON'T KNOW AGE 98	
747	How long were you trying to father a child?	LESS THAN 1 YEAR . . . . . 1 1 TO 3 YEARS . . . . . 2 3 TO 5 YEARS . . . . . 3 5 YEARS AND MORE 4	→ 754
748	Did you receive any examination to determine the reason of infertility?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 754

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
749	Where was the examination performed? RECORD ALL SOURCES MENTIONED.	PUBLIC SECTOR HOSPITAL . . . . . B CHILDREN'S HOSPITAL . . . . . C MATERNITY HOSPITAL . . . . . D POLICLINIC . . . . . E ABULATORY . . . . . F MEDICAL DIAGNOSTIC CENTER . . . H FAP . . . . . I OTHER PUBLIC J _____ (SPECIFY) PRIVATE SECTOR HOSPITAL . . . . . K CHILDREN'S HOSPITAL . . . . . L MATERNITY HOSPITAL . . . . . M POLICLINIC . . . . . N ABULATORY . . . . . O MEDICAL DIAGNOSTIC CENTER . . . Q FAP . . . . . R OTHER PRIVATE S _____ (SPECIFY) OTHER PHARMACY/SHOP . . . . . T NGO . . . . . U FRIEND/RELATIVE/NEIGHBOUR . . . V TRADITIONAL HEALER . . . . . W OTHER . . . . . X _____ (SPECIFY) DON'T KNOW . . . . . Z	
750	What kind of exam did they do?	GENERAL PHYSICAL EVALUATION A URINARY TRACT OR RECTAL INSPECTION . . . . . B SEMEN ANALYSIS . . . . . C TESTICULAR TISSUE INSPECTION (BIOPSY) . . . . . D EVALUATION FOR SEXUALLY TRANSMITTED DISEASE . . . . . E DETERMINATION OF BLOOD HORMONE LEVELS . . . . . F ECHOGRAPHY . . . . . G ANY OTHER_____ X (SPECIFY) DON'T KNOW/REMEMBER . . . . . Z	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
751	Can you tell me what was diagnosed as the reason for the infertility? RECORD ALL MENTIONED.	WEAKNESS/LACK (IMPOTENCY) OF SEXUAL ACTIVITY . . . . . A DEFECTIVE SEMEN . . . . . B LACK OF MOTILE SPERMATOZOIDS . . . . . C DILATION OF SCROTAL VESSELS (VARICOCELE) . . . . . D INFLAMATION OF PROSTATE OR ANY OTHER ACCESSORY GLANDS INFLAMMATION . . . . . E ENDOCRINE DISORDERS . . . . . F CONGENITAL PATHOLOGIES OF GENITOURINARY SYSTEM . . . . . G OTHER _____ X (SPECIFY) DON'T KNOW/REMEMBER . . . . . Z	
752	Have you had any treatment for infertility?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 754
753	Please, tell me, what kind of treatment did you get? RECORD ALL MENTIONED.	VITAMINS/BIOSTIMULANTS . . . . . A ANTIBIOTICS/SULFANILAMIDES . . B MEDICATIONS IMPROVING THE QUALITY OF SEMEN . . . . . C HORMONAL THERAPY . . . . . D MEDICATIONS INCREASING SEXUAL ACTIVITY . . . . . E FOLK MEDICINE . . . . . F PSYCHOTHERAPY . . . . . G PHYSIOTHERAPY . . . . . H PROSTATE MASSAGE . . . . . I SURGICAL INTERVENTION . . . . . J OTHER _____ X (SPECIFY) DON'T KNOW/REMEMBER . . . . . Z	
754	RECORD THE TIME.	HOUR . . . . . [ ][ ] MINUTES . . . . . [ ][ ]	

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 THE SUPERVISOR: _____ DATE: _____

EDITOR'S OBSERVATIONS

NAME OF EDITOR: _____ DATE: _____