Jordan

Population and Family Health Survey

2012

THE HASHEMITE KINGDOM OF JORDAN

Jordan Population and Family Health Survey 2012

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The JPFHS is part of the worldwide Demographic and Health Surveys Program, which is designed to collect data on fertility, family planning, and maternal and child health. Additional information about the Jordan survey may be obtained from the Department of Statistics, P.O. Box 2015, Amman 11181, Jordan (Telephone (962) 6-5-300-700; Fax (962) 6-5-300-710; e-mail stat@dos.gov.jo). Additional information about the MEASURE DHS program may be obtained from ICF International, 11785 Beltsville Drive, Suite 300, Calverton, MD 20705 (Telephone 301-572-0200; Fax 301-572-0999; e-mail reports@measuredhs.com).

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PREFACE

The Department of Statistics (DoS) takes pleasure in presenting the principal report of the 2012 Jordan Population and Family Health Survey (JPFHS), which includes the detailed main results. The survey was conducted from September to December 2012. The 2012 Jordan Population and Family Health Survey (JPFHS) is the sixth Demographic and Health Survey conducted in Jordan. Like the first five JPFHS, conducted respectively in 1990, 1997, 2002, 2007, and 2009, the 2012 JPFHS was carried out by the Department of Statistics (DoS). The main objective of the survey is to provide comprehensive data on fertility, mortality, family planning, and fertility preferences, as well as maternal and child health and nutrition, that can be used by program managers and policymakers to evaluate and improve existing programs. In addition, the JPFHS data will be useful for researchers and scholars interested in analyzing trends in demographic parameters in Jordan as well as conducting comparative, regional or cross-national studies and in-depth analyses.

The sample is nationally representative and has been designed to produce estimates of major survey variables at the national level, for urban and rural areas, for the country's three regions (Central, North, and South) and 12 governorates, and for Badia areas and refugee camp areas. Over 15,000 households and more than 11,000 ever-married women age 15-49 were interviewed.

The 2012 JPFHS was funded by the Government of Jordan. Additional funding was provided by the U.S. Agency for International Development (USAID), the United Nations Population Fund (UNFPA), and the United Nations Children's Fund (UNICEF). ICF International provided technical assistance through the worldwide MEASURE Demographic and Health Surveys (DHS) program.

It is hoped that the 2012 JPFHS data will meet the survey's objective of facilitating important government policies and programs promoting maternal and child health. Furthermore, the survey will also be useful to those interested in the fields of population, family planning, and health.

The DoS would like to express its thanks and appreciation to the individuals and organizations that contributed to the success of the survey. The timely and high-quality data are the result of hard work from all of the survey staff. Thanks go to all of the households interviewed during the survey for their time and willingness to provide the required information. Acknowledgment also goes to the Ministry of Health for its technical and logistical assistance. In addition, thanks are due to USAID, UNFPA and UNICEF in Amman for their financial and technical support. Thanks also go to the ICF International team: Bernard Barrere, DHS Deputy Director for Survey Operations; Pav Govindasamy, Technical Director, who participated in all stages of the survey; Ruilin Ren, for his contribution in the sampling design; Anne Cross, who assisted in preparing the preliminary results; and Noureddine Abderrahim for his valuable assistance in data processing. Finally, thanks are due to the local and international experts who prepared the present report.

Fathi Nsour
Director General

MILLENNIUM DEVELOPMENT GOAL INDICATORS

Millennium Development Goal Indicators

Jordan 2012

Indicator		Sex		
		Male	Female	Total
1.	**Eradicate extreme poverty and hunger**			
1.8	Prevalence of underweight children under age five[1]	3.3	2.7	3.0
4.	**Reduce child mortality**			
4.1	Under-five mortality rate[2]	22	19	21
4.2	Infant mortality rate[2]	19	16	17
4.3	Percentage of children age one immunized against measles	94.9	93.9	94.4
5.	**Improve maternal health**			
5.2	Percentage of births attended by skilled health personnel[3]	na	na	99.6
5.3	Contraceptive prevalence rate[4]	na	61.2	na
5.4	Adolescent birth rate[5]	na	25.6	na
5.5	Antenatal care coverage			
5.5a	At least one visit[6]	na	99.1	na
5.5b	Four or more visits[7]	na	94.5	na
5.6	Unmet need for family planning	na	11.7	na
6.	**Combat HIV/AIDS, malaria, and other diseases**			
6.3	Percentage of the population age 15-24 with comprehensive correct knowledge of HIV/AIDS[8]	na	8.6	na
6.4	Ratio of school attendance of orphans to school attendance of non-orphans age 10-14	1.03	0.55	0.80
		Urban	Rural	Total
7.	**Ensure environmental sustainability**			
7.8	Percentage of population using an improved water source[9]	99.4	95.9	98.8
7.9	Percentage of population using an improved sanitation facility[10]	99.9	100.0	99.9

na = Not applicable

[1] Proportion of children age 0-59 months who are below -2 standard deviations from the median of the WHO Child Growth Standards in weight-for-age.

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

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

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

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

[6] With a skilled provider.

[7] With any health care provider.

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

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

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

JORDAN

N
Ajloun
Irbid
Jarash
Mafraq
North Region
Balqa
Amman
Zarqa
Madaba
Central Region
Dead Sea
Karak
Tafiela
Ma'an
South Region
Aqaba
Gulf of Aqaba
0 25 50 100
Kilometers

INTRODUCTION 1

Key Findings

- The 2012 Jordan Population and Family Health Survey (JPFHS) is a nationally representative survey of 15,190 households and 11,352 ever-married women age 15-49.
- The 2012 JPFHS is the sixth comprehensive survey conducted in Jordan as part of the worldwide Demographic and Health Surveys project.
- The primary purpose of the JPFHS is to furnish policymakers and planners with detailed information on fertility and family planning; infant and child mortality; maternal and child health; nutrition; and knowledge of HIV/AIDS and other sexually transmitted infections.
- In two-thirds of the selected households, women age 15-49 and children age 6-59 months were weighed and measured and tested for anemia.

1.1 HISTORY, GEOGRAPHY, AND ECONOMY

Jordan, one of the most modern countries in the Middle East, was part of the Ottoman Empire until the end of World War I. It was declared a political entity known as Transjordan under the mandate of the British government in 1923, until it gained independence and was declared a kingdom in 1946. In 1950, Transjordan and the West Bank were united and assumed the current name of the Hashemite Kingdom of Jordan. The next major change for the kingdom came in 1967, when the occupation of the West Bank and Gaza Strip by Israeli forces caused a massive wave of migrants to flow into the East Bank. Two decades later, in accordance with the desires of the Arab states and the Palestinian National Authority, the West Bank was administratively disengaged from the kingdom in order to facilitate the establishment of the Palestinian state.

Geographically, Jordan is almost entirely landlocked. The port of Aqaba in the far south is Jordan's only outlet to the sea, as Palestine and Israel separate Jordan from the Mediterranean. Saudi Arabia lies to the south and east, Iraq to the northeast, and Syria to the north. Three climatic zones characterize Jordan, running from the west to the east of the country. These include the Jordan Valley, which is largely below sea level and considered semitropical; the highlands east of the Jordan Valley, which range in elevation from 100 to 1,500 meters above sea level, and can be considered to have a Mediterranean climate; and the low-lying desert to the east of the highlands. The total area of Jordan is about 89,000 square kilometers, of which over 80 percent is characterized by semidesert conditions; however, there do exist some wetlands, including the Azraq Basin.

Administratively, the country is divided into 12 governorates, which are then grouped into three regions—the North region (Irbid, Jarash, Ajloun, and Mafraq), the Central region (Amman, Zarqa, Balqa, and Madaba), and the South region (Karak, Tafielah, Ma'an, and Aqaba). The major cities are Amman (the capital), Zarqa, and Irbid.

With regard to the economy, the Jordanian government still controls most community services; however, Jordan is moving towards a free market economy. There has been a slight shift in the economic sectoral shares of gross domestic product (GDP) in the last two decades. The share of agriculture in GDP at constant prices dropped from 7 percent in 1992 to 3 percent in 2002, and remained at 3 percent in 2012. The contribution of wholesale and retail trade, restaurants, and hotels to the GDP has not changed

significantly; these sectors made up 9 percent of GDP in 1992 and 10 percent in 2012. There was a concomitant rise in the share of the manufacturing sector, from 12 percent in 1992 to 16 percent in 2002 and 17 percent in 2012. The share of the community and personal services sector also rose slightly during this period, from 2 percent in 1992 to 4 percent in 2012. The contribution of the transportation, storage, and communication sector to the GDP has changed little over the past 20 years, rising about 2 percentage points between 1992 and 2002, and was 15 percent in 2012 (Department of Statistics [DoS], 2013a).

The GDP per capita at current prices has risen steadily over time from US$ 1,381 in 1992 to US$ 1,880 in 2002, to an average of US$ 4,850 in 2012. The cost of living index increased, by 20 percent between 1992 and 1997, 8 percent between 1997 and 2002, and 36 percent between 2006 and 2012. The balance of trade deficit rose sharply, by 72 percent between 1990 and 1996, but declined by 14 percent between 1997 and 2001. While the deficit rose by 86 percent between 2002 and 2004 and remained stable between 2006 and 2012, it reached about 30 percent between 2004 and 2006. The rate of economic growth at constant prices has increased steadily over time: growth was 3.3 percent in 1997, 5.8 percent in 2002, 8.1 percent in 2006, and 2.7 percent in 2012 (DoS, 2013a).

To restructure economic activities in the country, the government began a reformation program in the early 1990s. Since the mid-1990s, the government has actively encouraged the privatization of certain community services as part of the program, and in 2000 issued the Privatization Act No. 25 to establish the legal and institutional framework for privatization in Jordan. The government has launched the process of integration and consolidation in the world economy by joining the World Trade Organization, signing a free trade agreement with the United States, a partnership agreement with the European Union, the Greater Arab Free Trade Agreement, and the Qualified Industrial Zones Agreement. The government has also established several development areas, such as the Aqaba Special Economic Zone Authority. The government has launched initiatives to fairly distribute the earnings generated from the progress made in the economic sector among all citizens through the Socioeconomic Transition Program, the E-government Initiative, the National Agenda, and the All of Us: the Jordan Initiative. Private local and foreign investments have significantly increased, reaching levels never previously achieved, as a result of continued implementation of privatization programs and a healthy environment for investment. The government, in response to the directives of His Majesty, the King of Jordan, has expanded the provision of decent housing for tens of thousands of poor and low-income households.

1.2 POPULATION

The first comprehensive population census in Jordan was carried out in 1961. The population then totaled 901,000 (Table 1.1). As a result of the Arab-Israeli wars in 1948 and 1967, and the subsequent Israeli occupation of the West Bank and the Gaza Strip, a large number of Palestinians moved into the East Bank. In 1979, the population of Jordan numbered 2.1 million; it nearly doubled to 4.1 million by 1994. According to the 2004 census, the population was 5.1 million, while it is estimated to have reached 6.3 million in 2012 (DoS, 2013b).

Table 1.1 Basic demographic indicators

Demographic indicators from selected sources, Jordan

Indicators	1961 census	1979 census	1994 census	2004 census	2012 estimates
Population (millions)	0.9	2.1	4.1	5.1	6.3
Intercensal growth rate (percent)	u	4.8	4.4	2.6	2.2
Density (population/km^2)	10.1	24	46.6	60.3	71.9
Percent urban	59.1	70.0	78.7	82.6	82.6
Life expectancy (years)	u	u	69.3	71.5	73.0
Male	u	u	68.5	70.6	71.6
Female	u	u	69.2	72.4	74.1

Source: Department of Statistics, 1997; Department of Statistics, 2006; Department of Statistics, 2013a; Department of Statistics, 2013b.
u = No information

Population growth averaged 4.8 percent during the period 1961-1979, 4.4 percent between 1979 and 1994, 2.6 percent between 1994 and 2004, and 2.2 percent between 2004 and 2012 (DoS, 2013b). The high rates of growth have been due to the influx of immigrants to the East Bank from the West Bank and Gaza Strip in the late 1960s, the inflow of large numbers of foreign workers, the high rate of natural increase, and the return of about 300,000 Jordanians from the Gulf States as a result of the 1990 Gulf Crisis, as well as the return of some tens of thousands of Jordanians and the migration of hundreds of thousands of Iraqis as a result of the 2003 Second Gulf War. The rapid increase in the population has created several problems for the country—namely, shortages in food, water, housing and employment opportunities, as well as placing a heavy burden on the education system, health services, and urban infrastructure. Fertility declines in Jordan have contributed to a slowing down in the population growth rate from 3.2 percent in the second half of the 1990s, to 2.3 percent in 2007, and to 2.2 percent in 2012. The average size of private households decreased from 6.7 persons in 1979 to 6.0 persons in 1994 and to 5.4 persons in 2004. In 2012, the average is estimated at about 5.2 persons (DoS, 2013b).

Urbanization is particularly important in Jordan. Historically, rural-to-urban migration, as well as immigration, has contributed to rapid urban growth. The recent international crises in Iraq and Syria have also impacted urban growth in Jordan. The percentage of the population living in urban areas increased by 13 percent between 1979 and 1994, reaching 83 percent in 2004 and remaining there in 2012, about a 5 percent increase compared to 1994.

In 1994, the life expectancy was 69 years for males and females. This increased to 71 years for males and 72 years for females in 2004. In 2012, the estimated life expectancy was 72 years for males and 74 years for females (DoS, 2013b).

1.3 Population and Family Planning Policies and Programs

Until the 1990s, Jordan had no explicit and official population policy. In 1973, the National Population Commission (NPC) was established, with the mandate to formulate and implement a national population policy and to address all population-related activities. However, the designing of a satisfactory population policy was controversial and, due to its sensitive nature, the NPC took no specific actions. The commission was revitalized in the late 1980s to backstop several agencies working in the population field. From that period until 1993, both public and private sectors made clear efforts to provide family planning services. The Ministry of Health (MoH), through its Mother and Child Health Centers (MCH) located in the governorates, provided optional and predominantly free family planning services as an unofficial and indirect intervention. The efforts made by the Jordan Association of Family Planning and Protection (JAFPP), as well as by some voluntary nongovernmental organizations, were invaluable in this regard.

The first initiative for a proposed population policy was taken in 1993, when the NPC adopted the National Birth Spacing Program, in an effort to promote better maternal and child health and to reduce fertility through advocating increased birth intervals. This program was discussed nationwide and, in 1993, the government approved the program as an official population policy, taking into consideration the religious, social, national, and free-choice dimensions of Jordanian society.

The NPC created the National Population Strategy for Jordan, which was approved by the cabinet in 1996 and was updated in 2000 in the light of regional and international recommendations and national surveys. The strategy document comprised four main dimensions—namely, reproductive health, population and sustainable development, gender equality and equity and empowerment of women, and population and enhancing advocacy (Higher Population Council, 2013).

This updated strategy was activated by the establishment of the Higher Population Council (HPC) at the beginning of 2002, designed to face the population and development challenges and follow up on the implementation of the work plan. This council is headed by the Prime Minister and is comprised of several ministers, in addition to relevant members from both the public and private sectors. The HPC continues the work of the NPC, as it is the higher authority commissioned with proposing and formulating national

population policies, following up, presenting, updating, and providing the supporting environment for achieving its objectives. This is in line with the national socioeconomic plans, the socioeconomic transition program, and the National Agenda of Jordan.

The HPC works toward the promotion of public awareness in population and development issues and enhances advocacy in these areas. The HPC collaborates and coordinates with regional and international bodies interested in population issues, in addition to building national capacities for officials working in these areas in different institutions.

1.4 HEALTH PRIORITIES AND PROGRAMS

The Ministry of Health (MoH) is responsible for all health matters in the Hashemite Kingdom of Jordan according to the Public Health Law No. 47 of 2008. Its tasks include the provision of primary health care services (preventive health services) and secondary and tertiary health care services. Additionally, the MoH organizes health services provided by the public and private sectors, provides health insurance for Jordanian citizens, and establishes educational and health training institutes to support the health sector with graduates specialized in medical occupations.

In light of the challenges facing the health sector, the MoH has prepared a National Health Strategy for the years 2008-2012 and the years 2013-2017, in line with the comprehensive development goals stated in the National Agenda Document (MoH, 2013). Executive plans, programs, and policies from these strategy documents mainly focus on the following areas:

- ***Primary Healthcare***

  The main goals include enhancement of healthy lifestyle patterns (such as physical activity, tobacco prevention, and following safe nutrition habits), enhancement of reproductive health services and child health, decreasing chronic disease prevalence and its complications, improvement of mother and child nutrition status, and improvement of first aid and emergency care.

  Its goals also include maintaining a low prevalence of HIV/AIDS and sexually transmitted infections; strengthening diseases and epidemics monitoring systems, setting up programs for screening for hereditary diseases among newborns, adding micronutrients to flour (flour fortification), fighting prevailing diseases and maintaining high vaccination coverage, introducing new vaccines to vaccination programs, and providing early diagnosis, evaluation, and health insurance coverage to those with special needs.

- ***Human Resources Management***

  Capacity building of staff is receiving considerable attention by the MoH. Activities include training courses (both internal and external) and on-the-job training and scholarships aimed at maintaining the provision of high-quality services.

- ***Secondary and Tertiary Care***

  MoH hospitals located in the governorates and districts provide basic curative health care services, such as medication disbursement, rehabilitation, and blood transfusions through the National Blood Bank.

  The positive effects of these services are reflected in the decreases in child mortality and maternal mortality rates and increases in the life expectancy at birth for both sexes.

- ***Monitoring and Control***

  The MoH monitors health professionals and other health institutions in the public and private sectors and participates in the drafting of laws and regulations related to clinics, hospitals, and medical laboratories with the aim of supervising, evaluating and developing the quality of these services.

- ***Financial Management***

  Jordan is characterized as a medium income country, with good infrastructure and modern health services. The average health expenditure represents about 10 percent of the GDP. Per capita health expenditures were 250 Jordanian dinars (JD) (US$ 350) in 2012, and the expenditure on primary health care amounted to 20 percent of the budget of the MoH. Expenditures on secondary and tertiary health care have also increased in Jordan.

  The MoH would like to provide health insurance coverage to all of its citizens in the coming years. Currently, 85 percent of the population has health insurance.

- ***Knowledge Management***

  Introducing the concept of knowledge management into the strategies of the MoH will enhance the benefit from available knowledge assets such as information, skills, and experiences.

  The MoH is computerizing and developing a geographic information system (GIS) for all affiliated health facilities. Most central directorates in the ministry have established electronic websites. The Health Insurance Directorate has also been computerized and linked to all governorates. Additionally, some central directorates, comprehensive health centers and hospitals have been computerized.

  Scientific research provides information that can be used for planning and decision-making purposes. The MoH has prepared a document that includes national priorities in the field of health research. Additionally, several studies have been conducted jointly between the MoH and various international agencies and Jordanian universities.

1.5 OBJECTIVES OF THE SURVEY

As in the previous Demographic and Health Surveys (DHS) in Jordan conducted in 1990, 1997, 2002, 2007, and 2009, the primary objective of the 2012 Jordan Population and Family Health Survey (JPFHS) is to provide reliable estimates of demographic parameters, such as fertility, mortality, family planning, and fertility preferences, as well as maternal and child health and nutrition, that can be used by program managers and policymakers to evaluate and improve existing programs. The JPFHS data will be useful to researchers and scholars interested in analyzing demographic trends in Jordan, as well as those conducting comparative, regional, or cross-national studies.

The content of the 2012 JPFHS was significantly expanded from the 2007 and 2009 surveys to include additional questions on women's status, reproductive health, domestic violence, early childhood development, and child discipline.

1.6 METHODOLOGY AND ORGANIZATION OF THE SURVEY

The 2012 JPFHS was designed to collect data on ever-married women of reproductive age (age 15-49). The areas covered include demographic and socioeconomic characteristics, reproduction, family planning, maternal health care, breastfeeding and child health care, marriage and employment, fertility preferences, nutritional status of children under age 5, knowledge of acquired immune deficiency

syndrome (AIDS) and sexually transmitted infections (STIs), domestic violence, early childhood development, and child discipline.

The survey was implemented by the Department of Statistics (DoS) and funded by the Jordanian government and the U.S. Agency for International Development (USAID). Additional funding was provided by UNFPA and UNICEF. ICF International provided technical assistance, through the global Demographic and Health Surveys (DHS) program, in sample and questionnaire design, training activities, computer processing of survey data, and preparation of reports. A national technical committee was established to provide guidelines for the planning and implementation stages of the survey. The committee consisted of representatives from various government and non-government agencies involved in population and health issues.

The survey was executed in three stages; the first was the preparatory stage, which involved sample design, mapping, listing of households, and implementation of sampling procedures. At the same time, the survey questionnaires and instruction manuals were developed, pretested, and finalized. All of these activities were completed by August 2012. The second stage encompassed interviewing and the collection of data, while the third stage involved office editing of questionnaires, coding of open-ended questions, ensuring data completion and data consistency, data processing operations, final editing, and verification of data accuracy and consistency.

1.6.1 Sample Design

The 2012 JPFHS sample was designed to produce reliable estimates of major survey variables for the country as a whole, urban and rural areas, each of the 12 governorates, and for the two special domains: the Badia areas and people living in refugee camps. To facilitate comparisons with previous surveys, the sample was also designed to produce estimates for the three regions (North, Central, and South). The grouping of the governorates into regions is as follows: the North consists of Irbid, Jarash, Ajloun, and Mafraq governorates; the Central region consists of Amman, Madaba, Balqa, and Zarqa governorates; and the South region consists of Karak, Tafiela, Ma’an, and Aqaba governorates.

The 2012 JPFHS sample was selected from the 2004 Jordan Population and Housing Census sampling frame. The frame excludes the population living in remote areas (most of whom are nomads), as well as those living in collective housing units such as hotels, hospitals, work camps, prisons, and the like. For the 2004 census, the country was subdivided into convenient area units called census blocks. For the purposes of the household surveys, the census blocks were regrouped to form a general statistical unit of moderate size (30 households or more), called a “cluster”, which is widely used in surveys as a primary sampling unit (PSU).

Stratification was achieved by first separating each governorate into urban and rural areas and then, within each urban and rural area, by Badia areas, refugee camps, and other. A two-stage sampling procedure was employed. In the first stage, 806 clusters were selected with probability proportional to the cluster size, that is, the number of residential households counted in the 2004 census. A household listing operation was then carried out in all of the selected clusters, and the resulting lists of households served as the sampling frame for the selection of households in the second stage. In the second stage of selection, a fixed number of 20 households was selected in each cluster with an equal probability systematic selection. A subsample of two-thirds of the selected households was identified for anthropometry measurements. The sample design is described in Appendix A, and sampling errors are presented in Appendix B.

1.6.2 Updating of Sampling Frame

Prior to the main fieldwork, mapping operations were carried out and the sample clusters were selected and then identified and located in the field. The selected clusters were delineated and the outer boundaries were mapped. During this process, the numbers on buildings and housing units were updated,

listed, and documented, along with the name of the household head. These activities were completed during the second quarter of 2012.

1.6.3 Questionnaires

The 2012 JPFHS used two questionnaires, namely the Household Questionnaire and the Woman's Questionnaire (see Appendix D). The Household Questionnaire was used to list all usual members of the sampled households, and visitors who slept in the household the night before the interview, and to obtain information on each household member's age, sex, educational attainment, relationship to the head of the household, and marital status. In addition, questions were included on the socioeconomic characteristics of the household, such as source of water, sanitation facilities, and the availability of durable goods. Moreover, the questionnaire included questions about child discipline. The Household Questionnaire was also used to identify women who were eligible for the individual interview (ever-married women age 15-49 years). In addition, all women age 15-49 and children under age 5 living in the subsample of households were eligible for height and weight measurement and anemia testing.

The Woman's Questionnaire was administered to ever-married women age 15-49 and collected information on the following topics:

- Respondent's background characteristics
- Birth history
- Knowledge, attitudes, and practice of family planning and exposure to family planning messages
- Maternal health (antenatal, delivery, and postnatal care)
- Immunization and health of children under age 5
- Breastfeeding and infant feeding practices
- Marriage and husband's background characteristics
- Fertility preferences
- Respondent's employment
- Knowledge of AIDS and sexually transmitted infections (STIs)
- Other health issues specific to women
- Early childhood development
- Domestic violence

In addition, information on births, pregnancies, and contraceptive use and discontinuation during the five years prior to the survey was collected using a monthly calendar.

The Household and Woman's Questionnaires were based on the model questionnaires developed by the MEASURE DHS program. Additions and modifications to the model questionnaires were made in order to provide detailed information specific to Jordan. The questionnaires were then translated into Arabic.

Anthropometric data were collected during the 2012 JPFHS in a subsample of two-thirds of the selected households in each cluster. All women age 15-49 and children age 0-4 in these households were measured for height using Shorr height boards and for weight using electronic Seca scales. In addition, a drop of capillary blood was taken from these women and children in the field to measure their hemoglobin level using the HemoCue system. Hemoglobin testing was used to estimate the prevalence of anemia.

1.6.4 Recruitment of Staff

Different supervisory and executive levels of survey staff members were recruited according to specific criteria, such as experience, educational and personal qualifications, and familiarity with geographic areas. Fieldworkers for the main survey were recruited from among those who participated in

the many surveys as well as those who took part in other demographic surveys conducted by the DoS, especially the 2007 and 2009 JPFHS. The interviewers were all highly qualified women. Supervisors and field editors were selected from the DoS permanent staff or from those with experience in such surveys.

1.6.5 Pretest and Training

Training of the interviewers for the pretest and main fieldwork survey took place in Amman in two phases—July 26 to August 16, 2012, and August 26 to September 2, 2012—for four weeks. The training course consisted of instructions on interviewing techniques and field procedures, a detailed review of the questionnaires, instruction and practice in weighing and measuring children and women, anemia testing, mock interviews between participants in the classroom, and practice interviews. Field practice in anemia testing was also carried out by persons who were assigned as team health technicians. In addition, team members practiced their ability to weigh and measure women and children in health centers affiliated with the Ministry of Health (Amman Comprehensive Health Center, Abu Nsair Comprehensive Health Center, and Sahab Comprehensive Health Center). Prior to the start of fieldwork, the questionnaires were pretested to make sure that the translation into Arabic were clear and could be understood by the respondents. The pretest fieldwork was conducted over a period of one week from September 2 to September 6 in three urban and one rural cluster not selected for the main survey. Following the completion of pretest, debriefing sessions were held with the field staff and modifications to the questionnaires and instructions were made based on lessons drawn from the exercise. Also during this period, field editors and team supervisors were provided with additional training in methods of field editing, data quality control procedures, and fieldwork coordination.

1.6.6 Main Fieldwork

The fieldwork was organized to ensure control over field logistics by DoS field offices all over the country. The workload, the dispersion of sample units, and transportation facilities served as criteria for identifying the number of field staff in each area. The field staff consisted of 26 field teams, each made up of one supervisor, one field editor, one biomarker technician, and three to four interviewers; two field coordinators supervised the 26 teams. During field work, these teams were combined or reformulated as necessary. Fieldwork was carried out between 9 September and 20 December, 2012.

To facilitate data collection, each interviewing team was assigned a number of clusters in the sample area. Each field supervisor, in collaboration with the field coordinator, divided his team so as to ensure that all adjacent sampled households were completed by one interviewer. To ensure good data quality, interviewers were asked to conduct fewer interviews during the first three days of data collection; the completed questionnaires were then checked by the field editor and the supervisor to ensure completeness and consistency of data. Under the supervision of the survey director and field coordinators, the field editor and the supervisor conducted spot checks by randomly visiting some sampled households and reinterviewing respondents with the household schedule. The original questionnaires were then matched to the reinterview questionnaires, and any differences were discussed with the interviewer and reconciled where necessary.

Interviewers made at least three call backs to attempt to successfully complete the interview of eligible women. Once a cluster was finished, the questionnaires were delivered to the DoS central office in Amman for processing.

1.6.7 Data Processing

Fieldwork and data processing activities overlapped. Data processing began two weeks after the start of the fieldwork. After field editing of questionnaires for completeness and consistency, the questionnaires for each cluster were packaged together and sent to the central office in Amman, where they were registered and stored. Special teams were formed to carry out office editing and coding of the open-ended questions.

Data entry and verification started after two weeks of office data processing. The process of data entry, including 100 percent reentry, editing, and cleaning, was done by using PCs and the CSPro (Census and Survey Processing) computer package, developed specially for such surveys. The CSPro program allows data to be edited while being entered. Data processing operations were completed by early January 2013. A data processing specialist from ICF International made a trip to Jordan in February 2013 to follow up on data editing and cleaning and to work on the tabulation of results for the survey preliminary report, which was published in March 2013. The tabulations for this report were completed in April 2013.

1.7 RESULTS OF THE HOUSEHOLD AND INDIVIDUAL INTERVIEWS

Table 1.2 is a summary of the results from both the household and the individual interviews. In all, 16,120 households were selected for the survey and, of these, 15,722 were found to be occupied households. Of these households, 15,190 (97 percent) were successfully interviewed.

In the households interviewed, 11,673 ever-married women age 15-49 were identified and interviews were completed with 11,352 women, or 97 percent of all eligible women.

Table 1.2 Results of the household and individual interviews

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

	Residence		
Result	Urban	Rural	Total
Household interviews			
Households selected	11,480	4,640	16,120
Households occupied	11,161	4,561	15,722
Households interviewed	10,727	4,463	15,190
Household response rate (HRR)[1]	96.1	97.9	96.6
Interviews with women age 15-49			
Number of eligible women	8,296	3,377	11,673
Number of eligible women interviewed	8,034	3,318	11,352
Eligible women response rate[2]	96.8	98.3	97.3
Overall women response rate (EWRR)[3]	93.1	96.1	94.0

[1] Households interviewed/households occupied.
[2] Respondents interviewed/eligible respondents.
[3] HRR * EWRR/100.

HOUSEHOLD CHARACTERISTICS 2

Key Findings

- Access to safe drinking water is universal in Jordan (99 percent).
- Almost all households in Jordan have a private flush toilet, with little variation by place of residence.
- More than half of households in Jordan own a private car or truck.
- Fifty-eight percent of households are exposed daily to secondhand smoke.
- A large proportion of the Jordanian population (36 percent) is under age 15.
- Thirteen percent of households are female-headed.
- Ninety-nine percent of births in Jordan are registered.

This chapter provides an overview of socioeconomic characteristics of the household population, including housing facilities and characteristics, sources of drinking water, sanitation facilities, availability of electricity, and possession of household durable goods. Information on household assets is used to create an indicator of household economic status—the wealth index. This chapter also describes the demographic characteristics of the household population, including age, sex, educational attainment, and employment status.

In the 2012 Jordan Population and Family Health Survey (JPFHS), information was collected about all usual residents of a selected household (de jure population) as well as persons who stayed in the selected household the night before the interview (de facto population). The difference between these two populations is very small, and all tables in this report refer to the de facto population, unless otherwise specified, to maintain comparability with other JPFHS reports.

2.1 HOUSING CHARACTERISTICS

Water and Sanitation

Access to safe water and sanitation are basic determinants of better health. Limited access to safe drinking water and sanitation facilities and poor hygiene are associated with acute respiratory infections (ARIs) and diarrheal diseases.

Table 2.1 presents information on household drinking water by urban-rural residence. Access to an improved source of drinking water is universal in Jordan (99 percent). The table also indicates that 49 percent of households in urban areas use piped water compared with 52 percent in rural areas. Five percent of households in urban areas use rainwater compared with 13 percent of households in rural areas. About half of urban households (46 percent) and 31 percent of rural households use bottled water for drinking. Overall, all households in urban areas, compared with 96 percent in rural areas, use an improved source of water for drinking. Some households treat their water to make it safe for drinking. The table indicates that 1 percent of households in urban areas and 2 percent in rural areas boil water, whereas 25 percent of households in urban areas and 15 percent in rural areas use water filters for water purification. Nationally, 25 percent of households use an appropriate water treatment method. Rural households are much less likely than urban households to treat their water appropriately (17 percent and 26 percent, respectively). Table 2.2 shows that almost all households in Jordan have a private flush toilet, with little variation by place of residence.

Table 2.1 Household drinking water

Percent distribution of households and de jure population by source of drinking water and treatment of drinking water, according to residence, Jordan 2012

Characteristic	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
Source of drinking water						
Improved source	99.5	96.2	98.9	99.4	95.9	98.8
Piped into dwelling	48.9	51.7	49.4	52.3	53.7	52.5
Piped to yard/plot	0.1	0.7	0.2	0.2	0.7	0.3
Rainwater	4.8	13.1	6.2	4.8	12.2	6.1
Bottled water	45.6	30.7	43.1	42.2	29.3	39.9
Non-improved source	0.5	3.8	1.1	0.6	4.1	1.2
Unprotected spring	0.2	1.9	0.4	0.2	1.8	0.5
Tanker truck	0.4	1.9	0.6	0.4	2.3	0.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
Water treatment prior to drinking[1]						
Boiled	1.1	1.6	1.2	1.0	1.6	1.1
Bleach/chlorine added	0.4	0.2	0.3	0.4	0.2	0.4
Water filter	24.9	15.0	23.3	26.4	16.1	24.6
Other	0.1	0.1	0.1	0.1	0.1	0.1
No treatment	73.5	83.2	75.1	72.0	82.1	73.8
Percentage using an appropriate treatment method[2]	26.4	16.7	24.8	27.9	17.8	26.1
Number	12,660	2,530	15,190	63,281	13,640	76,920

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

Table 2.2 Household sanitation facilities

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

Type of toilet/latrine facility	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
Improved, not shared facility	99.8	99.5	99.7	99.7	99.6	99.7
Flush/pour flush to piped sewer system	71.3	4.8	60.2	68.5	4.9	57.2
Flush/pour flush to pit latrine	28.4	94.1	39.3	31.1	94.2	42.3
Ventilated improved pit (VIP) latrine	0.0	0.4	0.1	0.0	0.3	0.1
Pit latrine with slab	0.0	0.2	0.1	0.0	0.2	0.1
Shared facility[1]	0.2	0.4	0.2	0.2	0.3	0.3
Non-improved facility	0.0	0.1	0.0	0.1	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	12,660	2,530	15,190	63,281	13,640	76,920

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

Housing Characteristics

In the 2012 JPFHS, information on housing characteristics was collected in the household questionnaire. Table 2.3 indicates that more than three-quarters of housing units (77 percent) in urban areas are apartments, compared with more than one-third (35 percent) in rural areas. *Dars*, which are homes that are built with an enclosed central courtyard, form 64 percent of the dwellings in rural areas, compared with only 21 percent in urban areas. In general, 99 percent of all housing units in Jordan are either apartments or dars.

Table 2.3 indicates that access to electricity is universal in Jordan (100 percent), with no difference by place of residence.

Table 2.3 shows that the vast majority (79 percent) of households in Jordan have tile flooring, with urban areas slightly less likely than rural households to have tile flooring (78 and 85 percent, respectively). On the other hand, urban households are more than twice as likely (18 percent) as rural households (7 percent) to have marble or ceramic tile flooring. Cement flooring is much more common in rural than urban households. The table also indicates that three-quarters of dwellings have walls built from cement bricks and about one in five dwellings have walls built from cut stone or cut stone and concrete (22 percent). Walls of dwellings are more likely to be built from cement bricks in rural areas than in urban areas (87 and 73 percent, respectively). Conversely, dwellings in urban areas are more likely to be built from cut stone or cut stone and concrete than those in rural areas (25 percent versus 8 percent). Almost all households in Jordan have concrete roofs (99 percent).

More than two-fifths of housing units (41 percent) have two or three rooms and more than one in two (51 percent) have four or five rooms, with 6 percent having six or more rooms; only 2 percent of housing units consist of one room. There are only slight differences in the number of rooms in a housing unit by place of residence. As for rooms used for sleeping, one in five housing units (23 percent) has one sleeping room, more than two-fifths (41 percent) have two, and about one-third (36 percent) have three sleeping rooms, with slight differences by place of residence.

The data also indicate that almost all households in Jordan have a separate room used as a kitchen (99 percent) and a separate bathroom (99 percent). In addition, nearly all households use natural gas for cooking regardless of the place of residence.

Information on smoking was collected in the 2012 JPFHS to assess the percentage of household members who are exposed to secondhand smoke (SHS), which is a risk factor for those who do not smoke. Pregnant women who are exposed to SHS have a higher risk of giving birth to a low birth weight baby (Windham et al., 1999). Also, children who are exposed to SHS are at a higher risk of respiratory and ear infections and poor lung development (U.S. Department of Health and Human Services, 2006). Table 2.3 provides information on the frequency of smoking in the home, which is used as a proxy for level of SHS exposure. Overall, 58 percent of households are exposed daily to SHS, with small differences by place of residence.

Table 2.3 Household characteristics

Percent distribution of households by housing characteristics and frequency of smoking in the home, according to residence, Jordan 2012

Housing characteristic	Residence		Total
	Urban	Rural	
Type of housing unit			
Apartment	77.3	35.0	70.3
Dar	21.1	64.2	28.2
Villa	1.6	0.8	1.5
Hut/barrack	0.0	0.1	0.0
Total	100.0	100.0	100.0
Electricity			
Yes	99.5	99.4	99.5
No	0.5	0.6	0.5
Total	100.0	100.0	100.0
Flooring material			
Earth	0.0	0.2	0.1
Parquet or polished wood	0.1	0.2	0.1
Tile	77.5	84.6	78.7
Marble/ceramic tile	18.4	7.4	16.6
Cement	3.9	7.6	4.5
Total	100.0	100.0	100.0
Main wall material			
Cement bricks	72.5	86.7	74.9
Cut stone	20.5	5.3	18.0
Cut stone and concrete	4.6	2.8	4.3
Concrete	2.1	4.6	2.5
Other	0.3	0.7	0.4
Total	100.0	100.0	100.0
Main roof material			
Concrete	99.0	98.9	99.0
Other	1.0	1.1	1.0
Total	100.0	100.0	100.0
Rooms in the house			
1	1.6	1.5	1.6
2	10.4	10.4	10.4
3	30.9	29.1	30.6
4	30.2	34.1	30.9
5	20.7	17.6	20.2
6 or more	6.1	7.3	6.3
Total	100.0	100.0	100.0
Rooms used for sleeping			
1	22.4	24.6	22.8
2	41.1	40.1	40.9
3 or more	36.5	35.3	36.3
Total	100.0	100.0	100.0
Has separate bathroom			
Yes	99.5	98.7	99.4
No	0.5	1.3	0.6
Total	100.0	100.0	100.0
Has separate room used as kitchen			
Yes	99.3	98.4	99.2
No	0.7	1.6	0.8
Total	100.0	100.0	100.0
Cooking fuel			
Natural gas	99.9	99.6	99.8
Other	0.1	0.4	0.2
Total	100.0	100.0	100.0
Frequency of smoking in the home			
Daily	57.3	58.2	57.5
Weekly	2.2	1.6	2.1
Monthly	0.6	0.4	0.5
Less than monthly	0.2	0.2	0.2
Never	39.7	39.6	39.7
Total	100.0	100.0	100.0
Number	12,660	2,530	15,190

Household Possessions

Jordan is a modern society, and most of the population enjoys the convenience of electrical appliances. Table 2.4 indicates that almost all households have a television, a refrigerator, a washing machine, and a satellite.

Table 2.4 Household possessions

Percentage of households possessing various household effects and means of transportation, by residence, Jordan 2012

Possession	Residence		Total
	Urban	Rural	
Household effects			
Bed or sofa bed	84.6	70.1	82.2
Radio	39.1	27.8	37.3
Television	99.2	98.3	99.1
Mobile telephone	98.6	97.8	98.4
Land telephone	21.7	9.5	19.7
Refrigerator	98.4	97.8	98.3
Satellite	98.7	97.4	98.5
Freezer	18.0	10.2	16.7
Washing machine	97.7	96.3	97.4
Dishwasher	2.2	0.6	1.9
Solar heater	15.7	8.6	14.5
Air conditioner	28.1	15.9	26.1
Fan	93.3	90.0	92.7
Water cooler	45.9	25.2	42.4
Microwave	52.7	33.2	49.4
Digital camera	12.7	5.0	11.4
Computer	59.1	44.1	56.6
Internet access at home	44.7	32.1	42.6
Credit card	9.8	2.8	8.6
Means of transport			
Car/truck	51.6	54.1	52.0
Number	12,660	2,530	15,190

As further testament to the level of development in Jordan, possession of mobile phones has increased from 90 percent of households in 2007 to 98 percent in 2012. The data also indicate that 57 percent of households own a computer, and four out of ten households (43 percent) have Internet access at home. The possession of computer-related assets varies considerably between urban and rural areas; urban households are more likely to own a computer than rural households (59 and 44 percent, respectively). Moreover, 45 percent of urban households have access to the Internet at home compared with 32 percent of rural households.

Fifteen percent of households have a solar heater. About one-quarter of households own an air conditioner, with marked differences between urban and rural households (28 and 16 percent, respectively). Eight in ten households possess beds or a sofa bed for sleeping, with significant variations by urban-rural residence (85 percent for urban areas compared with 70 percent in rural areas).

Households in urban areas are also more likely to have a water cooler (46 percent), a microwave (53 percent), and a digital camera (13 percent) than those in rural areas (25 percent, 33 percent, and 5 percent, respectively); urban households are also more likely to have a credit card than rural households (10 versus 3 percent). Of further interest is the fact that more than half of households in Jordan own a private car or truck.

2.2 HOUSEHOLD WEALTH

One of the background characteristics used for analysis in this report is the household wealth index. The data required for calculating this index include household assets and property, and the index is used to represent the relative wealth of surveyed households.

The household wealth index was developed and has been used in several countries to demonstrate the unequal distribution of income, use of health services, and health outcomes (Rutstein, 1999).

The wealth index is constructed using household assets, such as the ownership of a television or a private car, as well as dwelling characteristics, such as source of drinking water; type of toilet; type of floor, wall, and roof; and other household characteristics. Each asset is assigned a weight (factor score) generated through principal components analysis, and the resulting asset scores are standardized in relation to a normal distribution with a mean of zero and standard deviation of one (Gwatkin et al., 2000). Each household is then assigned a score for each asset and the scores are summed for each household; individuals are ranked according to the score of the household in which they reside. The sample is then divided into quintiles from one (lowest) to five (highest). For this report, a single asset index was developed for the whole sample; separate indices were prepared for the urban and rural population. This classification of population by quintiles is used as a background variable in the report to assess the demographic and health outcomes in relation to socioeconomic status.

Table 2.5 shows the distribution of the household population according to wealth quintiles, from the lowest to the highest. Urban households are generally wealthier than rural households. Forty-five percent of the population in urban areas fall into either the fourth or the highest wealth quintiles, while six in ten (57 percent) people in rural areas fall into either the lowest or the second quintiles.

Table 2.5 Wealth quintiles

Percent distribution of the de jure population by wealth quintiles, and the Gini coefficient, according to place of residence, Jordan 2012

	Wealth quintile							
Place of residence	Lowest	Second	Middle	Fourth	Highest	Total	Number of persons	Gini coefficient
Residence								
Urban	18.4	18.0	19.0	21.2	23.4	100.0	63,281	0.15
Rural	27.7	29.2	24.6	14.6	3.9	100.0	13,640	0.06
Region								
Central	17.0	18.1	18.6	21.1	25.1	100.0	47,879	0.12
North	24.1	23.2	22.9	18.1	11.7	100.0	21,640	0.12
South	27.3	22.9	20.7	18.2	10.9	100.0	7,401	0.07
Governorate								
Amman	14.4	14.6	16.1	20.7	34.2	100.0	29,457	0.16
Balqa	23.4	23.4	18.9	21.3	13.0	100.0	5,446	0.12
Zarqa	19.7	24.1	24.2	22.8	9.3	100.0	10,853	0.13
Madaba	24.0	23.0	23.3	18.5	11.2	100.0	2,123	0.11
Irbid	18.9	20.5	24.6	21.2	14.9	100.0	13,739	0.11
Mafraq	37.4	28.4	17.7	11.0	5.5	100.0	3,882	0.12
Jarash	29.5	26.8	22.9	14.1	6.7	100.0	2,264	0.11
Ajloun	29.0	28.1	21.7	15.0	6.1	100.0	1,755	0.11
Karak	28.7	25.9	20.2	19.1	6.1	100.0	3,189	0.07
Tafiela	29.8	26.0	20.7	16.3	7.1	100.0	1,139	0.10
Ma'an	36.3	24.4	20.7	13.3	5.3	100.0	1,362	0.10
Aqaba	15.8	13.8	21.7	21.8	26.9	100.0	1,710	0.10
Badia								
Badia	44.0	28.6	17.9	7.0	2.5	100.0	5,001	0.10
Non Badia	18.3	19.4	20.2	20.9	21.2	100.0	71,920	0.14
Camps								
Camp	40.7	29.3	18.3	9.6	2.0	100.0	2,917	0.13
Non camp	19.2	19.6	20.1	20.4	20.7	100.0	74,003	0.13
Total	20.0	20.0	20.0	20.0	20.0	100.0	76,920	0.10

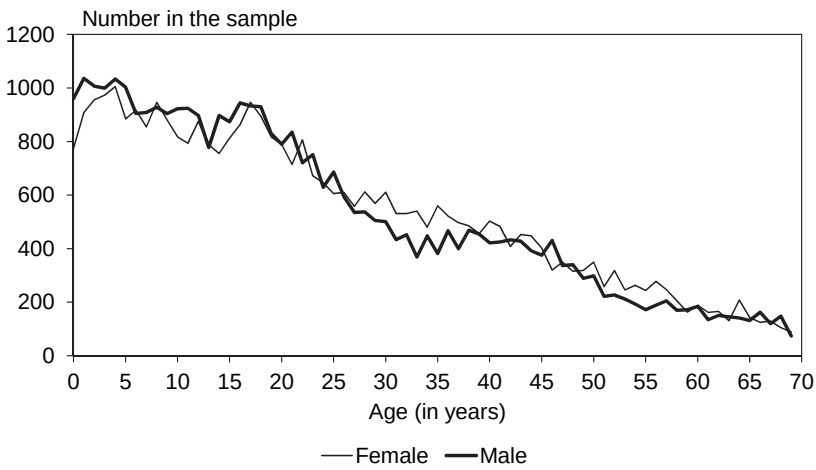
The table also indicates that there is a significant variation in the distribution of the population by governorates according to the wealth index. Whereas more than half of household members in Amman (55 percent) fall into either the fourth or the highest quintiles, more than half of those in Mafraq (66 percent), Ma'an (61 percent), Ajloun (57 percent), Jarash (56 percent), Tafiela (56 percent), and Karak (55 percent) fall in the lowest two quintiles. The data also indicate that about seven in ten people in Badia areas (73 percent) as well as in camps (70 percent) fall in the lowest two quintiles.

Variations are also observed regionally, with the South region having the highest percentage of population in the lowest quintile (27 percent) compared with the Central and North regions (17 and 24 percent, respectively) and the lowest percentage in the highest quintile (11 percent) compared with the other two regions (25 and 12 percent, respectively).

2.3 POPULATION BY AGE AND SEX

In many developing countries, data on age are affected by errors such as misstatement and preference for or avoidance of certain digits. In general, that was not the case in Jordan. The survey results indicated that for nearly all respondents age, month, and year of birth are recorded. Also, the distribution of the population by single years of age (Figure 2.1 and Appendix Table C.1) indicates that, although there is some preference for ages ending in 0 or 5, digit preference is not severe.

Figure 2.1
Male and female population by single year of age, 2012



JPFHS 2012

Table 2.6 shows the percent distribution of the population by age and sex, according to urban-rural residence. The table serves two purposes. The first is to show the effects of past demographic trends on the population and to give an indication of future trends, and the second is to describe the context in which various demographic processes operate. Thirty-six percent of the population is under age 15, an indicator that fertility remains high. The proportion under age 15 is slightly higher in rural areas (38 percent) than it is in urban areas (35 percent); this relationship holds for those under 20 as well. The opposite is true in the broad age category of age 20-44 (36 percent and 35 percent in urban and rural areas, respectively).

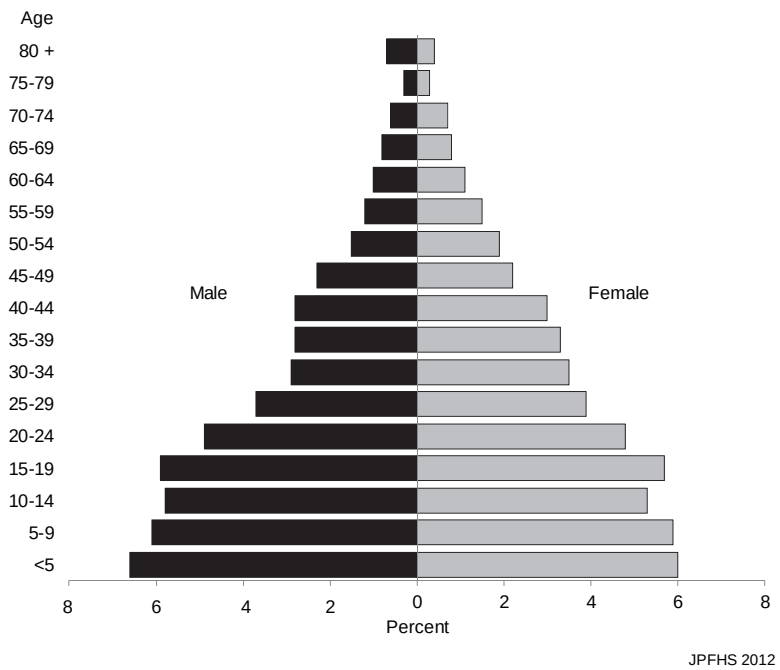
Table 2.6 Household population by age, sex, and residence

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

	Urban			Rural			Total		
Age	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	13.0	11.9	12.4	14.7	12.7	13.7	13.3	12.0	12.6
5-9	12.0	11.7	11.8	13.4	11.9	12.6	12.2	11.7	12.0
10-14	11.6	10.4	11.0	11.8	11.2	11.5	11.6	10.5	11.1
15-19	11.9	11.2	11.6	11.9	11.6	11.8	11.9	11.3	11.6
20-24	10.0	9.5	9.8	8.9	9.1	9.0	9.8	9.5	9.6
25-29	7.6	7.7	7.7	7.1	7.7	7.4	7.5	7.7	7.6
30-34	5.6	6.9	6.3	6.7	7.5	7.1	5.8	7.0	6.4
35-39	5.7	6.6	6.1	5.9	6.7	6.3	5.7	6.6	6.2
40-44	5.7	6.0	5.9	4.8	5.7	5.2	5.5	6.0	5.8
45-49	4.8	4.5	4.7	4.1	4.0	4.1	4.7	4.5	4.6
50-54	3.1	3.9	3.5	2.6	2.8	2.7	3.0	3.7	3.4
55-59	2.5	3.0	2.7	2.1	2.6	2.4	2.4	3.0	2.7
60-64	2.0	2.3	2.2	1.8	2.0	1.9	2.0	2.2	2.1
65-69	1.7	1.5	1.6	1.7	1.8	1.7	1.7	1.5	1.6
70-74	1.3	1.4	1.4	1.1	1.2	1.1	1.3	1.4	1.3
75-79	0.8	0.7	0.8	0.7	0.7	0.7	0.8	0.7	0.8
80 +	0.7	0.7	0.7	0.7	0.9	0.8	0.7	0.7	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	31,283	31,653	62,937	6,680	6,685	13,365	37,963	38,339	76,302

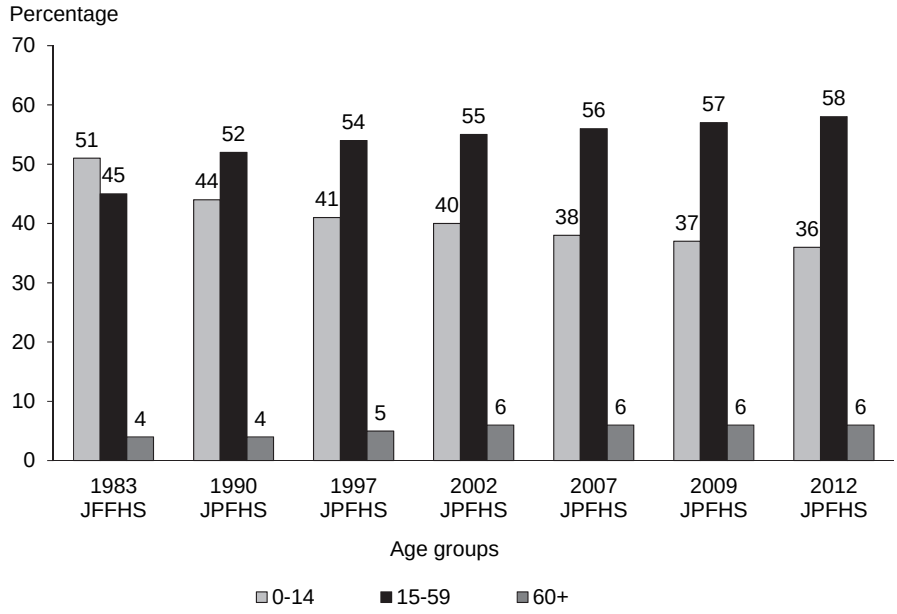
One may note that at the youngest ages in the population pyramid (Figure 2.2): there are more children in the 0-4 and 5-9 age groups than in the 10-14 age group, indicating that the reduced population age 10-14 was the consequence of the fast decline in fertility in the 1990s, while the increased population in the 0-9 age group may be a result of a recent pause in the decline in fertility.

Figure 2.2
Population pyramid



The percentage of the population under age 15 has declined substantially, from 51 percent in 1983 to 36 percent in 2012, with proportional increases in the 15-59 age group (Figure 2.3). This pattern is typical of populations that are experiencing a fertility decline (see Chapter 5 for more discussion on fertility in Jordan). The change in the age structure is favorable in economic terms. The dependency ratio, calculated as the ratio of persons in the "dependent" ages (under 15 and 60 and over) to those in the working-age category (15-59) on the basis of those figures, fell from 122 in 1983 to 73 in 2012.

Figure 2.3
Population by broad age groups, various surveys, 1983-2012



According to results from the 2012 JPFHS, there are more females than males in Jordan, with an overall sex ratio of 99 males for 100 females. The sex ratio varies by age: from 105 among those under age 30 to 87 in the middle age group (30-59) and about 98 among those age 60 and above.

2.4 HOUSEHOLD COMPOSITION

Household characteristics affect the social and economic well-being of the members of the household. Large household sizes may be associated with crowding, which can lead to unfavorable health conditions. Single-parent families, especially if they are headed by females, usually have limited financial resources.

Table 2.7 shows that the average number of members in a household is 5.1. Household size is smaller in urban areas (5.0) than in rural areas (5.4). Seven percent of households, on average, are composed of nine or more persons. The figure is higher in rural areas (10 percent) than in urban areas (7 percent). The table shows that 13 percent of households in urban areas are headed by females, compared with 12 percent in rural areas.

The table also shows that about 1 percent of households have at least one child under age 18 who doesn't live with both parents. A very low percentage of households (0.1 percent) include double orphans (both parents deceased), while 3 percent include single orphans (one parent deceased). However, there are no significant differences among households with single orphans according to urban-rural residence.

Table 2.7 Household composition

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

Characteristic	Residence		Total
	Urban	Rural	
Household headship			
Male	86.9	88.1	87.1
Female	13.1	11.9	12.9
Total	100.0	100.0	100.0
Number of usual members			
1	4.4	4.3	4.3
2	11.2	10.2	11.0
3	12.2	10.6	12.0
4	16.1	12.6	15.5
5	16.0	15.4	15.9
6	14.8	14.2	14.7
7	11.3	13.0	11.6
8	7.2	10.1	7.7
9+	6.6	9.7	7.1
Total	100.0	100.0	100.0
Mean size of households	5.0	5.4	5.1
Percentage of households with orphans and foster children under 18 years of age			
Foster children[1]	1.3	1.2	1.3
Double orphans	0.1	0.2	0.1
Single orphans[2]	2.9	2.8	2.9
Foster and/or orphan children	4.0	3.8	3.9
Number of households	12,660	2,530	15,190

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

2.5 BIRTH REGISTRATION

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 registration of the birth. Birth registration is basic to ensuring a child's legal status and, thus, basic rights and services (UNICEF, 2006; UNGASS, 2002). For the first time in the series of JPFHS surveys, the 2012 JPFHS Household Questionnaire included a question for all children under age 5 as to whether the child had a birth certificate or not.

Table 2.8 shows the percentage of children under age 5 whose births were officially registered. The data show that 99 percent of births in Jordan are registered, with birth certificates being shown to interviewers for 47 percent; for 52 percent, a birth certificate was not seen. Only a tiny fraction of births are not registered.

The proportion of children whose births are registered is above 97 percent by all background characteristics. Consequently, differentials in birth registration by background characteristics are very minor.

Table 2.8 Birth registration of children under age five

Percentage of de jure children under five years of age whose births are registered with the civil authorities, according to background characteristics, Jordan 2012

Background characteristic	Children whose births are registered: Percentage for whom a birth certificate was seen	Percentage for whom a birth certificate was not seen	Percentage registered	Number of children
Age				
<2	48.1	49.8	98.0	3,541
2-4	46.1	53.7	99.7	5,796
Sex				
Male	47.5	51.7	99.3	4,870
Female	46.1	52.7	98.8	4,468
Residence				
Urban	44.5	54.5	99.0	7,546
Rural	56.9	42.6	99.5	1,792
Region				
Central	36.8	62.5	99.3	5,665
North	63.9	34.9	98.7	2,751
South	58.0	40.9	98.9	921
Governorate				
Amman	38.7	60.3	99.0	3,292
Balqa	36.1	63.6	99.7	691
Zarqa	30.3	69.5	99.7	1,407
Madaba	49.4	49.6	99.1	276
Irbid	59.4	39.2	98.6	1,648
Mafraq	73.7	24.8	98.6	558
Jarash	68.4	30.7	99.1	323
Ajloun	65.9	33.7	99.7	223
Karak	53.8	45.3	99.1	399
Tafiela	56.5	41.4	97.9	152
Ma'an	63.3	35.9	99.2	166
Aqaba	63.0	36.0	99.0	204
Badia				
Badia	65.0	34.0	98.9	748
Non Badia	45.3	53.8	99.1	8,590
Camps				
Camp	48.1	51.4	99.6	382
Non camp	46.8	52.2	99.0	8,956
Wealth quintile				
Lowest	47.2	51.1	98.3	2,139
Second	46.9	52.1	99.0	2,032
Middle	48.6	50.9	99.5	1,998
Fourth	43.2	55.8	99.0	1,820
Highest	48.6	51.2	99.8	1,349
Total	46.9	52.2	99.1	9,338

Table 2.9 indicates that the majority of children under age 18 (93 percent) are living with both parents: this proportion is 94 percent for children under age 15. The range is between 96 percent for children age 0-4 and 87 percent for children age 15-17. No variations were noted according to sex, region, or Badia or camp areas, while there are variations in these percentages by governorate (ranging from 89 percent in Ma'an to 96 percent in Tafiela and Ajloun) and urban-rural residence (93 and 95 percent, respectively). The proportion of children under 18 living with both parents tends to increase with wealth before falling at the highest quintile. In addition, 3 percent of children under age 18 have experienced the death of one or both parents.

Table 2.9 Children's living arrangements and orphanhood

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

Background characteristic	Living with both parents	Living with mother but not with father		Living with father but not with mother		Not living with either parent				Total	Percentage not living with a biological parent	Percentage with one or both parents dead[1]	Number of children
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Only father alive	Only mother alive	Both dead				
Age													
0-4	96.3	2.7	0.4	0.2	0.1	0.2	0.0	0.0	0.0	100.0	0.3	0.6	9,338
<2	96.8	2.9	0.2	0.0	0.0	0.1	0.0	0.0	0.0	100.0	0.2	0.2	3,541
2-4	96.0	2.6	0.6	0.3	0.2	0.3	0.0	0.0	0.0	100.0	0.4	0.8	5,796
5-9	95.0	2.5	1.2	0.8	0.2	0.2	0.1	0.1	0.0	100.0	0.5	1.6	9,070
10-14	91.8	2.2	3.2	1.2	0.9	0.5	0.1	0.0	0.1	100.0	0.7	4.3	8,435
15-17	87.0	3.0	5.2	1.2	1.4	1.7	0.2	0.1	0.2	100.0	2.2	7.2	5,398
Sex													
Male	93.4	2.6	2.2	0.7	0.5	0.3	0.1	0.0	0.1	100.0	0.5	2.9	16,690
Female	93.0	2.5	2.1	0.9	0.5	0.8	0.1	0.1	0.1	100.0	1.0	2.9	15,550
Residence													
Urban	92.9	2.7	2.2	0.8	0.6	0.6	0.1	0.1	0.1	100.0	0.8	3.0	26,263
Rural	94.6	1.7	2.2	0.7	0.3	0.4	0.0	0.1	0.1	100.0	0.6	2.7	5,977
Region													
Central	93.1	2.7	2.2	0.7	0.5	0.5	0.1	0.1	0.1	100.0	0.7	2.9	19,715
North	93.1	2.7	1.7	0.9	0.8	0.5	0.2	0.0	0.1	100.0	0.8	2.8	9,260
South	93.7	1.6	3.0	0.8	0.2	0.6	0.1	0.1	0.0	100.0	0.8	3.4	3,265
Governorate													
Amman	92.5	3.1	2.3	0.9	0.6	0.5	0.1	0.0	0.0	100.0	0.6	3.1	11,582
Balqa	94.1	1.5	2.5	0.6	0.4	0.5	0.1	0.1	0.1	100.0	0.8	3.2	2,352
Zarqa	94.0	2.2	1.9	0.6	0.2	0.7	0.0	0.2	0.1	100.0	1.1	2.4	4,874
Madaba	94.2	1.9	2.9	0.2	0.4	0.4	0.0	0.0	0.0	100.0	0.5	3.3	906
Irbid	92.8	3.2	1.2	1.1	0.9	0.6	0.2	0.0	0.1	100.0	0.9	2.4	5,633
Mafraq	92.0	2.5	3.0	0.9	0.7	0.5	0.0	0.2	0.1	100.0	0.8	4.1	1,794
Jarash	94.5	1.4	2.0	0.6	0.8	0.4	0.0	0.1	0.2	100.0	0.7	3.1	1,052
Ajloun	96.0	1.0	2.2	0.2	0.3	0.2	0.0	0.1	0.0	100.0	0.4	2.6	780
Karak	95.0	0.9	2.5	0.5	0.1	0.7	0.2	0.2	0.0	100.0	1.0	2.9	1,358
Tafiela	96.0	1.5	1.7	0.3	0.2	0.2	0.1	0.0	0.0	100.0	0.3	2.0	513
Ma'an	89.3	2.2	6.0	1.5	0.2	0.7	0.0	0.1	0.0	100.0	0.8	6.3	627
Aqaba	93.5	2.4	2.1	1.1	0.3	0.5	0.0	0.1	0.0	100.0	0.7	2.6	767
Badia													
Badia	91.5	3.2	3.3	0.9	0.5	0.4	0.0	0.1	0.1	100.0	0.6	4.0	2,349
Non Badia	93.3	2.5	2.1	0.8	0.5	0.5	0.1	0.1	0.1	100.0	0.8	2.8	29,891
Camps													
Camp	93.7	2.3	1.7	0.6	0.3	1.0	0.0	0.2	0.0	100.0	1.2	2.3	1,365
Non camp	93.2	2.6	2.2	0.8	0.5	0.5	0.1	0.1	0.1	100.0	0.7	3.0	30,876
Wealth quintile													
Lowest	90.0	4.1	3.7	0.6	0.6	0.6	0.2	0.1	0.1	100.0	1.0	4.7	7,232
Second	93.3	1.5	2.4	1.1	0.6	0.7	0.1	0.1	0.2	100.0	1.1	3.4	6,767
Middle	94.7	2.7	1.3	0.4	0.2	0.5	0.1	0.0	0.0	100.0	0.7	1.7	6,668
Fourth	95.3	1.6	1.7	0.4	0.6	0.3	0.0	0.0	0.0	100.0	0.3	2.3	6,276
Highest	93.0	2.7	1.4	1.5	0.8	0.5	0.1	0.0	0.0	100.0	0.6	2.3	5,297
Total <18	93.2	2.6	2.2	0.8	0.5	0.5	0.1	0.1	0.1	100.0	0.8	2.9	32,240
Total <15	94.4	2.5	1.5	0.7	0.4	0.3	0.1	0.0	0.0	100.0	0.5	2.1	26,842

Note: Table is based on de jure members, i.e., usual residents.
[1] Includes children with father dead, mother dead, both dead, and one parent dead but missing information on survival status of the other parent.

2.6 EDUCATION OF THE HOUSEHOLD POPULATION

Education is an important variable with regard to its association with demographic behavior. Higher education is usually associated with greater knowledge and use of health practices and family planning methods. The education system in Jordan has been in place for a long time. Basic education is free and compulsory, starting at age six and lasting for 10 years. A further two-year period, known as the secondary cycle, is virtually cost-free. In the 2012 JPFHS, questions on education were asked for persons age 6 and older, to be used to calculate rates of school enrollment as well as overall education levels of the population.

Tables 2.10.1 and 2.10.2 present data on educational attainment as reported in the Household Questionnaire. In the 2012 JPFHS, information on educational attainment refers to the highest level of education attended and the highest grade completed at that level. An important observation is that women have less education than men: 98 percent of males in Jordan have had some schooling, compared with 92 percent of females.

More than half of males and females (54 and 52 percent, respectively) have attained secondary education or higher. Overall education levels have continued to increase for both men and women. In 2007 the percentages of men and women who attained secondary education or higher were 50 and 49 percent, respectively; in 2002 they were 46 percent and 43 percent among men and women, respectively, with a narrowing in the gender gap in overall educational attainment. There are variations in educational attainment by urban-rural residence and governorate. For example, educational attainment beyond preparatory school is higher in urban areas than in rural areas. The percentage varies from 38 percent for females in Ma'an to 55 percent in Amman; for males, it ranges from 44 percent in Ma'an to 57 percent in Amman. The difference in educational attainment is quite large between the Badia and non Badia areas. The percentages of women with at least some secondary education are 41 and 53 percent, respectively, and the percentages for men are 44 and 55 percent, respectively. A significant difference was also noted according to camp and non camp areas; the percentages of women who have at least some secondary education are 41 and 53 percent, respectively.

Medians presented in Tables 2.10.1 and 2.10.2 indicate an increase in the number of years of schooling as well as a reduction in the gender gap among the younger generations. Overall, men have a slightly longer stay in school than women, with a median of 9.5 years of education, compared with 9.4 for women. The medians have increased from 8.6 for men and 8.0 for women in 2002, to 9.1 for men and 8.8 for women in 2007, and further to 9.5 and 9.4, respectively, in 2012. At age 65 and over, men have an average of six years of schooling, with women having none. However, the male-female gender gap narrows, and by age 40-44 median years of schooling for women and men are identical at 10.7 years. Between ages 15 and 39, women have higher median years of schooling than men, with no gender gap among those age 6-14.

Table 2.10.1 Educational attainment of the female household population

Percent distribution of the de facto female household population age six and over by highest level of schooling attended, according to background characteristics, Jordan 2012

Background characteristic	Education						Total[1]	Number	Median years completed
	No education	Elementary	Preparatory	Secondary	Higher	Don't know, missing			
Age									
6-9	1.5	98.4	0.0	0.0	0.1	0.0	100.0	3,598	1.2
10-14	0.7	59.5	39.7	0.0	0.0	0.0	100.0	4,027	5.5
15-19	0.5	2.1	22.0	54.1	21.3	0.0	100.0	4,332	10.2
20-24	2.3	2.7	6.7	30.4	57.7	0.2	100.0	3,629	13.0
25-29	2.8	5.9	7.3	39.7	44.2	0.2	100.0	2,955	11.5
30-34	3.0	6.0	12.5	39.6	38.8	0.0	100.0	2,693	11.2
35-39	3.1	9.0	13.7	45.0	28.9	0.2	100.0	2,520	10.7
40-44	4.6	9.0	16.4	39.3	30.5	0.2	100.0	2,294	10.7
45-49	5.7	13.5	16.7	35.8	28.3	0.0	100.0	1,707	10.5
50-54	13.0	20.1	18.7	21.1	25.9	1.1	100.0	1,435	8.7
55-59	20.6	25.3	17.4	20.8	15.9	0.0	100.0	1,138	6.8
60-64	37.3	24.8	9.7	11.3	16.9	0.0	100.0	856	4.5
65+	66.6	16.8	4.6	5.2	6.8	0.0	100.0	1,649	0.0
Residence									
Urban	6.7	24.8	15.3	27.7	25.4	0.2	100.0	27,152	9.5
Rural	11.7	25.7	14.6	26.8	21.2	0.0	100.0	5,688	8.6
Region									
Central	6.6	24.8	15.4	28.1	24.9	0.2	100.0	20,583	9.5
North	8.7	24.8	15.0	27.2	24.3	0.0	100.0	9,181	9.2
South	10.3	26.5	14.3	24.9	23.9	0.0	100.0	3,076	8.8
Governorate									
Amman	6.2	23.6	14.6	28.1	27.2	0.3	100.0	12,986	9.9
Balqa	9.0	26.1	15.5	25.5	23.9	0.0	100.0	2,281	8.9
Zarqa	6.2	27.8	17.6	29.8	18.6	0.0	100.0	4,448	8.8
Madaba	8.7	23.3	14.7	27.8	25.6	0.0	100.0	868	9.6
Irbid	7.4	24.0	14.8	27.9	25.9	0.0	100.0	5,887	9.6
Mafraq	12.4	28.3	15.3	24.7	19.3	0.0	100.0	1,595	8.0
Jarash	9.0	25.8	16.3	27.0	21.9	0.0	100.0	948	8.8
Ajloun	9.7	22.5	14.5	27.3	26.0	0.0	100.0	751	9.6
Karak	10.8	24.4	13.4	25.3	26.1	0.0	100.0	1,338	9.3
Tafiela	9.8	25.6	14.7	23.8	26.1	0.0	100.0	464	9.0
Ma'an	13.6	33.1	15.0	19.7	18.7	0.0	100.0	550	6.6
Aqaba	7.2	26.1	15.2	28.9	22.6	0.0	100.0	724	9.3
Badia									
Badia	15.1	28.9	15.3	25.4	15.2	0.0	100.0	2,045	7.3
Non Badia	7.0	24.7	15.2	27.7	25.3	0.1	100.0	30,795	9.5
Camps									
Camp	7.3	31.0	20.3	27.4	13.9	0.0	100.0	1,192	7.8
Non camp	7.6	24.7	15.0	27.6	25.0	0.1	100.0	31,648	9.4
Wealth quintile									
Lowest	14.3	30.8	20.0	25.5	9.5	0.0	100.0	6,421	6.8
Second	8.8	27.8	16.2	31.0	16.2	0.0	100.0	6,460	8.6
Middle	6.0	26.5	16.7	29.1	21.7	0.0	100.0	6,343	9.1
Fourth	4.8	22.2	13.9	28.0	31.0	0.0	100.0	6,523	10.3
Highest	4.3	18.1	9.7	24.5	42.8	0.6	100.0	7,094	11.2
Total[1]	7.5	25.0	15.2	27.6	24.6	0.1	100.0	32,840	9.4

Note: Education categories refer to the highest level of education attended, whether or not that level was completed. Elementary education corresponds to the first six years of school, preparatory corresponds to the next three years, and secondary to the last three years, for a total of 12 years of schooling.
[1] Total includes one woman missing information on age who is not shown separately.

Table 2.10.2 Educational attainment of the male household population

Percent distribution of the de facto male household population age six and over by highest level of schooling attended, according to background characteristics, Jordan 2012

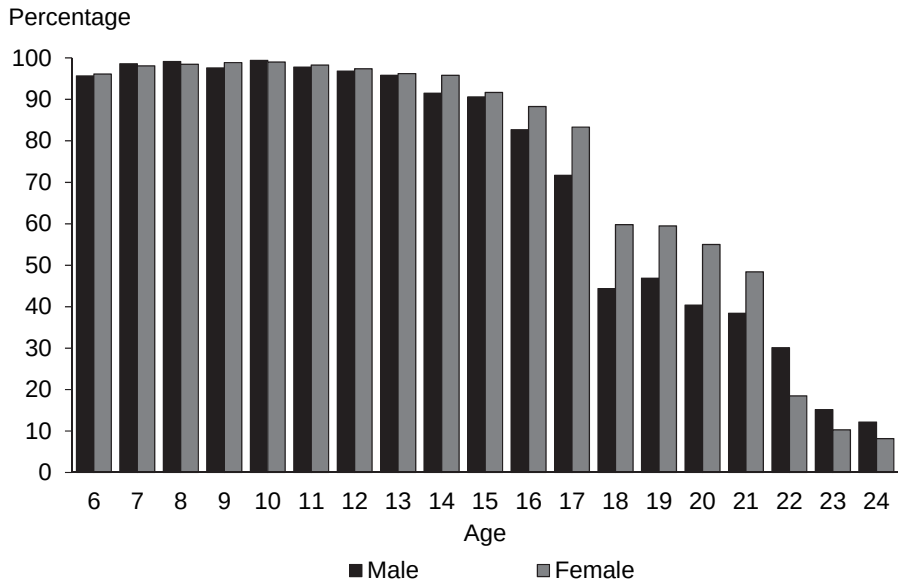
Background characteristic	Education: No education	Elementary	Preparatory	Secondary	Higher	Total	Number	Median years completed
Age								
6-9	1.4	98.6	0.0	0.0	0.0	100.0	3,645	1.1
10-14	0.7	59.3	39.6	0.3	0.0	100.0	4,419	5.5
15-19	0.9	4.1	24.2	56.9	13.9	100.0	4,511	9.9
20-24	0.6	3.5	10.8	40.1	45.0	100.0	3,726	11.3
25-29	0.5	4.1	7.7	44.5	43.3	100.0	2,858	11.3
30-34	1.4	8.7	9.8	49.9	30.2	100.0	2,204	10.8
35-39	1.4	9.7	19.2	43.4	26.3	100.0	2,173	10.5
40-44	1.3	10.4	21.2	37.8	29.2	100.0	2,100	10.7
45-49	1.9	7.9	19.5	35.1	35.7	100.0	1,771	11.2
50-54	1.5	16.0	15.6	28.1	38.8	100.0	1,152	11.1
55-59	3.2	17.0	18.9	18.9	41.9	100.0	908	11.3
60-64	6.0	22.9	17.8	21.6	31.7	100.0	757	9.8
65+	19.7	30.1	11.7	13.8	24.7	100.0	1,702	6.0
Residence								
Urban	1.9	26.0	17.7	29.6	24.9	100.0	26,434	9.6
Rural	3.9	28.6	16.4	34.3	16.9	100.0	5,493	9.2
Region								
Central	1.8	25.8	17.6	29.4	25.4	100.0	20,232	9.6
North	2.5	27.1	17.5	31.7	21.1	100.0	8,694	9.4
South	3.8	28.2	16.6	33.1	18.3	100.0	3,001	9.2
Governorate								
Amman	1.5	24.4	17.3	27.3	29.4	100.0	12,463	9.9
Balqa	2.9	26.4	17.8	31.7	21.2	100.0	2,292	9.4
Zarqa	1.8	29.1	18.5	33.9	16.7	100.0	4,591	9.0
Madaba	3.3	27.6	15.5	30.2	23.4	100.0	885	9.6
Irbid	1.9	25.9	17.2	30.9	24.1	100.0	5,594	9.7
Mafraq	4.3	30.1	18.7	33.9	13.0	100.0	1,535	8.6
Jarash	3.1	29.9	18.3	31.1	17.6	100.0	881	8.8
Ajloun	3.1	27.3	16.9	33.7	19.0	100.0	685	9.4
Karak	4.0	26.2	16.8	33.3	19.8	100.0	1,265	9.5
Tafiela	2.6	27.6	18.3	34.0	17.6	100.0	444	9.2
Ma'an	5.9	33.1	16.5	31.3	13.1	100.0	583	8.0
Aqaba	2.6	28.0	15.2	33.9	20.4	100.0	709	9.6
Badia								
Badia	6.2	31.8	18.1	33.2	10.8	100.0	1,969	8.2
Non Badia	2.0	26.1	17.4	30.2	24.4	100.0	29,959	9.6
Camps								
Camp	3.6	34.1	22.2	28.3	11.9	100.0	1,224	7.7
Non camp	2.2	26.1	17.3	30.5	24.0	100.0	30,703	9.6
Wealth quintile								
Lowest	5.6	34.3	22.6	30.2	7.2	100.0	6,129	7.5
Second	2.4	29.2	21.0	34.8	12.4	100.0	6,335	8.7
Middle	2.1	27.5	17.1	34.0	19.4	100.0	6,467	9.4
Fourth	0.9	24.0	15.9	30.5	28.6	100.0	6,467	10.1
Highest	0.2	17.6	11.0	22.5	48.7	100.0	6,529	11.6
Total	2.2	26.4	17.5	30.4	23.5	100.0	31,927	9.5

Note: Education categories refer to the highest level of education attended, whether or not that level was completed. Elementary education corresponds to the first six years of school, preparatory corresponds to the next three years, and secondary to the last three years, for a total of 12 years of schooling.

Figure 2.4 shows the proportion of the household population age 6-24 attending school, by age and sex. The data reflect the fact that school attendance in Jordan is very high, at almost 98 percent for both sexes among those age 7 through 12. Few differences in attendance are observed between males and females at younger ages (7-13 years).

Beyond the age of 13, attendance rates start to decline, especially for males. Nevertheless, the overall rate exceeds 90 percent for both sexes up to age 15. Age 14 marks the beginning of a gender-based divergence in attendance, where 92 percent of males and 96 percent of females are attending school. This gender gap continues through age 21, with 48 percent of females attending school as compared with 38 percent of males. Between age 22 and 24, men are more likely than women to be in school.

Figure 2.4
Age-specific attendance rates, 2012
(percentage of the population age 6-24 attending school)



JPFHS 2012

RESPONDENTS' BACKGROUND CHARACTERISTICS 3

Key Findings

- The median number of years of education for ever-married women age 15-49 is 10.8 years, with large differences in educational attainment by governorates.
- Seventeen percent of women read a newspaper, listen to the radio, and watch television at least once a week; 2 percent were not exposed to any of the three media.
- The majority of ever-married women (68 percent) have never been employed, while 16 percent are currently employed, and 16 percent have been previously employed.
- Among working women, the majority (66 percent) are engaged in professional, technical, and managerial work.
- Overall, 11 percent of women smoke cigarettes and 10 percent smoke nargila (water pipe).

This chapter highlights the basic characteristics of ever-married women age 15-49 who were interviewed in the survey. It also presents data on women's exposure to the mass media, their employment status, and tobacco use.

3.1 GENERAL CHARACTERISTICS

Table 3.1 presents the distribution of respondents by background characteristics, including age, marital status, residence, educational level, and household wealth. The distribution of ever-married women shows that, in 2012, less than one-third of ever-married women (31 percent) are under age 30. This represents a decline from 34 percent in 2002 and 32 percent in 2007 and 2009. In contrast, the proportion of ever-married women age 30-49 has increased from 66 percent in 2002 to 68 percent in 2007 and 2009 and to 69 percent in 2012. Among ever-married women, the percent distribution by marital status indicates that 95 percent are currently married; the rest are either divorced or separated (3 percent) or widowed (2 percent). The proportion of those currently married has remained about the same as in 2007 and 2009.

Table 3.1 shows that in 2012, 83 percent of ever-married women live in urban areas (defined as localities with a population of 5,000 or more, as stated in the 2004 Population and Housing Census). Almost two in three women live in the Central region (Amman, Zarqa, Balqa, and Madaba), about 28 percent in the North region (Irbid, Mafraq, Jarash, and Ajloun), and only 9 percent live in the South region (Karak, Tafiela, Ma'an, and Aqaba).

Table 3.1 Background characteristics of women

Percent distribution of ever-married women age 15-49 by selected background characteristics, Jordan 2012

Background characteristic	Weighted percent	Number of women: Weighted number	Number of women: Unweighted number
Age			
15-19	2.4	278	239
20-24	10.6	1,207	1,190
25-29	17.7	2,006	2,110
30-34	18.8	2,136	2,169
35-39	18.5	2,098	2,164
40-44	18.1	2,055	1,999
45-49	13.8	1,571	1,481
Marital status			
Married	95.1	10,801	10,746
Divorced/separated	3.1	350	346
Widowed	1.8	201	260
Residence			
Urban	83.3	9,458	8,034
Rural	16.7	1,894	3,318
Region			
Central	63.3	7,181	4,051
North	27.5	3,120	3,980
South	9.3	1,051	3,321
Governorate			
Amman	39.2	4,454	1,106
Balqa	6.7	765	945
Zarqa	14.6	1,659	1,139
Madaba	2.7	303	861
Irbid	17.5	1,986	1,137
Mafraq	5.0	562	1,000
Jarash	2.8	320	945
Ajloun	2.2	251	898
Karak	3.9	441	873
Tafiela	1.5	167	819
Ma'an	1.6	178	781
Aqaba	2.3	265	848
Badia			
Badia	6.2	705	1,265
Non Badia	93.8	10,647	10,087
Camps			
Camp	3.6	413	904
Non camp	96.4	10,939	10,448
Education			
No education	2.3	267	408
Elementary	7.6	860	981
Preparatory	14.8	1,677	1,610
Secondary	44.7	5,073	4,799
Higher	30.6	3,475	3,554
Wealth quintile			
Lowest	18.8	2,137	2,695
Second	20.6	2,343	2,896
Middle	21.7	2,461	2,601
Fourth	20.6	2,336	2,050
Highest	18.3	2,076	1,110
Total 15-49	100.0	11,352	11,352

Note: Education categories refer to the highest level of education attended, whether or not that level was completed.

The distribution of ever-married women by governorate is comparable to the distribution of the total population in the 2004 census. About two in five (39 percent) women live in Amman, 18 percent in Irbid, and 15 percent in Zarqa. Six percent of ever-married women live in Badia areas and 4 percent live in refugee camp areas.

The overall level of education among women continues to improve. The percentage of ever-married women age 15-49 years who had no schooling has steadily declined from 6 percent in 2002 to 4 percent in 2007, 3 percent in 2009, and 2 percent in 2012. The percentage who have attended school beyond secondary level increased from 25 percent in 2002 to 29 percent in 2007, 32 percent in 2009, and 31 percent in 2012.

Table 3.1 also presents the weighted and unweighted numbers of women in the sample. The unweighted numbers of women in the three largest governorates are smaller than the weighted numbers. The opposite is true for all other governorates because of oversampling. For example, in Ma'an governorate, although the weighted number of women is 178, in reality data were collected from 781 women: Ma'an governorate was oversampled to obtain a sufficient sample of women to yield statistically reliable estimates.

3.2 RESPONDENTS' LEVEL OF EDUCATION

Table 3.2 presents the distribution of ever-married women by the level of education attended, according to background characteristics. Broad-based access to education for the Jordanian population has continued to increase over the past 65 years. The data indicate that older women are less likely to have had education than younger women; almost 5 percent of women age 45-49 have had no education, compared with less than 1 percent of women between the ages of 15 and 24.

The median number of years of schooling according to age group reflects no major difference. The median number of years of education for all ever-married women is 10.8 years. While women age 15-24 and age 45-49 have a median of 10.5 years of education, those age 25-29 and 30-34 have a median of 11.1 years of education.

Ever-married women in urban areas are more likely to have had some education, as well as higher education, than their rural counterparts; 2 percent of women in urban areas have no education, compared with 6 percent of women in rural areas. There are small differences in terms of the median number of years of schooling according to urban-rural residence. There are pronounced differences in the proportion of women with no education by region and governorate. In the Central region, 2 percent of women have no education, whereas in the South region, the proportion is 6 percent. Only 1 percent of women in Irbid and Zarqa have no education, compared with 13 percent in Ma'an. Regional differences in secondary or higher education are small. Considerable differences exist in terms of higher education by governorate; only one in four women have attained higher education in Zarqa, Mafraq, and Ma'an in contrast to about two in five women in Ajloun and Karak.

In Badia areas, 13 percent of ever-married women age 15-49 have no education, compared with 2 percent in non-Badia areas. There is also a significant and notable difference in the percentage of woman attaining higher education between Badia and non- Badia areas (20 and 31 percent, respectively) and camp and non camp areas (19 percent and 31 percent, respectively). The table also shows an inverse relationship between wealth and educational attainment, with a higher proportion of women in the lowest wealth quintile having no education (8 percent) than in either the fourth or the highest quintiles (less than 1 percent each). The proportion of women who have attained higher education is highest in the wealthiest households (55 percent) and lowest in the poorest households (10 percent).

Table 3.2 Educational attainment

Percent distribution of ever-married women age 15-49 by highest level of schooling attended, according to background characteristics, Jordan 2012

Background characteristic	Education					Total	Median years completed	Number of women
	No education	Elementary	Preparatory	Secondary	Higher			
Age								
15-24	0.8	4.6	17.7	52.6	24.2	100.0	10.5	1,485
15-19	0.1	5.3	30.4	62.7	1.5	100.0	9.6	278
20-24	1.0	4.4	14.8	50.3	29.4	100.0	10.7	1,207
25-29	1.4	5.2	8.1	48.9	36.4	100.0	11.1	2,006
30-34	1.7	5.1	14.0	42.7	36.5	100.0	11.1	2,136
35-39	1.9	8.7	15.7	47.4	26.2	100.0	10.7	2,098
40-44	3.8	9.0	16.7	40.4	30.2	100.0	10.7	2,055
45-49	4.6	13.6	17.7	36.4	27.7	100.0	10.5	1,571
Residence								
Urban	1.7	7.2	15.1	45.3	30.7	100.0	10.8	9,458
Rural	5.5	9.5	13.4	41.6	30.1	100.0	10.6	1,894
Region								
Central	1.9	7.5	15.7	45.9	29.1	100.0	10.8	7,181
North	2.3	7.1	14.1	44.0	32.5	100.0	10.8	3,120
South	5.8	9.7	10.6	38.3	35.6	100.0	10.8	1,051
Governorate								
Amman	1.8	7.4	15.8	45.1	30.0	100.0	10.9	4,454
Balqa	3.3	9.2	14.2	40.3	33.0	100.0	10.8	765
Zarqa	1.4	7.1	16.7	51.4	23.5	100.0	10.6	1,659
Madaba	2.0	5.9	12.1	43.4	36.5	100.0	11.2	303
Irbid	1.1	5.9	13.6	46.1	33.4	100.0	10.9	1,986
Mafraq	7.2	13.1	16.2	37.0	26.6	100.0	10.3	562
Jarash	1.8	7.0	16.7	42.6	31.9	100.0	10.7	320
Ajloun	1.6	3.9	9.9	44.6	40.0	100.0	11.0	251
Karak	4.1	7.5	9.6	38.1	40.6	100.0	11.0	441
Tafiela	4.9	9.9	12.2	35.3	37.8	100.0	10.8	167
Ma'an	13.3	19.1	11.9	29.2	26.5	100.0	9.9	178
Aqaba	4.2	6.8	10.4	46.5	32.1	100.0	11.0	265
Badia								
Badia	12.8	15.0	16.2	35.9	20.2	100.0	9.8	705
Non Badia	1.7	7.1	14.7	45.3	31.3	100.0	10.8	10,647
Camps								
Camp	1.9	11.7	21.9	45.7	18.8	100.0	10.1	413
Non camp	2.4	7.4	14.5	44.6	31.1	100.0	10.8	10,939
Wealth quintile								
Lowest	8.3	16.6	25.3	39.4	10.3	100.0	8.9	2,137
Second	2.7	10.1	17.4	50.1	19.8	100.0	10.4	2,343
Middle	0.6	6.7	15.3	48.6	28.7	100.0	10.8	2,461
Fourth	0.3	3.2	11.2	44.9	40.4	100.0	11.4	2,336
Highest	0.2	1.3	4.4	39.2	54.9	100.0	13.1	2,076
Total	2.3	7.6	14.8	44.7	30.6	100.0	10.8	11,352

Note: Education categories refer to the highest level of education attended, whether or not that level was completed. Elementary education corresponds to the first six years of school, preparatory corresponds to the next three years, and secondary to the last three years, for a total of 12 years of schooling.

3.3 EXPOSURE TO MASS MEDIA

The exposure of ever-married women to television, radio, and newspapers is shown in Table 3.3. Ninety-seven percent of women watch television, 37 percent listen to the radio, and 35 percent read newspapers at least once a week. While 17 percent of women were exposed to all three forms of media at least once a week, 2 percent were not exposed to any.

Younger women are slightly less likely to be exposed to mass media than older women: whereas 13 percent of women age 15-19 were exposed to all three forms of mass media, the proportion goes up to 18-19 percent among women age 30-49. There is a steady increase with education level in the proportions of women who read a newspaper, watch television, and listen to the radio at least once a week. It should be noted that while about one-fourth of women with a higher than secondary education (27 percent) were exposed to all three media, almost no women with no education report the same.

Women in urban areas are more likely to read a newspaper (37 percent) than women in rural areas (25 percent), while there is no difference in exposure to the television. The extent to which women listen to the radio varies by urban-rural residence (37 percent in urban areas versus 33 percent in rural areas). Women living in the Central region are more likely than women in the other regions to read newspapers, listen to the radio, and watch television (20 percent exposed to all three media in the Central region versus 12 percent in the North and 17 percent in the South).

Women in Amman and Aqaba are more likely to read the newspaper than women in other governorates. While more than one-fourth of women in Aqaba (29 percent) are exposed to all three forms of mass media, this figure is only 9 percent in Ma'an and 7 percent in Mafraq.

The table also indicates the variation in these percentages by residence in Badia and camp areas; 8 percent of women in Badia and camp areas are exposed to all three media compared with 18 percent of women residing in non- Badia and non camp areas.

Table 3.3 also shows a positive relationship between exposure to mass media and household wealth, with exposure to all three media sources increasing from 4 percent of women in the lowest quintile to 37 percent in the highest quintile.

Table 3.3 Exposure to mass media

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

Background characteristic	Reads a newspaper at least once a week	Watches television at least once a week	Listens to the radio at least once a week	Accesses all three media at least once a week	Accesses none of the three media at least once a week	Number of women
Age						
15-19	28.0	99.1	30.4	13.0	0.5	278
20-24	31.1	98.0	33.5	15.2	0.9	1,207
25-29	33.7	96.9	37.4	15.3	1.8	2,006
30-34	34.7	95.6	35.8	18.1	2.4	2,136
35-39	35.4	96.7	36.1	17.9	2.6	2,098
40-44	35.3	97.9	39.9	17.9	1.3	2,055
45-49	38.7	95.7	36.2	19.0	2.8	1,571
Residence						
Urban	36.7	96.7	37.2	18.1	2.0	9,458
Rural	25.2	97.2	33.4	12.7	2.0	1,894
Region						
Central	38.1	96.4	40.3	19.5	2.2	7,181
North	27.8	97.7	29.7	12.1	1.5	3,120
South	32.8	97.1	31.4	16.5	1.9	1,051
Governorate						
Amman	41.4	96.1	42.6	21.1	2.2	4,454
Balqa	32.0	96.8	39.7	16.7	1.6	765
Zarqa	33.1	96.9	34.6	16.8	2.4	1,659
Madaba	32.2	97.6	39.8	18.4	1.8	303
Irbid	31.0	98.3	31.6	13.7	1.0	1,986
Mafraq	18.9	96.8	22.8	7.0	2.7	562
Jarash	25.7	95.9	30.8	12.1	2.8	320
Ajloun	25.1	97.3	28.2	10.9	1.3	251
Karak	28.0	97.8	27.6	14.6	1.7	441
Tafiela	25.9	95.4	27.9	10.4	3.6	167
Ma'an	19.7	96.7	28.5	8.6	2.3	178
Aqaba	53.9	97.1	41.9	28.8	0.9	265
Badia						
Badia	18.0	94.2	27.9	8.4	5.0	705
Non Badia	35.9	97.0	37.1	17.8	1.8	10,647
Camps						
Camp	23.5	95.4	21.3	8.3	3.3	413
Non camp	35.2	96.9	37.1	17.5	1.9	10,939
Education						
No education	0.0	86.5	16.5	0.0	13.1	267
Elementary	6.8	93.6	26.8	2.5	4.9	860
Preparatory	21.7	95.9	31.1	8.9	1.9	1,677
Secondary	35.2	97.7	35.9	16.9	1.6	5,073
Higher	50.1	97.5	44.0	26.6	1.0	3,475
Wealth quintile						
Lowest	14.6	94.2	20.1	3.7	4.1	2,137
Second	25.8	96.9	30.9	11.0	2.1	2,343
Middle	32.3	97.3	35.1	14.4	1.9	2,461
Fourth	40.6	97.7	43.8	21.5	0.8	2,336
Highest	62.1	97.9	53.6	36.6	1.1	2,076
Total	34.8	96.8	36.5	17.2	2.0	11,352

3.4 RESPONDENTS' EMPLOYMENT CHARACTERISTICS

In the 2012 JPFHS, respondents were asked a number of questions about their employment, including whether they were currently working or not. Women who were currently working were then asked a number of questions about the kind of work they do and their employment status. In the 2012 JPFHS, women were defined as currently employed if they worked in the seven days preceding the survey.

3.4.1 Working Status

The majority of ever-married women (68 percent) have never been employed, while only 16 percent worked during the seven days preceding the survey (Table 3.4). An additional 16 percent of women had worked in the past, but not during the seven days preceding the survey. The proportion of women who were currently working ranged from 1 percent among those age 15-19 to 20 percent among those age 30-34 and 45-49.

Table 3.4 Employment status

Percent distribution of ever-married women age 15-49 by employment status, according to background characteristics, Jordan 2012

Background characteristic	Worked in the 7 days preceding the survey[1]	Did not work in the 7 days preceding the survey but worked sometime in the past	Never employed	Total	Number of women
Age					
15-19	0.8	6.0	93.2	100.0	278
20-24	5.4	8.8	85.8	100.0	1,207
25-29	15.8	17.3	66.9	100.0	2,006
30-34	20.1	16.6	63.3	100.0	2,136
35-39	17.1	14.2	68.6	100.0	2,098
40-44	17.8	15.9	66.3	100.0	2,055
45-49	20.1	21.3	58.6	100.0	1,571
Marital status					
Married	16.0	15.4	68.6	100.0	10,801
Divorced/separated/widowed	23.3	22.0	54.7	100.0	551
Number of living children					
0	19.0	18.9	62.0	100.0	1,107
1-2	20.6	18.8	60.6	100.0	3,031
3-4	16.6	16.0	67.4	100.0	3,795
5+	11.4	11.6	76.9	100.0	3,419
Residence					
Urban	16.2	16.5	67.3	100.0	9,458
Rural	17.1	11.9	71.0	100.0	1,894
Region					
Central	15.4	17.2	67.4	100.0	7,181
North	16.2	14.0	69.8	100.0	3,120
South	23.1	10.5	66.4	100.0	1,051
Governorate					
Amman	14.9	18.0	67.0	100.0	4,454
Balqa	22.4	15.4	62.1	100.0	765
Zarqa	11.8	16.4	71.8	100.0	1,659
Madaba	24.8	14.1	61.2	100.0	303
Irbid	16.5	16.2	67.3	100.0	1,986
Mafraq	15.7	9.0	75.3	100.0	562
Jarash	15.7	12.3	71.9	100.0	320
Ajloun	15.0	10.6	74.4	100.0	251
Karak	27.9	8.7	63.4	100.0	441
Tafiela	21.2	12.0	66.9	100.0	167
Ma'an	20.9	9.1	70.0	100.0	178
Aqaba	17.8	13.6	68.6	100.0	265
Badia					
Badia	12.5	8.7	78.9	100.0	705
Non Badia	16.6	16.2	67.2	100.0	10,647
Camps					
Camp	9.9	16.0	74.1	100.0	413
Non camp	16.6	15.7	67.7	100.0	10,939
Education					
No education	11.1	7.0	81.9	100.0	267
Elementary	7.3	12.4	80.2	100.0	860
Preparatory	4.7	10.5	84.8	100.0	1,677
Secondary	7.5	11.5	81.0	100.0	5,073
Higher	37.5	25.9	36.6	100.0	3,475
Wealth quintile					
Lowest	7.7	12.2	80.1	100.0	2,137
Second	11.0	13.7	75.3	100.0	2,343
Middle	14.5	15.1	70.5	100.0	2,461
Fourth	21.3	15.8	62.8	100.0	2,336
Highest	27.8	22.4	49.9	100.0	2,076
Total	16.3	15.7	67.9	100.0	11,352

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

There are no major differences in work status according to urban-rural residence. However, a higher proportion of women in the South region report being currently employed (23 percent) compared with other regions. The table also indicates that there are notable variations in work status by governorates. Women in Zarqa are least likely to be currently employed (12 percent) and women in Karak most likely (28 percent). In addition, women are also more likely to be employed if they live in the non Badia and non camp areas. Women with postsecondary education are much more likely to report having been employed in the week preceding the survey (38 percent) than women with any other educational level.

Marital status seems to have a bearing on work status. Only 16 percent of currently married women are currently employed compared with 23 percent of divorced, separated, and widowed women. When the number of living children is considered, the percentage of working women rises from 19 percent among those with no children to 21 percent among those with one or two children, and drops to 11 percent among those with five or more children.

Not surprisingly, there is a direct relationship between household wealth and current employment, with the percentage of women currently employed increasing from 8 percent in the poorest households to 28 percent in the richest households.

The 2012 JPFHS also asked women who had worked in the past but were not currently working for the reasons they stopped working. One in three women (33 percent) had stopped work because they got married, 15 percent stopped because they became pregnant, 11 percent lost their job, 8 percent stopped work because their husbands were opposed, and 6 percent each stopped work due to retirement or illness (data not shown separately).

3.4.2 Occupation

Table 3.5 shows that among ever-married women who report being employed in the seven days preceding the survey, the majority (54 percent) are engaged in professional work, with much smaller proportions employed in services and sales (13 percent), elementary occupations (9 percent), clerical work (8 percent), and craft and related trades (5 percent). The percentages vary considerably by background characteristics of women, particularly by marital status, education, and household wealth.

It is of interest to note that the data do not reflect the expected urban-rural difference in women's involvement in the professional sector (53 percent and 58 percent, respectively). Employment in the professionalsector is higher among younger than older women, currently married than formerly married women, and women with fewer than five children than among women with five or more children. Employment in this sector is notably higher among women with higher education (76 percent) than among lesser educated women and rises with household wealth. Women in non camp areas are also more likely to be engaged in professional work (55 percent) than women in camp areas (32 percent). Differences by region, governorate, and Badia areas are smaller.

Table 3.5 Occupation

Percent distribution of ever-married women age 15-49 currently employed by occupation, according to background characteristics, Jordan 2012

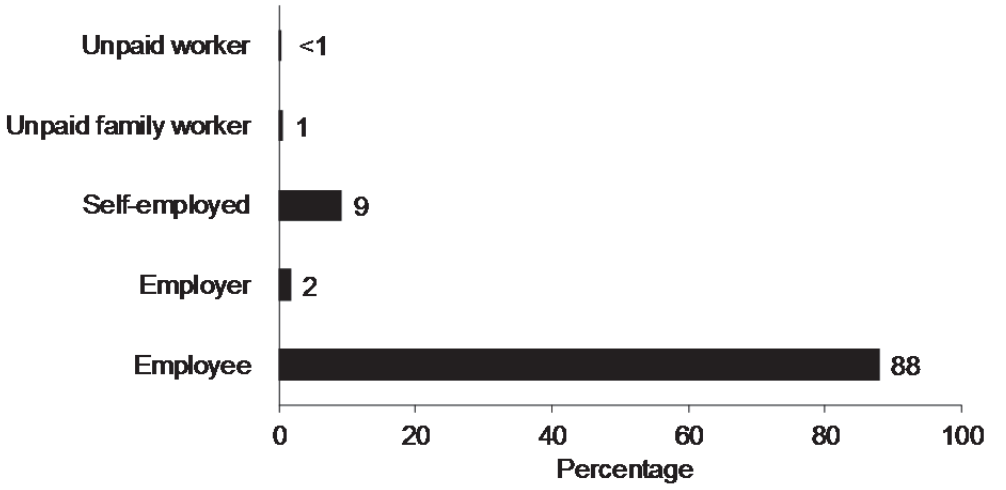
Background characteristic	Professionals	Technicians and associate professionals	Clerks	Service workers, shop, and market sales workers	Skilled agricultural and fishery workers	Craft and related trades workers	Elementary occupations	Total	Number of women
Age									
15-19	*	*	*	*	*	*	*	100.0	2
20-24	71.4	7.3	6.1	8.4	0.0	1.2	5.6	100.0	65
25-29	63.4	10.7	5.9	12.4	0.0	1.4	6.2	100.0	317
30-34	64.9	13.4	6.0	7.2	0.2	3.2	5.2	100.0	429
35-39	55.7	10.3	11.2	10.8	0.1	4.6	7.2	100.0	359
40-44	43.2	14.1	8.1	16.5	0.4	4.4	13.3	100.0	366
45-49	37.8	9.3	8.3	18.5	0.6	10.0	15.5	100.0	315
Marital status									
Married	56.5	11.5	7.3	11.8	0.2	4.6	8.1	100.0	1,726
Divorced/separated/ widowed	22.4	12.2	15.4	23.6	0.5	3.6	22.3	100.0	128
Number of living children									
0	46.2	16.4	10.7	10.9	0.0	2.7	13.1	100.0	211
1-2	63.7	9.3	7.6	11.7	0.0	2.9	4.8	100.0	624
3-4	53.9	13.7	8.5	12.2	0.1	5.9	5.9	100.0	630
5+	43.3	9.1	5.9	15.7	1.1	5.8	19.1	100.0	390
Residence									
Urban	53.2	11.4	7.8	13.2	0.2	5.3	8.9	100.0	1,530
Rural	58.4	12.0	8.2	10.0	0.6	0.5	10.3	100.0	325
Region									
Central	52.0	10.8	7.8	14.7	0.2	5.3	9.2	100.0	1,107
North	57.5	12.7	6.3	8.7	0.2	4.2	10.4	100.0	504
South	56.8	12.6	11.5	11.1	0.7	1.3	6.1	100.0	243
Governorate									
Amman	50.9	9.9	6.8	16.6	0.0	6.2	9.7	100.0	665
Balqa	50.4	11.9	10.8	9.9	0.9	2.4	13.7	100.0	172
Zarqa	54.3	12.8	7.6	13.8	0.0	6.1	5.4	100.0	195
Madaba	59.3	10.4	11.2	11.5	0.6	2.3	4.7	100.0	75
Irbid	55.4	12.9	6.4	8.7	0.0	5.0	11.6	100.0	328
Mafraq	63.5	13.2	6.4	6.1	0.6	0.9	9.2	100.0	88
Jarash	55.6	12.0	8.8	10.9	0.7	5.0	6.9	100.0	50
Ajloun	64.3	11.2	1.8	11.2	0.0	4.1	7.4	100.0	38
Karak	57.2	12.4	11.6	10.8	1.2	1.4	5.4	100.0	123
Tafiela	62.0	13.9	12.3	6.1	0.0	3.6	2.2	100.0	35
Ma'an	56.9	9.1	10.1	8.6	0.0	0.0	15.2	100.0	37
Aqaba	51.5	15.0	11.8	17.7	0.6	0.0	3.5	100.0	47
Badia									
Badia	63.8	5.9	2.8	11.6	0.9	0.6	14.3	100.0	88
Non Badia	53.6	11.8	8.2	12.7	0.2	4.7	8.9	100.0	1,766
Camps									
Camp	31.7	12.9	5.1	25.9	0.0	9.6	14.8	100.0	41
Non camp	54.6	11.5	8.0	12.3	0.3	4.4	9.0	100.0	1,813
Education									
No education	*	*	*	*	*	*	*	100.0	30
Elementary	0.0	1.2	0.4	23.2	2.0	15.3	57.9	100.0	63
Preparatory	2.9	2.6	8.6	28.8	1.2	9.6	46.4	100.0	78
Secondary	1.7	3.3	25.2	39.1	0.5	13.2	17.0	100.0	378
Higher	76.2	15.2	3.4	3.7	0.0	1.2	0.3	100.0	1,305
Wealth quintile									
Lowest	16.3	9.1	5.5	13.4	1.8	9.8	44.0	100.0	165
Second	38.0	9.8	6.0	23.1	0.4	6.3	16.4	100.0	259
Middle	49.7	11.7	16.0	12.9	0.1	5.1	4.5	100.0	356
Fourth	64.9	11.0	7.4	9.1	0.1	2.3	5.2	100.0	498
Highest	65.5	13.3	4.8	10.6	0.0	3.6	2.1	100.0	577
Total	54.1	11.5	7.9	12.6	0.3	4.5	9.1	100.0	1,854

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

It is of interest to note that the data do not reflect the expected urban-rural difference in women's involvement in the professional, technical, and managerial sector (65 percent and 70 percent, respectively). Employment in professional, technical, and managerial work is higher among younger than older women, currently married than formerly married women, and women with fewer than five children than among women with five or more children. Employment in this sector is notably higher among women with higher education (91 percent) than among lesser educated women and rises with household wealth. Differences by region, governorate, and Badia and camp areas are smaller.

The data also indicate that 88 percent of employed women are paid employees and 9 percent are self-employed (Figure 3.1).

Figure 3.1
Women's current employment status



JPFHS 2012

3.5 SMOKING TOBACCO

Tobacco use is widely regarded as the most preventable cause of death and disease among adults. In general, chronic exposure to nicotine may cause an acceleration of coronary artery disease, peptic ulcers, reproductive disorders, esophageal reflux, and hypertension. Tobacco and its various components have been associated with an increased risk of various types of cancer. Smoking is the most important contributor to the development of chronic bronchitis and chronic obstructive pulmonary disease, which are characterized by chronic cough, phlegm, and airflow obstruction. Smoking is well established as the cause of the majority of pulmonary emphysema. Smoking among women also creates particular risks for their offspring. Poor pregnancy outcomes, including low birth weight and intrauterine growth retardation, are more frequent among women who smoke than among those who do not smoke.

Table 3.6 shows the percentage of women who smoke cigarettes or a water pipe (*nargila*). Overall, 11 percent of women smoke cigarettes and 10 percent smoke nargila, a slight increase since 2009, when 9 percent of women reported smoking cigarettes and 6 percent nargila. The data also indicate that older women are more likely to smoke cigarettes but younger women prefer nargila. Smoking (both cigarettes and nargila) is also higher among women who are neither pregnant nor breastfeeding than among pregnant or breastfeeding women. Women living in urban areas are more likely to use tobacco than women living in rural areas. Also, women in the Central region are more likely to use tobacco compared with women from the other regions.

Table 3.6 Use of tobacco

Percentage of ever-married women age 15-49 who smoke cigarettes or a water pipe, according to background characteristics and maternity status, Jordan 2012

Background characteristic	Uses tobacco		Does not use tobacco	Number of women
	Cigarettes	Water pipe (nargila)		
Age				
15-19	8.2	14.1	84.5	278
20-24	5.8	15.4	81.3	1,207
25-29	9.3	11.1	83.5	2,006
30-34	7.6	10.2	84.7	2,136
35-39	11.2	8.0	82.9	2,098
40-44	14.0	11.0	78.6	2,055
45-49	16.6	6.9	80.0	1,571
Maternity status				
Pregnant	4.6	7.1	90.4	1,085
Breastfeeding (not pregnant)	5.8	8.4	87.3	1,869
Neither	12.7	11.1	79.8	8,399
Residence				
Urban	11.7	11.4	80.4	9,458
Rural	6.4	4.6	90.4	1,894
Region				
Central	12.4	12.0	79.4	7,181
North	8.5	8.2	85.6	3,120
South	7.0	4.9	89.4	1,051
Governorate				
Amman	13.9	13.4	77.2	4,454
Balqa	7.9	9.7	84.8	765
Zarqa	11.3	10.2	81.4	1,659
Madaba	7.5	6.7	87.5	303
Irbid	8.9	9.2	84.2	1,986
Mafraq	7.5	6.9	87.5	562
Jarash	9.7	7.6	85.4	320
Ajloun	5.7	3.4	92.1	251
Karak	3.8	4.0	92.9	441
Tafiela	5.7	3.7	92.2	167
Ma'an	11.3	3.8	86.6	178
Aqaba	10.4	8.1	83.5	265
Badia				
Badia	8.0	4.2	89.2	705
Non Badia	11.0	10.7	81.6	10,647
Camps				
Camp	7.9	5.0	89.1	413
Non camp	10.9	10.5	81.8	10,939
Education				
No education	17.1	2.6	82.2	267
Elementary	16.0	6.6	79.7	860
Preparatory	16.4	11.8	76.3	1,677
Secondary	10.1	11.4	82.1	5,073
Higher	7.4	9.4	85.3	3,475
Wealth quintile				
Lowest	10.7	5.5	86.1	2,137
Second	10.7	7.1	85.1	2,343
Middle	9.1	9.6	84.4	2,461
Fourth	8.8	11.4	82.4	2,336
Highest	15.3	18.5	71.2	2,076
Total	10.8	10.3	82.0	11,352

The data indicate that there are significant differences in tobacco use by women according to governorates, with women in Amman most likely to use tobacco and women in Karak least likely. Women living in the Badia and camp areas are less likely to smoke than women living in the non Badia and non camp areas.

Table 3.6 also indicates that there is a direct relationship between smoking and wealth, with the proportion of women smoking increasing with wealth from 14 percent among women in the lowest wealth quintile to 29 percent of women in the highest wealth quintile.

Women with no education are more likely to smoke cigarettes (17 percent) than women who have secondary education (10 percent) or higher (7 percent). However, the pattern differs when nargila use is considered. Only 3 percent of women with no education use tobacco with a pipe compared to 9-12 percent of women with preparatory education or higher.

Among women who smoked cigarettes, nearly one in two (47 percent) smoked 10 or more cigarettes in the past 24 hours, 8 percent smoked 6-9 cigarettes, 16 percent smoked 3-5 cigarettes, and 19 percent smoked 1-2 cigarettes. Eleven percent of women mentioned that they did not smoke any cigarettes in the past 24 hours (data not shown separately).

MARRIAGE AND EXPOSURE TO THE RISK OF PREGNANCY

4

Key Findings

- The percentage of women age 15-49 who had ever been married decreased from 59 percent to 57 percent between 2009 and 2012.
- Marriage is nearly universal in Jordan, with only 8 percent of women not married by the end of their reproductive age in 2012.
- Five percent of currently married women are in a polygynous union, with older women more likely to be in a polygynous union than younger women.
- Kinship marriages are common in Jordan and more prevalent among women living in Badia and camp areas than among other women.
- Data from the 2012 JPFHS show some evidence of a rising age at marriage in Jordan.

This chapter addresses the principal factors, other than contraception, that affect a woman's risk of becoming pregnant: marriage, postpartum amenorrhea, and secondary infertility. In addition, data pertaining to the timing of respondents' most recent sexual activity were collected.

Information on nuptiality is of particular interest because marriage is a primary determinant of the exposure of women to the risk of pregnancy, particularly in countries like Jordan where premarital fertility is rare. Marriage patterns are important for an understanding of fertility, since early age at first marriage is associated with early childbearing and high fertility. In this survey and for all data collection in Jordan, the term *marriage* refers to a formal, legal union.

4.1 CURRENT MARITAL STATUS

Table 4.1 presents the distribution of women by current marital status. Of the 19,891 women age 15-49 listed in the household schedule, 43 percent had never married, 54 percent were currently married, and the remaining 3 percent were either divorced, separated, or widowed.

Table 4.1 Current marital status

Percent distribution of women age 15-49 by current marital status, according to age, Jordan 2012

	Marital status						
Age	Never married	Married	Divorced	Separated	Widowed	Total	Number of respondents
15-19	93.7	6.0	0.3	0.0	0.0	100.0	4,411
20-24	66.4	32.6	1.0	0.0	0.0	100.0	3,588
25-29	30.2	67.3	2.0	0.0	0.4	100.0	2,875
30-34	17.3	79.6	2.7	0.0	0.4	100.0	2,583
35-39	13.7	82.8	2.2	0.1	1.2	100.0	2,430
40-44	10.5	84.7	1.9	0.3	2.6	100.0	2,295
45-49	8.0	83.1	3.5	0.3	5.1	100.0	1,708
Total 15-49	42.9	54.3	1.7	0.1	1.0	100.0	19,891

The proportion of women who are currently married increases steadily from 6 percent among women age 15-19 to 83 percent among those age 35-39, then to 85 percent for women in the age group 40-44 and back to 83 percent among women age 45-49. As expected, the proportion of widows increases with age, reaching 5 percent among women age 45-49. Less than 2 percent of women in Jordan are divorced.

Table 4.2 compares data on ever-married women age 15-49 from the 2012 JPFHS with data from five previous surveys: the 1990, 1997, 2002, 2007, and 2009 JPFHS. Over a period of 12 years, between 1990 and 2002, the percentage of ever-married women age 15-49 decreased from 56 to 54 percent. However, between 2002 and 2007, the percentage of ever-married women increased from 54 to 57 percent. This increase was mainly concentrated among young women in the age groups 20-24 and 25-29. Between 2009 and 2012 the percentage of ever-married women decreased from 59 to 57 percent.

Table 4.2 Trends in the proportion of ever-married women by age group

Percentage of women age 15-49 who have ever been married by age, according to various surveys, Jordan 1990-2012

Age	JPFHS 1990	JPFHS 1997	JPFHS 2002	JPFHS 2007	JPFHS 2009	JPFHS 2012
15-19	10.6	8.2	6.2	5.8	6.8	6.3
20-24	45.2	38.8	34.1	36.7	37.0	33.6
25-29	73.7	66.2	65.3	69.3	71.5	69.9
30-34	89.1	80.7	79.6	79.4	81.9	82.7
35-39	94.6	89.9	87.3	85.4	84.7	86.3
40-44	97.3	94.4	92.6	91.6	89.8	89.5
45-49	98.0	96.0	95.4	95.9	91.5	92.0
Total 15-49	56.2	54.6	54.4	57.4	58.5	57.1

In Jordan, marriage is almost universal. In 2012, only 8 percent of women had not married by the end of their reproductive years (see Table 4.2). However, the percentage of women who have never married has generally increased over the years. For example, in 1990, 5 percent of women age 35-39 had never married; the proportion doubled in 1997 (10 percent), rose again to 13 percent in 2002, and reached 15 percent in 2007 and 2009. This percentage dropped to 14 percent in 2012. Echoing this trend, the proportion of women age 15-19 who had never married increased from 89 to 94 percent between 1990 and 2012. This change is the consequence of an increase in the age at first marriage among the youngest cohort of women.

4.2 POLYGYNY

Marital unions in Jordan are predominantly of two types—those that are monogamous and those that are polygynous. The distinction has social significance and possible implications for fertility, although the relationship between type of union and fertility is complex and not easily understood. The proportion of currently married women in Jordan in a polygynous union is shown in Table 4.3.

Table 4.3 Number of women's co-wives

Percent distribution of currently married women age 15-49 by number of co-wives, according to background characteristics, Jordan 2012

Background characteristic	Number of co-wives			Total	Number of women
	0	1	2+		
Age					
15-19	99.5	0.5	0.0	100.0	264
20-24	99.4	0.5	0.0	100.0	1,171
25-29	96.9	3.0	0.1	100.0	1,935
30-34	97.1	2.7	0.2	100.0	2,055
35-39	94.7	4.7	0.6	100.0	2,012
40-44	92.7	6.5	0.8	100.0	1,944
45-49	88.4	10.5	1.1	100.0	1,419
Residence					
Urban	95.3	4.3	0.4	100.0	8,983
Rural	93.5	5.9	0.6	100.0	1,818
Region					
Central	94.9	4.7	0.3	100.0	6,839
North	95.7	3.7	0.6	100.0	2,966
South	93.3	5.9	0.8	100.0	996
Governorate					
Amman	94.9	4.8	0.3	100.0	4,262
Balqa	94.9	4.6	0.6	100.0	724
Zarqa	95.2	4.5	0.3	100.0	1,564
Madaba	94.6	5.0	0.4	100.0	289
Irbid	96.2	3.2	0.6	100.0	1,892
Mafraq	94.4	4.9	0.7	100.0	528
Jarash	94.1	5.6	0.3	100.0	306
Ajloun	96.2	3.2	0.6	100.0	239
Karak	94.0	5.5	0.5	100.0	420
Tafiela	93.8	5.9	0.3	100.0	161
Ma'an	89.5	8.3	2.2	100.0	163
Aqaba	94.4	5.0	0.6	100.0	253
Badia					
Badia	89.3	9.2	1.5	100.0	666
Non Badia	95.4	4.3	0.4	100.0	10,135
Camps					
Camp	93.3	6.3	0.4	100.0	387
Non camp	95.0	4.5	0.5	100.0	10,414
Education					
No education	78.0	17.5	4.5	100.0	226
Elementary	89.4	8.9	1.7	100.0	788
Preparatory	93.6	5.9	0.6	100.0	1,547
Secondary	96.1	3.7	0.2	100.0	4,863
Higher	96.4	3.3	0.3	100.0	3,376
Wealth quintile					
Lowest	91.3	7.4	1.2	100.0	1,975
Second	94.2	5.4	0.4	100.0	2,179
Middle	96.4	3.3	0.2	100.0	2,364
Fourth	96.6	3.2	0.2	100.0	2,274
Highest	95.9	3.8	0.3	100.0	2,009
Total	95.0	4.6	0.5	100.0	10,801

Overall, 5 percent of currently married women in 2012 are in a polygynous union. The percentage of women in a polygynous union has not changed in the past five years. Older women are more likely to be in a polygynous union than younger women (12 percent at age 45-49 compared with less than 1 percent at age 15-24). The prevalence of polygyny is also slightly higher in rural areas (7 percent) than in urban areas (5 percent). There are differences in type of marital union by region, governorate, and particularly residence in Badia areas: in the Badia areas, 11 percent of married women are in a polygynous union compared with 5 percent in the non Badia areas. The results show much smaller differences between camp and non camp areas (7 and 5 percent, respectively). There are also large differences in polygynous unions by household wealth. The proportion of women in the lowest wealth quintile who are in a polygynous union is 9 percent, compared with 4 percent of those in the highest wealth quintile, indicating an inverse relationship between polygyny and household wealth.

There is also an inverse relationship between polygyny and education. Among married women with no education, the proportion in a polygynous union is 22 percent; this declines to 7 percent among women with preparatory education and to 4 percent among women with a secondary or higher education.

4.3 CONSANGUINITY

Kinship marriage, also called consanguineous marriage, is relatively common in Jordan. Data in Table 4.4 indicate that 35 percent of ever-married women age 15-49 reported that they are related to their current husband or first husband (for those married more than once or last husband for divorced or widowed women). Data indicate that 1 percent were dual first cousin marriages (i.e., on both the father's and mother's sides). The proportion of marriages between first cousins on the father's side is higher than those on the mother's side (13 percent compared with 9 percent). Twelve percent were marriages to second cousins or other relatives.

Table 4.4 Consanguinity

Percent distribution of all ever-married women by their relationship to their current or first husband, according to background characteristics, Jordan 2012

	Relationship to husband											
Background characteristic	Not related	First cousin on both father and mother's side	First cousin on both mother and father's side	First cousin on father's side	First cousin on mother's side	First cousin on father's side (aunt)	First cousin on mother's side (aunt)	Second cousin on father's side	Second cousin on mother's side	Other relative	Total	Number of women
Age												
15-19	57.1	0.2	0.8	9.4	4.5	3.2	7.6	12.3	4.7	0.4	100.0	278
20-24	70.4	0.6	0.3	7.1	2.5	3.3	5.9	7.0	2.1	0.7	100.0	1,207
25-29	66.6	0.3	0.6	7.9	3.3	5.9	5.5	6.0	3.1	0.7	100.0	2,006
30-34	69.1	0.7	0.2	7.3	2.5	3.8	4.3	7.8	3.1	1.2	100.0	2,136
35-39	62.6	0.6	1.0	7.7	4.4	4.3	6.0	9.5	3.3	0.6	100.0	2,098
40-44	61.0	0.6	0.8	10.9	3.2	5.3	5.7	8.9	2.6	1.0	100.0	2,055
45-49	66.0	0.8	0.8	9.0	3.0	3.0	5.5	9.1	2.1	0.8	100.0	1,571
Residence												
Urban	66.5	0.6	0.6	7.9	3.2	4.3	5.4	7.9	2.8	0.9	100.0	9,458
Rural	59.9	0.6	0.7	11.0	3.4	4.9	6.0	9.7	3.2	0.5	100.0	1,894
Region												
Central	66.2	0.6	0.6	8.3	3.1	4.4	5.3	8.0	2.4	1.1	100.0	7,181
North	64.6	0.6	0.8	8.3	3.3	4.1	6.1	8.5	3.4	0.4	100.0	3,120
South	62.2	0.6	0.4	9.8	3.8	5.2	4.7	8.9	4.1	0.3	100.0	1,051
Governorate												
Amman	68.2	0.6	0.5	7.6	3.0	4.0	5.3	7.9	1.9	0.9	100.0	4,454
Balqa	60.7	0.4	0.9	10.4	2.7	4.6	4.9	10.5	3.8	1.2	100.0	765
Zarqa	64.8	0.5	0.6	8.4	3.8	4.8	5.4	6.9	3.0	1.7	100.0	1,659
Madaba	59.0	0.9	0.4	11.0	3.1	5.8	6.5	9.4	3.5	0.2	100.0	303
Irbid	67.3	0.3	0.6	8.0	3.4	3.4	5.7	7.9	3.1	0.2	100.0	1,986
Mafraq	60.1	0.9	0.5	8.8	3.2	5.8	7.0	10.1	3.1	0.5	100.0	562
Jarash	58.8	2.4	2.6	9.2	2.5	5.1	6.4	8.0	4.0	1.0	100.0	320
Ajloun	60.5	0.3	0.5	7.7	3.8	4.6	6.9	9.6	5.1	1.1	100.0	251
Karak	61.8	0.5	0.1	8.9	3.5	6.6	5.1	9.5	3.8	0.1	100.0	441
Tafiela	64.9	0.1	0.4	9.0	3.3	4.3	5.2	7.4	4.6	0.7	100.0	167
Ma'an	56.1	0.5	0.2	12.8	4.9	4.2	4.8	10.9	5.0	0.6	100.0	178
Aqaba	65.3	1.0	0.9	9.8	3.9	4.3	3.7	7.4	3.6	0.2	100.0	265
Badia												
Badia	56.3	0.4	0.5	12.9	3.2	5.5	5.9	11.0	3.9	0.5	100.0	705
Non Badia	66.0	0.6	0.6	8.1	3.2	4.3	5.5	8.0	2.8	0.9	100.0	10,647
Camps												
Camp	58.3	1.2	1.0	10.8	3.6	4.8	5.6	10.2	3.6	0.9	100.0	413
Non camp	65.7	0.6	0.6	8.3	3.2	4.3	5.5	8.1	2.8	0.8	100.0	10,939
Education												
No education	61.1	0.2	0.1	14.3	2.6	2.8	3.4	11.8	3.4	0.4	100.0	267
Elementary	61.0	1.4	1.3	13.9	3.3	4.1	2.8	9.2	2.4	0.5	100.0	860
Preparatory	60.2	0.8	0.7	10.9	3.3	5.6	5.5	9.0	3.1	1.0	100.0	1,677
Secondary	63.3	0.6	0.7	8.9	3.2	4.8	6.0	8.8	2.9	0.8	100.0	5,073
Higher	72.4	0.3	0.4	4.7	3.2	3.4	5.6	6.5	2.7	0.9	100.0	3,475
Wealth quintile												
Lowest	58.0	0.3	0.9	12.6	4.3	4.2	6.1	10.2	3.1	0.4	100.0	2,137
Second	62.4	1.2	0.8	9.7	3.0	5.5	5.0	8.6	2.6	1.3	100.0	2,343
Middle	64.7	0.6	0.6	8.4	3.1	4.5	6.2	8.8	2.5	0.5	100.0	2,461
Fourth	66.4	0.4	0.7	6.5	3.7	3.5	6.0	7.8	3.8	1.2	100.0	2,336
Highest	76.2	0.3	0.1	4.8	2.0	4.0	4.1	5.5	2.2	0.8	100.0	2,076
Total	65.4	0.6	0.6	8.4	3.2	4.4	5.5	8.2	2.8	0.8	100.0	11,352

As expected, kinship marriages are more common among rural women (40 percent) than among urban women (34 percent). Women in the South region are slightly more likely than those in the Central and North regions to marry a relative (38 percent compared with 34 percent and 35 percent, respectively). The same is true for women in Badia areas compared with non Badia areas (44 percent compared with 34 percent). Table 4.4 also shows that women in camps are more likely to marry a relative than women in non camps (42 percent versus 34 percent). Data also reveal that there are significant differences in kinship marriages by governorates. Women in Madaba, Jarash, and Ma'an are more likely to marry a relative than women in other governorates. Further, less educated women are more likely to marry a relative than highly educated women: 28 percent of women with higher than secondary education married a relative, while 39 percent of women with no education did so.

Few variations in consanguineous marriage exist by current age, with the exception of women age 15-19, where kinship marriages are more common than among women in other age groups. Data also show that there is an inverse relationship between kinship marriage and household wealth: women in the poorest households are more likely to marry relatives than those living in the wealthiest households (42 percent versus 24 percent).

4.4 AGE AT FIRST MARRIAGE

In Jordan, almost all births occur within marriage; thus, age at first marriage is an important indicator of exposure to the risk of pregnancy and childbirth. The legal minimum age at marriage in Jordan for both women and men is 18 years.

Table 4.5 shows the percentage of women who have ever married by specified exact ages and the median age at first marriage according to their age at the time of the survey. Overall, among Jordanian women age 25-49, 15 percent of women were married by age 18 and about one in three was married by age 20. The data indicate some evidence of rising age at marriage. For example, the proportion of women married by age 18 declines from 18 percent among women age 45-49 to 8 percent among women age 20-24. A similar pattern is seen in the percentage of women married by exact age 20, 22, and 25 by women's current age.

The last column in Table 4.5 provides further indication of later marriage among younger women. The median age at first marriage has increased, from 22.0 years among the cohort of women age 45-49 at the time of the survey to 23.0 years among the cohort of women age 25-29 and 30-34 at the time of the survey.

Another way to assess trends in age at first marriage is to compare data across surveys. The median age at first marriage for women age 25-49 rose slightly between 2002 and 2007 (from 21.8 to 22.2 years), but there was no change in the median age at first marriage between 2009 and 2012 (22.4 years).

Table 4.5 Age at first marriage

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

	Percentage first married by exact age:					Percentage never married	Number of respondents	Median age at first marriage
Current age	15	18	20	22	25			
15-19	0.5	na	na	na	na	93.7	4,411	a
20-24	0.3	8.4	19.4	na	na	66.4	3,588	a
25-29	0.5	11.1	26.3	42.0	63.7	30.2	2,875	23.0
30-34	1.7	13.1	27.5	43.8	63.3	17.3	2,583	23.0
35-39	1.5	17.2	34.3	49.2	66.9	13.7	2,430	22.1
40-44	2.7	18.2	35.6	52.8	71.0	10.5	2,295	21.7
45-49	2.0	18.0	34.1	50.3	67.1	8.0	1,708	22.0
20-49	1.3	13.6	28.4	na	na	28.5	15,480	a
25-49	1.6	15.1	31.1	47.1	66.2	17.0	11,892	22.4

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

Table 4.6 shows the median age at marriage by background characteristics. There are only minor differences in the median age at first marriage by urban-rural residence and region. However, there are sizeable variations by governorates: the median age at first marriage ranges from 21.5 years in Zarqa governorate to 23.5 years in Karak. Women in non Badia and non camp areas tend to get married later than women in the Badia and camp areas. Education plays an important role in determining women's age at marriage. Women with higher education tend to marry more than five years later than women with preparatory education, four years later than women with elementary or secondary education, and three years later than women with no education. The table also shows that women in the highest wealth quintile tend to get married later than those in the other wealth quintiles.

Table 4.6 Median age at first marriage by background characteristics

Median age at first marriage among women age 25-49, according to background characteristics, Jordan 2012

Background characteristic	Women age 25-49
Residence	
Urban	22.3
Rural	22.8
Region	
Central	22.3
North	22.5
South	22.7
Governorate	
Amman	22.4
Balqa	23.1
Zarqa	21.5
Madaba	23.2
Irbid	22.6
Mafraq	22.2
Jarash	22.0
Ajloun	22.1
Karak	23.5
Tafiela	22.1
Ma'an	21.9
Aqaba	21.9
Badia	
Badia	21.9
Non Badia	22.4
Camps	
Camp	21.5
Non camp	22.4
Education	
No education	21.9
Elementary	20.9
Preparatory	19.5
Secondary	20.8
Higher	25.0
Wealth quintile	
Lowest	21.7
Second	22.1
Middle	21.9
Fourth	22.7
Highest	23.2
Total	22.4

Note: The age at first marriage is defined as the age at which the respondent began living with her first husband.

4.5 RECENT SEXUAL ACTIVITY

In the absence of effective contraception, the probability of becoming pregnant is related to the frequency of sexual intercourse. Information on sexual activity can, therefore, be used to refine measures of exposure to pregnancy. Currently married women were asked about the timing of their most recent sexual intercourse. This information is presented in Table 4.7. Overall, about nine in ten (89 percent) women stated that their most recent sexual intercourse was within the four weeks prior to the day of interview, 8 percent within the year preceding the survey, and 2 percent within one or more years before the survey.

Table 4.7 Recent sexual activity

Percent distribution of currently married women age 15-49 by timing of last sexual intercourse, according to background characteristics, Jordan 2012

Background characteristic	Timing of last sexual intercourse: Within the past 4 weeks	Within 1 year[1]	One or more years	Missing	Total	Number of women
Age						
15-19	91.8	7.7	0.4	0.1	100.0	264
20-24	92.3	7.0	0.2	0.4	100.0	1,171
25-29	89.2	9.2	0.9	0.7	100.0	1,935
30-34	90.7	7.1	0.6	1.6	100.0	2,055
35-39	90.5	7.8	0.6	1.1	100.0	2,012
40-44	88.6	7.7	2.7	1.0	100.0	1,944
45-49	83.2	10.0	5.9	0.8	100.0	1,419
Marital duration						
0-4 years	89.7	9.0	0.6	0.7	100.0	2,122
5-9 years	89.7	8.5	0.8	1.0	100.0	2,160
10-14 years	91.7	6.6	0.8	0.9	100.0	1,809
15-19 years	92.5	5.6	0.6	1.2	100.0	1,648
20-24 years	87.2	8.2	3.5	1.2	100.0	1,605
25+ years	83.8	10.1	5.4	0.7	100.0	1,094
Married more than once	81.9	13.1	3.6	1.3	100.0	363
Residence						
Urban	88.8	8.5	1.8	1.0	100.0	8,983
Rural	91.4	6.5	1.3	0.8	100.0	1,818
Region						
Central	87.6	9.4	2.0	0.9	100.0	6,839
North	92.3	5.8	1.1	0.7	100.0	2,966
South	91.1	5.8	1.3	1.8	100.0	996
Governorate						
Amman	85.1	11.3	2.3	1.3	100.0	4,262
Balqa	91.4	7.0	1.3	0.3	100.0	724
Zarqa	91.7	6.1	1.8	0.4	100.0	1,564
Madaba	92.1	6.1	1.2	0.6	100.0	289
Irbid	92.3	5.8	1.1	0.8	100.0	1,892
Mafraq	91.8	6.1	1.4	0.6	100.0	528
Jarash	92.2	6.3	0.5	0.9	100.0	306
Ajloun	93.7	5.4	0.3	0.6	100.0	239
Karak	92.3	6.1	0.8	0.8	100.0	420
Tafiela	88.4	6.7	2.2	2.7	100.0	161
Ma'an	90.7	6.1	1.8	1.4	100.0	163
Aqaba	91.2	4.4	1.3	3.1	100.0	253
Badia						
Badia	89.4	7.5	2.2	0.8	100.0	666
Non Badia	89.2	8.2	1.7	1.0	100.0	10,135
Camps						
Camp	90.1	7.8	1.8	0.3	100.0	387
Non camp	89.2	8.1	1.7	1.0	100.0	10,414
Education						
No education	86.2	8.2	5.1	0.4	100.0	226
Elementary	87.0	8.6	3.1	1.3	100.0	788
Preparatory	87.5	9.2	3.0	0.3	100.0	1,547
Secondary	91.0	7.3	0.9	0.7	100.0	4,863
Higher	88.2	8.6	1.7	1.6	100.0	3,376
Wealth quintile						
Lowest	88.4	8.4	2.9	0.4	100.0	1,975
Second	92.9	5.2	1.2	0.7	100.0	2,179
Middle	90.0	8.2	1.6	0.2	100.0	2,364
Fourth	90.6	6.6	1.3	1.5	100.0	2,274
Highest	83.6	12.6	1.7	2.2	100.0	2,009
Total	89.2	8.1	1.7	1.0	100.0	10,801

[1] Excludes women who had sexual intercourse within the last 4 weeks.

The relationship between recent sexual activity and age, marital duration, education, and wealth quintile is mixed. Recent sexual activity is slightly higher in rural than urban areas, is highest in the North region, with little difference between Badia and non Badia and camp and non camp areas. Currently married women in Amman are noticeably less likely to have reported recent sexual activity than women in other governorates. Women with no education are also somewhat less likely to have had sexual activity in the four weeks before the survey than women with education.

FERTILITY 5

Key Findings

- The total fertility rate for the three years preceding the survey is 3.5 births per woman, a 38 percent decline from the rate recorded in 1990.
- Fertility decline has stalled in the past decade, with a mere 5 percent decline between 2002 and 2012.
- More than two-thirds of all children (68 percent) are born at least two years after their siblings.
- The median age at first birth has changed little between 2007 and 2012 but has declined by almost one year between 1997 and 2012.
- Five percent of adolescent women age 15-19 are already mothers or pregnant with their first child.

Fertility measures in this chapter are based on the reported birth histories of ever-married women age 15-49 who were interviewed in the 2012 JPFHS. Data were collected in two sections. First, each woman was asked a series of questions on the number of her sons and daughters living with her, the number living elsewhere, and the number who had died. Second, for each live birth, she was asked to report the sex, date of birth, whether the birth was single or multiple, and whether the child was living in the household or elsewhere. The survival status of each live birth was also asked. For deceased children, the age at death was recorded. As an indicator of future fertility, information was collected on whether currently married women were pregnant at the time of the interview.

Through previous experience in using birth histories to estimate fertility levels and trends, it has been found that the underreporting of children ever born and the displacement of children's dates of birth are common in many countries. Underreporting of children affects estimates of fertility levels, whereas misreporting of children's date of birth distorts fertility trends over time. Regarding the latter, one of the characteristics of the 2012 JPFHS is the high quality of age and date reporting. All women were able to report their age and their date of marriage or age at marriage. For children's age and date of birth reporting, both month and year of birth are documented for all births recorded in the birth history (see Table C.3 in Appendix C). This information lends confidence to the quality of basic data used in the estimation of fertility measures.

Two potential issues require some attention due to the fact that the fertility rates presented in this chapter are based on the birth history section of the JPFHS. First, only surviving women were interviewed in the survey. This would bias the rates if mortality of women of childbearing age were high and if fertility of surviving and non-surviving women differed significantly—neither of which is the case in Jordan. Limiting the survey respondents to ever-married women presents another potential bias. Although information on fertility was obtained only from ever-married women, estimates can be made for all women (regardless of marital status) based on information in the Household Questionnaire; these estimates assume that women who have never been married have had no children.

This chapter also analyzes levels of fertility by background characteristics of women, which include age, residence, educational level, and wealth index. Factors related to fertility, including the median age at first birth, birth intervals, and teenage fertility, are analyzed as well.

This chapter also addresses the principal factors, other than fertility, that affect a woman's risk of becoming pregnant: postpartum amenorrhea, postpartum abstinence, and insusceptibility.

5.1 CURRENT FERTILITY

Data on current fertility is important because it reflects the prevailing situation in a country and is relevant to population policies and programs. Table 5.1 and Figure 5.1 present the age-specific fertility rates and cumulative fertility by urban-rural residence for the three-year period preceding the survey. Table 5.1 also presents the general fertility rate (GFR), that is, the annual number of live births per 1,000 women age 15-44 for the three years preceding the survey, and the crude birth rate (CBR), that is, the annual number of live births per 1,000 population for the same period. At current levels, a woman would give birth to an average of 3.5 children in her lifetime—a 8 percent decline from the rate recorded in 2009 (3.8 births per woman). Fertility levels are higher in rural areas than in urban areas (3.9 compared with 3.4 births per woman). The most significant difference between rural and urban fertility is seen in the age group 25-29, where rural women have an average of 35 more births per 1,000 than urban women. This is in contrast to the pattern seen in 2009 when urban women had an average of 40 births more per 1,000 than rural women. Fertility rates are higher in urban areas than in rural areas among women under age 20. Women age 15-19 living in urban areas give birth to 9 more children per 1,000 than those living in rural areas, similar to the pattern seen in 2009. According to the age-specific fertility rates shown in the table, women in Jordan have, on average, just under one child (0.8 child) by age 25, but have almost three children (2.8) by age 35.

Table 5.1 Current fertility

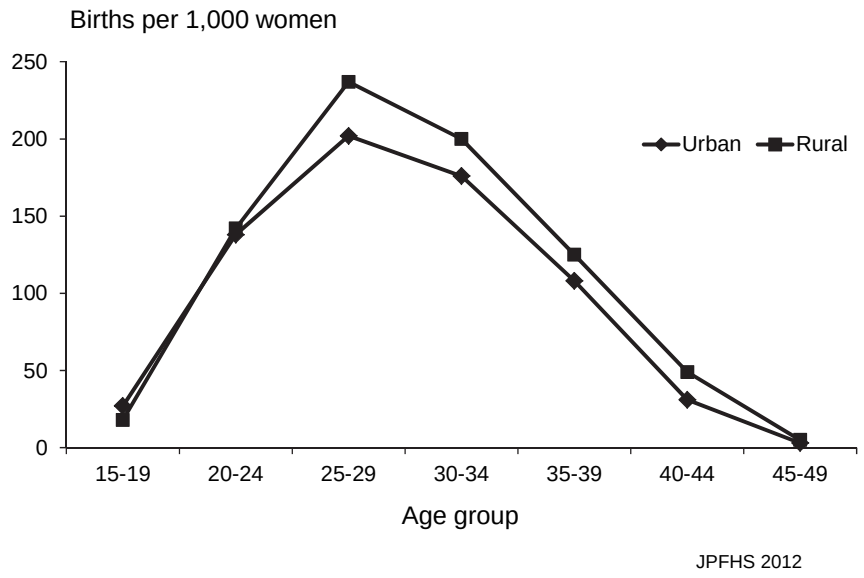
Age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the three years preceding the survey, by residence, Jordan 2012

	Residence		
Age group	Urban	Rural	Total
15-19	27	18	26
20-24	138	142	139
25-29	202	237	209
30-34	176	200	180
35-39	108	125	111
40-44	31	49	34
45-49	3	5	3
TFR(15-49)	3.4	3.9	3.5
GFR	109	125	112
CBR	26.7	29.8	27.2

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

Table 5.1 also indicates that the overall CBR is 27 per 1,000, with the urban CBR lower (27 per 1000) than the rural CBR (30 per 1,000). The GFR is 112 births per 1,000 women age 15-44. There is a significant difference in GFR between urban and rural areas (109 and 125 births per 1,000 women, respectively). This is a decrease from the 2009 JPFHS of 127 in the GFR and 31 in the CBR.

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



JPFHS 2012

5.2 FERTILITY DIFFERENTIALS BY BACKGROUND CHARACTERISTICS

Fertility differentials according to background characteristics of women are shown in Table 5.2 and Figure 5.2. The first column of the table shows the total fertility rates for the three years preceding the survey; column two shows the percentage of women who were pregnant at the time of data collection; and column three shows the mean number of children ever born (CEB) to women age 40-49. CEB is an indicator of cumulative fertility and reflects the fertility of older women who are nearing the end of their reproductive years, representing completed fertility. When fertility remains constant over time, TFR and CEB will be the same or almost the same. In the 2012 JPFHS, however, the fact that the completed fertility rate (4.6 children per woman) is much higher than the total fertility rate (3.5 children per woman) indicates a considerable decline in fertility; this finding is consistent with the decline in fertility in Jordan over the past 30 years.

Urban women have on average half a child less than rural women. Fertility is highest in the North (3.8 children per woman), followed by the South (3.7) and the Central (3.4). Fertility levels vary considerably by governorate; the TFR ranges from a low of 3.2 children per woman in Amman to a high of 4.3 children per woman in Jarash. In addition, women living in Badia areas have on average one child more than women living in the non Badia areas (4.4 and 3.4 children per woman, respectively).

Fertility varies significantly by education. It is of interest to note that the relationship of education to fertility is not linear as in most other countries; rather, in Jordan it has an inverted U-shape. Surprisingly, women who have secondary education have the highest fertility (4.2 births per woman), in contrast with women with no education and those with higher education who have the lowest fertility (3.0 children per woman). However, women who have higher than secondary education have 1.2 fewer births than women with a secondary education. These figures suggest that postsecondary education for women is associated with lower levels of fertility.

The TFR also varies considerably according to wealth index in an inverse pattern that is commonly seen in other countries. Fertility declines as household wealth increases, from 4.4 births per woman among women in the poorest households to 2.6 children among women in the richest households.

Table 5.2 Fertility by background characteristics

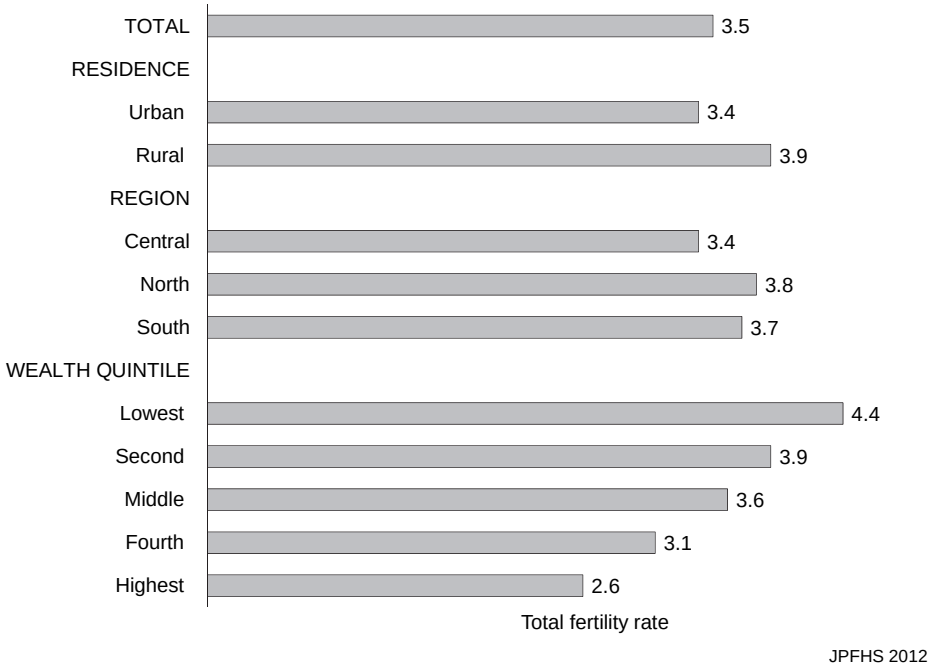
Total fertility rate for the three years preceding the survey, percentage of women age 15-49 currently pregnant, and mean number of children ever born to women age 40-49 years, by background characteristics, Jordan 2012

Background characteristic	Total fertility rate	Percentage of women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49
Residence			
Urban	3.4	5.5	4.5
Rural	3.9	5.4	5.0
Region			
Central	3.4	5.1	4.4
North	3.8	6.2	4.8
South	3.7	5.7	5.1
Governorate			
Amman	3.2	5.0	4.4
Balqa	3.8	5.4	4.3
Zarqa	3.6	5.0	4.5
Madaba	3.5	5.8	4.9
Irbid	3.6	6.3	4.6
Mafraq	4.1	6.0	5.1
Jarash	4.3	5.5	5.4
Ajloun	3.8	7.1	5.5
Karak	3.5	5.7	4.6
Tafiela	3.9	7.7	5.5
Ma'an	4.1	5.0	5.9
Aqaba	3.7	5.4	5.0
Badia			
Badia	4.4	6.8	5.6
Non Badia	3.4	5.4	4.5
Camps			
Camp	3.7	3.9	5.0
Non camp	3.5	5.5	4.5
Education			
No education	3.0	3.4	5.8
Elementary	3.9	5.1	5.3
Preparatory	3.8	3.2	5.0
Secondary	4.2	6.7	4.6
Higher	3.0	5.6	3.9
Wealth quintile			
Lowest	4.4	5.2	5.5
Second	3.9	5.6	4.9
Middle	3.6	7.4	4.4
Fourth	3.1	4.8	4.3
Highest	2.6	4.5	3.9
Total	3.5	5.5	4.6

Note: Total fertility rates are for the period 1-36 months prior to interview.

Table 5.2 also shows that 6 percent of all women of reproductive age were pregnant at the time of the survey. The percentages of women pregnant by region, Badia, and education follow a pattern roughly similar to that of fertility. The percentage of women pregnant ranges from a high of 8 percent in Tafiela to a low of 5 percent in Amman, Zarqa, and Ma'an. By wealth quintile, women in the middle wealth quintile were most likely to be pregnant at the time of the survey (7 percent), and women in the highest wealth quintile least likely (5 percent).

Figure 5.2
Total fertility rates by background characteristics



5.3 FERTILITY TRENDS

Fertility trends can also be investigated by using retrospective data from a single survey. The birth history information collected in the 2012 JPFHS is used for this purpose. Data in Table 5.3 and Figure 5.3 indicate that fertility has been declining in all age groups. For example, the age-specific fertility rate for women age 25-29 declined from 274 births per 1,000 women in the 15-19 years preceding the survey to 218 births per 1,000 women in the 5-9 year period before the survey, a 20 percent decline. More recently, between the 5-9 and 0-4 year period prior to the survey a slower pace in fertility decline is observed—a 3 percent decline.

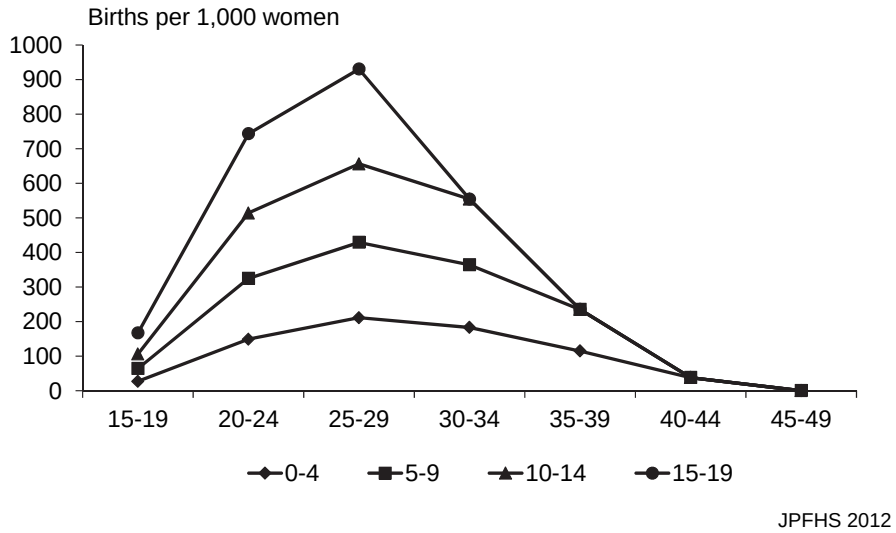
Table 5.3 Trends in age-specific fertility rates

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

Mother's age at birth	Number of years preceding survey			
	0-4	5-9	10-14	15-19
15-19	27	37	42	61
20-24	149	176	189	229
25-29	211	218	227	274
30-34	183	181	190	[220]
35-39	115	120	[120]	
40-44	38	[51]		
45-49	[3]			

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

Figure 5.3
Age-specific fertility rates for five-year periods preceding the survey



These trends in fertility decline from retrospective data collected in the 2012 JPFHS are consistent with the fertility trends observed from comparing with the five previous surveys—the 1990, 1997, 2002, 2007, and 2009 JPFHS. The calculated rates for these surveys refer to the three years preceding each survey (1988-1990, 1995-1997, 2000-2002, 2005-2007, 2007-2009, and 2010-2012, respectively). Comparison of the findings from these surveys shows trends in fertility levels over more than two decades. Data in Table 5.4 indicate that the pace of fertility decline was rapid until 2002, but has since slowed down. Fertility declined by 21 percent between 1990 and 1997 (dropping from 5.6 to 4.4 births per woman) and 16 percent between 1997 and 2002 (dropping from 4.4 to 3.7 births per woman). However, the fertility decline has stagnated in the last decade, with fertility decline a mere 5 percent (from 3.7 to 3.5 births per woman).

Table 5.4 Trends in fertility

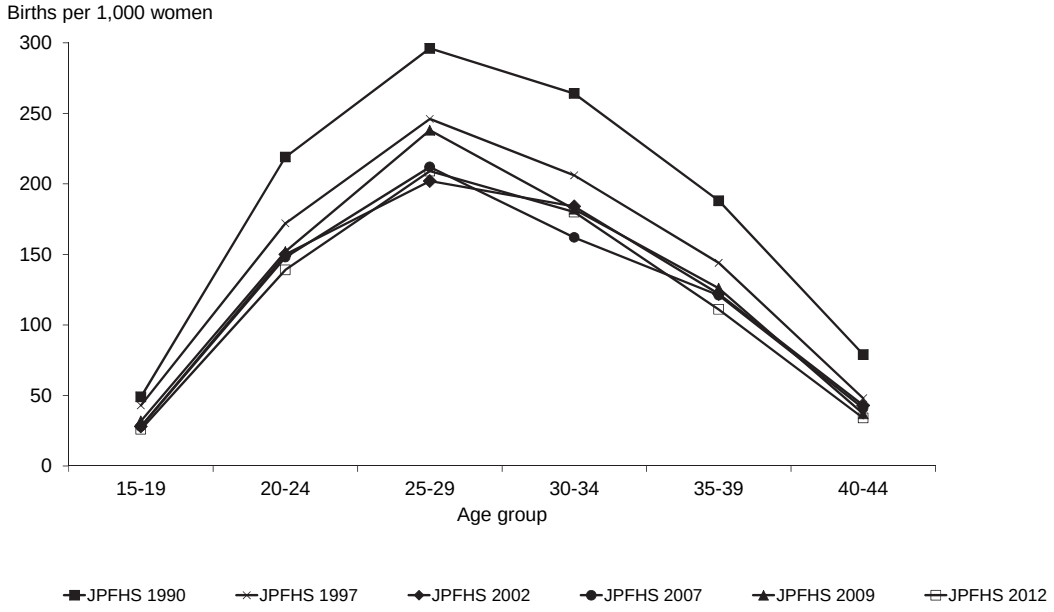
Age-specific fertility rates and total fertility rates, various surveys, Jordan 1990-2012

Age group	JPFHS 1990	JPFHS 1997	JPFHS 2002	JPFHS 2007	JPFHS 2009	JPFHS 2012
15-19	49	43	28	28	32	26
20-24	219	172	150	148	152	139
25-29	296	246	202	212	238	209
30-34	264	206	184	162	182	180
35-39	188	144	122	121	126	111
40-44	79	48	43	41	37	34
45-49	19	11	5	6	3	3
TFR 15-49	5.6	4.4	3.7	3.6	3.8	3.5

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

The most significant proportional decline has been observed among women 40-49: a 57 percent drop from 79 births per 1,000 women in 1990 to 34 births in 2012 for women age 40-44 and an 84 percent decline for women age 45-49 over the same period (Figure 5.4). The bulk of the decline in fertility since 2002 can be attributed to the decrease in the number of births among women between the ages of 20 and 39. Among all the surveys the age-specific fertility rates are highest for the 25-29 age group. These results indicate that the decline of the TFR has temporarily stalled in Jordan. This phenomenon (stability in the TFR after a long decline) has been observed in neighboring countries, such as Egypt (El-Zanaty and Way, 2009), as well.

Figure 5.4
Trends in age-specific fertility rates, various sources, 1990-2012



5.4 CHILDREN EVER BORN

Table 5.5 presents the distribution of all women and currently married women by the number of children they have had. In the 2012 JPFHS, information on the reproductive history of never-married women was not collected. However, since almost no births in Jordan take place before marriage, it is assumed that never-married women have had no births. The data represent the accumulation of births over time. The difference in fertility between all women and currently married women is due to the proportion of women who were not married at the time of the survey (i.e., single, divorced, or widowed). On average, women have given birth to 1.6 children by their late twenties, 3.7 children by their late thirties, and 4.7 children by the end of their reproductive period.

Table 5.5 Children ever born and living

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

	Number of children ever born														
Age	0	1	2	3	4	5	6	7	8	9	10+	Total	Number of women	Mean number of children ever born	Mean number of living children
ALL WOMEN															
15-19	96.5	2.9	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	4,411	0.04	0.04
20-24	74.7	12.1	8.9	3.8	0.4	0.1	0.0	0.0	0.0	0.0	0.0	100.0	3,588	0.43	0.43
25-29	37.2	13.1	20.4	17.2	8.0	3.5	0.4	0.1	0.2	0.0	0.0	100.0	2,875	1.59	1.55
30-34	21.5	7.9	14.6	20.2	18.4	10.5	4.9	1.2	0.6	0.1	0.1	100.0	2,583	2.68	2.63
35-39	18.8	3.2	6.4	13.1	20.5	16.9	11.4	4.8	3.3	1.2	0.4	100.0	2,430	3.66	3.55
40-44	15.2	2.5	4.2	9.8	15.7	16.9	14.6	8.6	6.6	3.0	3.0	100.0	2,295	4.48	4.33
45-49	14.8	2.6	4.6	11.0	14.4	13.9	11.7	10.2	7.1	4.3	5.5	100.0	1,708	4.67	4.46
Total	48.4	6.7	8.2	9.5	9.2	7.1	4.8	2.6	1.9	0.9	0.9	100.0	19,891	2.03	1.97
CURRENTLY MARRIED WOMEN															
15-19	42.8	47.8	9.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	264	0.67	0.65
20-24	24.1	35.8	27.3	11.4	1.3	0.2	0.0	0.0	0.0	0.0	0.0	100.0	1,171	1.31	1.28
25-29	8.5	18.7	29.9	25.3	11.6	5.1	0.6	0.1	0.3	0.0	0.0	100.0	1,935	2.33	2.27
30-34	4.0	9.1	16.9	25.3	22.8	13.2	6.2	1.5	0.7	0.1	0.1	100.0	2,055	3.32	3.24
35-39	4.8	3.2	6.9	15.5	24.3	19.9	13.7	5.8	3.7	1.5	0.5	100.0	2,012	4.32	4.19
40-44	3.8	2.5	4.4	11.0	17.8	19.5	16.8	10.1	7.5	3.2	3.4	100.0	1,944	5.10	4.93
45-49	6.7	2.7	5.0	12.2	14.4	15.3	13.4	11.3	7.9	4.7	6.3	100.0	1,419	5.18	4.94
Total	8.4	11.5	14.5	17.0	16.2	12.7	8.6	4.7	3.3	1.5	1.5	100.0	10,801	3.61	3.50

Differences in the mean number of children born and living are notable after women have reached the age of 40. Caution should be exercised in interpreting the data for women in the oldest age groups because of possible recall problems; older women are more likely to omit a child, particularly if the child died at a young age or is living away from the mother. Data in Table 5.5 indicate very little variation between the mean number of children ever born and the mean number of children still living for all women age 15-49 (2.03 and 1.97 children, respectively). The data also indicate that, on average, currently married women have given birth to 2.3 children by their late twenties, 4.3 children by their late thirties, and about 5.2 children by the end of their reproductive period. The mean number of children ever born is 3.6, compared with 3.5 children still living.

5.5 BIRTH INTERVALS

A birth interval is the period of time between two successive live births. Research has shown that children born soon after a previous birth are at greater risk of illness and death. The percent distribution of births in the five years before the survey by number of months since preceding birth is shown in Table 5.6.

Women in Jordan prefer relatively long birth intervals: the median birth interval among children born in the five years preceding the survey is 31.7 months, 0.5 months longer than that recorded in the 2007 JPFHS.

More than two-thirds of all children (68 percent) are born at least two years after their siblings. This figure is only marginally higher than that found in 2007 and 2002, but represents a marked increase when compared with 1997 (56 percent). More than two in five (42 percent) children are born after an interval of three years or longer, compared with 41 percent in 2007, 37 percent in 2002, and 26 percent in 1997. As expected, children born to younger women and low-parity women have shorter birth intervals than those born to older women and high-parity women. The birth interval following a child who has died is shorter than the interval following the birth of a surviving child (21 months compared with 32 months). The length of birth intervals varies little according to urban-rural residence, region, and camps. Birth interval is shortest in Jarash and longest in Irbid. Women in Badia areas have shorter birth intervals than women in the non Badia areas. Birth interval increases with education and wealth quintile. Women with no education have a median birth interval about four months shorter than women with secondary and higher education. Similarly, women in the lowest wealth quintile have a birth interval seven months shorter than women in the highest wealth quintile.

Table 5.6 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, Jordan 2012

Background characteristic	Months since preceding birth						Total	Number of non-first births	Median number of months since preceding birth
	7-17	18-23	24-35	36-47	48-59	60+			
Age									
15-19	*	*	*	*	*	*	100.0	24	*
20-29	22.6	23.7	30.7	13.7	5.5	3.8	100.0	2,578	25.1
30-39	12.0	14.7	25.2	17.9	13.1	17.2	100.0	3,895	35.1
40-49	6.2	7.9	19.3	14.0	16.7	35.7	100.0	982	49.9
Sex of preceding birth									
Male	14.6	15.4	25.7	16.6	11.1	16.6	100.0	3,800	32.8
Female	15.5	18.5	27.0	15.1	10.8	13.2	100.0	3,679	30.4
Survival of preceding birth									
Living	14.5	16.9	26.6	16.0	11.0	15.0	100.0	7,310	31.9
Dead	36.7	18.5	16.3	8.9	5.3	14.2	100.0	169	21.1
Birth order									
2-3	19.9	20.2	29.4	13.9	8.3	8.3	100.0	3,809	27.4
4-6	10.0	13.4	22.4	18.8	13.8	21.5	100.0	2,997	38.7
7+	9.9	13.6	26.4	13.7	13.1	23.3	100.0	673	36.0
Residence									
Urban	14.8	17.3	26.3	15.0	11.1	15.5	100.0	6,062	31.7
Rural	15.9	15.3	26.7	19.3	10.1	12.7	100.0	1,417	31.6
Region									
Central	15.1	16.7	26.7	15.3	11.0	15.2	100.0	4,585	31.7
North	14.4	17.3	25.6	17.1	11.0	14.7	100.0	2,142	32.1
South	16.5	17.1	26.3	15.7	10.2	14.2	100.0	751	30.7
Governorate									
Amman	15.0	16.4	26.1	15.4	10.7	16.4	100.0	2,720	32.3
Balqa	16.1	17.2	28.8	13.9	9.6	14.3	100.0	546	29.5
Zarqa	14.6	18.1	26.7	15.2	12.5	12.9	100.0	1,110	30.7
Madaba	17.1	12.6	28.5	17.5	10.4	14.0	100.0	209	32.3
Irbid	12.9	16.9	24.8	17.3	11.7	16.5	100.0	1,260	34.0
Mafraq	16.5	17.8	28.1	17.1	8.9	11.6	100.0	447	29.5
Jarash	18.5	17.5	26.6	16.2	10.0	11.3	100.0	258	29.4
Ajloun	13.2	18.3	24.1	17.5	12.6	14.2	100.0	178	32.3
Karak	16.2	15.8	28.3	16.0	11.7	12.1	100.0	317	31.2
Tafiela	16.1	18.4	25.5	17.2	9.4	13.4	100.0	120	30.0
Ma'an	18.2	18.5	27.3	13.3	8.8	14.0	100.0	142	29.6
Aqaba	16.2	17.6	22.4	16.0	9.2	18.6	100.0	172	31.2
Badia									
Badia	17.4	18.2	30.5	15.2	8.4	10.2	100.0	606	28.7
Non Badia	14.8	16.8	26.0	15.9	11.1	15.3	100.0	6,873	32.0
Camps									
Camp	12.5	16.2	30.7	15.0	12.1	13.6	100.0	320	31.2
Non camp	15.2	16.9	26.1	15.9	10.9	15.0	100.0	7,159	31.7
Education									
No education	15.9	19.8	29.3	14.1	8.9	12.0	100.0	176	28.1
Elementary	15.6	19.8	26.2	12.2	9.4	16.9	100.0	542	28.9
Preparatory	14.9	17.5	26.0	14.2	10.6	16.8	100.0	1,060	31.0
Secondary	15.6	15.6	26.1	16.1	10.8	15.8	100.0	3,591	32.3
Higher	14.0	17.9	26.7	17.4	11.8	12.3	100.0	2,109	32.0
Wealth quintile									
Lowest	16.3	19.5	28.5	15.1	9.6	11.0	100.0	1,866	28.7
Second	19.9	18.5	25.0	14.8	10.0	11.8	100.0	1,645	28.8
Middle	12.7	16.4	26.9	16.8	11.2	15.9	100.0	1,570	33.2
Fourth	12.0	14.5	25.5	18.8	11.7	17.4	100.0	1,411	34.6
Highest	12.7	13.7	24.7	13.2	13.2	22.4	100.0	988	35.7
Total	15.0	16.9	26.3	15.9	10.9	14.9	100.0	7,479	31.7

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

5.6 POSTPARTUM AMENORRHEA, POSTPARTUM ABSTINENCE, AND INSUSCEPTIBILITY

The risk of pregnancy is affected by several factors besides marriage patterns. There is a low risk of becoming pregnant during the period after childbirth before the return of menstruation (postpartum amenorrhea) and during the period before the resumption of sexual activity (postpartum abstinence). The duration of amenorrhea is directly related to the duration and intensity of breastfeeding: the longer a woman breastfeeds, the longer she is likely to remain amenorrheic. Since breastfeeding is an important issue in childhood nutrition, only postpartum amenorrhea and postpartum abstinence are considered in this section. Women are considered to be insusceptible when they are not exposed to the risk of pregnancy either because they are amenorrheic or because they are abstaining from sexual activity following a birth, or both. The estimates for postpartum amenorrhea, postpartum abstinence, and insusceptibility are based on current status measures—that is, the proportion of births occurring in the three years before the survey for which mothers were still amenorrheic, abstaining, or insusceptible at the time of the survey. The medians were calculated on the basis of current status proportions at each time period. The data are grouped by two-month intervals for greater stability.

Table 5.7 presents the proportion of births in the 36 months preceding the survey for which mothers are amenorrheic, abstaining, and insusceptible. For 13 percent of births, mothers had not experienced the return of menstruation, and for 5 percent of births, mothers had not resumed sexual relations following their last birth. Combining the two conditions indicates that for 13 percent of births, mothers were still insusceptible to the risk of pregnancy. The mean duration of amenorrhea is about five months; the mean duration of abstinence is about two months.

Table 5.7 Postpartum amenorrhea, abstinence, and insusceptibility

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

	Percentage of births for which the mother is:			
Months since birth	Amenorrheic	Abstaining	Insusceptible[1]	Number of births
< 2	95.1	82.4	96.2	216
2-3	52.4	14.2	52.8	323
4-5	30.2	1.0	31.1	307
6-7	26.2	0.8	26.6	300
8-9	12.1	0.6	12.7	272
10-11	10.5	0.2	10.5	328
12-13	8.0	0.2	8.2	345
14-15	7.6	0.2	7.6	311
16-17	1.1	0.3	1.4	284
18-19	4.2	0.7	4.9	321
20-21	1.3	2.4	3.7	361
22-23	0.6	0.9	1.5	329
24-25	0.3	0.2	0.5	334
26-27	0.3	0.0	0.3	263
28-29	0.1	0.1	0.1	324
30-31	0.4	0.3	0.7	365
32-33	4.0	0.4	4.4	360
34-35	0.0	0.2	0.2	303
Total	12.5	4.5	13.0	5,648
Median	3.1	1.8	3.1	na
Mean	5.4	2.4	5.5	na

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

For 95 percent of births, mothers were still amenorrheic in the first two months following childbirth. The percentage drops to 52 between two and three months after birth, and drops further to 30 percent in the subsequent two months. In Jordan, as in other Islamic societies, women observe sexual abstinence after childbirth. The period of postpartum abstinence traditionally lasts 40 days. The observance of this practice is noticeable in the 2012 JPFHS data. Mothers of 82 percent of the children born during the two months before the survey were still abstaining from sexual relations at the time of the survey. For births two and three months before the survey, 14 percent of mothers were still abstaining, with the percentage declining to 1 percent and below in subsequent months.

Table 5.8 presents the median duration of postpartum amenorrhea (3.1 months), postpartum abstinence (1.8 months), and postpartum insusceptibility (3.1 months). There is no clear pattern for the three medians by background characteristics. For example, the duration of postpartum amenorrhea and, consequently, insusceptibility both decline slightly with increasing level of education. Postpartum insusceptibility is one month lower among women who live in the South region than among women in the Central region. Women in the lowest wealth quintile are insusceptible for about two months less than women in the highest wealth quintile.

Table 5.8 Median duration of amenorrhea, postpartum abstinence, and postpartum insusceptibility

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

Background characteristic	Postpartum amenorrhea	Postpartum abstinence	Postpartum insusceptibility[1]
Mother's age			
15-29	2.9	1.7	3.0
30-49	3.2	1.8	3.2
Residence			
Urban	3.2	1.8	3.2
Rural	2.7	1.7	2.8
Region			
Central	3.3	1.9	3.4
North	2.8	1.6	3.0
South	2.3	1.7	2.4
Governorate			
Amman	3.6	(2.0)	3.6
Balqa	*	*	*
Zarqa	2.9	*	2.9
Madaba	3.3	*	3.4
Irbid	2.6	*	2.8
Mafraq	3.3	*	3.4
Jarash	3.0	(1.4)	3.2
Ajloun	*	*	2.7
Karak	*	*	*
Tafiela	3.6	*	3.7
Ma'an	3.4	*	3.4
Aqaba	*	*	*
Badia			
Badia	3.0	(1.6)	3.0
Non Badia	3.1	1.8	3.1
Camps			
Camp	3.4	*	3.4
Non camp	3.0	1.8	3.1
Education			
No education	*	*	*
Elementary	*	*	*
Preparatory	3.4	(2.3)	3.5
Secondary	3.2	1.7	3.3
Higher	2.9	1.7	3.0
Wealth quintile			
Lowest	2.5	1.5	2.5
Second	3.4	1.7	3.5
Middle	2.7	1.7	2.9
Fourth	3.0	(2.0)	3.0
Highest	4.4	*	4.5
Total	3.1	1.8	3.1

Note: Medians are based on the status at the time of the survey (current status). 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 births for which mothers are either still amenorrheic or still abstaining (or both) following birth.

5.7 MENOPAUSE

This section addresses menopause (i.e., termination of exposure to pregnancy and childbearing) for women age 30-49. Exposure to pregnancy is affected by the terminal amenorrhea of older women. Table 5.9 shows the percentage of ever-married women age 30-49 who are menopausal. For the purpose of this survey, lack of a menstrual period in the six months preceding the survey among women who are neither pregnant nor postpartum amenorrheic is taken as evidence of menopause, and therefore infecundity.

Table 5.9 shows few cases of menopausal women under the age of 40. Beyond this age, the percentage of menopausal women increases with age. The proportion rises from 2 percent among women age 42-43 to 13 percent among those age 46-47, and further to 21 percent for women age 48-49.

Table 5.9 Menopause

Percentage of ever-married women age 30-49 who are menopausal, by age, Jordan 2012

Age	Percentage menopausal[1]	Number of women
30-34	0.5	2,136
35-39	0.3	2,098
40-41	1.4	888
42-43	2.0	747
44-45	6.3	785
46-47	12.8	638
48-49	21.4	568
Total	3.8	7,860

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

5.8 AGE AT FIRST BIRTH

The onset of childbearing is an important indicator of fertility. In Jordan, the postponement of first births (reflecting a later age at first marriage) has contributed to the overall decline in fertility. Table 5.10 shows the distribution of women by age at first birth. Women under age 25 were not included in the calculation of median age at first birth because more than half had not yet given birth. Overall, for women 25-49 years old, median age at first birth has changed little between 2007 and 2012, but has declined by almost one year between 1997 and 2012. Figures in the last column suggest an increasing median age at first birth across age cohorts. Women in younger cohorts are likely to have their first birth at an older age than women in older cohorts. For example, women age 25-29 give birth to their first child one year later than women age 45-49.

Table 5.10 Age at first birth

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

	Percentage who gave birth by exact age					Percentage who have never given birth	Number of women	Median age at first birth
Current age	15	18	20	22	25			
15-19	0.0	na	na	na	na	96.5	4,411	a
20-24	0.0	3.6	10.8	na	na	74.7	3,588	a
25-29	0.0	3.8	14.3	29.0	51.9	37.2	2,875	24.7
30-34	0.1	6.0	16.9	30.9	52.5	21.5	2,583	24.6
35-39	0.0	7.4	22.3	38.0	56.5	18.8	2,430	24.0
40-44	0.0	7.2	22.4	39.4	63.4	15.2	2,295	23.2
45-49	0.5	7.6	21.4	36.9	58.0	14.8	1,708	23.6
25-49	0.1	6.2	19.1	34.4	56.1	22.6	11,892	24.0

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

Table 5.11 presents the differentials in age at first birth among women age 25-49 by background characteristics. Rural women begin childbearing half a year later than urban women (24.5 years compared with 23.9 years), and a similar pattern is seen between the non Badia and Badia areas (24.1 years compared with 23.6 years, respectively) and non camp and camp areas (24.1 years and 23.3 years, respectively). There are smaller differences in the median age at first birth by region, while there are noticeable variations according to governorates. The median age at first birth varies from 23.1 years in Zarqa to 24.9 years in Madaba. Contrary to the pattern seen in most other countries, the median age at first birth is two years higher among women with no education (24.5 years) than among women with secondary education (22.4 years). Not surprisingly, women in the poorest households have their first child more than a year earlier than women in the wealthiest households (23.5 versus 24.8).

Table 5.11 Median age at first birth

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

Background characteristic	Women age 25-49
Residence	
Urban	23.9
Rural	24.5
Region	
Central	23.9
North	24.2
South	24.3
Governorate	
Amman	24.0
Balqa	24.8
Zarqa	23.1
Madaba	24.9
Irbid	24.4
Mafraq	23.9
Jarash	23.7
Ajloun	24.0
Karak	a
Tafiela	23.8
Ma'an	23.8
Aqaba	23.5
Badia	
Badia	23.6
Non Badia	24.1
Camps	
Camp	23.3
Non camp	24.1
Education	
No education	24.5
Elementary	22.9
Preparatory	21.3
Secondary	22.4
Higher	a
Wealth quintile	
Lowest	23.5
Second	24.1
Middle	23.5
Fourth	24.1
Highest	24.8
Total	24.0

a = Omitted because less than 50 percent of the women had a birth before reaching age 25.

5.9 TEENAGE FERTILITY

Table 5.12 shows the extent of fertility among women age 15-19. This issue is a major social and health concern because teenage mothers and their children usually have a higher risk of illness and death. At the same time, women who become mothers in their teens are more likely to curtail their education.

Table 5.12 Teenage pregnancy and motherhood

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

Background characteristic	Percentage of women age 15-19 who: Have had a live birth	Are pregnant with first child	Percentage who have begun childbearing	Number of women
Age				
15	0.0	0.1	0.1	815
16	0.9	0.3	1.2	883
17	2.1	0.8	2.9	974
18	5.5	1.4	6.9	912
19	9.1	2.8	11.9	827
Residence				
Urban	3.8	1.2	5.0	3,634
Rural	2.0	0.4	2.4	774
Region				
Central	3.8	0.8	4.5	2,750
North	3.5	1.6	5.1	1,278
South	1.2	1.5	2.6	412
Governorate				
Amman	4.2	0.6	4.8	1,784
Balqa	2.4	1.1	3.4	304
Zarqa	3.5	0.9	4.4	540
Madaba	2.8	1.2	4.0	117
Irbid	3.9	2.0	5.9	839
Mafraq	2.6	0.7	3.3	219
Jarash	3.4	0.9	4.3	139
Ajloun	1.6	0.7	2.3	86
Karak	1.2	0.0	1.2	140
Tafiela	0.8	0.5	1.4	62
Ma'an	1.8	0.9	2.7	80
Aqaba	1.1	4.6	5.7	108
Badia				
Badia	2.9	0.8	3.7	300
Non Badia	3.5	1.1	4.6	4,111
Camps				
Camp	2.0	1.2	3.2	351
Non camp	3.4	1.0	4.4	4,272
Education				
No education	*	*	*	8
Elementary	6.9	1.7	8.6	86
Preparatory	3.0	0.4	3.4	2,080
Secondary	6.7	2.7	9.4	1,271
Higher	0.1	0.3	0.4	925
Wealth quintile				
Lowest	3.6	0.6	4.1	964
Second	4.0	0.9	4.9	894
Middle	5.5	2.1	7.6	748
Fourth	2.7	1.6	4.3	1,002
Highest	1.8	0.1	1.8	905
Total	3.5	1.1	4.5	4,411

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

The level of fertility among teenagers in Jordan is low; only 5 percent have begun childbearing. This percentage is similar to that found in 2007 (4 percent). Teenage pregnancy is twice as high in urban as in rural areas. Teenage pregnancy is much higher in the Central and North regions than in the South. Teenage pregnancy varies from a low of 1 percent in Karak and Tafiela to a high of 6 percent in Aqaba and Irbid. The most significant differentials are found by age and education. At age 15 less than 1 percent of women have begun childbearing, but this increases steadily to 7 percent by age 18 and by age 19, 12 percent have become mothers or are pregnant with their first child. The relationship between early childbearing and education is mixed. Teenage pregnancy is higher among women with elementary or secondary education than among women with preparatory or higher education. Similarly, teenage childbearing and wealth do not have a consistent pattern. Teenage pregnancy is highest among women in the middle wealth quintile and lowest among women in the highest wealth quintile.

FERTILITY PREFERENCES 6

Key Findings

- More than half (53 percent) of currently married women age 15-49 want no more children or are sterilized.
- The desire to stop childbearing among married women has increased only slightly in the past five years, from 51 percent in 2007 to 53 percent in 2012.
- Women report an ideal family size of about four children. The mean ideal number of children among ever-married women has not changed in the last five years.
- Overall, the current fertility rate in Jordan is about one child more per woman than it would be if all unwanted births were avoided. This implies that the total fertility rate of 3.5 children per woman is 46 percent higher than it would be if unwanted births were avoided.

This chapter addresses questions about the need for contraception and the extent of unwanted fertility. Information collected from respondents includes their desire for more children, the gender they would prefer, and the length of time women want to wait before their next child. Respondents were also asked about the number of children they would like to have if they could start anew. Two other issues are also examined: the extent to which unwanted and mistimed births occur and the effect that preventing such births would have on fertility rates.

Survey questions on fertility preferences have often been the subject of criticism. First, it is suggested that the answers respondents give are misleading because they may reflect uninformed, ephemeral views held with little conviction. Critics also argue that the questions do not take into account the effects of social pressure or the attitudes of other family members—particularly the husband, who may exert considerable influence on the wife's reproductive decisions. The first objection is probably not relevant in Jordan because family planning is widely used (presumably to realize fertility preferences). The second objection is correct in principle, but evidence from surveys in which both spouses are interviewed suggests that there are no significant differences between husbands and wives regarding their fertility preferences.

Women who were pregnant at the time of the survey were asked whether they would want to have another child later. Taking into account the way in which the preference variable is defined for pregnant women, a current pregnancy is treated as being equivalent to a living child. Women who have been sterilized are classified as wanting no more children.

6.1 DESIRE FOR CHILDREN

Women's preferences concerning future childbearing serve as indicators of future fertility. However, sterilized women and women who state that they are infecund (declared infecund) have no impact on future fertility, because their potential contribution to fertility has been curtailed.

Table 6.1 and Figure 6.1 show that half (53 percent) of currently married women either want no more children at any time in the future or are sterilized. These figures show an increase of about 2 percentage points since the 2007 JPFHS (51 percent). The findings also show that 23 percent of currently married women want to have another child later (after two or more years); this figure is about 3 percentage points less than that recorded in the 2007 JPFHS (26 percent). In general, about 74 percent of currently married women in Jordan have a potential need for family planning services for limiting or spacing their births. This figure is close to the one recorded in the 2007 JPFHS (73 percent).

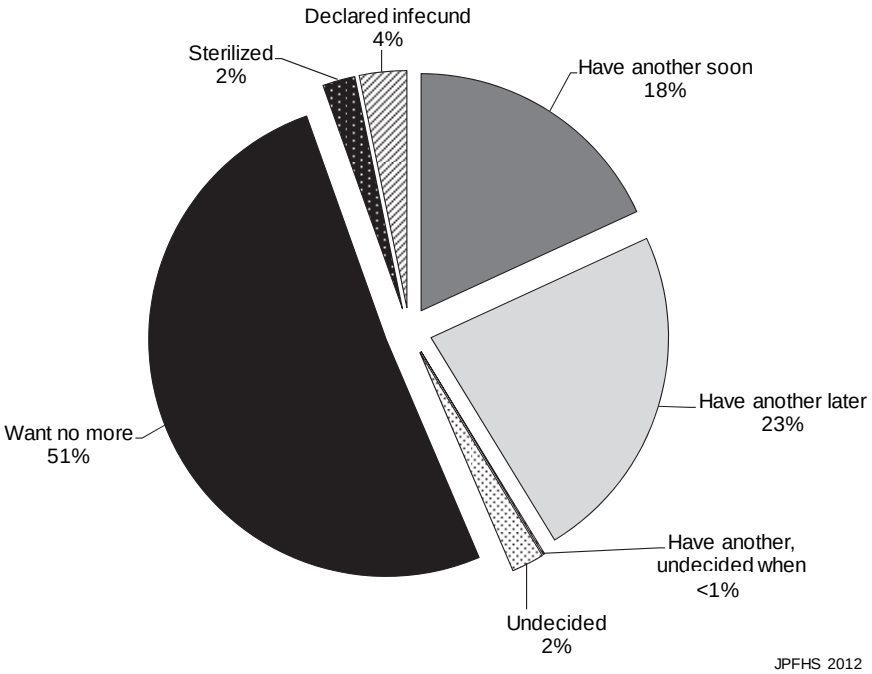
Table 6.1 Fertility preferences by number of living children

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

	Number of living children[1]							Total
Desire for children	0	1	2	3	4	5	6+	15-49
Have another soon[2]	82.8	43.0	19.0	14.9	8.4	5.6	2.6	18.4
Have another later[3]	1.7	48.2	47.1	32.8	15.6	8.0	2.5	23.1
Have another, undecided when	0.9	0.4	0.5	0.3	0.1	0.5	0.0	0.3
Undecided	0.5	0.6	2.8	3.1	3.4	2.2	1.1	2.2
Want no more	0.8	5.7	29.3	45.6	69.6	79.1	80.5	50.6
Sterilized[4]	0.0	0.0	0.7	0.6	1.1	1.5	8.7	2.2
Declared infecund	13.3	2.1	0.6	2.7	1.8	3.1	4.6	3.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	678	1,239	1,703	1,949	1,789	1,458	1,986	10,801

[1] The number of living children includes the current pregnancy.
[2] Wants next birth within 2 years.
[3] Wants to delay next birth for 2 or more years.
[4] Includes both female and male sterilization.

Figure 6.1
Fertility preferences of currently married women age 15-49



The desire for childbearing is strongly associated with the number of children that a woman has. Eighty-five percent of women who have not started childbearing by the time of the survey want to have a child, and the majority (83 percent) want to have this child soon, that is, within the next two years. Ninety-

two percent of women who have one child want to have another child, but the majority (48 percent) want to wait at least two years before having the next child. Among those who have more than one child, the desire to stop childbearing increases rapidly with the number of children they have—from 30 percent among women who have two children to 89 percent among those with six children or more, including 9 percent who are sterilized. Thirteen percent of childless women declared themselves infecund, probably because they are or believe that they are sterile. The proportion of sterilized women has decreased slightly while the proportion of infecund women has increased since the 2007 JPFHS.

Differentials in the desire to stop childbearing are presented in Table 6.2. In general, women living in urban areas are slightly more likely to want to stop childbearing than rural women. Women in the Central and South regions are more likely to want to stop childbearing than women in the North region. This preference also varies according to governorate (ranging from 46 percent in Mafraq to 56 percent in Amman) and according to residence in Badia areas (50 percent of women living in Badia areas compared to 53 percent for other women). The same pattern is seen when the data are analyzed on the basis of the number of living children a woman has.

Table 6.2 Desire to limit childbearing

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

Background characteristic	Number of living children[1]							Total
	0	1	2	3	4	5	6+	
Residence								
Urban	0.9	6.0	31.8	47.0	72.3	80.9	89.1	53.2
Rural	0.0	4.4	20.3	41.5	61.9	79.3	89.6	50.5
Region								
Central	1.0	5.5	35.7	49.7	74.6	82.4	89.9	55.0
North	0.4	5.0	19.5	37.8	62.0	77.4	87.8	47.4
South	0.5	9.1	21.1	43.8	69.0	76.8	89.4	53.2
Governorate								
Amman	0.0	5.8	41.5	52.0	76.7	82.7	90.7	56.2
Balqa	(0.0)	4.4	23.1	45.9	67.4	80.6	90.2	52.9
Zarqa	3.9	5.0	29.6	46.7	72.7	83.3	87.6	54.2
Madaba	0.0	6.5	18.6	41.5	71.6	75.8	89.7	48.9
Irbid	0.4	6.4	21.5	39.8	65.8	79.5	87.7	47.6
Mafraq	0.0	1.2	13.8	35.9	48.4	75.3	90.3	46.0
Jarash	(0.0)	1.9	14.2	27.6	65.2	75.5	84.5	47.9
Ajloun	1.7	3.5	22.6	35.6	51.8	70.0	87.9	48.5
Karak	0.0	11.3	16.1	40.0	71.8	79.8	89.0	52.1
Tafiela	(0.0)	6.6	25.2	43.9	74.1	76.5	90.7	54.9
Ma'an	(0.0)	16.8	22.5	39.8	48.6	69.6	92.8	54.7
Aqaba	(2.3)	4.5	25.8	50.1	73.8	77.0	85.6	52.8
Badia								
Badia	0.0	3.3	19.0	42.1	44.0	72.1	92.1	49.5
Non Badia	0.8	5.8	30.7	46.5	72.1	81.2	88.9	53.0
Camps								
Camp	(2.6)	2.4	20.3	43.1	69.5	72.9	86.8	55.9
Non camp	0.7	5.8	30.3	46.3	70.8	81.0	89.3	52.7
Education								
No education	*	*	(28.8)	(37.4)	(67.8)	(63.9)	90.1	63.1
Elementary	0.0	1.7	34.3	45.6	75.9	74.7	90.0	61.4
Preparatory	0.0	12.8	26.9	46.0	72.0	74.0	93.3	61.1
Secondary	1.1	3.9	29.5	41.2	70.2	83.5	86.5	53.3
Higher	1.0	5.7	31.0	53.2	70.1	82.1	88.8	45.5
Wealth quintile								
Lowest	0.0	3.9	27.6	43.7	63.1	73.3	90.3	56.4
Second	1.5	5.3	25.7	39.8	65.9	77.0	88.1	49.7
Middle	0.2	2.6	26.2	40.4	67.2	82.3	87.9	48.4
Fourth	0.2	8.3	26.3	44.9	73.2	86.2	91.3	52.2
Highest	(2.2)	8.1	44.5	59.3	82.6	82.3	87.4	58.4
Total	0.8	5.7	30.0	46.2	70.7	80.6	89.2	52.8

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] The number of living children includes the current pregnancy.

Education is negatively associated with the desire to stop childbearing. The proportion of women who want no more children decreases as the level of education increases, from 63 percent among uneducated women to 46 percent among women who have more than secondary education. However, the relationship between education and the desire to limit childbearing is mixed when analyzed by the number of living children. An inverse relationship between education and the desire to limit childbearing is only true of women with four children. The desire to limit childbearing is higher among women with elementary education than women with higher education when the number of living children is two or four. The impact of education diminishes for women with six or more children.

The data presented in Table 6.2 also show that overall there is a U-shaped association between the desire of women to stop childbearing and household wealth. The percentage of women who want no more children decreases from 56 percent among women in the lowest wealth quintile to 48 percent among women in the middle wealth quintile and increases again to 58 percent among women in the highest wealth quintile. However, there is no consistent association between the desire to stop childbearing and household wealth when analyzing data on the basis of the number of living children; however, women in the highest quintile are the most likely to want to stop childbearing at 2, 3, and 4 children.

6.2 IDEAL NUMBER OF CHILDREN

The focus of this chapter is on the future reproductive intentions of women, implicitly taking into account their number of living children. To ascertain her ideal number of children, the respondent was asked to consider—abstractly and independently of her actual family size—the number of children she would choose if she could start childbearing again.

There is usually a correlation between actual and ideal number of children. The reason is twofold. First, to the extent that women implement their preferences, those who want larger families tend to achieve larger families. Second, women may adjust their ideal family size upwards as their actual number of children increases. It is also possible that women with large families have larger ideal family sizes, because of attitudes they acquired 20 to 30 years ago.

Despite the likelihood that some rationalization occurs in the determination of ideal family size, respondents often state ideal family sizes that are lower than their actual number of surviving children. The data in Table 6.3 can be grouped into three categories. The first group is women who have reached their ideal family size—that is, women whose ideal number of children is exactly the same as the number of living children; it is represented by data along the diagonal line from 0 to 6+ children. The second group consists of women whose surviving children have exceeded their ideal family size (shown by data above the diagonal); the last group consists of women who have not reached their ideal family size (shown by data below the diagonal). The second category is of particular interest, because it permits the calculation of surplus or unwanted fertility (discussed in the next section).

The data in Table 6.3 indicate that 63 percent of ever-married women consider the ideal family size to be at least four children, compared with 56 percent in the 2007 JPFHS. Only 18 percent of ever-married women report an ideal family size of two children, the number that is just below replacement level fertility. The mean ideal number of children among ever-married women and currently married women is identical (3.9). Of concern to family planning program managers is the fact that about two-thirds of women with five or more children have already exceeded their ideal family size, in many cases by two or more children.

Table 6.3 Ideal number of children by number of living children

Percent distribution of ever-married women 15-49 by ideal number of children, and mean ideal number of children for ever-married women and for currently married women, according to the number of living children, Jordan 2012

	Number of living children[1]							
Ideal number of children	0	1	2	3	4	5	6+	Total
0	1.4	0.9	1.0	0.9	0.7	0.7	1.0	0.9
1	3.3	2.8	3.6	3.4	2.0	1.1	0.5	2.3
2	31.0	22.8	22.7	15.8	20.1	13.7	9.6	18.1
3	13.0	20.2	15.3	13.5	6.5	9.6	6.7	11.6
4	35.6	41.2	44.1	47.0	47.0	40.2	39.5	42.8
5	3.8	5.4	4.7	7.8	7.2	14.6	7.6	7.5
6+	8.1	5.9	6.4	8.6	13.4	17.4	26.6	13.1
Non-numeric responses	3.9	0.8	2.2	3.1	3.0	2.6	8.4	3.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of ever-married women	854	1,315	1,778	1,999	1,862	1,491	2,054	11,352
Mean ideal number children for:[2]								
Ever-married women	3.4	3.5	3.5	3.8	3.9	4.3	4.7	3.9
Number of ever-married women	820	1,305	1,738	1,936	1,806	1,452	1,882	10,938
Currently married women	3.5	3.5	3.5	3.8	3.9	4.3	4.7	3.9
Number of currently married women	646	1,230	1,666	1,889	1,734	1,419	1,816	10,399

[1] The number of living children includes the current pregnancy.
[2] Means are calculated excluding respondents who gave non-numeric responses.

Compared with the 2007 JPFHS, the percentage of women in the 2012 JPFHS who did not give a numeric response to the hypothetical question on ideal family size decreased substantially from 18 percent to 4 percent. Failure to give a definite answer suggests either an absence of conscious consideration given to the matter or a strong belief that family size is determined by God.

Table 6.4 presents the mean ideal number of children by background characteristics. The mean ideal number of children in Jordan increases with age, from 3.4 children for ever-married women in the youngest age group (15-19) to 4.0 children among women age 35-39 and to 4.5 among the oldest cohort of women (45-49). In general, women living in rural areas, women in the Badia areas, women in camp areas, and women in Ajloun and Ma'an have a slightly higher ideal family size than their counterparts in the other areas.

Table 6.4 Mean ideal number of children by background characteristics

Mean ideal number of children for ever-married women age 15-49 by background characteristics, Jordan 2012

Background characteristic	Mean	Number of women[1]
Age		
15-19	3.4	276
20-24	3.6	1,190
25-29	3.7	1,970
30-34	3.7	2,062
35-39	4.0	2,024
40-44	4.2	1,939
45-49	4.5	1,476
Residence		
Urban	3.9	9,110
Rural	4.1	1,829
Region		
Central	3.9	6,851
North	4.0	3,082
South	4.1	1,005
Governorate		
Amman	3.7	4,211
Balqa	4.0	745
Zarqa	4.1	1,607
Madaba	4.1	289
Irbid	3.9	1,971
Mafraq	4.2	553
Jarash	4.1	308
Ajloun	4.3	250
Karak	4.1	427
Tafiela	4.0	156
Ma'an	4.3	169
Aqaba	4.0	253
Badia		
Badia	4.3	680
Non Badia	3.9	10,258
Camps		
Camp	4.2	395
Non camp	3.9	10,543
Education		
No education	4.4	252
Elementary	4.2	796
Preparatory	3.9	1,593
Secondary	3.8	4,916
Higher	4.0	3,381
Wealth quintile		
Lowest	4.2	2,059
Second	4.1	2,285
Middle	3.9	2,394
Fourth	3.8	2,232
Highest	3.7	1,968
Total	3.9	10,938

[1] Number of women who gave a numeric response.

Ideal number of children is also associated with education. Women with no education have a higher mean ideal family size (4.4) than women who have secondary or higher education (3.8 and 4.0, respectively). The ideal number of children has an inverse relationship to household wealth, decreasing as household wealth increases from 4.2 among women in the lowest wealth quintile to 3.7 among women in the highest wealth quintile.

6.3 PLANNING STATUS OF BIRTHS

Respondents in the 2012 JPFHS were asked a series of questions concerning each child born in the five years preceding the survey and for any current pregnancy, to determine whether the particular pregnancy was either planned, unplanned but wanted at a later date, or unwanted. These questions yield data that provide a powerful indicator of the degree to which couples are able to control childbearing. Additionally, the data can be used to measure the effect of preventing unwanted births on the level of fertility for a period of time.

The questions about the planning status of births are demanding. The respondent is required to accurately recall her wishes at one or more points in the preceding five years, and to report them honestly. The possibility of rationalization is present, since an unwanted conception may well turn out to be a cherished child. Despite problems of comprehension, recall, and honesty, the results from previous surveys indicate that the questions are effective in eliciting plausible information about the planning status of births. Although some postpartum rationalization does occur, respondents are willing to report unwanted conceptions. Overall, the estimates of unwanted fertility obtained from the data are probably low.

Table 6.5 shows that about three-quarters (75 percent) of births during the five years preceding the survey were wanted at the time of conception, 15 percent were wanted later, and 10 percent were not wanted at all at the time of conception. The percentage of births wanted when conceived has remained at the same level between 2007 and 2012 (74 and 75 percent, respectively). The percentage of births wanted at conception is negatively associated with birth order; conversely, the percentage of unwanted births increases dramatically with birth order. In other words, higher order (later) births are more likely than first or second births to have been unwanted. Almost all first order births are wanted at the time of conception.

Table 6.5 Fertility planning status

Percent distribution of births tor ever-married 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, Jordan 2012

Birth order and mother's age at birth	Planning status of birth			Total	Number of births
	Wanted then	Wanted later	Wanted no more		
Birth order					
1	96.3	2.8	0.8	100.0	2,595
2	74.4	24.2	1.5	100.0	2,307
3	76.5	19.5	4.0	100.0	1,968
4+	61.8	15.8	22.4	100.0	4,047
Mother's age at birth					
<20	89.6	9.5	0.9	100.0	624
20-24	80.9	17.2	1.9	100.0	2,664
25-29	76.0	19.3	4.7	100.0	3,174
30-34	74.0	13.7	12.3	100.0	2,535
35-39	67.2	10.3	22.6	100.0	1,498
40-44	51.4	5.2	43.4	100.0	412
45-49	21.9	0.0	78.1	100.0	11
Total	75.3	15.1	9.5	100.0	10,918

Births to young women tend to be wanted at the time they are conceived, whereas births to older women are more likely to be unwanted (Table 6.5). Although 90 percent of births to women under age 20 were wanted at the time of conception, the percentage declines to 22 percent among women age 45-49.

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

As shown in Table 6.6, if all unwanted births were prevented in Jordan, the total wanted fertility rate would be 2.4 children per woman, or 1.1 child less than the actual total fertility rate (TFR). That theoretical rate implies that the TFR is inflated by 46 percent because of unwanted births. This is a marked increase when compared to 2007, when the TFR was inflated by 29 percent because of unwanted births.

Table 6.6 also shows that the gap between actual and wanted fertility rates is wider in rural than urban areas, in Badia than in non Badia areas, and in camp than in non camp areas; in addition, it is wider among women with preparatory education than among women with other levels of education and wider among women in the lowest wealth quintile than among women in the other wealth quintiles. The widest gap between actual and wanted fertility rates is in Ma'an, where the difference is 1.5 children per woman.

Table 6.6 Wanted fertility rates

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

Background characteristic	Total wanted fertility rate	Total fertility rate
Residence		
Urban	2.4	3.4
Rural	2.7	3.9
Region		
Central	2.3	3.4
North	2.7	3.8
South	2.6	3.7
Governorate		
Amman	2.2	3.2
Balqa	2.8	3.8
Zarqa	2.4	3.6
Madaba	2.6	3.5
Irbid	2.6	3.6
Mafraq	2.9	4.1
Jarash	2.9	4.3
Ajloun	2.8	3.8
Karak	2.6	3.5
Tafiela	2.6	3.9
Ma'an	2.6	4.1
Aqaba	2.6	3.7
Badia		
Badia	3.0	4.4
Non Badia	2.4	3.4
Camps		
Camp	2.2	3.7
Non camp	2.4	3.5
Education		
No education	1.8	3.0
Elementary	2.6	3.9
Preparatory	2.1	3.8
Secondary	3.0	4.2
Higher	2.4	3.0
Wealth quintile		
Lowest	2.8	4.4
Second	2.7	3.9
Middle	2.5	3.6
Fourth	2.2	3.1
Highest	2.0	2.6
Total	2.4	3.5

Note: Rates are calculated based on births to women age 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 5.2.

FAMILY PLANNING 7

Key Findings

- Knowledge of at least one method of family planning is universal among ever-married women in Jordan.
- Three-fifths of currently married women are using a method of contraception, with most women using a modern method (42 percent).
- The three most popular modern methods used by married women are the IUD (21 percent), pill, and male condom (8 percent each).
- Use of contraceptives has increased by 15 percent in the past 15 years; nevertheless, there has been a decline in the use of long-term methods such as female sterilization and IUD and an increase in use of short-term methods like the condom and withdrawal.
- The private sector serves 56 percent of contraceptive users, while the public sector serves the rest. Government health centers are the most important public source, serving one in four (23 percent) users.
- Overall, 48 percent of contraceptive users discontinued an episode within 12 months of starting its use. Twenty-four percent switched to another method following discontinuation.
- Twelve percent of currently married women have an unmet need for family planning services, with 5 percent having an unmet need for spacing and 7 percent having an unmet need for limiting.

This chapter considers a number of indicators from the 2012 JPFHS related to knowledge of, attitudes toward, and use of family planning and contraceptive sources and brands. This chapter also presents information on unmet need for family planning, intended future use of contraception, and exposure to mass media messages about family planning.

7.1 KNOWLEDGE OF FAMILY PLANNING METHODS

Determining the level of knowledge of contraceptive methods was a major objective of the 2012 JPFHS, since knowledge of specific methods is a precondition for using them. Information about women's knowledge of contraceptive methods was collected by describing each method of family planning and asking whether the respondent had heard of it. All methods recognized by the respondent after hearing a description of the method were recorded as knowledge.

Information on knowledge was collected for 10 modern methods: the pill, IUD, injectables, implants, emergency contraception, lactational amenorrhea method (LAM), the male and female condom, and female and male sterilization. Two traditional methods were also included: periodic abstinence or rhythm and withdrawal. In addition, provision was made in the questionnaire to record any other methods that respondents mentioned spontaneously.

It should be noted that knowledge of a family planning method in the JPFHS and all DHS surveys is defined simply as having heard of a method. No questions were asked to elicit depth of knowledge, such as how a specific method is used.

The 2012 JPFHS results indicate that all ever-married women in Jordan know at least one method of family planning (Table 7.1). Among modern methods, the IUD and pill are the best known (100 percent), followed by LAM (95 percent), male condom (95 percent), injectables (90 percent), and female sterilization (86 percent). The least recognized methods were emergency contraception and the female condom, with 15 percent and 19 percent, respectively, of ever-married women having heard of these methods. Withdrawal is also known to most ever-married women (96 percent), whereas rhythm is less known (88 percent). On average, an ever-married woman knows about nine methods of family planning.

Table 7.1 Knowledge of contraceptive methods

Percentage of ever-married women and currently married women age 15-49 who have heard of any contraceptive method, by specific method, Jordan 2012

	Ever-married women	Currently married women
Any method	99.9	100.0
Any modern method	99.9	100.0
Female sterilization	85.8	85.7
Male sterilization	20.9	21.1
Pill	99.5	99.6
IUD	99.7	99.8
Injectables	89.6	89.6
Implants	71.9	72.2
Male condom	94.9	95.4
Female condom	18.7	19.0
Lactational amenorrhea (LAM)	95.0	95.1
Emergency contraception	15.3	15.3
Any traditional method	97.4	97.6
Rhythm	88.3	88.5
Withdrawal	95.9	96.3
Folk method	0.6	0.6
Mean number of methods known	8.9	8.9
Number of women	11,352	10,801

Because knowledge of any family planning method or any modern method is almost universal, there are small variations in knowledge of any method or any modern method of contraception among subgroups by background characteristics (data not shown separately).

7.2 CURRENT USE OF CONTRACEPTION

The level of current use of contraception is one of the indicators most frequently used to assess the success of family planning activities. It is also widely used as a measure to analyze the determinants of fertility.

Results from the 2012 JPFHS indicate that 61 percent of currently married women are using a contraceptive method (Table 7.2); 42 percent are using modern methods and 19 percent are using traditional methods. The IUD is the most widely adopted modern method (21 percent), followed by the pill and male condom (8 percent each), female sterilization (2 percent), and LAM and injectables (1 percent each). Less than 1 percent of women rely on other modern methods. Withdrawal (14 percent) and rhythm (4 percent) are the most common traditional methods.

Overall, use of any method among currently married women has increased substantially in the last two decades—from 40 percent of women in the 1990 JPFHS survey to 53 percent in the 1997 JPFHS, 56 percent in the 2002 JPFHS, 57 percent in the 2007 JPFHS, and 59 percent in the 2009 JPFHS (Figure 7.1). There was a marked increase in contraceptive use of any method during the seven years between 1990 and 1997 (32 percent). However, since 1997 the increase in use has been steady but not as substantial. In the 15 years between 1997 and 2012, contraceptive use increased by just 15 percent.

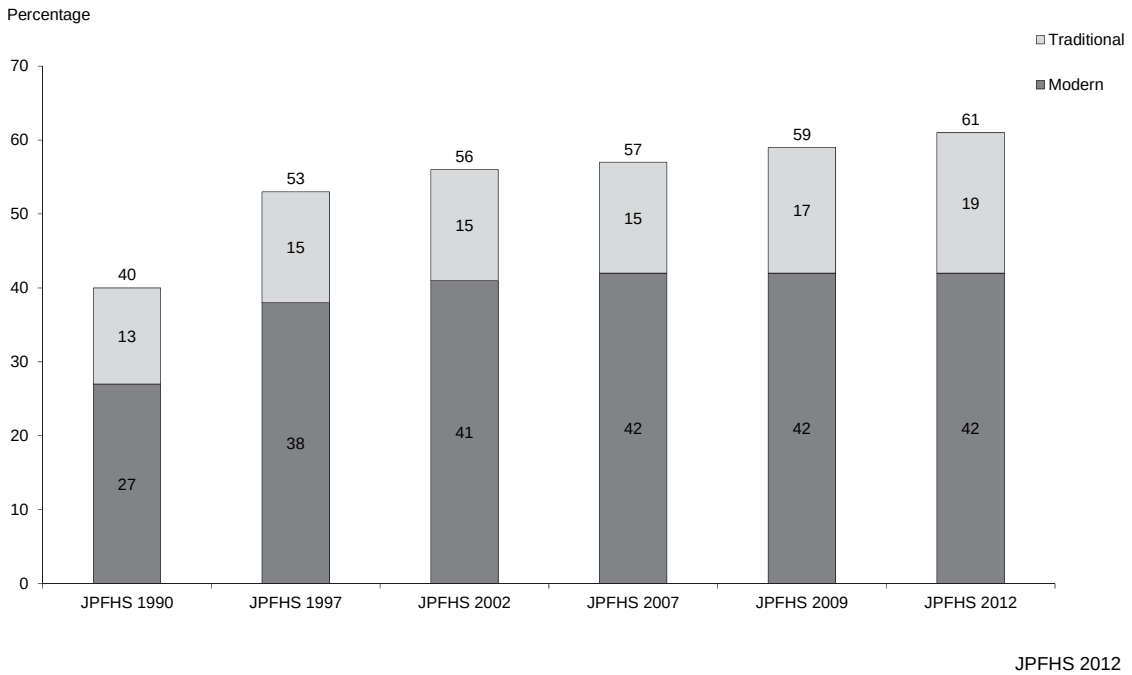
Table 7.2 Current use of contraception by age

Percent distribution of ever-married women and currently married women age 15-49 by contraceptive method currently used, according to age, Jordan 2012

			Modern method									Traditional method					
Age	Any method	Any modern method	Female sterili-zation	Pill	IUD	Inject-ables	Implants	Male condom	LAM	Other	Any tradi-tional method	Rhythm	With-drawal	Other	Not currently using	Total	Number of women
EVER-MARRIED WOMEN																	
15-19	26.1	20.7	0.0	10.8	3.8	1.0	0.0	1.1	3.9	0.0	5.4	0.0	4.2	1.2	73.9	100.0	278
20-24	45.4	29.1	0.0	7.4	10.3	1.5	0.5	6.3	3.2	0.0	16.3	1.1	14.0	1.2	54.6	100.0	1,207
25-29	55.7	36.3	0.0	8.3	17.6	1.1	0.5	7.5	1.3	0.0	19.3	2.3	15.8	1.2	44.3	100.0	2,006
30-34	62.8	44.3	0.2	9.9	21.7	1.0	0.2	8.9	2.0	0.3	18.5	2.8	14.5	1.2	37.2	100.0	2,136
35-39	68.3	49.0	1.5	9.9	25.6	1.1	0.4	9.1	0.9	0.6	19.4	3.4	14.8	1.2	31.7	100.0	2,098
40-44	67.0	48.3	4.9	6.7	27.3	0.6	0.4	8.1	0.2	0.1	18.8	5.3	12.8	0.6	33.0	100.0	2,055
45-49	46.2	30.3	7.1	2.2	16.1	0.1	0.0	4.7	0.0	0.1	15.9	5.2	10.6	0.1	53.8	100.0	1,571
Total	58.3	40.3	2.2	7.7	20.3	0.9	0.3	7.5	1.3	0.2	17.9	3.4	13.6	0.9	41.7	100.0	11,352
CURRENTLY MARRIED WOMEN																	
15-19	27.5	21.8	0.0	11.4	4.0	1.1	0.0	1.2	4.1	0.0	5.7	0.0	4.4	1.3	72.5	100.0	264
20-24	46.8	30.0	0.0	7.6	10.6	1.5	0.5	6.4	3.3	0.0	16.8	1.2	14.4	1.2	53.2	100.0	1,171
25-29	57.7	37.7	0.0	8.6	18.2	1.2	0.5	7.8	1.4	0.0	20.0	2.4	16.4	1.3	42.3	100.0	1,935
30-34	65.2	46.0	0.2	10.2	22.6	1.0	0.2	9.3	2.1	0.3	19.2	2.9	15.1	1.2	34.8	100.0	2,055
35-39	71.2	51.0	1.5	10.4	26.6	1.1	0.4	9.5	1.0	0.6	20.2	3.5	15.4	1.3	28.8	100.0	2,012
40-44	70.8	51.0	5.1	7.0	28.9	0.6	0.4	8.6	0.2	0.1	19.8	5.6	13.6	0.7	29.2	100.0	1,944
45-49	50.7	33.1	7.4	2.5	17.8	0.1	0.0	5.2	0.0	0.1	17.6	5.8	11.7	0.1	49.3	100.0	1,419
Total	61.2	42.3	2.2	8.1	21.3	0.9	0.3	7.9	1.3	0.2	18.9	3.5	14.3	1.0	38.8	100.0	10,801

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

Figure 7.1
Current use of contraception among currently married women, various surveys, 1990-2012



Comparing specific methods, there has been considerable change in the use of specific contraceptive methods in the period between 1990 and 2012. Most noticeable is the increased use of the IUD among currently married women, which rose from 15 percent in 1990 to 21 percent in 2012. Use of the male condom has also increased during the same period, rising from less than 1 percent to 8 percent. In addition, use of withdrawal has also increased steadily from 4 percent in 1990 to 14 percent in 2012. It is important to point out here that use of long-term methods—including IUD—are declining in favor of condom and withdrawal, resulting in rising discontinuation rates as discussed later in this chapter. In-depth analysis may be useful to discern the reasons for this disturbing trend.

Contraceptive use differs according to age (Table 7.2). Use among currently married women is lowest among women age 15-19 (28 percent), peaks among women age 35-39 (71 percent), then declines sharply among those age 45-49 (51 percent). Most women in the younger age cohorts use contraception for spacing births, relying on the pill, IUD, LAM, and withdrawal, while older women are using more permanent methods. Female sterilization, in particular, rises in popularity among women 35 years of age and older, with the prevalence of sterilization increasing from 2 percent among women age 35-39, to 5 percent among women age 40-44, and 7 percent among currently married women age 45-49. The use of the IUD is also very popular among older women.

Current use of contraceptive methods also differs by background characteristics (Table 7.3). Use of contraception increases with the number of living children, from 2 percent among currently married women with no children to 75 percent among women with five or more children. Although the overall use of contraception is not very different between urban and rural areas, the percentage using modern methods is 3 percentage points higher among urban than among rural women (43 percent and 40 percent, respectively).

There are no regional variations in current use of family planning. Current use of contraceptive methods differs by governorates and ranges from 58 percent of women in Ma’an to 64 percent in Tafiela and Aqaba. A similar difference is seen in use of modern methods, which ranges from 31 percent in Ma’an to 47 percent in Zarqa.

Current use of contraception increases steadily with women's education from 46 percent among women with no education to 65 percent among women with secondary education but declines to 59 percent among women with higher education. This pattern also holds for the current use of modern methods. However, it should be noted that use of female sterilization is highest among women with only elementary education. The use of traditional methods increases steadily with all levels of education, from 14 percent among women with no education to 21 percent among women with higher education.

Contraceptive use rises from 58 percent among women in the poorest households to 64 percent among women in the fourth wealth quintile, and then falls slightly to 63 percent among women in the richest households. A similar pattern is seen in the use of modern methods.

Table 7.3 Current use of contraception by background characteristics

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

			Modern method									Traditional method					
Background characteristic	Any method	Any modern method	Female sterilization	Pill	IUD	Injectables	Implants	Male condom	LAM	Other	Any traditional method	Rhythm	Withdrawal	Other	Not currently using	Total	Number of women
Number of living children																	
0	1.5	0.2	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	1.3	0.2	1.1	0.0	98.5	100.0	930
1-2	52.4	32.0	0.4	8.4	10.8	0.8	0.1	9.7	1.7	0.0	20.5	2.8	16.7	1.0	47.6	100.0	2,880
3-4	70.5	49.4	0.9	9.7	27.5	0.8	0.5	8.1	1.5	0.4	21.1	4.4	15.8	0.9	29.5	100.0	3,673
5+	75.2	55.3	5.9	8.3	29.5	1.5	0.4	8.3	1.2	0.3	19.9	4.1	14.4	1.4	24.8	100.0	3,317
Residence																	
Urban	61.1	42.7	2.2	7.3	22.1	0.8	0.3	8.5	1.3	0.2	18.3	3.6	13.9	0.9	38.9	100.0	8,983
Rural	61.7	40.2	2.4	12.1	17.4	1.8	0.3	4.9	1.2	0.1	21.6	3.3	16.6	1.7	38.3	100.0	1,818
Region																	
Central	61.1	42.7	1.8	7.5	22.0	0.8	0.4	8.6	1.4	0.3	18.4	4.0	13.6	0.8	38.9	100.0	6,839
North	61.3	42.3	2.8	9.2	21.1	1.0	0.1	6.7	1.2	0.2	19.0	2.6	15.0	1.5	38.7	100.0	2,966
South	61.0	39.5	3.3	9.4	17.1	1.7	0.5	6.4	1.1	0.1	21.5	3.1	17.6	0.8	39.0	100.0	996
Governorate																	
Amman	60.5	41.6	1.7	5.8	21.8	0.5	0.3	9.5	1.6	0.4	18.9	4.4	14.0	0.5	39.5	100.0	4,262
Balqa	60.0	41.6	2.2	10.2	20.8	1.9	0.1	5.5	0.9	0.0	18.4	4.7	12.3	1.3	40.0	100.0	724
Zarqa	63.1	46.5	1.7	10.4	23.5	0.8	1.0	8.0	1.0	0.0	16.7	2.6	12.6	1.4	36.9	100.0	1,564
Madaba	62.1	42.2	2.6	9.7	20.4	1.3	0.2	6.4	1.4	0.1	19.9	3.4	15.8	0.8	37.9	100.0	289
Irbid	61.7	43.9	3.1	9.4	22.0	0.6	0.0	7.3	1.3	0.1	17.8	2.5	14.1	1.1	38.3	100.0	1,892
Mafraq	59.5	36.7	1.9	10.2	15.8	2.7	0.0	4.5	1.3	0.4	22.8	2.0	18.8	2.0	40.5	100.0	528
Jarash	61.8	42.7	3.2	9.9	20.5	1.1	0.3	6.7	0.7	0.1	19.2	3.0	14.2	1.9	38.2	100.0	306
Ajloun	61.6	41.0	2.0	4.1	26.4	0.6	0.2	6.6	1.0	0.0	20.6	3.4	14.9	2.3	38.4	100.0	239
Karak	59.2	40.0	3.1	10.5	15.1	2.9	0.6	6.8	0.9	0.0	19.3	3.4	15.6	0.3	40.8	100.0	420
Tafiela	64.1	41.5	5.6	11.3	13.7	0.9	1.0	7.2	1.8	0.0	22.6	2.1	20.0	0.5	35.9	100.0	161
Ma'an	58.4	30.7	4.6	6.0	10.5	0.8	0.3	7.2	0.9	0.4	27.7	3.5	23.4	0.8	41.6	100.0	163
Aqaba	63.7	43.2	1.1	8.7	27.0	0.6	0.3	4.7	0.9	0.0	20.5	3.1	15.4	1.9	36.3	100.0	253
Badia																	
Badia	57.8	36.6	2.6	12.4	12.8	2.7	0.3	4.1	1.5	0.2	21.2	1.9	17.4	1.9	42.2	100.0	666
Non Badia	61.4	42.7	2.2	7.8	21.9	0.8	0.3	8.1	1.3	0.2	18.7	3.6	14.1	0.9	38.6	100.0	10,135
Camps																	
Camp	60.8	45.4	2.1	12.2	21.2	0.7	0.0	8.2	0.9	0.1	15.4	3.0	11.3	1.1	39.2	100.0	387
Non camp	61.2	42.2	2.2	8.0	21.3	0.9	0.3	7.9	1.3	0.2	19.0	3.6	14.4	1.0	38.8	100.0	10,414
Education																	
No education	45.6	31.8	3.8	7.9	14.3	2.0	0.0	3.0	0.7	0.1	13.8	0.5	10.2	3.0	54.4	100.0	226
Elementary	53.4	36.6	7.7	6.6	14.4	1.8	0.1	5.3	0.6	0.1	16.8	0.5	15.3	1.0	46.6	100.0	788
Preparatory	60.6	43.5	3.1	8.6	24.9	1.0	0.8	4.1	1.0	0.1	17.1	1.9	14.4	0.8	39.4	100.0	1,547
Secondary	64.7	46.0	1.6	8.3	24.1	1.1	0.3	8.7	1.7	0.2	18.7	3.7	13.8	1.1	35.3	100.0	4,863
Higher	59.3	38.5	1.3	8.0	17.8	0.4	0.1	9.4	1.1	0.4	20.8	4.9	15.1	0.7	40.7	100.0	3,376
Wealth quintile																	
Lowest	58.0	40.6	2.7	10.3	16.8	2.3	0.6	6.7	1.0	0.1	17.4	2.2	13.6	1.6	42.0	100.0	1,975
Second	60.9	41.8	2.8	7.9	19.6	1.2	0.5	7.7	2.0	0.2	19.1	2.5	15.2	1.4	39.1	100.0	2,179
Middle	59.9	41.1	1.5	7.5	22.5	0.8	0.3	7.1	1.3	0.0	18.9	3.2	15.0	0.7	40.1	100.0	2,364
Fourth	64.0	45.0	3.2	8.6	24.2	0.4	0.1	7.6	0.6	0.3	19.1	3.1	15.2	0.8	36.0	100.0	2,274
Highest	62.9	43.1	0.7	6.5	22.9	0.0	0.1	10.5	1.8	0.5	19.8	6.8	12.5	0.5	37.1	100.0	2,009
Total	61.2	42.3	2.2	8.1	21.3	0.9	0.3	7.9	1.3	0.2	18.9	3.5	14.3	1.0	38.8	100.0	10,801

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

7.3 TIMING OF STERILIZATION

Use of female sterilization decreased between 2007 and 2012 (from 4 to 2 percent), and it only represents 5 percent of users of modern methods. Nevertheless, the age at which the operation takes place is of particular interest to family planning officials. For 4 percent of women who have been sterilized, the operation took place before they were 30 years old; 21 percent were sterilized at 30-34 years, 52 percent at 35-39 years, and 23 percent at 40-49 (data not shown separately). Overall, women's age at sterilization has increased slightly in Jordan between 2007 and 2012: the median age for women under age 40 was 35.5 years in 2007; this increased to 36.0 years in 2012.

7.4 SOURCE OF SUPPLY FOR MODERN METHODS

In addition to information about the level of contraceptive use, program officials need to know where users obtain their methods. As in the 2007 and the 2009 JPFHS, the 2012 JPFHS survey included a question for current users of modern methods regarding the source of their method. Private sources serve almost three-fifths (56 percent) of current users, compared with 58 percent in 2007 and 54 percent in 2009. Private hospitals or clinics, pharmacies, the Jordanian Association of Family Planning and Protection (JAFPP), and the United Nations Refugee Welfare Association (UNRWA) clinics are major private sources of supply for modern contraceptive methods (Table 7.4 and Figure 7.2). The share of the public sector decreased to 44 percent in 2012 from 46 percent in 2009.

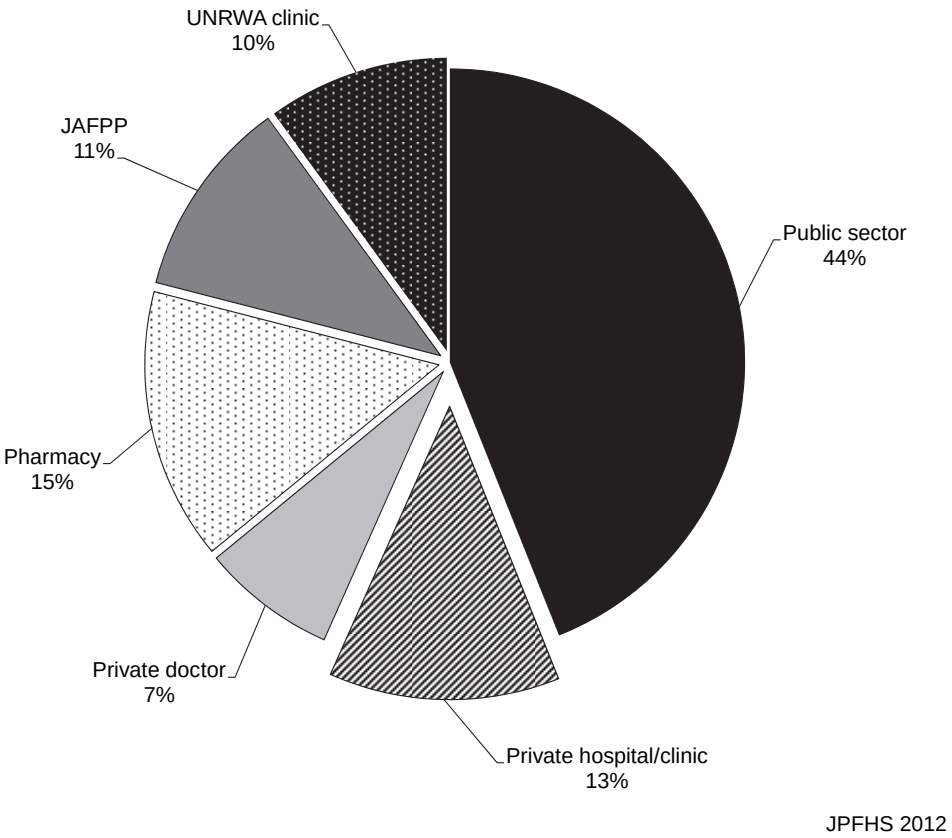
Table 7.4 Source of modern contraception methods

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

Source	Female sterilization	Pill	IUD	Injectables	Male condom	Total
Public sector	79.8	47.7	37.8	82.2	41.5	44.1
Government hospital	53.5	2.0	3.8	1.0	0.6	5.9
Government health center	0.0	30.3	18.9	63.2	27.1	22.7
Government MCH center	0.0	14.4	12.8	17.8	11.5	12.2
University hospital/clinic	2.0	0.1	0.5	0.0	0.8	0.5
Royal Medical Services	24.4	0.8	1.8	0.2	1.4	2.7
Private sector	20.0	52.3	62.1	17.8	57.6	55.6
Private hospital/clinic	20.0	0.7	21.7	0.7	0.2	12.7
Private doctor	0.0	1.1	13.4	2.6	0.3	7.4
Pharmacy	0.0	34.8	0.9	0.2	39.3	15.0
JAFPP	0.0	1.8	18.9	1.0	1.9	10.6
UNRWA clinic	0.0	14.0	6.9	12.6	16.0	9.7
Other NGO	0.0	0.0	0.3	0.8	0.0	0.1
Other source	0.2	0.0	0.2	0.0	1.0	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	246	877	2,302	101	852	4,413

Note: Total includes other modern methods but excludes lactational amenorrhea method (LAM). Total includes 37 unweighted users of implants who are not shown separately.
MCH = Maternal and child health
JAFPP = Jordanian Association of Family Planning and Protection
UNRWA = United Nations Refugee Welfare Association
NGO = Nongovernmental organization

Figure 7.2
Sources of family planning methods among current users of modern methods, 2012



The sources of contraceptive methods vary by method used. Pharmacies are the primary source for users of methods that require resupply, including the pill (35 percent) and condoms (39 percent). Private hospitals and clinics are the primary source for IUDs (22 percent), followed by government health centers and JAFPP (19 percent each). Government hospitals are the primary source for most female sterilizations (54 percent), followed by the Royal Medical Services (24 percent) and private hospitals (20 percent). Government health centers are the major source of injectables (63 percent), followed by government maternal and child health (MCH) centers (18 percent).

7.5 USE OF SOCIAL MARKETING BRANDS OF CONTRACEPTIVES

All users of the pill age 15-49 years were asked about the brand they are currently using. The overall results on the three most popular social marketing brands (Table 7.5) indicate that *Marvelon* is the most popular brand (41 percent), followed by *Microgynon* and *Yasmin* (15 percent each). Differentials in using these three most popular brand pills by respondents' background are evident. Although *Marvelon* is the most widely used brand of pills among women in all groups, it is most popular among women age 30-34, rural women, women in the North region, women in Jarash, women in Badia and camp areas, women with elementary education only, and women in the lowest wealth quintile. On the other hand, *Microgynon* is more popular among older women, urban women, women in the Central region, women in Amman, women in camps, and women in the two highest wealth quintiles. The use of *Yasmin* rises with education and wealth.

In addition to the three most popular brands of pills mentioned above, 8 percent of pill users were using *Ezluten* (data not shown separately). Other pill brands were less popular and their use varied from less than 1 percent to 4 percent. Ten percent of pill users did not know the brand they were using.

Table 7.5 Use of social marketing brand pills

Among all pill users age 15-49, the percentage of pill users using the three most popular social marketing brands, by background characteristics, Jordan 2012

Background characteristic	Percentage using Marvelon tab	Percentage using Microgynon	Percentage using Yasmin	Number of women using the pill
Age				
15-19	*	*	*	30
20-24	40.7	5.2	18.2	89
25-29	43.2	7.3	18.4	167
30-34	46.6	15.1	13.5	211
35-39	46.1	12.9	14.3	208
40-44	31.2	27.6	16.4	137
45-49	(24.8)	(29.1)	(11.9)	35
Residence				
Urban	36.7	15.8	16.0	657
Rural	52.4	11.7	12.5	220
Region				
Central	33.2	19.1	17.9	510
North	52.5	8.1	7.0	272
South	46.3	10.8	23.7	94
Governorate				
Amman	27.3	22.2	25.1	246
Balqa	43.6	16.6	12.0	74
Zarqa	35.7	15.8	10.1	162
Madaba	44.0	16.6	14.7	28
Irbid	55.7	7.7	5.5	178
Mafraq	41.7	10.0	8.3	54
Jarash	59.5	3.9	12.5	30
Ajloun	(31.3)	(17.9)	(11.3)	10
Karak	52.0	7.1	22.2	44
Tafiela	55.8	18.6	13.9	18
Ma'an	40.3	9.7	19.6	10
Aqaba	29.6	12.5	36.8	22
Badia				
Badia	47.2	13.2	12.4	83
Non Badia	39.9	15.0	15.4	794
Camps				
Camp	46.7	19.1	2.9	47
Non camp	40.3	14.5	15.8	830
Education				
No education	*	*	*	18
Elementary	50.7	10.3	0.2	52
Preparatory	48.4	15.0	5.8	132
Secondary	42.4	13.6	14.5	406
Higher	32.9	14.9	24.6	269
Wealth quintile				
Lowest	54.2	14.0	4.3	203
Second	43.2	10.9	11.2	173
Middle	48.0	12.6	12.8	177
Fourth	32.5	17.1	17.3	194
Highest	18.1	20.6	37.2	131
Total	40.6	14.8	15.1	877

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.

Because the IUD is the most popular contraceptive method in Jordan, its users were asked to mention the type of IUD they are currently using. The results indicate that more than half of IUD users (55 percent) are using a non-hormonal type and only 9 percent are using a hormonal type (data not shown separately). However, a significant number (36 percent) of IUD users don't know the type of IUD they are using.

The IUD is a provider-based method and women in Jordan prefer to receive IUD insertions from a female provider. The 2012 JPFHS asked IUD users about the gender of the person who inserted the IUD for them. Such information is useful for program managers in understanding the reasons for non-use and discontinuation of IUDs and promoting their use. According to data from the 2012 JPFHS, the majority of IUDs used in Jordan were inserted by female doctors (80 percent, with 9 percent inserted by midwives). Only 10 percent of IUDs were inserted by male doctors (data not shown separately).

7.6 INFORMED CHOICE

Women who were currently using a modern method of contraception and had adopted the method within the five years preceding the survey were asked whether they were informed about the side effects of the methods they were using, whether they were told what to do if they experienced any side effects, and whether they were informed about other methods of contraception they could use. Women who had been sterilized were asked if they were informed that they could not have any more children because of the operation. This information assists users in coping with side effects and decreases unnecessary discontinuations. In addition, these data serve as a measure of the quality of family planning services and inform program managers for future improvements.

Table 7.6 shows that 70 percent of women were informed about the side effects of the method they were using at the time of the survey, while 61 percent were informed about what to do if they experienced side effects. Seventy-five percent of women were also informed about alternative methods. The majority of women who use injectables were relatively well informed: 68 percent had been told about side effects, 62 percent knew what to do when they had side effects, and 85 percent were informed about other available methods of contraception. Users of the IUD and pill were similarly well informed about side effects (IUD: 71 percent; pill: 68 percent), and were told in different proportions about other methods they could use (pill: 78 percent; IUD: 74 percent); however, those who use an IUD were more likely to have been told what to do in case of side effects (63 percent) than users of the pill (56 percent). It should be noted that 61 percent of sterilized women were informed about side effects and only 47 percent were informed about what to do if they experienced side effects; 68 percent were informed about other methods. However, 91 percent were told that they would not be able to have any more children (data not shown separately) and consequently only 7 percent regret having the operation.

Table 7.6 Informed choice

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

	Among women who started last episode of modern contraceptive method within five years preceding the survey:			
Method/source	Percentage who were informed about side effects or problems of method used	Percentage who were informed about what to do if experienced side effects	Percentage who were informed by a health or family planning worker of other methods that could be used	Number of women
Method				
Female sterilization	61.3	47.3	68.0	88
Pill	68.3	56.3	77.7	774
IUD	70.6	62.8	74.1	1,666
Injectables	68.1	61.8	85.3	99
Implants	(85.9)	(73.9)	(67.4)	35
Initial source of method[1]				
Public sector	73.0	62.5	78.4	1,187
Government hospital	68.0	58.1	72.3	133
Government health center	74.0	64.2	81.2	638
Government MCH center	74.4	62.0	77.8	362
University hospital/clinic	*	*	*	12
Royal Medical Services	67.1	53.6	56.7	42
Private medical sector	67.2	59.0	72.8	1,474
Private hospital/clinic	64.3	58.8	67.8	404
Private doctor	72.6	67.7	68.2	218
Pharmacy	61.3	44.1	68.8	281
JAFPP	71.9	63.8	79.4	325
UNRWA clinic	67.1	61.8	81.1	240
Other NGO	*	*	*	6
Total	69.8	60.6	75.3	2,661

Note: Table includes users of only the methods listed individually. Table excludes users who obtained their method from friends and relatives. 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.
MCH = Maternal and child health
JAFPP = Jordanian Association of Family Planning and Protection
UNRWA = United Nations Refugee Welfare Association
NGO = Nongovernment organization
[1] Source at start of current episode of use.

Contraceptive users who obtained their methods from a public source were more likely to have received information about the method's side effects than those who went to a private source (73 percent and 67 percent, respectively). Women who obtained their methods from public health centers and public MCH centers were more likely than users who obtained their method from the Royal Medical Services to have received information about side effects (74 percent each and 67 percent, respectively) and what to do if they experienced side effects (62-64 percent and 54 percent). Among private sector users, those who obtained their method from a private doctor or JAFPP were relatively better informed than those who used other sources.

7.7 CONTRACEPTIVE DISCONTINUATION

A key concern of family planning officials is the extent to which women discontinue use of contraceptive methods and their reasons for doing so. Contraceptive discontinuation rates based on information collected in the five-year contraceptive calendar are presented in Table 7.7. Discontinuation rates were calculated for each method based on use by women who started an episode in the five years preceding the survey and those who discontinued an episode during the first 12 months after beginning the method. [1]

Nine percent of discontinuations were due to method failure, 10 percent were due to women wanting to become pregnant, 10 percent were due to women wanting a more effective method, 5 percent were due to side effects or health concerns, 2 percent were due to fertility-related reasons, and 11 percent were due to other reasons. Overall, nearly one in two (48 percent) women who started using a method discontinued use within 12 months. One in four (24 percent) women who started using a method discontinued within 12 months and switched to another method. These discontinuation rates are higher than those found in the 2007 and 2009 JPFHS.

Table 7.7 Twelve-month contraceptive discontinuation rates

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

	Reason for discontinuation									
Method	Method failure	Desire to become pregnant	Other fertility-related reasons[2]	Side effects/ health concerns	Wanted more effective method	Other method-related reasons[3]	Other reasons	Any reason[4]	Switched to another method[5]	Number of episodes of use[6]
Pill	6.1	11.9	2.9	16.2	2.9	2.6	3.7	46.3	20.4	2,488
IUD	1.5	4.5	0.2	5.6	0.1	1.4	0.1	13.5	5.2	2,768
Injectables	1.9	8.8	4.3	28.3	1.5	3.5	1.3	49.6	23.2	264
Male condom	11.9	9.8	0.7	2.5	7.4	1.5	4.7	38.4	13.8	1,504
Rhythm	20.5	13.2	1.3	1.3	6.5	0.3	0.1	43.2	7.8	696
Withdrawal	12.8	14.0	3.0	0.9	8.7	0.1	2.5	42.1	11.7	3,166
Other[1]	8.8	8.3	0.9	0.7	28.7	0.6	43.0	91.0	65.9	3,020
All methods	8.6	9.9	1.7	5.2	10.0	1.2	11.3	47.8	24.2	13,905

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

[1] The rates are calculated from information collected in the calendar portion of the questionnaire. All episodes of contraceptive use between January 2007 and the date of interview are recorded in the calendar. Thus, discontinuation rates presented in this table refer only to episodes of contraceptive use that began during the period of time covered by the calendar, not all episodes that occurred during this period. Specifically, the rates presented in Table 7.7 refer to the period 3-62 months prior to the survey—the month of interview and the two months prior are ignored in order to avoid the bias that may be introduced by unrecognized pregnancies.

Discontinuation rates were highest for other methods, predominantly LAM (91 percent)—in part because, by definition, LAM can be used for a maximum of six months postpartum. One in two episodes of injectable and pill use resulted in a discontinuation (50 percent and 46 percent, respectively), while 38 percent of condom users discontinued within 12 months. The lowest discontinuation rate was for the IUD, the most common method (14 percent). Part of the reason that the IUD has the lowest discontinuation rate may be because a woman has to seek the help of a medical professional to have it removed; she cannot stop using the method of her own volition. First-year discontinuation rates due to method failure are highest for rhythm (21 percent), withdrawal (13 percent), and male condom (12 percent). First-year discontinuation rates due to a desire to get pregnant are sizeable for several methods: withdrawal (14 percent), rhythm (13 percent), the pill (12 percent), the male condom (10 percent), and injectables (9 percent.

Table 7.8 provides information about women's reasons for discontinuing contraception. The table includes all discontinuations in the five years preceding the survey, regardless of whether they occurred during the first 12 months of use or later. The reason given most frequently for discontinuation was the desire to get pregnant (33 percent), followed by method failure (18 percent), side effects or health concerns (15 percent), and desire to have a more effective method (13 percent). The other reasons cited by women for discontinuation were infrequent sex or husband's absence (3 percent) and inconvenience of use (2 percent). About 2 percent of discontinuations were due to husband's disapproval of family planning.

Table 7.8 Reasons for discontinuation

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

Reason	Pill	IUD	Injectables	Male condom	LAM	Rhythm	Withdrawal	Other	All methods
Became pregnant while using	14.0	5.7	3.8	30.0	4.9	35.8	30.8	19.4	17.5
Wanted to become pregnant	35.9	45.9	26.0	36.8	4.5	44.3	42.7	17.5	33.3
Husband disapproved	0.9	1.0	0.0	8.1	0.1	0.7	2.6	0.1	1.7
Wanted a more effective method	4.2	1.1	3.2	11.8	26.7	11.7	14.7	41.2	13.4
Side effects/health concerns	32.1	34.1	47.4	4.4	0.1	1.3	1.4	0.4	14.8
Lack of access/too far	0.2	0.0	1.0	0.6	0.0	0.0	0.0	0.1	0.1
Costs too much	0.1	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
Inconvenient to use	3.8	4.0	6.4	2.4	0.1	0.0	0.4	1.8	2.1
Up to God/fatalistic	0.1	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.1
Difficult to get pregnant/menopausal	0.4	0.5	1.1	0.2	0.2	1.7	1.3	0.1	0.6
Infrequent sex/husband away	3.9	2.1	1.4	2.7	1.0	3.4	3.6	0.4	2.6
Marital dissolution/separation	0.5	0.7	3.9	0.0	0.0	0.3	0.4	0.2	0.4
Other	3.7	4.3	4.6	1.1	61.6	0.8	1.9	17.7	12.8
Don't know	0.0	0.0	0.0	0.6	0.0	0.0	0.0	0.0	0.1
Missing	0.2	0.5	1.0	1.1	0.7	0.2	0.1	0.1	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	2,314	2,118	219	1,074	1,680	592	2,400	957	11,374

Note: Total includes discontinuations while using implants and the female condom which are not shown separately.
LAM = Lactational amenorrhea method

Discontinuation due to method failure is particularly high for the traditional methods of rhythm (36 percent) and withdrawal (31 percent). Wanting to become pregnant and method failure were the main reasons given for discontinuation of male condoms (37 and 30 percent, respectively). Side effects and health concerns were frequently cited as the reason for discontinuation of injectables (47 percent), IUD (34 percent), and the pill (32 percent).

7.8 KNOWLEDGE OF THE FERTILE PERIOD

A basic knowledge of reproductive physiology provides a useful background for the successful practice of coitus-dependent methods (such as withdrawal, condom, or barrier methods), and particularly for the practice of the rhythm method. As noted earlier, traditional methods are currently used by 19 percent of currently married women, and rhythm is currently used by 4 percent of women. Since the failure rate for rhythm is high, it is important to find out if women who are practicing the method know when during the ovulatory cycle they should avoid having sexual intercourse.

Table 7.9 presents the distribution of ever-married women categorized by the time during the ovulatory cycle when they think a woman is most likely to get pregnant (perceived fertile period). The data are presented according to whether or not the woman is currently using the rhythm method. To obtain these data, the respondents were asked at what point during the monthly cycle a woman has the greatest chance of becoming pregnant. The results indicate that the ovulatory cycle is well known to ever-married women, as well as to women who have used the rhythm method. Three-fifths (62 percent) of ever-married women can correctly identify a woman's fertile period as halfway between two menstrual periods. Among women using rhythm, 78 percent answered correctly, as did 61 percent of nonusers. Overall, women's knowledge of the fertile period has not changed much since 2007. Eighteen percent of users of the rhythm method incorrectly identified the fertile period as right after the end of the period.

Table 7.9 Knowledge of fertile period

Percent distribution of ever-married women age 15-49 by knowledge of the fertile period during the ovulatory cycle, according to current use of the rhythm method, Jordan 2012

Perceived fertile period	Users of rhythm method	Nonusers of rhythm method	Ever-married women
Just before her menstrual period begins	0.6	1.7	1.7
During her menstrual period	0.0	0.3	0.3
Right after her menstrual period has ended	17.9	26.8	26.5
Halfway between two menstrual periods	78.4	61.4	62.0
Other	2.4	0.7	0.7
No specific time	0.6	3.8	3.7
Don't know	0.1	5.2	5.1
Total	100.0	100.0	100.0
Number of women	382	10,970	11,352

Despite the relatively large proportion of women who can correctly identify the fertile period, it should be noted that almost two-fifths of ever-married women said they did not know the fertile period or gave the wrong answer. Since traditional methods are being used by a substantial number of women, family planning workers need to provide more information on the physiology of reproduction, with emphasis on the ovulatory cycle.

7.9 NEED FOR FAMILY PLANNING SERVICES

Information on fertility preferences is insufficient by itself to estimate the need for family planning services. Many women who do not want to have another child soon are not exposed to the risk of pregnancy, either because they are using contraception or for other reasons. Clearly, a more detailed analysis of unmet need for family planning is needed. In the past, the definition of unmet need used information from the contraceptive calendar and other questions that were not included in every survey, which led to unmet need being calculated inconsistently between surveys. The revised definition uses only information that has been collected in every survey so that unmet need can be measured in the same way over time.

Unmet need for family planning refers to fecund women who are not using contraception but who wish to postpone the next birth (spacing) or stop childbearing altogether (limiting). Specifically, women are considered to have unmet need for spacing if they are:

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

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

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

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

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

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

- **Unmet need:** the sum of unmet need for spacing plus unmet need for limiting
- **Total demand for family planning:** the sum of unmet need plus total contraceptive use
- **Percentage of demand satisfied:** total contraceptive use divided by the sum of unmet need plus total contraceptive use

Table 7.10 shows that nearly 12 percent of currently married women in Jordan have an unmet need for family planning. The percentage is split between a need for spacing births (5 percent) and a need for limiting births (7 percent).

Sixty-one percent of women have a met need for contraception; in other words, they are currently using a method. Twenty-one percent of women are using contraception to delay their next birth, while 40 percent want to stop childbearing. The total demand for family planning among currently married women in Jordan is 73 percent. Eighty-four percent of women have had their demand for family planning satisfied.

The level of unmet need for family planning has declined from 14 percent to 12 percent between 2007 and 2012.[2] The proportion of total demand that is satisfied has increased by 1 percentage point (from 83 percent to 84 percent) during the same period.

[2] Data from 2007 do not match the published figure because it was recalculated with the new definition.

Unmet need for contraception for purposes of spacing births declines in relation to a woman's age, whereas the need for limiting births increases as a woman ages. The needs for spacing and limiting are complementary, as evidenced by the fact that total unmet need generally varies little by age of the woman, with the exception of women age 35-39.

Unmet need varies little by place of residence and region. Unmet need is lowest in Aqaba (9 percent) and highest in Ma'an (14 percent). Unmet need is linearly associated with education. Women with no education have the highest level of unmet need (17 percent) and women with higher education the lowest (10 percent). Since educated women are more likely to use a contraceptive method than uneducated women, a higher proportion of their total demand for family planning is satisfied. Unmet need is negatively associated with household wealth. Unmet need is higher among women in the lowest wealth quintile (17 percent) than in all other wealth quintiles.

Table 7.10 Need and demand for family planning among currently married women

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

Background characteristic	Unmet need for family planning			Met need for family planning (currently using)			Total demand for family planning[1]			Percentage of demand satisfied[2]	Percentage of demand satisfied by modern methods[3]	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total			
Age												
15-19	10.8	1.7	12.5	25.0	2.5	27.5	35.8	4.2	40.0	68.8	54.5	264
20-24	10.1	1.1	11.3	38.2	8.6	46.8	48.3	9.8	58.1	80.6	51.6	1,171
25-29	11.0	3.2	14.2	40.8	16.9	57.7	51.8	20.1	71.9	80.3	52.4	1,935
30-34	5.6	5.1	10.7	30.2	35.0	65.2	35.8	40.1	75.9	85.9	60.6	2,055
35-39	1.8	5.3	7.1	14.4	56.8	71.2	16.2	62.1	78.3	90.9	65.1	2,012
40-44	0.9	12.1	13.0	3.7	67.1	70.8	4.6	79.2	83.9	84.4	60.8	1,944
45-49	0.1	14.7	14.8	0.3	50.4	50.7	0.4	65.1	65.6	77.4	50.5	1,419
Residence												
Urban	4.9	7.0	11.9	20.8	40.3	61.1	25.7	47.3	73.0	83.7	58.6	8,983
Rural	5.2	5.7	10.9	23.2	38.5	61.7	28.4	44.2	72.7	85.0	55.3	1,818
Region												
Central	4.7	7.5	12.2	19.8	41.3	61.1	24.6	48.8	73.3	83.4	58.3	6,839
North	5.6	5.2	10.8	24.2	37.1	61.3	29.8	42.4	72.1	85.0	58.6	2,966
South	4.3	7.0	11.2	21.7	39.3	61.0	26.0	46.3	72.2	84.5	54.7	996
Governorate												
Amman	4.8	7.8	12.6	18.5	42.1	60.5	23.3	49.9	73.1	82.8	56.9	4,262
Balqa	4.8	5.3	10.1	21.6	38.4	60.0	26.4	43.7	70.1	85.6	59.3	724
Zarqa	4.4	7.7	12.1	21.9	41.2	63.1	26.3	48.9	75.3	83.9	61.8	1,564
Madaba	5.6	6.5	12.0	24.0	38.1	62.1	29.6	44.6	74.1	83.8	56.9	289
Irbid	5.8	4.7	10.5	23.6	38.1	61.7	29.3	42.8	72.2	85.5	60.8	1,892
Mafraq	5.0	6.3	11.3	26.3	33.2	59.5	31.2	39.6	70.8	84.0	51.8	528
Jarash	5.9	6.0	11.9	25.1	36.7	61.8	31.0	42.6	73.7	83.9	57.9	306
Ajloun	5.1	5.9	11.0	23.1	38.5	61.6	28.3	44.3	72.6	84.8	56.5	239
Karak	4.1	7.9	12.0	20.7	38.5	59.2	24.8	46.5	71.3	83.1	56.1	420
Tafiela	5.1	5.0	10.1	23.0	41.1	64.1	28.1	46.1	74.2	86.4	55.9	161
Ma'an	5.6	7.9	13.5	21.2	37.2	58.4	26.8	45.1	71.9	81.2	42.7	163
Aqaba	3.2	6.0	9.1	22.9	40.8	63.7	26.0	46.8	72.8	87.5	59.4	253
Badia												
Badia	6.1	7.6	13.7	23.2	34.6	57.8	29.3	42.2	71.5	80.9	51.2	666
Non Badia	4.9	6.7	11.6	21.1	40.3	61.4	25.9	47.1	73.0	84.1	58.5	10,135
Camps												
Camp	4.1	7.1	11.2	18.9	41.9	60.8	22.9	49.0	72.0	84.5	63.1	387
Non camp	5.0	6.8	11.8	21.3	39.9	61.2	26.2	46.7	72.9	83.9	57.8	10,414
Education												
No education	4.5	12.6	17.0	9.1	36.5	45.6	13.5	49.1	62.6	72.8	50.8	226
Elementary	3.7	11.2	14.9	10.4	42.9	53.4	14.1	54.1	68.3	78.2	53.6	788
Preparatory	4.9	9.4	14.3	14.7	45.9	60.6	19.6	55.3	74.9	80.9	58.1	1,547
Secondary	5.1	6.3	11.4	23.4	41.2	64.7	28.6	47.5	76.1	85.0	60.5	4,863
Higher	5.0	5.0	9.9	24.3	35.0	59.3	29.2	40.0	69.2	85.6	55.6	3,376
Wealth quintile												
Lowest	6.7	9.8	16.5	18.1	39.9	58.0	24.8	49.7	74.5	77.9	54.5	1,975
Second	5.0	6.2	11.2	22.7	38.2	60.9	27.7	44.4	72.1	84.4	58.0	2,179
Middle	5.8	6.0	11.8	23.0	37.0	59.9	28.8	42.9	71.7	83.6	57.3	2,364
Fourth	4.8	4.1	9.0	22.7	41.3	64.0	27.5	45.5	73.0	87.7	61.6	2,274
Highest	2.3	8.5	10.7	18.8	44.1	62.9	21.1	52.6	73.6	85.4	58.5	2,009
Total	4.9	6.8	11.7	21.2	40.0	61.2	26.1	46.8	72.9	83.9	58.0	10,801

Note: Numbers in this table correspond to the revised definition of unmet need described in Bradley et al., 2012.

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

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

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

7.10 FUTURE USE OF FAMILY PLANNING

To obtain information about potential demand for family planning services, all currently married women who were not using contraception at the time of the survey were asked about their intention to use family planning in the future. Those who responded in the affirmative were also asked which method they would prefer to use.

Table 7.11 presents the distribution of currently married women who were not using contraception at the time of the survey, by their intention to use in the future, according to the number of living children. Fifty-four percent of women not currently using a contraceptive method said that they intended to use family planning in the future, while more than two-fifths (42 percent) of nonusers said they do not intend to use in the future. In the 2007 and 2009 JPFHS, the proportion of nonusers who intended to use a family planning method in the future was 58 percent each.

Table 7.11 Future use of contraception

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

	Number of living children[1]					
Intention to use in the future	0	1	2	3	4+	Total
Intends to use	47.9	61.2	65.6	57.9	47.0	54.4
Unsure	7.3	4.4	3.9	3.8	2.4	4.0
Does not intend to use	44.8	34.4	30.5	38.3	50.6	41.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	664	775	657	653	1,445	4,194

[1] Includes current pregnancy.

Intention to use increases from 48 percent among childless women to 66 percent among women with two children, and declines thereafter, to 47 percent among women with four or more children.

7.11 EXPOSURE TO FAMILY PLANNING MESSAGES

Radio and television are major sources of information about family planning, in addition to mass media campaigns, print, and other media. To assess the effectiveness of those media and other sources for disseminating family planning information, all ever-married women were asked if they had heard, seen, or read messages about family planning on the radio, television, or other media and non-media sources, including the *Hayatee Ahla* campaign, during the few months preceding the survey. Table 7.12 shows that the vast majority of ever-married women have been exposed to at least one source of family planning messages (94 percent). Overall, 80 percent and 29 percent of ever-married women are exposed to family planning messages via the electronic media of television and radio, respectively. Differentials in access to family planning messages by age, place of residence, region, governorates, Badia and camp area, wealth quintile, and education are generally evident, with those sources of information that require literacy showing particularly striking differentials by education. Nevertheless, 67 percent of women had been exposed to family planning information via the print media such as newspapers, magazines, posters, bulletins, or booklets. Nearly two-thirds (64 percent) of women cited other women as a source of family planning messages.

Table 7.12 Exposure to family planning messages

Percentage of ever-married women age 15-49 who heard or saw a family planning message in the past few months on various media and non media sources, and percentage of ever-married women who were exposed to the Hayatee Ahla campaign on family planning in the past few months, according to background characteristics, Jordan 2012

Background characteristic	Radio	Television	Print media[1]	None of these three media sources	Com-munity event[2]	Women	Other people	Any source	Seen, heard, or read about Hayatee Ahla campaign	Seen logo for Hayatee Ahla campaign	Number of women
Age											
15-19	14.5	66.5	51.2	22.2	6.0	54.9	21.8	87.1	31.8	39.6	278
20-24	21.1	72.6	66.4	13.3	13.5	64.3	27.9	93.1	42.7	45.9	1,207
25-29	24.6	78.1	70.3	10.3	12.6	64.6	29.7	94.7	49.8	50.8	2,006
30-34	28.1	80.3	70.0	9.8	14.6	65.3	28.7	94.6	46.7	48.6	2,136
35-39	29.4	84.4	68.7	8.5	16.1	64.6	24.6	95.0	52.6	53.0	2,098
40-44	34.7	84.7	65.5	9.0	21.2	65.3	28.5	94.1	50.8	49.7	2,055
45-49	35.0	80.1	64.0	11.3	17.2	60.0	24.1	93.6	46.4	46.0	1,571
Residence											
Urban	29.7	79.3	68.7	10.5	16.3	63.5	27.8	94.1	47.4	48.0	9,458
Rural	24.0	85.2	60.5	9.9	13.0	66.2	23.9	94.3	52.5	54.6	1,894
Region											
Central	35.5	80.5	71.1	9.3	18.4	63.1	29.9	94.8	46.3	47.0	7,181
North	17.5	77.6	61.2	13.6	9.9	66.3	21.6	92.6	52.4	53.7	3,120
South	16.3	86.8	59.8	8.5	14.9	63.1	24.9	94.5	49.0	50.0	1,051
Governorate											
Amman	40.5	78.9	71.8	8.9	16.8	62.7	28.2	95.3	43.9	44.1	4,454
Balqa	31.0	84.9	70.9	8.7	22.2	68.9	36.9	95.3	52.2	51.6	765
Zarqa	26.3	81.5	70.6	10.9	21.4	61.9	32.3	93.1	49.6	52.0	1,659
Madaba	24.2	86.8	63.5	8.7	15.5	61.2	24.2	94.2	49.8	50.9	303
Irbid	18.1	74.1	61.2	15.5	9.1	65.2	17.9	91.2	53.6	53.7	1,986
Mafraq	13.7	85.1	53.4	11.0	7.0	69.3	22.5	94.5	46.5	49.2	562
Jarash	20.2	82.0	67.3	9.6	16.0	68.8	33.1	95.4	55.3	58.6	320
Ajloun	18.0	83.2	71.2	8.8	15.3	64.4	34.3	95.8	53.1	57.1	251
Karak	10.5	88.5	53.5	8.9	12.0	61.4	19.8	93.7	51.2	51.9	441
Tafiela	17.8	88.5	64.2	8.2	21.9	68.3	31.5	94.7	55.3	55.1	167
Ma'an	23.1	85.7	55.0	9.4	16.7	61.8	27.3	94.5	46.3	48.2	178
Aqaba	20.4	83.6	70.8	7.2	14.3	63.4	27.6	95.8	43.1	44.8	265
Badia											
Badia	20.3	84.1	53.5	12.6	12.7	64.9	25.8	94.0	42.4	46.3	705
Non Badia	29.4	80.0	68.2	10.2	15.9	63.9	27.3	94.1	48.6	49.3	10,647
Camps											
Camp	16.9	76.3	65.5	12.9	20.5	66.5	35.1	93.3	43.2	44.9	413
Non camp	29.2	80.4	67.4	10.3	15.6	63.9	26.9	94.2	48.4	49.3	10,939
Education											
No education	16.6	69.0	20.2	29.0	5.8	55.8	17.5	82.0	23.7	24.8	267
Elementary	18.1	75.9	46.2	18.7	10.7	61.4	23.4	90.3	32.7	33.6	860
Preparatory	26.0	77.8	57.0	13.7	13.7	60.2	22.9	92.7	36.9	39.0	1,677
Secondary	28.2	81.6	69.2	9.6	15.6	65.3	27.7	94.5	51.1	51.8	5,073
Higher	34.6	81.6	78.4	6.5	18.9	65.0	30.1	96.2	55.2	55.7	3,475
Wealth quintile											
Lowest	20.5	78.1	53.5	14.4	13.1	62.0	22.6	91.7	41.9	44.5	2,137
Second	22.8	80.1	62.0	10.6	14.8	62.4	25.0	93.9	47.1	48.1	2,343
Middle	24.5	82.7	70.3	9.6	15.5	63.6	27.3	95.3	49.2	50.7	2,461
Fourth	32.7	79.4	73.0	9.5	16.8	66.6	28.2	94.7	48.0	50.0	2,336
Highest	44.6	80.8	77.6	8.1	18.6	65.3	33.1	94.9	55.2	52.1	2,076
Total 15-49	28.8	80.3	67.3	10.4	15.7	64.0	27.2	94.1	48.3	49.1	11,352

[1] Includes newspaper, magazine, poster, bulletin, or booklet.
[2] Includes lecture.

The results also show that only 10 percent of respondents reported that they hadn't been exposed to family planning information via any of the three main media sources (radio, television, print). Women with no education and younger women (15-19 years) were most likely to report that they have not been exposed to family planning messages through these three media sources (29 and 22 percent, respectively) than older and more educated women. Differentials in access to family planning messages via any source by other respondent background characteristics are small and range between 90 and 96 percent.

Finally, all ever-married women were asked if they had heard or read about the *Hayatee Ahla* campaign or had seen its logo. *Hayatee Ahla*, which means, 'My Life is More Beautiful', is a national family planning campaign which encourages Jordanians to effectively plan for a healthy future through contraceptive use. The project which is funded by USAID and the Jordan Health Communication Partnership began in 2004 and is expected to end in 2013. The results indicate that, overall, 48 percent had heard or read about this campaign. An equal proportion (49 percent) of respondents reported seeing the campaign logo. Women age 15-19 years, urban women, women living in the Central region, women in Aqaba and Amman, women in Badia and camp areas, women with no education, and women in the lowest wealth quintile were less likely to have heard or read about the *Hayatee Ahla* campaign than their counterparts. Differentials with respect to seeing the campaign logo by the respondents' background characteristics showed a similar pattern.

Because a significant proportion of respondents were recently exposed to a family planning message, all ever-married women who had heard or seen a family planning message on radio, television, or print media in the past few months were asked what the slogan *Hayatee Ahla* means to them. The results (Table 7.13) indicate that, overall, 37 percent of women equated the meaning of this slogan with family planning. Other meanings of the slogan were also mentioned by the respondents but at very low levels. These meanings included: spacing at least three years between pregnancies (16 percent); happy small family (9 percent); using contraceptives and quality of life, well-being, or prosperity (7 percent each); reproductive health (6 percent); and life planning (4 percent). The remaining five meanings of the slogan were mentioned by 2 percent or fewer women. Around 5 percent of women could not attach a meaning to the slogan. Differentials in the most mentioned meaning of the slogan (family planning) by respondents' background exist. Least likely to equate the slogan with family planning were younger women (15-19 years); urban women; women living in the Central region, Amman governorate, and Badia and camp areas; women with no education; and women in the lowest wealth.

7.12 CONTACT OF NONUSERS WITH FAMILY PLANNING PROVIDERS

Information on whether ever-married women had visited a health facility (seeking care for themselves or their children) in the 12 months before the survey was collected in the 2012 JPFHS. This contact may provide an opportunity for them to receive family planning information; therefore, women who reported having visited a health facility in the past 12 months were asked whether anyone in the health facility had talked to them about family planning methods. In addition, information on whether ever-married women were visited by a health professional who spoke to them about family planning in the 12 months preceding the survey was also collected.

Table 7.13 Meaning of *Hayatee Ahla* message

Percentage of ever-married women age 15-49 by what the *Hayatee Ahla* family planning message means to them, according to background characteristics, Jordan 2012

Background characteristic	Meaning of Hayatee Ahla													
	Family planning	Using contraceptives	Advantage of modern contraception	Happy small family	Spacing at least 3 years between pregnancies	Quality of life, well-being, prosperity	Support of gender quality by Islam	Life planning	Reproductive health	Approval of modern contraception	Approval of spacing between pregnancies by at least 3 years	Other	Don't know	Number of women
Age														
15-19	29.3	4.0	1.8	5.2	6.1	6.0	0.0	2.3	0.8	0.5	0.0	1.8	5.1	278
20-24	36.8	7.0	2.0	6.5	13.9	5.2	1.3	2.7	5.1	1.0	0.9	1.5	3.8	1,207
25-29	38.8	6.3	2.1	9.4	19.2	6.8	0.2	3.2	4.6	1.1	2.4	1.2	4.5	2,006
30-34	36.0	6.8	1.7	10.0	13.7	6.7	0.3	4.9	6.3	1.1	1.3	2.0	4.7	2,136
35-39	40.3	7.1	1.2	9.0	15.8	9.0	0.9	4.3	6.7	0.9	2.1	1.9	5.7	2,098
40-44	38.6	8.0	1.7	10.8	16.4	9.5	0.4	4.4	8.7	1.4	1.8	2.3	4.0	2,055
45-49	33.4	7.4	3.2	6.7	16.2	5.9	0.2	3.2	6.8	0.9	1.6	3.3	4.9	1,571
Residence														
Urban	36.1	7.0	2.0	8.8	15.0	7.1	0.5	3.6	6.3	1.1	1.6	2.2	4.7	9,458
Rural	43.3	6.8	1.7	9.6	19.5	9.0	0.3	5.1	6.4	0.7	2.1	1.3	4.6	1,894
Region														
Central	34.7	7.3	2.0	9.7	13.7	7.0	0.5	3.8	6.6	1.4	1.8	2.4	4.7	7,181
North	43.3	5.8	1.4	7.0	19.8	8.3	0.4	3.9	5.5	0.4	1.3	1.2	4.8	3,120
South	37.7	8.7	3.2	9.1	17.8	7.4	0.7	4.2	7.0	0.9	1.9	2.1	3.8	1,051
Governorate														
Amman	31.7	8.7	2.3	10.1	12.8	6.7	0.5	3.1	5.9	1.8	1.4	2.9	4.6	4,454
Balqa	41.6	4.6	0.8	7.9	13.4	8.7	0.2	4.4	6.5	1.7	4.0	2.2	4.6	765
Zarqa	38.6	3.3	1.7	10.3	14.9	6.9	0.6	5.1	8.4	0.3	2.2	1.4	5.3	1,659
Madaba	40.3	14.2	1.6	5.5	20.6	7.7	0.9	6.1	5.9	0.9	1.7	1.2	3.5	303
Irbid	43.6	6.3	1.5	7.0	22.1	9.5	0.4	3.9	6.0	0.4	1.4	1.1	4.6	1,986
Mafraq	38.4	6.6	1.5	6.0	14.9	4.0	0.5	3.4	3.0	0.3	1.0	1.1	4.8	562
Jarash	48.7	3.7	0.8	7.6	18.6	7.5	0.2	3.7	6.1	0.4	0.7	1.9	4.6	320
Ajloun	44.5	3.5	1.4	8.1	14.0	9.5	0.3	5.8	7.2	0.6	1.8	1.5	6.2	251
Karak	37.8	10.4	4.7	10.6	20.4	7.3	0.7	3.9	7.7	0.9	1.4	1.1	2.6	441
Tafiela	42.1	9.3	1.2	9.9	19.3	9.1	0.7	3.8	9.4	0.9	2.8	3.0	3.9	167
Ma'an	35.5	8.5	2.3	6.8	13.4	6.9	1.2	4.4	5.9	1.0	1.4	3.0	5.4	178
Aqaba	36.1	5.7	2.5	7.5	15.6	6.6	0.3	4.6	4.9	1.0	2.3	2.7	4.5	265
Badia														
Badia	33.9	7.0	1.7	7.6	15.1	5.3	0.6	3.0	4.7	0.8	1.4	1.2	5.5	705
Non Badia	37.5	7.0	2.0	9.0	15.8	7.5	0.5	3.9	6.4	1.1	1.7	2.1	4.6	10,647
Camps														
Camp	35.0	4.5	1.0	6.7	11.1	7.0	0.1	3.1	4.2	0.2	1.6	1.9	6.1	413
Non camp	37.4	7.1	2.0	9.0	15.9	7.4	0.5	3.9	6.4	1.1	1.7	2.0	4.6	10,939
Education														
No education	17.4	3.7	0.2	3.7	4.6	2.2	0.6	1.1	1.2	0.0	1.0	0.5	3.6	267
Elementary	23.4	6.0	1.7	4.2	9.6	5.7	0.3	4.2	2.8	1.0	2.3	1.0	5.3	860
Preparatory	27.9	5.1	1.4	8.3	10.5	5.8	0.2	3.6	4.4	0.5	1.2	1.9	4.5	1,677
Secondary	39.1	7.9	1.7	9.1	17.3	7.5	0.5	3.5	6.2	1.2	1.7	1.5	5.1	5,073
Higher	44.3	7.2	2.8	10.5	18.3	8.8	0.7	4.6	8.6	1.3	1.9	3.2	4.0	3,475
Wealth quintile														
Lowest	32.9	5.7	0.4	7.1	14.4	6.8	0.3	4.9	4.4	1.8	1.7	1.9	4.9	2,137
Second	36.8	7.4	2.2	9.0	15.5	8.5	0.3	3.9	5.6	1.1	2.0	1.2	4.3	2,343
Middle	39.9	6.8	1.5	9.7	16.8	8.0	0.1	3.3	6.6	0.9	2.0	1.4	3.7	2,461
Fourth	38.0	7.3	2.8	9.5	15.5	7.4	0.6	3.3	6.9	0.4	2.1	1.2	5.6	2,336
Highest	38.6	7.7	2.6	9.1	16.4	6.1	1.3	4.0	8.1	1.1	0.5	4.8	4.7	2,076
Total 15-49	37.3	7.0	1.9	8.9	15.7	7.4	0.5	3.9	6.3	1.1	1.7	2.0	4.7	11,352

Table 7.14 shows that, overall, about three in four women who came into contact with family planning providers did not in fact discuss family planning with them. While more than three-quarters of women (77 percent) had visited a health facility in the 12 months preceding the survey, only 17 percent had discussed family planning methods during their visit. The results also show that older women (age 40-49); rural women; women living in the North region and in Irbid, Mafraq, and Ma'an; women in non Badia areas; women in non camp areas; uneducated women; and women in the fourth and highest wealth quintiles were less likely to have discussed family planning during a visit to a health facility than other women.

Table 7.14 Contact of nonusers with family planning providers

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

Background characteristic	Percentage of women who were visited by fieldworker who discussed family planning	Percentage of women who visited a health facility in the past 12 months and who:		Percentage of women who did not discuss family planning either with fieldworker or at a health facility	Number of women
		Discussed family planning	Did not discuss family planning		
Age					
15-19	8.6	15.6	60.7	80.1	205
20-24	12.0	20.9	63.4	72.0	659
25-29	13.4	23.6	61.8	69.2	889
30-34	18.2	22.3	58.0	66.8	796
35-39	16.7	17.9	58.8	69.6	664
40-44	15.8	8.4	58.6	79.5	678
45-49	12.3	6.6	59.9	84.2	845
Residence					
Urban	15.7	16.9	59.4	72.7	3,968
Rural	7.8	15.2	63.9	80.1	768
Region					
Central	15.1	18.1	56.1	71.7	2,995
North	14.8	13.7	68.3	76.9	1,298
South	8.3	15.8	63.3	79.4	443
Governorate					
Amman	11.7	17.6	57.7	74.0	1,870
Balqa	18.2	18.7	55.7	69.5	331
Zarqa	24.6	19.8	49.3	64.6	671
Madaba	7.0	13.4	71.0	81.7	122
Irbid	16.8	12.0	67.6	77.1	817
Mafraq	5.3	12.8	73.5	83.7	247
Jarash	19.1	23.3	59.2	67.6	131
Ajloun	17.0	16.7	72.7	71.2	104
Karak	5.4	14.3	67.5	83.0	193
Tafiela	11.7	25.5	52.1	68.6	63
Ma'an	8.2	12.3	67.9	82.5	83
Aqaba	11.8	15.3	58.9	76.9	104
Badia					
Badia	8.4	19.5	59.8	76.3	321
Non Badia	14.8	16.4	60.1	73.7	4,415
Camps					
Camp	30.5	27.7	48.2	54.1	177
Non camp	13.8	16.2	60.6	74.6	4,559
Education					
No education	14.4	8.9	55.7	80.7	163
Elementary	18.1	11.8	55.8	75.7	435
Preparatory	16.0	17.1	58.0	72.1	738
Secondary	15.1	18.2	59.3	72.2	1,928
Higher	11.7	16.7	64.0	75.6	1,472
Wealth quintile					
Lowest	16.1	21.4	54.8	68.8	989
Second	15.6	16.2	60.4	73.7	1,013
Middle	15.3	17.7	58.3	71.3	1,042
Fourth	13.0	13.8	62.1	77.7	880
Highest	11.2	13.2	66.3	79.3	812
Total	14.4	16.7	60.1	73.9	4,736

The data also reveal that only 14 percent of women were visited by a fieldworker who discussed family planning. Least likely to have been visited by a fieldworker who discussed family planning are women age 15-19, rural women, women in Mafraq and Karak, women in Badia areas and non camp areas, women with higher education, and women in the highest wealth quintile.

INFANT AND CHILD MORTALITY 8

Key Findings

- Infant and under-5 mortality rates in the past five years are 17 and 21 deaths per 1,000 live births, respectively. At these mortality levels, one in every 59 Jordanian children dies before reaching age 1, and one in every 48 does not survive to the fifth birthday.
- Under-5 mortality declined by 46 percent over the last 23 years from 39 deaths per 1,000 live births in 1990 to 21 deaths per 1,000 live births in 2012.
- Childhood mortality is relatively higher in the South region, in the Tafiela governorate, and in the camp areas of Jordan.
- The neonatal mortality rate is 14 deaths per 1,000 live births, which is three and a half times the postneonatal rate.
- The perinatal mortality rate is 17 per 1,000 pregnancies.

Estimates of levels, trends, and differentials in neonatal, postneonatal, and child mortality are important both for monitoring and evaluating ongoing health programs and for use in formulating future policies. The levels of infant and child mortality are viewed as basic indicators of the socioeconomic situation, quality of life, and general standard of living in a society. In addition to addressing those issues, this chapter examines the risk factors for births in Jordan.

The five measures of infant and child mortality used in this chapter are as follows:

Neonatal mortality, the probability of dying in the first month of life

Postneonatal mortality, the probability of dying between the first month and first year of life

Infant mortality ($_1q_0$), the probability of dying before the first birthday

Child mortality ($_4q_1$), the probability of dying between the first and fifth birthday

Under-5 mortality ($_5q_0$), the probability of dying before the fifth birthday

All of these rates are calculated per 1,000 live births, except for child mortality, which is calculated per 1,000 children surviving to age one.

Infant and child mortality rates are calculated from information collected in the birth history section of the Woman's Questionnaire. In the 2012 JPFHS, each ever-married woman was asked about the number of sons and daughters living with her, the number living away, and the number who had died. Those questions were aimed at obtaining the total number of births the respondent had. Next, the respondent was asked to give detailed information on each of the children she had given birth to, including name, sex, date of birth, whether the birth was single or multiple, and survival status. If the child had died, the age at death was recorded. If the child was still living, questions were asked about the age at last birthday and whether the child was living with the mother or elsewhere. It should be noted that birth histories are often subject to inaccuracies in the reporting of events, and can result in biased rates and trends over time. Despite the disadvantages, birth histories provide data for analyses that would be impossible to collect by any other method of gathering data.

The reliability of mortality estimates depends on the sampling variability of the estimates and on nonsampling errors. Sampling variability and sampling errors are discussed in Appendix B. Nonsampling errors depend on the completeness of a women's recall about children who have died, the absence of significant differences between the displacement of birth dates of living and dead children, and accurate reporting of ages at death. Previous survey results have shown some heaping of age at death at exactly 12 months or one year. On the assumption that age at death is reported in completed months or years, deaths at 12 months are classified as child rather than infant deaths. In reality, some of those deaths may have occurred before the first birthday, so their classification as child deaths tends to negatively bias infant mortality estimates and positively bias child mortality estimates. The distribution of deaths by age at death in months (see Table C.6 in Appendix C) shows that there is heaping at 12 months for deaths reported during the most recent period (0-4 years prior to the survey) and less severe heaping for deaths during the period 5-19 years prior to the survey. Therefore, infant mortality levels in the most recent period (0-4 years prior to the survey) may be slightly underestimated and child mortality slightly overestimated.

An unusual pattern in the distribution of births by calendar years is an indication of omission of children or age displacement. However, Table C.4 in Appendix C shows that the percentage of all births for which a month and year of birth was reported remains stable over time and is close to 100 percent.

Underreporting of deaths is usually assumed to be higher for deaths that occur very early in infancy. An examination of the ratios in Tables C.5 and C.6 shows that the proportion of neonatal deaths occurring in the first week of life (85 percent) and the proportion of infant deaths occurring during the first month of life (82 percent) are somewhat higher than findings from the previous JPFHS surveys. Findings from the 2002, 2007, and 2009 JPFHS surveys show that for deaths in the five years before the survey, the proportion of neonatal deaths occurring in the first week of life ranges from 64-75 and the proportion of infant deaths occurring in the first month of life ranges from 71-73. The higher proportions found in the 2012 JPFHS may not necessarily suggest issues with data quality in the 2012 JPFHS but a shift in the pattern of neonatal and infant mortality rates in the most recent period. This may warrant in-depth analysis of the change in the pattern of childhood mortality in more recent times. However, this kind of analysis is outside the scope of this report.

In addition to levels of mortality, this chapter also includes a table indicating the distribution of children and women according to characteristics of avoidable fertility behavior that place children at a greater risk of mortality. That information is useful for designing and monitoring programs aimed at both discouraging high-risk behavior and coping with the elevated risks.

8.1 LEVELS AND TRENDS

Table 8.1 shows early childhood mortality rates for the 15 years preceding the 2012 JPFHS. The under-5 mortality rate in the 0-4 years before the survey was 21 deaths per 1,000 live births. Most under-5 deaths occur during the first year of life, with infant mortality at 17 per 1,000 live births. The child mortality rate is 4 per 1,000 children. As expected, neonatal mortality is higher than postneonatal mortality (14 per 1,000 and 4 per 1,000, respectively) and accounts for 82 percent of total infant mortality.

Table 8.1 Early childhood mortality rates

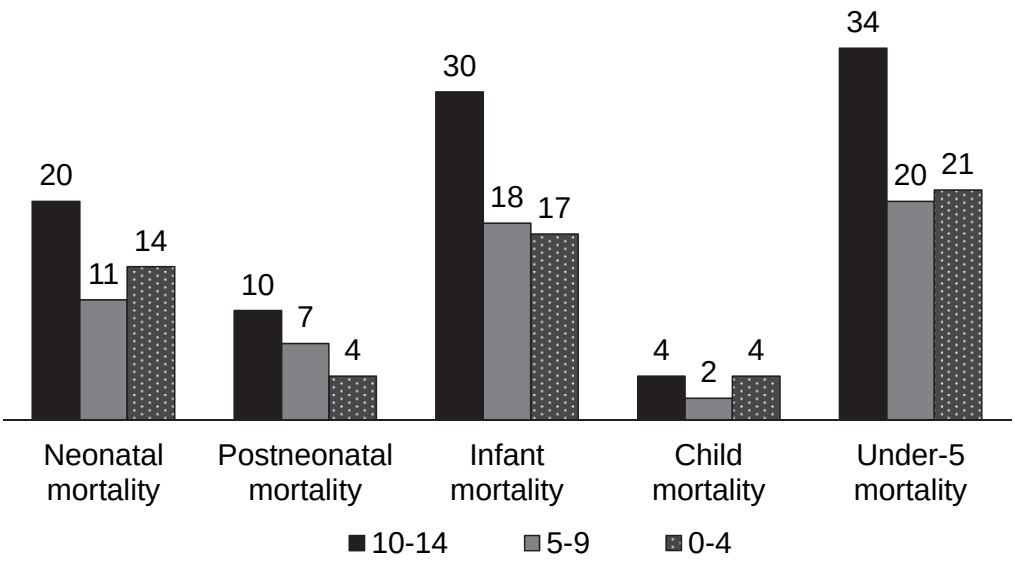
Neonatal, postneonatal, infant, child, and under-5 mortality rates for five-year periods preceding the survey, Jordan 2012

Years preceding the survey	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
0-4	14	4	17	4	21
5-9	11	7	18	2	20
10-14	20	10	30	4	34

[1] Computed as the difference between the infant and neonatal mortality rates.

It is apparent from Table 8.1 and Figure 8.1 that there was a marked decline in childhood mortality in the last 15 years. However, there is no indication of a decline in childhood mortality in the last five years. Under-5 mortality declined by 38 percent, from 34 deaths per 1,000 live births in the 10-14 years preceding the survey to 21 deaths during the five years preceding the survey. A similar decline is seen in infant mortality which declined by 43 percent from 30 deaths per 1,000 live births during the period 10-14 years preceding the survey to 17 deaths during the five years preceding the survey. This decline is due to a substantial decline in both neonatal and postneonatal mortality. However, child mortality has not changed during the last 15 years. In fact, child mortality seems to have increased in the last five years compared with the 5-9 years preceding the survey.

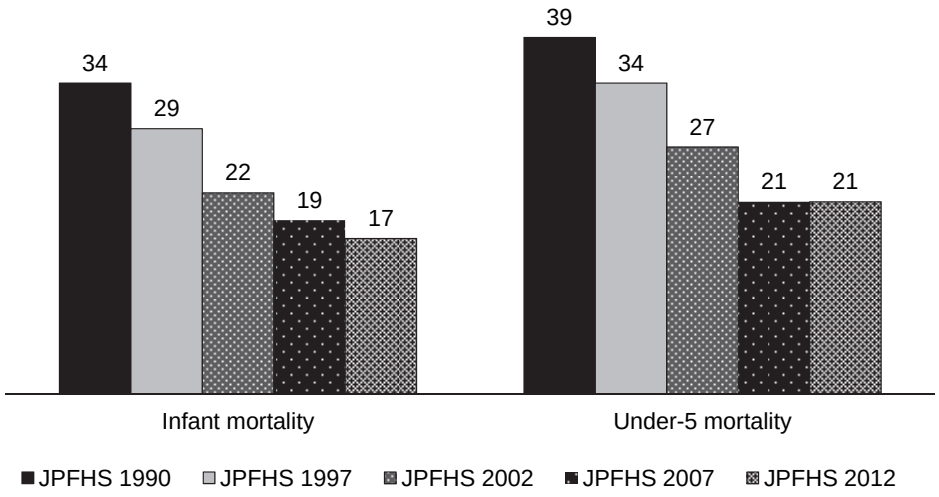
Figure 8.1
Trends in childhood mortality, Jordan 2012



JPFHS 2012

Another approach to looking at trends in mortality levels involves the comparison of estimates from surveys conducted at different points in time. Results from the five JPFHS surveys (conducted in 1990, 1997, 2002, 2007, and 2012) show a 46 percent decline in under-5 mortality over the last 23 years (Figure 8.2). Under-5 mortality declined from 39 deaths per 1,000 in 1990 to 21 per 1,000 in the 2012 survey. It is interesting to note that the confidence intervals associated with the 2007 and 2012 under-5 mortality rates of 21 per 1,000 are almost identical, suggesting that under-5 mortality has not changed in the last five years. A similar trend is observed in infant mortality. Infant mortality declined by 50 percent from 34 per 1,000 in 1990 to 17 per 1,000 in 2012.

Figure 8.2
Trends in under-5 mortality, 1990-2012



8.2 DIFFERENTIALS IN INFANT AND CHILD MORTALITY

8.2.1 Differentials by Background Characteristics

Differentials in neonatal, postneonatal, infant, child, and under-5 mortality by socioeconomic characteristics are shown in Table 8.2. To have a sufficient number of cases to ensure statistically reliable mortality estimates for population subgroups, mortality rates are presented for the 10-year period preceding the survey. Under-5 mortality does not vary substantially by type of residence.

Childhood mortality varies across regions. Under-5 mortality is higher in the South region (26 per 1,000) than in the North region (19 per 1,000) and Central region (20 deaths per 1,000). Childhood mortality also varies by governorate, with under-5 mortality ranging from a low of 16 deaths per 1,000 live births in Ajloun to a high of 31 deaths per 1,000 live births in Tafiela. Children living in camps are also more likely to die young than children outside of camps, with under-5 mortality at 33 per 1,000 in camps compared with 20 per 1,000 outside of camps.

Table 8.2 Early childhood mortality rates by socioeconomic characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by background characteristics, Jordan 2012

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
Residence					
Urban	12	5	18	3	21
Rural	11	5	16	3	19
Region					
Central	11	6	17	4	20
North	14	3	17	2	19
South	14	7	22	4	26
Governorate					
Amman	10	7	17	3	20
Balqa	10	5	14	3	18
Zarqa	13	3	16	4	20
Madaba	18	7	25	5	30
Irbid	14	3	17	2	18
Mafraq	16	5	21	2	23
Jarash	13	5	18	2	20
Ajloun	9	5	14	2	16
Karak	13	6	19	4	24
Tafiela	16	10	26	5	31
Ma'an	12	10	22	7	29
Aqaba	17	6	23	2	25
Badia					
Badia	12	6	18	2	20
Non Badia	12	5	17	3	21
Camps					
Camp	20	7	27	6	33
Non camp	12	5	17	3	20
Mother's education					
No education	7	3	10	7	16
Elementary	15	6	20	4	24
Preparatory	13	9	22	3	25
Secondary	14	6	20	2	22
Higher	9	2	11	4	15
Wealth quintile					
Lowest	17	9	26	3	29
Second	10	5	15	4	19
Middle	11	4	15	5	20
Fourth	15	4	20	1	21
Highest	5	3	8	3	11

[1] Computed as the difference between the infant and neonatal mortality rates

The data do not reveal a clear association between under-5 mortality and mother's education. Children of mothers with elementary, preparatory, or secondary education are more likely to die in the first five years of life than children of mothers with no education or higher education. Under-5 mortality ranges from a low of 15 deaths per 1,000 live births for children of women with higher education to a high of 25 per 1,000 for children of women with only preparatory education.

Under-5 mortality is almost three times higher among children living in the poorest households than among children living in the wealthiest households (29 deaths per 1,000 live births and 11 deaths per 1,000 live births, respectively).

8.2.2 Differentials by Demographic Characteristics

Besides socioeconomic characteristics, demographic characteristics of the child and the mother have been found to affect mortality risks. Some of these factors include the sex of the child, mother's age at birth, birth order, length of previous birth interval, and the size of the child at birth. The relationship between these demographic characteristics and mortality is shown in Table 8.3 and Figure 8.2.

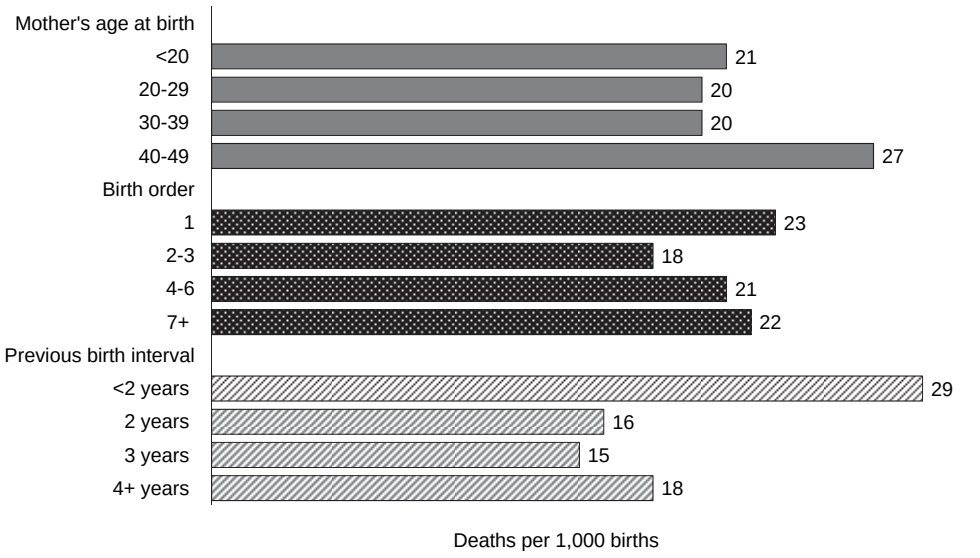
Table 8.3 Early childhood mortality rates by demographic characteristics

Neonatal, postneonatal, infant, child, and under-5 mortality rates for the 10-year period preceding the survey, by demographic characteristics, Jordan 2012

Demographic characteristic	Neonatal mortality (NN)	Postneonatal mortality (PNN)[1]	Infant mortality ($_1q_0$)	Child mortality ($_4q_1$)	Under-5 mortality ($_5q_0$)
Child's sex					
Male	13	6	19	3	22
Female	11	4	16	3	19
Mother's age at birth					
<20	10	8	18	3	21
20-29	12	6	18	3	20
30-39	13	4	17	3	20
40-49	12	1	12	(15)	(27)
Birth order					
1	15	5	19	3	23
2-3	12	3	14	4	18
4-6	11	7	18	3	21
7+	6	15	21	1	22
Previous birth interval[2]					
<2 years	16	9	25	4	29
2 years	9	3	12	4	16
3 years	9	3	13	2	15
4+ years	11	4	16	2	18
Birth size[3]					
Small/very small	34	4	38	na	na
Average or larger	9	3	12	na	na

Note: Figures in parentheses are based on 250-499 unweighted exposed persons.
na = Not applicable
[1] Computed as the difference between the infant and neonatal mortality rates.
[2] Excludes first-order births.
[3] Rates for the five-year period before the survey.

Figure 8.3
Under-5 mortality rates by selected demographic characteristics



JPFHS 2012

Under-5 mortality levels are slightly higher among male than female children (22 deaths and 19 deaths per 1,000 live births, respectively). Under-5 mortality does not differ much by mother's age at birth.

First births and higher-order births experience higher mortality, indicating a shallow U-shaped relationship between birth order and mortality. For example, under-5 mortality rates for first births and births of order seven and higher are 23 per 1,000 births and 22 per 1,000 births, respectively, compared with 18-21 per 1,000 births for second- through sixth-order births.

Mortality among children is negatively associated with the length of the previous birth interval. Under-5 mortality decreases sharply from a high of 29 per 1,000 for children born less than two years after a previous birth to 16 per 1,000 live births for children born two years after a previous birth and rises to 18 per 1,000 live births for children born four or more years after a previous birth.

Children's weight at birth is also closely associated with their chances of survival, particularly during the first month of life. Children reported as "small or very small" at birth were three times more likely to die in the first month of life compared with children whose size at birth was reported as "average or larger." Of children reported to be small or very small, 38 per 1,000 did not survive to their first birthday, compared with 12 per 1,000 children reported to be average or larger.

8.3 PERINATAL MORTALITY

The 2012 JPFHS survey asked women to report on pregnancy losses and the duration of the pregnancy for each loss for all such pregnancies ending in the five years before the survey. Pregnancy losses occurring after seven completed months of gestation (stillbirths) plus deaths to live births within the first seven days of life (early neonatal deaths) constitute perinatal deaths. The perinatal mortality rate is calculated by dividing the total number of perinatal deaths by the total number of pregnancies reaching seven months' gestation. An important consideration in the evaluation of perinatal mortality is the quality or completeness of reports on stillbirths, which are susceptible to omission, underreporting, or misclassification (as early neonatal deaths). The distinction between a stillbirth and an early neonatal death may be a fine one, depending often on the observed presence or absence of some faint signs of life after delivery. The causes of stillbirths and early neonatal deaths are overlapping, and examining just one or the other can understate the true level of mortality around delivery. For this reason, it is suggested that both event types be combined and examined together.

Table 8.4 shows perinatal mortality rates, according to background characteristics. At the national level, the perinatal mortality rate is 17 perinatal deaths per 1,000 pregnancies reaching seven months of gestation. Perinatal mortality increases with mother's age from 4 deaths per 1,000 pregnancies among women age less than 20 years to 22 deaths per 1,000 pregnancies among women age 40-49 years. First pregnancies have the highest perinatal mortality rates, while pregnancies with a short or very long preceding interpregnancy interval are also at higher perinatal risk (19 per 1,000 for an interpregnancy interval of less than 15 months and 18 per 1,000 for pregnancies after an interval of 39 or more months).

Perinatal mortality is very similar in urban areas (18 per 1,000) and rural areas (16 per 1,000). At the regional level, the perinatal mortality rates are slightly higher in the North and South regions (20 deaths per 1,000 pregnancies each) than in the Central region (16 deaths per 1,000 pregnancies). Perinatal mortality is also slightly higher in the non Badia and camp areas of Jordan than in the other areas. Perinatal mortality varies widely by governorate and ranges from a high of 27 deaths per 1,000 pregnancies in Karak to a low of 8 in Tafiela. It is worth noting that perinatal mortality is substantially higher among women with only elementary education than among other women (32 deaths per 1,000 pregnancies).

Table 8.4 Perinatal mortality

Number of stillbirths and early neonatal deaths, and the perinatal mortality rate for the five-year period preceding the survey, by background characteristics, Jordan 2012

Background characteristic	Number of stillbirths[1]	Number of early neonatal deaths[2]	Perinatal mortality rate[3]	Number of pregnancies of 7+ months' duration
Mother's age at birth				
<20	2	0	4	561
20-29	18	69	17	5,258
30-39	26	46	20	3,666
40-49	6	3	22	399
Previous pregnancy interval in months[4]				
First pregnancy	11	39	25	2,025
<15	10	18	19	1,479
15-26	9	24	13	2,532
27-38	3	14	11	1,560
39+	19	23	18	2,288
Residence				
Urban	41	100	18	8,051
Rural	10	18	16	1,833
Region				
Central	23	71	16	6,037
North	18	39	20	2,885
South	10	9	20	963
Governorate				
Amman	12	47	16	3,634
Balqa	4	7	16	708
Zarqa	4	13	12	1,416
Madaba	3	4	25	279
Irbid	11	26	21	1,739
Mafraq	4	9	21	577
Jarash	1	3	13	334
Ajloun	3	1	17	234
Karak	7	4	27	417
Tafiela	0	1	8	158
Ma'an	1	2	20	171
Aqaba	1	2	16	217
Badia				
Badia	4	8	15	773
Non Badia	48	111	17	9,112
Camps				
Camp	1	6	20	389
Non camp	50	112	17	9,496
Mother's education				
No education	1	2	13	208
Elementary	3	17	32	631
Preparatory	6	9	11	1,314
Secondary	25	75	22	4,625
Higher	16	16	10	3,107
Wealth quintile				
Lowest	12	43	24	2,304
Second	6	18	11	2,186
Middle	12	26	18	2,127
Fourth	4	18	11	1,897
Highest	17	13	22	1,371
Total	51	119	17	9,885

[1] Stillbirths are fetal deaths in pregnancies lasting seven or more months.
[2] Early neonatal deaths are deaths at age 0-6 days among live-born children.
[3] The sum of the number of stillbirths and early neonatal deaths divided by the number of pregnancies of seven or more months' duration, expressed per 1,000.
[4] Categories correspond to birth intervals of <24 months, 24-35 months, 36-47 months, and 48+ months.

There is no clear pattern in perinatal mortality by household wealth. Perinatal mortality is relatively higher among women in the lowest and highest wealth quintiles (24 and 22 deaths per 1,000 pregnancies).

8.4 HIGH-RISK FERTILITY BEHAVIOR

Table 8.5 presents the distribution of children born in the five years preceding the survey who are at increased risk of dying because of the mother's fertility characteristics. Children are typically at a higher risk of dying if the mother was too young or too old at the time of birth, if they are of high birth order, or if they were born too soon after their next older sibling. In this report, a woman is classified as "too young" if she is less than 18 years of age and "too old" if she is over 34 years of age at the time of delivery. A child is considered to be "high birth order" if the mother previously delivered three or more children. A "short birth interval" is defined as a birth occurring less than 24 months after a previous birth. In the analysis of birth intervals, only children whose preceding birth interval was less than 24 months are included, even though a short birth interval also increases the risk of dying for the previous child at the beginning of the interval. The latter relationship is subject to reverse causality in that the death of the earlier child may cause the subsequent interval to be short.

Table 8.5 High-risk fertility behavior

Percent distribution of children born in the five years preceding the survey by category of elevated risk of mortality and the risk ratio, and percent distribution of currently married women by category of risk if they were to conceive a child at the time of the survey, Jordan 2012

Risk category	Births in the 5 years preceding the survey		Percentage of currently married women[1]
	Percentage of births	Risk ratio	
Not in any high-risk category	20.5	1.00	15.3[a]
Unavoidable risk category			
First-order births between ages 18 and 34 years	16.5	2.81	5.6
Single high-risk category			
Mother's age <18	0.9	1.64	0.2
Mother's age >34	8.5	2.50	6.7
Birth interval <24 months	12.9	2.82	8.3
Birth order >3	22.5	2.26	13.1
Subtotal	44.7	2.45	28.4
Multiple high-risk category			
Age <18 and birth interval <24 months[2]	0.7	8.26	0.1
Age >34 and birth interval <24 months	1.4	4.58	0.4
Age >34 and birth order >3	6.3	0.77	38.6
Age >34 and birth interval <24 months and birth order >3	1.5	1.22	4.3
Birth interval <24 months and birth order >3	8.4	4.24	7.3
Subtotal	18.3	2.97	50.7
In any avoidable high-risk category	63.0	2.60	79.1
Total	100.0	na	100.0
Number of births/women	9,833	na	10,801

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.
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 less than 15 months ago, or latest birth being of order 3 or higher.
[2] Includes the category age <18 and birth order >3.
[a] Includes sterilized women.

Sixty-three percent of the children born during the five years preceding the survey were at an elevated and avoidable risk of dying. In 45 percent of the cases, the risk is higher only because of a single-risk category (mother's age, birth order, or birth interval), and in 18 percent of the cases the risk is higher owing to multiple risk categories. The largest group of children at risk includes those who are of a high birth order (23 percent) and those whose preceding birth interval was shorter than 24 months (13 percent). Nine percent of children were born to women age 35 and older, and 8 percent of children were born with a preceding birth interval of less than 24 months and with birth order higher than three.

Column 2 of Table 8.5 shows the relative risk of dying for children born in the last five years by comparing the proportion dead in each risk category to the proportion dead among children with no risk factors. The single most detrimental factors are short birth intervals and births to women age 35 and older. Children born less than 24 months after the previous birth and children born to a women age 35 or older are almost three times (2.82 and 2.50, respectively) more likely to die as children not in any risk category. Children of birth order four or higher are about twice (2.26) as likely to die as children not in any risk category. The combination of a mother giving birth at an age less than 18 and within 24 months of a previous birth results in a risk ratio that is more than 8 times higher than births not in any high-risk category. Fortunately the proportion of births in this category is less than 1 percent. The combination of a short birth interval and an older mother results in a risk ratio of 4.58.

The last column of Table 8.5 presents the distribution of currently married women according to category of increased risk. Women are placed in categories according to the status they would have at the birth of a child conceived at the time of the survey: women who were younger than 17 years and 3 months or older than 34 years and 2 months, women whose most recent birth was less than 15 months before the survey, and women whose most recent birth was of order three or higher. Many women are protected from the risk of pregnancy by contraception, postpartum insusceptibility, and prolonged abstinence but, in this report, for the sake of simplicity, only sterilized women are classified as not being in any risk category.

About eight of ten married women (79 percent) are susceptible to conceiving a child who will be at an increased risk of dying. About 51 percent of married women fall in the multiple high-risk category—mainly those who are older than 34 and with three or more births—while 28 percent of women fall in a single high-risk category, mainly because of a high-order birth (13 percent). The figures in Table 8.5 demonstrate the strong contribution of high parity (the number of children the mother has had) on the risk of dying among children under age 5.

MATERNAL HEALTH 9

Key Findings

- Almost all women (99 percent) received antenatal care (ANC) from medically trained personnel; the majority of women (96 percent) received care during pregnancy from a doctor.
- Seventy-eight percent of women make seven or more antenatal care visits during their entire pregnancy. The median duration of pregnancy at the first antenatal visit is 2.3 months.
- Thirty-one percent of mothers with a birth in the five years preceding the survey were protected against neonatal tetanus.
- An overwhelming majority of births (99 percent) in the five years preceding the survey were delivered in a medical facility. Three in four births (76 percent) were delivered by a doctor.
- Eighty-two percent of mothers received postnatal care from a doctor, nurse, or midwife within the critical first two days after a delivery.

Health conditions in Jordan are among the best in the Middle East. This is due in large part to the kingdom's stability and to a range of effective development plans and projects that have included health as a major component. This chapter presents findings on important areas of maternal health: antenatal, delivery, and postnatal care. In addition, problems in accessing health care and coverage of breast and cervical cancer prevention services are discussed. This information, in combination with data on child health and mortality, is useful in formulating programs and policies to improve maternal and child health services.

9.1 ANTENATAL CARE

A mother's well-being has a direct impact on her children's well-being. Conversely, when mothers fare poorly, so do children. For newborns, health and survival is directly proportional to a mother's health during pregnancy.

The health care that a mother receives during pregnancy and at delivery is important for the survival and well-being of both the mother and the child. Antenatal care (ANC) coverage is described according to the type of provider, number of ANC visits, stages of pregnancy at the time of the first and last visits, and number of visits, as well as services and information provided during ANC. It is recommended that, during ANC, women receive tetanus toxoid vaccine and adequate amounts of iron and folic acid tablets or syrup to prevent and treat anemia. Blood pressure checks and procedures to detect pregnancy complications are also part of ANC coverage. A well-designed and well-implemented ANC program facilitates detection and treatment of problems during pregnancy, such as anemia and infections, and provides an opportunity to disseminate health messages to women.

In the 2012 JPFHS, information on ANC coverage was obtained from women who had a birth in the five years preceding the survey. For women with two or more live births during the five-year period, data refer only to the most recent birth. Table 9.1 shows the percent distribution of mothers in the five years preceding the survey by source of antenatal care received during pregnancy. Almost all women (99 percent) received ANC from medically trained personnel (doctors, nurses, or midwives); the majority of

women (96 percent) received care during pregnancy from a doctor, and 3 percent received care from a nurse or midwife. Only 1 percent of women did not receive antenatal care for their last birth.

Table 9.1 Antenatal care

Percent distribution of women age 15-49 who had a live birth in the five years preceding the survey by antenatal care (ANC) provider during pregnancy for the most recent birth and the percentage receiving antenatal care from a skilled provider for the most recent birth, according to background characteristics, Jordan 2012

Background characteristic	Antenatal care provider		No ANC	Total	Percentage receiving antenatal care from a skilled provider[1]	Number of women
	Doctor	Nurse/ midwife				
Mother's age at birth						
<20	96.0	2.4	1.7	100.0	98.3	277
20-34	96.8	2.6	0.6	100.0	99.4	4,849
35-49	94.6	3.7	1.7	100.0	98.3	1,451
Birth order						
1	98.4	1.2	0.4	100.0	99.6	1,159
2-3	97.2	2.2	0.6	100.0	99.4	2,566
4-5	95.3	3.9	0.8	100.0	99.2	1,793
6+	93.4	4.4	2.2	100.0	97.8	1,059
Residence						
Urban	96.3	2.8	0.9	100.0	99.1	5,395
Rural	96.1	3.1	0.8	100.0	99.2	1,182
Region						
Central	96.0	3.1	0.9	100.0	99.1	4,052
North	97.0	2.2	0.8	100.0	99.2	1,903
South	96.0	3.2	0.9	100.0	99.1	622
Governorate						
Amman	96.0	2.8	1.2	100.0	98.8	2,469
Balqa	96.1	3.5	0.4	100.0	99.6	452
Zarqa	95.4	4.1	0.5	100.0	99.5	947
Madaba	97.4	1.7	0.8	100.0	99.2	184
Irbid	97.5	1.6	0.9	100.0	99.1	1,174
Mafraq	97.2	2.1	0.7	100.0	99.3	366
Jarash	93.2	6.0	0.8	100.0	99.2	207
Ajloun	97.6	2.0	0.4	100.0	99.6	156
Karak	95.8	3.5	0.7	100.0	99.3	269
Tafiela	94.8	4.5	0.7	100.0	99.3	103
Ma'an	93.6	3.9	2.5	100.0	97.5	104
Aqaba	98.9	1.0	0.1	100.0	99.9	146
Badia						
Badia	94.8	4.2	1.0	100.0	99.0	469
Non Badia	96.4	2.7	0.9	100.0	99.1	6,108
Camps						
Camp	92.2	7.4	0.4	100.0	99.6	253
Non camp	96.4	2.7	0.9	100.0	99.1	6,324
Education						
No education	93.3	4.7	2.0	100.0	98.0	130
Elementary	88.4	7.6	4.0	100.0	96.0	400
Preparatory	94.8	4.1	1.1	100.0	98.9	872
Secondary	96.4	2.8	0.8	100.0	99.2	3,069
Higher	98.4	1.4	0.3	100.0	99.7	2,106
Wealth quintile						
Lowest	91.3	6.1	2.6	100.0	97.4	1,393
Second	95.9	3.6	0.5	100.0	99.5	1,393
Middle	96.9	2.6	0.4	100.0	99.6	1,470
Fourth	98.4	0.9	0.6	100.0	99.4	1,327
Highest	99.9	0.1	0.0	100.0	100.0	994
Total	96.3	2.8	0.9	100.0	99.1	6,577

Note: If more than one source of ANC was mentioned, only the provider with the highest qualifications is considered in this tabulation.
[1] Skilled provider includes doctor, nurse, and midwife.

Antenatal care received from a health professional is very high among all subgroups of women and as such differentials by background characteristics are minor. However, differentials by background characteristics are more obvious for antenatal care received from a doctor. Mothers are more likely to

receive care from a doctor for the first birth (98 percent) than for births of order six and higher (93 percent). The differences in the use of antenatal care services between women in urban and rural areas are insignificant. There are some differences in women receiving ANC by governorates, with women in Jarash least likely to receive care from a doctor (93 percent) and women in Aqaba most likely (99 percent). Ninety-two percent of women in the camp areas receive ANC from a doctor compared with 96 percent in other areas. ANC services in the Badia areas have increased in the last five years and ANC coverage is now comparable to that for women in other areas.

Women with elementary education are least likely (88 percent) to receive antenatal care from a doctor when compared to women with other levels of education, including women with no education. On the other hand, women with elementary education are most likely (8 percent) to receive antenatal care from a nurse or midwife, or to receive no antenatal care at all (4 percent). The percentage of women with no education receiving ANC from a doctor has improved in the last five years from 84 percent in 2007 to 93 percent in 2012.

The use of antenatal care services is positively associated with household wealth. Women in the lowest wealth quintile are less likely to receive antenatal care from any trained personnel (97 percent) than those in the highest wealth quintiles (100 percent). Whereas almost all women in the highest wealth quintile received antenatal care from a doctor, this proportion drops to 91 percent for women in the lowest wealth quintile.

9.1.1 Number and Timing of ANC Visits

Antenatal care is more effective for preventing adverse pregnancy outcomes when it is sought early on in the pregnancy, throughout the gestational period, and during delivery. Obstetricians generally recommend that antenatal visits be made on a monthly basis until the 28th week (seventh month), fortnightly until the 36th week, and then weekly until the 40th week (until birth). If the first antenatal visit is made during the third month of pregnancy, this optimum schedule translates to a total of at least 12-13 visits during the pregnancy.

Table 9.2 shows that 78 percent of women make seven or more antenatal care visits during their entire pregnancy. Women whose age at birth is less than 20 years are less likely to make seven or more visits (74 percent) than women age 20-34 (79 percent) and women age 35-49 (76 percent). The proportion of women who make seven or more ANC visits declines as birth order increases. The percentage of women who make seven or more antenatal care visits is higher in urban areas (79 percent) than rural areas (75 percent) and higher in the North region (80 percent) than in the Central and South regions (77 percent and 74 percent, respectively). There is a notable variation in antenatal care services by residence in the Badia and non Badia areas: women in the Badia areas make fewer antenatal care visits (66 percent have seven or more visits) than women residing in the non Badia areas (79 percent). Women in Ma’an governorate are the least likely to have seven or more ANC visits.

Data indicate that there is a strong association between the proportions of women who make seven or more visits for antenatal care during their pregnancy by education and household wealth, with the percentage of women making seven or more visits increasing from 56 percent among women with no education to 85 percent among women with higher education. Similarly, the percentage of women making seven or more visits increases from 66 percent among women in the poorest households to 87 percent among women in the richest households.

Table 9.2 Number of antenatal care visits

Percent distribution of women age 15-49 who had a live birth in the five years preceding the survey by number of antenatal care (ANC) visits for the most recent live birth, according to background characteristics, Jordan 2012

Background characteristic	Antenatal care visits								Total	Number of women
	None	1	2	3	4	5	6	7+		
Mother's age at birth										
<20	1.5	0.7	1.4	3.4	8.8	5.2	5.2	73.9	100.0	465
20-34	0.8	0.6	1.2	2.7	4.4	5.0	6.7	78.6	100.0	4,863
35-49	1.2	0.6	1.8	2.2	4.8	6.0	7.2	76.1	100.0	1,249
Birth order										
1	0.6	0.6	1.0	2.4	3.7	4.3	5.4	81.9	100.0	2,301
2-3	0.5	0.4	0.8	2.5	6.0	4.5	6.8	78.7	100.0	1,899
4-5	1.0	0.8	2.1	2.5	4.8	6.4	8.3	74.1	100.0	1,516
6+	2.3	0.7	2.0	4.5	5.2	7.1	7.0	71.3	100.0	860
Residence										
Urban	0.9	0.6	1.2	2.6	4.6	4.9	6.7	78.5	100.0	5,395
Rural	0.8	0.7	1.9	3.2	5.7	6.7	6.4	74.7	100.0	1,182
Region										
Central	0.9	0.6	1.5	2.6	4.7	4.9	7.4	77.2	100.0	4,052
North	0.8	0.6	0.8	2.5	4.6	4.9	5.6	80.2	100.0	1,903
South	0.9	0.3	1.7	3.6	5.9	8.3	4.9	74.4	100.0	622
Governorate										
Amman	1.2	0.7	1.8	2.6	5.8	4.8	8.0	75.1	100.0	2,469
Balqa	0.4	0.4	0.7	2.6	2.5	5.1	8.8	79.2	100.0	452
Zarqa	0.5	0.7	1.1	2.8	3.5	5.1	5.9	80.4	100.0	947
Madaba	0.8	0.0	1.1	1.8	2.2	4.6	5.3	84.0	100.0	184
Irbid	0.9	0.6	0.6	1.6	4.0	3.6	4.7	84.2	100.0	1,174
Mafraq	0.7	0.7	1.4	5.6	6.8	8.7	6.0	70.1	100.0	366
Jarash	0.8	0.6	1.3	1.9	3.6	4.2	8.5	79.0	100.0	207
Ajloun	0.4	0.1	0.7	3.4	4.9	6.3	8.2	75.9	100.0	156
Karak	0.7	0.4	1.9	3.0	7.1	7.8	4.7	74.4	100.0	269
Tafiela	0.7	0.6	1.6	2.2	4.8	9.0	4.4	76.6	100.0	103
Ma'an	2.5	0.1	2.6	6.8	7.4	10.0	8.5	62.0	100.0	104
Aqaba	0.1	0.2	0.6	3.2	3.4	7.5	3.2	81.7	100.0	146
Badia										
Badia	1.0	1.3	2.8	6.2	7.3	8.9	6.4	66.1	100.0	469
Non Badia	0.9	0.5	1.2	2.4	4.6	4.9	6.7	78.7	100.0	6,108
Camps										
Camp	0.4	0.6	0.4	1.4	3.9	5.2	10.3	78.0	100.0	253
Non camp	0.9	0.6	1.4	2.7	4.8	5.2	6.5	77.8	100.0	6,324
Education										
No education	2.0	4.8	3.6	4.9	11.6	7.2	9.9	56.0	100.0	130
Elementary	4.0	3.6	2.2	3.1	6.9	6.2	10.0	64.0	100.0	400
Preparatory	1.1	0.6	1.5	5.3	5.8	5.5	8.7	71.5	100.0	872
Secondary	0.8	0.3	1.5	2.4	4.8	5.9	6.5	77.7	100.0	3,069
Higher	0.3	0.2	0.7	1.8	3.5	3.7	5.2	84.5	100.0	2,106
Wealth quintile										
Lowest	2.6	1.8	2.9	4.4	6.5	6.8	8.5	66.4	100.0	1,393
Second	0.5	0.3	1.4	3.6	5.8	5.7	7.7	74.9	100.0	1,393
Middle	0.4	0.6	1.5	2.4	4.6	4.4	5.7	80.4	100.0	1,470
Fourth	0.6	0.0	0.4	1.4	3.5	4.3	6.8	83.0	100.0	1,327
Highest	0.0	0.0	0.0	1.3	3.0	4.7	3.8	87.2	100.0	994
Total	0.9	0.6	1.3	2.7	4.8	5.2	6.7	77.8	100.0	6,577

Ninety-one percent of women made their first antenatal care visit before the fourth month of pregnancy (Table 9.3). This is slightly higher than the 89 percent found in 2007. The proportion of women seeking antenatal care before their sixth month of pregnancy increases to 97 percent. The median duration of pregnancy at the first antenatal care visit is 2.3 months. This indicates that, in Jordan, women start antenatal care at a relatively early stage of their pregnancy. The table also indicates that women who are younger (less than 35 years), those having their first birth, women in non camp areas, women with higher education, and women in the higher wealth quintiles are more likely than their counterparts in the other categories to receive antenatal care services before the fourth month of pregnancy.

Table 9.3 Timing of first antenatal care visit

Percent distribution of women age 15-49 who had a live birth in the five years preceding the survey by timing of the first antenatal care (ANC) visit for the most recent live birth, and median months pregnant at first visit for those with ANC, according to background characteristics, Jordan 2012

Background characteristics	Number of months pregnant at time of first ANC visit					Total	Number of women	Median months pregnant at first visit (for those with ANC)	Number of women with ANC
	No antenatal care	<4	4-5	6-7	8+				
Mother's age at birth									
<20	1.5	91.9	5.4	0.5	0.7	100.0	465	2.4	458
20-34	0.8	91.8	5.8	1.5	0.2	100.0	4,863	2.2	4,826
35-49	1.2	85.5	9.5	2.9	1.0	100.0	1,249	2.4	1,235
Birth order									
1	0.6	94.7	3.4	0.9	0.4	100.0	2,301	2.1	2,287
2-3	0.5	91.3	6.1	2.0	0.1	100.0	1,899	2.3	1,890
4-5	1.0	88.0	9.1	1.3	0.6	100.0	1,516	2.4	1,501
6+	2.3	82.8	10.6	3.6	0.7	100.0	860	2.5	840
Residence									
Urban	0.9	90.7	6.3	1.7	0.3	100.0	5,395	2.3	5,346
Rural	0.8	90.2	7.0	1.4	0.5	100.0	1,182	2.3	1,172
Region									
Central	0.9	90.1	6.6	2.1	0.4	100.0	4,052	2.3	4,014
North	0.8	91.1	6.6	1.2	0.4	100.0	1,903	2.2	1,888
South	0.9	92.8	5.3	0.7	0.2	100.0	622	2.3	616
Governorate									
Amman	1.2	89.9	6.1	2.4	0.5	100.0	2,469	2.3	2,439
Balqa	0.4	91.5	7.1	0.8	0.3	100.0	452	2.4	450
Zarqa	0.5	88.9	8.2	2.2	0.3	100.0	947	2.4	942
Madaba	0.8	95.1	3.4	0.4	0.2	100.0	184	1.8	183
Irbid	0.9	91.4	6.1	1.2	0.3	100.0	1,174	2.0	1,163
Mafraq	0.7	92.9	5.3	1.0	0.1	100.0	366	2.3	363
Jarash	0.8	86.1	10.2	1.4	1.4	100.0	207	2.5	206
Ajloun	0.4	90.5	8.3	0.8	0.0	100.0	156	2.4	156
Karak	0.7	93.9	4.7	0.4	0.3	100.0	269	2.3	267
Tafiela	0.7	89.4	7.3	2.1	0.2	100.0	103	2.5	102
Ma'an	2.5	89.6	7.0	0.9	0.0	100.0	104	2.4	102
Aqaba	0.1	95.6	3.8	0.1	0.3	100.0	146	1.9	146
Badia									
Badia	1.0	91.0	5.6	1.8	0.6	100.0	469	2.4	465
Non Badia	0.9	90.6	6.5	1.7	0.4	100.0	6,108	2.3	6,054
Camps									
Camp	0.4	86.8	10.7	1.5	0.6	100.0	253	2.4	252
Non camp	0.9	90.8	6.3	1.7	0.4	100.0	6,324	2.3	6,266
Education									
No education	2.0	74.9	14.3	4.7	4.1	100.0	130	2.7	127
Elementary	4.0	78.9	13.3	2.7	1.2	100.0	400	2.5	384
Preparatory	1.1	89.9	6.8	1.8	0.4	100.0	872	2.3	862
Secondary	0.8	90.2	7.0	1.7	0.3	100.0	3,069	2.3	3,045
Higher	0.3	94.7	3.7	1.2	0.2	100.0	2,106	2.1	2,100
Wealth quintile									
Lowest	2.6	83.7	10.2	2.2	1.3	100.0	1,393	2.5	1,356
Second	0.5	89.1	7.9	2.3	0.2	100.0	1,393	2.4	1,386
Middle	0.4	90.6	7.2	1.7	0.1	100.0	1,470	2.2	1,464
Fourth	0.6	94.9	3.6	0.7	0.2	100.0	1,327	2.1	1,318
Highest	0.0	96.9	1.6	1.4	0.1	100.0	994	2.2	994
Total	0.9	90.6	6.4	1.7	0.4	100.0	6,577	2.3	6,518

Note: Total includes 1 woman for whom information on timing of first antenatal visit was not known.

9.1.2 Components of Antenatal Care

The effectiveness of antenatal checkups in ensuring safe motherhood depends in part on the tests and measurements done and the advice given during the checkups. The 2012 JPFHS collected information on this important aspect of antenatal care by asking mothers who received antenatal checkups whether they received each of several components of ANC during their last pregnancy in the five years preceding the survey. Table 9.4 shows that one-third of mothers who received antenatal care reported that they were informed about pregnancy-related complications during their visits. This is a 32 percent decrease from what was reported in the 2007 JPFHS. Thirty percent of women were told where to go for any

complications. Twenty-nine percent were informed about signs of pregnancy-related complications after delivery, while about three-fourths of mothers (73 percent) were informed that they should make two visits for medical checkups one week and 30 days after delivery. A blood pressure test was part of antenatal care for 98 percent of mothers. Urine and blood samples were taken from 95 percent of women, while 97 percent of mothers were weighed. In addition, 85 percent of women took iron tablets or syrup during their pregnancy, which reflects an improvement over the last five years (81 percent in the 2007 JPFHS).

Table 9.4 Components of antenatal care

Among women age 15-49 with a live birth in the five years preceding the survey, the percentage who took iron tablets or syrup during the pregnancy of the most recent birth, and among women receiving antenatal care (ANC) for the most recent live birth in the five years preceding the survey, the percentage receiving specific antenatal services, according to background characteristics, Jordan 2012

	Among women with a live birth in the past five years, the percentage who during the pregnancy of their last birth:		Among women who received antenatal care for their most recent birth in the past five years, the percentage with selected services								
Background characteristic	Took iron tablets or syrup	Number of women with a live birth in the past five years	Informed of signs of pregnancy compli-cations	Told where to go for any compli-cations	Informed of signs of compli-cations during the postnatal period	Told to have two postnatal visits: one week and 30 days after delivery	Weighed	Blood pressure measured	Urine sample taken	Blood sample taken	Number of women with ANC for their most recent birth
Mother's age at birth											
<20	86.2	277	23.9	22.3	27.3	68.4	98.5	96.1	94.9	94.6	272
20-34	85.3	4,849	33.7	29.7	27.7	73.1	97.1	98.3	95.0	95.8	4,820
35-49	81.8	1,451	36.5	31.6	31.5	74.5	97.3	98.5	95.5	94.3	1,426
Birth order											
1	90.0	1,159	38.0	33.9	31.2	75.4	99.0	98.3	95.8	97.1	1,154
2-3	84.2	2,566	30.8	26.9	25.8	72.5	96.7	98.3	95.7	96.2	2,550
4-5	85.3	1,793	34.1	29.2	28.6	73.4	97.4	98.4	94.4	93.9	1,779
6+	78.3	1,059	36.6	33.5	31.8	72.3	96.1	97.4	94.2	94.4	1,036
Residence											
Urban	85.3	5,395	34.7	30.3	29.0	74.7	97.3	98.2	95.4	95.8	5,346
Rural	81.2	1,182	30.0	27.6	26.3	66.6	96.9	98.1	93.8	93.8	1,172
Region											
Central	86.2	4,052	38.0	32.7	31.5	77.7	97.3	98.1	95.4	95.5	4,014
North	81.8	1,903	26.6	24.2	22.7	66.1	97.2	98.6	94.9	95.8	1,888
South	82.5	622	29.6	28.2	26.4	65.9	97.0	97.8	93.6	93.8	616
Governorate											
Amman	85.3	2,469	41.7	35.8	33.7	80.2	97.0	98.4	95.1	95.2	2,439
Balqa	88.6	452	38.5	33.9	34.6	82.4	98.6	98.2	96.9	96.4	450
Zarqa	87.0	947	29.4	25.3	25.7	70.7	97.5	97.7	95.7	96.0	942
Madaba	87.7	184	31.2	27.2	24.9	68.3	96.6	96.6	94.5	95.8	183
Irbid	83.3	1,174	27.9	25.5	23.9	63.9	97.0	98.7	95.6	96.8	1,163
Mafraq	75.1	366	18.3	16.8	16.7	60.8	97.6	98.7	93.0	93.7	363
Jarash	84.6	207	38.9	34.6	30.8	73.9	97.9	98.8	95.6	95.9	206
Ajloun	81.9	156	20.3	18.3	17.3	84.4	96.8	96.8	93.5	92.9	156
Karak	83.2	269	32.6	31.8	22.8	65.2	96.5	97.0	90.6	91.2	267
Tafiela	73.0	103	30.1	27.8	30.7	57.3	92.3	94.9	90.5	91.6	102
Ma'an	80.7	104	23.7	21.8	23.7	61.0	98.8	99.4	97.1	95.8	102
Aqaba	89.1	146	28.1	26.2	31.8	76.7	100.0	100.0	98.7	98.7	146
Badia											
Badia	77.1	469	25.2	23.3	27.7	65.1	97.0	97.8	92.8	93.0	465
Non Badia	85.1	6,108	34.6	30.3	28.6	73.8	97.2	98.2	95.3	95.6	6,054
Camps											
Camp	88.2	253	42.1	36.9	36.1	85.8	98.7	99.5	98.5	97.3	252
Non camp	84.4	6,324	33.6	29.5	28.2	72.7	97.2	98.2	95.0	95.4	6,266
Education											
No education	71.4	130	35.4	24.1	24.2	71.9	94.9	96.8	92.6	92.5	127
Elementary	78.1	400	29.1	27.1	34.5	68.0	93.3	95.8	89.7	89.4	384
Preparatory	81.2	872	30.7	27.3	26.5	71.0	94.8	96.3	92.4	91.9	862
Secondary	84.2	3,069	35.3	31.0	28.0	73.5	97.5	98.5	95.5	96.1	3,045
Higher	88.4	2,106	34.0	30.0	29.2	74.7	98.6	99.1	96.7	97.3	2,100
Wealth quintile											
Lowest	77.0	1,393	33.2	29.1	31.3	70.6	94.6	96.0	93.6	93.7	1,356
Second	84.8	1,393	35.9	31.3	28.8	71.9	97.2	98.0	95.6	95.4	1,386
Middle	84.4	1,470	31.6	28.0	24.8	72.2	98.2	98.3	94.9	95.3	1,464
Fourth	87.7	1,327	33.2	29.4	26.5	75.0	98.1	99.3	94.9	96.3	1,318
Highest	90.9	994	36.3	31.9	32.3	77.7	98.2	99.9	97.0	96.8	994
Total	84.6	6,577	33.9	29.8	28.5	73.2	97.2	98.2	95.1	95.4	6,518

Urban-rural differences are noticeable for the various components of antenatal care. Urban women were more likely than rural women to get each component of antenatal care. Data also indicate regional variations in receiving antenatal care. For example, women in the Central region, camp areas, and the non-Badia areas are more likely to receive almost all of the antenatal care components than women in the North and South regions and the Badia and non camp areas. Antenatal care content also varies significantly according to the mother's educational level. Women with secondary or higher education are more likely to have received almost all routine tests than women with less education. Women who were pregnant with their first child were also more likely to receive almost all components of ANC than women who already had children at the time of the pregnancy. A higher proportion of women in the highest wealth quintiles received antenatal care components than women in lower wealth quintiles.

9.1.3 Coverage of Tetanus Toxoid Vaccinations

Tetanus toxoid injections are given during pregnancy for the prevention of neonatal tetanus, an important cause of death among infants. Neonatal tetanus is most common among children who are delivered in unhygienic environments and when unspecialized instruments are used to cut the umbilical cord. Tetanus usually develops during the first or second week of life and is fatal in 70-90 percent of cases. Neonatal tetanus, however, is a preventable disease. Full protection is considered to be provided to an infant if the mother has received two injections during that pregnancy or two or more injections (the last within three years of the birth), three or more injections (the last within five years of the birth), four or more injections (the last within 10 years of the birth), or five or more injections prior to the birth. When the mother is vaccinated, immunity against tetanus is transferred to the fetus through the placenta.

In the 2012 JPFHS, information was collected from women who had a birth in the five years before the survey on the lifetime number of doses of tetanus toxoid that the mother received. Table 9.5 shows that 3 percent of women received two or more doses of tetanus toxoid vaccine during the last pregnancy, which is lower than that observed in the 2007 JPFHS (6 percent). However, for 31 percent of women the last birth was protected against tetanus because of the injections received during this pregnancy and injections received prior to the pregnancy; this percentage was higher than that reported in 2007 (27 percent).

Table 9.5 Tetanus toxoid injections

Among mothers age 15-49 with a live birth in the five years preceding the survey, the percentage receiving two or more tetanus toxoid injections during the pregnancy for the last live birth and the percentage whose last live birth was protected against neonatal tetanus, according to background characteristics, Jordan 2012

Background characteristic	Percentage receiving two or more injections during last pregnancy	Percentage whose last birth was protected against neonatal tetanus[1]	Number of mothers
Mother's age at birth			
<20	3.0	31.9	277
20-34	2.7	30.0	4,849
35-49	2.3	33.7	1,451
Birth order			
1	6.0	31.4	1,159
2-3	2.0	28.6	2,566
4-5	1.8	29.6	1,793
6+	1.6	37.9	1,059
Residence			
Urban	2.5	32.3	5,395
Rural	2.9	24.4	1,182
Region			
Central	1.8	29.1	4,052
North	4.0	35.1	1,903
South	3.6	29.2	622
Governorate			
Amman	0.9	25.8	2,469
Balqa	1.6	35.7	452
Zarqa	2.8	32.0	947
Madaba	9.1	43.7	184
Irbid	4.8	39.2	1,174
Mafraq	1.1	16.1	366
Jarash	2.5	33.2	207
Ajloun	7.2	51.4	156
Karak	4.6	31.7	269
Tafiela	4.7	29.1	103
Ma'an	3.2	30.5	104
Aqaba	1.1	23.8	146
Badia			
Badia	2.2	21.8	469
Non Badia	2.6	31.6	6,108
Camps			
Camp	2.4	51.1	253
Non camp	2.6	30.1	6,324
Education			
No education	4.5	24.0	130
Elementary	2.0	36.4	400
Preparatory	2.6	32.6	872
Secondary	2.6	33.8	3,069
Higher	2.6	25.4	2,106
Wealth quintile			
Lowest	2.7	36.6	1,393
Second	2.9	39.5	1,393
Middle	3.2	31.6	1,470
Fourth	2.2	26.0	1,327
Highest	1.4	16.3	994
Total	2.6	30.9	6,577

[1] Includes mothers with two injections during the pregnancy of their last birth or two or more injections (the last within 3 years of the last live birth), three or more injections (the last within 5 years of the last birth), four or more injections (the last within 10 years of the last live birth), or five or more injections at any time prior to the last birth.

Women residing in urban areas, in the North region, in Ajloun, and in non Badia and camp areas are more likely to have full protection against tetanus for their last birth than women residing in other areas. The percentage of women with full protection for their last birth is highest among mothers age 35-49. The percentage of women with full protection generally increases with birth order. This is due to the cumulative effect of past vaccinations (whether during prior pregnancies or not). Full protection is higher among women with only elementary education and among women in the second wealth quintile than women in other categories.

9.2 DELIVERY

9.2.1 Place of Delivery

The objective of providing safe delivery services is to protect the life and health of the mother and her child. An important component of efforts to reduce the health risks to mother and child is to increase the proportion of infants delivered under the supervision of health professionals. Proper medical attention and hygienic conditions during delivery can reduce the risk of complications and infections that may cause death or serious illness for the mother, the child, or both. Data on delivery care were obtained for all births that occurred in the five years preceding the survey.

An overwhelming majority of births (99 percent) in the five years preceding the survey were delivered in a facility (Table 9.6). Sixty-five percent of births took place in public health facilities and 34 percent in private health facilities. Only 1 percent of births took place at home.

There are only very minor differences by background characteristics in the proportion of births that take place in a health facility. The proportion is 95 percent or more for all sub-groups except the small proportion of births for which the mother received fewer than 4 ANC visits, only 90-91 percent of which occurred in a health facility. However, there are some differences in the proportion of births that take place in public or private health facilities. Births to younger women (<20 years) are more likely to take place at a private health facility or at home than births to older women. Around three-fourths of six or higher order births are delivered at a public health facility.

Delivery in a public health facility varies according to the number of ANC visits from 73 percent among births to women with no ANC visit to 64 percent for births to women with four or more visits. Women who are not receiving any kind of ANC services are also more likely to deliver at home (10 percent) compared with those reporting four or more ANC visits (1 percent). Women with four or more ANC visits are also more likely to deliver in a private facility than women in the other categories.

Eighty-one percent of births in the South region took place in a public health facility compared with 59 percent of those in the Central region. Deliveries in a public health facility are also more common in rural areas, in the Badia areas, in camps, and in Tafiela than in other areas.

There is also a strong negative association between delivery by type of facility and mother's level of education. The proportion of births delivered in a public health facility declines from 77 percent among uneducated mothers to 57 percent of births to mothers with higher education. Conversely, births to mothers with higher education are most likely to be in a private facility.

Table 9.6 also shows that there is a strong, negative relationship between household wealth and delivery in the public sector. While 80 percent of births to mothers in the lowest wealth quintile took place in the public sector, this proportion drops to one-fourth (25 percent) of births to mothers in the highest wealth quintile.

Table 9.6 Place of delivery

Percent distribution of live births in the five years preceding the survey by place of delivery and percentage delivered in a health facility, according to background characteristics, Jordan 2012

Background characteristic	Health facility: Public sector	Health facility: Private sector	Home	Total	Percentage delivered in a health facility	Number of births
Mother's age at birth						
<20	58.8	38.6	2.6	100.0	97.4	559
20-34	65.0	33.9	1.1	100.0	98.9	7,535
35-49	68.4	30.4	1.2	100.0	98.8	1,739
Birth order						
1	60.4	38.9	0.7	100.0	99.3	2,354
2-3	63.9	34.8	1.3	100.0	98.7	3,809
4-5	67.3	31.7	1.0	100.0	99.0	2,368
6+	74.2	23.4	2.4	100.0	97.6	1,302
Antenatal care visits[1]						
None	73.1	17.0	10.0	100.0	90.0	58
1-3	70.0	21.0	9.0	100.0	91.0	303
4+	64.0	35.2	0.8	100.0	99.2	6,214
Residence						
Urban	61.4	37.2	1.4	100.0	98.6	8,010
Rural	81.9	17.3	0.7	100.0	99.3	1,823
Region						
Central	59.4	39.3	1.3	100.0	98.7	6,014
North	72.2	26.5	1.3	100.0	98.7	2,867
South	80.9	18.1	0.9	100.0	99.1	952
Governorate						
Amman	49.5	48.9	1.7	100.0	98.3	3,622
Balqa	73.8	26.1	0.1	100.0	99.9	703
Zarqa	74.0	25.0	1.0	100.0	99.0	1,412
Madaba	78.6	20.9	0.5	100.0	99.5	276
Irbid	69.0	29.4	1.6	100.0	98.4	1,729
Mafraq	72.1	26.5	1.5	100.0	98.5	574
Jarash	81.3	18.3	0.4	100.0	99.6	333
Ajloun	83.5	16.5	0.1	100.0	99.9	232
Karak	86.4	12.8	0.8	100.0	99.2	410
Tafiela	89.1	10.3	0.7	100.0	99.3	157
Ma'an	84.8	13.2	2.0	100.0	98.0	170
Aqaba	61.5	38.0	0.5	100.0	99.5	215
Badia						
Badia	80.8	17.8	1.4	100.0	98.6	769
Non Badia	63.9	34.8	1.2	100.0	98.8	9,064
Camps						
Camp	73.4	26.2	0.4	100.0	99.6	388
Non camp	64.9	33.8	1.3	100.0	98.7	9,446
Mother's education						
No education	77.3	17.8	4.9	100.0	95.1	207
Elementary	71.0	24.8	4.2	100.0	95.8	628
Preparatory	74.2	24.9	0.9	100.0	99.1	1,308
Secondary	66.6	31.9	1.4	100.0	98.6	4,599
Higher	57.4	42.4	0.3	100.0	99.7	3,091
Wealth quintile						
Lowest	80.3	16.6	3.1	100.0	96.9	2,292
Second	80.6	18.8	0.5	100.0	99.5	2,179
Middle	70.8	28.2	1.0	100.0	99.0	2,115
Fourth	51.9	47.2	0.9	100.0	99.1	1,893
Highest	25.0	75.0	0.0	100.0	100.0	1,354
Total	65.2	33.5	1.2	100.0	98.8	9,833

Note: Total includes one woman for whom data on number of antenatal care visits were not known.
[1] Includes only the most recent birth in the five years preceding the survey.

9.2.2 Assistance at Delivery

Obstetric care by a trained provider during delivery is recognized as critical for the reduction of maternal and neonatal mortality. Table 9.7 shows the type of assistance during delivery by background characteristics of mothers. Almost all births in Jordan were delivered with the assistance of a health

professional, that is, a doctor, nurse, or midwife. Three in four births (76 percent) were delivered by a doctor, and about one in four births (24 percent) was delivered by a nurse or midwife.

Table 9.7 Assistance during delivery

Percent distribution of live births in the five years preceding the survey by person providing assistance during delivery, percentage of births assisted by a skilled provider, percentage delivered by caesarean section, percentage given free sample of infant formula, and percentage for whom mothers discussed family planning (FP) before discharge, according to background characteristics, Jordan 2012

Background characteristic	Person providing assistance during delivery					Percentage delivered by a skilled provider[1]	Percentage delivered by C-section	Given free sample of infant formula	Discussed FP before discharge	Number of births
	Doctor	Nurse/ midwife	Relative/ other	No one	Total					
Mother's age at birth										
<20	81.4	17.6	0.8	0.3	100.0	98.9	19.1	7.3	6.7	559
20-34	75.4	24.3	0.2	0.1	100.0	99.7	26.9	14.3	12.7	7,535
35-49	75.8	23.8	0.2	0.2	100.0	99.6	36.1	16.7	16.8	1,739
Birth order										
1	82.7	17.2	0.0	0.1	100.0	99.9	33.5	13.9	9.0	2,354
2-3	75.5	23.9	0.4	0.2	100.0	99.4	25.4	15.7	14.1	3,809
4-5	73.6	26.3	0.1	0.1	100.0	99.8	26.4	14.0	13.6	2,368
6+	68.3	31.1	0.3	0.2	100.0	99.5	29.0	11.7	16.3	1,302
Antenatal care visits[2]										
None	61.8	29.4	7.5	1.3	100.0	91.2	24.8	4.4	23.1	58
1-3	61.0	36.0	0.6	2.5	100.0	96.9	24.8	8.6	12.3	303
4+	76.6	23.2	0.1	0.0	100.0	99.8	29.6	22.2	19.8	6,214
Place of delivery										
Health facility	76.5	23.5	0.0	0.0	100.0	100.0	28.4	14.5	13.2	9,711
Elsewhere	23.2	49.4	18.0	9.4	100.0	72.6	0.0	0.0	0.0	123
Residence										
Urban	78.3	21.4	0.2	0.1	100.0	99.6	28.4	14.9	13.8	8,010
Rural	65.1	34.6	0.1	0.1	100.0	99.7	26.7	11.6	9.8	1,823
Region										
Central	80.5	19.1	0.2	0.2	100.0	99.6	28.6	16.4	14.6	6,014
North	69.3	30.4	0.2	0.1	100.0	99.7	26.4	12.2	10.9	2,867
South	65.7	33.8	0.3	0.3	100.0	99.5	29.2	7.7	10.0	952
Governorate										
Amman	83.5	15.9	0.4	0.2	100.0	99.4	28.3	19.7	14.0	3,622
Balqa	79.9	19.9	0.1	0.1	100.0	99.8	27.3	13.3	15.1	703
Zarqa	75.9	24.1	0.0	0.0	100.0	100.0	29.1	10.2	17.6	1,412
Madaba	67.1	32.4	0.1	0.4	100.0	99.5	33.9	12.0	6.1	276
Irbid	73.0	26.8	0.1	0.1	100.0	99.8	27.8	13.8	12.2	1,729
Mafraq	63.0	36.3	0.7	0.0	100.0	99.3	24.2	7.8	5.9	574
Jarash	65.6	34.2	0.1	0.0	100.0	99.9	26.6	12.8	11.2	333
Ajloun	62.4	37.6	0.0	0.0	100.0	100.0	21.2	10.5	12.2	232
Karak	65.5	33.9	0.1	0.4	100.0	99.5	32.5	8.7	8.1	410
Tafiela	67.8	31.6	0.1	0.6	100.0	99.3	30.0	6.6	13.8	157
Ma'an	49.8	49.1	1.1	0.0	100.0	98.9	19.7	4.3	6.7	170
Aqaba	77.1	22.9	0.0	0.0	100.0	100.0	29.9	9.2	13.5	215
Badia										
Badia	60.8	38.5	0.7	0.1	100.0	99.3	22.0	7.2	10.2	769
Non Badia	77.1	22.6	0.2	0.1	100.0	99.7	28.6	14.9	13.3	9,064
Camps										
Camp	76.2	23.5	0.3	0.0	100.0	99.7	28.0	9.7	14.8	388
Non camp	75.8	23.8	0.2	0.1	100.0	99.6	28.0	14.5	13.0	9,446
Mother's education										
No education	64.0	34.2	1.9	0.0	100.0	98.1	17.6	6.5	15.5	207
Elementary	68.7	30.8	0.2	0.3	100.0	99.6	33.6	6.9	11.7	628
Preparatory	73.4	26.3	0.2	0.1	100.0	99.7	27.7	9.4	14.7	1,308
Secondary	74.5	25.0	0.3	0.2	100.0	99.5	27.1	13.6	13.4	4,599
Higher	81.1	18.8	0.0	0.1	100.0	99.9	29.1	19.4	11.9	3,091
Wealth quintile										
Lowest	66.6	32.3	0.9	0.2	100.0	98.9	25.2	6.9	13.5	2,292
Second	68.2	31.8	0.0	0.0	100.0	100.0	23.4	8.7	12.4	2,179
Middle	75.8	24.2	0.0	0.0	100.0	100.0	32.2	12.5	13.5	2,115
Fourth	83.4	16.1	0.1	0.4	100.0	99.5	29.9	18.5	13.1	1,893
Highest	93.1	6.9	0.0	0.0	100.0	100.0	31.1	32.8	12.8	1,354
Total	75.8	23.8	0.2	0.1	100.0	99.6	28.0	14.3	13.1	9,833

Note: If the respondent mentioned more than one person attending during delivery, only the most qualified person is considered in this tabulation. Total includes one woman for whom data on number of antenatal care visits were not known.

[1] Skilled provider includes doctor, nurse, and midwife.

[2] Includes only the most recent birth in the five years preceding the survey.

There are variations by background characteristics in the proportion of births delivered by a doctor as opposed to a nurse or midwife. Births that are more likely to be assisted by a doctor include those to very young mothers (<20 years), first-order births, births for whom mothers had four or more antenatal visits, births delivered in a health facility, urban births, births in the Central region, births in Amman, births in non Badia areas, births to mothers with higher education, and births in the wealthiest households.

9.2.3 Delivery Characteristics

Caesarean section (C-section) deliveries are one of the few indicators for measuring women's access to obstetric care. C-sections are generally performed because the mother has medical problems or experiences complications at the time of delivery. Based on research and analysis, the World Health Organization (WHO) has determined that C-sections in a given population should not be less than 5 percent of pregnancies and not more than 15 percent of all pregnancies if the lives of women and infants are to be protected (UNICEF, 1999). A C-section rate below 5 percent indicates that many women and babies may be dying because of inadequate access to the whole spectrum of obstetric services. A level above 15 percent indicates an unnecessarily high reliance on a major surgical procedure with numerous risks. It is essential that C-sections be performed only when necessary, and in facilities that are adequately equipped and staffed to ensure safety (UNICEF, 1999).

The 2012 JPFHS obtained information on a number of key aspects of deliveries, including the frequency of C-sections. Table 9.7 shows that 28 percent of births in the five years preceding the survey were delivered by C-section, a significant increase from the 2007 JPFHS (19 percent). Given the increasing percentage of births delivered by C-section, greater intervention is needed by health professionals in reviewing the necessity for C-section deliveries. C-sections are much more common among births to older women (age 35-49 years), first-order births, births for whom mothers made four or more ANC visits, births in Madaba, and births in non Badia areas. Births to mothers with only elementary education and births in the middle and highest wealth quintiles are also more likely to be delivered by C-section. The high level of C-sections in Jordan may be related to a proclivity of the medical community to routinely deliver a woman by C-section if she has had one before.

Women who delivered in a health facility were asked whether they were given a free sample of infant formula when they were discharged after delivery. Mothers of 14 percent of births were given infant formula by a health facility staff. This practice is particularly common in Amman (20 percent). The distribution of free samples of infant formula increases significantly with level of mother's education and household wealth.

During the survey, mothers were also asked whether anyone at the health facility talked to them or advised them about family planning before they were discharged. Data in Table 9.7 indicate that for 13 percent of births, mothers discussed family planning before checking out of the health facility after delivery. This percentage varies according to various background characteristics. In particular, it ranges from 6 percent in Mafraq and Madaba to 18 percent in Zarqa.

9.2.4 Payment for Delivery

Table 9.8 shows that, in the five years preceding the survey, 47 percent of births were delivered free of charge. Free deliveries were more common among births to older mothers (age 35-49 years), births of order six and higher, births for whom mothers had at least one antenatal visit, births in health facilities, births in rural areas, births in the South region, births in Tafiela, births in the Badia areas, births in non camp areas, births to mothers with no education, and births to mothers in the poorest households.

Fourteen percent of births were delivered for a cost of 200-499 Jordanian Dinars (JD), 13 percent were delivered for less than 50 JD, 8 percent were delivered for 100-199 JD or for 500 JD or more, and 6 percent of births were delivered for 50-99 JD. For 5 percent of births, the cost was not known.

Table 9.8 Cost of delivery

Percent distribution of live births in the five years preceding the survey by cost of delivery, according to background characteristics, Jordan 2012

Background characteristic	Cost of delivery (JD)								Number of births
	Free	<50	50-99	100-199	200-499	500+	Don't know/ missing	Total	
Mother's age at birth									
<20	34.6	19.6	10.9	7.6	15.0	6.8	5.4	100.0	559
20-34	46.3	14.4	5.8	7.0	14.1	7.8	4.6	100.0	7,535
35-49	55.4	5.7	5.2	9.5	10.7	8.2	5.3	100.0	1,739
Birth order									
1	44.1	11.3	5.8	6.8	15.5	12.5	4.0	100.0	2,354
2-3	45.7	14.8	6.2	7.2	13.8	6.8	5.6	100.0	3,809
4-5	47.8	12.9	6.4	8.4	13.9	6.4	4.1	100.0	2,368
6+	56.6	12.0	5.3	7.8	8.7	4.6	5.0	100.0	1,302
Antenatal care visits[1]									
None	34.7	3.8	18.3	10.0	18.2	4.4	10.5	100.0	58
1-3	46.4	18.8	6.2	12.7	5.6	5.1	5.2	100.0	303
4+	47.3	12.8	6.2	7.0	13.6	8.6	4.5	100.0	6,214
Place of delivery									
Health facility	47.7	12.9	5.8	7.5	13.7	7.9	4.4	100.0	9,711
Elsewhere	9.3	29.8	25.8	4.3	0.0	0.0	30.9	100.0	123
Residence									
Urban	41.8	14.7	6.4	8.1	15.1	8.6	5.4	100.0	8,010
Rural	71.4	6.3	4.3	5.0	6.9	4.3	1.9	100.0	1,823
Region									
Central	36.4	17.1	6.7	8.1	15.6	9.9	6.3	100.0	6,014
North	59.8	7.8	5.7	8.0	11.8	4.6	2.2	100.0	2,867
South	78.2	3.8	2.8	2.2	5.6	4.5	2.9	100.0	952
Governorate									
Amman	31.7	14.4	6.3	9.1	19.1	12.3	7.1	100.0	3,622
Balqa	52.3	14.0	7.3	6.2	10.0	6.3	3.9	100.0	703
Zarqa	35.0	27.2	7.4	7.4	10.9	5.9	6.1	100.0	1,412
Madaba	64.7	9.8	5.2	2.4	7.8	6.6	3.5	100.0	276
Irbid	55.8	7.7	6.3	8.5	13.8	5.4	2.4	100.0	1,729
Mafraq	61.0	8.2	5.5	8.1	11.5	4.0	1.7	100.0	574
Jarash	65.0	10.9	4.8	5.8	7.6	3.2	2.7	100.0	333
Ajloun	79.8	2.6	3.2	7.2	4.0	2.0	1.2	100.0	232
Karak	83.9	2.7	1.8	1.5	2.9	4.6	2.6	100.0	410
Tafiela	85.9	3.8	1.3	0.9	2.6	2.7	2.9	100.0	157
Ma'an	77.9	6.8	2.7	1.9	4.1	1.9	4.7	100.0	170
Aqaba	61.9	3.6	5.9	4.7	14.3	7.6	2.0	100.0	215
Badia									
Badia	67.4	10.2	4.8	5.5	6.2	3.2	2.7	100.0	769
Non Badia	45.6	13.4	6.1	7.7	14.2	8.2	5.0	100.0	9,064
Camps									
Camp	29.2	32.3	10.5	7.8	10.9	4.2	5.1	100.0	388
Non camp	48.0	12.3	5.8	7.5	13.7	7.9	4.8	100.0	9,446
Mother's education									
No education	59.8	13.8	6.0	7.8	5.4	2.5	4.7	100.0	207
Elementary	43.9	14.9	10.8	10.5	11.0	3.6	5.3	100.0	628
Preparatory	44.7	18.1	8.4	8.8	10.9	3.7	5.5	100.0	1,308
Secondary	46.6	15.5	5.3	7.2	13.7	6.3	5.4	100.0	4,599
Higher	49.2	7.1	5.1	6.7	15.5	12.9	3.5	100.0	3,091
Wealth quintile									
Lowest	55.9	18.2	6.4	7.8	5.9	1.7	4.0	100.0	2,292
Second	54.3	13.4	7.0	6.9	10.5	2.4	5.5	100.0	2,179
Middle	50.0	13.4	6.1	8.4	13.1	5.3	3.7	100.0	2,115
Fourth	39.2	12.0	5.7	7.7	20.1	10.5	4.8	100.0	1,893
Highest	28.3	5.3	4.1	6.1	22.7	27.0	6.6	100.0	1,354
Total	47.3	13.1	6.0	7.5	13.5	7.8	4.8	100.0	9,833

[1] Includes only the most recent birth in the five years preceding the survey.

9.3 POSTNATAL CARE

A large proportion of maternal and neonatal deaths occur during the first 48 hours after delivery. Safe motherhood programs have recently increased their emphasis on the importance of postnatal care,

recommending that all women receive a health check within two days of delivery. To assess the extent of postnatal care utilization, respondents were asked whether they had received a health check after the delivery of their last birth in the five years preceding the survey.

9.3.1 Postnatal Care for Mother

Table 9.9 shows that four-fifths (82 percent) of mothers received postnatal care from a health professional (doctor, nurse, or midwife) within the critical first two days after a delivery; 39 percent received postnatal care within 4 hours, 27 percent within 4-23 hours, 16 percent between 1 and 2 days, and 4 percent after 3 days. Fourteen percent of women received no postnatal care at all.

Table 9.9 Timing of first postnatal checkup for the mother

Among women age 15-49 giving birth in the two years preceding the survey, the percent distribution of the mother's first postnatal checkup for the last live birth by time after delivery, and the percentage of women with a live birth in the five years preceding the survey who received a postnatal checkup in the first two days after giving birth, according to background characteristics, Jordan 2012

Background characteristic	Time after delivery of mother's first postnatal checkup						No postnatal checkup[1]	Total	Percentage of women with a postnatal checkup in the first two days after birth by a health professional	Number of women
	Less than 4 hours	4-23 hours	1-2 days	3-6 days	7-41 days	Don't know/ missing				
Mother's age at birth										
<20	35.2	19.8	12.0	0.0	3.2	0.0	29.8	100.0	67.0	195
20-34	39.2	28.0	15.8	0.9	3.2	0.3	12.7	100.0	83.0	2,629
35-49	39.7	23.2	19.5	1.5	1.2	0.5	14.3	100.0	82.5	664
Birth order										
1	35.5	30.6	19.3	0.6	1.6	0.1	12.3	100.0	85.4	814
2-3	38.2	26.8	15.1	0.3	4.0	0.4	15.2	100.0	80.1	1,359
4-5	40.8	27.7	14.9	1.2	2.7	0.4	12.4	100.0	83.3	837
6+	44.5	17.6	17.3	3.0	1.6	0.2	15.7	100.0	79.5	477
Place of delivery										
Health facility	39.0	27.0	16.6	0.9	2.6	0.3	13.7	100.0	82.5	3,441
Elsewhere	(42.6)	(1.6)	(0.0)	(1.0)	(16.5)	(4.6)	(33.7)	(100.0)	(44.2)	47
Residence										
Urban	38.1	27.3	15.2	1.0	3.3	0.3	14.8	100.0	80.6	2,796
Rural	42.8	23.8	21.1	0.6	0.9	0.2	10.6	100.0	87.7	692
Region										
Central	40.0	21.6	16.3	1.4	4.3	0.3	16.2	100.0	77.9	2,144
North	36.1	37.5	13.7	0.3	0.6	0.4	11.4	100.0	87.2	1,013
South	42.0	25.8	24.9	0.1	0.2	0.4	6.7	100.0	92.6	331
Governorate										
Amman	39.1	20.5	14.4	1.7	4.6	0.0	19.6	100.0	74.1	1,318
Balqa	42.0	17.2	25.9	1.4	3.7	0.0	9.8	100.0	85.1	257
Zarqa	38.6	28.4	15.2	0.6	4.1	0.9	12.2	100.0	82.2	470
Madaba	52.0	15.7	21.5	0.9	2.2	1.0	6.7	100.0	89.2	99
Irbid	34.1	40.5	12.9	0.4	0.6	0.5	11.0	100.0	87.5	601
Mafraq	43.0	29.9	13.1	0.2	0.3	0.3	13.2	100.0	86.0	203
Jarash	39.1	33.5	13.8	0.3	0.9	0.0	12.4	100.0	86.4	123
Ajloun	29.9	39.9	19.9	0.0	1.1	0.0	9.2	100.0	89.7	86
Karak	33.0	26.6	34.7	0.0	0.3	0.7	4.7	100.0	94.3	143
Tafiela	37.7	30.8	22.2	0.2	0.0	0.8	8.4	100.0	90.7	54
Ma'an	55.4	19.9	12.1	0.3	0.3	0.0	12.0	100.0	87.4	62
Aqaba	51.6	25.4	18.2	0.0	0.0	0.0	4.7	100.0	95.3	71
Badia										
Badia	50.3	21.7	11.9	0.7	1.1	0.3	14.0	100.0	83.9	293
Non Badia	38.0	27.1	16.7	1.0	3.0	0.3	13.9	100.0	81.8	3,196
Camps										
Camp	40.2	28.0	8.6	2.1	6.0	0.8	14.3	100.0	76.8	130
Non camp	39.0	26.6	16.6	0.9	2.7	0.3	13.9	100.0	82.2	3,358
Education										
No education	51.1	12.5	3.3	0.1	0.0	0.0	32.9	100.0	66.9	57
Elementary	45.3	16.6	13.7	0.8	1.0	1.1	21.6	100.0	75.6	202
Preparatory	39.3	20.9	14.4	0.6	2.6	0.1	22.1	100.0	74.6	464
Secondary	37.6	26.0	15.9	1.6	3.8	0.4	14.7	100.0	79.5	1,603
Higher	39.2	32.3	18.7	0.3	2.1	0.1	7.3	100.0	90.3	1,162
Wealth quintile										
Lowest	41.2	24.7	13.4	0.3	1.7	0.4	18.3	100.0	79.3	780
Second	33.2	29.8	16.1	1.1	2.8	0.2	17.0	100.0	79.0	773
Middle	37.0	24.6	17.7	1.2	3.5	0.1	15.9	100.0	79.3	740
Fourth	37.8	28.1	18.9	0.5	2.9	0.8	10.9	100.0	84.8	680
Highest	49.2	25.7	15.9	1.9	3.5	0.0	3.9	100.0	90.8	514
Total	39.0	26.6	16.3	0.9	2.8	0.3	13.9	100.0	82.0	3,488

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Includes women who received a checkup after 41 days.

Postnatal care within the first two days from a health professional is higher among women age 20-49; mothers of first-order births; women in rural areas, in the South region, in Aqaba, and in non camp areas; women with higher education; and women in the highest wealth quintile.

The 2012 JPFHS also collected information on the percentage of women with a birth in the two years preceding the survey who discussed family planning during any postnatal checkup for their last birth. One in four women (23 percent) discussed family planning during their postnatal checkup (data not shown separately).

9.3.2 Postnatal Care for Newborn

Each woman with a birth in the two years preceding the survey was asked questions on the postnatal care her last baby received in the first two days after birth.

Table 9.10 shows that three-fourths (75 percent) of children received postnatal care from a health professional (doctor, nurse, or midwife) within the critical first two days after delivery; 13 percent received postnatal care within 1 hour, 33 percent within 1-3 hours, 17 percent within 4-23 hours, 12 percent within 1-2 days, and 2 percent after 3 days. One in five (21 percent) children received no postnatal checkup at all.

Postnatal care within the first two days from a health professional is higher among children born to mothers age 35-49; births of order six and higher; births in rural areas, in the North region, in Aqaba, in Badia areas, and in non camp areas; births to women with no education; and births in the middle wealth quintile.

Among newborns who ever received postnatal care (including after the first week of life), seven out of ten received a heel prick (to test for anemia) and eight out of ten received a hearing test (Table 9.11). Results show that births to women age 20-49, births in rural areas, births in the South region, births in Tafiela and Aqaba, births in camp areas, and births to mothers with higher education are more likely to receive a heel prick and get a hearing test. While children in the non Badia areas are more likely than children in the Badia areas to receive a heel prick, there is no difference in terms of children receiving a hearing test by these areas of residence. Children in the wealthiest households are more likely to receive a heel prick than children in the other wealth quintiles. On the other hand, children from the middle wealth quintile are more likely to receive a hearing test than children in other wealth quintiles.

Table 9.10 Timing of first postnatal checkup for the newborn

Percent distribution of last births in the two years preceding the survey by time after birth of first postnatal checkup, and the percentage of births with a postnatal checkup in the first two days after birth, according to background characteristics, Jordan 2012

Background characteristic	Time after birth of newborn's first postnatal checkup						No postnatal checkup[1]	Total	Percentage of births with a postnatal checkup in the first two days after birth by a health professional	Number of births
	Less than 1 hour	1-3 hours	4-23 hours	1-2 days	3-6 days	Don't know/ missing				
Mother's age at birth										
<20	9.5	26.2	26.1	9.9	3.2	4.5	20.6	100.0	71.7	195
20-34	12.1	32.5	17.1	12.0	2.1	2.1	22.1	100.0	73.7	2,629
35-49	18.2	34.7	14.7	11.9	1.6	3.3	15.7	100.0	79.5	664
Birth order										
1	11.0	34.0	18.8	11.1	2.2	2.4	20.5	100.0	74.8	814
2-3	14.5	29.5	16.8	12.2	2.5	1.8	22.8	100.0	73.0	1,359
4-5	10.5	33.4	17.7	12.8	1.8	2.2	21.7	100.0	74.4	837
6+	17.2	37.7	14.4	10.7	0.8	4.8	14.3	100.0	80.1	477
Place of delivery										
Health facility	13.2	32.6	17.4	12.0	2.0	2.5	20.3	100.0	75.2	3,441
Elsewhere	(3.0)	(32.7)	(1.0)	(1.0)	(3.1)	(0.0)	(59.3)	(100.0)	(37.6)	47
Residence										
Urban	13.0	33.0	16.9	10.8	2.0	2.6	21.7	100.0	73.6	2,796
Rural	13.4	31.2	18.4	16.3	2.1	1.6	17.0	100.0	79.3	692
Region										
Central	11.5	31.8	13.0	10.0	2.7	2.4	28.5	100.0	66.4	2,144
North	15.4	34.5	27.0	13.0	0.4	3.1	6.5	100.0	90.0	1,013
South	16.2	31.8	13.7	20.3	2.9	0.5	14.5	100.0	82.1	331
Governorate										
Amman	12.2	31.5	12.3	8.4	2.8	2.8	29.9	100.0	64.4	1,318
Balqa	6.9	26.8	8.3	11.4	2.6	1.9	42.1	100.0	53.4	257
Zarqa	12.9	33.2	17.6	12.9	1.9	2.0	19.6	100.0	76.5	470
Madaba	8.0	42.0	13.3	14.3	3.9	1.0	17.4	100.0	77.7	99
Irbid	13.2	35.3	29.1	13.5	0.4	3.8	4.6	100.0	91.2	601
Mafraq	20.7	35.7	22.1	11.2	0.5	1.2	8.5	100.0	89.8	203
Jarash	23.1	28.8	23.5	10.1	0.3	3.3	11.0	100.0	85.5	123
Ajloun	6.8	34.6	28.9	18.3	0.3	2.5	8.6	100.0	88.6	86
Karak	13.4	21.8	12.4	26.5	2.3	0.3	23.3	100.0	74.1	143
Tafiela	15.4	34.0	18.2	16.5	4.9	1.3	9.8	100.0	84.0	54
Ma'an	10.5	45.9	12.7	16.6	5.3	0.7	8.3	100.0	85.7	62
Aqaba	27.5	38.2	14.0	14.0	0.4	0.0	5.8	100.0	93.8	71
Badia										
Badia	13.5	39.7	16.7	11.9	1.8	1.0	15.4	100.0	81.8	293
Non Badia	13.1	31.9	17.2	11.9	2.0	2.6	21.3	100.0	74.1	3,196
Camps										
Camp	11.7	23.7	15.7	7.8	1.8	3.9	35.4	100.0	58.9	130
Non camp	13.1	32.9	17.2	12.0	2.0	2.4	20.2	100.0	75.3	3,358
Mother's education										
No education	8.1	50.0	10.9	13.6	2.5	1.1	13.9	100.0	82.6	57
Elementary	18.7	27.1	14.6	14.4	2.1	2.5	20.4	100.0	74.9	202
Preparatory	13.9	32.7	17.9	9.5	1.2	4.1	20.7	100.0	74.0	464
Secondary	11.8	31.4	17.2	12.6	2.3	2.6	22.3	100.0	72.8	1,603
Higher	13.9	34.4	17.6	11.3	2.0	1.6	19.3	100.0	77.2	1,162
Wealth quintile										
Lowest	10.5	34.6	16.6	12.8	1.1	3.9	20.5	100.0	74.6	780
Second	14.8	26.6	20.8	13.0	2.8	1.5	20.5	100.0	75.2	773
Middle	14.7	33.3	17.7	12.1	2.6	2.1	17.5	100.0	77.8	740
Fourth	12.0	33.3	19.1	10.8	0.8	1.4	22.6	100.0	75.2	680
Highest	13.5	36.6	9.3	9.7	3.2	3.5	24.1	100.0	69.1	514
Total	13.1	32.6	17.2	11.9	2.0	2.4	20.8	100.0	74.7	3,488

Note: Figures in parentheses are based on 25-49 unweighted cases.
[1] Includes newborns who received a checkup after the first week.

Table 9.11 Heel prick and hearing test for the newborn

Among last born children in the two years before the survey who ever received postnatal care, the percentage who received a heel prick and the percentage who had a hearing test, according to background characteristics, Jordan 2012

Background characteristic	Among children who ever received postnatal care		Number of births who received postnatal care
	Percentage who received a heel prick	Percentage who had a hearing test	
Mother's age at birth			
<20	49.1	72.3	177
20-34	71.8	80.9	2,424
35-49	70.3	81.0	646
Birth order			
1	71.9	80.0	760
2-3	68.2	81.4	1,257
4-5	72.8	80.6	772
6+	68.6	78.4	457
Place of delivery			
Health facility	70.4	80.7	3,212
Elsewhere	(53.0)	(59.6)	35
Residence			
Urban	69.8	79.3	2,586
Rural	71.8	84.8	662
Region			
Central	70.2	76.7	1,927
North	65.7	85.2	997
South	84.2	88.1	323
Governorate			
Amman	68.2	75.7	1,162
Balqa	75.6	79.8	228
Zarqa	72.0	75.6	444
Madaba	73.8	86.9	93
Irbid	63.3	86.4	594
Mafraq	62.4	84.0	198
Jarash	75.7	87.2	119
Ajloun	76.1	76.9	85
Karak	87.9	86.6	139
Tafiela	90.7	93.0	54
Ma'an	65.0	81.5	60
Aqaba	88.5	93.1	71
Badia			
Badia	63.6	81.8	275
Non Badia	70.8	80.3	2,973
Camps			
Camp	76.6	81.7	118
Non camp	70.0	80.4	3,129
Mother's education			
No education	60.7	81.2	54
Elementary	59.7	75.6	184
Preparatory	67.5	81.5	430
Secondary	68.4	78.5	1,484
Higher	76.1	83.5	1,095
Wealth quintile			
Lowest	67.6	80.5	720
Second	70.3	78.8	717
Middle	70.3	86.4	702
Fourth	70.1	78.4	629
Highest	74.3	76.9	480
Total	70.2	80.5	3,247

Table 9.12 shows that in the two years preceding the survey, 59 percent of newborns who ever had a post-natal checkup received the checkups free of charge. Only 3 percent of births incurred a cost for a postnatal checkup. For 39 percent of births, mothers did not know the cost or the information was missing.

Table 9.12 Cost of postnatal checkup

Percent distribution of live births in the two years preceding the survey by cost of postnatal checkup, according to background characteristics, Jordan 2012

Background characteristic	Cost of postnatal visit				Number of births who received postnatal care
	Free	Paid	Don't know/ missing	Total	
Mother's age at birth					
<20	25.4	3.2	71.4	100.0	177
20-34	60.6	3.0	36.4	100.0	2,424
35-49	60.1	1.4	38.5	100.0	646
Birth order					
1	52.6	2.4	45.1	100.0	760
2-3	57.9	3.8	38.4	100.0	1,257
4-5	64.7	2.6	32.7	100.0	772
6+	60.1	0.7	39.2	100.0	457
Place of delivery					
Health facility	59.1	2.3	38.6	100.0	3,212
Elsewhere	11.2	41.9	46.9	100.0	35
Residence					
Urban	55.5	3.3	41.2	100.0	2,586
Rural	70.6	0.7	28.8	100.0	662
Region					
Central	54.5	4.2	41.4	100.0	1,927
North	60.3	0.8	38.9	100.0	997
South	77.6	0.3	22.2	100.0	323
Governorate					
Amman	49.3	4.2	46.6	100.0	1,162
Balqa	75.2	5.7	19.1	100.0	228
Zarqa	54.9	2.1	43.0	100.0	444
Madaba	67.4	10.0	22.6	100.0	93
Irbid	56.8	0.9	42.2	100.0	594
Mafraq	60.7	0.5	38.9	100.0	198
Jarash	63.1	1.1	35.9	100.0	119
Ajloun	79.5	0.3	20.2	100.0	85
Karak	85.2	0.0	14.8	100.0	139
Tafiela	83.2	0.9	15.9	100.0	54
Ma'an	75.3	0.0	24.7	100.0	60
Aqaba	60.3	0.5	39.2	100.0	71
Badia					
Badia	60.5	0.8	38.7	100.0	275
Non Badia	58.4	2.9	38.7	100.0	2,973
Camps					
Camp	49.8	7.6	42.7	100.0	118
Non camp	58.9	2.5	38.5	100.0	3,129
Mother's education					
No education	58.7	0.0	41.3	100.0	54
Elementary	48.5	1.2	50.3	100.0	184
Preparatory	53.3	2.1	44.6	100.0	430
Secondary	58.7	4.0	37.3	100.0	1,484
Higher	62.2	1.6	36.3	100.0	1,095
Wealth quintile					
Lowest	62.0	2.5	35.5	100.0	720
Second	63.2	1.1	35.6	100.0	717
Middle	56.7	3.5	39.7	100.0	702
Fourth	54.6	3.9	41.5	100.0	629
Highest	54.3	2.7	42.9	100.0	480
Total	58.6	2.7	38.7	100.0	3,247

9.4 PROBLEMS IN ACCESSING HEALTH CARE

Many different factors can prevent women from getting medical advice or treatment for themselves. In the 2012 JPFHS, women were asked about various problems they face in accessing health care. Table 9.13 shows that 62 percent of women reported having at least one problem in accessing health care for themselves.

Table 9.13 Problems in accessing health care

Percentage of ever-married women age 15-49 who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem, according to background characteristics, Jordan 2012

	Problems in accessing health care								
Background characteristic	Knowing where to go	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Using means of trans-portation	Not wanting to go alone	No female provider	At least one problem accessing health care	Number of women
Age									
15-19	21.5	10.4	24.9	28.6	42.0	56.4	45.5	79.0	278
20-34	18.2	9.1	21.2	28.3	30.8	33.4	31.5	64.6	5,350
35-49	18.5	5.9	23.7	24.6	25.9	23.2	26.9	58.1	5,724
Number of living children									
0	17.3	6.9	17.3	26.6	27.5	34.0	25.5	59.2	1,107
1-2	19.3	8.9	19.1	25.4	31.1	33.2	31.5	63.8	3,031
3-4	17.6	7.0	22.6	26.2	27.1	27.1	27.3	59.5	3,795
5+	19.0	7.1	27.3	27.5	28.5	25.3	31.6	63.0	3,419
Marital status									
Married	18.5	7.6	22.1	26.5	28.7	29.1	29.9	61.8	10,801
Divorced/separated/widowed	17.4	5.9	30.8	25.5	27.6	23.1	21.3	58.2	551
Residence									
Urban	19.0	7.6	22.1	25.0	27.2	28.7	30.1	61.4	9,458
Rural	15.8	7.4	24.6	33.7	35.7	29.6	26.5	63.0	1,894
Region									
Central	20.3	8.4	23.4	26.1	28.7	29.0	31.3	63.1	7,181
North	17.4	6.0	21.1	26.7	27.9	29.8	27.4	61.0	3,120
South	9.2	5.9	21.2	27.5	30.3	25.0	23.8	53.6	1,051
Governorate									
Amman	20.3	8.3	23.7	26.3	30.1	30.7	31.3	64.4	4,454
Balqa	15.6	6.8	22.8	24.7	27.3	22.4	28.8	56.2	765
Zarqa	22.8	8.9	23.4	25.8	24.8	26.6	29.8	61.5	1,659
Madaba	17.3	10.9	20.0	28.9	32.6	33.1	44.4	71.6	303
Irbid	19.9	6.6	20.7	25.9	26.2	30.1	28.5	62.6	1,986
Mafraq	10.9	4.2	23.1	25.5	28.6	29.2	22.9	54.0	562
Jarash	11.3	5.3	22.8	24.6	27.0	28.8	23.8	56.1	320
Ajloun	19.4	6.8	17.0	37.9	41.0	30.7	33.7	69.8	251
Karak	7.1	5.8	22.1	28.2	32.7	23.2	23.9	53.2	441
Tafiela	14.2	7.0	20.5	31.6	32.8	27.8	26.5	60.3	167
Ma'an	12.3	5.3	27.6	38.5	40.3	38.0	26.1	68.0	178
Aqaba	7.4	5.8	16.0	16.3	17.8	17.4	20.5	40.3	265
Badia									
Badia	15.0	10.0	30.0	36.7	39.3	37.7	29.6	64.5	705
Non Badia	18.7	7.4	22.1	25.7	27.9	28.2	29.5	61.5	10,647
Camps									
Camp	21.8	10.9	34.4	25.2	30.1	28.5	35.1	68.1	413
Non camp	18.3	7.4	22.1	26.5	28.6	28.8	29.3	61.4	10,939
Education									
No education	17.2	15.5	37.3	31.6	33.9	32.4	25.4	61.4	267
Elementary	22.2	7.9	40.6	34.4	34.5	32.8	31.7	68.8	860
Preparatory	22.2	12.6	34.0	30.7	33.1	31.6	33.7	69.8	1,677
Secondary	18.0	7.8	21.4	26.0	29.7	30.4	30.2	63.3	5,073
Higher	16.5	4.0	13.1	22.6	23.0	24.0	26.3	53.6	3,475
Wealth quintile									
Lowest	21.3	11.2	40.1	34.3	37.3	33.8	34.2	71.5	2,137
Second	16.7	7.4	26.8	29.7	33.3	31.0	30.2	64.4	2,343
Middle	17.4	8.0	19.6	25.9	26.8	29.7	31.1	62.9	2,461
Fourth	18.9	7.4	16.4	24.5	26.9	28.2	28.9	59.0	2,336
Highest	18.1	3.5	10.2	17.3	18.5	21.0	22.7	49.9	2,076
Total	18.4	7.5	22.5	26.4	28.6	28.8	29.5	61.7	11,352

Three in ten women were concerned that there might not be a female provider at the health facility, did not want to go alone, or were concerned about having to take transport to access care. One in four women was concerned about the distance to the health facility or not being able to get money for treatment, one in five women was concerned about not knowing where to go, and fewer than one in ten women were concerned about not getting permission to go to a health facility. Younger women (age 15-19), women living in the Central region, women in Madaba, women living in camp areas, women with elementary and preparatory education, and those in the lowest wealth quintile reported more frequently than others that they have at least one problem in accessing health care. As expected, rural women were more likely than urban women to have problems related to distance to the health facility and need for transportation.

9.5 PREMARITAL MEDICAL EXAMINATIONS

Premarital examinations, which normally include genetic testing (given the high proportion of consanguineous unions in Jordan), are considered an important aspect of the process of forming a marital union in Jordan; since 2004, these examinations have been required by law for all marriages. The lack of facilities providing this type of service and the desire to avoid premarital medical examinations are likely to result in increases in poor health outcomes for children if their parents are too closely related to one another by blood.

Table 9.14 indicates that only two in five ever-married women (40 percent) mentioned that they or their husbands underwent premarital medical examinations. The table also indicates that the percentage of women who said that they or their husbands underwent a premarital examination increases with women's age at first marriage from 31 percent among women who were married before age 20 to 78 percent among women married at age 35 and older. Premarital examinations are slightly more common among women in the Central region, in Madaba, and in non camp areas. There is a direct relationship between having a premarital examination and education, with the percentage rising from 21 percent among women with no education to 53 percent among women with higher education. Premarital examinations are least common among women in the lowest wealth quintile.

Table 9.14 Premarital medical exams by background characteristics

Percentage of ever-married women age 15-49 whose husbands had a premarital medical exam and who had a premarital medical exam themselves, according to background characteristics, Jordan 2012

Background characteristic	Husband	Women	Number of women
	Yes	Yes	
Age at first marriage			
< 20	31.3	31.0	4,670
20-24	43.9	42.8	4,684
25-29	47.6	47.2	1,428
30-34	63.7	64.3	382
35+	77.9	78.1	188
Residence			
Urban	40.8	40.2	9,458
Rural	38.3	37.9	1,894
Region			
Central	41.4	40.5	7,181
North	39.5	39.4	3,120
South	36.1	36.0	1,051
Governorate			
Amman	42.0	40.5	4,454
Balqa	40.9	40.6	765
Zarqa	39.9	39.9	1,659
Madaba	42.6	43.2	303
Irbid	40.5	40.6	1,986
Mafraq	36.8	36.8	562
Jarash	39.7	39.2	320
Ajloun	37.0	36.7	251
Karak	36.3	36.3	441
Tafiela	41.0	41.0	167
Ma'an	32.3	32.3	178
Aqaba	35.1	34.9	265
Badia			
Badia	38.3	37.6	705
Non Badia	40.5	39.9	10,647
Camps			
Camp	33.3	33.0	413
Non camp	40.7	40.1	10,939
Education			
No education	20.9	20.9	267
Elementary	26.2	25.6	860
Preparatory	28.6	28.7	1,677
Secondary	38.4	37.6	5,073
Higher	54.0	53.4	3,475
Wealth quintile			
Lowest	35.2	34.7	2,137
Second	42.0	40.8	2,343
Middle	41.2	40.3	2,461
Fourth	40.6	40.7	2,336
Highest	42.8	42.2	2,076
Total	40.4	39.8	11,352

9.6 CANCER SCREENING

Breast self-examination (BSE) is a very important part of every adult woman's personal health regimen. BSE should be performed monthly beginning at age 20 and should continue each month throughout a woman's lifetime. In addition to BSE, adult women should receive regular physician-performed clinical breast exams. Table 9.15 shows the percentage of women who have had a breast cancer self-exam or an exam by a health specialist.

About two-fifths of women (39 percent) had a breast cancer examination in the 12 months preceding the survey, either by a self-exam (31 percent) or a clinical exam (19 percent). This has not changed from data collected in the 2007 JPFHS. Older women (age 35-49 years); those who have three children or more; women who live in urban areas, in the North region, in Jarash, and in the non Badia and camp areas; women with higher education; and those in the highest wealth quintile are more likely to have had a breast cancer self-exam or an examination by a health professional than other women.

The Pap smear or Pap test checks for changes in the cells of the cervix (lower part of the uterus/womb that opens into the birth canal) that show cervical cancer or conditions that may develop into cervical cancer. The pre-cancerous changes are usually caused by sexually transmitted human papillomaviruses (HPV). The test aims to detect and prevent the progression of HPV-induced cervical cancer and other abnormalities in the female genital tract. If detected early, cervical cancer can be cured. All women age 21 or older or sexually active should have an annual Pap smear. During the survey, women were asked whether they have ever heard about the Pap smear for detecting cervical cancer. They were also asked if they ever had a Pap smear.

Table 9.15 shows that although 74 percent of women have heard about the Pap smear for detecting cervical cancer, only 19 percent of women have ever undergone this test.

As with breast cancer exams, older women; women who have three children or more; women residing in urban areas, in the Central and North regions, and in the non Badia and non camp areas; women with higher education; and those in the highest wealth quintile are more likely to have had a Pap smear than other women.

Table 9.15 Breast cancer exam and Pap smear

Percentage of ever-married women age 15-49 who had a breast cancer self-exam or an exam by a health specialist to detect breast cancer in the 12 months preceding the survey, percentage who have heard of Pap smear, and percentage who ever had a Pap smear, according to background characteristics, Jordan 2012

Background characteristic	Had a breast cancer self-exam in past 12 months	Had a breast cancer exam by a specialist in past 12 months	Had a breast cancer self-exam or exam by a specialist in past 12 months	Has heard of Pap smear	Ever had a Pap smear	Number of women
Age						
15-19	9.3	6.9	14.5	34.6	2.7	278
20-34	26.8	16.2	34.1	68.5	11.0	5,350
35-49	35.8	22.3	44.3	81.6	26.8	5,724
Number of living children						
0	23.8	16.2	29.8	61.2	10.9	1,107
1-2	27.7	15.8	36.0	68.3	10.9	3,031
3-4	32.8	21.1	41.4	78.2	22.3	3,795
5+	33.8	20.4	41.3	79.4	24.4	3,419
Marital status						
Married	31.3	19.0	39.1	74.7	18.9	10,801
Divorced/separated/widowed	23.7	18.2	33.1	65.2	15.5	551
Residence						
Urban	31.6	19.8	39.9	75.4	19.7	9,458
Rural	27.2	15.0	33.2	68.6	14.4	1,894
Region						
Central	30.3	19.6	38.6	74.8	20.3	7,181
North	33.6	19.6	41.5	76.7	18.7	3,120
South	27.2	13.3	31.8	63.4	8.6	1,051
Governorate						
Amman	29.5	21.4	38.7	75.0	22.6	4,454
Balqa	27.8	15.8	34.1	68.9	13.6	765
Zarqa	34.0	16.6	41.2	76.8	17.3	1,659
Madaba	27.8	18.2	35.2	76.0	19.6	303
Irbid	34.5	21.2	43.2	77.9	20.0	1,986
Mafraq	28.7	14.5	34.3	68.8	12.9	562
Jarash	37.8	22.5	47.3	76.7	22.2	320
Ajloun	31.7	14.6	36.7	85.2	17.2	251
Karak	24.6	12.8	28.7	61.2	6.4	441
Tafiela	22.4	9.7	25.8	63.0	6.7	167
Ma'an	26.4	10.0	29.8	57.9	7.2	178
Aqaba	35.0	18.6	41.8	70.8	14.5	265
Badia						
Badia	21.6	11.0	27.0	59.5	10.6	705
Non Badia	31.5	19.5	39.6	75.3	19.3	10,647
Camps						
Camp	35.4	23.4	44.4	71.4	14.1	413
Non camp	30.7	18.8	38.6	74.4	19.0	10,939
Education						
No education	20.3	13.9	24.9	42.2	13.1	267
Elementary	20.5	13.4	25.2	59.5	13.2	860
Preparatory	26.2	17.4	34.4	68.6	17.5	1,677
Secondary	31.3	19.3	39.0	75.7	18.7	5,073
Higher	36.0	21.2	45.0	81.0	21.3	3,475
Wealth quintile						
Lowest	23.5	12.7	28.5	59.1	10.6	2,137
Second	26.1	16.9	34.7	70.3	13.1	2,343
Middle	33.6	20.9	40.9	76.1	15.3	2,461
Fourth	34.2	19.2	41.9	78.1	21.4	2,336
Highest	36.9	25.4	47.9	88.0	34.8	2,076
Total	30.9	19.0	38.8	74.3	18.8	11,352

CHILD HEALTH 10

Key Findings

- Ninety-three percent of Jordanian children age 12-23 months are fully immunized. This is a 7 percent increase over the last five years.
- Seven percent of children under age five showed symptoms of acute respiratory infection in the two weeks before the survey, and more than three-quarters of them were taken to a health facility or provider for advice or treatment.
- Eighteen percent of children under five had fever in the two weeks before the survey, and two-thirds of them were taken to a health facility or provider for advice or treatment.
- Sixteen percent of children under age five had diarrhea in the two weeks before the survey, and 56 percent were taken to a health facility or provider for advice or treatment.

This chapter presents findings on several areas of importance to child health: characteristics of the neonate (birth weight), vaccination status of children, and the prevalence and treatment of childhood illnesses, namely acute respiratory infection (ARI), fever, and diarrhea.

10.1 BIRTH WEIGHT

Birth weight is an important indicator of a child's vulnerability to the risk of childhood illness and chances of survival. Children whose birth weight is less than 2.5 kilograms are considered to have a higher than average risk of early childhood death. In the 2012 JPFHS, for all births during the five years preceding the survey, mothers were asked to report the weight in kilograms if the baby had been weighed after delivery. Table 10.1 shows that nearly all babies were weighed at birth. Among those births for which the baby's weight was reported, 14 percent weighed less than 2.5 kilograms at birth. In addition to the birth weight, mothers were also asked about the size of the baby at birth. This information is a useful proxy for birth weight, particularly in countries where a sizeable proportion of infants are not weighed at birth. Six percent of births were reported by mothers as being very small, 14 percent smaller than average, and 80 percent as average or larger.

Births to mothers younger than 20 years (21 percent), first-order births (16 percent), and births to women who smoke (20 percent) are more likely to weigh less than 2.5 kg at birth than births in the other categories. By governorate, the proportion of low birth weight babies varies from 12 percent in Ajloun to 17 percent in Tafiela. Low birth weight is also associated with mother's education, ranging from 19 percent of births when the mother has no education to 11 percent for mothers with higher education. A similar pattern is seen with wealth quintile, where low birth weight varies from 16 percent of births in the poorest households to 12 percent of births in the middle quintile.

Table 10.1 Child's size and weight at birth

Percent distribution of live births in the five years preceding the survey by mother's estimate of baby's size at birth, percentage of live births in the five years preceding the survey that have a reported birth weight, and among live births in the five years preceding the survey with a reported birth weight, percentage less than 2.5 kg, according to background characteristics, Jordan 2012

	Percent distribution of all live births by size of child at birth					Percentage of all births that have a reported birth weight[1]	Number of births	Births with a reported birth weight[1]	
Background characteristic	Very small	Smaller than average	Average or larger	Don't know/ missing	Total			Percentage less than 2.5 kg	Number of births
Mother's age at birth									
<20	10.0	14.6	75.5	0.0	100.0	99.5	559	21.1	556
20-34	5.4	14.0	80.6	0.1	100.0	98.9	7,535	13.2	7,453
35-49	6.0	13.3	80.6	0.1	100.0	99.2	1,739	14.1	1,725
Birth order									
1	5.7	14.9	79.3	0.1	100.0	99.1	2,354	16.1	2,332
2-3	5.7	14.5	79.8	0.0	100.0	98.9	3,809	13.5	3,767
4-5	4.8	12.0	83.1	0.1	100.0	99.4	2,368	12.4	2,355
6+	7.9	13.7	78.3	0.1	100.0	98.4	1,302	13.5	1,280
Mother's smoking status									
Smokes cigarettes/ tobacco	9.3	18.0	72.5	0.1	100.0	98.5	721	19.7	711
Does not smoke	5.5	13.6	80.9	0.1	100.0	99.0	9,112	13.4	9,023
Residence									
Urban	5.9	14.0	80.0	0.0	100.0	98.9	8,010	13.9	7,926
Rural	5.1	13.4	81.3	0.1	100.0	99.2	1,823	13.5	1,808
Region									
Central	5.8	13.7	80.5	0.0	100.0	98.9	6,014	14.2	5,950
North	5.6	14.6	79.7	0.1	100.0	99.2	2,867	12.7	2,844
South	6.1	13.1	80.5	0.3	100.0	98.8	952	14.8	941
Governorate									
Amman	7.2	13.4	79.4	0.0	100.0	98.8	3,622	15.2	3,578
Balqa	4.6	13.2	82.2	0.0	100.0	99.6	703	12.7	701
Zarqa	3.3	14.6	82.1	0.0	100.0	98.9	1,412	12.6	1,397
Madaba	3.5	14.2	82.2	0.1	100.0	99.3	276	14.5	274
Irbid	5.4	15.3	79.3	0.0	100.0	99.5	1,729	12.7	1,720
Mafraq	5.9	13.3	80.5	0.3	100.0	98.3	574	12.8	564
Jarash	6.5	13.3	80.1	0.1	100.0	98.6	333	12.6	328
Ajloun	4.7	15.2	80.0	0.1	100.0	99.7	232	12.4	231
Karak	5.7	11.1	83.0	0.2	100.0	99.0	410	13.1	406
Tafiela	7.7	13.8	78.3	0.2	100.0	99.0	157	17.2	156
Ma'an	4.1	17.4	78.3	0.1	100.0	97.7	170	15.6	166
Aqaba	7.4	12.8	79.3	0.5	100.0	99.0	215	15.6	213
Badia									
Badia	5.7	14.6	79.4	0.3	100.0	97.9	769	15.0	753
Non Badia	5.8	13.8	80.4	0.0	100.0	99.1	9,064	13.8	8,981
Camps									
Camp	7.2	12.9	79.8	0.1	100.0	99.6	388	15.1	386
Non camp	5.7	13.9	80.3	0.1	100.0	99.0	9,446	13.8	9,348
Mother's education									
No education	6.6	18.4	74.5	0.6	100.0	92.0	207	18.5	191
Elementary	10.8	14.7	74.4	0.2	100.0	98.2	628	17.8	617
Preparatory	5.6	14.1	80.2	0.0	100.0	99.3	1,308	15.2	1,298
Secondary	5.8	14.6	79.5	0.1	100.0	98.8	4,599	14.8	4,543
Higher	4.7	12.3	83.0	0.0	100.0	99.8	3,091	10.8	3,085
Wealth quintile									
Lowest	6.3	15.5	78.0	0.2	100.0	97.3	2,292	15.8	2,231
Second	6.1	14.1	79.8	0.0	100.0	99.4	2,179	14.1	2,166
Middle	3.8	13.6	82.6	0.0	100.0	99.4	2,115	12.2	2,103
Fourth	6.5	10.6	82.9	0.0	100.0	99.3	1,893	12.9	1,880
Highest	6.4	16.0	77.6	0.0	100.0	100.0	1,354	14.1	1,354
Total	5.8	13.9	80.3	0.1	100.0	99.0	9,833	13.8	9,734

[1] Based on either a written record or the mother's recall.

10.2 VACCINATION COVERAGE

Universal immunization of children against six vaccine-preventable diseases (tuberculosis, diphtheria, whooping cough, tetanus, polio, and measles) is a crucial component in any strategy to reduce infant and child mortality. Differences in vaccination coverage among subgroups of the population are of great assistance for program planning and targeting resources to areas most in need. Additionally, information on immunization coverage is important for the monitoring and evaluation of the Expanded Program on Immunization (EPI).

Jordan joined UNICEF's "Child Survival Revolution" in 1980. Since then, the Ministry of Health has made the vaccination card a requirement for entry into the school system. The card is issued through various service providers at the time of a child's first vaccination. Upon registering at the Maternal and Child Health Center, each child receives a health card that shows vaccinations and the child's height and weight. The 2012 JPFHS collected information on vaccination coverage for all living children born in the five years preceding the survey. According to the guidelines developed by the World Health Organization (WHO), children are considered fully vaccinated when they have received a vaccination against tuberculosis (BCG), three doses of DPT vaccine (against diphtheria, pertussis, and tetanus), three doses of polio vaccine, and one dose of measles vaccination by age 12 months. BCG should be given at birth or at first clinical contact; DPT and polio require three vaccinations at approximately age four, eight, and 12 weeks; and measles should be given at age nine months.

Information on vaccination coverage was collected in two ways: from vaccination cards shown to the interviewer and from mothers' verbal reports. If the child's vaccination card was available, the interviewer copied the vaccination dates from the card directly onto the questionnaire. When there was no vaccination card for the child, the respondent was asked to recall the vaccines given to her child. Table 10.2 and Figure 10.1 show the percentage of children age 12-23 months who have received various vaccinations by source of information, that is, whether from a vaccination card or mother's report. Children age 12-23 months are the youngest cohort of children who have reached the age by which they should be fully vaccinated.

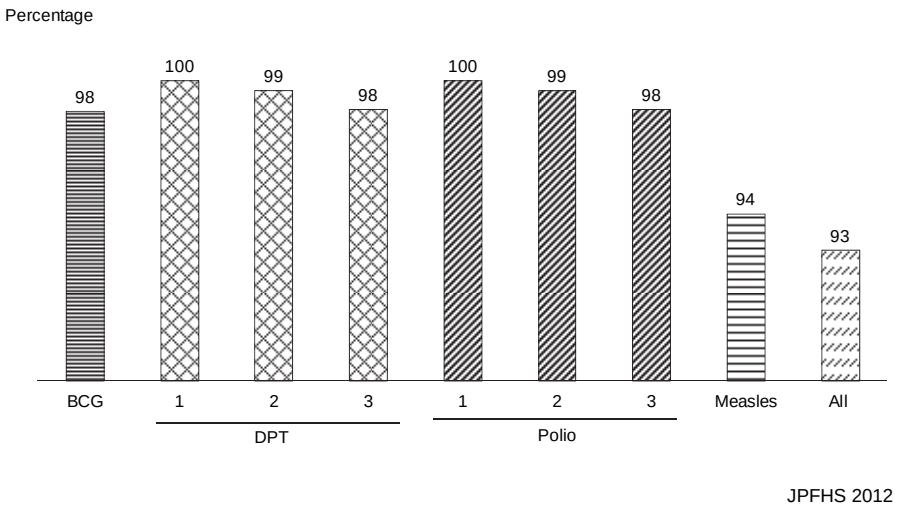
Table 10.2 Vaccinations by source of information

Percentage of children age 12-23 months who received specific vaccines at any time before the survey, by source of information (vaccination card or mother's report), and percentage vaccinated by age 12 months, Jordan 2012

Source of information	BCG	DPT 1	DPT 2	DPT 3	Polio 1	Polio 2	Polio 3	Measles	All basic vaccinations[1]	No vaccinations	Number of children
Vaccinated at any time before survey											
Vaccination card	79.0	80.3	80.1	79.4	80.3	80.1	79.4	77.1	75.7	0.0	1,560
Mother's report	19.3	19.2	19.0	19.0	19.2	19.0	19.0	17.4	17.3	0.3	381
Either source	98.3	99.5	99.1	98.4	99.5	99.1	98.4	94.4	93.0	0.3	1,941
Vaccinated by age 12 months[2]	97.9	99.3	98.7	97.9	99.3	98.7	97.9	85.7	85.1	0.5	1,941

[1] BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth).
[2] For children whose information is based on the mother's report, the proportion of vaccinations given during the first year of life is assumed to be the same as for children with a written record of vaccination.

Figure 10.1
Percentage of children age 12-23 months with specific vaccinations



Ninety-three percent of children were fully immunized at the time of the survey. Ninety-four percent of children are vaccinated against measles; this figure includes children who have received either the measles vaccine or the MMR vaccine, a combination vaccine against measles, mumps, and rubella.

Coverage for the first and second doses of DPT is slightly higher (about 99 percent for both) than that for the third dose of DPT (98 percent). DPT and polio vaccines are often administered at the same time so they have similar coverage. The dropout between the first and third doses of the polio vaccine is similar to that between the first and third doses of DPT.

Table 10.3 shows the vaccination coverage by background characteristics among children age 12-23 months. Vaccination coverage is high regardless of background characteristic, an indication of the success of the immunization program in reaching out to all population subgroups. However, the proportion of vaccination cards seen by the interviewer (80 percent) is lower compared to data from the 2007 JPFHS (90 percent).

Vaccination coverage is lower among children of birth order six and higher than children of other birth orders. Vaccination coverage is also lower among children in the South region, the Badia areas, and non camp areas than for other children. Vaccination coverage varies from a low of 79 percent of children in Ma'an to a high of 96 percent in Jarash and Zarqa.

Table 10.3 also shows variations according to the level of education of the mother. Children of mothers with no education show relatively lower vaccination coverage (70 percent) than children of mothers with preparatory or higher education (94-95 percent). There are also differences in vaccination coverage by household wealth quintile. Children in the poorest households are least likely to be fully vaccinated (89 percent), while children living in households in the middle wealth quintile are most likely to be fully vaccinated (97 percent).

Table 10.3 Basic vaccinations of children age 12-23 months by background characteristics

Percentage of children age 12-23 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), and percentage with a vaccination card, by background characteristics, Jordan 2012

Background characteristic	BCG	DPT 1	DPT 2	DPT 3	Polio 1	Polio 2	Polio 3	Measles	All basic vaccinations[1]	No vaccinations	Percentage with a vaccination card seen	Number of children
Sex												
Male	97.6	99.3	99.1	98.5	99.3	99.1	98.5	94.9	92.7	0.4	80.0	1,030
Female	99.1	99.7	99.2	98.3	99.7	99.2	98.3	93.9	93.3	0.2	80.8	910
Birth order												
1	97.8	99.8	99.7	99.4	99.8	99.7	99.4	98.0	95.9	0.1	84.6	493
2-3	98.2	99.8	99.2	98.9	99.8	99.2	98.9	92.9	91.4	0.2	79.2	733
4-5	99.4	99.3	98.8	97.3	99.3	98.8	97.3	95.9	95.6	0.3	80.6	449
6+	97.4	98.6	98.1	96.8	98.6	98.1	97.0	89.5	87.5	1.3	75.4	266
Residence												
Urban	98.5	99.5	99.3	98.6	99.5	99.3	98.7	94.3	93.0	0.3	80.0	1,538
Rural	97.4	99.6	98.4	97.4	99.6	98.4	97.4	95.1	92.8	0.2	81.8	403
Region												
Central	98.4	99.8	99.4	99.2	99.8	99.4	99.2	94.6	93.0	0.1	79.8	1,190
North	99.2	99.9	99.5	98.1	99.9	99.5	98.2	95.2	94.5	0.1	83.4	562
South	94.6	96.6	95.9	94.0	96.6	95.9	94.0	91.0	88.6	2.6	75.3	189
Governorate												
Amman	97.8	100.0	99.6	99.6	100.0	99.6	99.6	93.8	91.5	0.0	79.5	730
Balqa	98.5	99.6	99.0	97.9	99.6	99.0	97.9	96.6	94.8	0.4	85.0	145
Zarqa	100.0	99.4	99.4	99.2	99.4	99.4	99.2	96.3	96.3	0.0	76.0	258
Madaba	99.4	99.4	97.5	96.6	99.4	97.5	96.6	93.2	91.6	0.6	87.2	57
Irbid	100.0	100.0	100.0	99.2	100.0	100.0	99.2	95.6	95.6	0.0	86.7	332
Mafraq	96.9	99.6	97.8	94.3	99.6	97.8	94.8	93.2	90.0	0.4	80.2	116
Jarash	98.5	100.0	100.0	99.4	100.0	100.0	99.4	96.6	96.3	0.0	69.9	69
Ajloun	100.0	100.0	100.0	98.0	100.0	100.0	98.0	94.6	94.6	0.0	87.0	45
Karak	97.4	99.5	99.0	97.8	99.5	99.0	97.8	93.2	90.4	0.0	80.8	80
Tafiela	90.7	93.8	93.8	93.8	93.8	93.8	93.8	92.2	88.0	4.2	71.1	29
Ma'an	88.8	90.4	88.9	83.5	90.4	88.9	83.5	80.0	78.8	9.0	76.2	36
Aqaba	97.1	97.9	97.4	95.8	97.9	97.4	95.8	95.3	93.7	1.1	67.4	44
Badia												
Badia	94.8	97.0	94.8	91.3	97.0	94.8	91.3	88.1	85.7	2.6	80.4	169
Non Badia	98.6	99.8	99.5	99.1	99.8	99.5	99.1	95.0	93.7	0.1	80.4	1,772
Camps												
Camp	99.2	99.2	99.2	99.2	99.2	99.2	99.2	97.6	97.6	0.8	85.7	68
Non camp	98.2	99.5	99.1	98.3	99.5	99.1	98.4	94.3	92.8	0.3	80.2	1,873
Mother's education												
No education	91.4	90.4	87.9	77.1	90.4	87.9	77.1	74.8	69.5	5.6	76.3	37
Elementary	95.6	97.9	96.6	94.3	97.9	96.6	94.8	85.4	82.8	2.1	64.0	114
Preparatory	99.7	99.8	99.0	97.9	99.8	99.0	97.9	95.1	94.7	0.2	80.3	288
Secondary	99.5	99.9	99.6	99.2	99.9	99.6	99.2	94.8	94.4	0.0	81.5	855
Higher	96.9	99.7	99.6	99.4	99.7	99.6	99.4	96.4	93.5	0.1	82.1	647
Wealth quintile												
Lowest	98.1	98.4	97.6	96.0	98.4	97.6	96.1	90.7	89.3	1.1	73.0	479
Second	99.0	99.9	99.6	99.1	99.9	99.6	99.1	94.3	93.7	0.1	79.7	415
Middle	99.6	100.0	99.5	99.2	100.0	99.5	99.2	97.2	97.1	0.0	84.3	377
Fourth	99.3	99.8	99.5	99.3	99.8	99.5	99.3	94.9	94.3	0.1	88.0	369
Highest	94.6	100.0	100.0	99.1	100.0	100.0	99.1	96.5	91.1	0.0	78.9	301
Total	98.3	99.5	99.1	98.4	99.5	99.1	98.4	94.4	93.0	0.3	80.4	1,941

[1] BCG, measles, and three doses each of DPT and polio vaccine (excluding polio vaccine given at birth).

10.2.1 Additional Doses of Polio and DPT

Table 10.4 shows the percentage of children age 24-59 months who received additional doses of polio and DPT vaccines at any time before the survey.

In addition to the three polio doses given at one-month intervals, children in Jordan receive a fourth dose of polio at age nine months and a booster dose at age 18 months. There are no significant differences observed in polio vaccination coverage for three doses of polio (more than 99 percent of children age 24-59 months). However, there is a slight decrease between the proportion of children vaccinated with the fourth dose of polio (98 percent) and those vaccinated with the booster (96 percent).

Table 10.4 Basic and booster vaccinations of children 24-59 months by background characteristics

Percentage of children age 24-59 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), and percentage with a vaccination card, by background characteristics, Jordan 2012

Background characteristic	Polio 1	Polio 2	Polio 3	Polio 4	Polio booster	DPT 1	DPT 2	DPT 3	DPT booster	Number of children
Sex										
Male	99.4	99.1	98.7	98.1	95.7	99.3	99.0	98.6	96.0	3,022
Female	99.5	99.3	99.2	98.5	96.6	99.5	99.3	99.2	96.9	2,910
Birth order										
1	99.7	99.5	99.4	98.8	97.5	99.5	99.3	99.3	97.4	1,383
2-3	99.5	99.4	99.2	98.8	96.7	99.5	99.3	99.2	97.1	2,306
4-5	99.7	99.3	98.9	97.9	94.8	99.7	99.3	98.8	95.4	1,456
6+	98.4	98.0	97.6	96.8	94.5	98.3	98.0	97.4	94.9	787
Residence										
Urban	99.4	99.2	99.1	98.4	96.3	99.4	99.2	99.0	96.6	4,890
Rural	99.6	99.0	98.4	97.8	95.5	99.5	98.8	98.3	95.6	1,041
Region										
Central	99.6	99.6	99.4	98.8	96.7	99.6	99.6	99.4	97.0	3,637
North	99.2	98.9	98.6	98.2	96.6	99.1	98.6	98.4	96.9	1,718
South	98.8	98.0	97.1	95.3	91.4	98.8	97.9	96.7	91.9	577
Governorate										
Amman	99.7	99.6	99.4	98.9	96.7	99.7	99.6	99.4	97.1	2,166
Balqa	100.0	100.0	100.0	98.7	96.4	100.0	100.0	100.0	97.0	413
Zarqa	99.2	99.2	99.2	99.0	97.2	99.2	99.2	99.2	97.0	895
Madaba	99.8	99.4	99.2	97.9	95.1	99.8	99.4	99.2	96.2	163
Irbid	99.0	98.8	98.8	98.8	97.3	98.8	98.6	98.6	97.6	1,041
Mafraq	99.4	98.4	97.2	96.2	94.5	99.2	98.1	97.0	94.6	342
Jarash	99.5	99.2	99.2	98.7	96.4	99.5	99.2	99.2	96.7	195
Ajloun	99.8	99.7	99.5	98.2	96.2	99.6	99.4	99.3	96.7	139
Karak	99.0	98.7	97.5	96.3	92.2	99.0	98.7	97.5	92.9	248
Tafiela	99.8	99.4	98.8	97.0	95.3	99.8	99.4	98.3	95.4	98
Ma'an	96.4	93.1	92.4	88.8	81.3	96.4	92.9	90.5	81.8	96
Aqaba	99.2	99.1	98.5	96.8	94.3	99.2	99.1	98.5	94.7	135
Badia										
Badia	98.7	97.0	95.8	93.9	89.9	98.5	96.7	95.2	89.7	439
Non Badia	99.5	99.4	99.2	98.7	96.6	99.4	99.3	99.2	97.0	5,493
Camps										
Camp	99.1	99.1	99.0	98.6	96.5	99.1	99.1	98.8	97.0	239
Non camp	99.4	99.2	99.0	98.3	96.1	99.4	99.1	98.9	96.4	5,693
Mother's education										
No education	96.4	91.4	89.0	86.8	83.6	96.4	91.1	88.2	84.3	143
Elementary	98.0	97.6	96.0	94.5	91.8	97.8	97.5	95.5	91.9	405
Preparatory	99.6	99.6	99.5	98.5	96.3	99.3	99.2	99.2	96.3	797
Secondary	99.7	99.5	99.4	98.9	96.4	99.7	99.5	99.4	97.0	2,790
Higher	99.6	99.5	99.5	99.1	97.6	99.6	99.5	99.5	97.6	1,797
Wealth quintile										
Lowest	98.9	98.3	97.4	96.8	94.3	98.7	98.0	97.1	94.3	1,380
Second	99.8	99.7	99.5	98.9	97.0	99.8	99.7	99.5	97.6	1,295
Middle	99.4	99.3	99.3	99.0	96.7	99.4	99.3	99.2	97.6	1,299
Fourth	99.6	99.4	99.3	98.7	95.9	99.6	99.4	99.3	96.2	1,164
Highest	99.6	99.6	99.6	98.4	97.3	99.6	99.6	99.6	96.8	794
Total	99.4	99.2	99.0	98.3	96.1	99.4	99.1	98.9	96.5	5,932

Coverage of the three doses of DPT in children age 24-59 months is high as well (more than 99 percent). As is the case for polio, coverage for the DPT booster (97 percent), usually given at 18 months, is slightly lower than DPT 3 (99 percent).

10.2.2 Additional Vaccinations

Hepatitis B

Hepatitis B is a viral disease that primarily attacks the liver. Primary vaccination consists of three intramuscular injections: the first dose is administered at the end of the second month of life, and the second and third doses are given between the third and fourth month. The percentage of children vaccinated against hepatitis B is shown in Table 10.5. Ninety-nine percent of children received three doses of hepatitis vaccination. There is very little variation in vaccination coverage according to background characteristics.

Table 10.5 Additional vaccinations of children 24-59 months by background characteristics

Percentage of children age 24-59 months who received specific vaccines at any time before the survey (according to a vaccination card or the mother's report), and percentage with a vaccination card, by background characteristics, Jordan 2012

Background characteristic	Hepatitis B 1	Hepatitis B 2	Hepatitis B 3	Hib 1	Hib 2	Hib 3	Measles	MMR	Percentage with a vaccination card seen	Number of children
Sex										
Male	99.3	98.8	98.2	99.3	99.0	98.5	98.3	96.0	65.4	3,022
Female	99.5	99.3	98.8	99.5	99.3	99.0	98.1	97.2	67.2	2,910
Birth order										
1	99.7	99.5	99.1	99.6	99.5	99.1	98.9	98.2	65.6	1,383
2-3	99.5	99.0	98.8	99.5	99.3	98.9	98.2	97.3	66.8	2,306
4-5	99.7	99.3	98.0	99.6	99.2	98.7	98.4	95.5	68.0	1,456
6+	98.3	97.9	97.4	98.3	97.9	97.4	96.9	93.7	62.9	787
Residence										
Urban	99.4	99.1	98.5	99.4	99.2	98.8	98.4	96.8	65.5	4,890
Rural	99.5	98.8	98.3	99.5	98.8	98.3	97.5	95.6	70.2	1,041
Region										
Central	99.6	99.3	98.8	99.6	99.5	99.1	98.9	97.2	66.0	3,637
North	99.2	98.8	98.5	99.2	98.7	98.5	97.9	97.0	68.5	1,718
South	98.8	97.9	96.6	98.8	97.9	96.8	94.9	91.5	61.7	577
Governorate										
Amman	99.7	99.3	98.5	99.7	99.6	98.9	98.6	97.0	64.8	2,166
Balqa	100.0	100.0	99.9	100.0	100.0	100.0	100.0	97.8	65.1	413
Zarqa	99.2	99.2	98.9	99.0	99.0	99.0	99.2	97.6	68.5	895
Madaba	99.8	99.4	99.2	99.8	99.4	99.2	98.3	96.4	70.7	163
Irbid	99.0	98.8	98.8	99.0	98.8	98.8	98.3	97.7	69.5	1,041
Mafraq	99.1	97.9	96.9	99.1	97.9	96.9	96.4	95.3	69.3	342
Jarash	99.5	99.2	99.2	99.5	99.2	99.2	98.6	96.4	61.6	195
Ajloun	99.8	99.7	99.3	99.6	99.4	99.3	97.4	96.5	67.8	139
Karak	99.0	98.7	97.5	99.0	98.7	97.5	95.6	92.9	60.8	248
Tafiela	99.8	99.3	98.3	99.8	99.3	98.3	97.5	95.4	60.0	98
Ma'an	96.4	92.7	90.0	96.4	92.7	91.5	89.3	81.0	67.3	96
Aqaba	99.2	99.1	98.5	99.2	99.1	98.5	95.9	93.8	60.3	135
Badia										
Badia	98.4	96.5	95.1	98.4	96.5	95.4	94.0	89.9	70.1	439
Non Badia	99.5	99.2	98.8	99.5	99.3	99.0	98.6	97.1	66.0	5,493
Camps										
Camp	99.1	99.1	98.6	99.1	99.1	98.8	98.8	96.7	68.7	239
Non camp	99.4	99.0	98.5	99.4	99.1	98.7	98.2	96.6	66.2	5,693
Mother's education										
No education	96.1	90.6	88.2	96.1	90.6	88.2	87.9	84.8	65.4	143
Elementary	97.8	97.5	95.5	97.8	97.5	95.8	94.6	92.1	60.7	405
Preparatory	99.6	99.6	98.8	99.6	99.5	98.8	98.7	96.7	64.0	797
Secondary	99.7	99.2	99.1	99.6	99.4	99.4	98.5	96.9	69.4	2,790
Higher	99.6	99.5	99.0	99.6	99.5	99.1	99.2	97.9	63.9	1,797
Wealth quintile										
Lowest	98.8	98.1	97.2	98.8	98.1	97.2	96.7	94.6	63.8	1,380
Second	99.8	99.1	99.0	99.7	99.5	99.4	98.5	96.8	70.0	1,295
Middle	99.4	99.3	99.0	99.4	99.3	99.3	98.2	97.6	67.6	1,299
Fourth	99.6	99.4	98.9	99.6	99.4	98.9	99.0	96.3	67.3	1,164
Highest	99.6	99.6	98.5	99.6	99.6	98.8	99.4	98.2	60.9	794
Total	99.4	99.0	98.5	99.4	99.1	98.7	98.2	96.6	66.3	5,932

Haemophilus influenzae type b (Hib)

Haemophilus influenzae type b (Hib) is a bacterial disease that can cause meningitis in infants and severe infection of the epiglottis in older children. Children should receive the first two doses of Hib vaccine at age two and three months, respectively, and a third dose may be given at age four months. Results in Table 10.5 show that 99 percent of children age 24-59 months received the Hib vaccine. Variations in vaccination coverage for Hib are negligible.

Measles/MMR

Since 1995, a routine two-dose schedule has been recommended for measles vaccination. The purpose of the second dose is to produce immunity to measles in a person who fails to respond to the first dose. Children generally receive the second dose of measles vaccine as a combined MMR vaccine. The first dose is administered at age nine months and the second dose, as part of the MMR vaccine, is recommended at 18 months. Ninety-eight percent of children age 24-59 months received the first dose of the measles vaccine (Table 10.5) and a combined MMR was given to 97 percent of children.

There are some variations in MMR coverage by birth order and mother's level of education. For example, 98 percent of children of mothers with higher education have MMR coverage compared to 85 percent of children of mothers with no education. MMR coverage is particularly low among children in Ma'an (81 percent).

10.2.3 Trends in Vaccination Coverage

One way of measuring trends in vaccination coverage is to compare coverage among children of different ages. Table 10.6 shows the percentage of children age 12-59 months who have received vaccinations during the first year of life according to their current age. This type of data can provide evidence of any trends in the vaccination coverage over the past five years.

Table 10.6 Vaccinations in first year of life

Percentage of children age 12-59 months at the time of the survey who received specific vaccines by age 12 months, and percentage with a vaccination card, by current age of child, Jordan 2012

Age in months	BCG	DPT 1	DPT 2	DPT 3	Polio 1	Polio 2	Polio 3	Measles	All basic vaccinations[1]	No vaccinations	Percentage with a vaccination card seen	Number of children
12-23	97.9	99.3	98.7	97.9	99.3	98.7	97.9	85.7	85.1	0.5	80.4	1,941
24-35	98.1	98.2	97.9	97.2	98.4	98.1	97.4	86.5	85.9	1.2	76.1	1,950
36-47	98.3	98.7	98.1	97.3	98.7	98.1	97.3	83.5	82.5	0.9	70.5	1,965
48-59	96.4	99.0	98.7	96.8	99.0	98.7	97.0	87.3	86.5	0.8	52.7	2,018
Total	97.8	98.8	98.4	97.4	98.9	98.4	97.5	85.8	85.1	0.9	69.8	7,873

Note: Information was obtained from the vaccination card or, if there was no written record, from the mother. For children whose information is based on the mother's report, the proportion of vaccinations given during the first year of life is assumed to be the same as for children with a written record of vaccinations.
[1] BCG, measles, and three doses each of DPT and polio vaccine.

Coverage has remained consistently high among all age groups of children. Vaccination cards were seen by the interviewer for 80 percent of children age 12-23 months compared to 53 percent of children age 48-59 months. The lower percentage of cards shown for older children could be because vaccination cards for children in kindergarten are generally kept at the school and may not have been available at the time of the survey.

Another way of measuring trends in vaccination coverage is to compare coverage across surveys. Vaccination coverage increased by 7 percent in the last five years from 87 percent of children fully immunized (including BCG) in 2007 to 93 percent in 2012. This increase was primarily due to the increase in BCG coverage from 91 percent to 98 percent. Surveys prior to the 2007 JPFHS show very low coverage for BCG (and therefore very low coverage of all basic vaccinations) because the health program in Jordan did not emphasize BCG coverage for children below age six.

10.3 ACUTE RESPIRATORY INFECTION

Acute respiratory infection (ARI) is a leading cause of childhood morbidity and mortality throughout the world. Early diagnosis and treatment with antibiotics can prevent a large proportion of deaths caused by ARI. In the 2012 JPFHS, the prevalence of ARI was estimated by asking mothers whether their children under age five had been ill in the two weeks preceding the survey with a cough accompanied by short, rapid breathing that is chest-related. It should be noted that the morbidity data collected are subjective, as they are based on the mother's perception of illness with no validation from medical personnel.

Table 10.7 shows the percentage of children under age five with symptoms of ARI during the two weeks preceding the survey. In total, 7 percent of children showed symptoms of ARI at some time in the two weeks preceding the survey. Prevalence of ARI varies by age of child: children age 6-11 months are more likely to have ARI symptoms (10 percent) than children in any other age group. Boys (8 percent) are more likely to have symptoms of ARI than girls (5 percent). Children of mothers who smoke are also more likely to have symptoms of ARI (10 percent) than children of mothers who don't smoke (7 percent). Prevalence of ARI is also relatively higher in Jarash, among children of mothers with no education, and among children living in the middle wealth quintile. Table 10.7 also shows that medical advice or treatment was sought for more than three-quarters of children who had ARI symptoms, and 87 percent of these children received antibiotics to treat the infection. There are significant variations in treatment by background characteristics; however, they do not follow any clear pattern. The results indicate that male children are more likely to be taken to a health facility or provider and receive antibiotics to treat ARI than female children. Children residing in the rural areas are slightly more likely to be taken to a health facility and receive antibiotics compared to children residing in the urban areas.

Table 10.7 Prevalence and treatment of symptoms of ARI

Among children under age five, the percentage who had symptoms of acute respiratory infection (ARI) in the two weeks preceding the survey and among children with symptoms of ARI, the percentage for whom advice or treatment was sought from a health facility or provider and the percentage who received antibiotics as treatment, according to background characteristics, Jordan 2012

Background characteristic	Among children under age five:		Among children under age five with symptoms of ARI:		
	Percentage with symptoms of ARI[1]	Number of children	Percentage for whom advice or treatment was sought from a health facility or provider[2]	Percentage who received antibiotics	Number of children
Age in months					
<6	3.9	851	(91.0)	(92.3)	34
6-11	9.5	913	81.2	84.6	86
12-23	8.4	1,941	79.7	87.1	164
24-35	8.0	1,950	74.1	84.0	156
36-47	5.7	1,965	78.9	91.7	113
48-59	5.1	2,018	68.6	86.1	104
Sex					
Male	8.4	5,018	79.1	89.4	420
Female	5.1	4,619	74.0	82.6	236
Mother's smoking status					
Smokes cigarettes/tobacco	9.7	712	83.2	89.4	69
Does not smoke	6.6	8,925	76.5	86.6	587
Residence					
Urban	6.9	7,852	75.8	86.2	541
Rural	6.4	1,784	84.2	90.4	114
Region					
Central	6.6	5,897	78.9	86.9	387
North	7.0	2,811	74.2	85.5	197
South	7.7	929	76.4	90.9	71
Governorate					
Amman	6.6	3,547	79.0	85.3	233
Balqa	5.4	691	73.1	90.5	37
Zarqa	7.4	1,391	79.8	88.6	102
Madaba	5.3	268	(86.2)	(90.1)	14
Irbid	6.7	1,696	74.0	84.9	113
Mafraq	7.0	559	71.3	86.1	39
Jarash	9.3	327	78.6	85.8	31
Ajloun	6.1	229	74.6	89.0	14
Karak	6.7	398	83.2	90.0	27
Tafiela	8.6	155	77.4	81.1	13
Ma'an	8.1	166	63.5	93.4	13
Aqaba	8.5	211	(75.2)	(97.6)	18
Badia					
Badia	6.6	753	70.4	85.3	50
Non Badia	6.8	8,884	77.8	87.1	606
Camps					
Camp	9.2	377	77.5	84.4	35
Non camp	6.7	9,260	77.2	87.1	621
Mother's education					
No education	7.9	204	*	*	16
Elementary	5.7	608	(85.1)	(94.5)	35
Preparatory	6.8	1,279	85.7	80.2	87
Secondary	6.7	4,493	77.0	88.7	300
Higher	7.1	3,052	73.3	86.4	218
Wealth quintile					
Lowest	6.4	2,225	79.9	84.3	142
Second	7.3	2,142	74.3	84.7	156
Middle	7.8	2,069	83.5	93.9	161
Fourth	6.0	1,866	71.9	80.9	111
Highest	6.4	1,335	73.5	89.9	86
Total	6.8	9,637	77.2	86.9	656

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] Symptoms of ARI (cough accompanied by short, rapid breathing which was chest-related and/or by difficult breathing which was chest-related) are considered a proxy for pneumonia.
[2] Excludes pharmacy and other.

10.4 PREVALENCE OF FEVER

Fever is a major manifestation of acute infections in children. Table 10.8 shows the percentage of children under age five who had fever in the two weeks preceding the survey and the percentage receiving treatment, by background characteristics. Overall, 18 percent of children had fever in the two weeks before the interview.

The prevalence of fever is high among children age 6-11 months and 12-23 months (26 and 27 percent, respectively). There are no significant variations in the prevalence of fever by the sex of the child. However, there are noticeable variations by region (from 12 percent in the South to 22 percent in the North and by governorate, ranging from 9 percent in Karak to 26 percent in Irbid. There is no clear pattern between mother's education and the prevalence of fever; the prevalence ranges from 8 percent among children of mothers with no education to 22 percent among children of mothers with elementary and preparatory education.

Table 10.8 Prevalence and treatment of fever

Among children under age 5, the percentage who had a fever in the two weeks preceding the survey, and among children with fever, the percentage for whom advice or treatment was sought from a health facility or provider and the percentage who received antibiotics as treatment, by background characteristics, Jordan 2012

	Among children under age 5:		Among children under age 5 with fever:		
Background characteristic	Percentage with fever	Number of children	Percentage for whom advice or treatment was sought from a health facility or provider[1]	Percentage who took antibiotic drugs	Number of children
Age in months					
<6	11.6	851	64.1	62.6	98
6-11	26.4	913	79.0	75.3	241
12-23	26.5	1,941	64.2	77.6	515
24-35	16.4	1,950	70.7	89.0	321
36-47	15.5	1,965	65.0	77.1	304
48-59	13.9	2,018	72.1	83.6	281
Sex					
Male	18.1	5,018	69.0	78.1	908
Female	18.4	4,619	68.6	80.8	852
Residence					
Urban	18.9	7,852	66.4	77.5	1,486
Rural	15.3	1,784	81.7	89.8	274
Region					
Central	17.3	5,897	68.3	78.2	1,022
North	22.3	2,811	68.8	79.9	626
South	12.0	929	73.5	87.8	112
Governorate					
Amman	19.2	3,547	67.2	75.2	680
Balqa	9.8	691	75.4	85.0	68
Zarqa	17.4	1,391	68.3	83.9	242
Madaba	12.1	268	75.6	85.8	32
Irbid	25.9	1,696	66.8	77.0	440
Mafraq	12.2	559	74.1	91.1	68
Jarash	22.8	327	74.2	81.1	75
Ajloun	19.1	229	72.1	89.1	44
Karak	8.5	398	73.9	84.8	34
Tafiela	18.6	155	79.9	83.2	29
Ma'an	16.8	166	67.6	93.9	28
Aqaba	10.1	211	72.1	90.5	21
Badia					
Badia	15.0	753	76.4	89.4	113
Non Badia	18.5	8,884	68.3	78.7	1,646
Camps					
Camp	23.0	377	70.1	77.3	87
Non camp	18.1	9,260	68.7	79.5	1,673
Mother's education					
No education	7.7	204	*	*	16
Elementary	22.2	608	67.7	58.2	135
Preparatory	21.9	1,279	61.2	76.9	281
Secondary	18.0	4,493	70.4	81.1	807
Higher	17.1	3,052	70.3	83.2	521
Wealth quintile					
Lowest	15.7	2,225	65.9	82.7	349
Second	21.9	2,142	74.3	74.8	469
Middle	18.8	2,069	69.6	81.3	389
Fourth	19.6	1,866	65.7	81.6	366
Highest	14.1	1,335	64.8	76.9	188
Total	18.3	9,637	68.8	79.4	1,760

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Excludes pharmacy and other.

Table 10.8 shows that medical advice or treatment was sought for 69 percent of children with fever and 79 percent received antibiotics to treat the fever. These percentages vary slightly by background characteristics. Treatment or advice for fever is sought more commonly in rural areas than in urban areas and in the South region compared to other regions. Use of antibiotics to treat fever is also more common in rural areas than urban areas, in the South region, and in Badia areas.

Table 10.9 shows that 18 percent of children with fever sought treatment the same day, while 39 percent sought treatment the next day. Two in five children received treatment after two days (42 percent).

Children under age six months (32 percent), children in Zarqa (38 percent), children of mothers with higher education (26 percent), and children in the fourth wealth quintile (27 percent) are much more likely to receive treatment for the fever the same day than children in other categories.

Table 10.9 Children taken for treatment of fever by number of days

Among children under age 5 who had fever in the two weeks preceding the survey and who were taken to a health facility or provider, percent distribution by number of days after fever began when treatment was first sought, by background characteristics, Jordan 2012

Background characteristic	Number of days after fever began before treatment was sought				Total	Number of children with fever taken to a health facility[1]
	Same day	Next day	2-6 days	7+ days		
Age in months						
<6	31.7	45.4	22.9	0.0	100.0	63
6-11	20.1	43.5	36.1	0.3	100.0	190
12-23	14.8	34.7	49.3	1.2	100.0	331
24-35	20.5	43.2	33.8	2.6	100.0	227
36-47	14.3	44.1	41.4	0.2	100.0	198
48-59	19.6	32.3	46.9	1.2	100.0	203
Sex						
Male	18.0	39.5	41.7	0.8	100.0	627
Female	18.5	39.3	40.8	1.4	100.0	584
Residence						
Urban	18.9	37.4	42.7	1.0	100.0	987
Rural	15.7	48.1	34.7	1.5	100.0	223
Region						
Central	17.2	36.0	45.9	0.9	100.0	698
North	20.3	44.2	33.9	1.6	100.0	431
South	16.8	42.7	40.4	0.2	100.0	82
Governorate						
Amman	10.3	33.4	55.2	1.1	100.0	457
Balqa	11.4	48.6	38.8	1.3	100.0	51
Zarqa	37.6	37.6	24.8	0.0	100.0	165
Madaba	20.9	48.8	28.4	1.8	100.0	25
Irbid	21.1	43.5	33.7	1.7	100.0	294
Mafraq	16.6	49.6	33.8	0.0	100.0	50
Jarash	23.8	46.5	28.9	0.7	100.0	55
Ajloun	12.4	38.1	45.1	4.4	100.0	32
Karak	12.3	35.6	52.1	0.0	100.0	25
Tafiela	14.6	55.0	30.4	0.0	100.0	23
Ma'an	20.6	35.8	42.9	0.8	100.0	19
Aqaba	22.9	44.0	33.1	0.0	100.0	15
Badia						
Badia	18.6	40.6	40.8	0.0	100.0	86
Non Badia	18.3	39.3	41.3	1.2	100.0	1,124
Camps						
Camp	21.4	39.0	39.7	0.0	100.0	61
Non camp	18.1	39.4	41.3	1.1	100.0	1,150
Mother's education						
No education	*	*	*	*	100.0	13
Elementary	4.7	28.7	66.6	0.0	100.0	91
Preparatory	10.7	46.4	42.4	0.5	100.0	172
Secondary	17.6	35.5	45.0	1.9	100.0	569
Higher	26.4	44.9	28.3	0.4	100.0	366
Wealth quintile						
Lowest	11.4	39.9	48.6	0.1	100.0	230
Second	19.2	41.7	37.5	1.6	100.0	348
Middle	15.6	39.3	43.5	1.6	100.0	271
Fourth	26.5	37.3	35.7	0.5	100.0	240
Highest	18.2	36.2	44.1	1.4	100.0	122
Total	18.3	39.4	41.3	1.1	100.0	1,211

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
[1] Excludes pharmacy and other.

10.5 PREVALENCE OF DIARRHEA

Table 10.10 shows the percentage of children under five with diarrhea in the two weeks preceding the survey, by background characteristics. Sixteen percent of all children under age five experienced diarrhea at some time in the two weeks preceding the survey. The occurrence of diarrhea varies by age of the child; children age 6-23 months are more prone to diarrhea than children in the other age groups. The prevalence of diarrhea varies from a low of 8 percent in Aqaba to a high of 19 percent in Jarash. The prevalence of diarrhea in children also varies according to the source of drinking water. Children who consume water from an improved source are slightly less likely to have diarrhea (14 percent) than children who consume water from sources that are not considered safe for drinking (17 percent).

Table 10.10 Prevalence of diarrhea

Percentage of children under age five who had diarrhea in the two weeks preceding the survey, by background characteristics, Jordan 2012

Background characteristic	Diarrhea in the two weeks preceding the survey: All diarrhea	Diarrhea in the two weeks preceding the survey: Diarrhea with blood	Number of children
Age in months			
<6	16.2	0.1	851
6-11	32.0	2.1	913
12-23	27.8	1.2	1,941
24-35	12.2	0.4	1,950
36-47	9.6	0.7	1,965
48-59	5.3	0.4	2,018
Sex			
Male	16.4	0.8	5,018
Female	14.7	0.7	4,619
Source of drinking water[1]			
Improved	14.3	0.8	5,306
Not improved	17.1	0.8	4,331
Residence			
Urban	16.1	0.7	7,852
Rural	13.5	0.9	1,784
Region			
Central	15.5	0.9	5,897
North	17.0	0.5	2,811
South	11.4	0.7	929
Governorate			
Amman	16.0	1.1	3,547
Balqa	12.9	1.0	691
Zarqa	15.6	0.4	1,391
Madaba	16.4	0.8	268
Irbid	18.1	0.4	1,696
Mafraq	12.8	0.5	559
Jarash	18.8	0.7	327
Ajloun	16.5	1.0	229
Karak	10.9	0.7	398
Tafiela	15.1	0.8	155
Ma'an	12.9	0.8	166
Aqaba	8.4	0.5	211
Badia			
Badia	14.0	0.7	753
Non Badia	15.7	0.8	8,884
Camps			
Camp	18.2	0.6	377
Non camp	15.5	0.8	9,260
Mother's education			
No education	7.3	0.6	204
Elementary	21.5	0.3	608
Preparatory	20.6	1.9	1,279
Secondary	15.3	0.8	4,493
Higher	13.3	0.3	3,052
Wealth quintile			
Lowest	17.9	0.4	2,225
Second	18.7	1.8	2,142
Middle	14.4	0.4	2,069
Fourth	12.4	0.4	1,866
Highest	12.9	0.8	1,335
Total	15.6	0.8	9,637

Note: Total includes 4 children living in households using non-improved toilet facilities who are not shown separately.
[1] See Table 2.1 for definition of categories.

Table 10.10 also shows that less than 1 percent of children had bloody diarrhea in the two weeks before the survey.

10.5.1 Diarrhea Treatment

Table 10.11 shows the percentage of children with diarrhea who received specific treatments by background characteristics. Advice or treatment was sought from a health facility or a provider for more than half (56 percent) of children with diarrhea in the two weeks preceding the survey. Treatment was most commonly sought for children age 6-11 months. Children residing in Karak and Ma'an are most likely to have received advice or treatment. Children of mothers with higher education and children living in households in the middle wealth quintile are also more likely than their counterparts to have received advice or treatment for diarrhea.

One in five children with diarrhea was treated with oral rehydration salts (ORS), and 10 percent were given recommended home fluids (RHF). In addition, 34 percent of children with diarrhea were given increased fluids. Overall, 52 percent of children received ORT or increased fluids. Moreover, 51 percent of children were given antibiotic drugs and 29 percent were given home remedies. However, 24 percent of children with diarrhea did not receive any type of treatment at all.

Diarrhea treatment varies slightly with age. Children age 12-23 months, children with bloody diarrhea, female children, children of mothers with higher education, and children from the richest households are more likely than their counterparts to be given ORT or increased fluids. In addition, children in the South region, children in Aqaba, children in the Badia areas, and children in non camp areas are more likely to receive ORT or increased fluids than other children.

Table 10.11 Diarrhea treatment

Among children under age five who had diarrhea in the two weeks preceding the survey, the percentage for whom advice or treatment was sought from a health facility or provider, the percentage given oral rehydration therapy (ORT), the percentage given increased fluids, the percentage given ORT or increased fluids, and the percentage who were given other treatments, by background characteristics, Jordan 2012

Background characteristic	Percentage of children with diarrhea for whom advice or treatment was sought from a health facility or provider[1]	Oral rehydration therapy (ORT)					Other treatments				
		Fluid from ORS packets or pre-packaged liquid	Recommended home fluids (RHF)	Either ORS or RHF	Increased fluids	ORT or increased fluids	Antibiotic drugs	Intravenous solution	Home remedy/ other	No treatment	Number of children with diarrhea
Age in months											
<6	47.4	11.1	13.4	24.2	21.1	37.8	32.7	0.7	27.7	42.3	138
6-11	66.9	22.3	5.6	27.0	32.1	52.3	55.4	1.2	32.8	21.3	292
12-23	56.8	27.3	11.1	32.8	39.0	57.4	52.4	0.4	29.2	18.4	539
24-35	52.7	13.3	7.0	19.0	39.0	51.6	52.7	0.0	27.1	26.9	237
36-47	44.0	12.8	15.3	27.8	30.3	47.8	47.3	0.0	25.3	28.8	188
48-59	57.8	21.6	8.8	30.0	30.1	51.7	51.2	0.4	28.3	24.8	107
Sex											
Male	55.0	17.7	9.1	24.9	32.7	49.6	48.2	0.5	27.1	26.0	823
Female	56.6	23.7	11.0	31.4	36.2	55.1	53.4	0.5	31.1	22.1	678
Type of diarrhea											
Non-bloody	54.9	19.6	10.3	27.2	33.5	51.3	50.3	0.4	28.9	25.2	1,427
Bloody	71.8	36.7	4.0	39.6	50.3	67.1	54.5	1.5	28.6	5.7	74
Residence											
Urban	55.5	20.0	10.5	27.7	34.2	51.8	50.2	0.5	27.4	24.4	1,261
Rural	57.0	22.7	7.4	28.9	34.5	53.5	52.3	0.6	36.6	23.2	241
Region											
Central	55.7	20.9	10.1	27.7	33.9	51.0	48.4	0.3	22.1	26.3	917
North	53.1	19.0	8.7	26.7	33.8	52.2	51.3	0.8	39.7	22.6	478
South	67.5	22.6	14.2	33.9	40.1	61.6	65.1	0.6	38.8	13.4	106
Governorate											
Amman	53.6	15.8	10.7	24.0	31.0	46.0	46.2	0.0	18.5	27.9	567
Balqa	57.9	35.0	14.4	38.6	37.0	57.7	50.1	2.8	38.0	26.0	89
Zarqa	61.4	29.9	7.6	34.7	41.2	62.8	56.0	0.0	25.6	20.2	217
Madaba	49.8	13.3	6.6	19.1	28.2	42.4	35.2	0.7	19.6	37.2	44
Irbid	50.7	18.0	9.4	26.2	29.6	49.3	46.4	0.6	39.4	25.1	308
Mafraq	59.2	21.9	8.4	29.6	42.3	60.9	62.5	0.7	43.6	16.6	71
Jarash	57.2	24.3	6.0	29.4	39.7	56.9	60.8	2.4	43.0	18.0	62
Ajloun	54.9	13.7	8.4	20.7	42.4	51.2	55.2	0.7	29.1	21.4	38
Karak	70.4	27.9	14.3	37.8	42.9	66.2	66.7	1.1	35.0	9.0	44
Tafiela	63.6	10.2	9.6	18.5	40.2	48.5	57.7	0.0	29.4	20.4	23
Ma'an	69.5	23.4	10.9	31.5	30.8	51.9	64.5	0.0	44.5	19.8	21
Aqaba	63.4	25.2	24.1	47.7	44.4	79.3	71.9	1.1	53.3	7.1	18
Badia											
Badia	62.5	25.4	6.1	31.4	33.1	55.4	60.5	0.4	43.0	18.8	105
Non Badia	55.2	20.0	10.3	27.6	34.4	51.8	49.8	0.5	27.8	24.7	1,396
Camps											
Camp	52.1	17.0	7.5	21.0	31.7	43.9	45.5	0.7	26.9	30.8	68
Non camp	55.9	20.6	10.1	28.2	34.4	52.5	50.8	0.5	29.0	23.9	1,433
Mother's education											
No education	(50.3)	(31.4)	(5.9)	(37.3)	(23.7)	(41.0)	(53.2)	(0.0)	(38.5)	(31.2)	15
Elementary	58.3	16.1	6.2	18.2	20.7	32.9	60.0	0.2	26.7	24.3	131
Preparatory	42.4	23.7	11.0	32.4	35.9	52.0	47.0	0.4	20.4	28.3	264
Secondary	57.0	23.0	9.5	29.6	30.4	51.1	48.4	0.5	28.0	26.9	686
Higher	61.5	14.9	11.6	24.7	44.6	60.4	53.2	0.6	36.3	16.9	405
Wealth quintile											
Lowest	54.7	22.1	13.0	31.6	31.5	51.5	48.8	1.0	27.5	26.2	399
Second	58.3	20.6	6.0	25.2	35.1	50.3	58.0	0.0	28.2	20.0	401
Middle	61.3	21.2	6.0	25.7	35.9	53.0	53.9	0.9	31.3	21.7	298
Fourth	44.7	15.6	7.4	22.2	39.1	51.8	38.0	0.3	28.9	32.2	232
Highest	57.4	21.3	22.5	36.7	29.6	56.6	48.1	0.0	29.6	23.1	172
Total	55.7	20.4	10.0	27.8	34.3	52.1	50.5	0.5	28.9	24.2	1,501

Note: Figures in parentheses are based on 25-49 unweighted cases. ORT includes fluid prepared from oral rehydration salt (ORS) packets, pre-packaged ORS fluid, and recommended home fluids (RHF).
[1] Excludes pharmacy and other.

10.5.2 Nutritional Practices during Diarrhea

Mothers are encouraged to treat children suffering from diarrhea by increasing their fluid intake and continuing to feed them normally. These practices help to reduce dehydration and minimize the adverse consequences of diarrhea on the child's nutritional status. To assess compliance with proper treatment practices, mothers with a child who had diarrhea in the two weeks preceding the survey were asked about the relative amounts of fluids and foods given to the child during the diarrheal episode. Table 10.12 shows that 34 percent of children with diarrhea were given more fluids during the illness, while 39 percent were given the same amount of fluids as usual; 20 percent were given somewhat less fluids and 6 percent much less. With respect to food intake during diarrheal episodes, 4 percent of children were given more food and 33 percent maintained their usual food intake, 34 percent received somewhat less food, and 20 percent were given much less than usual.

Only a fifth of children with diarrhea (20 percent) were fed according to recommendations (more liquids and same amount of food). However, 34 percent of children with diarrhea continued feeding as usual and were given ORT and/or increased fluids for management of diarrhea. This practice is more common for children with bloody diarrhea.

Table 10.12 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, the percentage of children given increased fluids and continued feeding during the diarrhea episode, and the percentage of children who continued feeding and were given ORT and/or increased fluids during the episode of diarrhea, by background characteristics, Jordan 2012

	Amount of liquids given						Amount of food given								
Background characteristic	More	Same as usual	Some-what less	Much less	None	Total	More	Same as usual	Some-what less	Much less	None	Total	Percent-age given increased fluids and continued feeding[1]	Percent-age who continued feeding and were given ORT and/or increased fluids[1]	Number of children with diarrhea
Age in months															
<6	21.1	59.5	10.7	0.9	7.7	100.0	4.3	18.2	9.8	1.1	66.7	100.0	8.4	17.3	138
6-11	32.1	41.0	21.7	5.2	0.0	100.0	4.2	40.1	34.5	14.2	6.9	100.0	22.1	36.9	292
12-23	39.0	32.3	22.5	6.0	0.2	100.0	3.5	33.3	33.0	26.9	3.2	100.0	19.6	36.4	539
24-35	39.0	40.7	13.9	6.2	0.2	100.0	2.8	32.3	36.0	25.3	3.6	100.0	25.6	33.4	237
36-47	30.3	40.0	19.7	10.1	0.0	100.0	3.5	35.5	39.2	20.4	1.3	100.0	22.6	37.4	188
48-59	30.1	36.6	33.1	0.2	0.0	100.0	2.4	27.2	53.9	16.5	0.0	100.0	15.5	36.4	107
Sex															
Male	32.7	38.1	21.9	6.2	1.1	100.0	2.5	31.2	35.0	22.2	9.1	100.0	18.2	32.3	823
Female	36.2	40.4	18.3	4.6	0.4	100.0	4.7	35.1	32.7	17.9	9.6	100.0	22.3	36.9	678
Type of diarrhea															
Non-bloody	33.5	39.3	21.1	5.3	0.8	100.0	3.5	32.7	35.1	18.9	9.8	100.0	20.5	34.8	1,427
Bloody	50.3	34.6	5.5	9.6	0.0	100.0	3.6	37.9	11.3	45.8	1.4	100.0	12.3	27.0	74
Residence															
Urban	34.2	38.8	20.8	5.4	0.7	100.0	3.6	33.2	33.6	20.3	9.3	100.0	19.7	34.3	1,261
Rural	34.5	40.6	17.6	6.2	1.1	100.0	3.0	31.8	35.7	19.8	9.7	100.0	22.0	35.1	241
Region															
Central	33.9	41.3	18.9	5.6	0.4	100.0	4.2	34.1	30.5	22.1	9.1	100.0	18.0	32.9	917
North	33.8	37.3	22.1	5.2	1.5	100.0	2.3	32.5	38.5	17.5	9.2	100.0	22.3	35.5	478
South	40.1	28.2	24.8	5.9	1.1	100.0	3.4	25.1	42.5	17.0	12.0	100.0	27.9	42.7	106
Governorate															
Amman	31.0	39.1	23.4	6.6	0.0	100.0	3.5	33.2	31.9	22.0	9.4	100.0	15.3	29.9	567
Balqa	37.0	46.8	12.0	3.6	0.5	100.0	7.3	31.8	29.2	20.8	10.9	100.0	23.0	36.8	89
Zarqa	41.2	44.0	11.0	2.7	1.2	100.0	5.2	36.9	27.8	23.4	6.7	100.0	23.2	39.9	217
Madaba	28.2	45.7	13.8	11.4	0.9	100.0	1.5	36.8	29.7	19.5	12.6	100.0	17.9	29.4	44
Irbid	29.6	38.2	25.9	4.7	1.7	100.0	1.2	33.4	39.5	17.6	8.3	100.0	18.2	32.0	308
Mafraq	42.3	33.4	15.1	9.2	0.0	100.0	6.0	32.1	35.0	15.9	10.9	100.0	29.9	45.3	71
Jarash	39.7	32.5	18.9	5.2	3.7	100.0	3.6	23.2	42.0	19.1	12.1	100.0	28.3	39.8	62
Ajloun	42.4	45.3	9.9	2.4	0.0	100.0	1.9	41.1	31.6	16.8	8.5	100.0	31.2	38.3	38
Karak	42.9	22.9	25.2	7.9	1.1	100.0	1.1	18.9	44.3	17.6	18.1	100.0	25.3	41.4	44
Tafiela	40.2	39.7	14.3	3.0	2.9	100.0	8.1	34.7	35.6	6.9	14.6	100.0	33.7	40.7	23
Ma'an	30.8	25.9	40.3	3.0	0.0	100.0	2.8	22.5	48.6	23.7	2.5	100.0	18.6	29.2	21
Aqaba	44.4	28.4	19.0	8.2	0.0	100.0	3.8	30.5	39.9	20.7	5.1	100.0	37.7	64.8	18
Badia															
Badia	33.1	37.2	23.6	5.6	0.5	100.0	2.3	31.9	35.7	20.6	9.5	100.0	21.8	36.8	105
Non Badia	34.4	39.2	20.1	5.5	0.8	100.0	3.6	33.0	33.8	20.2	9.3	100.0	20.0	34.2	1,396
Camps															
Camp	31.7	38.6	22.6	3.2	3.9	100.0	4.4	24.8	33.6	23.2	14.0	100.0	16.1	25.6	68
Non camp	34.4	39.1	20.2	5.6	0.7	100.0	3.5	33.3	33.9	20.1	9.1	100.0	20.3	34.8	1,433
Mother's education															
No education	(23.7)	(57.7)	(16.0)	(2.5)	(0.0)	100.0	(0.0)	(55.3)	(34.9)	(6.7)	(3.1)	100.0	(19.5)	(33.7)	15
Elementary	20.7	43.9	32.2	1.9	1.2	100.0	1.2	30.7	39.4	24.7	4.0	100.0	9.6	16.5	131
Preparatory	35.9	31.9	23.8	7.9	0.5	100.0	7.2	27.2	37.5	18.9	9.2	100.0	20.6	35.3	264
Secondary	30.4	43.8	19.0	5.6	1.3	100.0	2.6	34.6	33.4	18.5	10.9	100.0	18.3	34.4	686
Higher	44.6	33.6	16.6	5.0	0.1	100.0	3.6	33.8	30.7	23.1	8.8	100.0	26.3	39.7	405
Wealth quintile															
Lowest	31.5	39.7	19.2	8.9	0.7	100.0	4.3	34.4	35.1	16.8	9.5	100.0	21.1	38.1	399
Second	35.1	39.2	21.0	2.8	1.9	100.0	3.7	33.6	31.5	21.4	9.7	100.0	19.2	30.2	401
Middle	35.9	36.3	22.7	4.7	0.4	100.0	3.5	30.1	37.0	22.4	7.0	100.0	18.3	32.5	298
Fourth	39.1	38.8	16.8	5.2	0.1	100.0	2.4	31.9	32.2	25.6	8.0	100.0	21.2	29.1	232
Highest	29.6	42.7	21.9	5.8	0.0	100.0	3.0	34.5	33.9	14.6	14.1	100.0	21.2	46.3	172
Total	34.3	39.1	20.3	5.5	0.8	100.0	3.5	32.9	33.9	20.3	9.3	100.0	20.1	34.4	1,501

Note: It is recommended that children should be given more liquids to drink during diarrhea and food should not be reduced. Figures in parentheses are based on 25-49 unweighted cases.

[1] Continued feeding practices include children who were given more, the same as usual, or somewhat less food during the diarrhea episode.

Table 10.13 shows that for 15 percent of children with diarrhea, treatment was sought the same day, while for 35 percent, care was sought the next day, and for 51 percent after the second day. The percentage of children for whom treatment was sought the same day is higher among children with non-bloody diarrhea, children living in Karak and Zarqa, children of mothers with secondary education, and children living in the middle wealth quintile.

Table 10.13 Children taken for treatment of diarrhea by number of days

Among children under age five who had diarrhea in the two weeks preceding the survey and who were taken to a health facility or provider, percent distribution by number of days after diarrhea began before treatment was first sought, by background characteristics, Jordan 2012

Background characteristic	Number of days after diarrhea began before treatment was sought				Total	Number of children with diarrhea taken to a health facility[1]
	Same day	Next day	2-6 days	7+ days		
Age in months						
<6	8.7	35.3	38.1	17.9	100.0	65
6-11	17.0	37.1	45.1	0.8	100.0	195
12-23	13.2	32.0	51.4	3.4	100.0	306
24-35	16.9	37.7	44.1	1.2	100.0	125
36-47	17.2	33.5	49.2	0.0	100.0	83
48-59	13.8	34.8	51.4	0.0	100.0	62
Sex						
Male	15.6	34.6	45.9	3.8	100.0	453
Female	13.7	34.7	49.5	2.1	100.0	384
Type of diarrhea						
Non-bloody	15.1	33.4	48.2	3.2	100.0	783
Bloody	9.2	52.6	38.2	0.0	100.0	53
Residence						
Urban	15.2	33.3	48.3	3.2	100.0	699
Rural	12.3	41.8	43.9	2.0	100.0	137
Region						
Central	13.7	32.4	49.5	4.4	100.0	511
North	16.2	37.5	45.6	0.7	100.0	254
South	16.6	41.3	41.0	1.2	100.0	72
Governorate						
Amman	10.4	27.3	56.3	6.0	100.0	304
Balqa	5.9	39.7	46.6	7.8	100.0	52
Zarqa	24.5	38.6	36.9	0.0	100.0	133
Madaba	13.7	46.2	38.4	1.6	100.0	22
Irbid	16.4	35.2	48.4	0.0	100.0	156
Mafraq	14.7	50.0	34.0	1.3	100.0	42
Jarash	17.6	31.0	48.1	3.3	100.0	35
Ajloun	15.9	39.8	44.3	0.0	100.0	21
Karak	24.6	40.9	34.5	0.0	100.0	31
Tafiela	3.5	41.9	50.0	4.6	100.0	15
Ma'an	8.8	36.5	53.7	1.0	100.0	15
Aqaba	22.4	47.8	29.8	0.0	100.0	11
Badia						
Badia	16.6	37.6	44.7	1.1	100.0	66
Non Badia	14.6	34.4	47.8	3.2	100.0	771
Camps						
Camp	13.7	32.7	50.9	2.7	100.0	36
Non camp	14.8	34.8	47.4	3.0	100.0	801
Mother's education						
No education	*	*	*	*	100.0	7
Elementary	9.6	31.0	59.1	0.4	100.0	76
Preparatory	10.4	49.1	38.8	1.7	100.0	112
Secondary	20.0	30.3	44.1	5.6	100.0	391
Higher	10.5	36.2	52.9	0.4	100.0	249
Wealth quintile						
Lowest	10.1	43.0	42.7	4.3	100.0	218
Second	12.6	37.0	44.6	5.7	100.0	234
Middle	21.9	33.0	44.1	1.0	100.0	182
Fourth	14.7	28.2	56.4	0.7	100.0	104
Highest	16.8	20.8	62.4	0.0	100.0	99
Total	14.7	34.7	47.6	3.0	100.0	836

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed. Total includes one child missing information on type of diarrhea who is not shown separately.
[1] Excludes pharmacy and other.

10.5.3 Knowledge of Diarrhea Treatment Solutions

A simple and effective response to dehydration caused by diarrhea is a prompt increase in the child's fluid intake through some form of ORT, which may include the use of solutions prepared from packets of oral rehydration salts (ORS packets), known in Jordan as "Aquasal." Women were asked whether they know about ORS or Aquasal packets. Table 10.14 shows that the majority of women (92 percent) know about ORS packets for the treatment of diarrhea. Knowledge is high among all subgroups of women, with the exception of young mothers age 15-19 (63 percent).

Table 10.14 Knowledge of ORS packets or pre-packaged liquids

Percentage of women age 15-49 with a live birth in the five years preceding the survey who know about ORS packets or ORS pre-packaged liquids for treatment of diarrhea, by background characteristics, Jordan 2012

Background characteristic	Percentage of women who know about ORS packets or ORS pre-packaged liquids	Number of women
Age		
15-19	62.6	154
20-24	79.0	901
25-34	93.0	3,412
35-49	97.9	2,110
Residence		
Urban	91.9	5,395
Rural	92.1	1,182
Region		
Central	92.7	4,052
North	90.9	1,903
South	90.6	622
Governorate		
Amman	92.7	2,469
Balqa	93.6	452
Zarqa	92.7	947
Madaba	90.7	184
Irbid	90.6	1,174
Mafraq	88.5	366
Jarash	93.1	207
Ajloun	96.1	156
Karak	94.0	269
Tafiela	88.5	103
Ma'an	90.1	104
Aqaba	86.1	146
Badia		
Badia	90.1	469
Non Badia	92.1	6,108
Camps		
Camp	94.0	253
Non camp	91.9	6,324
Education		
No education	80.0	130
Elementary	86.9	400
Preparatory	90.7	872
Secondary	92.4	3,069
Higher	93.6	2,106
Wealth quintile		
Lowest	88.8	1,393
Second	90.2	1,393
Middle	93.5	1,470
Fourth	94.7	1,327
Highest	92.8	994
Total	92.0	6,577

ORS = Oral rehydration salts

NUTRITIONAL STATUS AND PREVALENCE OF ANEMIA

11

Key Findings

- Eight percent of children under five years of age are stunted, 2 percent are wasted, 3 percent are underweight and 4 percent are overweight.
- Breastfeeding is common in Jordan with 93 percent of children ever breastfed, and half of children breastfed for about 12 months or longer.
- About one in five children under age 6 months is exclusively breastfed, and the median duration of exclusive breastfeeding is less than one month.
- Complementary foods are not introduced in a timely fashion for all children. Sixty-six percent of children age 6-9 months are breastfeeding and given complementary foods.
- Overall, only one-third of children age 6-23 months are fed appropriately based on recommended infant and young child feeding (IYCF) practices.
- Thirty-two percent of children age 6-59 months are anemic, 20 percent are mildly anemic, 12 percent are moderately anemic, and less than 1 percent are severely anemic.
- Five percent of women are too thin, that is, they fall below the body mass index (BMI) cutoff of 18.5. On the other hand, an alarming 55 percent of women are overweight or obese.
- Thirty-four percent of women age 15-49 are anemic, 26 percent are mildly anemic, 7 percent are moderately anemic, and less than 1 percent are severely anemic.

Good nutrition is a prerequisite for the well-being of individuals and for national development. Although problems related to poor nutrition affect the entire population, women and children are particularly vulnerable because of their unique physiology and socioeconomic characteristics.

This chapter reviews the nutritional status of children and women in Jordan. Specific issues discussed include the nutritional status of children based on anthropometric measurements; infant and young child feeding practices based on information on initiation of breastfeeding, exclusive and continued breastfeeding status, and feeding with solid or semisolid foods; diversity of foods fed and frequency of feeding; micronutrient intake; and prevalence of anemia. The discussion also covers the nutritional status of women age 15-49.

11.1 NUTRITIONAL STATUS OF CHILDREN

Adequate nutrition is critical to children's growth and development. The period from birth to age two is especially important for optimal physical, mental, and cognitive growth, health, and development. Unfortunately, this period is often marked by protein-energy and micronutrient deficiencies that interfere with optimal growth. Childhood illnesses such as diarrhea and acute respiratory infections (ARIs) are also common. The nutritional status of young children reflects the level of household, community, and national development. Malnutrition (inadequate nutrition) is a direct result of insufficient food intake or repeated infection, or a combination of both. It can result in increased risk of illness and death.

11.1.1 Measurement of Nutritional Status among Young Children

In the 2012 JPFHS, anthropometric data on height and weight for children less than age five were collected in two-thirds of the sampled households to evaluate their nutritional status. Their standing height (for children age 24 months and older) or recumbent length (for children under age 24 months) was measured using the Shorr height board. Electronic Seca scales were used to measure the weight of children. Based on these measurements, three internationally accepted indices were constructed and are used to reflect the nutritional status of children. These are:

- Height-for-age (stunting)
- Weight-for-height (wasting)
- Weight-for-age (underweight)

In presenting anthropometric results, the nutritional status of children is compared with the World Health Organization (WHO) Child Growth Standards (WHO, 2006). The WHO Child Growth Standards are based on data from 8,440 children in six countries around the world showing that well-nourished children in all population groups follow very similar growth patterns before puberty. In any large population, there are natural variations in height and weight. The variations approximate a normal distribution. Children who fall below minus two standard deviations (-2 SD) from the reference median are considered malnourished, and children who fall below minus three standard deviations (-3 SD) from the reference median are considered severely malnourished. Because children's height and weight change with age, it is useful that height and weight be assessed in relation to age and that weight be assessed in relation to height, taking the sex of the child into consideration. Each of the three indices provides information about different aspects of children's nutritional status.

The height-for-age index reflects long-term, cumulative effects of inadequate nutrition, poor health, or both. Children who are below -2 SD from the median of the reference population are considered short for their age, or *stunted*. Children who are below -3 SD are *severely stunted*. Stunting of a child's growth may result from failure to receive adequate nutrition over a long period, sustained improper feeding practices, or the effects of repeated episodes of illness. Height-for-age therefore represents a measure of the outcome of malnutrition in a population over a long period and usually does not vary appreciably with the season of data collection.

The weight-for-height index measures body mass in relation to body length. It describes a recent and severe process that has produced substantial weight loss, usually as a consequence of acute shortage of food, severe disease, or both. Children whose weight-for-height is below -2 SD from the median of the reference population are too thin for their height, or *wasted*, while those who measure below -3 SD from the reference population median are *severely wasted*. Wasting represents the failure to receive adequate nutrition during the period immediately before the survey and usually shows marked seasonal patterns associated with changes in food availability or disease prevalence. It may be the result of recent episodes of illness, particularly diarrhea, improper feeding practices, or acute food shortage.

Weight-for-age is a composite index of height-for-age and weight-for-height. It represents body mass relative to age and takes into account both acute and chronic malnutrition. Children whose weight-for-age measures below -2 SD from the median of the reference population are *underweight* for their age, and those whose measurements are below -3 SD from the reference population median are *severely underweight*. Being underweight for one's age therefore could mean that a child is stunted or wasted or both stunted and wasted.

Overweight and obesity are becoming problems for some children in developing countries. The percentage of children more than two standard deviations above the median for weight-for-height indicates the level of this potential problem.

11.1.2 Results of Data Collection

All children born in the five years prior to the survey who were listed in the Household Questionnaires in the selected households were eligible for measuring and weighing. Table 11.1 shows the percentage of children under five years classified as malnourished according to background characteristics. The table also shows the nutritional status of children of mothers who were not interviewed, according to whether or not the mother lives in the household.

Among the 6,810 children eligible for anthropometric measurement, 92 percent had complete and valid anthropometric and age data. Seven percent of children could not be measured either because they were not at home at the time of the survey, they refused to be measured, or the mother refused to allow the child to be measured. In some cases, measurements were not taken if the child was too sick. However, the data are unlikely to be biased, since the proportion with missing information on anthropometry is relatively uniform across age groups and other background characteristics. In addition, 1 percent of children had measures considered to be out of range for their ages. Therefore, the anthropometric data in the tables are based on 6,368 children (5,851 weighted children).

11.1.3 Levels of Child Malnutrition

Chronic malnutrition among Jordanian children is relatively low. Eight percent of children are stunted or chronically malnourished (height-for-age below -2 SD), of whom one in four (2 percent) are severely stunted (Table 11.1). As Figure 11.1 shows, stunting levels increase rapidly with age, from only 9 percent among children less than six months of age to 13 percent among children age 18-23 months. After 23 months of age, the level of stunting declines linearly to 5 percent among children age 48-59 months. Male children are more likely to be stunted (9 percent) than female children (6 percent). Children born less than 48 months apart (9-10 percent) are more likely to be stunted than first births (6 percent) and children born after an interval of 48 months or longer (5 percent). Children who were considered by the mother to be very small (19 percent) or small (13 percent) at birth were two to three times more likely to be stunted as children who were average or larger (6 percent).

Table 11.1 shows that stunting is not strongly associated with urban-rural residence. Children from the South (12 percent) are more likely to be chronically malnourished than children from the North (7 percent) and Central (8 percent) regions. More children who live in Badia areas (12 percent) are stunted than children who live in other areas (7 percent). There are small differences in stunting by residence in camp areas. The prevalence of stunting ranges from 5 percent in the Madaba, Irbid, and Ajloun governorates to 19 percent in Ma’an. Mother’s education has a positive relationship with children’s nutritional status, with 5 percent of children of highly educated mothers stunted compared with 12 percent of children of mothers with elementary or no education. The relationship between stunting and household wealth is mixed. However, the data show that children who live in the poorest households (14 percent) are seven times as likely to be stunted as children who live in the richest households (2 percent). There is no clear pattern between stunting and either mother’s interview status or mother’s nutritional status.

Table 11.1 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, Jordan 2012

	Height-for-age[1]			Weight-for-height				Weight-for-age				
Background characteristic	Percentage below -3 SD	Percentage below -2 SD[2]	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Number of children
Age in months												
<6	1.6	8.6	-0.1	2.3	5.0	13.1	0.3	1.6	4.8	1.2	0.0	482
6-8	0.4	5.6	0.1	1.0	3.0	6.0	0.2	0.7	1.0	2.0	0.1	221
9-11	0.3	9.3	-0.1	0.1	0.7	2.6	0.2	0.2	0.3	5.2	0.1	274
12-17	0.6	7.8	-0.1	0.9	2.4	6.2	0.3	1.4	3.3	5.6	0.2	608
18-23	3.9	13.1	-0.6	0.1	1.0	4.2	0.3	0.2	5.0	2.1	-0.1	599
24-35	2.2	8.8	-0.5	0.6	1.5	3.1	0.2	0.3	3.0	0.7	-0.1	1,159
36-47	0.7	6.3	-0.5	0.1	2.8	2.4	0.1	0.1	3.0	0.8	-0.2	1,260
48-59	1.2	5.0	-0.5	0.4	2.8	3.6	-0.0	0.3	2.2	1.1	-0.3	1,248
Sex												
Male	1.6	9.2	-0.4	0.4	2.4	5.1	0.2	0.4	3.3	2.3	-0.1	3,006
Female	1.3	6.1	-0.4	0.8	2.5	3.6	0.1	0.6	2.7	1.2	-0.1	2,846
Birth interval in months[3]												
First birth[4]	1.4	6.0	-0.3	0.3	2.2	4.6	0.2	0.2	2.6	1.5	-0.0	1,303
<24	1.7	9.0	-0.5	0.5	3.0	4.5	0.1	0.9	4.2	1.5	-0.2	1,448
24-47	1.8	9.5	-0.4	0.8	2.3	4.5	0.2	0.4	2.8	2.1	-0.1	1,877
48+	0.7	4.8	-0.3	0.3	2.0	4.0	0.2	0.2	2.1	1.8	-0.0	1,126
Size at birth[3]												
Very small	4.1	18.7	-0.9	1.8	7.0	1.4	-0.2	2.5	9.8	0.9	-0.6	322
Small	1.1	13.1	-0.7	0.3	3.4	3.1	-0.0	0.4	4.8	0.5	-0.5	768
Average or larger	1.3	6.0	-0.3	0.5	1.9	4.9	0.2	0.3	2.2	2.0	-0.0	4,661
Mother's interview status												
Interviewed	1.5	7.7	-0.4	0.5	2.4	4.4	0.2	0.4	3.0	1.7	-0.1	5,754
Not interviewed but in household	(0.5)	(6.2)	-0.6	(5.9)	(6.5)	(3.1)	-0.1	(4.2)	(6.5)	(3.1)	-0.4	50
Not interviewed and not in the household[5]	1.4	6.6	-0.6	0.6	0.9	2.4	0.3	0.0	3.3	0.0	-0.1	47
Mother's nutritional status[6]												
Thin (BMI < 18.5)	3.3	8.6	-0.7	0.2	7.9	4.7	(0.4)	0.2	3.8	0.3	-0.6	126
Normal (BMI 18.5-24.9)	1.3	9.1	-0.4	1.0	3.3	2.9	0.0	0.7	3.6	1.3	-0.2	1,901
Overweight/ obese (BMI ≥ 25)	1.5	6.9	-0.4	0.3	1.7	5.2	0.3	0.3	2.6	2.1	-0.0	3,735
Residence												
Urban	1.3	7.4	-0.4	0.6	2.5	4.1	0.1	0.5	3.2	1.7	-0.1	4,737
Rural	2.3	8.9	-0.5	0.5	2.0	5.7	0.3	0.6	2.1	1.7	-0.1	1,114
Region												
Central	1.3	7.5	-0.4	0.7	2.7	4.2	0.1	0.5	3.2	1.6	-0.1	3,472
North	1.3	6.7	-0.4	0.4	2.0	3.7	0.2	0.4	2.5	1.6	-0.1	1,813
South	2.9	12.1	-0.6	0.6	2.0	7.7	0.4	0.5	3.4	3.1	-0.1	567

Continued…

Table 11.1—*Continued*

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, Jordan 2012

	Height-for-age[1]			Weight-for-height				Weight-for-age				
Background characteristic	Percentage below -3 SD	Percentage below -2 SD[2]	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Number of children
Governorate												
Amman	1.2	7.1	-0.3	0.7	2.9	4.4	0.2	0.6	3.3	1.4	-0.1	2,038
Balqa	0.9	5.6	-0.4	1.5	3.3	4.5	0.2	0.6	3.0	1.7	-0.1	395
Zarqa	2.1	9.8	-0.5	0.3	2.1	3.5	0.1	0.3	3.5	1.7	-0.3	879
Madaba	0.4	4.5	-0.2	0.4	2.0	6.2	0.3	0.0	1.6	2.7	0.1	160
Irbid	0.8	5.1	-0.2	0.5	2.2	2.9	0.1	0.3	2.3	1.6	-0.1	1,080
Mafraq	2.2	10.4	-0.7	0.0	0.9	4.3	0.3	0.5	2.3	0.9	-0.2	369
Jarash	2.5	9.2	-0.5	0.4	3.0	4.6	0.2	0.5	3.8	2.2	-0.1	217
Ajloun	0.8	4.6	-0.4	0.7	1.2	6.0	0.3	0.4	1.9	2.5	-0.0	146
Karak	3.2	11.1	-0.5	0.2	1.5	8.9	0.4	0.4	2.7	2.9	-0.0	257
Tafiela	0.5	9.9	-0.4	1.6	2.7	6.0	0.2	1.0	3.1	3.7	-0.1	98
Ma'an	3.8	18.5	-0.9	0.7	3.2	4.5	0.2	0.4	6.2	1.4	-0.4	105
Aqaba	3.3	10.4	-0.5	0.3	1.0	9.8	0.4	0.4	2.6	5.0	0.0	107
Badia												
Badia	3.2	11.8	-0.8	0.2	2.6	4.7	0.1	0.4	2.9	0.7	-0.3	468
Non Badia	1.3	7.3	-0.4	0.6	2.4	4.4	0.2	0.5	3.0	1.8	-0.1	5,383
Camps												
Camp	2.0	9.6	-0.6	0.7	3.2	2.5	0.0	0.7	4.2	0.9	-0.3	245
Non camp	1.4	7.6	-0.4	0.6	2.4	4.5	0.2	0.5	2.9	1.8	-0.1	5,606
Mother's education[7]												
No education	2.2	11.7	-1.0	1.4	4.5	3.2	0.1	0.6	6.7	0.7	-0.5	103
Elementary	2.8	12.0	-0.7	0.3	0.6	4.8	0.3	0.4	2.7	0.7	-0.2	386
Preparatory	2.4	10.9	-0.6	0.3	1.8	3.1	0.1	0.2	4.0	1.1	-0.3	765
Secondary	1.2	8.0	-0.4	0.6	3.4	3.7	0.1	0.7	3.8	1.7	(0.1)	2,774
Higher	1.1	4.7	-0.2	0.6	1.5	6.1	0.2	0.3	1.2	2.4	0.1	1,777
Wealth quintile												
Lowest	3.4	13.8	-0.8	0.6	3.0	4.7	0.1	1.2	5.2	1.7	-0.3	1,373
Second	1.2	7.0	-0.4	0.7	2.6	3.3	0.2	0.3	2.8	1.4	-0.1	1,321
Middle	0.7	6.2	-0.4	0.2	1.7	3.3	0.1	0.2	2.3	1.4	-0.1	1,311
Fourth	1.2	6.8	-0.2	0.8	2.1	4.8	0.2	0.6	3.2	2.8	0.0	1,060
Highest	0.2	1.8	0.0	0.7	2.5	6.9	0.2	0.0	0.4	1.6	0.2	787
Total	1.5	7.7	-0.4	0.6	2.4	4.4	0.2	0.5	3.0	1.7	-0.1	5,851

Note: Table is based on children who stayed in the household on the night before the interview. Each of the indices is expressed in standard deviation units (SD) from the median of the WHO Child Growth Standards adopted in 2006. The indices in this table are NOT comparable to those based on the previously used 1977 NCHS/CDC/WHO reference.

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] Recumbent length is measured for children under age 2, or in the few cases when the age of the child is unknown and the child is less than 85 cm; standing height is measured for all other children.

[2] Includes children who are below -3 standard deviations (SD) from the WHO Child Growth Standards population median.

[3] Excludes children whose mothers were not interviewed.

[4] First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.

[5] Includes children whose mothers are deceased.

[6] Excludes children whose mothers were not weighed and measured, and children whose mothers are pregnant or gave birth within the preceding 2 months. Mother's nutritional status in terms of BMI (body mass index) is presented in Table 11.9.

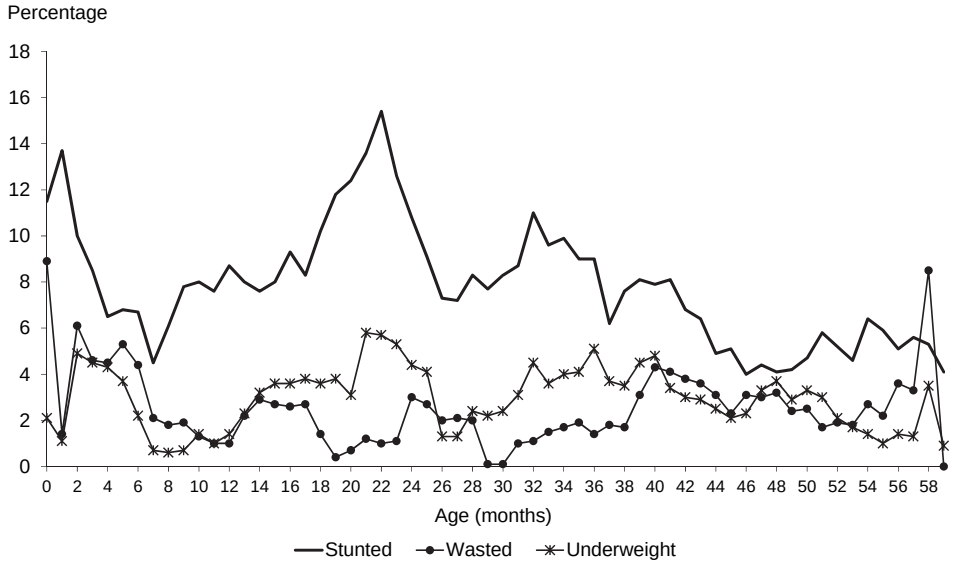
[7] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

Two percent of children under age five are wasted (weight-for-height below -2 SD) and less than 1 percent are severely wasted. The proportion wasted is highest among children under age six months (5 percent) (Figure 11.1). There is little difference in the level of wasting by sex or birth interval. Wasting is higher among children perceived to be very small (7 percent) at birth than children who are small (3 percent) or average or larger (2 percent). Children born to mothers who are thin (BMI < 18.5) are more likely to be wasted than those born to mothers who are overweight/obese (BMI ≥ 25). Wasting among children does not vary markedly by any place of residence. The relationship between wasting and mother's education and wealth quintile is mixed.

Four percent of children are overweight (weight-for-height above +2 SD), with children under age six months much more likely to be overweight (13 percent) than children in the other age groups (2-6 percent). Children who are perceived to have been average or larger at birth are more likely to be overweight (5 percent) than children who were small (3 percent) or very small (1 percent) at birth. There is no clear pattern between mother's nutritional status and overweight children. Children from the South (8 percent) are more likely to be overweight than children from the North and Central regions (4 percent each). The percentage of children overweight ranges from 10 percent in Aqaba to 3 percent in Irbid.

Three percent of children are underweight (weight-for-age below -2 SD), and less than 1 percent are severely underweight. Differentials by background characteristics are very similar to those discussed for stunting.

Figure 11.1
Nutritional status of children by age



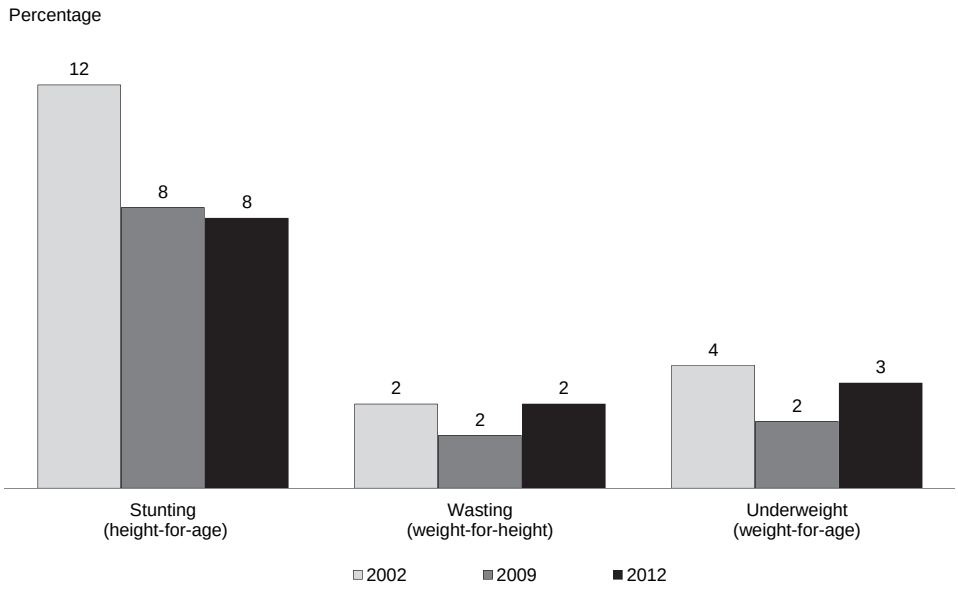
Note: *Stunting* reflects chronic malnutrition; *wasting* reflects acute malnutrition; *underweight* reflects chronic or acute malnutrition or a combination of both. Plotted values are smoothed by a five-month moving average.

JPFHS 2012

11.1.4 Trends in Children's Nutritional Status

The nutritional status among children can be compared over the last decade from data collected in the 2002, 2009, and 2012 JPFHS surveys. For comparison purposes in this section, data from the 2002 JPFHS were recalculated according to the new reference population. Figure 11.2 presents the prevalence of stunting, wasting, and underweight in 2002, 2009, and 2012 according to the WHO Child Growth Standards. Stunting has declined in the last decade from 12 percent of children under five years to 8 percent. This decline was more obvious between the 2002 and 2009 surveys, with the changes in the last three years minimal. There has been very little change in the percentage of children wasted in the last decade. A similar pattern is seen in the percentage of children underweight.

Figure 11.2
Trends in nutritional status of children under age five, 2002, 2009, and 2012



Note: The data for all three surveys are based on the WHO Child Growth Standards adopted in 2006.

JPFHS 2012

11.2 BREASTFEEDING AND COMPLEMENTARY FEEDING

Breastfeeding and complementary feeding behaviors are important predictors of infant and child nutrition, health, and survival. 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. A well-documented effect of exclusive breastfeeding of sufficient intensity and duration is delayed return to ovulation, resulting in longer birth intervals and lower fertility, which is strongly related to infant and child survival.

11.2.1 Initiation of Breastfeeding

Breast milk is the most desirable source of nutrients for infants. Breastfeeding provides a complete source of nutrition for the first six months of life, half of all requirements in the second six months of life, and one-third of requirements in the second year of life. The attributes of breast milk go beyond its nutrient content, as it offers the infant unsurpassed protection against infection. Colostrum, a pre-milk substance containing antibodies and white cells from the mother's blood, is produced during the first two to three days of lactation. Colostrum contains maternal immune factors and helps protect the newborn infant from infections. There is evidence that links having been breastfed as a child with stronger intellectual

development and a reduced risk of cancer, obesity, and several chronic diseases. The early initiation of breastfeeding is also beneficial for the mother since it stimulates breast milk production and causes the uterus to retract, which reduces postpartum blood loss. Furthermore, women who breastfeed have a reduced risk of ovarian cancer and premenopausal breast cancer (Administrative Committee on Coordination/Subcommittee on Nutrition [ACC/SCN], 2000).

Table 11.2 shows that breastfeeding is common in Jordan. Among children born in the two years preceding the survey, 93 percent were breastfed. There are small differences in the percentage of infants ever breastfed by sex, residence, and household wealth. Children of mothers with elementary education are less likely to be breastfed (83 percent) compared to children of mothers with no education (96 percent).

Nineteen percent of children began breastfeeding within an hour after delivery, and two-thirds (67 percent) of infants were breastfed within the first day. Children in the South are relatively more likely to be breastfed within one hour of birth (26 percent) than children in the Central and North regions (18 percent each). The proportions of children breastfed within one hour and one day of birth decline as mother's education and wealth quintile increase.

The percentages breastfed within one hour of birth and one day of birth are much lower in 2012 than in 2007. This could be attributed to the fact that recall in the 2012 survey was presumably better since it was restricted to the two years preceding the survey in contrast to five years in 2007. In addition, in the 2012 survey the timing of breastfeeding was based on all last-born children in contrast to 2007, when this percentage was restricted to last-born children ever breastfed.

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. Table 11.2 shows that a total of 67 percent of children who were ever breastfed received a prelacteal feed. The proportion of infants receiving a prelacteal feed is higher in rural areas (72 percent) than in urban areas (66 percent), the South region (74 percent) compared with the Central and North regions (66-67 percent), and in non camp areas (67 percent) than in camps (59 percent). Prelacteal feeding varies from a low of 58 percent in Ajloun to a high of 79 percent in Karak. Also, the proportion receiving a prelacteal feed is highest among infants born to mothers with higher education (75 percent) and mothers living in the wealthiest quintile of households (80 percent).

Table 11.2 Initial breastfeeding

Among last-born children who were born in the two years preceding the survey, the percentage who were ever breastfed and the percentages who started breastfeeding within one hour and within one day of birth, and among last-born children born in the two years preceding the survey who were ever breastfed, the percentage who received a prelacteal feed, by background characteristics, Jordan 2012

	Among last-born children born in the past two years:				Among last-born children born in the past two years who were ever breastfed:	
Background characteristic	Percentage ever breastfed	Percentage who started breastfeeding within 1 hour of birth	Percentage who started breastfeeding within 1 day of birth[1]	Number of last-born children	Percentage who received a prelacteal feed[2]	Number of last-born children ever breastfed
Sex						
Male	93.3	18.9	66.7	1,901	65.1	1,775
Female	92.8	18.1	68.2	1,587	69.3	1,472
Residence						
Urban	92.9	17.9	67.0	2,796	65.8	2,597
Rural	93.9	21.1	68.8	692	71.8	650
Region						
Central	92.3	17.5	63.8	2,144	66.2	1,978
North	95.0	18.4	74.7	1,013	66.5	962
South	92.5	26.0	67.9	331	73.7	306
Governorate						
Amman	91.3	16.6	64.0	1,318	65.7	1,204
Balqa	93.7	20.3	64.3	257	62.1	241
Zarqa	93.9	20.0	63.6	470	67.8	442
Madaba	93.0	9.8	61.4	99	76.5	92
Irbid	94.4	19.5	75.2	601	65.2	567
Mafraq	96.7	15.8	72.3	203	70.7	197
Jarash	94.2	18.8	74.7	123	71.8	116
Ajloun	95.9	16.1	77.5	86	58.4	82
Karak	89.8	28.2	64.0	143	78.7	129
Tafiela	94.2	25.4	71.9	54	75.7	51
Ma'an	94.3	23.9	77.1	62	64.2	59
Aqaba	95.2	23.7	64.7	71	70.7	68
Badia						
Badia	96.3	24.6	70.1	293	66.0	282
Non Badia	92.8	18.0	67.1	3,196	67.1	2,965
Camps						
Camp	94.7	20.6	75.6	130	58.6	124
Non camp	93.0	18.5	67.1	3,358	67.4	3,123
Mother's education						
No education	95.6	24.9	81.4	57	65.0	55
Elementary	82.8	25.0	59.3	202	62.5	167
Preparatory	93.2	18.6	69.5	464	60.7	432
Secondary	93.8	19.6	70.8	1,603	63.8	1,503
Higher	93.7	15.6	62.6	1,162	74.7	1,089
Wealth quintile						
Lowest	92.9	21.2	70.5	780	60.9	725
Second	95.1	24.5	75.8	773	61.2	736
Middle	92.7	16.6	63.7	740	67.2	686
Fourth	92.4	14.4	67.9	680	71.0	629
Highest	91.7	13.8	54.6	514	80.0	471
Total	93.1	18.6	67.4	3,488	67.0	3,247

Note: Table is based on last-born children born in the two years preceding the survey regardless of whether the children are living or dead at the time of interview.

[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.

11.2.2 Breastfeeding Status by Age

Exclusive breastfeeding, defined as the consumption of human milk as a sole source of energy, is the preferred method of feeding for normal full-term infants from birth to six months. Breastfeeding complemented by the appropriate introduction of other foods is recommended for the remainder of the first year or longer if desired.

Early supplementation is discouraged for several reasons. First, it exposes infants to pathogens and increases their risk of infection, especially diarrheal disease. Second, it decreases infant's intake of breast milk and therefore suckling, which reduces breast milk production. Third, in harsh socioeconomic environments, available supplementary food is often nutritionally inferior. On the other hand, after age six months, breastfeeding alone provides insufficient nutrition for the infant, and must be supplemented with the introduction of other appropriate foods in order to promote the best growth possible.

Information on supplementation was obtained by asking mothers about the current breastfeeding status of their youngest child under age two, and about the foods (liquids and solids) given to the child the day before the survey. Table 11.3 shows the percent distribution of youngest children under two years who are living with the mother by breastfeeding status. According to the World Health Organization's recommendation, children should be exclusively breastfed for the first six months of life. However, data from the 2012 JPFHS show that only 23 percent of children 0-5 months are exclusively breastfed in Jordan. This has changed little over the last five years. Two-fifths (38 percent) of Jordanian children under age two months are exclusively breastfed. By age 4-5 months, only 9 percent of children are exclusively breastfed. After age five months, very few children are exclusively breastfeeding.

Table 11.3 Breastfeeding status by age

Percent distribution of youngest children under two years who are living with their mother by breastfeeding status and the percentage currently breastfeeding, and the percentage of all children under two years using a bottle with a nipple, according to age in months, Jordan 2012

		Breastfeeding status									
Age in months	Not breast-feeding	Exclusively breastfed	Breast-feeding and consu-ming plain water only	Breast-feeding and consu-ming non-milk liq-uids[1]	Breast-feeding and consu-ming other milk	Breast-feeding and consu-ming com-plementary foods	Total	Percent-age cur-rently breast-feeding	Number of youngest children under two years living with their mother	Percent-age using a bottle with a nipple	Number of all children under two years
0-1	0.8	38.1	5.1	10.8	45.2	0.0	100.0	99.2	206	59.8	218
2-3	10.4	25.4	9.7	3.3	44.3	6.8	100.0	89.6	320	62.1	322
4-5	23.9	9.3	9.7	3.6	22.6	30.9	100.0	76.1	304	71.1	311
6-8	26.4	2.3	2.3	0.2	2.0	66.8	100.0	73.6	424	59.0	436
9-11	36.4	1.9	0.0	0.0	2.3	59.5	100.0	63.6	466	60.8	477
12-17	61.0	0.1	0.0	0.3	0.5	38.1	100.0	39.0	856	64.5	942
18-23	83.6	0.0	0.0	0.0	0.0	16.4	100.0	16.4	857	50.6	999
0-3	6.7	30.4	7.9	6.3	44.7	4.1	100.0	93.3	527	61.2	540
0-5	13.0	22.7	8.5	5.3	36.6	13.9	100.0	87.0	831	64.8	851
6-9	27.7	3.0	1.7	0.2	1.6	65.7	100.0	72.3	564	57.3	581
12-15	56.5	0.2	0.0	0.4	0.7	42.2	100.0	43.5	608	64.0	657
12-23	72.3	0.1	0.0	0.1	0.2	27.2	100.0	27.7	1,712	57.4	1,941
20-23	87.1	0.0	0.0	0.0	0.0	12.9	100.0	12.9	590	48.7	685

Note: Breastfeeding status refers to a "24-hour" period (yesterday and last night). Children who are classified as breastfeeding and consuming plain water only consumed no liquid or solid supplements. The categories of not breastfeeding, exclusively breastfed, and breastfeeding and consuming plain water, non-milk liquids, other milk, and complementary foods (solids and semi-solids) are hierarchical and mutually exclusive, and their percentages add to 100 percent. Thus, children who receive breast milk and non-milk liquids and who do not receive other milk and who do not receive complementary foods are classified in the non-milk liquid category even though they may also get plain water. Any children who get complementary food are classified in that category as long as they are breastfeeding as well.

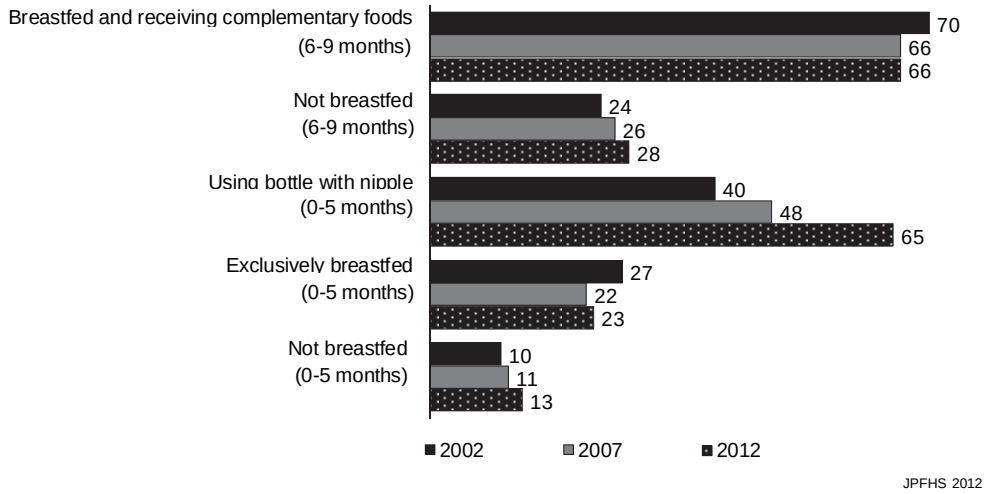
[1] Non-milk liquids include juice, juice drinks, clear broth, or other liquids.

The table shows that more than one-third (37 percent) of children under age six months breastfeed and also consume other milk (e.g., fresh milk or powdered milk), 9 percent of children consume plain water and breast milk, and 14 percent are given complementary food in addition to breast milk. Two-thirds (67 percent) of children are breastfeeding and consuming complementary food at 6-8 months. By 18-23 months, only 16 percent of children are still breastfeeding.

Bottle-feeding is discouraged for very young children. It is usually associated with increased risk of illness, especially diarrheal disease, because of difficulty in sterilizing the nipples properly. Bottle-feeding also shortens the period of postpartum amenorrhea and increases the risk of pregnancy. As seen in Table 11.3, the practice of bottle-feeding with a nipple is prevalent in 60 percent of children under age two months. Bottle-feeding peaks at 71 percent among children age 4-5 months.

Since 2002, infant feeding practices have worsened (Figure 11.3). The proportion of children 0-5 months of age not breastfed has slightly increased (from 10 percent in 2002 to 13 percent in 2012); exclusive breastfeeding (as recommended) has decreased (from 27 to 23 percent); and use of a bottle with a nipple has increased (from 40 to 65 percent). Similarly, the proportion of children 6-9 months of age not breastfed has slightly increased (from 24 to 28 percent), and the percentage of breastfed children receiving complementary food (as recommended) has decreased (from 70 to 66 percent).

Figure 11.3
Breastfeeding Status, 2002, 2007, 2012



11.2.3 Duration of Breastfeeding

Table 11.4 provides information on the median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the three years preceding the survey. Estimates of the mean and median duration of breastfeeding are based on current status data, that is, the proportion of children under three years who were being breastfed at the time of the survey.

Table 11.4 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, Jordan 2012

Background characteristic	Median duration (months) of breastfeeding among children born in the past three years[1]		
	Any breastfeeding	Exclusive breastfeeding	Predominant breastfeeding[2]
Sex			
Male	11.6	0.6	0.7
Female	11.9	0.6	1.5
Residence			
Urban	11.7	0.6	0.7
Rural	11.8	0.7	1.5
Region			
Central	12.1	0.6	1.0
North	11.7	0.6	0.7
South	9.4	0.5	0.6
Governorate			
Amman	11.6	0.6	1.0
Balqa	12.7	0.6	0.7
Zarqa	12.9	0.7	1.4
Madaba	10.6	0.6	0.6
Irbid	11.3	0.5	0.7
Mafraq	12.8	0.8	1.4
Jarash	12.5	0.5	0.6
Ajloun	10.1	1.6	2.1
Karak	7.1	0.5	0.5
Tafiela	12.0	0.5	0.7
Ma'an	8.9	0.6	0.8
Aqaba	10.9	0.9	1.0
Badia			
Badia	12.7	0.9	1.6
Non Badia	11.7	0.6	0.7
Camps			
Camp	13.4	0.6	0.7
Non camp	11.7	0.6	0.8
Mother's education			
No education	13.4	1.8	4.8
Elementary	11.2	0.5	0.5
Preparatory	12.6	0.9	2.3
Secondary	12.9	0.6	0.7
Higher	10.5	0.5	0.7
Wealth quintile			
Lowest	12.7	0.5	0.6
Second	12.2	0.7	1.9
Middle	10.1	0.6	0.7
Fourth	12.3	0.6	1.4
Highest	9.2	0.6	0.6
Total	11.7	0.6	0.8
Mean for all children	12.5	2.1	2.9

Note: Median and mean durations are based on the distributions at the time of the survey of the proportion of births by months since birth. Includes children living and deceased at the time of the survey.

[1] It is assumed that non-last-born children and last-born children not currently living with the mother are not currently breastfeeding.

[2] Either exclusively breastfed or received breast milk and plain water and/or non-milk liquids only

The median duration of any breastfeeding in Jordan is 11.7 months, which is lower than the median in 2007 (12.5 months). The mean duration of breastfeeding in 2012 for all children is 12.5 months. There are no differences in the duration of breastfeeding by sex of the child and urban-rural residence. The median duration of breastfeeding varies by governorates from a low of 7.1 months in Karak to a high of 12.9 months in Zarqa. The relationship between the median duration of breastfeeding and mother's education and household wealth is mixed. The median duration of exclusive breastfeeding is 0.6 months.

Predominant breastfeeding is defined as exclusive breastfeeding or breastfeeding in combination with plain water, water-based liquids, or juices. The median duration of predominant breastfeeding is 0.8 months, lower than in 2007 (1.7 months).

11.2.4 Types of Complementary Foods

Information on the types of food given to children under age two in the 24 hours preceding the survey, according to breastfeeding status, is shown in Table 11.5. In Jordan, the introduction of other liquids such as water, juice, and formula takes place earlier than the recommended age of about six months. Even among the youngest breastfed children (under age two months), almost one in two (45 percent) children receive milk other than breast milk and one in five (19 percent) consumes other liquids.

WHO recommends the introduction of solid food to infants around age six months because by that age breast milk by itself is no longer sufficient to maintain a child's optimal growth. However, in Jordan, breastfed children consume breads, cereals, grains, and semi-solid or solid types of foods early in life. Among infants age 4-5 months, 41 percent consume solid or semi-solid food. The percentage of children who are fed solid or semi-solid food increases rapidly to 91 percent at 6-8 months. Among children who are not breastfed, nearly two-thirds (65 percent) receive solid or semi-solid food by the age of 4-5 months.

Overall, 45 percent of breastfed children under two years of age consume foods made with grain; 20 percent receive meat, fish, and poultry; and 21 percent receive eggs. In comparison, the percentage of children consuming roots, tubers, legumes and nuts, and fruits and vegetables rich in vitamin A is much lower.

11.3 Appropriate Infant and Young Child Feeding (IYCF) Practices

Breastfed children age 6-23 months should receive animal-source foods and vitamin A-rich fruits and vegetables daily (PAHO/WHO, 2003). Since first foods almost universally include a grain- or tuber-based staple, it is unlikely that young children who eat two or fewer food groups will receive both an animal-source food and a vitamin A-rich fruit or vegetable. Therefore, four food groups are considered as the minimum acceptable number of food groups for breastfed infants (Arimond and Ruel, 2003). Breastfed infants age 6-8 months should be fed meals of complementary foods two to three times per day, with one to two snacks as desired; breastfed children 9-23 months should be fed meals three to four times per day, with one to two snacks (WHO, 2008).

Nonbreastfed children age 6-23 months should receive milk products at least twice a day to ensure their calcium needs are met. In addition, they also need animal-source foods and vitamin A-rich fruits and vegetables. Therefore, four food groups are considered as a minimum acceptable number of food groups for nonbreastfed young children. Nonbreastfed children should be fed meals four to five times per day, with one to two snacks as desired (WHO, 2005). Meal frequency is considered a proxy for energy intake from foods other than breast milk; therefore, the feeding frequency indicator for nonbreastfed children includes both milk feeds and solid/semi-solid feeds (WHO, 2008). Table 11.6 shows the percentage of breastfed children who were fed from at least four food groups and who were fed at least the minimum number of times for their age (i.e., at least twice for infants 6-8 months and at least three times for children 9-23 months). Among breastfed children age 6-23 months, 43 percent were given foods from four or more food groups in the 24 hours preceding the survey. The percentage of children given foods from four or more food groups increases with age from 17 percent among those age 6-8 months to 70 percent among

those age 18-23 months. Two in five (39-40 percent) children residing in the North and South regions were given foods from four or more food groups, compared with 46 percent of children living in the Central region. Children living in Amman and Aqaba, children in non Badia areas, children of mothers with higher education, and children from the wealthiest households were more likely than their counterparts to receive foods from four or more food groups.

Table 11.5 Foods and liquids consumed by children in the day or night preceding the interview

Percentage of youngest children under two years of age who are living with the mother by type of foods consumed in the day or night preceding the interview, according to breastfeeding status and age, Jordan 2012

	Liquids			Solid or semi-solid foods										
Age in months	Infant formula	Other milk[1]	Other liquids[2]	Fortified baby foods	Food made from grains[3]	Fruits and vegetables rich in vitamin A[4]	Other fruits and vegetables	Food made from roots and tubers	Food made from legumes and nuts	Meat, fish, poultry	Eggs	Cheese, yogurt, other milk product	Any solid or semi-solid food	Number of children
BREASTFEEDING CHILDREN														
0-1	0.1	45.4	19.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	205
2-3	4.6	52.7	7.4	3.4	0.0	0.2	0.1	0.0	0.0	0.0	0.0	4.1	7.5	287
4-5	10.2	48.5	21.5	17.4	7.1	1.0	2.8	2.2	0.3	0.3	3.4	21.4	40.6	231
6-8	15.0	41.8	56.2	29.3	55.9	13.7	30.9	19.8	5.8	11.2	22.7	61.8	90.7	312
9-11	10.0	45.8	53.8	19.4	75.0	23.1	51.7	26.6	13.9	32.0	35.0	71.1	93.5	296
12-17	14.3	38.2	73.0	10.7	84.2	32.2	60.9	29.8	18.7	45.6	38.3	79.3	97.7	334
18-23	3.7	52.9	82.8	1.1	85.4	40.6	72.1	41.6	34.0	49.1	46.6	80.2	100.0	140
6-23	11.9	43.2	64.2	17.2	73.7	25.5	51.2	27.6	15.6	32.4	34.0	72.1	94.8	1,083
Total	9.2	45.6	44.6	13.1	45.1	15.4	31.1	16.8	9.4	19.5	20.8	46.6	63.3	1,806
NONBREASTFEEDING CHILDREN														
0-1	*	*	*	*	*	*	*	*	*	*	*	*	*	2
2-3	(1.8)	(100.0)	(30.3)	(0.0)	(1.2)	(6.8)	(0.0)	(6.8)	(0.0)	(0.0)	(0.0)	(0.0)	(9.8)	33
4-5	20.0	98.2	26.9	23.0	21.1	5.1	10.5	2.7	7.4	1.4	8.1	26.8	64.8	73
6-8	12.8	95.8	58.4	38.2	49.6	10.5	42.8	22.2	4.7	11.6	16.0	63.6	94.5	112
9-11	16.0	95.3	65.8	19.0	79.5	22.8	45.1	29.5	12.1	24.0	30.9	74.8	98.3	170
12-17	4.4	94.2	74.2	5.8	87.0	28.5	72.2	31.6	25.7	45.9	41.5	81.2	99.4	522
18-23	4.5	79.9	80.6	3.7	89.2	36.7	72.2	31.5	28.4	60.0	47.8	80.6	98.9	716
6-23	6.4	87.7	75.1	8.7	84.5	30.4	67.0	30.7	23.9	47.6	41.4	78.9	98.7	1,520
Total	6.9	88.4	72.0	9.1	79.8	28.7	63.0	28.9	22.7	44.5	39.0	74.9	95.2	1,628

Note: Breastfeeding status and food consumed refer to a "24-hour" period (yesterday and last night). 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] Other milk includes fresh, tinned, and powdered animal milk.

[2] Does not include plain water. Includes juice, juice drinks, clear broth, or other non-milk liquids.

[3] Includes fortified baby food.

[4] Includes pumpkin, carrots, red sweet potatoes, spinach, mouloukia, and other locally grown fruits and vegetables that are rich in vitamin A.

Table 11.6 Infant and young child feeding (IYCF) practices

Percentage of youngest children age 6-23 months living with their mother who are fed according to three IYCF feeding practices based on breastfeeding status, number of food groups, and times they are fed during the day or night preceding the survey, by background characteristics, Jordan 2012

	Among breastfed children 6-23 months, percentage fed:				Among nonbreastfed children 6-23 months, percentage fed:					Among all children 6-23 months, percentage fed:				
Background characteristic	4+ food groups[1]	Minimum meal frequency[2]	Both 4+ food groups and minimum meal frequency	Number of breastfed children 6-23 months	Milk or milk products[3]	4+ food groups[1]	Minimum meal frequency[4]	With 3 IYCF practices[5]	Number of nonbreastfed children 6-23 months	Breast milk, milk, or milk products[6]	4+ food groups[1]	Minimum meal frequency[7]	With 3 IYCF practices	Number of all children 6-23 months
Age in months														
6-8	17.4	74.3	16.9	312	97.0	21.2	98.8	3.0	112	99.2	18.4	80.8	13.2	424
9-11	41.6	55.4	32.0	296	95.2	39.3	95.1	16.1	170	98.2	40.8	69.9	26.2	466
12-17	57.7	62.3	44.6	334	93.0	65.5	94.1	34.2	522	95.7	62.4	81.7	38.3	856
18-23	69.6	75.7	56.8	140	80.2	74.4	88.2	39.3	716	83.4	73.6	86.1	42.2	857
Sex														
Male	42.1	65.8	34.6	607	87.9	62.6	91.3	32.3	821	93.1	53.9	80.5	33.3	1,428
Female	44.6	65.5	34.9	476	87.0	64.5	92.3	32.4	699	92.2	56.4	81.4	33.4	1,174
Residence														
Urban	43.7	65.0	34.9	875	88.0	65.7	91.6	33.7	1,211	93.0	56.5	80.4	34.2	2,086
Rural	41.1	68.5	33.9	208	85.6	54.9	92.5	27.0	308	91.4	49.3	82.8	29.8	517
Region														
Central	45.9	63.7	36.5	650	89.0	64.7	92.0	35.6	929	93.5	57.0	80.4	36.0	1,579
North	39.0	69.6	32.7	346	84.5	63.9	91.0	26.4	431	91.4	52.8	81.5	29.2	778
South	40.0	63.8	29.3	86	86.8	55.3	92.4	29.4	160	91.4	49.9	82.4	29.3	246
Governorate														
Amman	47.1	64.6	36.6	367	90.6	65.8	90.9	38.5	574	94.2	58.5	80.6	37.7	941
Balqa	42.2	67.2	33.8	79	85.0	57.2	90.6	29.7	111	91.3	50.9	80.9	31.4	190
Zarqa	45.3	59.2	37.4	175	85.7	67.9	95.4	31.6	197	92.4	57.3	78.4	34.3	372
Madaba	43.9	70.3	38.2	29	93.5	56.4	95.4	30.9	47	95.9	51.7	85.9	33.7	76
Irbid	39.4	71.0	32.8	204	81.8	65.6	88.1	25.3	254	89.9	53.9	80.5	28.7	458
Mafraq	32.4	63.3	25.0	72	91.2	58.1	94.8	24.2	87	95.2	46.5	80.6	24.5	159
Jarash	43.6	71.4	40.8	40	82.1	62.4	94.5	30.2	53	89.8	54.3	84.6	34.7	93
Ajloun	45.8	72.7	39.7	30	90.4	68.3	96.3	33.6	37	94.7	58.2	85.7	36.4	68
Karak	31.6	60.8	23.7	29	84.8	52.7	90.2	27.6	78	88.9	47.0	82.3	26.6	106
Tafiela	39.1	64.9	32.6	18	85.8	61.4	90.0	32.5	22	92.2	51.4	78.8	32.5	39
Ma'an	45.4	66.1	29.0	19	92.0	52.9	96.8	25.8	27	95.3	49.8	84.1	27.1	47
Aqaba	47.4	64.8	34.4	21	87.7	59.1	95.6	34.3	33	92.4	54.6	83.8	34.4	54
Badia														
Badia	32.7	59.0	21.8	95	92.4	51.1	95.8	22.1	130	95.6	43.3	80.3	21.9	225
Non Badia	44.2	66.3	36.0	988	87.0	64.7	91.4	33.3	1,390	92.4	56.2	81.0	34.4	2,378
Camps														
Camp	40.1	64.4	35.6	42	76.9	55.5	89.5	25.2	55	86.9	48.8	78.6	29.7	97
Non camp	43.3	65.7	34.7	1,041	87.9	63.8	91.9	32.6	1,465	92.9	55.3	81.0	33.5	2,505

Continued…

Table 11.6—*Continued*

Percentage of youngest children age 6-23 months living with their mother who are fed according to three IYCF feeding practices based on breastfeeding status, number of food groups, and times they are fed during the day or night preceding the survey, by background characteristics, Jordan 2012

	Among breastfed children 6-23 months, percentage fed:				Among nonbreastfed children 6-23 months, percentage fed:					Among all children 6-23 months, percentage fed:				
Background characteristic	4+ food groups[1]	Minimum meal frequency[2]	Both 4+ food groups and minimum meal frequency	Number of breastfed children 6-23 months	Milk or milk products[3]	4+ food groups[1]	Minimum meal frequency[4]	With 3 IYCF practices[5]	Number of nonbreastfed children 6-23 months	Breast milk, milk, or milk products[6]	4+ food groups[1]	Minimum meal frequency[7]	With 3 IYCF practices	Number of all children 6-23 months
Mother's education														
No education	(14.5)	(56.5)	(12.6)	22	(77.1)	(48.8)	(91.1)	(20.4)	26	87.5	33.3	75.5	16.9	48
Elementary	43.7	56.8	27.9	61	69.7	56.1	68.1	24.2	91	81.9	51.1	63.5	25.7	152
Preparatory	35.3	56.3	30.2	144	81.8	52.7	92.7	25.0	222	89.0	45.9	78.4	27.0	366
Secondary	42.2	64.6	32.8	550	88.6	65.9	92.9	32.3	641	93.9	55.0	79.8	32.5	1,191
Higher	50.7	74.2	43.4	306	92.0	67.0	94.1	37.3	540	94.9	61.1	86.9	39.5	846
Wealth quintile														
Lowest	33.4	64.3	26.0	265	80.3	52.7	89.7	17.4	332	89.0	44.1	78.5	21.2	597
Second	41.8	61.3	34.1	289	83.9	59.4	87.7	27.1	295	91.9	50.7	74.7	30.5	584
Middle	37.7	68.0	31.2	203	89.0	63.7	93.9	33.0	350	93.1	54.2	84.4	32.4	552
Fourth	55.0	67.2	46.0	206	89.2	70.8	93.0	38.5	304	93.6	64.4	82.6	41.6	510
Highest	57.2	72.0	42.2	120	97.3	73.9	95.0	50.6	239	98.2	68.3	87.3	47.8	359
Total	43.2	65.6	34.7	1,083	87.5	63.5	91.8	32.3	1,520	92.7	55.1	80.9	33.3	2,603

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

[1] Food groups: a. infant formula, milk other than breast milk, cheese or yogurt or other milk products; b. foods made from grains, roots, and tubers, including porridge and fortified baby food from grains; c. vitamin A-rich fruits and vegetables (and red palm oil); d. other fruits and vegetables; e. eggs; f. meat, poultry, fish, and shellfish (and organ meats); g. legumes and nuts.

[2] For breastfed children, minimum meal frequency is receiving solid or semi-solid food at least twice a day for infants 6-8 months and at least three times a day for children 9-23 months.

[3] Includes two or more feedings of commercial infant formula; fresh, tinned, and powdered animal milk; and yogurt

[4] For nonbreastfed children age 6-23 months, minimum meal frequency is receiving solid or semi-solid food or milk feeds at least four times a day.

[5] Nonbreastfed children age 6-23 months are considered to be fed with a minimum standard of three infant and young child feeding practices if they receive other milk or milk products at least twice a day, receive the minimum meal frequency, and receive solid or semi-solid foods from at least four food groups not including the milk or milk products food group.

[6] Breastfeeding, or not breastfeeding and receiving two or more feedings of commercial infant formula; fresh, tinned, and powdered animal milk; and yogurt

[7] Children are fed the minimum recommended number of times per day according to their age and breastfeeding status as described in footnotes 2 and 4.

Sixty-six percent of breastfed children were fed the minimum number of times in the previous 24 hours. The combined percentage of children who fall in both categories (given foods from four or more groups and fed the minimum number of times per day) is 35 percent. The proportion of breastfeeding children age 6-23 months who are given a variety of foods at least three times daily is highest in the Central region, in Jarash, in non Badia areas, and in the fourth wealth quintile. This figure also increases with the mother's level of education.

The percentages of children who received food from four or more food groups and were fed the minimum number of times are much higher among nonbreastfed children (64 percent and 92 percent, respectively) than among breastfed children. One in three (32 percent) nonbreastfed children was fed in accordance with all three IYCF practices. Nonbreastfed children in urban areas, in the Central region, in Amman, in non Badia areas, and in non camp areas; nonbreastfed children of women with higher education; and those in the highest wealth quintile are more likely to be fed with all three IYCF practices than their counterparts in the other categories.

Ninety-three percent of children age 6-23 months (both breastfed and nonbreastfed) are given either breast milk or other milk products. Fifty-five percent of children are given foods from the appropriate number of food groups, and 81 percent are fed an appropriate number of times per day. Overall, one-third of Jordanian children are fed in accordance with the three recommended IYCF practices. The likelihood of children being fed appropriately increases with mother's education and wealth quintile.

There have been changes in the definition of the standard IYCF indicators (such as the removal of "foods made with fats" as a food group, the requirement that breastfed children receive four instead of three food groups, the requirement that nonbreastfed children receive two or more servings of milk or milk products, and the removal of cheese from the milk or milk products group) from the 2007 JPFHS, and thus direct comparisons of these indicators are problematic. However, for purposes of comparison, the data were recalculated based on the former IYCF definition, and results indicate that the percentage of children fed in accordance with the recommended three IYCF practices has decreased between 2007 (38 percent) and 2012 (32 percent). However, these results should be interpreted with caution, as they could be influenced by methodological differences in data collection (data not shown).

11.4 Prevalence of Anemia in Children

Anemia is characterized by a low level of hemoglobin in the blood. Hemoglobin is necessary for transporting oxygen from the lungs to other tissues and organs in the body. Anemia can result from a deficiency of iron, folate, vitamin B12, or some other nutrients. These types of anemia are commonly referred to as iron deficiency anemia and is the most widespread form of malnutrition in the world. Young children and pregnant and postpartum women are the most severely affected because of the high iron demands of infant growth and pregnancy. Anemia can also be the result of hemorrhage and chronic disease, malaria, parasitic infection, or genetic disorders.

Hemoglobin testing is the primary method of anemia diagnosis. The 2012 JPFHS included direct measurement of hemoglobin levels years in two-thirds of the households for children age 6-59 months and all women age 15-49. Hemoglobin measurements were taken in the field using the HemoCue instrument. This methodology utilizes a drop of capillary blood taken from the finger drawn in one continuous process directly into a reagent-coated microcuvette that serves as a blood collection device. Excess blood on the outside of the microcuvette is wiped off and the filled microcuvette is inserted into a cuvette holder of a portable, battery-operated photometer. In less than a minute, hemoglobin concentration is indicated on a digital readout in grams per deciliter. Given that hemoglobin requirements differ substantially depending on altitude, an adjustment to sea-level equivalents was made before classifying children by level of anemia. Table 11.7 reflects anemia levels that have been adjusted for altitude. Levels of anemia were classified as severe, moderate, or mild according to criteria developed by the World Health Organization. Children with a hemoglobin level below 7.0 g/dl are classified as having severe anemia, those with a level

of 7.0-9.9 g/dl are classified as having moderate anemia, and those with a level of 10.0-10.9 g/dl are classified as having mild anemia.

Table 11.7 Prevalence of anemia in children

Percentage of children age 6-59 months classified as having anemia, by background characteristics, Jordan 2012

Background characteristic	Anemia status by hemoglobin level				
	Any anemia (<11.0 g/dl)	Mild anemia (10.0-10.9 g/dl)	Moderate anemia (7.0-9.9 g/dl)	Severe anemia (< 7.0 g/dl)	Number of children
Age in months					
6-8	61.3	34.8	26.1	0.5	207
9-11	41.2	24.6	16.7	0.0	263
12-17	54.0	29.7	23.9	0.4	579
18-23	42.8	24.2	18.3	0.3	555
24-35	31.9	20.4	11.4	0.2	1,119
36-47	25.8	16.2	9.4	0.3	1,199
48-59	17.1	12.2	4.8	0.2	1,196
Sex					
Male	33.7	19.6	13.8	0.3	2,635
Female	31.0	19.9	11.0	0.1	2,484
Mother's interview status					
Interviewed	32.2	19.8	12.1	0.2	5,019
Not interviewed but in household	(34.9)	(4.6)	(30.3)	(0.0)	55
Not interviewed and not in the household[1]	45.9	26.2	19.7	0.0	46
Residence					
Urban	32.2	19.5	12.5	0.2	4,142
Rural	33.0	20.7	12.1	0.2	977
Region					
Central	32.4	20.0	12.2	0.2	3,014
North	32.5	19.7	12.6	0.2	1,603
South	31.8	18.4	13.0	0.4	503
Governorate					
Amman	34.2	22.2	12.0	0.0	1,738
Balqa	37.5	20.4	16.0	1.1	341
Zarqa	27.4	15.4	11.7	0.3	797
Madaba	24.6	16.9	7.5	0.2	138
Irbid	34.2	21.0	13.0	0.2	960
Mafraq	26.3	16.2	10.0	0.1	325
Jarash	31.3	17.7	13.2	0.4	187
Ajloun	37.2	21.4	15.6	0.2	131
Karak	34.7	19.0	15.1	0.6	224
Tafiela	21.9	15.9	5.7	0.3	87
Ma'an	38.1	19.8	18.0	0.3	88
Aqaba	28.6	17.8	10.5	0.2	104
Badia					
Badia	39.3	23.5	15.8	0.0	420
Non Badia	31.7	19.4	12.1	0.2	4,700
Camps					
Camp	36.5	21.1	15.3	0.0	222
Non camp	32.2	19.7	12.3	0.2	4,897
Mother's education[2]					
No education	35.2	19.8	13.2	2.3	95
Elementary	36.2	19.2	16.5	0.5	352
Preparatory	37.0	23.0	14.0	0.1	685
Secondary	31.3	18.6	12.5	0.2	2,460
Higher	30.5	20.1	10.2	0.2	1,481
Wealth quintile					
Lowest	40.5	24.5	15.5	0.5	1,230
Second	30.8	19.9	10.8	0.1	1,174
Middle	30.5	18.5	11.8	0.2	1,135
Fourth	29.8	18.0	11.6	0.2	970
Highest	26.3	14.6	11.7	0.0	610
Total	32.4	19.7	12.4	0.2	5,119

Note: Table is based on children who stayed in the household on the night before the interview and who were tested for anemia. Prevalence of anemia, based on hemoglobin levels, is adjusted for altitude using formulas in CDC, 1998. Hemoglobin is in grams per deciliter (g/dl). Figures in parentheses are based on 25-49 unweighted cases.

[1] Includes children whose mothers are deceased.

[2] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

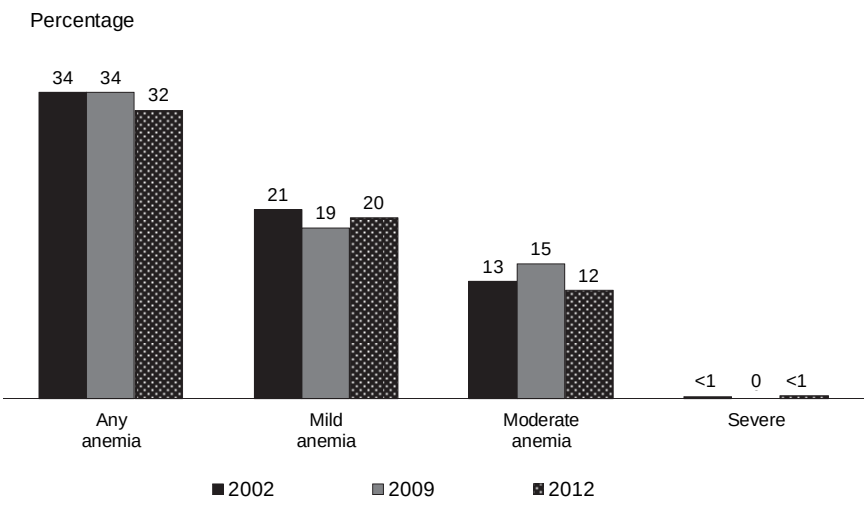
Eighty-eight percent of eligible children were tested for hemoglobin levels. The remaining eligible children could not be measured for various reasons such as not being available in the household at the time of the interview. Before hemoglobin testing, a separate informed consent statement was read to the child's mother or caretaker explaining that participation in the hemoglobin testing was completely voluntary. This too could have led to refusals of testing by the mother for her child. In some cases measurements were not taken if the child was too sick. However, because missing information is almost uniform by background characteristics for both children, we can assume that the response rate has not caused any bias in the data. A total of 5,620 children were tested for anemia (5,119 weighted children).

Table 11.7 shows anemia levels for children age 6-59 months. Anemia is common among children in Jordan; one-third (32 percent) of children are anemic. Twenty percent of children are classified as having mild anemia and 12 percent of children have moderate anemia. Less than 1 percent of children are classified as having severe anemia. Among infants, the prevalence of any anemia is highest at age 6-8 months (61 percent), decreases at age 9-11 months (41 percent), and increases at age 12-17 months (54 percent), after which it declines linearly to a low of 17 percent for the age group 48-59 months.

Differences in anemia levels are small between boys and girls, in rural and urban areas, and by region. Prevalence of any anemia varies by governorate from 22 percent in Tafiela to 38 percent in Ma'an. Anemia is more prevalent in Badia and camp areas than in the other areas. The percentage of children with anemia varies with mother's education from 35-37 percent among mothers with only preparatory education or less to 31 percent among mothers with some secondary or higher education. Similarly, the prevalence of anemia varies inversely with household wealth, decreasing from 41 percent among children in the poorest households to 26 percent among children in the richest households.

Figure 11.4 shows that the overall prevalence of anemia has not changed much in the last decade, decreasing very slightly from 34 percent in 2002 to 32 percent in 2012. However, there are marked improvements by region, particularly in the South region, where the prevalence of any anemia declined by 22 percent in the last three years from 41 percent in 2009 to 32 percent in 2012. A smaller improvement is seen in the prevalence of anemia in the North region, from 36 percent in 2009 to 33 in 2012.

Figure 11.4
Trends in anemia status among children 6-59 months



JPFHS 2012

11.5 MICRONUTRIENT INTAKE AMONG CHILDREN

A serious contributor to childhood morbidity and mortality is micronutrient deficiency. Children can receive micronutrients from foods, food fortification, and direct supplementation. Table 11.8 looks at measures relating to the intake of several key micronutrients among children.

Table 11.8 Micronutrient intake among children

Among youngest children age 6-23 months who are living with their mother, the percentages who consumed vitamin A-rich and iron-rich foods in the day or night preceding the survey, and among all children 6-59 months, the percentages who were given vitamin A supplements in the six months preceding the survey and who were given iron supplements in the past seven days, by background characteristics, Jordan 2012

	Among youngest children age 6-23 months living with the mother:			Among all children age 6-59 months:		
Background characteristic	Percentage who consumed foods rich in vitamin A in last 24 hours[1]	Percentage who consumed foods rich in iron in last 24 hours[2]	Number of children	Percentage given vitamin A supplements in last 6 months	Percentage given iron sup-plements in last 7 days	Number of children
Age in months						
6-8	36.9	28.2	424	11.6	1.3	436
9-11	58.2	50.3	466	14.0	2.7	477
12-17	73.9	65.6	856	16.3	5.4	942
18-23	82.3	76.9	857	21.7	7.5	999
24-35	na	na	na	10.0	4.0	1,950
36-47	na	na	na	8.1	3.7	1,965
48-59	na	na	na	6.1	3.1	2,018
Sex						
Male	67.0	59.8	1,428	10.4	4.2	4,550
Female	68.8	61.4	1,174	11.6	4.0	4,235
Breastfeeding status						
Breastfeeding	59.0	51.6	1,083	14.2	4.8	1,174
Not breastfeeding	74.0	66.8	1,520	10.5	4.0	7,611
Mother's age at birth						
15-19	65.6	63.3	85	20.3	2.9	120
20-29	68.6	61.5	1,279	12.7	4.7	3,731
30-39	66.8	58.0	1,042	9.6	3.3	3,971
40-49	68.7	66.2	196	8.9	5.3	963
Residence						
Urban	68.6	61.4	2,086	11.5	4.4	7,171
Rural	64.6	56.7	517	8.8	2.5	1,615
Region						
Central	69.3	60.9	1,579	11.5	4.9	5,362
North	64.7	59.9	778	10.2	2.7	2,577
South	67.9	59.9	246	10.0	3.0	846
Governorate						
Amman	71.3	62.3	941	10.9	5.3	3,196
Balqa	66.4	58.6	190	19.5	4.7	626
Zarqa	65.2	57.4	372	10.1	4.2	1,294
Madaba	72.6	65.7	76	6.1	3.5	246
Irbid	65.6	62.0	458	10.9	3.0	1,553
Mafraq	59.2	53.0	159	10.0	1.8	516
Jarash	65.3	59.7	93	11.0	3.5	297
Ajloun	69.9	62.6	68	4.8	1.8	211
Karak	68.3	62.2	106	12.6	2.9	361
Tafiela	64.7	57.4	39	7.5	4.0	141
Ma'an	62.5	51.6	47	8.5	1.9	151
Aqaba	74.0	64.5	54	8.0	3.4	194
Badia						
Badia	61.0	51.7	225	8.2	2.3	686
Non Badia	68.4	61.3	2,378	11.2	4.2	8,100
Camps						
Camp	63.9	55.6	97	22.3	7.6	343
Non camp	67.9	60.7	2,505	10.5	3.9	8,443
Mother's education						
No education	58.4	47.9	48	4.1	2.3	196
Elementary	59.3	51.3	152	9.4	6.0	563
Preparatory	62.2	58.2	366	9.6	4.5	1,188
Secondary	68.3	60.9	1,191	12.7	4.0	4,104
Higher	71.5	63.2	846	9.8	3.7	2,735
Wealth quintile						
Lowest	61.9	53.3	597	10.4	3.8	2,050
Second	64.8	60.3	584	10.5	4.6	1,952
Middle	63.6	58.0	552	8.9	3.8	1,895
Fourth	77.7	67.3	510	12.7	4.4	1,700
Highest	74.8	67.0	359	13.8	3.5	1,189
Total	67.8	60.5	2,603	11.0	4.1	8,786

Note: Information on vitamin A is based on both mother's recall and the immunization card (where available). Information on iron supplements is based on the mother's recall.
na = Not applicable
[1] Includes meat (and organ meat), fish, poultry, eggs, pumpkin, carrots, red sweet potatoes, dark green leafy vegetables, apricot, palm nuts, yellow melon, and other locally grown fruits and vegetables that are rich in vitamin A
[2] Includes meat (and organ meat), fish, poultry, and eggs

Vitamin A is an essential micronutrient for the immune system and plays an important role in maintaining the epithelial tissue in the body. Severe vitamin A deficiency (VAD) can cause eye damage. VAD can also increase severity of infections such as measles and diarrheal diseases in children and slows recovery from illness. Vitamin A is found in breast milk, other milks, liver, eggs, fish, butter, red palm oil, mangoes, papayas, carrots, pumpkins, and dark green leafy vegetables. The liver can store an adequate amount of the vitamin for four to six months. Periodic dosing (usually every six months) of vitamin A supplements is one method of ensuring that children at risk do not develop VAD. Similarly, iron-rich foods and iron supplementation are valuable means of preventing anemia.

The 2012 JPFHS collected information on the consumption of foods rich in vitamin A and iron and on the coverage of supplements. Sixty-eight percent of last-born children age 6-23 months living with the mother consumed vitamin A-rich foods in the 24 hours before the survey. Consumption of vitamin A-rich foods increases from 37 percent among children age 6-8 months to 82 percent among children age 18-23 months. Not surprisingly, breastfeeding children are much less likely to consume vitamin A-rich foods than nonbreastfeeding children. Consumption of foods rich in vitamin A increases with education of the mother.

Sixty-one percent of young children consume foods rich in iron. Differences in the consumption of iron-rich foods are similar to those seen for the consumption of vitamin A-rich foods.

Only 11 percent of children age 6-59 months received a vitamin A supplement in the six months before the survey, and 4 percent received iron supplements in the seven days preceding the survey. Interestingly, children in camps are more likely to receive both types of supplements than children not in camps.

11.6 NUTRITIONAL STATUS OF WOMEN

In the 2012 JPFHS, data were collected on the height and weight of all women age 15-49 in two-thirds of the households sampled. 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 11.9: the percentage of women with very short stature (less than 145 cm) and body mass index (BMI).

Adult 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 pelvic size and a greater likelihood of obstructed labor. Short stature also correlates with low birth weight in infants, high risk of stillbirths, and high rates of miscarriage. A woman is considered at nutritional risk if her height is below 145 centimeters.

BMI is used to measure thinness and obesity. BMI utilizes both height and weight and provides a better measure of thinness than weight alone; it is defined as weight in kilograms divided by the square of height in meters (kg/m^2).

Table 11.9 shows the percentage of women with height below 145 cm, the mean BMI, and the proportion of women falling into high-risk categories, according to background characteristics. Respondents for whom there was no information on height or weight and for whom a BMI could not be estimated are excluded from this analysis. 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. The data analysis on BMI is based on 10,747 women (10,312 weighted women) age 15-49, while the height analysis is based on 11,624 women (11,123 weighted women).

Table 11.9 Nutritional status of women

Among women age 15-49, the percentage with height under 145 cm, mean body mass index (BMI), and the percentage with specific BMI levels, by background characteristics, Jordan 2012

	Height		Body mass index[1]								
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 (moderately and severely thin)	≥25.0 (total overweight or obese)	25.0-29.9 (overweight)	≥30.0 (obese)	Number of women
Age											
15-19	1.6	830	23.1	62.2	11.3	8.7	2.6	26.5	19.5	7.0	786
20-29	1.0	3,087	25.1	49.2	7.3	6.4	0.9	43.5	26.2	17.3	2,660
30-39	1.1	3,582	27.2	36.6	3.2	2.3	0.9	60.2	31.8	28.5	3,271
40-49	0.8	3,623	28.4	32.0	3.7	2.9	0.8	64.3	25.9	38.5	3,594
Residence											
Urban	0.9	9,123	26.8	40.5	5.1	4.2	1.0	54.4	27.0	27.4	8,463
Rural	1.6	1,999	26.8	38.9	4.6	3.5	1.1	56.4	28.7	27.7	1,849
Region											
Central	1.0	6,755	26.7	41.1	5.3	4.4	0.9	53.6	26.8	26.9	6,277
North	1.1	3,281	26.8	39.2	4.7	3.6	1.1	56.1	28.2	27.9	3,027
South	1.2	1,087	27.1	37.7	4.4	3.2	1.2	57.8	28.2	29.7	1,008
Governorate											
Amman	0.7	4,151	26.7	41.4	5.4	4.6	0.8	53.2	26.7	26.5	3,863
Balqa	1.1	755	26.9	37.9	5.5	4.3	1.2	56.5	29.2	27.4	693
Zarqa	1.6	1,533	26.8	41.9	4.8	3.8	1.0	53.3	25.8	27.5	1,433
Madaba	1.3	315	26.6	39.5	6.1	4.6	1.5	54.3	27.0	27.3	288
Irbid	0.7	2,088	26.7	39.1	5.1	4.0	1.1	55.8	29.0	26.8	1,928
Mafraq	1.8	583	27.3	37.1	4.2	2.9	1.3	58.7	26.3	32.3	538
Jarash	1.8	341	26.6	44.2	3.6	2.6	1.0	52.2	25.1	27.1	312
Ajloun	1.4	269	26.9	37.9	4.4	3.3	1.0	57.7	29.7	28.0	248
Karak	1.5	472	26.8	38.9	3.9	3.0	1.0	57.1	29.7	27.4	440
Tafiela	0.5	171	27.3	38.2	3.9	2.4	1.5	57.8	25.9	31.9	155
Ma'an	1.8	195	26.6	40.2	5.2	4.0	1.3	54.6	28.7	25.9	184
Aqaba	0.4	249	27.9	33.1	5.1	3.5	1.6	61.8	26.3	35.5	230
Badia											
Badia	1.9	731	26.2	42.7	5.0	3.7	1.3	52.3	28.0	24.3	666
Non Badia	0.9	10,391	26.8	40.0	5.1	4.1	1.0	54.9	27.3	27.7	9,646
Camps											
Camp	1.8	413	27.2	34.6	6.0	5.0	0.9	59.5	31.2	28.3	385
Non camp	1.0	10,710	26.8	40.4	5.0	4.0	1.0	54.6	27.2	27.4	9,928
Education[2]											
No education	11.6	243	28.2	27.8	9.3	5.2	4.1	62.9	24.3	38.6	234
Elementary	1.7	689	29.9	28.0	1.7	1.3	0.4	70.4	24.0	46.4	639
Preparatory	1.0	1,689	27.4	37.9	4.6	3.6	1.0	57.4	28.0	29.4	1,589
Secondary	0.9	4,905	26.8	41.6	4.4	3.7	0.7	54.0	25.7	28.4	4,526
Higher	0.4	3,589	25.8	42.4	6.5	5.3	1.2	51.0	30.2	20.8	3,316
Wealth quintile											
Lowest	2.1	2,271	27.0	41.6	4.3	3.7	0.6	54.1	26.2	27.9	2,124
Second	1.2	2,331	27.5	36.8	4.8	4.0	0.8	58.4	26.8	31.6	2,147
Middle	0.5	2,262	26.7	37.6	5.2	3.8	1.4	57.2	30.4	26.8	2,034
Fourth	0.4	2,174	26.7	41.6	4.6	3.5	1.1	53.8	25.9	27.9	2,039
Highest	0.8	2,085	25.9	43.5	6.4	5.3	1.1	50.0	27.4	22.6	1,968
Total	1.0	11,123	26.8	40.2	5.1	4.1	1.0	54.8	27.3	27.4	10,312

Note: The body mass index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m^2). Total includes 8 women missing information on education.

[1] Excludes pregnant women and women with a birth in the preceding 2 months.

[2] For women who are not interviewed, information is taken from the Household Questionnaire.

The data show that 1 percent of women are below 145 cm in height. Short stature decreases dramatically with increasing level of education, from 12 percent among women with no education to less than 1 percent among women with higher education. There are no other major variations in height by background characteristics.

The mean BMI of women in Jordan is 27, higher than the normal BMI range of 18.5-24.9. Forty percent of women fall in the normal BMI category. Five percent of women fall below the cutoff of 18.5, indicating that the level of chronic energy deficiency is relatively low in Jordan. In general, very young women (15-19) are more likely than other women to suffer from chronic energy deficiency. An alarming proportion of women—more than half (55 percent)—have a BMI of 25 and over, and thus can be considered overweight or obese. Women from Aqaba (62 percent) are more likely to be overweight or obese than women from other governorates. Older women and women with no education or elementary education are also more likely to be overweight or obese.

11.7 Prevalence of Anemia in Women

Table 11.10 shows the prevalence of anemia in women age 15-49. Women with a hemoglobin level below 7.0 g/dl are classified as having severe anemia, those with a level of 7.0-9.9 g/dl are classified as having moderate anemia, and non-pregnant women with a level of 10.0-11.9 g/dl and pregnant women with a level of 10.0-10.9 g/dl are classified as having mild anemia. Eighty-four percent of women age 15-49 were measured, and the remaining eligible women were not measured primarily because they refused to be measured (12 percent) or were not in the household at the time of the interview (4 percent). Besides altitude, hemoglobin requirements also differ substantially depending on women's smoking status. Table 11.10 reflects anemia levels among women that have been adjusted for the influence of altitude and smoking.

Results show that anemia is common among women in Jordan; about one in three women are anemic (34 percent). About one in four (26 percent) women has mild anemia, and 7 percent of women have moderate anemia. Less than 1 percent of women have severe anemia.

Age is associated with anemia levels, with the highest prevalence among women age 30-39 (39 percent). There is no uniform pattern in the prevalence of anemia by women's education and wealth. Differences by urban-rural residence, region, and Badia and camp areas are small. The prevalence of anemia among women varies from 24 percent in Madaba to 40 percent in Balqa.

The prevalence of anemia rises with the number of living children from 30 percent among ever-married women with no children to 43 percent among women with six or more children. It is more common among ever-married women who are using the IUD than among those who are not.

Table 11.10 Prevalence of anemia in women

Percentage of women age 15-49 with anemia, by background characteristics, Jordan 2012

Background characteristic	Anemia status by hemoglobin level: Any (Not pregnant <12.0 g/dl; Pregnant <11.0 g/dl)	Mild (10.0-11.9 g/dl; 10.0-10.9 g/dl)	Moderate (7.0-9.9 g/dl; 7.0-9.9 g/dl)	Severe (< 7.0 g/dl; < 7.0 g/dl)	Number of women
ALL WOMEN					
Age					
15-19	25.3	21.1	4.0	0.1	2,323
20-29	32.1	26.1	5.9	0.1	3,261
30-39	38.5	29.6	8.8	0.1	2,861
40-49	37.4	26.9	9.4	1.1	2,289
Residence					
Urban	33.3	26.3	6.6	0.3	8,798
Rural	34.4	25.2	8.9	0.3	1,936
Region					
Central	32.4	25.7	6.4	0.3	6,513
North	35.3	26.6	8.5	0.2	3,173
South	34.4	27.4	6.8	0.2	1,048
Governorate					
Amman	29.5	24.3	5.0	0.3	3,988
Balqa	39.7	30.3	8.6	0.7	731
Zarqa	38.4	28.8	9.1	0.4	1,494
Madaba	23.7	18.4	5.3	0.0	301
Irbid	36.2	27.1	8.8	0.2	2,019
Mafraq	30.4	22.8	7.5	0.1	557
Jarash	35.1	27.5	7.6	0.0	333
Ajloun	38.9	29.0	9.2	0.7	264
Karak	35.6	29.4	6.0	0.2	459
Tafiela	32.9	24.6	8.2	0.2	166
Ma'an	30.3	22.7	7.4	0.1	189
Aqaba	36.5	29.3	6.9	0.3	235
Badia					
Badia	30.5	22.1	8.1	0.3	707
Non Badia	33.7	26.4	7.0	0.3	10,027
Camps					
Camp	33.8	26.3	7.1	0.5	403
Non camp	33.4	26.1	7.0	0.3	10,331
Education[1]					
No education	27.0	20.8	6.0	0.2	236
Elementary	37.8	29.1	8.4	0.3	671
Preparatory	35.5	27.0	8.2	0.3	1,635
Secondary	35.1	27.6	7.3	0.2	4,779
Higher	29.6	23.3	5.9	0.4	3,406
Wealth quintile					
Lowest	34.8	26.3	8.2	0.3	2,226
Second	37.0	28.5	8.1	0.4	2,272
Middle	37.7	29.1	8.1	0.4	2,187
Fourth	27.9	22.0	5.5	0.4	2,102
Highest	29.0	24.2	4.8	0.0	1,946
Total	33.5	26.1	7.0	0.3	10,734
EVER-MARRIED WOMEN[2]					
Number of children ever born					
0	30.4	21.3	8.9	0.2	639
1	34.4	26.1	8.0	0.3	733
2-3	35.4	29.4	5.7	0.3	2,137
4-5	38.3	30.1	7.9	0.3	1,957
6+	43.4	29.9	12.9	0.6	1,357
Maternity status					
Pregnant	39.7	26.2	13.4	0.1	642
Breastfeeding	33.8	29.2	4.4	0.2	1,111
Neither	37.7	28.8	8.5	0.4	5,070
Using IUD					
Yes	42.6	32.9	9.3	0.4	1,386
No	35.9	27.5	8.1	0.3	5,437
Smoking status					
Smokes cigarettes/tobacco	36.2	28.1	7.9	0.2	1,268
Does not smoke	37.5	28.7	8.4	0.4	5,555
Total	37.3	28.6	8.3	0.4	6,823

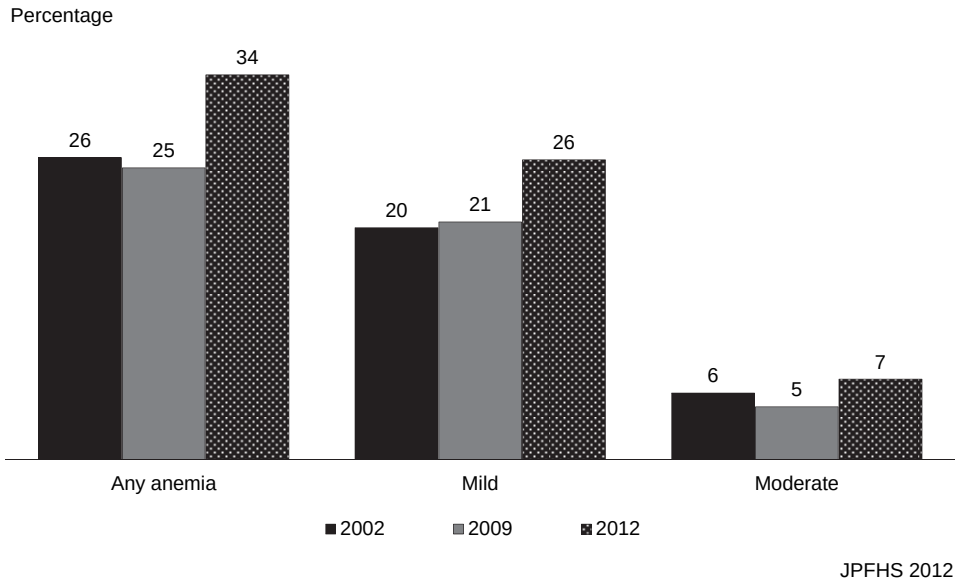
Note: Prevalence for all women and ever-married women is adjusted for altitude using formulas in CDC, 1998.

[1] For women who are not interviewed, information is taken from the Household Questionnaire.

[2] Prevalence for ever-married women is adjusted for smoking status using formulas in CDC, 1998.

Figure 11.5 shows that the prevalence of anemia has increased over the past decade, from 26 percent of all women in 2002 to 34 percent in 2012. The increase appears to have occurred among women in all three regions.

Figure 11.5
Trends in anemia status among women age 15-49



11.8 MICRONUTRIENT INTAKE AMONG MOTHERS

Women who had given birth during the five years prior to the survey were asked to indicate the number of days they took iron supplements during their last pregnancy. Sixty-one percent of mothers reported taking iron tablets or syrup for more than three months during their last pregnancy (Table 11.11). Fifteen percent of mothers reported not taking any iron supplementation during their last pregnancy. Intake of iron supplements for at least 90 days is higher in urban areas, in the Central and South regions, in Aqaba, and in non Badia and camp areas. Intake of iron supplementation for at least 90 days rises with women's education and household wealth.

Table 11.11 Micronutrient intake among mothers

Among ever-married women age 15-49 with a child born in the past five years, the percent distribution by number of days they took iron tablets or syrup during the pregnancy of the last child, by background characteristics, Jordan 2012

Background characteristic	Number of days women took iron tablets or syrup during pregnancy of last birth						Number of women
	None	<60	60-89	90+	Don't know/ missing	Total	
Age							
15-19	17.3	18.9	10.0	53.7	0.1	100.0	154
20-29	13.8	16.2	8.8	60.5	0.8	100.0	2,606
30-39	14.3	13.0	8.6	63.6	0.5	100.0	2,979
40-49	22.3	9.5	9.2	58.4	0.7	100.0	838
Residence							
Urban	14.4	13.7	8.3	62.8	0.7	100.0	5,395
Rural	18.7	14.8	11.1	55.2	0.3	100.0	1,182
Region							
Central	13.6	13.2	7.6	65.0	0.5	100.0	4,052
North	17.8	16.9	11.5	52.9	0.9	100.0	1,903
South	17.4	9.4	8.4	64.3	0.5	100.0	622
Governorate							
Amman	14.7	12.3	7.4	65.2	0.4	100.0	2,469
Balqa	11.0	11.9	7.0	69.6	0.5	100.0	452
Zarqa	12.4	15.5	7.7	63.5	1.0	100.0	947
Madaba	12.3	17.5	10.4	59.3	0.6	100.0	184
Irbid	16.1	17.3	11.8	53.6	1.3	100.0	1,174
Mafraq	24.6	16.8	11.7	46.6	0.3	100.0	366
Jarash	15.4	14.0	8.6	61.5	0.4	100.0	207
Ajloun	18.0	18.2	12.5	50.6	0.7	100.0	156
Karak	16.8	9.0	7.8	66.1	0.2	100.0	269
Tafiela	26.5	14.0	9.3	49.0	1.1	100.0	103
Ma'an	19.1	11.2	11.3	57.6	0.8	100.0	104
Aqaba	10.9	5.6	6.8	76.4	0.3	100.0	146
Badia							
Badia	22.5	16.7	14.2	46.2	0.4	100.0	469
Non Badia	14.6	13.7	8.4	62.6	0.7	100.0	6,108
Camps							
Camp	11.6	13.9	6.6	67.4	0.5	100.0	253
Non camp	15.3	13.9	8.9	61.2	0.7	100.0	6,324
Education							
No education	28.1	14.6	14.4	42.1	0.8	100.0	130
Elementary	21.4	16.1	5.4	56.7	0.5	100.0	400
Preparatory	18.2	13.5	7.8	58.8	1.7	100.0	872
Secondary	15.5	16.1	9.2	58.7	0.4	100.0	3,069
Higher	11.5	10.5	8.9	68.6	0.6	100.0	2,106
Wealth quintile							
Lowest	23.0	14.9	9.1	52.8	0.2	100.0	1,393
Second	14.6	15.2	9.7	59.4	1.1	100.0	1,393
Middle	15.6	13.2	8.8	62.1	0.4	100.0	1,470
Fourth	11.9	16.5	7.5	62.8	1.3	100.0	1,327
Highest	9.0	8.5	8.6	73.7	0.1	100.0	994
Total	15.2	13.9	8.8	61.4	0.7	100.0	6,577

HIV/AIDS-RELATED KNOWLEDGE, ATTITUDES, AND BEHAVIOR

12

Key Findings

- Ninety-nine percent of ever-married women age 15-49 have heard of AIDS.
- More than one in two women know that both using condoms and limiting sexual intercourse to one uninfected partner prevents HIV transmission.
- Comprehensive knowledge of AIDS is not widespread among ever-married women age 15-49 (13 percent); it is even lower among women age 15-24 (9 percent).
- Overall, only 3 percent of women express accepting attitudes toward people living with AIDS.
- Two in five women have heard of sexually transmitted infections (STIs) other than HIV.

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 a pandemic with cases reported from every country. The Joint United Nations Programme on HIV/AIDS (UNAIDS) estimates that approximately 34 million people worldwide were living with HIV in 2011. Nevertheless, the joint global effort in the fight against AIDS resulted in a 24 percent decline in the number of AIDS-related deaths in 2011 compared to 2005, and a 20 percent decline in newly infected cases in the decade between 2001 and 2011 (UNAIDS, 2012).

The first case of AIDS reported in Jordan was in 1986. By December 2011, there were 847 reported HIV infections in Jordan: a total of 247 cases (29 percent) among Jordanian nationals and the remaining 600 cases (71 percent) among members of the expatriate community (UNGASS, 2012). As of December 2011, there were 99 AIDS-related deaths. As surveillance systems are not fully developed, and there continues to exist pervasive fear of and stigma against HIV/AIDS in Jordan, it is believed that the number of HIV-infected individuals residing in Jordan exceeds the number of officially registered cases. According to available data, transmission occurs primarily among those age 25-34. The modes of transmission are estimated to be 65 percent via sexual contact, 25 percent via blood or blood products, 2 percent via injecting drug use, 3 percent via mother-to-child transmission, and 5 percent through unknown routes (MOH/NAP and UNAIDS, 2011).

In 1986, Jordan launched the National AIDS Program within the Ministry of Health, followed in 2005 by the National AIDS Strategy 2005-2009 to promote peer education, develop life skill strategies among the youth population, provide voluntary counseling and testing (VCT), and provide free antiretroviral drugs to people living with HIV. The Ministry of Health is working with international bodies such as UNAIDS and the World Health Organization to combat the threat of AIDS in Jordan. The new National Strategic Plan on HIV and AIDS (2012-2016) aims to continue and further guide Jordan's national AIDS response (UNGASS, 2012).

The 2012 JPFHS collected information from ever-married women about HIV/AIDS, as well as information about knowledge of other sexually transmitted infections (STIs), which are known to be important predisposing factors for the HIV epidemic. This chapter summarizes information on knowledge, perceptions, and behaviors of ever-married women age 15-49 by background characteristics.

12.1 KNOWLEDGE OF HIV/AIDS AND METHODS OF HIV PREVENTION

Table 12.1 shows the percentage of ever-married women who have heard of AIDS by background characteristics. Almost all of the women (99 percent) report that they have heard of AIDS. As such, differentials by background characteristics are minimal.

To evaluate the level of knowledge about HIV/AIDS, women who had heard of the infection were asked a series of questions on knowledge of HIV prevention methods and detailed or comprehensive knowledge about AIDS including knowledge of prevention of mother-to-child transmission of HIV. HIV/AIDS prevention programs focus their messages and efforts on two important aspects of behavior: limiting the number of sexual partners to one uninfected partner who has no other partners and use of condoms at every sexual encounter. To ascertain whether programs have effectively communicated these messages, women were prompted with specific questions about whether it is possible to reduce the chances of getting the AIDS virus by having just one faithful sexual partner and using a condom at every sexual encounter. Table 12.2 presents the results on knowledge about these two key prevention strategies by background characteristics.

Ever-married women are most knowledgeable about limiting sexual intercourse to one uninfected partner (81 percent). Far fewer women know that using condoms can reduce the risk of contracting HIV (58 percent). Knowledge of both these means of prevention is highest among women age 30-39, currently married women, women residing in the South region, women in Tafiela and Aqaba, and women in the non Badia and non camp areas of Jordan. Knowledge also increases with education and wealth. There is a particularly strong relationship between education and knowledge of the two prevention methods; 30 percent of women with no education cite using condoms and limiting sexual intercourse to one uninfected partner as means of preventing HIV compared to 60 percent of women with a higher than secondary education.

Table 12.1 Knowledge of AIDS

Percentage of ever-married women age 15-49 who have heard of AIDS, by background characteristics, Jordan 2012

Background characteristic	Has heard of AIDS	Number of women
Age		
15-24	98.8	1,485
15-19	95.0	278
20-24	99.7	1,207
25-29	99.5	2,006
30-39	99.4	4,234
40-49	98.9	3,626
Marital status		
Married	99.2	10,801
Divorced/separated/widowed	98.9	551
Residence		
Urban	99.3	9,458
Rural	98.5	1,894
Region		
Central	99.3	7,181
North	99.1	3,120
South	98.5	1,051
Governorate		
Amman	99.3	4,454
Balqa	98.8	765
Zarqa	99.5	1,659
Madaba	99.3	303
Irbid	99.2	1,986
Mafraq	98.4	562
Jarash	99.2	320
Ajloun	99.5	251
Karak	99.1	441
Tafiela	99.1	167
Ma'an	96.3	178
Aqaba	98.8	265
Badia		
Badia	97.0	705
Non Badia	99.3	10,647
Camps		
Camp	98.7	413
Non camp	99.2	10,939
Education		
No education	88.9	267
Elementary	97.4	860
Preparatory	98.2	1,677
Secondary	99.8	5,073
Higher	100.0	3,475
Wealth quintile		
Lowest	97.6	2,137
Second	99.3	2,343
Middle	99.7	2,461
Fourth	99.6	2,336
Highest	99.6	2,076
Total 15-49	99.2	11,352

Table 12.2 Knowledge of HIV prevention methods

Percentage of ever-married women age 15-49 who, in response to prompted questions, say that people can reduce the risk of getting the AIDS virus by using condoms every time they have sexual intercourse and by having one sex partner who is not infected and has no other partners, by background characteristics, Jordan 2012

	Percentage who say HIV can be prevented by			
Background characteristic	Using condoms[1]	Limiting sexual intercourse to one uninfected partner[2]	Using condoms and limiting sexual intercourse to one uninfected partner[1,2]	Number of women
Age				
15-24	56.5	79.9	48.3	1,485
15-19	51.5	70.2	40.5	278
20-24	57.6	82.1	50.1	1,207
25-29	59.4	81.0	51.6	2,006
30-39	59.6	82.8	54.3	4,234
40-49	56.7	78.8	49.3	3,626
Marital status				
Married	58.6	81.1	51.9	10,801
Divorced/separated/ widowed	51.6	75.2	43.7	551
Residence				
Urban	58.5	80.8	51.3	9,458
Rural	57.1	81.2	52.5	1,894
Region				
Central	57.8	78.9	50.0	7,181
North	58.2	86.2	53.6	3,120
South	61.0	78.4	55.4	1,051
Governorate				
Amman	55.6	77.2	47.0	4,454
Balqa	61.8	83.8	56.9	765
Zarqa	61.2	80.8	54.0	1,659
Madaba	61.8	80.5	54.1	303
Irbid	57.6	85.4	52.3	1,986
Mafraq	57.8	85.4	54.2	562
Jarash	61.5	88.2	58.2	320
Ajloun	59.6	91.0	56.2	251
Karak	60.4	75.6	54.4	441
Tafiela	65.0	78.6	59.1	167
Ma'an	55.4	73.0	48.8	178
Aqaba	63.0	86.6	59.2	265
Badia				
Badia	49.2	74.3	44.6	705
Non Badia	58.8	81.3	51.9	10,647
Camps				
Camp	55.3	80.2	49.7	413
Non camp	58.3	80.9	51.5	10,939
Education				
No education	33.6	52.9	30.2	267
Elementary	45.5	65.0	37.8	860
Preparatory	52.6	75.8	44.7	1,677
Secondary	58.6	82.2	51.3	5,073
Higher	65.5	87.4	60.0	3,475
Wealth quintile				
Lowest	50.0	75.0	43.5	2,137
Second	56.7	78.3	49.1	2,343
Middle	58.1	82.4	51.3	2,461
Fourth	62.6	84.4	56.5	2,336
Highest	63.5	83.7	56.7	2,076
Total 15-49	58.2	80.8	51.5	11,352

[1] Using condoms every time they have sexual intercourse.
[2] Partner who has no other partners.

The 2012 JPFHS also included questions to assess the prevalence of common misconceptions about AIDS and HIV transmission. Women who had heard of HIV/AIDS were asked whether they think it is possible for a healthy-looking person to have the AIDS virus. They were also asked whether a person can get AIDS from mosquito bites, by sharing food with a person who has AIDS, by shaking hands or hugging someone who has AIDS, or by sharing razors or blades when shaving their beard or having their

hair cut. Table 12.3 indicates that many women lack accurate knowledge about the ways in which HIV can and cannot be transmitted. Only 65 percent of ever-married women know that a healthy-looking person can have (and thus transmit) the virus that causes AIDS. Although this represents a significant increase from 2002, when only 46 percent of women reported knowing this, there has been no change in the last five years.

Table 12.3 Comprehensive knowledge about AIDS

Percentage of ever-married women age 15-49 who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about transmission or prevention of the AIDS virus, and the percentage with comprehensive knowledge about AIDS, by background characteristics, Jordan 2012

	Percentage of women who say that:							
Background characteristic	A healthy-looking person can have the AIDS virus	The AIDS virus cannot be transmitted by mosquito bites	A person cannot become infected by sharing food with a person who has AIDS	The AIDS virus cannot be transmitted by shaking hands or hugging a person with AIDS	The AIDS virus can be transmitted by sharing razors or blades while shaving or having a haircut	Percentage who say that a healthy-looking person can have the AIDS virus and who reject the two most common local miscon-ceptions[1]	Percentage with compre-hensive knowledge about AIDS[2]	Number of women
Age								
15-24	60.0	32.2	63.6	81.0	91.6	14.8	8.6	1,485
15-19	46.5	31.1	52.6	69.0	87.4	11.9	5.6	278
20-24	63.1	32.5	66.2	83.8	92.6	15.5	9.3	1,207
25-29	66.1	37.3	66.7	79.1	90.5	20.0	11.1	2,006
30-39	67.3	39.1	66.5	75.3	88.2	22.4	14.9	4,234
40-49	65.0	37.7	68.3	74.2	86.0	22.2	13.4	3,626
Marital status								
Married	65.5	37.8	67.0	76.6	88.5	21.1	13.2	10,801
Divorced/separated/ widowed	63.5	29.0	61.3	71.2	86.4	16.4	8.2	551
Residence								
Urban	66.0	37.8	67.3	77.3	88.4	21.2	13.1	9,458
Rural	62.6	35.5	63.7	71.8	87.9	19.1	12.1	1,894
Region								
Central	66.6	39.0	67.6	77.1	88.2	21.6	12.9	7,181
North	61.5	33.2	65.1	77.0	89.0	18.1	11.9	3,120
South	68.5	39.4	65.3	69.2	87.6	24.1	15.8	1,051
Governorate								
Amman	70.1	38.3	69.3	78.9	87.5	22.5	12.7	4,454
Balqa	59.0	36.5	62.9	73.8	88.1	17.3	11.8	765
Zarqa	62.3	40.7	64.5	73.2	90.2	20.5	13.7	1,659
Madaba	59.0	45.6	73.0	81.1	87.9	25.5	15.4	303
Irbid	61.6	33.7	64.9	78.2	88.3	18.3	12.0	1,986
Mafraq	61.2	29.8	62.3	72.2	93.0	16.4	10.9	562
Jarash	59.7	36.0	69.0	78.0	86.3	20.4	13.8	320
Ajloun	63.7	33.0	67.3	76.8	88.2	17.5	11.3	251
Karak	72.8	45.5	66.4	69.3	86.9	28.2	17.7	441
Tafiela	65.7	32.3	66.8	71.5	88.8	19.0	13.4	167
Ma'an	54.4	28.5	55.1	56.5	82.0	13.5	8.9	178
Aqaba	72.5	41.0	69.3	76.1	91.6	27.7	18.7	265
Badia								
Badia	57.4	28.0	58.3	63.8	86.5	13.9	6.9	705
Non Badia	65.9	38.0	67.3	77.2	88.5	21.4	13.3	10,647
Camps								
Camp	60.1	37.4	62.0	73.1	86.3	18.4	11.0	413
Non camp	65.6	37.4	66.9	76.5	88.4	21.0	13.0	10,939
Education								
No education	37.3	20.1	42.2	41.0	64.6	11.3	3.9	267
Elementary	51.2	26.2	48.5	57.8	77.8	12.5	5.7	860
Preparatory	55.2	31.3	58.4	69.5	84.4	14.1	7.2	1,677
Secondary	64.1	39.8	67.0	78.3	89.0	20.0	12.6	5,073
Higher	77.9	41.0	76.7	84.1	93.7	28.3	18.6	3,475
Wealth quintile								
Lowest	54.8	33.3	57.7	66.2	81.4	15.2	8.2	2,137
Second	61.1	33.5	62.9	70.8	86.5	17.0	9.6	2,343
Middle	65.9	37.2	67.6	76.1	90.2	20.6	12.4	2,461
Fourth	68.4	40.7	70.2	82.3	90.0	22.4	15.7	2,336
Highest	77.3	42.6	75.2	86.7	93.5	29.7	19.0	2,076
Total 15-49	65.4	37.4	66.7	76.4	88.4	20.9	12.9	11,352

[1] Two most common local misconceptions: the AIDS virus can be transmitted through mosquito bites and by sharing food.

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

Many women also erroneously believe that AIDS can be transmitted by mosquito bites; only 37 percent of women reject this common misconception. Larger proportions of women are aware that the AIDS virus cannot be transmitted by sharing food with a person who has AIDS (67 percent) or by shaking hands or hugging an infected person (76 percent). In addition, the majority of women (88 percent) know that the AIDS virus can be transmitted by sharing razors or blades while shaving or having their hair cut. However, only one fifth of women (21 percent) reject the two most common misconceptions about AIDS—that AIDS can be transmitted by mosquito bites and that a person can become infected with the AIDS virus by sharing food with someone who is infected—and know that a healthy-looking person can have the AIDS virus. Table 12.3 also provides an assessment of the level of comprehensive knowledge of HIV/AIDS prevention and transmission. Comprehensive knowledge is defined as: 1) knowing that both condom use and limiting sex partners to one uninfected person are HIV/AIDS prevention methods, 2) being aware that a healthy-looking person can have HIV, and 3) rejecting the two most common local misconceptions—that HIV/AIDS can be transmitted through mosquito bites and by sharing food. Overall, only 13 percent of ever-married women have comprehensive knowledge of HIV/AIDS prevention and transmission. Comprehensive knowledge is positively associated with education; 19 percent of the most highly educated women have comprehensive knowledge about AIDS, compared to only 4 percent of women with no education.

Comprehensive knowledge of AIDS has decreased slightly since 2007 from 14 percent to 13 percent. The percentage of ever-married women who know that AIDS cannot be transmitted through mosquito bites, sharing foods with an infected person, or shaking hands or hugging a person with AIDS, decreased from 40, 73 and 79 percent, respectively, in 2007 to 37, 67 and 76 percent, respectively in 2012.

The 2012 JPFHS asked women whether they thought the AIDS virus could be transmitted from mother to child during pregnancy, during delivery, and through breastfeeding (Table 12.4). The results indicate that, while 84 percent know that HIV can be transmitted from mother to child during pregnancy and three-fourths (72 percent) know that the virus can be transmitted during delivery, only half (48 percent) know that it can be transmitted through breastfeeding. Although knowledge of HIV transmission during pregnancy and through delivery is positively correlated with a woman's education, there is no relationship between education levels and knowledge of transmission of HIV through breastfeeding.

Table 12.4 Knowledge of prevention of mother-to-child transmission of HIV

Percentage of ever-married women age 15-49 who know that HIV can be transmitted from mother to child during pregnancy, during delivery, and through breastfeeding, by background characteristics, Jordan 2012

Background characteristic	Percentage who know that: HIV can be transmitted during pregnancy	HIV can be transmitted during delivery	HIV can be transmitted by breastfeeding	Number of women
Age				
15-24	87.5	71.4	53.2	1,485
15-19	83.5	65.3	53.1	278
20-24	88.4	72.8	53.3	1,207
25-29	86.0	72.1	49.8	2,006
30-39	84.3	73.4	48.3	4,234
40-49	80.9	71.9	43.7	3,626
Marital status				
Married	84.0	72.5	47.7	10,801
Divorced/separated/ widowed	82.1	71.0	49.2	551
Currently pregnant				
Pregnant	88.6	70.1	52.9	1,085
Not pregnant or not sure	83.4	72.7	47.2	10,267
Residence				
Urban	84.1	72.6	46.8	9,458
Rural	83.3	71.6	52.4	1,894
Region				
Central	84.0	73.7	46.4	7,181
North	84.6	69.8	50.4	3,120
South	81.9	71.6	49.0	1,051
Governorate				
Amman	83.5	73.2	42.6	4,454
Balqa	84.5	76.4	57.0	765
Zarqa	85.0	73.8	49.8	1,659
Madaba	83.7	74.2	56.8	303
Irbid	84.0	68.9	49.0	1,986
Mafraq	85.6	72.0	58.3	562
Jarash	84.8	72.4	48.7	320
Ajloun	86.8	68.6	44.9	251
Karak	83.0	72.2	47.3	441
Tafiela	83.1	71.2	52.5	167
Ma'an	72.7	62.8	44.0	178
Aqaba	85.3	76.7	53.2	265
Badia				
Badia	78.6	66.3	51.8	705
Non Badia	84.3	72.8	47.5	10,647
Camps				
Camp	82.4	72.6	50.7	413
Non camp	84.0	72.4	47.6	10,939
Education				
No education	58.6	47.7	41.8	267
Elementary	72.0	56.8	50.9	860
Preparatory	80.2	66.1	50.6	1,677
Secondary	84.9	73.0	48.9	5,073
Higher	89.3	80.4	44.3	3,475
Wealth quintile				
Lowest	77.5	66.7	50.1	2,137
Second	83.7	68.8	53.4	2,343
Middle	85.1	73.9	49.8	2,461
Fourth	83.6	72.9	44.9	2,336
Highest	89.8	80.1	39.6	2,076
Total 15-49	83.9	72.4	47.7	11,352

The survey also collected information on whether women know where to go to get an HIV test. Table 12.5 shows that only one in five women (21 percent) know where to go to be tested. Knowledge is particularly low among very young women (age 15-19), women living in the Badia and camp areas, women with no education, and women from the poorest households.

Table 12.5 Knowledge of where to get an HIV test

Percentage of ever-married women age 15-49 who know where to get an HIV test, according to background characteristics, Jordan 2012

Background characteristic	Percentage who know where to get an HIV test	Number of women
Age		
15-24	15.5	1,485
15-19	13.5	278
20-24	15.9	1,207
25-29	18.3	2,006
30-39	21.2	4,234
40-49	23.1	3,626
Marital status		
Married	20.6	10,801
Divorced/separated/widowed	19.2	551
Residence		
Urban	20.9	9,458
Rural	18.9	1,894
Region		
Central	22.1	7,181
North	18.0	3,120
South	17.9	1,051
Governorate		
Amman	23.5	4,454
Balqa	23.0	765
Zarqa	18.4	1,659
Madaba	18.9	303
Irbid	16.7	1,986
Mafraq	17.5	562
Jarash	26.3	320
Ajloun	18.3	251
Karak	16.6	441
Tafiela	20.2	167
Ma'an	18.3	178
Aqaba	18.6	265
Badia		
Badia	15.7	705
Non Badia	20.9	10,647
Camps		
Camp	16.8	413
Non camp	20.7	10,939
Education		
No education	10.1	267
Elementary	16.0	860
Preparatory	15.7	1,677
Secondary	18.9	5,073
Higher	27.2	3,475
Wealth quintile		
Lowest	16.1	2,137
Second	17.5	2,343
Middle	18.8	2,461
Fourth	22.3	2,336
Highest	28.6	2,076
Total 15-49	20.6	11,352

12.2 STIGMA ASSOCIATED WITH AIDS

Social aspects of HIV/AIDS include, among others, negative attitudes toward people living with AIDS. The stigma is related to the public's perception of HIV/AIDS as associated with marginalized groups such as injecting drug users, prostitutes, and homosexuals. Fear of being stigmatized has been implicated as an important barrier to HIV testing and programs aimed at assisting persons living with AIDS and their families. In the 2012 JPFHS, women who had heard of AIDS were asked questions to assess the extent of stigma associated with AIDS.

The results in Table 12.6 indicate that 69 percent of women would be willing to care for a family member with AIDS at home. However, far fewer women would be willing to buy fresh vegetables from a shopkeeper with the AIDS virus (21 percent) or allow a female teacher with HIV to keep teaching (23 percent) even if she is not sick. One-third of women say that they would not want to keep secret the fact that a family member is HIV-positive. Accepting attitudes are expressed on all four indicators of tolerance by only 3 percent of women, a sign that stigma surrounding AIDS continues to be widespread in Jordan.

Table 12.6 Accepting attitudes toward those living with HIV/AIDS

Among ever-married women age 15-49 who have heard of AIDS, percentage expressing specific accepting attitudes toward people with HIV/AIDS, by background characteristics, Jordan 2012

	Percentage of women who:					
Background characteristic	Are willing to care for a family member with AIDS in the respondent's home	Would buy fresh vegetables from shopkeeper who has the AIDS virus	Say that a female teacher who has the AIDS virus but is not sick should be allowed to continue teaching	Would not want to keep secret that a family member got infected with the AIDS virus	Percentage expressing accepting attitudes on all four indicators	Number of women who have heard of AIDS
Age						
15-24	70.7	19.8	20.5	34.5	1.9	1,468
15-19	74.1	17.1	22.5	36.7	1.8	264
20-24	70.0	20.4	20.1	34.0	2.0	1,204
25-29	67.4	21.4	18.9	34.3	2.9	1,996
30-39	68.0	19.9	23.2	32.3	2.1	4,210
40-49	71.7	21.7	27.5	33.1	2.8	3,585
Marital status						
Married	69.4	20.8	23.4	32.9	2.4	10,715
Divorced/separated/ widowed	70.2	19.7	24.0	38.1	4.5	545
Residence						
Urban	69.9	21.0	24.2	33.4	2.5	9,394
Rural	66.8	19.4	19.7	31.9	2.4	1,865
Region						
Central	70.2	21.9	23.8	32.5	2.2	7,132
North	68.0	17.9	24.7	34.3	3.0	3,091
South	67.9	20.6	17.2	34.4	2.5	1,036
Governorate						
Amman	71.0	23.2	25.1	32.3	2.6	4,425
Balqa	59.5	19.0	21.1	32.0	1.5	756
Zarqa	71.2	20.8	22.2	34.5	1.8	1,651
Madaba	81.4	16.8	20.7	26.1	1.6	301
Irbid	67.9	16.7	25.4	34.6	3.2	1,970
Mafraq	66.4	19.9	20.6	30.6	1.2	553
Jarash	70.4	21.7	28.3	33.3	3.8	318
Ajloun	69.3	18.5	23.3	41.5	3.7	250
Karak	72.6	22.1	17.5	31.5	2.6	437
Tafiela	69.9	20.8	21.3	36.4	2.5	165
Ma'an	66.2	18.6	16.9	41.2	2.5	172
Aqaba	59.8	19.5	14.1	33.3	2.4	261
Badia						
Badia	65.0	20.7	17.7	36.7	2.0	684
Non Badia	69.7	20.7	23.8	32.9	2.5	10,575
Camps						
Camp	69.2	19.6	24.3	29.3	2.3	408
Non camp	69.4	20.7	23.4	33.3	2.5	10,852
Education						
No education	68.9	15.0	10.4	45.7	0.9	237
Elementary	68.0	16.9	17.7	32.2	2.0	837
Preparatory	68.4	20.7	20.1	34.9	2.0	1,647
Secondary	68.5	20.8	24.1	33.6	2.5	5,064
Higher	71.5	21.9	26.3	31.1	2.7	3,474
Wealth quintile						
Lowest	68.6	19.5	20.0	34.5	2.0	2,085
Second	67.5	18.9	19.7	35.4	1.8	2,326
Middle	66.5	19.8	21.9	34.4	2.6	2,454
Fourth	71.5	20.8	26.6	29.5	2.8	2,327
Highest	73.4	24.9	29.4	31.9	3.1	2,068
Total 15-49	69.4	20.7	23.4	33.2	2.5	11,259

12.3 ATTITUDES TOWARDS NEGOTIATING SAFER SEXUAL RELATIONS

Knowledge about HIV transmission and ways to prevent it is of little use if women feel powerless to negotiate safer sexual practices with their partner. In an effort to assess the ability of women to negotiate safer sex, women were asked if they thought a wife is justified in refusing to have sex with her husband if she knows he has sex with other women or if she knows he has a disease that can be transmitted through sexual contact. They were also asked if they thought a woman is justified in asking her husband to use a condom if she knows he has a sexually transmitted infection (STI).

Table 12.7 shows that the vast majority of ever-married women age 15-49 believe that, if she knows her husband has an STI, a woman is justified in either refusing to have sex with him or asking him to wear a condom (96 percent and 89 percent, respectively). In addition, 94 percent also mentioned that a woman is justified in refusing to have sexual intercourse with her husband if she knows he has sex with other women.

Table 12.7 Attitudes toward negotiating safer sexual relations with husband

Percentage of ever-married women age 15-49 who believe that a woman is justified in refusing to have sexual intercourse with her husband if she knows that he has sexual intercourse with other women, percentage who believe that a woman is justified in refusing to have sexual intercourse with her husband if she knows he has a sexually transmitted infection (STI), and percentage who believe that a woman is justified in asking that they use a condom if she knows that her husband has an STI, by background characteristics, Jordan 2012

Background characteristic	Woman is justified in			Number of women
	Refusing to have sexual intercourse with her husband if she knows he has sex with other women	Refusing to have sexual intercourse with her husband if she knows he has an STI	Asking that they use a condom if she knows that her husband has an STI	
Age				
15-24	93.4	95.6	85.0	1,485
15-19	89.2	90.8	76.2	278
20-24	94.4	96.7	87.0	1,207
25-29	94.9	96.5	90.3	2,006
30-39	95.6	97.0	90.8	4,234
40-49	92.0	95.9	86.8	3,626
Marital status				
Married	94.3	96.5	89.2	10,801
Divorced/separated/widowed	89.1	94.5	78.6	551
Residence				
Urban	93.8	96.2	88.3	9,458
Rural	95.5	97.3	90.4	1,894
Region				
Central	93.6	95.9	88.5	7,181
North	95.1	97.1	89.6	3,120
South	94.0	97.6	87.0	1,051
Governorate				
Amman	92.8	95.8	88.1	4,454
Balqa	95.2	95.9	90.6	765
Zarqa	94.8	96.0	87.6	1,659
Madaba	94.8	96.8	94.4	303
Irbid	95.1	96.9	89.1	1,986
Mafraq	94.7	97.2	91.0	562
Jarash	96.1	97.4	88.2	320
Ajloun	95.1	97.9	91.8	251
Karak	93.5	97.9	83.4	441
Tafiela	94.5	98.4	92.3	167
Ma'an	92.2	94.1	90.6	178
Aqaba	95.7	98.8	87.4	265
Badia				
Badia	93.3	95.2	89.0	705
Non Badia	94.1	96.5	88.6	10,647
Camps				
Camp	94.0	93.7	86.2	413
Non camp	94.1	96.5	88.8	10,939
Education				
No education	90.4	90.4	77.1	267
Elementary	89.2	91.9	83.3	860
Preparatory	92.7	93.3	86.2	1,677
Secondary	94.3	97.3	88.4	5,073
Higher	95.8	98.1	92.4	3,475
Wealth quintile				
Lowest	91.4	95.0	86.1	2,137
Second	94.6	95.4	88.3	2,343
Middle	94.7	96.4	88.8	2,461
Fourth	94.7	97.4	89.5	2,336
Highest	94.7	97.8	90.7	2,076
Total 15-49	94.1	96.4	88.7	11,352

Currently married women were asked whether they had ever discussed HIV/AIDS prevention with their husband, since discussing HIV prevention with one's partner is an important aspect of preventive behavior. Table 12.8 shows that approximately one-third of currently married women (30 percent) had discussed HIV/AIDS prevention with their husbands. Very young women (age 15-19), less educated women, and those living in poorer households were least likely to have talked to their spouses about this important issue. Those most likely to have broached the topic with their husband were women with secondary and higher education (32 percent each), women living in the wealthiest households (34 percent), and women living in Zarqa (35 percent).

Table 12.8 Talked about AIDS with husband

Among currently married women age 15-49 who have heard of AIDS, the percentage who have talked with their husband about ways to prevent getting the virus that causes AIDS, by background characteristics, Jordan 2012

Background characteristic	Talked about AIDS with husband	Number of women
Age		
15-24	22.5	1,418
15-19	12.2	250
20-24	24.8	1,168
25-29	26.6	1,925
30-39	31.4	4,046
40-49	34.0	3,326
Residence		
Urban	30.4	8,924
Rural	29.1	1,791
Region		
Central	31.4	6,794
North	28.8	2,938
South	25.9	982
Governorate		
Amman	31.3	4,233
Balqa	26.9	717
Zarqa	34.9	1,557
Madaba	24.7	288
Irbid	30.3	1,876
Mafraq	24.3	520
Jarash	30.3	304
Ajloun	24.3	238
Karak	26.0	416
Tafiela	27.7	159
Ma'an	22.0	157
Aqaba	27.1	250
Badia		
Badia	25.6	647
Non Badia	30.5	10,067
Camps		
Camp	25.1	382
Non camp	30.4	10,332
Education		
No education	16.8	199
Elementary	17.7	766
Preparatory	28.6	1,519
Secondary	32.0	4,854
Higher	31.9	3,376
Wealth quintile		
Lowest	25.4	1,927
Second	26.4	2,164
Middle	31.6	2,357
Fourth	32.8	2,265
Highest	34.1	2,002
Total 15-49	30.2	10,715

12.4 KNOWLEDGE OF SEXUALLY TRANSMITTED INFECTIONS

Sexually transmitted infections (STIs) are important predisposing factors of HIV/AIDS transmission. As such, the presence of STIs in a population increases the likelihood of the occurrence of HIV. AIDS prevention programs must therefore also address the prevention and treatment of STIs. Additional questions were included in the JPFHS to assess the level of awareness of STIs among women.

Table 12.9 shows that only two in five ever-married women (40 percent) have heard of STIs apart from AIDS. As expected, younger women, rural residents, women with less education, and women living in poorer households are less likely than others to have heard about other STIs.

Table 12.9 Knowledge of sexually transmitted infections (STIs)

Percentage of ever-married women age 15-49 who have heard of sexually transmitted infections (STI) other than AIDS, by background characteristics, Jordan 2012

Background characteristic	Heard of STIs	Number of ever-married women
Age		
15-24	31.2	1,485
15-19	20.9	278
20-24	33.6	1,207
25-29	38.4	2,006
30-39	39.0	4,234
40-49	44.5	3,626
Marital status		
Married	39.8	10,801
Divorced/separated/widowed	37.0	551
Residence		
Urban	41.1	9,458
Rural	32.3	1,894
Region		
Central	43.0	7,181
North	32.5	3,120
South	37.7	1,051
Governorate		
Amman	44.6	4,454
Balqa	40.8	765
Zarqa	40.6	1,659
Madaba	37.7	303
Irbid	33.3	1,986
Mafraq	29.0	562
Jarash	33.9	320
Ajloun	32.5	251
Karak	37.8	441
Tafiela	41.4	167
Ma'an	32.6	178
Aqaba	38.5	265
Badia		
Badia	29.4	705
Non Badia	40.3	10,647
Camps		
Camp	35.7	413
Non camp	39.8	10,939
Education		
No education	14.7	267
Elementary	21.3	860
Preparatory	24.7	1,677
Secondary	35.4	5,073
Higher	59.4	3,475
Wealth quintile		
Lowest	25.3	2,137
Second	30.8	2,343
Middle	37.7	2,461
Fourth	47.3	2,336
Highest	58.0	2,076
Total 15-49	39.6	11,352

Those who have heard of STIs were asked to specify what type of STI they have heard about. The most commonly known STIs are syphilis, mentioned by 58 percent of women; gonorrhea, mentioned by 46 percent of women; and hepatitis, mentioned by 15 percent of women (data not shown separately).

12.5 EXPOSURE TO MEDIA MESSAGES ABOUT AIDS

Media messages play an important role in transmitting information about HIV/AIDS and its spread and are an important and effective tool for educating the general population. The JPFHS asked ever-married women who have heard of AIDS if they had heard, seen, or received information about HIV/AIDS in the previous six months.

Table 12.10 shows that three-fifths of women (60 percent) have had no exposure to media messages about AIDS in the past six months. Non-exposure to media messages about AIDS ranges from a low of 42 percent among women in Karak to a high of 66 percent among women in Irbid. Not surprisingly, women with no education are most likely to have had no exposure (79 percent).

Table 12.10 Exposure to media messages about AIDS

Among ever-married women age 15-49 who have heard of AIDS, percentage who have heard, seen, or received information about HIV/AIDS from specific sources in the 6 months before the survey, by background characteristics, Jordan 2012

	Media									
Background characteristic	Television	Radio	Print media	Social meetings	Health worker	Husband	Other relatives, friends, neighbors	Other	No media	Number of ever-married women
Age										
15-24	31.6	2.5	4.0	0.4	0.5	0.5	1.9	0.4	64.5	1,468
15-19	30.0	3.6	2.5	1.0	0.4	1.0	2.9	1.6	64.2	264
20-24	31.9	2.2	4.3	0.3	0.5	0.4	1.7	0.2	64.5	1,204
25-29	34.2	1.5	5.8	1.0	0.9	0.6	3.9	0.0	60.4	1,996
30-39	33.4	2.3	5.3	1.1	1.4	1.1	3.2	0.3	61.3	4,210
40-49	38.2	2.4	7.1	1.4	1.4	1.6	3.5	0.3	56.0	3,585
Marital status										
Married	34.8	2.1	5.8	1.1	1.2	1.2	3.0	0.3	60.2	10,715
Divorced/separated/ widowed	36.3	3.3	5.2	1.4	0.3	0.0	6.7	0.0	53.2	545
Residence										
Urban	33.7	2.3	5.5	1.0	1.2	1.0	3.3	0.3	60.7	9,394
Rural	40.7	1.4	7.1	1.8	1.3	1.5	3.0	0.2	55.4	1,865
Region										
Central	34.7	2.7	5.7	1.1	1.2	1.1	3.6	0.3	59.8	7,132
North	32.0	1.3	4.8	0.9	0.9	0.6	2.2	0.2	62.9	3,091
South	44.0	1.3	9.1	1.8	1.8	2.3	3.5	0.3	50.9	1,036
Governorate										
Amman	33.6	3.2	5.3	0.5	0.9	1.3	3.5	0.3	60.9	4,425
Balqa	34.5	1.4	5.4	3.5	2.4	0.9	5.0	0.4	60.2	756
Zarqa	36.0	2.0	6.8	1.5	1.4	0.7	3.4	0.3	58.1	1,651
Madaba	44.0	2.8	6.6	1.6	1.9	0.9	2.8	0.5	52.4	301
Irbid	28.6	1.3	4.4	0.8	0.9	0.7	2.1	0.2	65.5	1,970
Mafraq	35.4	0.8	3.3	1.2	0.5	0.4	2.1	0.1	61.7	553
Jarash	41.7	1.4	8.5	0.8	1.1	0.4	2.0	0.1	53.8	318
Ajloun	38.6	2.1	6.4	0.5	1.0	0.9	3.5	0.2	57.0	250
Karak	51.5	1.7	11.7	2.0	2.3	4.1	4.3	0.1	42.4	437
Tafiela	41.2	1.1	8.2	2.0	2.5	1.7	5.0	0.1	54.9	165
Ma'an	33.7	1.1	6.8	0.5	1.7	0.7	3.6	0.3	61.1	172
Aqaba	39.9	1.1	6.9	2.0	0.6	0.9	1.0	0.9	55.8	261
Badia										
Badia	36.5	1.0	3.7	0.9	1.2	0.3	3.2	0.1	61.0	684
Non Badia	34.7	2.3	5.9	1.1	1.2	1.1	3.2	0.3	59.8	10,575
Camps										
Camp	33.9	1.1	5.5	1.3	1.6	0.6	3.7	0.1	61.5	408
Non camp	34.9	2.2	5.8	1.1	1.2	1.1	3.2	0.3	59.8	10,852
Education										
No education	17.5	0.7	0.1	0.5	0.0	0.2	4.6	0.0	79.3	237
Elementary	26.8	0.4	2.6	0.8	0.8	0.0	3.7	0.0	71.2	837
Preparatory	34.4	1.9	4.7	0.8	1.0	1.2	3.7	0.4	61.1	1,647
Secondary	35.0	2.5	5.0	0.8	0.8	1.3	3.0	0.2	60.5	5,064
Higher	37.9	2.4	8.6	1.7	2.1	1.0	3.1	0.4	54.3	3,474
Wealth quintile										
Lowest	30.5	1.3	4.8	0.6	0.8	0.6	3.6	0.3	66.1	2,085
Second	39.1	1.9	4.6	1.2	1.2	1.1	3.2	0.0	56.8	2,326
Middle	37.9	2.1	7.2	1.6	1.8	1.1	3.2	0.2	56.1	2,454
Fourth	34.4	2.7	7.6	1.0	1.0	1.7	3.6	0.2	60.5	2,327
Highest	31.3	2.8	4.4	1.0	1.0	0.8	2.4	0.7	60.8	2,068
Total 15-49	34.8	2.2	5.8	1.1	1.2	1.1	3.2	0.3	59.9	11,259

The most important source of exposure to AIDS messages is the television, mentioned by one-third of women (35 percent). The print media is mentioned by 6 percent; friends, relatives, and neighbors by 3 percent; and radio by 2 percent. Women's exposure to information about AIDS on the television is highest among those residing in Karak (52 percent) and lowest in Irbid (29 percent).

12.6 AIDS-RELATED KNOWLEDGE AMONG YOUTH

Knowledge of AIDS among youth age 15-24 is of particular interest because the period between sexual initiation and marriage is, for many young people, a time of sexual experimentation that may involve high-risk behaviors. This section considers two issues that relate to knowledge of both transmission and prevention of AIDS among youth: the extent to which youth have comprehensive knowledge about AIDS transmission and prevention modes and knowledge of a source where they can obtain condoms.

Knowledge of how AIDS is transmitted is crucial for people to avoid contracting HIV. Young people are often at greater risk because they have short relationships with more partners or engage in other risky behaviors. In a country like Jordan, where sexual intercourse occurs predominantly within the context of marriage, this may be of lesser importance. However, AIDS-related knowledge is important when age at marriage is relatively low as in Jordan. Table 12.11 shows the level of comprehensive knowledge of AIDS among youth, and the percentage of youth who know of a source where they can obtain condoms. As noted earlier, comprehensive knowledge of AIDS is defined as knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chances of contracting HIV, knowing that a healthy-looking person can have HIV, and rejecting the two most common misconceptions about HIV transmission in Jordan (that HIV can be transmitted by mosquito bites and that it can be transmitted by sharing food with someone who has AIDS).

Table 12.11 Comprehensive knowledge about AIDS and of a source of condoms among young women

Percentage of ever-married women age 15-24 with comprehensive knowledge about AIDS and percentage with knowledge of a source of condoms, by background characteristics, Jordan 2012

Background characteristic	Percentage with comprehensive knowledge of AIDS[1]	Percentage who know a condom source[2]	Number of women
Age			
15-19	5.6	55.3	278
15-17	2.1	47.0	64
18-19	6.6	57.8	214
20-24	9.3	80.0	1,207
20-22	9.2	79.2	586
23-24	9.4	80.7	621
Residence			
Urban	8.2	75.1	1,271
Rural	11.1	77.0	214
Region			
Central	7.4	74.9	913
North	10.1	75.2	454
South	11.9	79.6	118
Badia			
Badia	5.2	71.0	99
Non Badia	8.8	75.7	1,387
Camps			
Camp	7.1	72.1	56
Non camp	8.7	75.5	1,429
Education			
No education	*	*	13
Elementary	3.6	54.7	68
Preparatory	7.1	65.0	264
Secondary	8.0	78.1	782
Higher	12.3	81.1	359
Total 15-24	8.6	75.4	1,485

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

[1] Comprehensive knowledge means knowing that consistent use of condoms during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting the AIDS virus, knowing that a healthy-looking person can have the AIDS virus, and rejecting the two most common local misconceptions about AIDS transmission or prevention of the AIDS virus. The components of comprehensive knowledge are presented in Tables 12.2, and 12.3.

[2] For this table, the following responses are not considered a source for condoms: friends, family members, and home.

Less than one in ten (9 percent) ever-married young women have comprehensive knowledge of AIDS in Jordan. Comprehensive knowledge is lower among women age 15-17, young women living in urban areas and in the Central region, women residing in Badia and camp areas, and women with low levels of education.

Table 12.11 shows that three-fourths of young women (75 percent) know where to get condoms. Knowledge of a source for condoms follows expected patterns by background characteristics, with the exception being that young women in rural areas are slightly more likely than those in urban areas to know a condom source.

12.7 KNOWLEDGE OF TUBERCULOSIS

Tuberculosis (TB) is an infectious disease caused by mycobacteria. TB usually attacks the lungs (as pulmonary TB) but it can also affect other systems of the body. TB is spread through the air when an infectious person coughs, sneezes, or spits. In the 2012 JPFHS, women were asked if they had ever heard of TB, whether they knew how TB spreads from one person to another, whether TB can be cured, and if they would be willing to be tested for TB.

Table 12.12 shows that 96 percent of ever-married women have heard of TB. There are no significant variations in knowledge of TB by most background characteristics except that women age 15-19 are far less likely than older women to have heard of TB. Knowledge of TB increases with level of education and wealth.

Data in Table 12.13 indicate that, among women who have heard of TB, only 41 percent know how TB is transmitted from one person to another. Knowledge of the means of transmission of TB is the highest among women age 40-49, women residing in the South region and in Karak, and women in the non Badia and non camp areas. However, even among these women, only 50 percent or less know that TB is spread through the air by an infected person coughing or sneezing.

Wider variations are found by educational level and household wealth quintile. Knowledge of the means of transmission of TB increases as educational level and wealth quintile increase. However, only 53 percent of women with higher education and 53 percent of women in the highest wealth quintile know how TB is spread from person to person.

Table 12.13 also shows that 60 percent of women who have ever heard of TB reported that it can be cured. Variations according to background characteristics follow approximately the same pattern as knowledge of the route of transmission of TB; however, differences are negligible. Data also

Table 12.12 Knowledge of tuberculosis

Percentage of ever-married women age 15-49 who have heard of tuberculosis, by background characteristics, Jordan 2012

Background characteristic	Heard of tuberculosis	Number of women
Age		
15-24	88.9	1,485
15-19	81.0	278
20-24	90.7	1,207
25-29	94.8	2,006
30-39	97.1	4,234
40-49	98.1	3,626
Marital status		
Married	96.0	10,801
Divorced/separated/ widowed	94.7	551
Knows condom source[1]		
Yes	97.3	9,219
No	90.0	2,133
Residence		
Urban	95.8	9,458
Rural	96.7	1,894
Region		
Central	96.0	7,181
North	95.6	3,120
South	96.6	1,051
Governorate		
Amman	95.6	4,454
Balqa	95.8	765
Zarqa	96.5	1,659
Madaba	98.8	303
Irbid	94.6	1,986
Mafraq	98.2	562
Jarash	95.2	320
Ajloun	98.4	251
Karak	96.5	441
Tafiela	96.8	167
Ma'an	96.5	178
Aqaba	96.9	265
Badia		
Badia	97.0	705
Non Badia	95.9	10,647
Camps		
Camp	93.2	413
Non camp	96.1	10,939
Education		
No education	91.7	267
Elementary	89.7	860
Preparatory	93.3	1,677
Secondary	96.2	5,073
Higher	98.7	3,475
Wealth quintile		
Lowest	93.3	2,137
Second	95.3	2,343
Middle	95.8	2,461
Fourth	96.6	2,336
Highest	98.8	2,076
Total 15-49	96.0	11,352

[1] For this table, the following responses are not considered a source for condoms: friends, family members, and home.

indicate that 40 percent of women would be willing to take a TB test, much less than what was reported in the 2007 JPFHS. This varies from a minimum of 32 percent in Mafraq to a maximum of 45 percent in Ajloun. Variations by other background characteristics are mixed and do not follow any clear pattern.

Table 12.13 Comprehensive knowledge of tuberculosis and willingness to be tested

Among ever-married women age 15-49 who have heard of tuberculosis, the percentage who know that tuberculosis is spread from one person to another through the air when coughing or sneezing, the percentage who know that tuberculosis can be cured, and the percentage who are willing to be tested for tuberculosis, by background characteristics, Jordan 2012

Background characteristic	Know that tuberculosis is spread from one person to another through the air when coughing or sneezing	Know that tuberculosis can be cured	Willing to be tested for tuberculosis	Number of women
Age				
15-24	27.6	51.2	45.0	1,320
15-19	21.4	50.1	39.5	225
20-24	28.8	51.4	46.1	1,095
25-29	33.4	55.3	40.1	1,902
30-39	41.8	59.5	40.0	4,113
40-49	48.5	67.3	37.6	3,558
Marital status				
Married	40.6	60.2	40.0	10,371
Divorced/separated/widowed	44.5	63.2	37.5	522
Knows condom source[1]				
Yes	42.4	61.5	41.1	8,972
No	33.0	55.0	34.0	1,920
Residence				
Urban	41.1	61.0	40.4	9,061
Rural	39.2	57.0	37.1	1,831
Region				
Central	42.2	61.4	42.0	6,893
North	36.5	59.6	36.3	2,984
South	43.8	55.0	35.8	1,016
Governorate				
Amman	43.5	62.0	42.7	4,260
Balqa	36.6	60.6	41.1	733
Zarqa	40.2	60.8	41.8	1,600
Madaba	47.1	58.2	34.9	299
Irbid	36.3	57.5	36.0	1,879
Mafraq	41.7	66.6	32.2	552
Jarash	33.7	57.5	38.8	305
Ajloun	30.6	62.3	45.0	247
Karak	50.1	53.9	34.6	426
Tafiela	42.0	57.7	39.2	161
Ma'an	34.9	51.9	39.6	172
Aqaba	40.5	57.2	33.4	257
Badia				
Badia	36.0	58.6	36.5	684
Non Badia	41.1	60.4	40.1	10,208
Camps				
Camp	36.1	55.0	46.7	385
Non camp	41.0	60.5	39.6	10,508
Education				
No education	23.7	52.9	36.0	245
Elementary	24.5	48.0	33.3	771
Preparatory	29.3	55.4	41.6	1,564
Secondary	39.4	59.4	40.2	4,880
Higher	52.9	67.2	40.3	3,432
Wealth quintile				
Lowest	30.7	54.4	44.1	1,994
Second	35.4	56.9	39.1	2,233
Middle	39.9	58.1	40.3	2,359
Fourth	44.7	64.5	38.2	2,256
Highest	53.1	67.8	37.7	2,051
Total 15-49	40.8	60.3	39.8	10,892

WOMEN'S EMPOWERMENT 13

Key Findings

- Only 16 percent of ever-married Jordanian women were employed at the time of the survey.
- Two-fifths (39 percent) of currently employed women earning cash made independent decisions on how to spend their earnings.
- Ninety-three percent of ever-married women age 15-49 do not own a house or land and only 3 percent own a house or land by themselves.
- Two-thirds (65 percent) of currently married women participate either alone or jointly with their husband in making all three specified decisions pertaining to their own health care, major household purchases, and visits to their family or relatives.
- Seventy percent of ever-married women accept at least one reason as a justification for wife beating. Women are most likely to agree that if a woman has relations with other men, it justifies wife beating (65 percent).

This chapter looks at indicators of women's status and empowerment, such as working status, use of earnings, and participation in decision making. It also presents data on women's attitudes towards wife beating and a woman's ability to refuse sexual intercourse with her husband.

13.1 WOMEN'S WORK STATUS

In the 2012 JPFHS, ever-married women age 15-49 were asked a number of questions about their work, including whether they were currently working or not. Women who were currently working were then asked additional questions about the kind of work they do, their employment status, who makes the decision about how their earnings are used, and what proportion of household expenditures are paid for by the income gained from their own employment.

A relatively small proportion of Jordanian women (16 percent) were employed in the seven days prior to the interview (Table 13.1). The proportion of currently married women who are currently employed ranges from less than 1 percent among those age 15-19 to 20 percent among those age 45-49.

Table 13.1 Employment of currently married women

Percentage of currently married women age 15-49 who were employed at any time in the past 7 days and, among those employed in the past 7 days, percent distribution by employment status, according to age, Jordan 2012

			Employment status					
Age	Percentage employed	Number of women	Employee	Employer	Self-employed	Unpaid worker	Total	Number of women
15-19	0.1	264	100.0	na	na	na	100.0	0
20-24	5.5	1,171	97.3	0.0	2.1	0.6	100.0	64
25-29	15.5	1,935	91.8	0.3	7.6	0.2	100.0	300
30-34	19.2	2,055	92.1	1.2	6.5	0.2	100.0	395
35-39	16.8	2,012	89.0	2.3	8.6	0.2	100.0	338
40-44	17.8	1,944	87.2	1.1	8.6	3.1	100.0	346
45-49	20.0	1,419	77.4	3.9	17.2	1.5	100.0	283
Total	16.0	10,801	88.3	1.6	9.1	1.0	100.0	1,726

na = Not applicable

Among those who are currently working, the majority are employees, that is, they work for someone else (88 percent); 2 percent are employers, 9 percent are self-employed, and 1 percent are unpaid workers. Women age 45-49 are more likely to be self-employed (17 percent) than younger women.

13.2 Women's Control Over Their Own Earnings and Relative Magnitude of Women's Earnings

Currently married women earning cash for their work were asked who mainly decides how their earnings will be used and whether they earn more or less than their husband. Table 13.2 shows that 58 percent of women reported that they decide jointly with their husband how their earnings are spent, and 39 percent of women stated that it is mainly their own decision. Young women age 20-24, women who reside in the South region, and women who reside in the Badia areas are less likely than other women to make independent decisions on spending their earnings. Independent decision making is higher in urban areas than in rural areas; 41 percent of urban women mainly decide on their own how to spend their earnings, compared to 30 percent of rural women. The percentage of women who decide how their earnings are spent is lower among women with two children or less than among women with three children or more. There is wide variation in decision making about spending women's earnings according to level of education. Women with elementary education are least likely to be the sole decision maker (32 percent). Thirty-eight percent of women in the lowest wealth quintile reported being the main decision maker on spending their earnings, compared with 47 percent of women in the highest quintile.

Table 13.2 also shows that 58 percent of women reported earning less than their husband, 16 percent of women reported earning more than their husband, and 15 percent reported earning about the same amount. Young women age 20-24; women with one to two children; women in urban areas, in the Central region, in Zarqa and Aqaba, and in the non Badia and non camp areas; women with elementary education; and women in the highest wealth quintile are more likely to earn less than their husbands than their counterparts in the other categories.

Table 13.2 Control over women's cash earnings and relative magnitude of women's cash earnings

Percent distribution of currently married women age 15-49 who received cash earnings for employment in the 7 days preceding the survey by person who decides how wife's cash earnings are used and by whether she earned more or less than her husband, according to background characteristics, Jordan 2012

	Person who decides how the wife's cash earnings are used:				Wife's cash earnings compared with husband's earnings:						
Background characteristic	Mainly wife	Wife and husband jointly	Mainly husband	Total	More	Less	About the same	Husband has no earnings	Don't know/ missing	Total	Number of women
Age											
20-24	21.4	73.6	5.1	100.0	5.2	85.6	6.1	3.1	0.0	100.0	64
25-29	34.7	63.0	2.3	100.0	15.5	60.8	22.3	1.2	0.1	100.0	299
30-34	39.5	56.6	3.9	100.0	19.1	64.8	11.2	4.8	0.0	100.0	395
35-39	33.4	65.6	1.1	100.0	19.2	53.1	17.0	9.0	1.7	100.0	337
40-44	43.6	53.0	3.5	100.0	14.1	48.4	15.5	20.2	1.8	100.0	335
45-49	47.4	45.4	7.2	100.0	13.0	55.1	8.9	22.3	0.7	100.0	279
Number of living children											
0	35.7	62.0	2.2	100.0	14.5	52.1	20.7	8.8	3.8	100.0	159
1-2	35.8	61.0	3.2	100.0	15.0	64.0	14.7	5.3	1.0	100.0	578
3-4	41.0	56.1	2.9	100.0	17.3	58.7	14.4	9.4	0.0	100.0	597
5+	41.5	52.8	5.7	100.0	16.0	49.0	12.0	22.4	0.5	100.0	375
Residence											
Urban	40.8	55.3	3.9	100.0	15.1	59.5	14.3	10.1	1.0	100.0	1,400
Rural	30.0	67.8	2.2	100.0	20.2	50.1	15.7	14.0	0.0	100.0	309
Region											
Central	45.6	50.5	3.9	100.0	14.3	58.9	14.9	10.8	1.1	100.0	1,025
North	30.3	66.1	3.6	100.0	20.7	56.4	11.5	10.9	0.4	100.0	455
South	25.8	72.1	2.1	100.0	14.1	55.4	19.2	11.0	0.2	100.0	230
Governorate											
Amman	53.6	42.5	3.8	100.0	11.0	59.6	14.5	13.0	1.9	100.0	625
Balqa	35.5	58.1	6.4	100.0	19.4	49.9	22.6	8.1	0.0	100.0	154
Zarqa	33.0	65.4	1.6	100.0	19.3	66.5	9.4	4.8	0.0	100.0	174
Madaba	27.9	67.9	4.1	100.0	20.4	53.0	14.5	12.2	0.0	100.0	71
Irbid	32.2	64.1	3.6	100.0	17.8	61.9	9.4	10.3	0.7	100.0	294
Mafraq	27.5	69.8	2.7	100.0	32.7	40.3	14.8	12.1	0.0	100.0	81
Jarash	27.5	67.9	4.5	100.0	16.1	52.5	19.8	11.6	0.0	100.0	47
Ajloun	23.3	72.5	4.2	100.0	23.8	53.2	10.5	12.5	0.0	100.0	33
Karak	22.7	77.1	0.3	100.0	12.5	54.2	23.7	9.6	0.0	100.0	117
Tafiela	27.6	71.1	1.4	100.0	30.0	45.2	11.5	12.3	1.0	100.0	35
Ma'an	26.0	70.4	3.6	100.0	14.2	54.8	14.3	16.1	0.5	100.0	33
Aqaba	32.4	61.0	6.6	100.0	6.0	67.2	16.9	9.8	0.0	100.0	44
Badia											
Badia	32.3	64.0	3.7	100.0	30.0	38.8	16.4	14.3	0.5	100.0	84
Non Badia	39.2	57.3	3.6	100.0	15.3	58.7	14.5	10.7	0.8	100.0	1,625
Camps											
Camp	37.9	57.9	4.2	100.0	24.4	46.1	17.0	11.5	1.1	100.0	35
Non camp	38.9	57.6	3.6	100.0	15.8	58.0	14.5	10.8	0.8	100.0	1,674
Education											
No education	*	*	*	*	*	*	*	*	*	*	21
Elementary	32.4	57.8	9.8	100.0	3.0	66.2	17.0	13.5	0.3	100.0	55
Preparatory	53.4	43.5	3.1	100.0	22.6	33.7	16.8	26.9	0.0	100.0	68
Secondary	44.2	52.6	3.2	100.0	10.3	61.7	9.7	17.7	0.6	100.0	315
Higher	37.0	59.7	3.3	100.0	17.8	57.8	15.7	7.7	1.0	100.0	1,250
Wealth quintile											
Lowest	38.4	52.8	8.8	100.0	10.4	48.6	12.7	28.1	0.1	100.0	136
Second	38.0	58.8	3.2	100.0	21.4	54.0	11.4	13.1	0.1	100.0	221
Middle	33.5	62.6	3.9	100.0	13.5	59.5	14.1	10.3	2.5	100.0	335
Fourth	33.3	63.9	2.9	100.0	21.6	50.9	17.4	10.0	0.0	100.0	471
Highest	47.4	49.8	2.8	100.0	11.9	66.3	14.1	6.7	1.0	100.0	547
Total	38.8	57.6	3.6	100.0	16.0	57.8	14.6	10.8	0.8	100.0	1,709

Note: Total includes 1 woman age 15-19 who is not shown separately. An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.

13.3 CONTROL OVER HUSBANDS' EARNINGS

Currently married women age 15-49 whose husbands have earnings were asked who decides how their husbands' earnings are used. Table 13.3 shows women's responses on who makes the decision about their husband's earnings. Sixty-two percent of currently married women whose husbands receive earnings say that they decide jointly with their husband about the use of his cash earnings, 5 percent say that they decide by themselves, 33 percent say that their husband alone decides, and less than 1 percent say that others decide.

Table 13.3 Control over husband's earnings

Percent distribution of currently married women age 15-49 whose husbands have earnings, by person who decides how husband's earnings are used, according to background characteristics, Jordan 2012

Background characteristic	Person who decides how husband's earnings are used: Mainly wife	Husband and wife jointly	Mainly husband	Other	Total	Number of women
Age						
15-19	0.1	47.3	50.8	1.8	100.0	256
20-24	2.5	64.6	32.0	1.0	100.0	1,113
25-29	4.0	63.2	32.6	0.2	100.0	1,840
30-34	3.8	63.8	32.2	0.2	100.0	1,905
35-39	4.7	62.1	33.0	0.3	100.0	1,776
40-44	7.1	63.4	29.0	0.5	100.0	1,635
45-49	6.8	58.0	35.1	0.1	100.0	1,062
Number of living children						
0	2.7	67.6	28.9	0.9	100.0	815
1-2	3.1	64.6	31.7	0.7	100.0	2,709
3-4	5.5	60.3	34.0	0.1	100.0	3,317
5+	5.7	60.9	33.1	0.3	100.0	2,746
Residence						
Urban	5.0	61.4	33.3	0.4	100.0	8,081
Rural	3.0	67.3	29.3	0.4	100.0	1,506
Region						
Central	5.7	59.1	34.8	0.5	100.0	6,180
North	3.0	67.2	29.6	0.3	100.0	2,568
South	2.1	71.4	26.4	0.1	100.0	839
Governorate						
Amman	6.2	57.6	35.5	0.7	100.0	3,869
Balqa	5.0	55.0	40.0	0.1	100.0	634
Zarqa	5.0	63.3	31.5	0.2	100.0	1,426
Madaba	3.8	67.5	28.8	0.0	100.0	250
Irbid	3.0	66.4	30.3	0.3	100.0	1,686
Mafraq	2.7	66.9	30.3	0.2	100.0	421
Jarash	3.9	68.6	27.4	0.1	100.0	265
Ajloun	2.4	72.8	24.6	0.1	100.0	197
Karak	1.4	77.4	21.1	0.1	100.0	350
Tafiela	3.6	64.7	31.4	0.3	100.0	137
Ma'an	1.7	64.9	33.2	0.2	100.0	126
Aqaba	2.3	69.8	27.9	0.0	100.0	226
Badia						
Badia	4.1	55.5	39.4	0.9	100.0	521
Non Badia	4.7	62.7	32.3	0.4	100.0	9,065
Camps						
Camp	6.0	57.5	35.6	0.9	100.0	348
Non camp	4.6	62.5	32.5	0.4	100.0	9,239
Education						
No education	5.4	44.0	50.6	0.0	100.0	148
Elementary	5.5	45.5	47.5	1.5	100.0	569
Preparatory	4.3	53.7	41.1	0.9	100.0	1,310
Secondary	5.9	60.3	33.5	0.3	100.0	4,414
Higher	2.9	72.6	24.4	0.0	100.0	3,146
Wealth quintile						
Lowest	4.9	55.6	38.7	0.8	100.0	1,560
Second	4.3	62.3	33.1	0.3	100.0	1,910
Middle	5.1	63.3	31.4	0.2	100.0	2,139
Fourth	4.6	63.4	31.5	0.5	100.0	2,068
Highest	4.3	65.5	29.9	0.2	100.0	1,910
Total	4.6	62.3	32.7	0.4	100.0	9,587

Joint decision making is more commonly reported by childless women, women living in rural areas, those in the South region, and those residing in the non Badia and non camp areas. In addition, 73 percent of currently married women with higher education and 66 percent of women in the highest wealth quintile say that they make decisions about the use of their husband's earnings jointly with their husband. Decision making by mainly the husband is higher among women with no education and women in the youngest (15-19) age group (51 percent each).

The level of women's earnings relative to their husbands' earnings is expected to be associated with women's control over their own and their husbands' earnings. To examine this association, Table 13.4 shows the percent distribution of currently married women age 15-49 with earnings in the last seven days by the person who decides how the wife's earnings are used and the distribution of currently married women age 15-49 whose husbands have earnings by the person who decides how the husband's earnings are used, according to women's earnings relative to their husband's earnings.

Table 13.4 Women's control over their own earnings and over those of their husbands

Percent distribution of currently married women age 15-49 with earnings in the last 7 days by person who decides how the wife's earnings are used and percent distribution of currently married women age 15-49 whose husbands have earnings by person who decides how the husband's earnings are used, according to the relation between wife's and husband's earnings, Jordan 2012

	Person who decides how the wife's earnings are used:					Person who decides how husband's earnings are used:					
Women's earnings relative to husband's earnings	Mainly wife	Wife and husband jointly	Mainly husband	Total	Number	Mainly wife	Wife and husband jointly	Mainly husband	Other	Total	Number of women
More than husband	31.3	65.7	3.0	100.0	273	10.3	75.4	14.4	0.0	100.0	273
Less than husband	42.2	54.7	3.1	100.0	987	5.2	68.4	26.4	0.0	100.0	987
Same as husband	26.5	69.7	3.8	100.0	249	2.2	78.3	19.5	0.0	100.0	249
Husband has no earnings or did not work	45.0	47.9	7.1	100.0	185	na	na	na	na	na	na
Woman worked but has no earnings	na	na	na	na	na	*	*	*	*	*	17
Woman did not work	na	na	na	na	na	4.5	60.7	34.4	0.5	100.0	8,047
Total[1]	38.8	57.6	3.6	100.0	1,709	4.6	62.3	32.7	0.4	100.0	9,587

Note: An asterisk indicates that a figure is based on fewer than 25 unweighted cases and has been suppressed.
na = Not applicable
[1] Includes cases where a woman does not know whether she earned more or less than her husband.

The table shows that women who earn about the same as their husbands are most likely to jointly decide about the use of both their own earnings (70 percent) and their husband's earnings (78 percent). Women who earn more than their husband are more likely than other women to be the main decision maker about the use of their husband's earnings (10 percent), but women whose husbands have no earnings or did not work are more likely than other women to be the main decision makers about their own earnings (45 percent).

13.4 WOMEN'S OWNERSHIP OF ASSETS

Ownership of assets, particularly high value assets, has many beneficial effects for households, including protection against financial ruin. Women's individual ownership of assets enables their economic empowerment and provides protection in the case of marital dissolution or abandonment. The 2012 JPFHS collected information on women's ownership (alone, jointly, and alone and jointly) of two high value assets, namely, land and a house.

Table 13.5 shows that 93 percent of currently married women age 15-49 do not own a house and the same percentage do not own land. Three percent of currently married women own a house or land by themselves. Currently married women's ownership of a house and land increases with age and wealth. Urban currently married women, those from the Central region, women in Amman, and those from the non Badia and non camp areas are more likely to own a house alone than rural currently married women and women in other regions and areas. In contrast, currently married women living in non camp areas, those in the North and South regions, and those living in Ma'an are more likely to own land alone than currently married women in other regions and areas. Women with higher education are most likely to own land or a house.

Table 13.5 Ownership of assets

Percent distribution of currently married women age 15-49 by ownership of housing and land, according to background characteristics, Jordan 2012

Background characteristic	Percentage who own a house: Alone	Jointly	Alone and jointly	Percentage who do not own a house	Total	Percentage who own land: Alone	Jointly	Alone and jointly	Percentage who do not own land	Total	Number of women
Age											
15-19	0.4	1.6	0.0	98.0	100.0	0.0	1.4	0.1	98.6	100.0	264
20-24	0.1	1.1	0.0	98.8	100.0	0.3	2.0	0.0	97.7	100.0	1,171
25-29	1.2	1.8	0.0	97.0	100.0	1.9	2.2	0.0	95.9	100.0	1,935
30-34	1.9	4.7	0.0	93.3	100.0	3.0	3.1	0.2	93.8	100.0	2,055
35-39	3.9	3.6	0.0	92.5	100.0	3.0	4.0	0.1	92.9	100.0	2,012
40-44	5.4	4.0	0.0	90.7	100.0	4.5	4.9	0.3	90.3	100.0	1,944
45-49	7.1	5.8	0.0	87.2	100.0	7.8	4.7	0.0	87.5	100.0	1,419
Residence											
Urban	3.5	3.7	0.0	92.8	100.0	3.3	3.1	0.1	93.6	100.0	8,983
Rural	2.0	2.6	0.0	95.4	100.0	3.7	5.4	0.1	90.7	100.0	1,818
Region											
Central	3.8	3.6	0.0	92.6	100.0	3.1	2.6	0.1	94.2	100.0	6,839
North	2.2	3.8	0.0	94.0	100.0	3.8	5.4	0.2	90.6	100.0	2,966
South	2.3	2.1	0.1	95.5	100.0	3.8	3.4	0.3	92.6	100.0	996
Governorate											
Amman	5.0	4.2	0.0	90.8	100.0	3.3	2.5	0.0	94.2	100.0	4,262
Balqa	2.2	2.6	0.1	95.1	100.0	2.6	3.6	0.4	93.5	100.0	724
Zarqa	1.5	2.8	0.0	95.7	100.0	2.7	2.2	0.1	95.1	100.0	1,564
Madaba	2.8	1.8	0.0	95.4	100.0	3.1	4.5	0.1	92.4	100.0	289
Irbid	2.2	4.7	0.0	93.1	100.0	3.8	5.8	0.2	90.3	100.0	1,892
Mafraq	2.3	2.0	0.0	95.7	100.0	4.1	3.3	0.1	92.5	100.0	528
Jarash	1.8	2.1	0.0	96.1	100.0	3.8	4.8	0.2	91.2	100.0	306
Ajloun	1.6	3.1	0.1	95.3	100.0	2.9	8.1	0.3	88.7	100.0	239
Karak	1.8	1.2	0.0	97.0	100.0	3.4	2.8	0.0	93.8	100.0	420
Tafiela	1.1	3.1	0.4	95.5	100.0	4.9	6.1	1.0	88.0	100.0	161
Ma'an	2.1	0.7	0.0	97.2	100.0	5.7	5.1	0.7	88.6	100.0	163
Aqaba	4.1	4.0	0.1	91.8	100.0	2.3	1.5	0.1	96.1	100.0	253
Badia											
Badia	1.8	1.9	0.0	96.3	100.0	4.2	3.6	0.1	92.1	100.0	666
Non Badia	3.3	3.6	0.0	93.0	100.0	3.3	3.4	0.1	93.2	100.0	10,135
Camps											
Camp	2.4	1.8	0.0	95.8	100.0	1.4	0.9	0.0	97.6	100.0	387
Non camp	3.3	3.6	0.0	93.1	100.0	3.4	3.5	0.1	92.9	100.0	10,414
Education											
No education	0.9	0.5	0.1	98.5	100.0	1.0	0.2	0.1	98.7	100.0	226
Elementary	2.7	2.1	0.0	95.3	100.0	2.8	2.6	0.1	94.6	100.0	788
Preparatory	1.8	1.5	0.0	96.7	100.0	1.9	1.8	0.1	96.2	100.0	1,547
Secondary	2.8	2.9	0.0	94.3	100.0	2.9	3.8	0.0	93.2	100.0	4,863
Higher	4.7	5.9	0.1	89.3	100.0	4.9	4.1	0.3	90.7	100.0	3,376
Wealth quintile											
Lowest	1.7	1.1	0.0	97.3	100.0	1.6	1.4	0.2	96.9	100.0	1,975
Second	1.8	2.2	0.0	96.0	100.0	2.6	3.0	0.0	94.4	100.0	2,179
Middle	1.8	2.5	0.0	95.7	100.0	2.3	3.5	0.2	94.0	100.0	2,364
Fourth	3.8	4.1	0.0	92.1	100.0	3.1	3.4	0.1	93.4	100.0	2,274
Highest	7.4	7.9	0.1	84.7	100.0	7.3	6.0	0.1	86.5	100.0	2,009
Total	3.2	3.5	0.0	93.2	100.0	3.3	3.5	0.1	93.1	100.0	10,801

13.5 WOMEN'S PARTICIPATION IN DECISION MAKING

The ability of women to make decisions that affect their personal circumstances is an essential element of their empowerment and serves as an important aspect of their overall development. To assess currently married women's decision-making autonomy, the 2012 JPFHS collected information on three issues: the respondent's own health care, major household purchases, and visits to her family or relatives.

Table 13.6 shows that 40 percent of currently married women reported that they decide for themselves about seeking their own health care, and 49 percent said that this decision is made jointly with the husband. Eleven percent of women reported that their husbands have the final say over their wives' health care.

Table 13.6 Participation in decision making

Percent distribution of currently married women age 15-49 by person who usually makes decisions about various issues, Jordan 2012

Decision	Mainly wife	Wife and husband jointly	Mainly husband	Someone else	Other	Total	Number of women
Own health care	40.0	48.7	11.0	0.3	0.0	100.0	10,801
Major household purchases	19.0	58.1	22.2	0.5	0.1	100.0	10,801
Visits to her family or relatives	25.7	60.2	13.7	0.2	0.2	100.0	10,801

More than half of currently married women (58 percent) report that decisions about major household purchases are made jointly with their husbands. The data show that only 26 percent of currently married women decide on their own regarding visits to their family or relatives.

Table 13.7 shows currently married women's participation (alone or jointly) in decision making by background characteristics. Sixty-five percent of women participated alone or jointly with their husband on all three decisions, whereas only 3 percent of women did not have a say in making decisions on any of these issues (Figure 13.1). Women are most likely to have the final or joint say with regard to their own health care (89 percent) and visits to their family or relatives (86 percent), while they are less likely to participate in decision making about major household purchases (77 percent).

Currently married women in the South region, those with higher education, those living in the wealthiest households, and those who work are more likely than women in other categories to participate in household decision making on all of the three issues. Sixty-four percent of women who are not currently working participate in all three decisions, in contrast to 74 percent of those who are working. Half of women with no education participate in all decisions, compared with three-fourths of women with higher than secondary education. Participation in all three decisions varies from a high of 81 percent of women in Karak to a low of 59 percent in Jarash.

Figure 13.1
Number of decisions in which currently married women participate

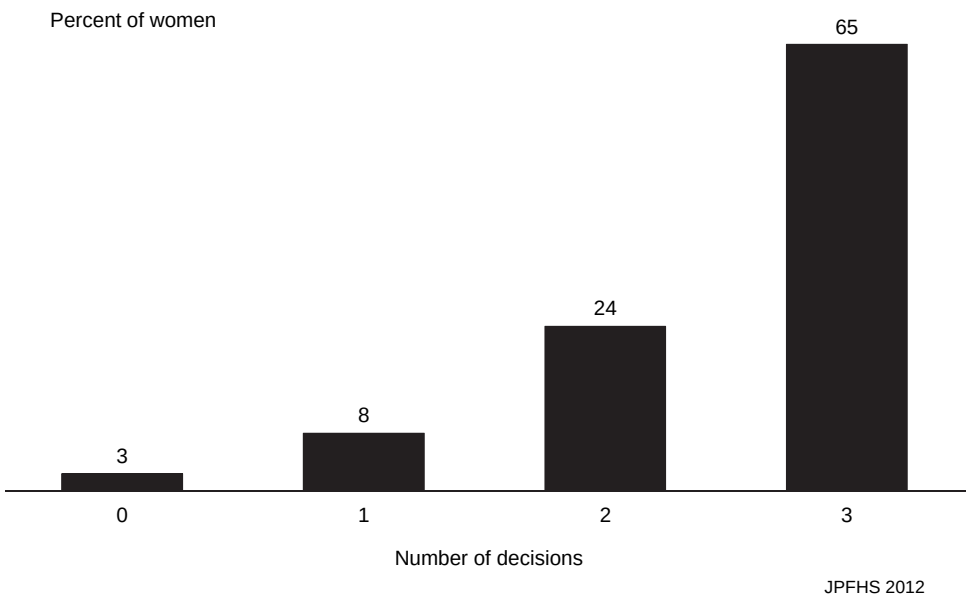


Table 13.7 Women's participation in decision making by background characteristics

Percentage of currently married women age 15-49 who usually make specific decisions either by themselves or jointly with their husband, by background characteristics, Jordan 2012

Background characteristic	Specific decisions			All three decisions	None of the three decisions	Number of women
	Woman's own health care	Making major household purchases	Visits to her family or relatives			
Age						
15-19	77.2	63.7	71.0	43.4	9.6	264
20-24	86.5	69.9	82.2	56.6	3.3	1,171
25-29	87.0	76.7	86.6	64.0	2.5	1,935
30-34	92.0	75.8	86.5	66.6	1.7	2,055
35-39	89.4	79.2	84.5	65.7	2.2	2,012
40-44	89.5	83.7	89.3	72.6	1.9	1,944
45-49	88.2	76.4	87.6	64.5	2.4	1,419
Employment (last 7 days)						
Employed	90.9	85.3	92.4	73.7	0.7	1,726
Not employed	88.3	75.6	84.7	63.5	2.8	9,075
Number of living children						
0	81.5	77.2	84.0	59.4	3.4	930
1-2	87.6	75.4	86.3	63.5	3.0	2,880
3-4	90.8	77.2	85.9	66.6	1.8	3,673
5+	89.4	78.6	86.2	66.5	2.4	3,317
Residence						
Urban	89.0	77.2	86.0	65.2	2.3	8,983
Rural	87.3	77.0	85.8	65.0	3.3	1,818
Region						
Central	89.1	77.3	86.0	64.9	2.2	6,839
North	86.9	75.1	84.6	62.0	2.8	2,966
South	91.7	82.1	89.3	75.9	3.6	996
Governorate						
Amman	88.4	78.1	86.9	65.0	2.1	4,262
Balqa	87.0	74.5	85.7	62.9	2.4	724
Zarqa	92.6	75.4	83.8	65.9	2.3	1,564
Madaba	83.8	83.0	86.2	64.2	1.5	289
Irbid	87.5	75.4	84.3	62.0	2.5	1,892
Mafraq	87.3	73.0	83.9	62.2	3.5	528
Jarash	84.9	72.1	84.7	59.4	3.7	306
Ajloun	84.2	81.8	88.3	64.8	1.6	239
Karak	95.0	85.2	90.7	81.4	3.3	420
Tafiela	87.4	78.9	88.7	68.5	2.9	161
Ma'an	87.2	75.6	85.6	65.6	4.6	163
Aqaba	91.7	83.3	89.8	78.0	3.7	253
Badia						
Badia	83.7	69.9	80.2	56.8	4.9	666
Non Badia	89.0	77.6	86.3	65.7	2.3	10,135
Camps						
Camp	87.8	76.1	80.9	62.0	3.4	387
Non camp	88.7	77.2	86.1	65.3	2.4	10,414
Education						
No education	81.4	59.4	70.2	49.6	9.9	226
Elementary	81.0	68.8	81.1	53.9	5.3	788
Preparatory	87.9	70.1	79.4	55.6	3.5	1,547
Secondary	89.8	78.0	85.0	65.9	2.3	4,863
Higher	89.8	82.3	92.4	72.1	1.1	3,376
Wealth quintile						
Lowest	85.4	70.8	78.8	58.0	5.5	1,975
Second	89.1	73.8	83.8	61.0	2.4	2,179
Middle	88.2	77.7	86.0	65.3	2.3	2,364
Fourth	89.2	79.6	88.7	67.0	1.4	2,274
Highest	91.7	83.7	92.0	74.3	0.9	2,009
Total	88.7	77.2	85.9	65.1	2.5	10,801

13.6 WOMEN'S ATTITUDES TOWARD WIFE BEATING

For many years, there has been increasing concern about violence against women in general and domestic violence in particular, in both developed and developing countries. Both tolerance of and experience of domestic violence are significant barriers to the empowerment of women, with consequences for women's health, their health-seeking behavior, and the health of their children. Learning more about attitudes toward domestic violence is important in a country such as Jordan, where, in some cases, domestic violence and even the murder of one's wife or daughter, called "honor killing" (Faqir, 2001), have been justified by ideas about family honor and what is required to keep it intact.

In order to assess women's attitudes toward wife beating, women were asked in the 2012 JPFHS whether they thought that a husband is justified in beating his wife for each of the following reasons: if she burns the food, argues with her husband, insults her husband, goes out without telling her husband, neglects the children, does not feed her husband, or has relations with other men. These reasons, which range from reasons that involve suspicions about a wife's moral character to those that may be considered more trivial, such as not cooking properly, were chosen to provide variation in the perceived seriousness of violations of behavioral norms. Table 13.8 gives the percentages of ever-married women age 15-49 who agree with various reasons for wife beating by background characteristics.

Seventy percent of women accept at least one reason as a justification for wife beating. Women are most likely to agree that if a woman has relations with other men, it justifies wife beating (65 percent), while relatively few believe that a man is justified in beating his wife if she burns the food (2 percent) or argues with him (6 percent). Thirty-eight percent of women agree that a husband is justified in beating his wife if she insults him, and 25 percent believe that wife beating is justified if a wife does not feed her husband.

Table 13.8 also indicates that young women, women who are not employed, currently married women, women living in the North region, and those who reside in camp areas are the most likely to agree with at least one reason for justifying wife beating. Justification of wife beating for at least one reason decreases with educational level and wealth. In addition, women living in Madaba are more likely to agree that wife beating is justified for at least one specified reason than women in other governorates.

Table 13.8 Attitude toward wife beating

Percentage of ever-married women age 15-49 who agree that a husband is justified in hitting or beating his wife for specific reasons, by background characteristics, Jordan 2012

Background characteristic	Husband is justified in hitting or beating his wife if she: Burns the food	Argues with him	Goes out without telling him	Neglects the children	Insults him	Does not feed him	Has relations with other men	Percentage who agree with at least one specified reason	Number of women
Age									
15-19	3.0	12.0	24.2	25.1	53.4	44.3	77.3	84.1	278
20-24	1.2	5.2	12.0	16.9	38.1	26.8	70.2	74.2	1,207
25-29	2.0	6.1	13.3	18.5	38.0	26.3	67.4	71.7	2,006
30-34	2.0	6.7	10.8	15.6	37.0	23.2	65.6	68.8	2,136
35-39	1.5	6.6	11.9	17.2	39.8	26.2	65.8	71.1	2,098
40-44	1.4	5.5	12.2	16.5	37.4	22.6	62.4	66.7	2,055
45-49	2.6	6.2	11.9	15.9	35.5	22.5	60.1	65.9	1,571
Employment (last 7 days)									
Employed	0.6	3.1	7.5	11.5	26.9	18.3	53.9	56.7	1,854
Not employed	2.0	6.9	13.3	18.1	40.3	26.3	67.6	72.5	9,498
Number of living children									
0	0.9	5.6	15.1	17.2	34.7	27.5	62.3	67.2	1,107
1-2	1.6	5.4	11.8	15.9	34.7	23.6	65.9	69.8	3,031
3-4	1.5	6.1	10.7	15.7	36.0	22.1	64.8	68.5	3,795
5+	2.6	7.4	13.8	19.4	44.5	28.6	66.6	72.5	3,419
Marital status									
Married	1.8	6.2	12.1	16.6	38.2	24.8	65.8	70.4	10,801
Divorced/separated/ widowed	2.1	7.3	17.5	24.4	36.3	28.4	56.6	61.6	551
Residence									
Urban	1.6	5.8	11.6	16.5	37.2	23.9	65.2	69.6	9,458
Rural	2.7	8.5	15.7	19.6	42.7	30.5	66.1	71.4	1,894
Region									
Central	1.7	5.9	11.2	16.4	35.6	23.2	65.4	69.7	7,181
North	2.0	6.7	14.9	18.8	44.6	28.7	68.1	73.4	3,120
South	1.8	7.6	12.4	15.6	35.5	26.6	57.5	61.3	1,051
Governorate									
Amman	1.7	4.5	9.4	13.4	32.2	19.9	64.3	68.6	4,454
Balqa	2.6	10.8	17.2	26.4	48.3	37.5	70.1	73.8	765
Zarqa	1.5	7.5	12.9	19.7	38.4	24.6	64.2	68.7	1,659
Madaba	1.0	4.1	12.4	17.5	38.2	27.2	76.0	80.1	303
Irbid	1.6	4.7	15.6	19.5	46.9	29.4	68.4	73.7	1,986
Mafraq	3.4	12.7	15.2	17.8	41.2	29.4	64.0	69.2	562
Jarash	2.7	11.1	15.4	20.8	45.5	28.1	67.9	75.1	320
Ajloun	1.3	3.9	8.7	13.2	33.6	22.6	74.4	78.7	251
Karak	1.6	8.1	11.8	16.2	37.8	31.6	69.0	71.8	441
Tafiela	1.6	7.5	11.7	16.1	37.7	21.7	56.9	62.3	167
Ma'an	4.4	10.1	18.8	22.4	42.3	33.7	61.8	64.9	178
Aqaba	0.4	5.2	9.5	9.8	25.5	16.3	35.8	40.8	265
Badia									
Badia	3.9	10.6	19.8	23.0	44.8	32.5	63.9	68.9	705
Non Badia	1.7	6.0	11.8	16.6	37.6	24.5	65.5	70.0	10,647
Camps									
Camp	2.4	8.6	16.7	25.1	49.3	32.7	72.2	79.0	413
Non camp	1.8	6.2	12.1	16.7	37.7	24.7	65.1	69.6	10,939
Education									
No education	9.7	20.7	33.3	36.2	58.5	44.0	75.0	81.0	267
Elementary	4.8	15.6	24.8	29.2	55.1	41.6	69.8	76.1	860
Preparatory	2.7	8.2	16.8	21.0	44.4	29.6	69.8	75.8	1,677
Secondary	1.6	5.9	11.9	17.3	39.1	25.4	67.8	71.9	5,073
Higher	0.3	2.4	6.1	10.1	27.7	16.6	57.8	61.9	3,475
Wealth quintile									
Lowest	3.9	12.0	21.2	27.2	48.6	34.8	68.7	74.3	2,137
Second	2.2	7.1	15.3	20.8	45.8	32.4	68.8	74.2	2,343
Middle	1.5	6.4	11.4	16.4	39.5	24.4	67.1	72.4	2,461
Fourth	1.1	4.3	9.3	13.9	34.4	21.7	65.6	68.4	2,336
Highest	0.3	1.4	4.2	6.5	20.9	10.9	55.8	59.4	2,076
Total	1.8	6.3	12.3	17.0	38.1	25.0	65.4	69.9	11,352

13.7 WOMEN'S EMPOWERMENT INDICATORS

Table 13.9 provides a brief overview on how the two basic empowerment indicators—number of decisions in which women participate and number of reasons for which wife beating is justified—relate to each other.

Table 13.9 Indicators of women's empowerment

Percentage of currently married women age 15-49 who participate in all decision making and the percentage who disagree with all of the reasons justifying wife beating, by value on each of the indicators of women's empowerment, Jordan 2012

Empowerment indicator	Percentage who participate in all decision making	Percentage who disagree with all reasons justifying wife beating	Number of women
Number of decisions in which women participate[1]			
0	na	20.5	265
1-2	na	24.0	3,501
3	na	32.8	7,035
Number of reasons for which wife beating is justified[2]			
0	72.0	na	3,202
1-2	64.2	na	4,704
3-4	60.0	na	2,013
5-7	56.5	na	882

na = Not applicable
[1] See Table 13.6 for the list of decisions.
[2] See Table 13.8 for the list of reasons.

The results show strong correlation between the two indicators. The top panel shows that the proportion of currently married women who disagree with all the specified reasons for wife beating increases with the number of decisions in which women participate, from 21 percent among women who do not participate in any decisions to 33 percent among those who participate in all three of the decisions. The lower panel shows that the greater the number of reasons for which women feel wife beating is justified, the smaller the percentage who participate in all three decisions. For example, almost three out of four currently married women who do not believe wife beating is justified for any reason participate in making all three decisions, compared with only 57 percent of women who believe that wife beating is justified for 5-7 reasons.

13.8 CURRENT USE OF CONTRACEPTION BY WOMEN'S EMPOWERMENT

A woman's desire and ability to control her fertility and her choice of a contraceptive method are in part affected by her own sense of empowerment. A woman who feels that she is unable to control her life may be less likely to feel that she can make and carry out decisions about her fertility. She may also feel the need to choose methods that are less obvious or which do not depend on her husband's cooperation. Table 13.10 shows the distribution of currently married women by contraceptive method used, according to the two empowerment indicators.

The data indicate that there is a positive relationship between use of contraception and participation in household decision making. For example, current use of modern contraceptive methods rises from 32 percent among women who participate in none of the household decisions to 43 percent among women who participate in all of the three household decisions.

There is not much variation in use of any contraceptive method by number of reasons for which a women believes wife beating is justified. For each number of reasons, the percentage using any method of contraception ranges from 57 percent to 63 percent. This pattern also applies for women using modern or traditional contraceptive methods.

Table 13.10 Current use of contraception by women's empowerment

Percent distribution of currently married women age 15-49 by current contraceptive method, according to selected indicators of women's status, Jordan 2012

Empowerment indicator	Any method	Any modern method	Modern methods: Female sterilization	Modern methods: Temporary modern female methods[1]	Modern methods: Male condom	Any traditional method	Not currently using	Total	Number of women
Number of decisions in which women participate[2]									
0	46.2	32.0	2.4	24.1	5.5	14.1	53.8	100.0	265
1-2	59.1	41.4	1.9	32.7	6.9	17.6	40.9	100.0	3,501
3	62.8	43.1	2.4	32.3	8.5	19.6	37.2	100.0	7,035
Number of reasons for which wife beating is justified[3]									
0	62.4	41.8	2.2	31.4	8.2	20.6	37.6	100.0	3,202
1-2	60.5	42.7	1.7	32.8	8.2	17.8	39.5	100.0	4,704
3-4	62.5	42.7	3.5	31.5	7.7	19.8	37.5	100.0	2,013
5-7	57.3	41.1	1.9	33.6	5.6	16.1	42.7	100.0	882
Total	61.2	42.3	2.2	32.2	7.9	18.9	38.8	100.0	10,801

Note: If more than one method is used, only the most effective method is considered in this tabulation.
[1] Pill, IUD, injectables, implants, and lactational amenorrhea method.
[2] See Table 13.6 for the list of decisions.
[3] See Table 13.8 for the list of reasons.

13.9 IDEAL FAMILY SIZE AND UNMET NEED BY WOMEN'S EMPOWERMENT

The ability of women to make decisions effectively has important implications for their fertility preferences and the practice of family planning. An increase in women's empowerment is recognized as important for efforts to reduce fertility through at least two main pathways: its negative association with ideal family size and its positive association with women's ability to meet their own family-size goals through the effective use of contraception.

Table 13.11 shows how women's ideal family size and their unmet need for family planning vary by women's empowerment indicators. There is a linear association between the number of reasons a woman believes wife beating is justified and the mean ideal number of children. Women who believe there are no reasons which justify a husband beating his wife consider the ideal number of children to be 3.9, compared to 4.2 among women who believe that wife beating is justified for 5-7 reasons. There is no clear relationship between the mean ideal number of children and women's participation in decision making.

The data also indicate that there is a direct association between the number of decisions in which a woman participates and unmet need for family planning. Women who participate in one or more decisions have a lower level of unmet need (12 percent) than women who participate in no decisions (16 percent). The relationship between unmet need for family planning and reasons to justify wife beating is mixed, with small differences overall.

Table 13.11 Ideal number of children and unmet need for family planning by women's empowerment

Mean ideal number of children for ever-married women 15-49 and the percentage of currently married women age 15-49 with an unmet need for family planning, by indicators of women's empowerment, Jordan 2012

Empowerment indicator	Mean ideal number of children[1]	Number of women	Percentage of currently married women with an unmet need for family planning			Number of women
			For spacing	For limiting	Total	
Number of decisions in which women participate[2]						
0	4.1	262	4.2	11.9	16.1	265
1-2	3.9	3,399	5.8	5.9	11.6	3,501
3	4.0	6,738	4.5	7.1	11.6	7,035
Number of reasons for which wife beating is justified[3]						
0	3.9	3,275	4.8	5.8	10.6	3,202
1-2	3.9	4,723	4.9	7.7	12.6	4,704
3-4	4.0	2,015	5.4	6.0	11.4	2,013
5-7	4.2	925	4.3	7.6	11.9	882
Total	3.9	10,938	4.9	6.8	11.7	10,801

[1] Mean excludes respondents who gave non-numeric responses.
[2] Restricted to currently married women. See Table 13.6 for the list of decisions.
[3] See Table 13.8 for the list of reasons.

DOMESTIC VIOLENCE 14

Key Findings

- Thirty-four percent of ever-married women age 15-49 have experienced physical violence at least once since age 15, and 13 percent experienced physical violence within the 12 months prior to the survey.
- Nine percent of ever-married women age 15-49 report having experienced sexual violence at least once in their lifetime.
- Overall, 32 percent of ever-married women age 15-49 report ever having experienced emotional, physical, and/or sexual violence from their spouse, and 22 percent report having experienced one or more of these forms of violence in the past 12 months.
- Among ever-married women who had experienced spousal violence (physical or sexual) in the past 12 months, 30 percent reported experiencing physical injuries.
- It is not common for women in Jordan to seek assistance from any source for violence they have experienced. Nearly one in two (47 percent) women have never sought help and never told anyone about the violence they have experienced.

Violence against women has been acknowledged worldwide as a violation of basic human rights, and an increasing amount of research highlights the health burdens, intergenerational effects, and demographic consequences of such violence (UNGASS, 1991; Heise et al., 1994, 1998; Jejeebhoy, 1998).

The 2012 JPFHS included a special module designed to obtain information on the extent to which women experience domestic violence. The domestic violence module was administered to women in a subsample of two-thirds of the JPFHS clusters selected for the survey. To ensure confidentiality, only one woman in each designated household in the subsample was randomly selected to be asked questions about domestic violence.

The module included a series of questions to collect information on various forms of spousal violence, including physical and emotional violence. Although the module focused on the extent of spousal violence, information was also obtained on any physical violence involving perpetrators other than the current (last) husband that the woman experienced since her fifteenth birthday. Women who reported recent spousal violence were asked about assistance they may have sought at the time the most recent episode of violence occurred.

14.1 PHYSICAL VIOLENCE

One-third (34 percent) of ever-married women age 15-49 reported that they had been hit, slapped, kicked, or subjected to some other form of physical violence at some point after their fifteenth birthday (Table 14.1). Thirteen percent of women reported that they had been subjected to some form of physical violence at least once within the 12-month period before the interview, including 4 percent who reported that they had often experienced some form of physical violence during the period.

The experience of physical violence varies substantially by background characteristics. Women age 25-39 are more likely than other women to have experienced physical violence since age 15 (37 percent). Women age 25-29 are more likely than other women to have experienced physical violence during the 12 months prior to the survey (15 percent). A woman's marital status is strongly related to the likelihood that she had ever experienced physical violence; the prevalence of violence is higher among formerly married (divorced, separated, or widowed) women (57 percent) than currently married women (33 percent). Thirteen percent of married women report having been subjected to violence often or sometimes in the 12 months preceding the survey.

Urban women, women living in the Central region, and women in the non Badia areas are more likely to have experienced physical violence since age 15 than women in other areas and regions. Women living in Zarqa were more likely to have ever experienced physical violence than women living in other governorates. Experience of physical violence in the past 12 months tends to follow a similar trend for residency, region, and Badia areas. There is a notable variation in the experience of physical violence by camps. Forty-five percent of women living in camps reported experiencing violence since age 15, and 21 percent of women reported experiencing physical violence in the 12 months preceding the survey.

In terms of employment, women who are not employed are more likely than employed women to have experienced physical violence since age 15 as well as during the 12 months preceding the survey (35 percent and 13 percent, respectively).

Women with higher education (26 percent) are less likely than women with lower educational attainment (35-46 percent) to have experienced physical violence since age 15. Similarly, only 8 percent of women with higher education reported experiencing physical violence in the 12 months preceding the survey, compared to 13-15 percent of women with lower levels of education.

Women living in the poorest households are more likely than other women to report physical violence since age 15 as well as during the 12 months preceding the survey (46 percent and 19 percent, respectively).

Table 14.1 Experience of physical violence

Percentage of ever-married women age 15-49 who have ever experienced physical violence since age 15 and percentage who have experienced violence during the 12 months preceding the survey, by background characteristics, Jordan 2012

Background characteristic	Percentage who have ever experienced physical violence since age 15[1]	Percentage who have experienced physical violence in the past 12 months			Number of women
		Often	Sometimes	Often or sometimes[2]	
Age					
15-19	31.1	3.5	10.6	14.1	166
20-24	31.0	3.1	10.7	13.7	744
25-29	37.1	5.4	9.7	15.1	1,215
30-39	36.9	4.2	10.0	14.3	2,684
40-49	31.0	3.3	5.5	8.8	2,219
Residence					
Urban	35.3	4.3	9.0	13.3	5,814
Rural	29.5	2.6	6.7	9.3	1,213
Region					
Central	36.4	4.1	9.7	13.9	4,356
North	32.4	4.0	7.2	11.2	1,989
South	26.3	2.9	5.7	8.7	681
Governorate					
Amman	37.0	4.2	10.5	14.7	2,604
Balqa	31.2	3.3	6.8	10.1	480
Zarqa	38.0	4.8	9.2	14.1	1,083
Madaba	32.7	1.8	10.7	12.6	190
Irbid	34.5	4.6	7.6	12.2	1,245
Mafraq	27.9	2.2	5.1	7.3	364
Jarash	36.5	6.4	8.8	15.2	216
Ajloun	21.2	0.0	6.4	6.4	164
Karak	23.3	1.9	4.3	6.2	288
Tafiela	32.6	5.6	7.7	13.4	109
Ma'an	25.2	1.7	5.5	7.3	114
Aqaba	28.1	3.7	6.7	10.7	171
Badia					
Badia	31.6	3.5	8.4	11.9	462
Non Badia	34.5	4.0	8.6	12.7	6,565
Camps					
Camp	44.7	6.9	13.9	20.8	274
Non camp	33.9	3.9	8.4	12.3	6,753
Marital status					
Married	33.2	4.1	8.8	12.9	6,714
Divorced/separated/widowed	57.1	1.3	5.6	6.9	313
Number of living children					
0	32.9	2.2	5.5	7.7	663
1-2	33.0	3.8	9.8	13.6	1,844
3-4	34.9	4.2	10.0	14.2	2,379
5+	35.2	4.4	7.0	11.6	2,141
Employment (last 7 days)					
Employed	31.0	3.1	6.9	10.0	1,141
Not employed	34.9	4.1	9.0	13.1	5,886
Education					
No education	36.9	3.5	9.0	12.5	152
Elementary	45.7	7.7	6.4	14.1	537
Preparatory	42.0	5.1	10.0	15.1	1,055
Secondary	35.0	4.5	10.1	14.7	3,167
Higher	26.3	1.7	6.2	7.9	2,116
Wealth quintile					
Lowest	45.6	7.3	11.2	18.5	1,335
Second	36.0	4.5	8.2	12.7	1,504
Middle	33.3	3.7	9.2	13.0	1,554
Fourth	28.1	2.5	5.8	8.4	1,389
Highest	28.2	1.8	8.8	10.6	1,245
Total	34.3	4.0	8.6	12.6	7,027

[1] Includes violence in the past 12 months. For women who were married before age 15 and who reported physical violence, the violence could have occurred before age 15.

[2] Includes women who report physical violence in the past 12 months but for whom frequency is not known.

Table 14.2 shows the percentage of ever-married women who have ever experienced violence according to the persons identified as perpetrators of the violence. The most commonly reported perpetrator of physical violence is the current husband (57 percent. More than one in four (27 percent) women report physical violence by a brother, one in five (21 percent) women report physical violence by their father, and one in ten (10 percent) women report physical violence by a former husband.

Table 14.2 Persons committing physical violence

Among ever-married women age 15-49 who have experienced physical violence since age 15, percentage who report specific persons who committed the violence, according to the respondent's current marital status, Jordan 2012

Person	Percentage of ever-married women
Current husband	56.9
Former husband	9.7
Father	21.2
Mother	14.3
Brother	27.0
Sister	2.8
Stepfather/stepmother	0.7
Other relative	1.0
Teacher	4.0
Other male	0.3
Other	0.6
Number of women who have experienced physical violence since age 15	2,410

14.2 SEXUAL VIOLENCE

Table 14.3 shows the percentage of ever-married women age 15-49 who have ever experienced spousal sexual violence, by background characteristics. The results show that 9 percent of women have ever experienced sexual violence from a current or former husband. There is a notable variation in experience of sexual violence by age. Women age 20-24 are less likely to report sexual violence than women in the other age groups. Differences in the experience of sexual violence are also seen by region and camps. Women in the North region and those living in the camp areas are more likely to report spousal sexual violence (11 percent and 12 percent, respectively) than women living in non camp areas (9 percent), in the Central region (9 percent), and in the South region (7 percent).

Women who are divorced, separated, or widowed are much more likely to have ever experienced spousal sexual violence (23 percent) than currently married women (9 percent). Women who are not employed, women with higher education, and women in the highest wealth quintile are less likely to report sexual violence than their counterparts in the other categories.

Six percent of women report having experienced sexual violence in the 12 months preceding the survey. The variation by background characteristics among women who have experienced sexual violence in the past 12 months is similar to the variation among women who have ever experienced sexual violence except by marital status.

Table 14.3 Experience of sexual violence

Percentage of ever-married women age 15-49 who have ever experienced sexual violence from their current or former husband and percentage who have experienced this sexual violence in the 12 months preceding the survey, by background characteristics, Jordan 2012

Background characteristic	Percentage who have experienced sexual violence: Ever[1]	In the past 12 months	Number of women
Age			
15-19	12.9	12.9	166
20-24	4.5	4.3	744
25-29	10.3	7.2	1,215
30-39	9.5	5.9	2,684
40-49	9.6	5.5	2,219
Residence			
Urban	9.2	6.0	5,814
Rural	9.2	5.6	1,213
Region			
Central	9.0	5.8	4,356
North	10.6	6.6	1,989
South	6.6	5.2	681
Governorate			
Amman	8.8	6.0	2,604
Balqa	7.4	4.8	480
Zarqa	10.3	5.8	1,083
Madaba	7.6	6.0	190
Irbid	11.4	7.1	1,245
Mafraq	7.9	4.4	364
Jarash	11.0	8.3	216
Ajloun	10.1	5.1	164
Karak	5.1	4.4	288
Tafiela	7.4	6.0	109
Ma'an	7.5	4.7	114
Aqaba	8.0	6.4	171
Badia			
Badia	9.4	4.6	462
Non Badia	9.2	6.1	6,565
Camps			
Camp	12.2	9.4	274
Non camp	9.1	5.8	6,753
Marital status			
Married	8.5	6.1	6,714
Divorced/separated/widowed	23.4	2.8	313
Employment (last 7 days)			
Employed	11.9	6.2	1,141
Not employed	8.7	5.9	5,886
Number of living children			
0	11.6	5.5	663
1-2	7.8	5.8	1,844
3-4	9.4	5.8	2,379
5+	9.5	6.4	2,141
Education			
No education	10.9	5.5	152
Elementary	14.0	10.0	537
Preparatory	12.4	6.9	1,055
Secondary	9.0	6.2	3,167
Higher	6.6	4.2	2,116
Wealth quintile			
Lowest	15.3	10.9	1,335
Second	10.3	6.1	1,504
Middle	9.2	6.3	1,554
Fourth	5.8	3.9	1,389
Highest	5.1	2.4	1,245
Total	9.2	6.0	7,027

[1] Includes violence in the past 12 months.

14.3 PHYSICAL AND SEXUAL VIOLENCE

Table 14.4 shows the percentage of ever-married women age 15-49 who have ever experienced physical and/or sexual violence. Overall, more than one-third of women (36 percent) reported that they have experienced either physical or sexual violence. Twenty-seven percent have experienced physical violence only, 2 percent have experienced sexual violence only, and 7 percent have experienced both physical and sexual violence. Women age 25-39 are more likely to have experienced either physical or sexual violence (39 percent) than women in the other age groups. Sexual violence is highest among women age 18-19 (8 percent).

Table 14.4 Experience of different forms of violence

Percentage of ever-married women age 15-49 who have ever experienced different forms of violence by current age, Jordan 2012

Age	Physical violence only	Sexual violence only	Physical and sexual violence	Physical or sexual violence	Number of women
15-19	24.6	6.4	6.4	37.5	166
15-17	(30.2)	(0.0)	(12.2)	(42.5)	37
18-19	23.0	8.3	4.8	36.1	129
20-24	28.1	1.7	2.8	32.6	744
25-29	29.0	2.1	8.1	39.3	1,215
30-39	29.1	1.7	7.8	38.6	2,684
40-49	23.5	2.1	7.5	33.1	2,219
Total	27.1	2.0	7.2	36.3	7,027

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

14.4 VIOLENCE DURING PREGNANCY

Violence during pregnancy may threaten not only a woman's well-being but that of her unborn child. Table 14.5 presents information on the proportion of women who have experienced some form of physical violence during pregnancy by background characteristics. Among women who had ever been pregnant, 7 percent were hit, slapped, kicked, or subjected to some other form of physical violence at least once during a pregnancy.

Although there is no clear pattern between current age and physical violence during pregnancy, it can be noted that older women (age 40-49) are less likely than women in other age groups to report ever having experienced physical violence during pregnancy. Women who are divorced, separated, or widowed were far more likely to report ever experiencing violence during pregnancy (19 percent) than currently married women (7 percent). The experience of physical violence during pregnancy increases with the number of children, from 3 percent among women who have no living children to 8 percent among women who have five or more living children. Women in Aqaba (12 percent) are most likely to report experiencing physical violence during pregnancy and women in Ma'an (3 percent) least likely. The proportion of women who reported physical violence during pregnancy is noticeably higher in camps (10 percent) than in non camps (7 percent). Women with elementary or preparatory education are more likely to report violence during pregnancy than women with no education or secondary and higher education. Women in the lowest wealth quintile are more than twice as likely as women in the other wealth quintiles to report physical violence during pregnancy.

Table 14.5 Experience of violence during pregnancy

Among ever-married women age 15-49 who have ever been pregnant, percentage who have ever experienced physical violence during pregnancy, by background characteristics, Jordan 2012

Background characteristic	Percentage who experienced violence during pregnancy	Number of women who have ever been pregnant
Age		
15-19	7.9	130
20-24	6.3	653
25-29	9.7	1,142
30-39	7.2	2,580
40-49	5.4	2,150
Marital status		
Married	6.6	6,434
Divorced/separated/widowed	19.1	220
Number of living children		
0	2.5	290
1-2	6.2	1,844
3-4	7.3	2,379
5+	8.0	2,141
Residence		
Urban	7.3	5,513
Rural	5.8	1,141
Region		
Central	7.3	4,123
North	6.4	1,884
South	7.3	647
Governorate		
Amman	7.6	2,473
Balqa	6.7	454
Zarqa	6.9	1,014
Madaba	5.5	182
Irbid	6.5	1,178
Mafraq	6.3	347
Jarash	6.8	205
Ajloun	4.5	154
Karak	5.8	271
Tafiela	8.4	104
Ma'an	3.2	109
Aqaba	11.8	163
Badia		
Badia	7.3	433
Non Badia	7.0	6,221
Camps		
Camp	10.4	257
Non camp	6.9	6,397
Education		
No education	4.9	145
Elementary	12.0	493
Preparatory	11.2	1,010
Secondary	7.3	3,021
Higher	3.3	1,985
Wealth quintile		
Lowest	13.9	1,261
Second	5.9	1,380
Middle	6.0	1,480
Fourth	4.0	1,326
Highest	5.7	1,207
Total	7.0	6,654

14.5 MARITAL CONTROL BY HUSBAND

Close control and monitoring of their wife's behavior by husbands is seen as an important warning sign and correlate of violence in a relationship. A series of questions were asked in the 2012 JPFHS to determine the degree of marital control exercised by a husband over his wife. Table 14.6 shows the percentage of ever-married women whose husband displays various types of controlling behavior, by selected background characteristics.

The main controlling behavior women experience from their husbands is jealousy or anger if she talks to other men (70 percent). Thirty-one percent of women say their husbands insist on knowing where they are at all times, 15 percent say their husbands do not permit them to meet their female friends, 10 percent say he tries to limit her contact with her family, and 4 percent say he frequently accuses her of being unfaithful. Thirteen percent of ever-married women say that their husband displays three or more controlling behaviors, whereas 24 percent say their husband displays none of the behaviors.

Divorced, separated, or widowed women are twice as likely as currently married women to report that their husband displays at least three of the controlling behaviors. Women who are not employed, urban women, women living in camps, and women in the lowest wealth quintile are more likely than their counterparts to report that their husband engages in three or more controlling behaviors. Women in Amman are most likely to report controlling behavior by their husband and women in Ma'an least likely. Highly educated women are least likely to experience controlling behavior by their husband. Women who are afraid of their husband most of the time are far more likely to report that their husband displays at least three of the controlling behaviors than women who are only sometimes afraid of their husband or women who are never afraid of their husband.

Table 14.6 Marital control exercised by husbands

Percentage of ever-married women age 15-49 whose husbands have ever demonstrated specific types of controlling behaviors, by background characteristics, Jordan 2012

Background characteristic	Percentage of women whose husband: Is jealous or angry if she talks to other men	Frequently accuses her of being unfaithful	Does not permit her to meet her female friends	Tries to limit her contact with her family	Insists on knowing where she is at all times	Displays 3 or more of the specific behaviors	Displays none of the specific behaviors	Number of ever-married women
Age								
15-19	86.9	4.8	21.8	5.9	38.2	12.7	6.6	166
20-24	83.4	2.3	18.1	9.4	39.2	15.8	13.1	744
25-29	78.2	4.0	16.1	11.0	34.8	14.7	17.1	1,215
30-39	70.8	4.3	15.4	10.2	31.0	12.5	23.0	2,684
40-49	59.7	4.1	12.7	10.4	25.8	11.8	32.9	2,219
Marital status								
Married	70.5	3.7	14.2	9.7	30.9	12.5	23.9	6,714
Divorced/separated/ widowed	66.0	10.0	33.3	21.0	33.6	24.0	19.5	313
Number of living children								
0	73.8	3.4	20.3	8.7	34.0	15.5	16.6	663
1-2	72.1	3.0	14.8	8.8	31.8	11.9	23.5	1,844
3-4	69.3	4.3	14.7	11.9	31.6	13.6	24.6	2,379
5+	68.8	4.8	14.2	10.1	28.9	12.6	24.9	2,141
Residence								
Urban	70.5	4.3	16.1	10.6	31.1	13.7	23.3	5,814
Rural	69.4	2.7	10.4	8.1	30.7	9.5	25.2	1,213
Region								
Central	68.9	4.4	16.3	11.0	29.7	14.1	25.1	4,356
North	73.8	3.5	12.1	9.3	34.4	11.4	20.3	1,989
South	68.9	2.9	15.9	7.5	30.1	10.5	24.0	681
Governorate								
Amman	65.7	5.1	15.1	11.8	31.6	15.1	27.7	2,604
Balqa	71.7	3.1	14.1	10.6	26.0	11.5	24.3	480
Zarqa	75.6	3.5	20.8	10.2	26.0	13.7	19.3	1,083
Madaba	67.5	2.9	13.5	7.2	32.7	10.5	24.6	190
Irbid	72.5	3.3	13.3	10.1	33.4	12.4	21.4	1,245
Mafraq	74.9	5.2	9.5	6.8	34.9	9.2	19.2	364
Jarash	75.2	3.4	12.4	11.1	31.4	12.4	21.4	216
Ajloun	79.2	1.3	8.7	6.0	44.6	7.4	13.4	164
Karak	61.0	1.3	15.7	7.5	33.0	9.7	29.2	288
Tafiela	81.5	3.8	14.7	10.6	28.9	12.8	16.2	109
Ma'an	75.7	1.6	14.3	6.2	27.6	6.1	18.9	114
Aqaba	69.4	6.0	18.2	6.5	27.8	13.3	23.4	171
Badia								
Badia	75.5	4.5	12.5	8.9	38.2	11.8	19.4	462
Non Badia	69.9	4.0	15.3	10.3	30.5	13.1	24.0	6,565
Camps								
Camp	73.4	3.4	16.6	15.1	37.4	16.5	19.9	274
Non camp	70.2	4.0	15.0	10.0	30.8	12.9	23.8	6,753
Employment (last 7 days)								
Employed	57.0	4.2	12.7	8.6	25.6	9.6	34.6	1,141
Not employed	72.9	4.0	15.6	10.5	32.1	13.7	21.5	5,886
Education								
No education	62.0	9.2	14.2	11.2	30.1	12.4	31.3	152
Elementary	70.4	5.9	16.4	12.4	32.6	15.7	23.7	537
Preparatory	73.9	7.0	18.5	13.0	34.1	17.3	21.2	1,055
Secondary	73.7	3.9	16.5	10.2	32.9	13.6	19.1	3,167
Higher	64.1	1.7	11.0	8.2	26.5	9.3	31.2	2,116
Wealth quintile								
Lowest	75.0	8.3	18.8	14.8	36.7	18.6	18.5	1,335
Second	76.2	3.2	16.1	9.7	30.9	12.0	18.2	1,504
Middle	72.6	3.0	17.2	9.6	33.7	13.9	21.6	1,554
Fourth	67.6	3.3	13.9	9.0	26.9	11.9	25.0	1,389
Highest	58.3	2.4	8.6	8.1	26.4	8.4	36.9	1,245
Woman afraid of husband								
Most of the time	86.1	19.2	38.6	37.2	55.9	43.2	7.2	705
Sometimes	77.5	3.7	15.6	10.8	38.7	14.0	16.0	2,288
Never afraid	63.4	1.5	10.7	5.1	22.3	7.2	30.9	4,035
Total	70.3	4.0	15.1	10.2	31.0	13.0	23.7	7,027

Note: Husband refers to the current husband for currently married women and the most recent husband for divorced, separated, or widowed women.

14.6 SPOUSAL VIOLENCE

The domestic violence module obtained more detailed information on the forms of violence ever-married women had experienced in the relationship with their current husband or, in the case of widowed or divorced women, their most recent husband. Table 14.7 shows the proportions of ever-married women age 15-49 who have experienced various forms of violence by their husband or former husband either ever or in the 12 months preceding the survey.

Table 14.7 Forms of spousal violence

Percentage of ever-married women age 15-49 who have experienced various forms of violence ever or in the 12 months preceding the survey, committed by their husband or former husband, Jordan 2012

		In the past 12 months		
Type of violence	Ever	Often	Sometimes	Often or sometimes
SPOUSAL VIOLENCE COMMITTED BY CURRENT OR MOST RECENT HUSBAND				
Physical violence				
Any physical violence	21.1	3.6	7.6	11.2
Pushed her, shook her, or threw something at her	15.9	2.8	6.5	9.3
Slapped her	15.2	2.3	4.6	6.9
Twisted her arm or pulled her hair	8.8	1.5	3.4	5.0
Punched her with his fist or with something that could hurt her	8.9	1.6	3.6	5.2
Kicked her, dragged her, or beat her up	5.2	1.2	1.9	3.1
Tried to choke her or burn her on purpose	2.3	0.3	0.8	1.1
Threatened her or attacked her with a knife, gun, or other weapon	1.3	0.1	0.6	0.7
Sexual violence				
Any sexual violence	8.6	1.6	4.4	6.0
Physically forced her to have sexual intercourse with him when she did not want to	8.6	1.6	4.4	6.0
Emotional violence				
Any emotional violence	24.6	6.7	10.8	17.4
Said or did something to humiliate her in front of others	17.2	4.5	7.3	11.8
Threatened to hurt or harm her or someone she cared about	6.0	1.6	2.2	3.8
Insulted her or made her feel bad about herself	19.1	5.4	8.6	14.0
Any form of physical and/or sexual violence	23.6	4.4	9.7	14.1
Any form of emotional and/or physical and/or sexual violence	31.7	8.2	13.8	22.0
SPOUSAL VIOLENCE COMMITTED BY ANY HUSBAND				
Physical violence	21.8	na	na	11.2
Sexual violence	9.2	na	na	6.0
Physical and/or sexual violence	24.3	na	na	14.1
Number of women	7,027	7,027	7,027	7,027

na = Not applicable

The results show that 21 percent of ever-married women report ever experiencing physical violence from their current or most recent husband, 9 percent report sexual violence, and 25 percent report emotional violence. Approximately a quarter of ever-married women (24 percent) have experienced physical and/or sexual violence from their current or most recent husband, while nearly one-third (32 percent) have experienced physical, sexual, and/or emotional violence.

Table 14.7 also shows that 22 percent of ever-married women reported experiencing physical violence from any husband, 9 percent of ever-married women reported experiencing sexual violence from any husband, and one in four ever-married women reported experiencing physical and/or sexual violence from any husband.

Ever-married women most commonly state that their husband insults them or makes them feel bad about themselves (19 percent). Seventeen percent of ever-married women report that their husband said or did something to humiliate them in front of others, 16 percent have been pushed or shaken or had objects thrown at them, and 15 percent report being slapped.

Twenty-two percent of ever-married women reported experiencing spousal emotional, physical and/or sexual violence in the past 12 months, with 14 percent having experienced violence sometimes and 8 percent having experienced it often. Table 14.8 shows the percentage of ever-married women age 15-49 who have experienced spousal violence by background characteristics.

Table 14.8 Spousal violence by background characteristics

Percentage of ever-married women age 15-49 who have ever experienced emotional, physical, or sexual violence committed by their husband, by background characteristics, Jordan 2012

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of ever-married women
Age								
15-19	14.5	10.0	12.9	3.2	2.9	19.6	25.7	166
20-24	19.0	17.0	4.5	2.0	2.0	19.5	25.3	744
25-29	26.0	20.1	9.5	6.5	5.6	23.1	32.7	1,215
30-39	25.7	24.3	8.9	6.7	6.1	26.4	33.5	2,684
40-49	25.1	20.1	8.7	6.5	5.9	22.2	31.6	2,219
Marital status								
Married	23.5	20.1	8.0	5.5	4.9	22.6	30.6	6,714
Divorced/separated/ widowed	47.8	42.5	21.6	19.2	18.5	44.9	54.4	313
Number of living children								
0	17.4	14.7	10.0	6.3	5.8	18.5	23.0	663
1-2	23.0	18.5	7.2	4.6	4.2	21.2	29.5	1,844
3-4	27.9	22.8	8.9	6.9	6.5	24.8	34.5	2,379
5+	24.4	23.4	9.0	6.3	5.3	26.0	33.2	2,141
Residence								
Urban	25.8	21.8	8.6	6.1	5.7	24.3	32.7	5,814
Rural	18.7	17.6	8.4	5.8	4.3	20.2	27.0	1,213
Region								
Central	26.4	22.4	8.2	6.5	6.0	24.1	32.4	4,356
North	22.0	20.2	10.1	5.8	5.0	24.5	32.1	1,989
South	20.7	15.4	6.3	3.9	3.5	17.8	25.9	681
Governorate								
Amman	26.8	22.1	8.4	7.2	6.9	23.2	31.4	2,604
Balqa	21.8	21.3	6.5	5.3	4.0	22.6	29.8	480
Zarqa	28.5	25.2	8.7	6.0	5.1	28.0	36.7	1,083
Madaba	20.6	13.9	7.3	2.9	2.6	18.3	27.7	190
Irbid	23.0	21.1	10.9	6.2	5.5	25.8	33.5	1,245
Mafraq	19.5	17.7	7.5	4.3	3.4	20.9	28.8	364
Jarash	25.0	25.7	10.9	7.8	6.0	28.8	36.2	216
Ajloun	15.8	11.8	9.7	3.9	3.5	17.6	24.1	164
Karak	16.5	11.2	4.7	2.2	1.7	13.6	21.4	288
Tafiela	24.5	19.6	7.4	5.0	4.9	22.0	30.2	109
Ma'an	21.9	15.7	7.5	3.3	2.7	20.0	29.2	114
Aqaba	24.7	19.6	7.7	6.5	6.3	20.8	28.5	171
Badia								
Badia	22.9	21.4	9.2	6.7	5.7	23.8	31.5	462
Non Badia	24.7	21.1	8.5	6.0	5.4	23.6	31.7	6,565
Camps								
Camp	30.5	30.3	11.5	7.8	6.6	34.0	41.7	274
Non camp	24.3	20.7	8.5	6.0	5.4	23.2	31.3	6,753
Employment (last 7 days)								
Employed	23.0	19.5	11.3	8.9	8.6	21.9	29.4	1,141
Not employed	24.9	21.4	8.1	5.5	4.9	24.0	32.2	5,886
Education								
No education	25.7	28.3	10.6	9.5	9.0	29.5	33.2	152
Elementary	30.6	33.3	12.8	10.5	9.2	35.6	40.5	537
Preparatory	28.3	28.5	11.6	8.3	7.6	31.8	37.9	1,055
Secondary	25.8	20.7	8.4	5.7	5.1	23.4	33.1	3,167
Higher	19.3	14.5	6.2	4.2	3.7	16.4	24.3	2,116
Wealth quintile								
Lowest	30.6	31.9	14.6	11.8	11.0	34.8	40.9	1,335
Second	24.8	23.1	9.9	6.9	6.1	26.1	33.5	1,504
Middle	24.4	20.0	8.6	5.2	4.5	23.3	31.9	1,554
Fourth	20.8	15.1	5.4	3.5	3.0	16.9	26.6	1,389
Highest	22.3	15.3	4.0	2.8	2.8	16.5	25.2	1,245
Total	24.6	21.1	8.6	6.1	5.5	23.6	31.7	7,027

Note: Husband refers to the current husband for currently married women and the most recent husband for divorced, separated, or widowed women.

More than one in two (54 percent) divorced, separated, or widowed women have ever experienced emotional, physical, or sexual violence from a spouse. Spousal violence rises from 23 percent among women with no children to 33-35 percent among women with three or more children. Spousal violence is higher among women who are not employed than among employed women. Spousal violence is also higher in urban than rural areas, in the Central and North regions compared to the South region, and ranges from a low of 21 percent in Karak to a high of 37 percent in Zarqa. Women living in camps are much more likely to have ever experienced spousal violence (42 percent) than women in non camp areas (31 percent). It is notable that women with higher education and women in the highest wealth quintile are consistently less likely than women in other education groups and wealth quintiles to experience any form of spousal violence.

14.7 SPOUSAL VIOLENCE AND WOMEN'S EMPOWERMENT

Table 14.9 presents a cross tabulation of spousal violence by husband's characteristics and empowerment indicators for ever-married women age 15-49. Women whose husbands are highly educated (higher education) are least likely to experience spousal physical, sexual, or emotional violence (26 percent). In addition, spousal violence is lowest among women whose education is equal to that of their husband (28 percent). Spousal violence is highest among women who are older than their husband (42 percent).

Not surprisingly, there is a direct relationship between spousal behavior and controlling behaviors displayed by a husband. Spousal violence increases linearly with the number of controlling behaviors displayed by a husband, from 19 percent among women whose husband displayed no controlling behavior to 94 percent among women whose husband displayed five controlling behaviors.

Spousal violence decreases linearly with the number of decisions in which women participate—the more empowered a woman, the less likely she is to have experienced violence. Forty-six percent of women who do not participate in any household decision have experienced one or more forms of violence at the hands of their husband, compared to 28 percent of women who participate in all household decisions. In addition, 29 percent of women who believe that there are up to two reasons that justify a husband beating his wife have ever experienced one or more forms of violence, compared with 36-41 percent of women who believe that there is at least three reason to justify wife beating.

A family history of domestic violence is associated with a respondent's own experience of domestic violence. As Table 14.9 shows, twice (51 percent) as many women whose father beat their mother experienced spousal violence as women whose father did not beat their mother (27 percent). In addition, there is a strong relationship between spousal violence and women being afraid of their husband. Seventy-one percent of women who were afraid of their husband most of the time reported spousal abuse, compared to 39 percent of women who reported that they were afraid of their husband only sometimes, and 21 percent of those who were never afraid.

Table 14.9 Spousal violence by husband's characteristics and empowerment indicators

Percentage of ever-married women age 15-49 who have ever experienced emotional, physical, or sexual violence committed by their husband, by husband's characteristics and empowerment indicators, Jordan 2012

Background characteristic	Emotional violence	Physical violence	Sexual violence	Physical and sexual	Physical and sexual and emotional	Physical or sexual	Physical or sexual or emotional	Number of ever-married women
Husband's education								
No education	34.8	30.0	8.2	7.6	7.4	30.5	39.2	120
Elementary	26.8	29.4	13.9	9.7	8.7	33.6	37.8	759
Preparatory	30.7	29.4	14.0	10.7	9.5	32.7	39.5	1,212
Secondary	22.9	19.2	7.4	4.9	4.3	21.7	30.6	2,968
Higher	21.7	15.0	4.8	3.3	3.1	16.5	25.7	1,963
Spousal education difference								
Husband better educated	25.4	22.6	7.3	5.8	5.3	24.1	32.4	2,477
Wife better educated	25.1	21.7	10.5	7.0	6.2	25.2	32.9	2,860
Both equally educated	22.3	17.5	7.1	4.7	4.1	19.9	28.4	1,626
Neither educated	31.3	31.4	8.5	8.5	8.5	31.4	35.3	48
Spousal age difference[1]								
Wife older	33.6	27.9	14.6	11.8	10.6	30.7	41.5	374
Wife same age	28.1	22.7	6.2	3.9	3.8	25.0	35.3	374
Wife 1-4 years younger	22.4	19.0	7.0	5.0	4.6	20.9	28.4	2,171
Wife 5-9 years younger	22.9	19.5	7.4	4.5	4.2	22.4	31.1	2,617
Wife 10+ years younger	22.1	20.3	9.5	6.8	5.3	23.0	28.9	1,177
Number of marital control behaviors displayed by husband[2]								
0	14.3	12.3	3.6	2.5	2.0	13.5	19.3	1,663
1-2	21.1	18.2	6.8	4.0	3.5	21.0	29.0	4,450
3-4	57.0	47.7	23.2	19.5	18.2	51.4	64.3	825
5	90.6	86.1	53.2	50.1	50.1	89.2	93.6	90
Number of decisions in which women participate[3]								
0	39.4	34.2	10.9	8.4	7.2	36.7	45.7	168
1-2	26.0	24.3	9.6	7.2	6.4	26.6	34.3	2,164
3	21.6	17.5	7.1	4.5	4.0	20.1	28.3	4,382
Number of reasons for which wife beating is justified[4]								
0	23.4	19.2	8.7	6.5	6.1	21.4	28.5	2,139
1-2	22.9	18.1	6.9	4.6	4.0	20.4	29.3	3,056
3-4	30.7	28.7	11.2	7.6	6.6	32.4	41.1	1,271
5-7	24.3	27.9	11.3	9.2	8.4	30.0	36.2	561
Woman's father beat her mother								
Yes	41.7	39.2	15.3	13.1	12.3	41.4	51.3	1,396
No	20.1	16.4	6.8	4.2	3.7	19.0	26.6	5,420
Don't know/missing	26.1	22.9	10.8	8.1	7.0	25.6	31.9	211
Woman afraid of husband								
Most of the time	63.4	59.8	26.5	25.1	24.0	61.2	70.9	705
Sometimes	30.9	25.5	9.0	6.3	5.7	28.2	38.9	2,288
Never afraid	14.2	11.9	5.2	2.6	2.1	14.5	20.8	4,035
Total	24.6	21.1	8.6	6.1	5.5	23.6	31.7	7,027

Note: Husband refers to the current husband for currently married women and the most recent husband for divorced, separated, or widowed women. Total includes 5 women missing information on husband's education and 16 women missing information on education difference.
[1] Includes women who have been married only once.
[2] According to the wife's report. See Table 14.6 for list of behaviors.
[3] According to the wife's report. See Table 13.6 for list of decisions.
[4] According to the wife's report. See Table 13.8 for list of reasons.

14.8 SPOUSAL VIOLENCE IN THE PAST 12 MONTHS

Table 14.10 shows that 14 percent of ever-married women experienced spousal physical or sexual abuse in the past 12 months. Currently married women, women who are not currently employed, urban women, and women in camp areas are more likely than their counterparts to have experienced physical or sexual violence in the past 12 months. Experience of spousal violence in the past 12 months varies from a high of 17 percent among women in Jarash to a low of 9 percent in Ajloun, Mafraq, and Karak. Experience of spousal abuse in the past 12 months is lowest among women with higher education and women living in households in the fourth and fifth wealth quintiles and highest among women with preparatory education and women in the lowest wealth quintile. Spousal abuse in the past 12 months is twice as high among women who stated that they are afraid of their husband most of the time as women who reported being afraid of their husband only sometimes.

Table 14.10 Frequency of physical or sexual violence

Percentage of ever-married women who have experienced physical or sexual violence by any husband in the past 12 months, by background characteristics, Jordan 2012

Background characteristic	Percentage of women who have experienced physical or sexual violence in the past 12 months from any husband	Number of ever-married women
Age		
15-19	18.2	166
20-24	15.1	744
25-29	16.6	1,215
30-39	15.4	2,684
40-49	10.6	2,219
Marital status		
Married	14.6	6,714
Divorced/separated/ widowed	4.7	313
Number of living children		
0	9.3	663
1-2	14.5	1,844
3-4	15.4	2,379
5+	13.9	2,141
Residence		
Urban	14.8	5,814
Rural	11.0	1,213
Region		
Central	14.8	4,356
North	13.5	1,989
South	11.8	681
Governorate		
Amman	15.6	2,604
Balqa	11.1	480
Zarqa	14.6	1,083
Madaba	13.7	190
Irbid	14.7	1,245
Mafraq	9.1	364
Jarash	17.4	216
Ajloun	8.7	164
Karak	9.4	288
Tafiela	14.6	109
Ma'an	11.0	114
Aqaba	14.6	171
Badia		
Badia	13.0	462
Non Badia	14.2	6,565
Camps		
Camp	22.5	274
Non camp	13.8	6,753
Employment (last 7 days)		
Employed	11.5	1,141
Not employed	14.6	5,886
Education		
No education	14.5	152
Elementary	17.1	537
Preparatory	17.7	1,055
Secondary	15.5	3,167
Higher	9.4	2,116
Wealth quintile		
Lowest	20.8	1,335
Second	15.6	1,504
Middle	14.2	1,554
Fourth	9.7	1,389
Highest	10.1	1,245
Woman afraid of husband		
Most of the time	38.3	705
Sometimes	17.9	2,288
Never afraid	7.7	4,035
Total	14.1	7,027

Note: Any husband includes all current, most recent, and former husbands.

14.9 INJURIES FROM SPOUSAL VIOLENCE

In the 2012 JPFHS, ever-married women age 15-49 were asked whether they had sustained any form of injury as a result of physical or sexual violence inflicted by their husband. Table 14.11 shows the type of injury sustained by ever-married women age 15-49 who had ever experienced spousal violence or had experienced spousal violence in the past 12 months.

One-third (32 percent) of women who had ever experienced physical violence reported having ever sustained cuts, bruises, or aches; 9 percent had eye injuries, sprains, dislocations, or burns; and 4 percent had deep wounds, broken bones, broken teeth, or other serious injuries. Overall, 34 percent of women had suffered one or more of these injuries. A similar pattern is seen for injuries sustained in an incident in the past 12 months.

Forty percent of women who had ever experienced sexual violence suffered some form of injury; 39 percent had cuts, bruises, or aches; 12 percent had eye injuries, sprains, dislocations, or burns; and 6 percent suffered deep wounds, broken bones, broken teeth, or another serious injury. A similar pattern is seen for women who had experienced sexual violence in the past 12 months.

Table 14.11 Injuries to women due to spousal violence

Percentage of ever-married women age 15-49 who have experienced specific types of spousal violence by types of injuries resulting from the violence, according to the type of violence and whether they experienced the violence ever and in the 12 months preceding the survey, Jordan 2012

Type of violence	Cuts, bruises, or aches	Eye injuries, sprains, dislocations, or burns	Deep wounds, broken bones, broken teeth, or any other serious injury	Any of these injuries	Number of ever-married women who have ever experienced any physical or sexual violence
Experienced physical violence[1]					
Ever[2]	32.4	9.4	4.3	33.7	1,484
In the past 12 months	36.2	10.2	2.0	37.3	788
Experienced sexual violence					
Ever[2]	38.9	11.6	6.4	40.2	603
In the past 12 months	34.9	10.5	3.7	35.9	419
Experienced physical or sexual violence[1]					
Ever[2]	29.0	8.5	3.9	30.2	1,660
In the past 12 months	30.2	8.9	2.2	31.4	990

Note: Husband refers to the current husband for currently married women and the most recent husband for divorced, separated, or widowed women.
[1] Excludes women who reported violence only in response to a direct question on violence during pregnancy
[2] Includes in the past 12 months

Among women who experienced either physical or sexual violence, 29 percent had cuts, bruises, or aches; 9 percent had eye injuries, sprains, dislocations, or burns; and 4 percent had deep wounds, broken bones, broken teeth, or another serious injury. Thirty percent of these women suffered some type of injury. Comparable percentages are seen among women who experienced physical or sexual violence in the past 12 months.

14.10 HELP-SEEKING BEHAVIOR BY ABUSED WOMEN

Table 14.12 shows the percent distribution of women who have ever experienced physical or sexual violence committed by anyone, according to whether they have ever sought help to stop the violence and, if they did not seek help, whether or not they told anyone about the violence.

Only four in ten women (41 percent) who have ever experienced any form of physical or sexual violence have sought help from any source. In addition, 13 percent of women did not seek help but told someone about their experience. The remaining 47 percent of women did not either seek help or inform anyone about the abuse.

Women who have experienced only sexual violence are much less likely (5 percent) than women who have experienced physical violence (38 percent) to seek help; help seeking is most common among women who have experienced both physical and sexual violence (61 percent). Women age 30-39 are most likely to seek help (48 percent). Divorced, separated, or widowed women are more likely to seek help than married women. Help-seeking behavior decreases with the number of children. Women in the South region, women in Aqaba, women in the non Badia and camp areas, women with elementary education, and women in the lowest wealth quintile are more likely to seek help than their counterparts in the other categories.

Table 14.12 Help seeking to stop violence

Percent distribution of ever-married women age 15-49 who have ever experienced physical or sexual violence by their help-seeking behavior, by type of violence and background characteristics, Jordan 2012

Background characteristic	Sought help to stop violence	Never sought help but told someone	Never sought help, never told anyone	Total	Number of women who have ever experienced any physical or sexual violence
Type of violence experienced					
Physical only	38.1	13.9	48.0	100.0	1,904
Sexual only	4.8	1.7	93.5	100.0	141
Physical and sexual	60.5	10.2	29.3	100.0	506
Age					
15-19	(33.1)	(15.5)	(51.5)	(100.0)	62
20-24	40.4	15.0	44.6	100.0	243
25-29	40.9	17.5	41.6	100.0	477
30-39	47.7	10.4	41.8	100.0	1,035
40-49	31.3	11.2	57.5	100.0	734
Marital status					
Married	38.8	13.2	48.1	100.0	2,369
Divorced/separated/widowed	65.9	4.1	30.1	100.0	182
Number of living children					
0	45.9	13.7	40.4	100.0	236
1-2	40.4	15.9	43.7	100.0	648
3-4	41.4	12.0	46.6	100.0	864
5+	38.6	10.0	51.4	100.0	803
Residence					
Urban	40.6	13.3	46.1	100.0	2,169
Rural	41.0	8.4	50.7	100.0	382
Region					
Central	39.7	14.1	46.2	100.0	1,643
North	40.3	10.4	49.4	100.0	716
South	50.5	7.0	42.4	100.0	192
Governorate					
Amman	39.3	16.5	44.2	100.0	987
Balqa	37.9	11.9	50.1	100.0	154
Zarqa	40.5	10.4	49.1	100.0	433
Madaba	44.9	7.7	47.4	100.0	69
Irbid	40.4	10.9	48.7	100.0	478
Mafraq	37.3	10.7	52.0	100.0	111
Jarash	49.5	5.9	44.6	100.0	84
Ajloun	29.0	12.2	58.8	100.0	43
Karak	52.3	6.6	41.1	100.0	72
Tafiela	47.5	10.8	41.6	100.0	37
Ma'an	45.2	4.0	50.8	100.0	33
Aqaba	53.7	6.8	39.5	100.0	50
Badia					
Badia	34.1	11.7	54.2	100.0	155
Non Badia	41.1	12.6	46.3	100.0	2,396
Camps					
Camp	43.2	12.1	44.7	100.0	129
Non camp	40.6	12.5	46.9	100.0	2,422
Employment (last 7 days)					
Employed	42.5	12.4	45.1	100.0	372
Not employed	40.4	12.5	47.1	100.0	2,179
Education					
No education	30.8	9.8	59.4	100.0	58
Elementary	43.2	11.8	44.9	100.0	259
Preparatory	41.9	16.3	41.8	100.0	469
Secondary	39.5	11.8	48.7	100.0	1,177
Higher	41.9	11.6	46.5	100.0	589
Wealth quintile					
Lowest	45.9	11.0	43.1	100.0	634
Second	38.9	11.0	50.1	100.0	582
Middle	38.6	15.3	46.1	100.0	561
Fourth	36.6	12.0	51.4	100.0	410
Highest	42.3	13.9	43.8	100.0	365
Total	40.7	12.5	46.8	100.0	2,551

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

Table 14.13 shows the percentage of women age 15-49 who have ever experienced physical or sexual violence and who sought help, by sources from which help was sought. The most common source of help is a woman's own family (84 percent). One in five (19 percent) women sought help from her husband's family. Five percent each sought help from friends or others, while 4 percent each sought help from neighbors or a social service organization. Less than 2 percent sought help from the police.

Table 14.13 Sources for help to stop violence

Percentage of ever-married women age 15-49 who have experienced physical or sexual violence and sought help by sources from which they sought help, according to the type of violence that women reported, Jordan 2012

	Type of violence experienced		
Source	Physical only	Physical and sexual	Total
Own family	86.3	78.6	83.9
Husband's family	15.5	25.8	18.5
Friend	2.2	9.3	4.5
Neighbor	1.8	7.6	3.5
Religious leader	0.0	0.5	0.1
Doctor/medical personnel	0.0	0.0	0.0
Police	0.7	3.3	1.5
Lawyer	0.0	0.7	0.2
Social service organization	2.8	7.4	4.1
Other	4.2	6.1	4.8
Number of women who have experienced violence and sought help	725	306	1,038

Note: Total includes 7 women who reported seeking help for sexual violence only.

EARLY CHILDHOOD DEVELOPMENT AND CHILD DISCIPLINE

15

Key Findings

- Twenty-two percent of 3-4 year-old children in Jordan are attending an organized early childhood education program.
- For more than four-fifths (82 percent) of children age 3-4 years, an adult household member engaged in four or more activities that promote learning and school readiness in the three days preceding the survey.
- Only 23 percent of children under five live in households where at least three children's books are present; 70 percent of children had two or more types of playthings within the home.
- Eight percent of children under five were left in the care of other children during the week preceding the interview, while 2 percent were left alone for at least one hour.
- Sixty-nine percent of children age 36-59 months are developmentally on track as measured by the early childhood development index (ECDI).
- Sixty-six percent of children age 2-14 were subjected to at least one form of physical punishment during the month preceding the survey.

Early childhood, roughly described as ages 0 to 8, is a time of tremendous physical, social, emotional, and intellectual growth for children. One of the stated goals of the United Nations' World Fit for Children is that children should be "physically healthy, mentally alert, emotionally secure, socially competent and able to learn" (United Nations, 2002). Therefore, any comprehensive model of early childhood development must cover major areas of well-being including intellectual development, social development, emotional development, and child health.

Social development refers to the ability of young children to interact and sustain relationships with others, including parents, siblings, peers, teachers, and other adults. *Emotional development*, on the other hand, refers not to relationships but to children's feelings about themselves and others. It includes such characteristics as self-control, self-efficacy (i.e., the sense of being able to affect events), and the ability to properly interpret the emotions of others. The behaviors which constitute healthy social and emotional development vary greatly according to the age of the child. For example, at age two, markers of good social development focus heavily on relationships with parents and caregivers, whereas by ages five and six, they would include working cooperatively and playing well with fellow students and being able to make friends. In addition, it should be understood that young children mature at different rates and that the range of behaviors that fall in the normal range (though not always optimal) can be quite wide. Good social skills and positive emotional characteristics are important outcomes in and of themselves. Also, they can have strong influences on intellectual development and early school performance (Child Trends and Center for Child Health Research, 2004). When recognized early, problems in any of these areas can often be addressed effectively, and their long-term negative consequences can often be minimized and sometimes eliminated altogether.

This chapter also addresses methods of disciplining children. The World Fit for Children and the Millennium Declaration calls for the protection of children against abuse, exploitation and violence (United Nations, 2002). Respondents to the 2012 JPFHS household questionnaire were asked a series of questions on the ways adults in the household teach children the right behavior or address a

behavior problem. Only one child was selected at random per household from all children age 2-14 living in the household, and questions were asked about the methods used on that particular child, by any adult in the household. Figures were then appropriately weighted to reflect all children age 2-14 in all of the households interviewed.

15.1 EARLY CHILDHOOD EDUCATION AND LEARNING

In order to obtain an overview of certain early childhood education (ECE) indicators in Jordan, ever-married women age 15-49 in two-thirds of the households selected for the 2012 JPFHS who had a child age 3-4 living with them were asked about early education regarding their youngest child age 3-4. These children were identified through the birth histories of ever-married women age 15-49. The results are presented in this chapter for all (100 percent) of the 3,829 children (3,670 weighted children) who met the selection criteria.

Early childhood education (ECE) programs and preschool attendance socialize children for primary school and improve school readiness. ECE programs include organized learning components and do not include baby-sitting or day care, which typically do not include organized education and learning.

According to data from the 2012 JPFHS, 22 percent of children age 36-59 months are attending an organized ECE program in Jordan (Table 15.1). Children age 48-59 months are three and a half times more likely to attend an organized ECE program as children age 36-47 months (35 percent versus 10 percent). Female children are slightly more likely to be engaged in ECE programs than male children. Urban children are slightly more likely to be in ECE programs than rural children. Children living in the North region are most likely to attend ECE programs. The percentage of children attending ECE programs ranges from a low of 17 percent in Mafraq and Zarqa to a high of 29 percent in Irbid. ECE program attendance is also higher in the non Badia and non camp areas of Jordan. Attendance at ECE programs varies positively with mother's education and household wealth.

Table 15.1 Early childhood education

Percentage of children age 36-59 months who are attending an organized early childhood education program, Jordan 2012

Background characteristic	Percentage of children age 36-59 months currently attending early childhood education	Number of children 36-59 months
Age in months		
36-47	9.6	1,915
48-59	35.0	1,755
Child's sex		
Male	20.9	1,866
Female	22.6	1,804
Residence		
Urban	22.2	3,045
Rural	19.3	625
Region		
Central	19.5	2,285
North	25.8	1,038
South	24.1	348
Governorate		
Amman	20.5	1,361
Balqa	19.1	259
Zarqa	17.3	561
Madaba	19.0	104
Irbid	29.0	628
Mafraq	17.3	209
Jarash	26.5	118
Ajloun	22.6	83
Karak	26.1	160
Tafiela	22.4	56
Ma'an	26.0	58
Aqaba	19.6	74
Badia		
Badia	13.2	270
Non Badia	22.4	3,400
Camps		
Camp	16.0	145
Non camp	22.0	3,526
Mother's education		
No education	7.6	96
Elementary	8.7	261
Preparatory	11.3	541
Secondary	19.6	1,682
Higher	34.6	1,091
Wealth quintile		
Lowest	10.5	851
Second	14.3	778
Middle	25.8	815
Fourth	26.4	724
Highest	38.9	503
Total	21.7	3,670

It is well recognized that a period of rapid brain development occurs in the first 3-4 years of life, and the quality of home care is the major determinant of the child's development during this period. In this context, engagement of adults in activities with children, presence of books in the home for the child, and the conditions of care are important indicators of quality of home care.

Information on a number of activities that support early learning was collected in the Jordan survey for children age 36-59 months. Questions included the involvement of adults with children in the following six activities: reading books or looking at picture books; telling stories; singing songs; taking children outside the home, compound, or yard; playing with children; and spending time with children naming, counting, or drawing things.

For more than four-fifths (82 percent) of children age 36-59 months, an adult household member engaged in four or more activities that promote learning and school readiness during the three days preceding the survey (Table 15.2). The mean number of activities that adults engaged in with children was 4.8. The table also indicates that a father's involvement in such activities was somewhat limited. Although father's involvement with one or more activities was 72 percent, the average number of activities that fathers engaged in with children was only 2.0. The two most common activities fathers engaged in were taking the child outside the house and playing with the child (data not shown separately). Six percent of children were living in a household without their biological fathers.

There are small gender differentials in terms of engagement of adults in activities, with female children slightly more likely than male children to engage with adults; however, fathers engaged in activities for a slightly larger proportion of male children (73 percent) than female children (71 percent). Larger proportions of adults engaged in learning and school readiness activities with urban children (82 percent) than rural children (78 percent). Strong differentials by region and socioeconomic status are also observed: adult engagement in activities with children was greatest in the South region (86 percent) and lowest in the North region (80 percent), and it ranged from a low of 72 percent in Balqa to a high of 89 percent in Aqaba. The proportion of children age 3-4 years who engaged in at least four learning activities with an adult is higher in non Badia and non camp areas than in other areas. Support for learning activities increases with household wealth from 75 percent of children living in the poorest households to 87 percent of children living in the richest households. Adult involvement rose from 58 percent among children of mothers with no education to 87 percent among children of mothers with higher education. Similarly, adult involvement increased from 47 percent among children of fathers with no education to 87 percent among children of fathers with higher education. A similar pattern was seen with father's involvement by background characteristics.

Exposure to books in early years not only provides a child with greater understanding of the nature of print, but may also give the child opportunities to see others reading, such as older siblings doing school work. Presence of books is important for later school performance. In two-thirds of the households selected for the 2012 JPFHS, mothers with a child under age five were asked about the number of children's books or picture books they have for the child, household objects or outside objects, and homemade toys or toys that came from a shop that are available at home. If a woman had more than one child under five living with her, the questions referred to the youngest child.

Table 15.2 Support for learning

Percentage of children age 36-59 months with whom an adult household member engaged in activities that promote learning and school readiness during the last three days, Jordan 2012

Background characteristic	Percentage of children age 36-59 months: With whom adult household members engaged in four or more activities	Percentage of children age 36-59 months: With whom the father engaged in one or more activities	Mean number of activities: Any adult household member engaged with the child	Mean number of activities: The father engaged with the child	Percentage of children not living with their natural father	Number of children 36-59 months
Age in months						
36-47	80.3	73.7	4.8	2.0	6.6	1,915
48-59	83.2	69.9	4.8	1.9	4.2	1,755
Child's sex						
Male	80.5	73.1	4.8	2.0	5.9	1,866
Female	82.8	70.6	4.8	2.0	5.0	1,804
Residence						
Urban	82.4	71.6	4.8	2.0	5.7	3,045
Rural	78.0	73.1	4.6	1.9	4.5	625
Region						
Central	81.5	69.0	4.8	1.9	5.5	2,285
North	80.3	75.9	4.8	2.0	6.2	1,038
South	86.2	78.8	5.1	2.3	3.1	348
Governorate						
Amman	83.6	72.0	4.8	2.1	7.1	1,361
Balqa	72.1	62.6	4.4	1.4	1.9	259
Zarqa	80.1	63.0	4.7	1.7	3.3	561
Madaba	85.9	77.8	5.0	2.4	4.9	104
Irbid	80.0	76.0	4.7	2.0	6.5	628
Mafraq	78.7	74.9	4.8	2.0	5.4	209
Jarash	81.5	78.6	4.8	2.0	5.5	118
Ajloun	85.5	73.1	4.9	1.9	6.8	83
Karak	86.3	74.1	5.1	2.1	3.1	160
Tafiela	85.3	83.8	5.0	2.5	3.6	56
Ma'an	84.0	77.0	4.8	2.3	3.6	58
Aqaba	88.5	86.4	5.1	2.7	2.6	74
Badia						
Badia	72.8	69.7	4.4	1.8	5.4	270
Non Badia	82.3	72.0	4.8	2.0	5.5	3,400
Camps						
Camp	74.8	64.6	4.5	1.5	3.9	145
Non camp	81.9	72.2	4.8	2.0	5.5	3,526
Mother's education						
No education	57.5	47.8	3.7	1.3	8.2	96
Elementary	68.1	65.9	4.4	1.6	4.8	261
Preparatory	75.1	74.2	4.5	1.7	6.1	541
Secondary	84.1	70.6	4.9	1.9	5.9	1,682
Higher	86.5	76.2	5.0	2.3	4.3	1,091
Father's education						
No education	47.2	61.1	3.2	1.2	0.0	35
Elementary	73.3	60.1	4.5	1.5	0.0	402
Preparatory	81.2	70.9	4.6	1.6	0.0	605
Secondary	82.4	78.4	4.8	2.2	0.0	1,561
Higher	87.2	77.1	5.1	2.4	0.0	865
Missing, don't know, no father in the household, father not alive	76.0	na	4.6	na	99.0	202
Wealth quintile						
Lowest	74.6	65.0	4.5	1.6	6.6	851
Second	80.8	68.9	4.7	1.7	6.2	778
Middle	82.7	74.7	4.8	2.0	5.2	815
Fourth	86.3	78.5	5.0	2.3	3.2	724
Highest	86.5	74.0	5.1	2.4	6.0	503
Total	81.6	71.9	4.8	2.0	5.5	3,670

na = Not applicable

In Jordan, only 23 percent of children age 0-59 months live in households where at least three children's books are present for the child (Table 15.3). The proportion of children with 10 or more books declines to 3 percent. The presence of children's books is positively correlated with the child's age; three or more children's books are present in the homes of 40 percent of children age 24-59 months, compared with 8 percent of children age 0-23 months. Urban children appear to have greater access to children's books than those living in rural households. The proportion of children under age five who have three or more children's books is 25 percent in urban areas, compared to 15 percent in rural areas. Children living in households in the Central region and the non Badia and non camp areas of Jordan are more likely to have three or more children's books than children living in other areas. Children living in Amman (28 percent) are most likely to live in households with three or more books and children in Ma'an are least likely (13 percent). Education of both mothers and fathers has a positive influence on the percentage of children exposed to three or more books in the household, as does household wealth. A similar pattern is seen in the percentage of children exposed to 10 or more children's books in the household for all of the background characteristics with the exception of governorates, where exposure is highest in Balqa and Amman and lowest in Karak.

Table 15.3 also shows that 70 percent of children age 0-59 months play with two or more types of playthings in their homes. The types of playthings include homemade toys (such as dolls and cars, or other toys made at home), toys that came from a store, and household objects (such as pots and bowls) or objects and materials found outside the home (such as sticks, rocks, animal shells, or leaves). It is interesting to note that the vast majority of children (89 percent) play with toys that come from a store; the percentage of children playing with homemade toys is only 9 percent. Sixty-nine percent of children play with other types of household objects or objects found outside the home. Older children (24-59 months) are much more likely to play with two or more types of playthings than younger children (0-23 months). There are smaller differences in the proportion of children who play with two or more types of playthings by gender of the child, urban-rural residence, residence in Badia, camp areas of Jordan and mother's education. Larger differences are observed in terms of region, governorate, father's education, and wealth quintile.

Leaving children alone or in the presence of other young children is known to increase the risk of accidents. In the 2012 JPFHS, two questions were asked to find out whether children age 0-59 months were left alone in the house during the week preceding the interview and whether children were left in the care of other children under age 10.

Table 15.3 Learning materials

Percentage of youngest children under age five by numbers of children's books present in the household, and by playthings that child plays with, Jordan 2012

Background characteristic	Household has for the child: 3 or more children's books	Household has for the child: 10 or more children's books	Child plays with: Home-made toys	Child plays with: Toys from a shop/manu-factured toys	Child plays with: Household objects/ objects found outside	Two or more types of playthings	Number of youngest children under age 5
Age in months							
0-23	8.4	1.3	8.5	81.0	55.8	57.0	3,433
24-59	39.6	5.1	10.3	97.1	84.1	85.3	3,069
Child's sex							
Male	21.2	2.8	9.6	88.6	67.8	69.4	3,510
Female	25.4	3.3	9.1	88.6	70.8	71.6	2,993
Residence							
Urban	24.9	3.6	9.8	89.4	69.2	71.1	5,331
Rural	14.8	0.8	7.1	85.0	69.0	67.3	1,172
Region							
Central	25.8	3.5	12.2	88.8	66.9	69.6	4,003
North	19.3	2.6	5.2	89.4	75.8	74.7	1,885
South	17.2	1.5	3.3	84.9	64.0	62.2	614
Governorate							
Amman	27.7	3.8	16.7	87.5	67.8	72.0	2,431
Balqa	18.6	4.0	5.9	89.5	59.5	60.3	450
Zarqa	25.7	2.8	4.6	91.4	66.6	66.8	939
Madaba	19.8	2.8	7.8	90.1	73.3	74.9	183
Irbid	21.8	3.3	5.0	90.4	76.9	76.5	1,160
Mafraq	14.1	1.4	3.0	86.2	75.4	71.4	362
Jarash	14.4	1.8	7.5	87.7	76.1	75.8	206
Ajluon	19.4	1.2	8.4	91.6	68.0	67.3	156
Karak	16.7	0.8	2.0	83.9	51.9	50.5	266
Tafiela	20.8	2.4	7.7	86.4	71.5	69.5	102
Ma'an	13.4	1.5	4.9	83.4	73.6	71.5	103
Aqaba	18.4	2.0	1.4	86.9	74.3	72.1	143
Badia							
Badia	9.4	0.7	7.1	82.0	71.6	68.6	466
Non Badia	24.2	3.2	9.5	89.1	69.0	70.5	6,036
Camps							
Camp	16.9	1.6	12.3	87.4	63.9	66.9	251
Non camp	23.4	3.1	9.2	88.6	69.4	70.5	6,252
Mother's education							
No education	10.6	0.1	9.4	77.2	77.6	70.0	128
Elementary	8.7	0.1	11.8	83.1	74.1	70.6	389
Preparatory	14.9	0.9	9.4	88.1	72.7	72.5	860
Secondary	20.7	1.0	8.9	88.8	68.9	70.8	3,028
Higher	33.4	7.6	9.5	90.2	66.7	68.8	2,097
Father's education							
No education	8.1	0.0	2.6	68.1	68.8	56.2	49
Elementary	16.2	1.0	10.9	84.7	68.8	69.2	676
Preparatory	17.4	0.8	8.5	85.7	65.3	65.2	1,012
Secondary	22.4	1.5	7.9	89.4	69.1	70.0	2,703
Higher	31.2	7.6	11.2	90.7	70.7	73.6	1,646
Missing, don't know, no father in the household, father not alive	22.5	4.3	12.1	90.9	73.6	76.3	417
Wealth quintile							
Lowest	11.2	0.5	10.7	83.1	70.7	68.2	1,375
Second	17.1	0.9	7.7	88.0	65.2	67.6	1,383
Middle	22.1	1.6	8.9	92.1	71.1	72.1	1,441
Fourth	30.7	3.7	8.8	90.9	68.8	71.3	1,320
Highest	39.5	10.9	11.2	88.8	70.3	73.6	983
Total	23.1	3.1	9.3	88.6	69.2	70.4	6,502

Table 15.4 shows that 8 percent of children age 0-59 months were left in the care of other children for more than one hour during the week preceding the interview, while 2 percent were left alone for at least one hour. Combining the two care indicators, it is calculated that 9 percent of children were left with inadequate care for at least one hour during the week preceding the survey, either by being left alone or in the care of another child. No differences were observed by the sex of the child. Urban children are more likely than rural children to be left with inadequate care (10 percent versus 7 percent). Inadequate care was also more prevalent among children living in the Central region (10 percent) compared with children in the North and South regions (8 percent and 7 percent, respectively). Inadequate care is most prevalent in

Jarash (12 percent) and least prevalent in Aqaba (3 percent). Inadequate care is also higher in the non Badia and camp areas of Jordan than in the other areas. The pattern of inadequate care by mother's and father's education is mixed, with children of mothers with preparatory education and fathers with elementary education most likely to be left with inadequate care. Inadequate care varies inversely with household wealth.

Table 15.4 Inadequate care

Percentage of youngest children under age five left alone or left in the care of another child younger than age 10 for more than one hour at least once during the past week, Jordan 2012

Background characteristic	Percentage of children under age 5: Left alone in the past week	Left in the care of another child younger than age 10 in the past week	Left with inadequate care in the past week[1]	Number of children under age 5
Age in months				
0-23	2.1	5.7	7.1	3,433
24-59	2.3	10.8	11.9	3,069
Child's sex				
Male	2.5	8.1	9.4	3,510
Female	1.9	8.1	9.4	2,993
Residence				
Urban	2.2	8.7	10.0	5,331
Rural	2.2	5.3	6.7	1,172
Region				
Central	2.3	9.1	10.3	4,003
North	2.2	6.9	8.3	1,885
South	2.2	5.2	6.9	614
Governorate				
Amman	2.3	9.4	10.6	2,431
Balqa	2.2	5.1	6.5	450
Zarqa	2.4	10.3	11.2	939
Madaba	1.7	9.0	10.2	183
Irbid	2.5	7.4	9.0	1,160
Mafraq	1.1	4.2	4.7	362
Jarash	2.9	9.8	11.8	206
Ajloun	1.6	5.2	6.8	156
Karak	3.6	6.1	9.1	266
Tafiela	1.5	7.8	8.4	102
Ma'an	1.1	3.9	4.7	103
Aqaba	0.8	2.3	3.1	143
Badia				
Badia	1.8	4.6	5.7	466
Non Badia	2.3	8.4	9.7	6,036
Camps				
Camp	2.0	15.1	16.0	251
Non camp	2.2	7.8	9.1	6,252
Mother's education				
No education	0.6	4.9	5.5	128
Elementary	1.5	10.8	12.0	389
Preparatory	2.0	12.2	13.2	860
Secondary	2.8	8.3	9.9	3,028
Higher	1.8	5.8	6.8	2,097
Father's education				
No education	0.4	2.2	2.6	49
Elementary	0.9	11.4	11.9	676
Preparatory	2.4	9.3	10.3	1,012
Secondary	2.4	7.4	8.7	2,703
Higher	1.0	7.4	7.9	1,646
Missing, don't know, no father in the household, father not alive	8.0	7.8	14.1	417
Wealth quintile				
Lowest	2.6	9.2	10.7	1,375
Second	3.0	9.1	10.7	1,383
Middle	1.8	8.1	9.4	1,441
Fourth	1.5	6.8	7.9	1,320
Highest	2.3	6.9	7.7	983
Total	2.2	8.1	9.4	6,502

[1] Inadequate care is defined as children left alone or in the care of another child under 10 years for more than one hour at least once in the week before the survey.

15.2 EARLY CHILDHOOD DEVELOPMENT

Early child development is defined as an orderly, predictable process along a continuous path, in which a child learns to handle more complicated levels of moving, thinking, speaking, feeling, and relating to others. Physical growth, literacy and numeracy skills, socioemotional development, and readiness to learn are vital domains of a child's overall development, which is a basis for overall human development.

A 10-item module that was developed for UNICEF's Multiple Indicator Cluster Survey (MICS) program was included in the 2012 JPFHS, and the data from this module were used to calculate the early childhood development index (ECDI). The indicator is based on some benchmarks that 3-4 year-old children would be expected to have if they are developing as the majority of children in their age group. The primary purpose of the ECDI is to inform public policy regarding the developmental status of children in Jordan.

Each of the 10 items is used in one of the four domains to determine if children are developmentally on track in that domain. The domains in question are:

- Literacy-numeracy: Children are identified as being developmentally on track based on whether they can identify/name at least 10 letters of the alphabet; whether they can read at least four simple, popular words; and whether they know the name and recognize the symbols of all numbers from 1 to 10. If at least two of these are true, then the child is considered developmentally on track.

- Physical: If the child can pick up a small object with two fingers, such as a stick or a rock from the ground, and/or the mother does not indicate that the child is sometimes too sick to play, then the child is regarded as being developmentally on track in the physical domain.

- Social-emotional: Children are considered to be developmentally on track if two of the following are true: the child gets along well with other children or adults; the child does not kick, bite, or hit other children or adults; and the child does not get distracted easily.

- Learning: If the child follows simple directions on how to do something correctly and/or, when given something to do, is able to do it independently, then the child is considered to be developmentally on track in this domain.

The ECDI is then calculated as the percentage of children who are developmentally on track in at least three of these four domains.

The results are presented in Table 15.5. In Jordan, 69 percent of children age 36-59 months are developmentally on track. As expected, the ECDI is higher in the older age group (72 percent among children 48-59 months) than in the younger age group (67 percent among children 36-47 months), since children acquire more skills with increasing age. The ECDI is higher among girls (73 percent) than boys (65 percent). The ECDI is also higher for children living in the North region and in Irbid than for their counterparts in the other areas. Not surprisingly, the ECDI is higher among children attending an early childhood education program (76 percent) than children not attending (67 percent). It is also highest among children whose mothers have higher than secondary education. The ECDI is lower for children living in the poorest households (61 percent) compared to children living in the richest households (74 percent of children developmentally on track).

The analysis of the four domains of child development shows that nearly all children (99 percent and 91 percent) are on track in the physical and learning domains, respectively, and 71 percent in the social-emotional domain. However, only 17 percent of children are on track in the literacy-numeracy domain. In each individual domain, higher percentages are associated with children attending an early childhood education program.

Table 15.5 Early child development index

Percentage of children age 36-59 months who are developmentally on track in the literacy-numeracy, physical, social-emotional, and learning domains, and the early child development index score, Jordan 2012

Background characteristic	Percentage of children age 36-59 months who are developmentally on track for indicated domains				Early child development index score[1]	Number of children 36-59 months
	Literacy-numeracy	Physical	Social-emotional	Learning		
Age in months						
36-47	10.7	98.9	70.4	90.6	66.5	1,915
48-59	23.8	98.7	71.6	90.9	71.6	1,755
Child's sex						
Male	15.8	98.8	68.3	88.7	65.3	1,866
Female	18.2	98.7	73.7	92.9	72.6	1,804
Residence						
Urban	18.1	98.8	70.7	90.8	69.1	3,045
Rural	11.7	98.4	72.2	90.5	68.3	625
Region						
Central	18.8	98.8	70.0	89.3	67.6	2,285
North	14.3	98.7	72.6	94.2	71.6	1,038
South	13.0	98.8	72.5	89.9	70.0	348
Governorate						
Amman	20.8	98.6	66.5	89.9	65.0	1,361
Balqa	11.4	99.1	73.4	89.5	69.5	259
Zarqa	17.3	99.1	75.1	87.8	72.1	561
Madaba	19.5	98.4	79.2	88.9	72.1	104
Irbid	16.8	99.0	72.8	96.5	75.0	628
Mafraq	8.9	98.9	71.6	87.6	63.6	209
Jarash	11.3	98.6	70.5	93.7	67.5	118
Ajloun	12.7	96.6	76.4	94.2	71.1	83
Karak	16.3	98.9	71.4	89.1	70.0	160
Tafiela	12.0	99.3	66.2	86.3	64.2	56
Ma'an	9.2	98.2	75.4	93.9	73.0	58
Aqaba	9.4	98.6	77.4	91.4	71.9	74
Badia						
Badia	9.4	98.1	74.4	86.6	65.8	270
Non Badia	17.6	98.8	70.7	91.1	69.2	3,400
Camps						
Camp	11.6	97.5	69.1	93.2	67.9	145
Non camp	17.2	98.8	71.0	90.6	69.0	3,526
Attendance at early childhood education						
Attending	37.3	99.6	72.1	93.3	76.3	798
Not attending	11.3	98.6	70.6	90.0	66.9	2,873
Mother's education						
No education	4.7	96.8	79.4	87.3	70.9	96
Elementary	14.4	99.0	62.3	89.2	61.4	261
Preparatory	10.7	98.4	63.6	87.9	60.9	541
Secondary	17.1	98.9	69.1	89.6	66.7	1,682
Higher	21.5	99.0	78.7	94.5	78.0	1,091
Wealth quintile						
Lowest	10.8	98.8	62.8	89.1	61.2	851
Second	12.7	98.7	68.1	90.5	65.2	778
Middle	15.9	99.5	77.1	91.6	74.2	815
Fourth	19.4	97.8	74.5	91.2	72.2	724
Highest	32.3	99.0	74.0	91.8	74.4	503
Total	17.0	98.8	71.0	90.7	68.9	3,670

[1] Percentage of children who are developmentally on track in at least three of the four domains.

15.3 CHILD DISCIPLINE

As stated in A World Fit for Children, "children must be protected against any acts of violence," and the Millennium Declaration calls for the protection of children against abuse, exploitation, and violence (United Nations, 2002). In the 2012 JPFHS, for the child discipline module, one child age 2-14 per household was selected randomly during fieldwork. Mothers or fathers of these children were asked a series of questions on the ways adults in the household tended to discipline the child during the past month preceding the survey. Out of these questions, the two indicators used to describe aspects of child discipline are 1) the number of children 2-14 years who experience psychological aggression as punishment or physical punishment and 2) the number of respondents who believe that in order to raise children properly, they need be physically punished.

In Jordan, 66 percent of children age 2-14 were subjected to at least one form of physical punishment by their parents or other adult household members during the month preceding the survey (Table 15.6). More importantly, 89 percent of children were subjected to a violent form of discipline, with 20 percent subject to severe physical punishment, i.e., either being hit or slapped on the face, head, or ears, or being beaten hard with an implement over and over. On the other hand, only 23 percent of young children's parents believe that children need to be physically punished, which implies an interesting contrast with the actual prevalence of physical discipline. Eighty-seven percent of children were subjected to psychological disciplining methods, such as being shouted at, yelled at, or screamed at, or being called dumb, lazy or something similar.

Table 15.6 Child discipline

Percentage of children age 2-14 who experienced various methods of disciplining during the month before the survey, according to background characteristics, Jordan 2012

Background characteristic	Percentage of children age 2-14 who experienced:					Respondent believes that the child needs to be physically punished	Respondents to the child discipline module
	Only non-violent discipline	Psychological aggression	Any physical punishment	Severe physical punishment	Any violent discipline method		
Age							
2-4	7.0	86.6	76.4	20.2	89.5	23.6	1,486
5-9	5.8	91.1	73.5	23.9	92.5	23.8	2,340
10-14	10.6	83.4	52.2	17.0	86.5	21.4	2,490
Child's sex							
Male	7.6	88.0	68.9	22.4	90.4	23.0	3,215
Female	8.3	86.0	62.6	18.0	88.4	22.6	3,105
Residence							
Urban	7.9	87.2	66.7	20.9	89.6	23.6	5,176
Rural	8.4	85.9	61.7	17.3	88.6	19.0	1,144
Region							
Central	8.8	85.6	65.5	20.7	88.4	23.9	3,912
North	5.8	90.0	69.4	20.1	91.7	21.2	1,770
South	8.7	87.4	57.5	18.1	89.6	20.5	638
Governorate							
Amman	10.4	83.4	63.7	20.2	86.7	24.3	2,289
Balqa	5.9	89.6	66.6	19.2	91.3	24.4	456
Zarqa	6.9	87.9	69.0	22.8	90.3	24.2	996
Madaba	6.7	90.3	67.8	19.3	91.4	15.9	171
Irbid	6.4	89.6	67.9	19.7	90.9	23.6	1,059
Mafraq	5.0	90.2	70.0	19.1	92.3	14.5	350
Jarash	5.0	90.8	73.2	26.9	93.2	22.4	208
Ajloun	4.9	91.6	73.0	15.4	93.8	18.3	153
Karak	11.0	84.6	50.0	16.3	86.9	20.9	268
Tafiela	7.6	88.6	67.2	21.1	91.3	20.6	102
Ma'an	5.6	90.1	69.3	25.3	93.3	20.8	118
Aqaba	7.7	89.4	55.1	13.5	90.5	19.7	150
Badia							
Badia	7.3	86.2	68.3	20.3	89.4	17.1	459
Non Badia	8.0	87.1	65.6	20.3	89.4	23.2	5,861
Camps							
Camp	2.9	93.7	79.1	27.5	96.0	25.8	275
Non camp	8.2	86.7	65.2	19.9	89.1	22.7	6,045
Education of the household head							
No education	5.2	90.5	64.1	36.8	93.5	na	na
Elementary	11.3	82.6	62.3	21.8	85.3	na	na
Preparatory	4.8	91.4	71.3	24.0	92.8	na	na
Secondary	6.1	89.8	71.3	21.1	92.0	na	na
Higher	11.7	81.3	55.5	13.7	84.7	na	na
Respondent's education							
No education	na	na	na	na	na	21.0	196
Elementary	na	na	na	na	na	23.9	554
Preparatory	na	na	na	na	na	18.7	973
Secondary	na	na	na	na	na	24.3	2,879
Higher	na	na	na	na	na	22.5	1,718
Wealth quintile							
Lowest	6.9	86.8	70.5	25.1	90.2	19.5	1,357
Second	5.9	90.1	68.9	21.6	91.9	22.6	1,322
Middle	6.7	88.1	68.4	20.0	90.9	24.8	1,347
Fourth	6.0	89.4	66.9	18.8	91.4	25.8	1,217
Highest	15.6	79.4	51.6	14.5	81.4	21.2	1,077
Total	8.0	87.0	65.8	20.3	89.4	22.8	6,320

na = Not applicable

Male children were slightly more likely to be subjected to physical discipline (90 percent) than female children (88 percent). Differentials with respect to many of the background variables are relatively small because of the very high overall prevalence of physical discipline.

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SAMPLE IMPLEMENTATION APPENDIX A

A.1 OBJECTIVES OF THE SURVEY

The 2012 Jordan Population and Family Health Survey (JPFHS 2012) is the sixth survey of its kind, following those implemented in 1990, 1997, 2002, 2007 and 2009. As with the prior surveys, the main objectives of the JPFHS 2012 survey are to provide up-to-date information on fertility and childhood mortality levels; fertility preferences; awareness, approval, and use of family planning methods; maternal and child health; knowledge and attitudes toward HIV/AIDS and other sexually transmitted infections (STI). All ever-married women 15-49 who were usual members of the selected households or who spent the night in the selected households the day before the survey were eligible for the survey. The survey uses a nationally representative sample consisting of 16,120 residential households, resulting in about 11,000 interviews of ever-married women age 15-49. The survey produces representative results for the country as a whole, for the urban and rural areas separately, for each of the 12 governorates of the country, and for two special domains: the Badia areas and people living in refugee camps.

A sub-sample of two-thirds of the selected households was selected for anthropometry measurements. All women 15-49 years and all children under 5 years in the selected sub-sample were eligible for an anemia test and for height and weight measurement.

A.2 SAMPLING FRAME

Administratively, Jordan is divided into 12 governorates. Each governorate is subdivided into districts; each district into sub-districts; each sub-district into localities, and each locality into areas and then sub-areas. In addition to these administrative units, during the 2004 Jordan Population and Housing Census (JPHC 2004), each sub-area was subdivided into convenient area units called census blocks. An electronic file of a complete list of all the census blocks was created. This list contains census information on households, population, geographical locations and socioeconomic and other characteristics of each block. Based on this list, the census blocks were then regrouped to form a general statistical unit of moderate size (30 households or more), called a cluster which is widely used in various surveys as the primary sampling unit (PSU). The sample for the 2012 JPFHS was selected from the frame of cluster units provided by the Department of Statistics (DoS). The frame excludes the population living in remote areas (most of whom are nomads), as well as those living in collective housing units, such as hotels, hospitals, work camps, prisons, and the like. Table A.1 shows the distribution of the clusters by governorate and by urban-rural residence. The sample for the Badia areas was provided by the Hashemite Fund for the Badia Development, and the refugee camp areas are identified by DOS based on the United Nation's Relief and Works Agency (UNRWA) records. The camps are defined at the block level. For the JPFHS 2012, a cluster is defined as camps if refugees represent 80 percent of the total population or more of the cluster. With this cutoff, only 33 clusters with refugee population were not counted in this domain. A few clusters in the Amman governorate which are both Badia and refugee camps are defined as refugee camps in order to simplify the stratification. The refugee camps exist only in urban areas.

In total, there are 13,025 clusters in Jordan. The average size of the cluster is 74 households in the urban areas and 62 in the rural areas. The overall average size is 72 households which is adequate for a sample take of 20 households per cluster for the JPFHS 2012.

Table A.1 Enumeration areas

Distribution of enumeration areas in the sampling frame by governorate and type of residence, Jordan 2012

	Urban				Rural			Grand
Governorate	Badia	Camps	Other	Total	Badia	Other	Total	total
Amman	7	110	4,540	4,657	182	147	329	4,986
Balqa		112	437	549		247	247	796
Zarqa	53	93	1,729	1,875	42	86	128	2,003
Madaba		9	225	234		112	112	346
Irbid		57	1,874	1,931		422	422	2,353
Mafraq	69		155	224	243	110	353	577
Jarash		50	167	217		142	142	359
Ajloun			222	222		80	80	302
Karak			176	176	20	353	373	549
Tafiela	21		131	152	4	57	61	213
Ma'an	19		114	133	56	65	121	254
Aqaba	19		230	249	37	1	38	287
Jordan	188	431	10,000	10,619	584	1,822	2,406	13,025

Table A.2 shows the distribution of households by governorate and by urban-rural residence. In Jordan, 84 percent of the households live in urban areas according to the sampling frame. The urban-rural definition had been modified after the 2004 Census since it was based on the 1994 Census definition and it no longer reflects the true situation of the country.

Table A.2 Households

Distribution of residential households in the sampling frame by governorate and type of residence, Jordan 2012

	Urban				Rural			Grand
Governorate	Badia	Camps	Other	Total	Badia	Other	Total	total
Amman	465	8,651	348,861	357,977	10,813	9,167	19,980	377,957
Balqa		10,457	34,348	44,805		16,827	16,827	61,632
Zarqa	3,498	8,050	123,838	135,386	2,275	4,303	6,578	141,964
Madaba		636	15,708	16,344		6,245	6,245	22,589
Irbid		4,783	132,767	137,550		27,668	27,668	165,218
Mafraq	5,164		11,070	16,234	15,538	6,612	22,150	38,384
Jarash		4,118	12,234	16,352		9,351	9,351	25,703
Ajloun			15,733	15,733		4,698	4,698	20,431
Karak			11,541	11,541	1,053	22,940	23,993	35,534
Tafiela	1,292		8,274	9,566	175	3,262	3,437	13,003
Ma'an	1,367		7,162	8,529	3,063	3,546	6,609	15,138
Aqaba	1,191		14,319	15,510	2,096	77	2,173	17,683
Jordan	12,977	36,695	735,855	785,527	35,013	114,696	149,709	935,236

A.3 SAMPLE ALLOCATION AND SAMPLE SELECTION

The sample for the JPFHS 2012 is a stratified sample selected in two stages from the 2004 JPHC frame. Stratification is achieved by separating each governorate into urban and rural areas, and each urban and rural area is further stratified by Badia areas, refugee camps and other. In total, 43 sampling strata have been constructed. Samples were selected independently in each sampling stratum, in two stages according to the sample allocation shown in Table A.3 and Table A.4. Prior to the sample selection, the sampling frame was sorted by social-geographical characteristics which defines cities with a population of over 100,000, and by social-economic characteristics within each sampling stratum. In the three governorates of Amman, Zarqa and Irbid, there are cities having a population of 100,000 or more. By using a probability proportional to size selection at the first stage of sampling, an implicit stratification and proportional allocation was achieved at each of the lower administrative levels and for each of the social-geographical strata.

In the first stage, 806 clusters were selected with probability proportional to the cluster size, with the cluster size being the number of residential households as counted in the 2004 JPHC. The sample allocation takes the precision consideration at the governorate level and at each of the two special domain levels. The ideal sample would allocate the 11,000 completed women interviews proportionally to each sampling stratum according to the stratum size. But the proportional allocation will allocate a too small a sample size for certain governorates such as Tafiela, Ma'an and Aqaba, and for the two special domains. Meanwhile, a proportional allocation will allocate an unnecessarily large sample size to the large governorates. DHS surveys in other countries show that in order to get a reasonable precision for most indicators at the regional level, at least 800 completed interviews of women 15-49 are needed. This means that a proportional allocation cannot meet the precision request for the small governorates. To assure that the survey precision is comparable across the governorates, it was decided to use a power allocation with small adjustments, which is between the proportional allocation and the equal size allocation. The given allocation undersampled the large governorates such as Amman, Zarqa and Irbid, and oversampled the small governorates such as Tafiela, Ma'an and Aqaba; the two domains Badia area and the refugee camps were also oversampled. Neither the oversample nor the undersample created any problems in data analysis because a sampling weight was developed according to the sample allocation; all analysis using the JPFHS data apply the sampling weight in order to guarantee that the actual sample is representative.

Following the selection of the PSU in the first stage, a household listing operation was carried out in all the selected clusters, and the resulting lists of households served as the sampling frame for the selection of households in the second stage. In the second stage of selection, a fixed number of 20 households per cluster was selected with an equal probability systematic selection from the newly created household listing. The survey interviewers interviewed only the pre-selected households. No replacements and no changes of the pre-selected households were allowed in the implementing stages in order to prevent bias.

Table A.3 shows the sample allocation of clusters by governorate and by type of residence; Table A.4 shows the sample allocation of households by governorate and by type of residence. Table A.5 shows the sample allocation of expected numbers of interviews of ever-married women 15-49. The parameters used in the sample calculations are obtained from the survey results of the JPFHS 2009: the household response rate is assumed to be 97 percent; the individual woman response rate is assumed to be 97 percent; and, it is assumed that there are 0.77 ever-married women age 15-49 per household.

Table A.3 Sample allocation of enumeration areas

Sample allocation of enumeration areas by governorate and type of residence, Jordan 2012

	Urban				Rural			
Governorate	Badia	Camps	Other	Total	Badia	Other	Total	Grand total
Amman	2	14	64	80	8	2	10	90
Balqa		17	34	51		19	19	70
Zarqa	5	13	55	73	3	3	6	79
Madaba		2	43	45		17	17	62
Irbid		8	58	66		13	13	79
Mafraq	8		19	27	26	11	37	64
Jarash		7	33	40		23	23	63
Ajloun			47	47		14	14	61
Karak			21	21	2	42	44	65
Tafiela	2		39	41	2	14	16	57
Ma'an	2		30	32	11	15	26	58
Aqaba	2		49	51	7		7	58
Jordan	21	61	492	574	59	173	232	806

Table A.4 Sample allocation of households

Sample allocation of households by governorate and type of residence, Jordan 2012

	Urban				Rural			
Governorate	Badia	Camps	Other	Total	Badia	Other	Total	Grand total
Amman	40	280	1,280	1,600	160	40	200	1,800
Balqa		340	680	1,020		380	380	1,400
Zarqa	100	260	1,100	1,460	60	60	120	1,580
Madaba		40	860	900		340	340	1,240
Irbid		160	1,160	1,320		260	260	1,580
Mafraq	160		380	540	520	220	740	1,280
Jarash		140	660	800		460	460	1,260
Ajloun			940	940		280	280	1,220
Karak			420	420	40	840	880	1,300
Tafiela	40		780	820	40	280	320	1,140
Ma'an	40		600	640	220	300	520	1,160
Aqaba	40		980	1,020	140		140	1,160
Jordan	420	1,220	9,840	11,480	1,180	3,460	4,640	16,120

Table A.5 Sample allocation of expected interviews with women

Sample allocation of expected number of completed interviews with ever-married women by governorate, according to type of residence, Jordan 2012

	Urban				Rural			
Governorate	Badia	Camps	Other	Total	Badia	Other	Total	Grand total
Amman	27	190	870	1,087	109	27	136	1,223
Balqa		231	462	693		258	258	951
Zarqa	68	177	748	992	41	41	82	1,075
Madaba		27	585	612		231	231	843
Irbid		109	788	897		177	177	1,074
Mafraq	109		258	367	353	150	503	870
Jarash		95	449	544		313	313	857
Ajloun			639	639		190	190	829
Karak			285	285	27	571	598	883
Tafiela	27		530	557	27	190	217	774
Ma'an	27		408	435	150	204	353	789
Aqaba	27		666	693	95		95	788
Jordan	285	829	6,688	7,801	802	2,352	3,153	10,956

A.4 SELECTION PROBABILITY AND SAMPLING WEIGHT

Due to the non-proportional allocation of sample to different governorates and to their urban and rural areas and the possible differences in response rates, sampling weights are required for any analysis using the 2012 JPFHS data to ensure the actual representativeness of the survey results at the national level and as well as at the domain level. Since the 2012 JPFHS sample is a two-stage stratified cluster sample, sampling weights are calculated based on sampling probabilities separately for each sampling stage and for each cluster. The following notations are used:

P_{1hi}: first-stage sampling probability of the ith cluster in stratum h
P_{2hi}: second -stage sampling probability within the ith cluster (household selection)

Let a_h be the number of clusters selected in stratum h, M_{hi} the number of households according to the sampling frame in the ith cluster, and $\sum M_{hi}$ the total number of households in the stratum. The probability of selecting the ith cluster in the JPFHS 2012 sample is calculated as follows:

$$\frac{a_h \, M_{hi}}{\sum M_{hi}}$$

Let L_{hi} be the number of households listed in the household listing operation in cluster *i* in stratum *h*, and let g_{hi} be the number of households selected in the cluster. The second stage selection probability for each household in the cluster is calculated as follows:

$$P_{2hi} = \frac{g_{hi}}{L_{hi}}$$

The overall selection probability of each household in cluster *i* of stratum *h* is therefore the product of the two stages selection probabilities:

$$P_{hi} = P_{1hi} \times P_{2hi}$$

The sampling weight for each household in cluster *i* of stratum *h* is the inverse of its overall selection probability:

$$W_{hi} = 1 / P_{hi}$$

A spreadsheet containing all sampling parameters and selection probabilities was prepared to facilitate the calculation of sampling weights. Sampling weights were adjusted for household non-response and as well as for individual non-response. Therefore, two sets of weights were calculated: one set for the households and one set for individual women. The difference of the household weight and the individual weight was introduced by the women's non-response. The final weights were normalized in order for the total number of unweighted cases to equal the total number of weighted cases at the national level, for both household weights and individual weights.

A.5 SAMPLE IMPLEMENTATION

Table A.6 presents the sample implementation results by the number of households selected and interviewed and the number of ever-married women found and interviewed.

Table A.6 Sample implementation

Percent distribution of households and eligible women by results of the household and individual interviews, and household, eligible women and overall women response rates, according to urban-rural residence and region (unweighted), Jordan 2012

	Residence		Region			Governorate of residence												Badia		Camps		
Result	Urban	Rural	Central	North	South	Amman	Balqa	Zarqa	Madaba	Irbid	Mafraq	Jarash	Ajloun	Karak	Tafiela	Ma'an	Aqaba	Badia	Non Badia	Camp	Non camp	Total
Selected households																						
Completed (C)	93.4	96.2	91.6	96.6	94.8	86.3	93.4	93.4	95.0	96.9	95.8	97.8	96.1	95.6	93.6	94.7	95.3	95.4	94.1	95.3	94.1	94.2
Household present but no competent respondent at home (HP)	2.1	1.1	3.1	0.2	1.9	5.7	2.6	2.3	1.0	0.0	0.3	0.2	0.5	1.5	2.4	1.6	2.2	1.7	1.8	1.5	1.8	1.8
Postponed (P)	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Refused (R)	1.6	1.1	1.8	0.9	1.4	2.7	1.9	1.1	1.4	1.3	1.5	0.3	0.5	0.9	0.8	2.4	1.7	1.4	1.4	0.7	1.5	1.4
Dwelling not found (DNF)	0.1	0.0	0.1	0.1	0.0	0.0	0.1	0.0	0.2	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.1	0.1	0.1	0.2	0.0	0.1
Household absent (HA)	1.0	0.3	1.4	0.4	0.4	2.9	0.5	1.1	0.8	0.2	0.4	0.6	0.6	0.0	0.8	0.8	0.3	0.2	0.9	0.1	0.9	0.8
Dwelling vacant/address not a dwelling (DV)	1.7	1.4	1.8	1.7	1.2	2.3	1.4	1.9	1.6	1.5	2.0	1.0	2.3	1.9	2.3	0.3	0.3	1.1	1.7	2.1	1.6	1.6
Dwelling destroyed (DD)	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.1	0.0	0.0
Other (O)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	11,480	4,640	6,020	5,340	4,760	1,800	1,400	1,580	1,240	1,580	1,280	1,260	1,220	1,300	1,140	1,160	1,160	1,620	14,500	1,220	14,900	16,120
Household response rate (HRR)[1]	96.1	97.9	94.8	98.8	96.5	91.1	95.2	96.5	97.4	98.6	98.2	99.4	98.9	97.6	96.6	95.8	95.9	96.7	96.6	97.6	96.5	96.6
Eligible women																						
Completed (EWC)	96.8	98.3	96.0	98.3	97.6	92.6	96.2	98.1	97.5	97.4	98.6	98.5	98.7	98.0	98.1	97.6	96.8	98.8	97.1	98.3	97.2	97.3
Not at home (EWNH)	1.0	0.6	1.3	0.7	0.5	2.3	1.1	1.1	0.6	0.7	0.9	0.4	0.8	0.2	1.2	0.5	0.1	0.7	0.9	0.9	0.9	0.9
Postponed (EWP)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Refused (EWR)	0.5	0.4	0.8	0.3	0.3	1.3	1.0	0.3	0.5	0.5	0.2	0.3	0.1	0.3	0.4	0.4	0.2	0.2	0.5	0.4	0.5	0.5
Partly completed (EWPC)	0.1	0.1	0.1	0.0	0.1	0.3	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.2	0.1	0.1	0.1	0.1
Incapacitated (EWI)	0.9	0.4	1.0	0.2	1.0	2.4	0.8	0.1	0.6	0.3	0.0	0.4	0.3	0.6	0.1	1.3	1.9	0.2	0.8	0.2	0.8	0.7
Other (EWO)	0.7	0.4	0.8	0.5	0.5	1.2	0.8	0.3	0.9	1.1	0.3	0.3	0.1	0.9	0.1	0.1	0.7	0.0	0.7	0.1	0.6	0.6
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	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	8,296	3,377	4,221	4,050	3,402	1,195	982	1,161	883	1,167	1,014	959	910	891	835	800	876	1,281	10,392	920	10,753	11,673
Eligible women response rate (EWRR)[2]	96.8	98.3	96.0	98.3	97.6	92.6	96.2	98.1	97.5	97.4	98.6	98.5	98.7	98.0	98.1	97.6	96.8	98.8	97.1	98.3	97.2	97.3
Overall women response rate (ORR)[3]	93.1	96.1	91.0	97.0	94.2	84.3	91.6	94.6	94.9	96.0	96.8	98.0	97.6	95.6	94.8	93.5	92.9	95.5	93.8	95.9	93.8	94.0

[1] Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

[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:

$$OWRR = HRR * EWRR/100$$

ESTIMATES OF SAMPLING ERRORS APPENDIX B

The estimates from a sample survey are affected by two types of errors: (1) nonsampling errors and (2) sampling errors. Nonsampling 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 2012 Jordan Population and Family Health Survey (JPFHS) to minimize this type of error, nonsampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 2012 JPFHS is only one of many samples that could have been selected from the same population, using the same design and identical size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling error is 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 2012 JPFHS sample is the result of a multistage stratified design, and, consequently, it was necessary to use more complex formulae. The computer software used to calculate sampling errors for the 2012 JPFHS is an SAS program. This program used the Taylor linearization method for variance estimation for survey estimates that are means or proportions. The Jackknife repeated replication method is used for variance estimation of more complex statistics such as fertility and mortality rates.

The Taylor linearization method treats any percentage or average as a ratio estimate, $r = y/x$, where y represents the total sample value for variable y, and x represents the total number of cases in the group or subgroup under consideration. The variance of r is computed using the formula given below, with the standard error being the square root of the variance:

$$SE^2(r) = var(r) = \frac{1}{x^2}\sum_{h=1}^{H}\left[(1-f_h)\frac{m_h}{m_h-1}\left(\sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h}\right)\right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi}\text{, and } z_h = y_h - rx_h$$

where h represents the stratum which varies from 1 to H,
m_h is the total number of clusters selected in the hth stratum,
y_{hi} is the sum of the weighted values of variable y in the ith cluster in the hth stratum,
x_{hi} is the sum of the weighted number of cases in the ith cluster in the hth stratum, and
f_h is the sampling fraction of PSU in the hth stratum, which is small and ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample and calculates standard errors for these estimates using simple formulae. Each replication considers *all but one* cluster in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2012 JPFHS, there were 806 non-empty clusters. Hence, 806 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 806 clusters,
$r_{(i)}$ is the estimate computed from the reduced sample of 805 clusters (i^{th} cluster excluded), and
k is the total number of clusters.

In addition to the standard error, the program computes the design effect (DEFT) for each estimate, which 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, such as multistage and cluster selection. The program also computes the relative standard error and the confidence limits for the estimates.

Sampling errors for the 2012 JPFHS are calculated for selected variables considered to be of primary interest. The results are presented in this appendix for the country as a whole, for urban and rural areas separately, for each of the three geographical regions, for each of the 12 governorates, for the Badia and non Badia populations, and for the refugee camp population and the non camp population. For each variable, the type of statistic (mean, proportion, or rate) and the base population are given in Table B.1. Tables B.2 to B.23 present the value of the statistic (R), its standard error (SE), the number of unweighted (N) and weighted (WN) cases, the design effect (DEFT), the relative standard error (SE/R), and the 95 percent confidence limits (R±2SE) for each variable. The DEFT is considered undefined when the standard error considering simple random sample is zero (when the estimate is close to 0 or 1). In the case of the total fertility rate, the number of unweighted cases is not relevant, as there is no known unweighted value for woman-years of exposure to childbearing.

The confidence interval (e.g., as calculated for *children ever born to women over age 40*) can be interpreted as follows: the overall average from the national sample is 4.561, and its standard error is 0.071. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, that is, 4.561±2×0.071. There is a high probability (95 percent) that the *true* average number of children ever born to all women over age 40 is between 4.420 and 4.703.

For the total sample, the value of the design effect (DEFT), averaged over all variables for the women's survey, is 1.705, which means that, due to multistage clustering of the sample, the average standard error is increased by a factor of 1.705 over that in an equivalent simple random sample.

Table B.1 List of indicators for sampling errors, Jordan 2012

Variable	Estimate	Base population
Urban residence	Proportion	Ever-married women 15-49
No education	Proportion	Ever-married women 15-49
Secondary education	Proportion	Ever-married women 15-49
Higher education	Proportion	Ever-married women 15-49
Currently married/in union	Proportion	All women 15-49
Married before age 20	Proportion	All women 25-49
Currently pregnant	Proportion	Ever-married women 15-49
Children ever born	Mean	All women 15-49
Children surviving	Mean	All women 15-49
Children ever born to women age 40-49	Mean	All women 40-49
Knows any contraceptive method	Proportion	Ever-married women 15-49
Knows any modern contraceptive method	Proportion	Ever-married women 15-49
Currently using any contraceptive method	Proportion	Currently married women 15-49
Currently using a modern method	Proportion	Currently married women 15-49
Currently using a traditional method	Proportion	Currently married women 15-49
Currently using pill	Proportion	Currently married women 15-49
Currently using IUD	Proportion	Currently married women 15-49
Currently using condoms	Proportion	Currently married women 15-49
Currently using injectables	Proportion	Currently married women 15-49
Currently using female sterilization	Proportion	Currently married women 15-49
Currently using rhythm	Proportion	Currently married women 15-49
Currently using withdrawal	Proportion	Currently married women 15-49
Obtained method from public sector source	Proportion	Currently married women 15-49
Want no more children	Proportion	Ever-married women 15-49
Want to delay birth at least 2 years	Proportion	Ever-married women 15-49
Ideal number of children	Mean	Ever-married women 15-49
Mothers received antenatal care for last birth	Proportion	Women with at least 1 live birth in past 5 years
Mothers protected against tetanus for last birth	Proportion	Births in last 5 years
Births with skilled attendant at delivery	Proportion	Births in last 5 years
Had diarrhea in the 2 weeks before survey	Proportion	Children under age 5
Treated with oral rehydration salts (ORS)	Proportion	Children under age 5 with diarrhea in past 2 weeks
Sought medical treatment for diarrhea	Proportion	Children with diarrhea in past 2 weeks
Vaccination card seen	Proportion	Children age 12-23 months
Received BCG vaccination	Proportion	Children age 12-23 months
Received DPT (3 doses) vaccination	Proportion	Children age 12-23 months
Received polio (3 doses) vaccination	Proportion	Children age 12-23 months
Received measles vaccination	Proportion	Children age 12-23 months
Received all vaccinations	Proportion	Children age 12-23 months
Height-for-age (below -2SD)	Proportion	Children under age 5 who were measured
Weight-for-height (below -2SD)	Proportion	Children under age 5 who were measured
Weight-for-age (below -2SD)	Proportion	Children under age 5 who were measured
Prevalence of anemia (children 6-59 months)	Proportion	Children age 6-59 months who were tested
Experienced physical violence since age 15 by anyone	Proportion	Ever-married women 15-49
Ever experienced any sexual violence	Proportion	Ever-married women 15-49
Experienced physical or sexual violence by husband	Proportion	Ever-married women 15-49
Experienced physical or sexual violence in the last 12 months by husband	Proportion	Ever-married women 15-49
Prevalence of anemia (women 15-49 years)	Proportion	All women 15-49 who were tested
Body mass index (BMI) < 18.5	Proportion	Ever-married women 15-49 who were measured
Total fertility rate (last 0-2 years)	Rate	Woman-years of exposure to childbearing for all women 15-49
Neonatal mortality rate[1]	Rate	Children exposed to the risk of mortality
Post-neonatal mortality rate[1]	Rate	Children exposed to the risk of mortality
Infant mortality rate[1]	Rate	Children exposed to the risk of mortality
Child mortality rate[1]	Rate	Children exposed to the risk of mortality
Under-5 mortality rate[1]	Rate	Children exposed to the risk of mortality

[1] Mortality rates are calculated for the last 0-4 years for the total sample and for the last 0-9 years for the domain sample.

Table B.2 Sampling errors: Total sample, Jordan 2012

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.833	0.005	11,352	11,352	1.385	0.006	0.823	0.843
No education	0.023	0.003	11,352	11,352	2.050	0.124	0.018	0.029
Secondary education	0.447	0.009	11,352	11,352	1.869	0.020	0.429	0.464
Higher education	0.306	0.010	11,352	11,352	2.376	0.034	0.286	0.327
Currently married (in union)	0.543	0.015	20,065	19,891	1.304	0.027	0.514	0.572
Married before age 20	0.311	0.007	12,000	11,892	1.682	0.022	0.297	0.324
Currently pregnant	0.055	0.003	20,065	19,891	1.470	0.050	0.049	0.060
Children ever born	2.030	0.063	20,065	19,891	1.363	0.031	1.905	2.155
Children surviving	1.967	0.060	20,065	19,891	1.356	0.031	1.846	2.087
Children ever born to women age 40-49	4.561	0.071	3,844	4,003	1.799	0.015	4.420	4.703
Knows any contraceptive method	1.000	0.000	10,746	10,801	1.061	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	10,746	10,801	1.061	0.000	1.000	1.000
Currently using any method	0.612	0.007	10,746	10,801	1.563	0.012	0.597	0.626
Currently using a modern method	0.423	0.007	10,746	10,801	1.542	0.017	0.408	0.438
Currently using a traditional method	0.189	0.005	10,746	10,801	1.399	0.028	0.178	0.199
Currently using pill	0.081	0.005	10,746	10,801	1.826	0.059	0.072	0.091
Currently using IUD	0.213	0.008	10,746	10,801	1.940	0.036	0.198	0.228
Currently using condoms	0.079	0.005	10,746	10,801	1.808	0.060	0.069	0.088
Currently using injectables	0.009	0.001	10,746	10,801	1.370	0.136	0.007	0.012
Currently using female sterilization	0.022	0.003	10,746	10,801	1.844	0.118	0.017	0.027
Currently using rhythm	0.035	0.003	10,746	10,801	1.949	0.098	0.028	0.042
Currently using withdrawal	0.143	0.005	10,746	10,801	1.512	0.036	0.133	0.154
Used public sector source	0.441	0.014	4,308	4,404	1.878	0.032	0.412	0.469
Want no more children	0.528	0.008	10,746	10,801	1.726	0.016	0.511	0.544
Want to delay birth at least 2 years	0.231	0.007	10,746	10,801	1.716	0.030	0.217	0.245
Ideal number of children	3.931	0.031	10,983	10,938	1.695	0.008	3.870	3.993
Mothers received antenatal care for last birth	0.991	0.002	6,811	6,577	1.684	0.002	0.987	0.995
Mothers protected against tetanus for last birth	0.309	0.012	6,811	6,577	2.037	0.038	0.286	0.332
Births with skilled attendant at delivery	0.996	0.001	10,360	9,833	1.849	0.001	0.994	0.999
Had diarrhea in the last 2 weeks	0.156	0.008	10,128	9,637	1.984	0.050	0.140	0.171
Treated with ORS	0.204	0.019	1,540	1,501	1.715	0.094	0.166	0.243
Sought medical treatment for diarrhea	0.557	0.026	1,540	1,501	1.922	0.047	0.505	0.610
Vaccination card seen	0.804	0.016	2,030	1,941	1.761	0.020	0.772	0.836
Received BCG vaccination	0.983	0.009	2,030	1,941	2.919	0.009	0.966	1.000
Received DPT (3 doses) vaccination	0.984	0.003	2,030	1,941	1.204	0.004	0.977	0.991
Received polio (3 doses) vaccination	0.984	0.003	2,030	1,941	1.211	0.003	0.977	0.991
Received measles vaccination	0.944	0.009	2,030	1,941	1.800	0.010	0.926	0.963
Received all vaccinations	0.930	0.012	2,030	1,941	2.133	0.013	0.905	0.955
Height-for-age (below -2SD)	0.077	0.006	6,368	5,851	1.532	0.078	0.065	0.089
Weight-for-height (below -2SD)	0.024	0.003	6,368	5,851	1.497	0.124	0.018	0.030
Weight-for-age (below -2SD)	0.030	0.004	6,368	5,851	1.723	0.137	0.022	0.038
Prevalence of anemia (children 6-59 months)	0.324	0.012	5,620	5,119	1.761	0.036	0.300	0.347
Experienced physical violence since age 15 by anyone	0.343	0.010	7,027	7,027	1.771	0.029	0.323	0.363
Ever experienced any sexual violence	0.092	0.007	7,027	7,027	1.989	0.075	0.078	0.106
Experienced physical or sexual violence by husband	0.236	0.010	7,027	7,027	1.924	0.041	0.217	0.256
Experienced physical or sexual violence by husband in the last 12 months	0.141	0.007	7,027	7,027	1.777	0.052	0.126	0.156
Prevalence of anemia (women 15-49 years)	0.335	0.009	11,249	10,734	1.960	0.026	0.317	0.352
Body mass index (BMI) < 18.5	0.051	0.004	10,747	10,312	1.810	0.076	0.043	0.058
Total fertility rate (last 3 years)	3.506	0.067	55,059	55,927	1.706	0.019	3.373	3.640
Neonatal mortality rate (last 0-4 years)	13.709	2.149	10,437	9,871	1.584	0.157	9.411	18.006
Post-neonatal mortality rate (last 0-4 years)	3.505	0.801	10,483	9,925	1.356	0.229	1.903	5.108
Infant mortality rate (last 0-4 years)	17.214	2.462	10,440	9,872	1.652	0.143	12.290	22.138
Child mortality rate (last 0-4 years)	3.815	1.112	10,633	9,951	1.649	0.292	1.591	6.039
Under-5 mortality rate (last 0-4 years)	20.963	2.590	10,453	9,882	1.614	0.124	15.783	26.143

Table B.3 Sampling errors: Urban sample, Jordan 2012

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	1.000	0.000	8,034	9,458	na	0.000	1.000	1.000
No education	0.017	0.003	8,034	9,458	2.107	0.177	0.011	0.023
Secondary education	0.453	0.010	8,034	9,458	1.810	0.022	0.433	0.473
Higher education	0.307	0.012	8,034	9,458	2.341	0.039	0.283	0.331
Currently married (in union)	0.546	0.017	14,308	16,450	1.224	0.031	0.512	0.580
Married before age 20	0.315	0.008	8,412	9,830	1.626	0.025	0.299	0.331
Currently pregnant	0.055	0.003	14,308	16,450	1.401	0.058	0.048	0.061
Children ever born	2.022	0.072	14,308	16,450	1.284	0.036	1.878	2.165
Children surviving	1.958	0.069	14,308	16,450	1.278	0.035	1.819	2.096
Children ever born to women age 40-49	4.490	0.081	2,735	3,364	1.768	0.018	4.328	4.652
Knows any contraceptive method	1.000	0.000	7,575	8,983	0.977	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	7,575	8,983	0.977	0.000	1.000	1.000
Currently using any method	0.611	0.009	7,575	8,983	1.520	0.014	0.594	0.628
Currently using a modern method	0.427	0.009	7,575	8,983	1.505	0.020	0.410	0.445
Currently using a traditional method	0.183	0.006	7,575	8,983	1.357	0.033	0.171	0.195
Currently using pill	0.073	0.006	7,575	8,983	1.845	0.075	0.062	0.084
Currently using IUD	0.221	0.009	7,575	8,983	1.896	0.041	0.203	0.239
Currently using condoms	0.085	0.006	7,575	8,983	1.740	0.066	0.074	0.096
Currently using injectables	0.008	0.001	7,575	8,983	1.343	0.177	0.005	0.010
Currently using female sterilization	0.022	0.003	7,575	8,983	1.844	0.142	0.016	0.028
Currently using rhythm	0.036	0.004	7,575	8,983	1.910	0.114	0.028	0.044
Currently using withdrawal	0.139	0.006	7,575	8,983	1.504	0.043	0.127	0.151
Used public sector source	0.415	0.016	3,100	3,698	1.857	0.040	0.382	0.448
Want no more children	0.532	0.010	7,575	8,983	1.695	0.018	0.513	0.552
Want to delay birth at least 2 years	0.226	0.008	7,575	8,983	1.723	0.037	0.209	0.242
Ideal number of children	3.906	0.036	7,801	9,110	1.650	0.009	3.834	3.978
Mothers received antenatal care for last birth	0.991	0.002	4,738	5,395	1.647	0.002	0.986	0.996
Mothers protected against tetanus for last birth	0.323	0.014	4,738	5,395	2.009	0.043	0.295	0.351
Births with skilled attendant at delivery	0.996	0.002	7,156	8,010	1.810	0.002	0.993	0.999
Had diarrhea in the last 2 weeks	0.161	0.009	6,995	7,852	1.943	0.058	0.142	0.179
Treated with ORS	0.200	0.022	1,103	1,261	1.693	0.112	0.155	0.245
Sought medical treatment for diarrhea	0.555	0.031	1,103	1,261	1.895	0.055	0.493	0.616
Vaccination card seen	0.800	0.019	1,346	1,538	1.751	0.024	0.761	0.839
Received BCG vaccination	0.985	0.011	1,346	1,538	3.181	0.011	0.964	1.006
Received DPT (3 doses) vaccination	0.986	0.004	1,346	1,538	1.191	0.004	0.979	0.994
Received polio (3 doses) vaccination	0.987	0.004	1,346	1,538	1.202	0.004	0.979	0.994
Received measles vaccination	0.943	0.011	1,346	1,538	1.775	0.012	0.920	0.965
Received all vaccinations	0.930	0.015	1,346	1,538	2.147	0.016	0.900	0.960
Height-for-age (below -2SD)	0.074	0.007	4,404	4,737	1.526	0.098	0.059	0.088
Weight-for-height (below -2SD)	0.025	0.004	4,404	4,737	1.456	0.143	0.018	0.032
Weight-for-age (below -2SD)	0.032	0.005	4,404	4,737	1.661	0.155	0.022	0.042
Prevalence of anemia (children 6-59 months)	0.322	0.014	3,902	4,142	1.706	0.043	0.294	0.349
Experienced physical violence since age 15 by anyone	0.353	0.012	4,958	5,814	1.713	0.033	0.330	0.376
Ever experienced any sexual violence	0.092	0.008	4,958	5,814	1.952	0.087	0.076	0.108
Experienced physical or sexual violence by husband	0.243	0.011	4,958	5,814	1.880	0.047	0.221	0.266
Experienced physical or sexual violence by husband in the last 12 months	0.148	0.009	4,958	5,814	1.718	0.059	0.130	0.165
Prevalence of anemia (women 15-49 years)	0.333	0.010	7,849	8,798	1.848	0.030	0.313	0.352
Body mass index (BMI) < 18.5	0.051	0.004	7,500	8,463	1.726	0.086	0.043	0.060
Total fertility rate (last 3 years)	3.423	0.076	39,134	46,355	1.650	0.022	3.271	3.575
Neonatal mortality rate (last 0-9 years)	12.356	1.789	14,089	15,660	1.547	0.145	8.778	15.934
Post-neonatal mortality rate (last 0-9 years)	5.297	1.095	14,085	15,635	1.731	0.207	3.108	7.486
Infant mortality rate (last 0-9 years)	17.653	2.364	14,090	15,660	1.769	0.134	12.926	22.380
Child mortality rate (last 0-9 years)	3.239	0.834	13,976	15,520	1.568	0.258	1.571	4.908
Under-5 mortality rate (last 0-9 years)	20.835	2.407	14,099	15,665	1.699	0.116	16.021	25.650

na = Not applicable

Table B.4 Sampling errors: Rural sample, Jordan 2012

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.000	0.000	3,318	1,894	na	na	0.000	0.000
No education	0.055	0.008	3,318	1,894	2.128	0.154	0.038	0.071
Secondary education	0.416	0.014	3,318	1,894	1.619	0.033	0.388	0.443
Higher education	0.301	0.013	3,318	1,894	1.691	0.045	0.274	0.328
Currently married (in union)	0.528	0.026	6,185	3,444	1.144	0.049	0.476	0.580
Married before age 20	0.290	0.011	3,623	2,066	1.467	0.037	0.268	0.311
Currently pregnant	0.054	0.005	6,185	3,444	1.316	0.086	0.045	0.063
Children ever born	2.071	0.116	6,185	3,444	1.200	0.056	1.839	2.302
Children surviving	2.008	0.112	6,185	3,444	1.194	0.056	1.785	2.232
Children ever born to women age 40-49	4.958	0.126	1,135	637	1.657	0.025	4.706	5.210
Knows any contraceptive method	1.000	0.000	3,171	1,818	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	3,171	1,818	na	0.000	1.000	1.000
Currently using any method	0.617	0.012	3,171	1,818	1.334	0.019	0.594	0.641
Currently using a modern method	0.402	0.011	3,171	1,818	1.278	0.028	0.380	0.424
Currently using a traditional method	0.216	0.010	3,171	1,818	1.349	0.046	0.196	0.235
Currently using pill	0.121	0.008	3,171	1,818	1.309	0.063	0.106	0.136
Currently using IUD	0.174	0.009	3,171	1,818	1.290	0.050	0.157	0.191
Currently using condoms	0.049	0.005	3,171	1,818	1.274	0.099	0.039	0.059
Currently using injectables	0.018	0.004	3,171	1,818	1.523	0.199	0.011	0.025
Currently using female sterilization	0.024	0.003	3,171	1,818	1.073	0.122	0.018	0.030
Currently using rhythm	0.033	0.004	3,171	1,818	1.385	0.134	0.024	0.041
Currently using withdrawal	0.166	0.008	3,171	1,818	1.139	0.045	0.151	0.181
Used public sector source	0.577	0.021	1,208	707	1.442	0.036	0.536	0.618
Want no more children	0.505	0.012	3,171	1,818	1.311	0.023	0.481	0.528
Want to delay birth at least 2 years	0.257	0.008	3,171	1,818	0.970	0.029	0.242	0.272
Ideal number of children	4.059	0.040	3,182	1,829	1.306	0.010	3.979	4.139
Mothers received antenatal care for last birth	0.992	0.003	2,073	1,182	1.295	0.003	0.987	0.997
Mothers protected against tetanus for last birth	0.244	0.012	2,073	1,182	1.287	0.050	0.220	0.268
Births with skilled attendant at delivery	0.997	0.001	3,204	1,823	1.070	0.001	0.995	1.000
Had diarrhea in the last 2 weeks	0.135	0.010	3,133	1,784	1.484	0.071	0.116	0.154
Treated with ORS	0.227	0.024	437	241	1.142	0.107	0.178	0.275
Sought medical treatment for diarrhea	0.570	0.032	437	241	1.252	0.056	0.506	0.633
Vaccination card seen	0.818	0.020	684	403	1.324	0.024	0.779	0.858
Received BCG vaccination	0.974	0.008	684	403	1.391	0.009	0.957	0.991
Received DPT (3 doses) vaccination	0.974	0.008	684	403	1.315	0.008	0.959	0.990
Received polio (3 doses) vaccination	0.974	0.008	684	403	1.315	0.008	0.959	0.990
Received measles vaccination	0.951	0.012	684	403	1.464	0.013	0.927	0.974
Received all vaccinations	0.928	0.015	684	403	1.502	0.016	0.899	0.958
Height-for-age (below -2SD)	0.089	0.007	1,964	1,114	1.074	0.081	0.075	0.104
Weight-for-height (below -2SD)	0.020	0.004	1,964	1,114	1.245	0.193	0.013	0.028
Weight-for-age (below -2SD)	0.021	0.004	1,964	1,114	1.146	0.183	0.013	0.028
Prevalence of anemia (children 6-59 months)	0.330	0.021	1,718	977	1.756	0.062	0.289	0.372
Experienced physical violence since age 15 by anyone	0.295	0.017	2,069	1,213	1.658	0.056	0.261	0.328
Ever experienced any sexual violence	0.092	0.010	2,069	1,213	1.588	0.110	0.071	0.112
Experienced physical or sexual violence by husband	0.202	0.013	2,069	1,213	1.484	0.065	0.176	0.228
Experienced physical or sexual violence by husband in the last 12 months	0.110	0.010	2,069	1,213	1.483	0.093	0.089	0.130
Prevalence of anemia (women 15-49 years)	0.344	0.018	3,400	1,936	2.245	0.053	0.307	0.381
Body mass index (BMI) < 18.5	0.046	0.007	3,247	1,849	1.912	0.152	0.032	0.061
Total fertility rate (last 3 years)	3.881	0.112	16,931	9,592	1.451	0.029	3.658	4.105
Neonatal mortality rate (last 0-9 years)	11.422	1.755	6,196	3,494	1.174	0.154	7.911	14.932
Post-neonatal mortality rate (last 0-9 years)	4.613	0.956	6,195	3,493	1.054	0.207	2.702	6.524
Infant mortality rate (last 0-9 years)	16.035	2.343	6,198	3,495	1.273	0.146	11.349	20.721
Child mortality rate (last 0-9 years)	2.841	0.983	6,112	3,421	1.444	0.346	0.876	4.807
Under-5 mortality rate (last 0-9 years)	18.830	2.494	6,203	3,497	1.355	0.132	13.842	23.819

na = Not applicable

Table B.5 Sampling errors: Central sample, Jordan 2012

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.907	0.005	4,051	7,181	1.148	0.006	0.897	0.918
No education	0.019	0.004	4,051	7,181	1.881	0.214	0.011	0.027
Secondary education	0.459	0.012	4,051	7,181	1.583	0.027	0.435	0.484
Higher education	0.291	0.014	4,051	7,181	2.017	0.050	0.262	0.319
Currently married (in union)	0.545	0.022	7,251	12,553	1.302	0.040	0.502	0.588
Married before age 20	0.320	0.010	4,280	7,531	1.392	0.030	0.301	0.339
Currently pregnant	0.051	0.004	7,251	12,553	1.362	0.077	0.043	0.058
Children ever born	2.006	0.090	7,251	12,553	1.316	0.045	1.826	2.185
Children surviving	1.943	0.086	7,251	12,553	1.311	0.044	1.770	2.116
Children ever born to women age 40-49	4.400	0.102	1,367	2,596	1.596	0.023	4.196	4.604
Knows any contraceptive method	1.000	0.000	3,834	6,839	0.797	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	3,834	6,839	0.797	0.000	1.000	1.000
Currently using any method	0.611	0.011	3,834	6,839	1.353	0.017	0.590	0.633
Currently using a modern method	0.427	0.011	3,834	6,839	1.332	0.025	0.406	0.449
Currently using a traditional method	0.184	0.007	3,834	6,839	1.193	0.041	0.169	0.199
Currently using pill	0.075	0.007	3,834	6,839	1.633	0.093	0.061	0.089
Currently using IUD	0.220	0.011	3,834	6,839	1.678	0.051	0.197	0.242
Currently using condoms	0.086	0.007	3,834	6,839	1.504	0.079	0.073	0.100
Currently using injectables	0.008	0.002	3,834	6,839	1.249	0.227	0.004	0.011
Currently using female sterilization	0.018	0.004	3,834	6,839	1.777	0.212	0.010	0.026
Currently using rhythm	0.040	0.005	3,834	6,839	1.648	0.130	0.030	0.051
Currently using withdrawal	0.136	0.007	3,834	6,839	1.325	0.054	0.121	0.150
Used public sector source	0.395	0.020	1,618	2,810	1.657	0.051	0.354	0.435
Want no more children	0.550	0.012	3,834	6,839	1.540	0.022	0.526	0.575
Want to delay birth at least 2 years	0.214	0.010	3,834	6,839	1.550	0.048	0.193	0.234
Ideal number of children	3.867	0.045	3,901	6,851	1.442	0.012	3.777	3.957
Mothers received antenatal care for last birth	0.991	0.003	2,374	4,052	1.433	0.003	0.985	0.997
Mothers protected against tetanus for last birth	0.291	0.016	2,374	4,052	1.715	0.056	0.259	0.324
Births with skilled attendant at delivery	0.996	0.002	3,592	6,014	1.622	0.002	0.992	1.000
Had diarrhea in the last 2 weeks	0.155	0.012	3,511	5,897	1.756	0.075	0.132	0.179
Treated with ORS	0.209	0.029	550	917	1.522	0.139	0.151	0.267
Sought medical treatment for diarrhea	0.557	0.040	550	917	1.719	0.071	0.478	0.636
Vaccination card seen	0.798	0.024	698	1,190	1.531	0.030	0.751	0.845
Received BCG vaccination	0.984	0.014	698	1,190	2.827	0.014	0.957	1.011
Received DPT (3 doses) vaccination	0.992	0.003	698	1,190	0.741	0.003	0.987	0.997
Received polio (3 doses) vaccination	0.992	0.003	698	1,190	0.741	0.003	0.987	0.997
Received measles vaccination	0.946	0.014	698	1,190	1.626	0.015	0.918	0.975
Received all vaccinations	0.930	0.019	698	1,190	1.939	0.021	0.891	0.968
Height-for-age (below -2SD)	0.075	0.009	2,154	3,472	1.330	0.123	0.056	0.093
Weight-for-height (below -2SD)	0.027	0.005	2,154	3,472	1.293	0.171	0.018	0.036
Weight-for-age (below -2SD)	0.032	0.006	2,154	3,472	1.486	0.199	0.019	0.045
Prevalence of anemia (children 6-59 months)	0.324	0.017	1,901	3,014	1.492	0.053	0.290	0.358
Experienced physical violence since age 15 by anyone	0.364	0.015	2,482	4,356	1.506	0.040	0.335	0.393
Ever experienced any sexual violence	0.090	0.010	2,482	4,356	1.732	0.111	0.070	0.110
Experienced physical or sexual violence by husband	0.241	0.014	2,482	4,356	1.651	0.059	0.213	0.270
Experienced physical or sexual violence by husband in the last 12 months	0.148	0.011	2,482	4,356	1.513	0.073	0.126	0.169
Prevalence of anemia (women 15-49 years)	0.324	0.013	3,841	6,513	1.656	0.039	0.299	0.349
Body mass index (BMI) < 18.5	0.053	0.006	3,673	6,277	1.580	0.110	0.041	0.065
Total fertility rate (last 3 years)	3.355	0.096	20,443	35,778	1.531	0.029	3.163	3.548
Neonatal mortality rate (last 0-9 years)	11.061	2.149	7,100	11,828	1.501	0.194	6.763	15.359
Post-neonatal mortality rate (last 0-9 years)	5.583	1.414	7,090	11,800	1.577	0.253	2.755	8.411
Infant mortality rate (last 0-9 years)	16.644	2.974	7,101	11,828	1.703	0.179	10.697	22.591
Child mortality rate (last 0-9 years)	3.541	1.089	7,038	11,712	1.372	0.308	1.363	5.719
Under-5 mortality rate (last 0-9 years)	20.126	3.032	7,107	11,832	1.613	0.151	14.063	26.190

Table B.6 Sampling errors: North sample, Jordan 2012

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.737	0.008	3,980	3,120	1.081	0.010	0.722	0.752
No education	0.023	0.004	3,980	3,120	1.578	0.164	0.015	0.030
Secondary education	0.440	0.012	3,980	3,120	1.544	0.028	0.415	0.464
Higher education	0.325	0.015	3,980	3,120	2.005	0.046	0.295	0.355
Currently married (in union)	0.538	0.020	6,988	5,511	1.230	0.038	0.497	0.579
Married before age 20	0.298	0.010	4,164	3,237	1.528	0.035	0.277	0.319
Currently pregnant	0.062	0.004	6,988	5,511	1.284	0.067	0.054	0.071
Children ever born	2.033	0.087	6,988	5,511	1.245	0.043	1.858	2.208
Children surviving	1.971	0.084	6,988	5,511	1.243	0.043	1.802	2.140
Children ever born to women age 40-49	4.809	0.090	1,270	1,019	1.271	0.019	4.628	4.990
Knows any contraceptive method	1.000	0.000	3,771	2,966	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	3,771	2,966	na	0.000	1.000	1.000
Currently using any method	0.613	0.010	3,771	2,966	1.214	0.016	0.594	0.632
Currently using a modern method	0.423	0.010	3,771	2,966	1.233	0.023	0.403	0.442
Currently using a traditional method	0.190	0.008	3,771	2,966	1.266	0.043	0.174	0.207
Currently using pill	0.092	0.007	3,771	2,966	1.390	0.071	0.079	0.105
Currently using IUD	0.211	0.010	3,771	2,966	1.441	0.045	0.192	0.230
Currently using condoms	0.067	0.006	3,771	2,966	1.582	0.096	0.054	0.079
Currently using injectables	0.010	0.002	3,771	2,966	1.152	0.184	0.007	0.014
Currently using female sterilization	0.028	0.004	3,771	2,966	1.323	0.127	0.021	0.035
Currently using rhythm	0.026	0.004	3,771	2,966	1.439	0.144	0.018	0.033
Currently using withdrawal	0.150	0.007	3,771	2,966	1.286	0.050	0.135	0.165
Used public sector source	0.493	0.021	1,506	1,212	1.624	0.043	0.451	0.534
Want no more children	0.474	0.010	3,771	2,966	1.199	0.021	0.454	0.493
Want to delay birth at least 2 years	0.270	0.009	3,771	2,966	1.309	0.035	0.251	0.289
Ideal number of children	4.024	0.042	3,916	3,082	1.469	0.010	3.939	4.108
Mothers received antenatal care for last birth	0.992	0.003	2,484	1,903	1.450	0.003	0.987	0.997
Mothers protected against tetanus for last birth	0.351	0.019	2,484	1,903	1.970	0.054	0.313	0.389
Births with skilled attendant at delivery	0.997	0.001	3,798	2,867	1.029	0.001	0.996	0.999
Had diarrhea in the last 2 weeks	0.170	0.010	3,721	2,811	1.469	0.058	0.150	0.190
Treated with ORS	0.190	0.023	624	478	1.309	0.121	0.144	0.236
Sought medical treatment for diarrhea	0.531	0.032	624	478	1.437	0.059	0.468	0.595
Vaccination card seen	0.834	0.020	762	562	1.401	0.024	0.794	0.873
Received BCG vaccination	0.992	0.005	762	562	1.472	0.005	0.982	1.002
Received DPT (3 doses) vaccination	0.981	0.007	762	562	1.299	0.007	0.968	0.994
Received polio (3 doses) vaccination	0.982	0.006	762	562	1.322	0.007	0.969	0.995
Received measles vaccination	0.952	0.010	762	562	1.205	0.010	0.932	0.971
Received all vaccinations	0.945	0.011	762	562	1.261	0.011	0.923	0.966
Height-for-age (below -2SD)	0.067	0.007	2,415	1,813	1.257	0.105	0.053	0.081
Weight-for-height (below -2SD)	0.020	0.004	2,415	1,813	1.174	0.178	0.013	0.027
Weight-for-age (below -2SD)	0.025	0.004	2,415	1,813	1.341	0.182	0.016	0.034
Prevalence of anemia (children 6-59 months)	0.325	0.019	2,129	1,603	1.735	0.058	0.288	0.362
Experienced physical violence since age 15 by anyone	0.324	0.014	2,450	1,989	1.498	0.044	0.296	0.352
Ever experienced any sexual violence	0.106	0.010	2,450	1,989	1.675	0.098	0.085	0.127
Experienced physical or sexual violence by husband	0.245	0.014	2,450	1,989	1.628	0.058	0.217	0.274
Experienced physical or sexual violence by husband in the last 12 months	0.135	0.010	2,450	1,989	1.498	0.077	0.114	0.155
Prevalence of anemia (women 15-49 years)	0.353	0.014	4,066	3,173	1.843	0.039	0.325	0.380
Body mass index (BMI) < 18.5	0.047	0.004	3,869	3,027	1.309	0.094	0.038	0.056
Total fertility rate (last 3 years)	3.764	0.095	19,276	15,409	1.223	0.025	3.574	3.953
Neonatal mortality rate (last 0-9 years)	13.843	2.409	7,223	5,409	1.310	0.174	9.025	18.661
Post-neonatal mortality rate (last 0-9 years)	3.471	0.790	7,224	5,415	1.085	0.228	1.890	5.052
Infant mortality rate (last 0-9 years)	17.314	2.583	7,224	5,409	1.297	0.149	12.149	22.479
Child mortality rate (last 0-9 years)	1.929	0.641	7,127	5,328	1.221	0.332	0.646	3.211
Under-5 mortality rate (last 0-9 years)	19.209	2.592	7,228	5,411	1.269	0.135	14.026	24.393

na = Not applicable

Table B.7 Sampling errors: South sample, Jordan 2012

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.613	0.023	3,321	1,051	2.691	0.037	0.567	0.658
No education	0.058	0.011	3,321	1,051	2.629	0.184	0.037	0.080
Secondary education	0.383	0.014	3,321	1,051	1.717	0.038	0.354	0.412
Higher education	0.356	0.018	3,321	1,051	2.213	0.052	0.320	0.393
Currently married (in union)	0.536	0.030	6,064	1,856	1.209	0.055	0.477	0.596
Married before age 20	0.286	0.011	3,548	1,118	1.486	0.038	0.264	0.308
Currently pregnant	0.057	0.004	6,064	1,856	1.093	0.071	0.049	0.066
Children ever born	2.158	0.143	6,064	1,856	1.370	0.066	1.872	2.445
Children surviving	2.083	0.138	6,064	1,856	1.362	0.066	1.808	2.359
Children ever born to women age 40-49	5.056	0.093	1,224	384	1.283	0.018	4.870	5.241
Knows any contraceptive method	1.000	0.000	3,141	996	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	3,141	996	na	0.000	1.000	1.000
Currently using any method	0.610	0.013	3,141	996	1.501	0.021	0.584	0.636
Currently using a modern method	0.395	0.012	3,141	996	1.424	0.031	0.370	0.420
Currently using a traditional method	0.215	0.009	3,141	996	1.199	0.041	0.197	0.233
Currently using pill	0.094	0.006	3,141	996	1.150	0.064	0.082	0.106
Currently using IUD	0.171	0.013	3,141	996	2.002	0.079	0.144	0.198
Currently using condoms	0.064	0.006	3,141	996	1.483	0.101	0.051	0.077
Currently using injectables	0.017	0.003	3,141	996	1.260	0.173	0.011	0.022
Currently using female sterilization	0.033	0.004	3,141	996	1.303	0.127	0.024	0.041
Currently using rhythm	0.031	0.004	3,141	996	1.370	0.136	0.023	0.040
Currently using withdrawal	0.176	0.008	3,141	996	1.190	0.046	0.159	0.192
Used public sector source	0.615	0.021	1,184	383	1.475	0.034	0.573	0.656
Want no more children	0.532	0.010	3,141	996	1.091	0.018	0.512	0.551
Want to delay birth at least 2 years	0.233	0.010	3,141	996	1.274	0.041	0.214	0.253
Ideal number of children	4.089	0.044	3,166	1,005	1.335	0.011	4.002	4.177
Mothers received antenatal care for last birth	0.991	0.003	1,953	622	1.436	0.003	0.985	0.997
Mothers protected against tetanus for last birth	0.292	0.020	1,953	622	1.977	0.069	0.252	0.333
Births with skilled attendant at delivery	0.995	0.002	2,970	952	1.520	0.002	0.990	0.999
Had diarrhea in the last 2 weeks	0.114	0.010	2,896	929	1.656	0.092	0.093	0.135
Treated with ORS	0.226	0.021	366	106	0.881	0.092	0.185	0.268
Sought medical treatment for diarrhea	0.675	0.031	366	106	1.121	0.046	0.614	0.737
Vaccination card seen	0.753	0.028	570	189	1.560	0.037	0.698	0.809
Received BCG vaccination	0.946	0.017	570	189	1.834	0.018	0.913	0.980
Received DPT (3 doses) vaccination	0.940	0.023	570	189	2.339	0.024	0.895	0.985
Received polio (3 doses) vaccination	0.940	0.023	570	189	2.339	0.024	0.895	0.985
Received measles vaccination	0.910	0.021	570	189	1.787	0.023	0.869	0.952
Received all vaccinations	0.886	0.023	570	189	1.774	0.026	0.840	0.932
Height-for-age (below -2SD)	0.121	0.013	1,799	567	1.542	0.103	0.096	0.146
Weight-for-height (below -2SD)	0.020	0.004	1,799	567	1.179	0.194	0.012	0.027
Weight-for-age (below -2SD)	0.034	0.006	1,799	567	1.324	0.174	0.022	0.046
Prevalence of anemia (children 6-59 months)	0.318	0.021	1,590	503	1.682	0.066	0.277	0.360
Experienced physical violence since age 15 by anyone	0.263	0.017	2,095	681	1.795	0.066	0.228	0.297
Ever experienced any sexual violence	0.066	0.007	2,095	681	1.333	0.110	0.051	0.080
Experienced physical or sexual violence by husband	0.178	0.015	2,095	681	1.735	0.081	0.149	0.207
Experienced physical or sexual violence by husband in the last 12 months	0.118	0.012	2,095	681	1.681	0.101	0.094	0.142
Prevalence of anemia (women 15-49 years)	0.344	0.012	3,342	1,048	1.474	0.035	0.320	0.368
Body mass index (BMI) < 18.5	0.044	0.005	3,205	1,008	1.270	0.104	0.035	0.053
Total fertility rate (last 3 years)	3.723	0.109	16,837	5,192	1.181	0.029	3.506	3.941
Neonatal mortality rate (last 0-9 years)	14.438	2.048	5,962	1,917	1.126	0.142	10.343	18.533
Post-neonatal mortality rate (last 0-9 years)	7.453	1.402	5,966	1,914	1.193	0.188	4.650	10.256
Infant mortality rate (last 0-9 years)	21.891	2.684	5,963	1,917	1.253	0.123	16.522	27.259
Child mortality rate (last 0-9 years)	4.325	1.089	5,923	1,901	1.189	0.252	2.148	6.503
Under-5 mortality rate (last 0-9 years)	26.121	3.023	5,967	1,918	1.324	0.116	20.076	32.166

na = Not applicable

Table B.8 Sampling errors: Amman sample, Jordan 2012

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.940	0.006	1,106	4,454	0.853	0.007	0.927	0.952
No education	0.018	0.006	1,106	4,454	1.468	0.327	0.006	0.030
Secondary education	0.451	0.019	1,106	4,454	1.265	0.042	0.413	0.488
Higher education	0.300	0.022	1,106	4,454	1.597	0.074	0.255	0.344
Currently married (in union)	0.527	0.034	2,181	8,085	1.030	0.064	0.460	0.595
Married before age 20	0.312	0.014	1,171	4,728	1.042	0.043	0.285	0.339
Currently pregnant	0.050	0.006	2,181	8,085	1.057	0.115	0.038	0.061
Children ever born	1.912	0.136	2,181	8,085	1.037	0.071	1.640	2.184
Children surviving	1.851	0.131	2,181	8,085	1.036	0.071	1.588	2.113
Children ever born to women age 40-49	4.357	0.146	410	1,727	1.231	0.034	4.064	4.649
Knows any contraceptive method	1.000	0.000	1,049	4,262	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	1,049	4,262	na	0.000	1.000	1.000
Currently using any method	0.605	0.016	1,049	4,262	1.041	0.026	0.574	0.637
Currently using a modern method	0.416	0.016	1,049	4,262	1.026	0.038	0.385	0.447
Currently using a traditional method	0.189	0.010	1,049	4,262	0.863	0.055	0.169	0.210
Currently using pill	0.058	0.010	1,049	4,262	1.380	0.172	0.038	0.078
Currently using IUD	0.218	0.017	1,049	4,262	1.336	0.078	0.184	0.252
Currently using condoms	0.095	0.010	1,049	4,262	1.125	0.107	0.075	0.116
Currently using injectables	0.005	0.002	1,049	4,262	1.036	0.437	0.001	0.010
Currently using female sterilization	0.017	0.006	1,049	4,262	1.468	0.345	0.005	0.029
Currently using rhythm	0.044	0.008	1,049	4,262	1.256	0.180	0.028	0.060
Currently using withdrawal	0.140	0.011	1,049	4,262	1.005	0.077	0.118	0.161
Used public sector source	0.342	0.030	435	1,687	1.322	0.088	0.282	0.402
Want no more children	0.562	0.019	1,049	4,262	1.217	0.033	0.524	0.599
Want to delay birth at least 2 years	0.209	0.016	1,049	4,262	1.246	0.075	0.178	0.240
Ideal number of children	3.747	0.066	1,050	4,211	1.204	0.018	3.615	3.879
Mothers received antenatal care for last birth	0.988	0.005	635	2,469	1.030	0.005	0.979	0.997
Mothers protected against tetanus for last birth	0.258	0.025	635	2,469	1.438	0.099	0.207	0.309
Births with skilled attendant at delivery	0.994	0.003	951	3,622	1.122	0.003	0.988	1.001
Had diarrhea in the last 2 weeks	0.160	0.018	928	3,547	1.385	0.115	0.123	0.196
Treated with ORS	0.158	0.042	142	567	1.271	0.269	0.073	0.242
Sought medical treatment for diarrhea	0.536	0.062	142	567	1.396	0.116	0.412	0.661
Vaccination card seen	0.795	0.035	186	730	1.188	0.044	0.725	0.866
Received BCG vaccination	0.978	0.022	186	730	2.012	0.023	0.934	1.022
Received DPT (3 doses) vaccination	0.996	0.002	186	730	0.533	0.002	0.992	1.001
Received polio (3 doses) vaccination	0.996	0.002	186	730	0.533	0.002	0.992	1.001
Received measles vaccination	0.938	0.022	186	730	1.231	0.024	0.893	0.982
Received all vaccinations	0.915	0.030	186	730	1.471	0.033	0.854	0.976
Height-for-age (below -2SD)	0.071	0.014	575	2,038	1.021	0.205	0.042	0.100
Weight-for-height (below -2SD)	0.029	0.007	575	2,038	1.020	0.249	0.015	0.044
Weight-for-age (below -2SD)	0.033	0.010	575	2,038	1.158	0.316	0.012	0.054
Prevalence of anemia (children 6-59 months)	0.342	0.026	506	1,738	1.199	0.077	0.290	0.395
Experienced physical violence since age 15 by anyone	0.370	0.022	668	2,604	1.190	0.060	0.325	0.414
Ever experienced any sexual violence	0.088	0.015	668	2,604	1.391	0.173	0.058	0.119
Experienced physical or sexual violence by husband	0.232	0.022	668	2,604	1.344	0.095	0.188	0.276
Experienced physical or sexual violence by husband in the last 12 months	0.156	0.016	668	2,604	1.157	0.104	0.124	0.189
Prevalence of anemia (women 15-49 years)	0.295	0.019	1,016	3,988	1.302	0.063	0.258	0.332
Body mass index (BMI) < 18.5	0.054	0.009	976	3,863	1.245	0.167	0.036	0.072
Total fertility rate (last 3 years)	3.206	0.143	6,099	23,230	1.204	0.044	2.920	3.491
Neonatal mortality rate (last 0-9 years)	10.038	3.355	1,842	6,998	1.294	0.334	3.327	16.748
Post-neonatal mortality rate (last 0-9 years)	6.624	2.300	1,835	6,973	1.211	0.347	2.024	11.224
Infant mortality rate (last 0-9 years)	16.661	4.815	1,843	6,998	1.400	0.289	7.031	26.292
Child mortality rate (last 0-9 years)	3.483	1.685	1,809	6,909	1.034	0.484	0.113	6.854
Under-5 mortality rate (last 0-9 years)	20.087	4.882	1,843	6,998	1.313	0.243	10.323	29.850

na = Not applicable

Table B.9 Sampling errors: Balqa sample, Jordan 2012

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.732	0.017	945	765	1.163	0.023	0.698	0.765
No education	0.033	0.011	945	765	1.921	0.342	0.010	0.055
Secondary education	0.403	0.020	945	765	1.223	0.048	0.364	0.442
Higher education	0.330	0.027	945	765	1.750	0.081	0.277	0.384
Currently married (in union)	0.535	0.044	1,681	1,353	1.223	0.083	0.446	0.624
Married before age 20	0.278	0.016	1,037	841	1.210	0.058	0.246	0.310
Currently pregnant	0.054	0.007	1,681	1,353	1.135	0.131	0.040	0.069
Children ever born	2.071	0.186	1,681	1,353	1.201	0.090	1.700	2.443
Children surviving	2.017	0.180	1,681	1,353	1.196	0.089	1.657	2.377
Children ever born to women age 40-49	4.323	0.155	338	272	1.242	0.036	4.013	4.633
Knows any contraceptive method	0.998	0.002	896	724	1.172	0.002	0.995	1.002
Knows any modern contraceptive method	0.998	0.002	896	724	1.172	0.002	0.995	1.002
Currently using any method	0.600	0.019	896	724	1.143	0.031	0.562	0.637
Currently using a modern method	0.416	0.019	896	724	1.133	0.045	0.379	0.453
Currently using a traditional method	0.184	0.015	896	724	1.174	0.083	0.154	0.214
Currently using pill	0.102	0.012	896	724	1.192	0.118	0.078	0.126
Currently using IUD	0.208	0.016	896	724	1.185	0.077	0.176	0.240
Currently using condoms	0.055	0.008	896	724	1.032	0.143	0.039	0.071
Currently using injectables	0.019	0.007	896	724	1.577	0.378	0.005	0.034
Currently using female sterilization	0.022	0.006	896	724	1.130	0.253	0.011	0.033
Currently using rhythm	0.047	0.008	896	724	1.098	0.165	0.032	0.063
Currently using withdrawal	0.123	0.012	896	724	1.059	0.094	0.100	0.146
Used public sector source	0.535	0.033	373	295	1.291	0.062	0.468	0.602
Want no more children	0.529	0.019	896	724	1.154	0.036	0.491	0.568
Want to delay birth at least 2 years	0.231	0.013	896	724	0.945	0.058	0.204	0.258
Ideal number of children	4.035	0.079	919	745	1.293	0.020	3.877	4.193
Mothers received antenatal care for last birth	0.996	0.003	563	452	1.006	0.003	0.991	1.001
Mothers protected against tetanus for last birth	0.357	0.023	563	452	1.128	0.064	0.311	0.403
Births with skilled attendant at delivery	0.998	0.001	871	703	0.926	0.001	0.995	1.001
Had diarrhea in the last 2 weeks	0.129	0.015	855	691	1.190	0.113	0.100	0.158
Treated with ORS	0.350	0.053	114	89	1.091	0.150	0.245	0.455
Sought medical treatment for diarrhea	0.579	0.056	114	89	1.092	0.097	0.467	0.691
Vaccination card seen	0.850	0.027	174	145	0.994	0.032	0.795	0.905
Received BCG vaccination	0.985	0.009	174	145	0.940	0.009	0.968	1.002
Received DPT (3 doses) vaccination	0.979	0.010	174	145	0.959	0.011	0.958	0.999
Received polio (3 doses) vaccination	0.979	0.010	174	145	0.959	0.011	0.958	0.999
Received measles vaccination	0.966	0.015	174	145	1.126	0.016	0.935	0.996
Received all vaccinations	0.948	0.019	174	145	1.146	0.020	0.910	0.986
Height-for-age (below -2SD)	0.056	0.011	506	395	1.011	0.194	0.034	0.077
Weight-for-height (below -2SD)	0.033	0.008	506	395	1.035	0.251	0.016	0.049
Weight-for-age (below -2SD)	0.030	0.007	506	395	0.927	0.235	0.016	0.044
Prevalence of anemia (children 6-59 months)	0.375	0.031	436	341	1.271	0.082	0.314	0.437
Experienced physical violence since age 15 by anyone	0.312	0.025	575	480	1.283	0.080	0.262	0.361
Ever experienced any sexual violence	0.074	0.013	575	480	1.169	0.172	0.049	0.100
Experienced physical or sexual violence by husband	0.226	0.024	575	480	1.373	0.106	0.178	0.274
Experienced physical or sexual violence by husband in the last 12 months	0.111	0.014	575	480	1.053	0.124	0.083	0.139
Prevalence of anemia (women 15-49 years)	0.397	0.022	916	731	1.343	0.055	0.353	0.440
Body mass index (BMI) < 18.5	0.055	0.009	873	693	1.145	0.160	0.038	0.073
Total fertility rate (last 3 years)	3.840	0.174	4,799	3,873	1.376	0.045	3.491	4.189
Neonatal mortality rate (last 0-9 years)	9.622	3.118	1,708	1,354	1.178	0.324	3.385	15.859
Post-neonatal mortality rate (last 0-9 years)	4.818	1.809	1,703	1,347	1.075	0.376	1.199	8.436
Infant mortality rate (last 0-9 years)	14.440	3.582	1,708	1,354	1.152	0.248	7.276	21.603
Child mortality rate (last 0-9 years)	3.437	1.486	1,692	1,334	1.071	0.432	0.465	6.409
Under-5 mortality rate (last 0-9 years)	17.827	3.643	1,710	1,355	1.102	0.204	10.540	25.114

Table B.10 Sampling errors: Zarqa sample, Jordan 2012

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.942	0.006	1,139	1,659	0.934	0.007	0.929	0.955
No education	0.014	0.005	1,139	1,659	1.425	0.354	0.004	0.024
Secondary education	0.514	0.015	1,139	1,659	1.033	0.030	0.483	0.544
Higher education	0.235	0.017	1,139	1,659	1.335	0.071	0.201	0.268
Currently married (in union)	0.605	0.033	1,942	2,583	0.658	0.055	0.539	0.672
Married before age 20	0.379	0.017	1,123	1,636	1.238	0.045	0.344	0.413
Currently pregnant	0.050	0.006	1,942	2,583	0.913	0.118	0.038	0.061
Children ever born	2.256	0.137	1,942	2,583	0.695	0.061	1.982	2.529
Children surviving	2.188	0.131	1,942	2,583	0.687	0.060	1.926	2.450
Children ever born to women age 40-49	4.462	0.124	354	502	1.061	0.028	4.213	4.710
Knows any contraceptive method	1.000	0.000	1,071	1,564	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	1,071	1,564	na	0.000	1.000	1.000
Currently using any method	0.631	0.016	1,071	1,564	1.058	0.025	0.600	0.663
Currently using a modern method	0.465	0.016	1,071	1,564	1.017	0.033	0.434	0.496
Currently using a traditional method	0.167	0.014	1,071	1,564	1.219	0.083	0.139	0.194
Currently using pill	0.104	0.011	1,071	1,564	1.175	0.106	0.082	0.126
Currently using IUD	0.235	0.014	1,071	1,564	1.054	0.058	0.207	0.262
Currently using condoms	0.080	0.010	1,071	1,564	1.251	0.130	0.059	0.101
Currently using injectables	0.008	0.003	1,071	1,564	1.025	0.339	0.003	0.014
Currently using female sterilization	0.017	0.004	1,071	1,564	1.008	0.232	0.009	0.025
Currently using rhythm	0.026	0.006	1,071	1,564	1.209	0.226	0.014	0.038
Currently using withdrawal	0.126	0.011	1,071	1,564	1.105	0.089	0.104	0.149
Used public sector source	0.444	0.033	475	711	1.459	0.075	0.377	0.511
Want no more children	0.542	0.016	1,071	1,564	1.051	0.030	0.510	0.574
Want to delay birth at least 2 years	0.207	0.013	1,071	1,564	1.037	0.062	0.181	0.233
Ideal number of children	4.058	0.081	1,105	1,607	1.135	0.020	3.896	4.219
Mothers received antenatal care for last birth	0.995	0.003	662	947	0.986	0.003	0.990	1.001
Mothers protected against tetanus for last birth	0.320	0.021	662	947	1.135	0.065	0.279	0.362
Births with skilled attendant at delivery	1.000	0.000	990	1,412	na	0.000	1.000	1.000
Had diarrhea in the last 2 weeks	0.156	0.014	975	1,391	1.187	0.092	0.127	0.185
Treated with ORS	0.299	0.047	170	217	1.193	0.156	0.206	0.393
Sought medical treatment for diarrhea	0.614	0.040	170	217	0.976	0.066	0.533	0.694
Vaccination card seen	0.760	0.040	181	258	1.228	0.052	0.680	0.839
Received BCG vaccination	1.000	0.000	181	258	na	0.000	1.000	1.000
Received DPT (3 doses) vaccination	0.992	0.006	181	258	0.945	0.006	0.979	1.005
Received polio (3 doses) vaccination	0.992	0.006	181	258	0.945	0.006	0.979	1.005
Received measles vaccination	0.963	0.016	181	258	1.159	0.017	0.930	0.996
Received all vaccinations	0.963	0.016	181	258	1.159	0.017	0.930	0.996
Height-for-age (below -2SD)	0.098	0.012	622	879	1.001	0.127	0.073	0.122
Weight-for-height (below -2SD)	0.021	0.006	622	879	1.014	0.286	0.009	0.034
Weight-for-age (below -2SD)	0.035	0.007	622	879	0.954	0.203	0.021	0.049
Prevalence of anemia (children 6-59 months)	0.274	0.023	568	797	1.128	0.085	0.228	0.321
Experienced physical violence since age 15 by anyone	0.380	0.020	701	1,083	1.115	0.054	0.339	0.421
Ever experienced any sexual violence	0.103	0.015	701	1,083	1.275	0.142	0.074	0.132
Experienced physical or sexual violence by husband	0.280	0.018	701	1,083	1.082	0.066	0.243	0.316
Experienced physical or sexual violence by husband in the last 12 months	0.146	0.018	701	1,083	1.313	0.120	0.111	0.181
Prevalence of anemia (women 15-49 years)	0.384	0.019	1,040	1,494	1.241	0.049	0.346	0.421
Body mass index (BMI) < 18.5	0.048	0.006	991	1,433	0.954	0.135	0.035	0.061
Total fertility rate (last 3 years)	3.566	0.136	4,949	7,167	1.068	0.038	3.293	3.839
Neonatal mortality rate (last 0-9 years)	12.920	3.182	2,051	2,945	1.083	0.246	6.556	19.283
Post-neonatal mortality rate (last 0-9 years)	3.193	1.231	2,060	2,952	0.984	0.386	0.731	5.656
Infant mortality rate (last 0-9 years)	16.113	3.330	2,051	2,945	1.050	0.207	9.454	22.772
Child mortality rate (last 0-9 years)	3.516	1.651	2,050	2,942	1.167	0.470	0.213	6.819
Under-5 mortality rate (last 0-9 years)	19.573	3.559	2,054	2,948	1.034	0.182	12.454	26.691

na = Not applicable

Table B.11 Sampling errors: Madaba sample, Jordan 2012

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.688	0.037	861	303	2.306	0.053	0.615	0.761
No education	0.020	0.006	861	303	1.264	0.301	0.008	0.032
Secondary education	0.434	0.019	861	303	1.139	0.044	0.396	0.473
Higher education	0.365	0.023	861	303	1.383	0.062	0.320	0.411
Currently married (in union)	0.541	0.055	1,616	535	0.886	0.101	0.432	0.651
Married before age 20	0.252	0.014	925	329	1.024	0.056	0.223	0.280
Currently pregnant	0.058	0.008	1,616	535	0.974	0.145	0.041	0.074
Children ever born	2.033	0.210	1,616	535	0.870	0.103	1.613	2.453
Children surviving	1.950	0.203	1,616	535	0.878	0.104	1.544	2.356
Children ever born to women age 40-49	4.906	0.156	285	98	1.078	0.032	4.595	5.217
Knows any contraceptive method	1.000	0.000	818	289	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	818	289	na	0.000	1.000	1.000
Currently using any method	0.621	0.018	818	289	1.080	0.030	0.584	0.658
Currently using a modern method	0.422	0.021	818	289	1.197	0.049	0.381	0.463
Currently using a traditional method	0.199	0.016	818	289	1.110	0.078	0.168	0.230
Currently using pill	0.097	0.011	818	289	1.085	0.116	0.075	0.120
Currently using IUD	0.204	0.015	818	289	1.072	0.074	0.174	0.234
Currently using condoms	0.064	0.009	818	289	1.029	0.137	0.047	0.082
Currently using injectables	0.013	0.004	818	289	0.912	0.274	0.006	0.021
Currently using female sterilization	0.026	0.006	818	289	1.045	0.224	0.014	0.038
Currently using rhythm	0.034	0.006	818	289	0.989	0.185	0.021	0.046
Currently using withdrawal	0.158	0.014	818	289	1.094	0.088	0.130	0.186
Used public sector source	0.502	0.025	335	118	0.919	0.050	0.451	0.552
Want no more children	0.489	0.021	818	289	1.183	0.042	0.447	0.530
Want to delay birth at least 2 years	0.277	0.017	818	289	1.090	0.062	0.243	0.311
Ideal number of children	4.121	0.072	827	289	1.012	0.017	3.978	4.265
Mothers received antenatal care for last birth	0.992	0.004	514	184	0.947	0.004	0.984	0.999
Mothers protected against tetanus for last birth	0.437	0.022	514	184	1.024	0.051	0.393	0.482
Births with skilled attendant at delivery	0.995	0.004	780	276	1.488	0.004	0.988	1.003
Had diarrhea in the last 2 weeks	0.164	0.015	753	268	1.062	0.092	0.134	0.195
Treated with ORS	0.133	0.028	124	44	0.868	0.208	0.078	0.188
Sought medical treatment for diarrhea	0.498	0.061	124	44	1.256	0.123	0.376	0.620
Vaccination card seen	0.872	0.031	157	57	1.179	0.036	0.810	0.934
Received BCG vaccination	0.994	0.006	157	57	0.947	0.006	0.983	1.006
Received DPT (3 doses) vaccination	0.966	0.018	157	57	1.231	0.018	0.931	1.001
Received polio (3 doses) vaccination	0.966	0.018	157	57	1.231	0.018	0.931	1.001
Received measles vaccination	0.932	0.021	157	57	1.073	0.023	0.889	0.974
Received all vaccinations	0.916	0.025	157	57	1.121	0.027	0.867	0.965
Height-for-age (below -2SD)	0.045	0.011	451	160	1.026	0.250	0.022	0.067
Weight-for-height (below -2SD)	0.020	0.006	451	160	0.975	0.320	0.007	0.032
Weight-for-age (below -2SD)	0.016	0.006	451	160	1.028	0.379	0.004	0.027
Prevalence of anemia (children 6-59 months)	0.246	0.025	391	138	1.140	0.101	0.197	0.296
Experienced physical violence since age 15 by anyone	0.327	0.025	538	190	1.252	0.077	0.277	0.378
Ever experienced any sexual violence	0.076	0.011	538	190	0.997	0.150	0.053	0.099
Experienced physical or sexual violence by husband	0.183	0.018	538	190	1.051	0.096	0.148	0.218
Experienced physical or sexual violence by husband in the last 12 months	0.137	0.014	538	190	0.955	0.103	0.109	0.166
Prevalence of anemia (women 15-49 years)	0.237	0.019	869	301	1.349	0.082	0.198	0.276
Body mass index (BMI) < 18.5	0.061	0.012	833	288	1.384	0.188	0.038	0.085
Total fertility rate (last 3 years)	3.481	0.158	4,549	1,527	0.953	0.045	3.165	3.796
Neonatal mortality rate (last 0-9 years)	17.888	4.192	1,499	531	0.985	0.234	9.503	26.272
Post-neonatal mortality rate (last 0-9 years)	7.286	2.010	1,492	527	0.928	0.276	3.267	11.306
Infant mortality rate (last 0-9 years)	25.174	4.977	1,499	531	1.029	0.198	15.220	35.128
Child mortality rate (last 0-9 years)	4.815	1.798	1,487	526	0.971	0.373	1.219	8.410
Under-5 mortality rate (last 0-9 years)	29.868	5.857	1,500	531	1.120	0.196	18.154	41.581

na = Not applicable

Table B.12 Sampling errors: Irbid sample, Jordan 2012

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.838	0.010	1,137	1,986	0.918	0.012	0.818	0.858
No education	0.011	0.004	1,137	1,986	1.307	0.376	0.003	0.018
Secondary education	0.461	0.018	1,137	1,986	1.213	0.039	0.425	0.497
Higher education	0.334	0.022	1,137	1,986	1.600	0.067	0.289	0.378
Currently married (in union)	0.532	0.037	2,024	3,559	0.995	0.070	0.457	0.606
Married before age 20	0.282	0.015	1,180	2,059	1.203	0.054	0.251	0.312
Currently pregnant	0.063	0.007	2,024	3,559	1.041	0.108	0.049	0.077
Children ever born	1.929	0.147	2,024	3,559	0.997	0.076	1.635	2.222
Children surviving	1.873	0.142	2,024	3,559	0.995	0.076	1.589	2.157
Children ever born to women age 40-49	4.584	0.124	384	681	0.969	0.027	4.336	4.833
Knows any contraceptive method	1.000	0.000	1,080	1,892	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	1,080	1,892	na	0.000	1.000	1.000
Currently using any method	0.617	0.014	1,080	1,892	0.951	0.023	0.589	0.645
Currently using a modern method	0.439	0.015	1,080	1,892	0.963	0.033	0.410	0.468
Currently using a traditional method	0.178	0.012	1,080	1,892	1.014	0.066	0.154	0.201
Currently using pill	0.094	0.010	1,080	1,892	1.083	0.102	0.075	0.113
Currently using IUD	0.220	0.014	1,080	1,892	1.133	0.065	0.192	0.249
Currently using condoms	0.073	0.010	1,080	1,892	1.230	0.134	0.053	0.092
Currently using injectables	0.006	0.002	1,080	1,892	0.984	0.379	0.002	0.011
Currently using female sterilization	0.031	0.005	1,080	1,892	1.007	0.171	0.021	0.042
Currently using rhythm	0.025	0.005	1,080	1,892	1.137	0.214	0.015	0.036
Currently using withdrawal	0.141	0.011	1,080	1,892	1.031	0.077	0.119	0.163
Used public sector source	0.519	0.030	461	803	1.302	0.059	0.458	0.580
Want no more children	0.476	0.014	1,080	1,892	0.946	0.030	0.447	0.505
Want to delay birth at least 2 years	0.260	0.014	1,080	1,892	1.051	0.054	0.232	0.288
Ideal number of children	3.939	0.062	1,127	1,971	1.145	0.016	3.814	4.063
Mothers received antenatal care for last birth	0.991	0.004	672	1,174	1.097	0.004	0.983	0.999
Mothers protected against tetanus for last birth	0.392	0.030	672	1,174	1.589	0.076	0.333	0.452
Births with skilled attendant at delivery	0.998	0.001	990	1,729	0.921	0.001	0.996	1.001
Had diarrhea in the last 2 weeks	0.181	0.015	968	1,696	1.144	0.085	0.151	0.212
Treated with ORS	0.180	0.034	180	308	1.026	0.189	0.112	0.247
Sought medical treatment for diarrhea	0.507	0.048	180	308	1.135	0.094	0.412	0.602
Vaccination card seen	0.867	0.031	195	332	1.252	0.036	0.806	0.929
Received BCG vaccination	1.000	0.000	195	332	na	0.000	1.000	1.000
Received DPT (3 doses) vaccination	0.992	0.008	195	332	1.219	0.008	0.977	1.008
Received polio (3 doses) vaccination	0.992	0.008	195	332	1.219	0.008	0.977	1.008
Received measles vaccination	0.956	0.015	195	332	0.992	0.015	0.927	0.986
Received all vaccinations	0.956	0.015	195	332	0.992	0.015	0.927	0.986
Height-for-age (below -2SD)	0.051	0.010	625	1,080	1.143	0.195	0.031	0.072
Weight-for-height (below -2SD)	0.022	0.005	625	1,080	0.928	0.246	0.011	0.033
Weight-for-age (below -2SD)	0.023	0.007	625	1,080	1.156	0.297	0.010	0.037
Prevalence of anemia (children 6-59 months)	0.342	0.030	557	960	1.417	0.088	0.282	0.402
Experienced physical violence since age 15 by anyone	0.345	0.021	684	1,245	1.180	0.062	0.302	0.388
Ever experienced any sexual violence	0.114	0.016	684	1,245	1.314	0.140	0.082	0.146
Experienced physical or sexual violence by husband	0.258	0.021	684	1,245	1.269	0.082	0.216	0.301
Experienced physical or sexual violence by husband in the last 12 months	0.147	0.015	684	1,245	1.141	0.105	0.116	0.178
Prevalence of anemia (women 15-49 years)	0.362	0.021	1,155	2,019	1.477	0.058	0.320	0.404
Body mass index (BMI) < 18.5	0.051	0.007	1,103	1,928	0.995	0.129	0.038	0.064
Total fertility rate (last 3 years)	3.576	0.140	5,701	9,976	0.954	0.039	3.296	3.857
Neonatal mortality rate (last 0-9 years)	14.036	3.793	1,889	3,260	0.984	0.270	6.450	21.622
Post-neonatal mortality rate (last 0-9 years)	2.617	1.115	1,892	3,269	0.899	0.426	0.387	4.847
Infant mortality rate (last 0-9 years)	16.653	4.019	1,889	3,260	0.998	0.241	8.615	24.692
Child mortality rate (last 0-9 years)	1.796	0.972	1,872	3,217	1.019	0.541	0.000	3.739
Under-5 mortality rate (last 0-9 years)	18.420	4.027	1,890	3,261	0.980	0.219	10.365	26.475

na = Not applicable

Table B.13 Sampling errors: Mafraq sample, Jordan 2012

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.429	0.022	1,000	562	1.373	0.050	0.386	0.472
No education	0.072	0.015	1,000	562	1.825	0.207	0.042	0.102
Secondary education	0.370	0.019	1,000	562	1.236	0.051	0.332	0.407
Higher education	0.266	0.020	1,000	562	1.411	0.074	0.226	0.305
Currently married (in union)	0.551	0.032	1,718	959	1.143	0.058	0.487	0.615
Married before age 20	0.317	0.017	1,025	578	1.239	0.055	0.283	0.352
Currently pregnant	0.060	0.006	1,718	959	0.991	0.104	0.047	0.072
Children ever born	2.180	0.142	1,718	959	1.100	0.065	1.895	2.465
Children surviving	2.098	0.137	1,718	959	1.099	0.065	1.825	2.372
Children ever born to women age 40-49	5.057	0.162	284	158	1.054	0.032	4.732	5.382
Knows any contraceptive method	1.000	0.000	935	528	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	935	528	na	0.000	1.000	1.000
Currently using any method	0.595	0.014	935	528	0.880	0.024	0.567	0.623
Currently using a modern method	0.367	0.015	935	528	0.933	0.040	0.338	0.397
Currently using a traditional method	0.228	0.012	935	528	0.898	0.054	0.203	0.253
Currently using pill	0.102	0.011	935	528	1.070	0.104	0.081	0.123
Currently using IUD	0.158	0.012	935	528	1.036	0.078	0.133	0.183
Currently using condoms	0.045	0.007	935	528	1.065	0.160	0.031	0.060
Currently using injectables	0.027	0.006	935	528	1.139	0.226	0.015	0.038
Currently using female sterilization	0.019	0.004	935	528	0.967	0.230	0.010	0.027
Currently using rhythm	0.020	0.005	935	528	0.996	0.226	0.011	0.030
Currently using withdrawal	0.188	0.011	935	528	0.889	0.061	0.165	0.210
Used public sector source	0.455	0.032	323	185	1.144	0.070	0.391	0.518
Want no more children	0.460	0.014	935	528	0.837	0.030	0.432	0.487
Want to delay birth at least 2 years	0.300	0.014	935	528	0.922	0.046	0.272	0.328
Ideal number of children	4.167	0.059	983	553	1.058	0.014	4.050	4.284
Mothers received antenatal care for last birth	0.993	0.004	647	366	1.220	0.004	0.986	1.001
Mothers protected against tetanus for last birth	0.161	0.016	647	366	1.122	0.101	0.129	0.194
Births with skilled attendant at delivery	0.993	0.003	1,016	574	0.908	0.003	0.988	0.998
Had diarrhea in the last 2 weeks	0.128	0.014	989	559	1.261	0.111	0.099	0.156
Treated with ORS	0.219	0.037	128	71	0.982	0.169	0.145	0.292
Sought medical treatment for diarrhea	0.592	0.042	128	71	0.908	0.071	0.508	0.676
Vaccination card seen	0.802	0.030	205	116	1.056	0.037	0.742	0.862
Received BCG vaccination	0.969	0.023	205	116	1.905	0.024	0.923	1.015
Received DPT (3 doses) vaccination	0.943	0.021	205	116	1.324	0.023	0.901	0.986
Received polio (3 doses) vaccination	0.948	0.021	205	116	1.354	0.022	0.906	0.990
Received measles vaccination	0.932	0.017	205	116	0.955	0.018	0.899	0.966
Received all vaccinations	0.900	0.028	205	116	1.341	0.031	0.844	0.956
Height-for-age (below -2SD)	0.104	0.014	645	369	1.015	0.129	0.077	0.131
Weight-for-height (below -2SD)	0.009	0.003	645	369	0.858	0.348	0.003	0.016
Weight-for-age (below -2SD)	0.023	0.006	645	369	1.051	0.271	0.010	0.035
Prevalence of anemia (children 6-59 months)	0.263	0.020	566	325	1.076	0.076	0.223	0.303
Experienced physical violence since age 15 by anyone	0.279	0.018	608	364	0.998	0.065	0.242	0.315
Ever experienced any sexual violence	0.079	0.011	608	364	1.009	0.139	0.057	0.102
Experienced physical or sexual violence by husband	0.209	0.020	608	364	1.230	0.097	0.168	0.249
Experienced physical or sexual violence by husband in the last 12 months	0.091	0.013	608	364	1.120	0.144	0.065	0.117
Prevalence of anemia (women 15-49 years)	0.304	0.016	979	557	1.081	0.052	0.273	0.336
Body mass index (BMI) < 18.5	0.042	0.007	948	538	1.015	0.158	0.028	0.055
Total fertility rate (last 3 years)	4.106	0.149	4,763	2,661	1.160	0.036	3.808	4.404
Neonatal mortality rate (last 0-9 years)	15.825	3.260	1,905	1,074	1.043	0.206	9.304	22.346
Post-neonatal mortality rate (last 0-9 years)	4.839	1.618	1,905	1,073	0.967	0.334	1.603	8.075
Infant mortality rate (last 0-9 years)	20.664	3.881	1,906	1,075	1.033	0.188	12.902	28.426
Child mortality rate (last 0-9 years)	2.093	1.055	1,870	1,052	0.966	0.504	0.000	4.204
Under-5 mortality rate (last 0-9 years)	22.714	3.916	1,907	1,075	1.031	0.172	14.881	30.547

na = Not applicable

Table B.14 Sampling errors: Jarash sample, Jordan 2012

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.609	0.017	945	320	1.098	0.029	0.574	0.644
No education	0.018	0.004	945	320	0.929	0.223	0.010	0.026
Secondary education	0.426	0.016	945	320	0.985	0.037	0.394	0.457
Higher education	0.319	0.019	945	320	1.228	0.058	0.282	0.356
Currently married (in union)	0.539	0.040	1,631	568	1.231	0.074	0.460	0.619
Married before age 20	0.366	0.019	984	333	1.281	0.051	0.329	0.403
Currently pregnant	0.055	0.006	1,631	568	0.975	0.108	0.043	0.067
Children ever born	2.238	0.173	1,631	568	1.144	0.077	1.893	2.584
Children surviving	2.172	0.170	1,631	568	1.162	0.078	1.832	2.511
Children ever born to women age 40-49	5.425	0.170	288	98	1.157	0.031	5.085	5.766
Knows any contraceptive method	1.000	0.000	902	306	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	902	306	na	0.000	1.000	1.000
Currently using any method	0.618	0.020	902	306	1.237	0.032	0.578	0.658
Currently using a modern method	0.427	0.018	902	306	1.121	0.043	0.390	0.463
Currently using a traditional method	0.192	0.016	902	306	1.215	0.083	0.160	0.223
Currently using pill	0.099	0.010	902	306	1.000	0.100	0.079	0.119
Currently using IUD	0.205	0.014	902	306	1.010	0.066	0.178	0.232
Currently using condoms	0.067	0.009	902	306	1.118	0.139	0.049	0.086
Currently using injectables	0.011	0.003	902	306	0.963	0.302	0.004	0.018
Currently using female sterilization	0.032	0.006	902	306	1.085	0.198	0.020	0.045
Currently using rhythm	0.030	0.007	902	306	1.297	0.246	0.015	0.045
Currently using withdrawal	0.142	0.015	902	306	1.275	0.104	0.113	0.172
Used public sector source	0.456	0.027	380	128	1.050	0.059	0.403	0.510
Want no more children	0.479	0.017	902	306	1.014	0.035	0.446	0.513
Want to delay birth at least 2 years	0.295	0.015	902	306	0.981	0.051	0.265	0.324
Ideal number of children	4.065	0.081	913	308	1.429	0.020	3.903	4.227
Mothers received antenatal care for last birth	0.992	0.004	612	207	0.979	0.004	0.985	0.999
Mothers protected against tetanus for last birth	0.332	0.020	612	207	1.074	0.062	0.291	0.373
Births with skilled attendant at delivery	0.999	0.001	977	333	1.211	0.001	0.996	1.001
Had diarrhea in the last 2 weeks	0.188	0.012	960	327	0.903	0.064	0.164	0.212
Treated with ORS	0.243	0.039	181	62	1.075	0.159	0.166	0.320
Sought medical treatment for diarrhea	0.572	0.036	181	62	0.939	0.064	0.499	0.645
Vaccination card seen	0.699	0.041	204	69	1.202	0.058	0.618	0.781
Received BCG vaccination	0.985	0.009	204	69	1.021	0.009	0.967	1.002
Received DPT (3 doses) vaccination	0.994	0.006	204	69	1.095	0.006	0.982	1.006
Received polio (3 doses) vaccination	0.994	0.006	204	69	1.095	0.006	0.982	1.006
Received measles vaccination	0.966	0.013	204	69	1.033	0.014	0.940	0.992
Received all vaccinations	0.963	0.014	204	69	1.025	0.014	0.935	0.990
Height-for-age (below -2SD)	0.092	0.014	631	217	1.091	0.154	0.063	0.120
Weight-for-height (below -2SD)	0.030	0.008	631	217	1.106	0.278	0.013	0.046
Weight-for-age (below -2SD)	0.038	0.009	631	217	0.964	0.223	0.021	0.055
Prevalence of anemia (children 6-59 months)	0.313	0.018	543	187	0.969	0.059	0.276	0.350
Experienced physical violence since age 15 by anyone	0.365	0.024	599	216	1.194	0.064	0.318	0.412
Ever experienced any sexual violence	0.110	0.016	599	216	1.281	0.149	0.077	0.143
Experienced physical or sexual violence by husband	0.288	0.024	599	216	1.274	0.082	0.240	0.335
Experienced physical or sexual violence by husband in the last 12 months	0.174	0.022	599	216	1.413	0.126	0.130	0.218
Prevalence of anemia (women 15-49 years)	0.351	0.019	983	333	1.218	0.053	0.314	0.388
Body mass index (BMI) < 18.5	0.036	0.007	921	312	1.136	0.194	0.022	0.050
Total fertility rate (last 3 years)	4.257	0.150	4,554	1,575	1.258	0.035	3.957	4.556
Neonatal mortality rate (last 0-9 years)	12.855	3.476	1,792	615	1.058	0.270	5.903	19.807
Post-neonatal mortality rate (last 0-9 years)	4.794	1.989	1,781	611	1.255	0.415	0.816	8.772
Infant mortality rate (last 0-9 years)	17.649	4.105	1,792	615	1.093	0.233	9.438	25.859
Child mortality rate (last 0-9 years)	1.984	1.024	1,742	598	0.986	0.516	0.000	4.031
Under-5 mortality rate (last 0-9 years)	19.598	4.229	1,793	615	1.069	0.216	11.140	28.056

na = Not applicable

Table B.15 Sampling errors: Ajloun sample, Jordan 2012

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.785	0.017	898	251	1.218	0.021	0.752	0.819
No education	0.016	0.004	898	251	0.900	0.233	0.009	0.024
Secondary education	0.446	0.017	898	251	1.051	0.039	0.411	0.481
Higher education	0.400	0.020	898	251	1.240	0.051	0.359	0.440
Currently married (in union)	0.557	0.035	1,534	429	0.971	0.062	0.488	0.626
Married before age 20	0.301	0.017	953	266	1.202	0.057	0.266	0.335
Currently pregnant	0.071	0.007	1,534	429	0.947	0.098	0.057	0.085
Children ever born	2.278	0.151	1,534	429	0.923	0.066	1.976	2.580
Children surviving	2.220	0.147	1,534	429	0.926	0.066	1.925	2.515
Children ever born to women age 40-49	5.516	0.146	299	81	0.969	0.026	5.225	5.808
Knows any contraceptive method	1.000	0.000	854	239	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	854	239	na	0.000	1.000	1.000
Currently using any method	0.616	0.014	854	239	0.829	0.022	0.588	0.644
Currently using a modern method	0.410	0.016	854	239	0.934	0.038	0.378	0.441
Currently using a traditional method	0.206	0.017	854	239	1.239	0.083	0.172	0.240
Currently using pill	0.041	0.007	854	239	0.971	0.160	0.028	0.054
Currently using IUD	0.264	0.017	854	239	1.096	0.063	0.231	0.298
Currently using condoms	0.066	0.009	854	239	1.044	0.135	0.048	0.083
Currently using injectables	0.006	0.003	854	239	1.214	0.533	0.000	0.013
Currently using female sterilization	0.020	0.005	854	239	0.953	0.227	0.011	0.029
Currently using rhythm	0.034	0.008	854	239	1.271	0.232	0.018	0.050
Currently using withdrawal	0.149	0.014	854	239	1.141	0.093	0.121	0.177
Used public sector source	0.393	0.026	342	96	0.995	0.067	0.340	0.446
Want no more children	0.485	0.017	854	239	1.020	0.036	0.450	0.520
Want to delay birth at least 2 years	0.255	0.014	854	239	0.929	0.054	0.228	0.283
Ideal number of children	4.324	0.061	893	250	1.049	0.014	4.201	4.447
Mothers received antenatal care for last birth	0.996	0.003	553	156	1.045	0.003	0.990	1.002
Mothers protected against tetanus for last birth	0.514	0.019	553	156	0.887	0.037	0.476	0.551
Births with skilled attendant at delivery	1.000	0.000	815	232	na	0.000	1.000	1.000
Had diarrhea in the last 2 weeks	0.165	0.015	804	229	1.092	0.091	0.135	0.195
Treated with ORS	0.137	0.029	135	38	0.944	0.213	0.079	0.196
Sought medical treatment for diarrhea	0.549	0.051	135	38	1.118	0.093	0.447	0.652
Vaccination card seen	0.870	0.027	158	45	1.025	0.031	0.815	0.925
Received BCG vaccination	1.000	0.000	158	45	na	0.000	1.000	1.000
Received DPT (3 doses) vaccination	0.980	0.011	158	45	0.978	0.011	0.959	1.002
Received polio (3 doses) vaccination	0.980	0.011	158	45	0.978	0.011	0.959	1.002
Received measles vaccination	0.946	0.020	158	45	1.097	0.021	0.907	0.986
Received all vaccinations	0.946	0.020	158	45	1.097	0.021	0.907	0.986
Height-for-age (below -2SD)	0.046	0.012	514	146	1.263	0.267	0.022	0.071
Weight-for-height (below -2SD)	0.012	0.005	514	146	0.943	0.420	0.002	0.022
Weight-for-age (below -2SD)	0.019	0.006	514	146	0.979	0.308	0.007	0.030
Prevalence of anemia (children 6-59 months)	0.372	0.026	463	131	1.149	0.071	0.319	0.425
Experienced physical violence since age 15 by anyone	0.212	0.021	559	164	1.219	0.099	0.170	0.255
Ever experienced any sexual violence	0.101	0.016	559	164	1.235	0.156	0.069	0.132
Experienced physical or sexual violence by husband	0.176	0.021	559	164	1.274	0.117	0.135	0.218
Experienced physical or sexual violence by husband in the last 12 months	0.087	0.013	559	164	1.060	0.145	0.062	0.113
Prevalence of anemia (women 15-49 years)	0.389	0.019	949	264	1.208	0.049	0.351	0.427
Body mass index (BMI) < 18.5	0.044	0.006	897	248	0.906	0.141	0.031	0.056
Total fertility rate (last 3 years)	3.817	0.144	4,447	1,246	1.126	0.038	3.530	4.104
Neonatal mortality rate (last 0-9 years)	9.173	2.056	1,637	460	0.872	0.224	5.060	13.285
Post-neonatal mortality rate (last 0-9 years)	4.567	1.546	1,646	462	0.940	0.338	1.476	7.659
Infant mortality rate (last 0-9 years)	13.740	2.473	1,637	460	0.874	0.180	8.794	18.687
Child mortality rate (last 0-9 years)	2.463	1.197	1,643	461	0.954	0.486	0.068	4.858
Under-5 mortality rate (last 0-9 years)	16.169	2.469	1,638	460	0.821	0.153	11.231	21.107

na = Not applicable

Table B.16 Sampling errors: Karak sample, Jordan 2012

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.392	0.033	873	441	2.001	0.085	0.325	0.458
No education	0.041	0.010	873	441	1.517	0.248	0.021	0.061
Secondary education	0.381	0.019	873	441	1.178	0.051	0.343	0.420
Higher education	0.406	0.031	873	441	1.861	0.076	0.344	0.468
Currently married (in union)	0.539	0.047	1,592	779	1.036	0.088	0.445	0.634
Married before age 20	0.225	0.015	971	493	1.140	0.066	0.195	0.254
Currently pregnant	0.057	0.007	1,592	779	1.023	0.128	0.043	0.072
Children ever born	2.081	0.192	1,592	779	1.021	0.092	1.697	2.466
Children surviving	2.013	0.186	1,592	779	1.021	0.092	1.641	2.384
Children ever born to women age 40-49	4.594	0.168	343	171	1.315	0.036	4.259	4.929
Knows any contraceptive method	1.000	0.000	831	420	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	831	420	na	0.000	1.000	1.000
Currently using any method	0.592	0.023	831	420	1.323	0.038	0.547	0.638
Currently using a modern method	0.400	0.019	831	420	1.124	0.048	0.361	0.438
Currently using a traditional method	0.193	0.016	831	420	1.190	0.085	0.160	0.225
Currently using pill	0.105	0.011	831	420	1.067	0.108	0.083	0.128
Currently using IUD	0.151	0.014	831	420	1.151	0.095	0.122	0.180
Currently using condoms	0.068	0.010	831	420	1.134	0.146	0.048	0.088
Currently using injectables	0.029	0.006	831	420	0.969	0.194	0.018	0.041
Currently using female sterilization	0.031	0.007	831	420	1.086	0.209	0.018	0.045
Currently using rhythm	0.034	0.008	831	420	1.294	0.240	0.018	0.050
Currently using withdrawal	0.156	0.014	831	420	1.139	0.092	0.128	0.185
Used public sector source	0.685	0.028	326	164	1.077	0.041	0.629	0.740
Want no more children	0.521	0.018	831	420	1.052	0.035	0.485	0.558
Want to delay birth at least 2 years	0.215	0.015	831	420	1.059	0.070	0.184	0.245
Ideal number of children	4.057	0.056	845	427	0.949	0.014	3.946	4.168
Mothers received antenatal care for last birth	0.993	0.006	521	269	1.594	0.006	0.981	1.005
Mothers protected against tetanus for last birth	0.317	0.042	521	269	2.060	0.132	0.233	0.400
Births with skilled attendant at delivery	0.995	0.004	791	410	1.196	0.004	0.987	1.003
Had diarrhea in the last 2 weeks	0.109	0.017	765	398	1.470	0.155	0.076	0.143
Treated with ORS	0.279	0.043	91	44	0.870	0.154	0.193	0.365
Sought medical treatment for diarrhea	0.704	0.059	91	44	1.097	0.083	0.586	0.822
Vaccination card seen	0.808	0.030	157	80	0.973	0.038	0.748	0.869
Received BCG vaccination	0.974	0.012	157	80	0.932	0.012	0.950	0.997
Received DPT (3 doses) vaccination	0.978	0.012	157	80	1.056	0.013	0.953	1.003
Received polio (3 doses) vaccination	0.978	0.012	157	80	1.056	0.013	0.953	1.003
Received measles vaccination	0.932	0.019	157	80	0.948	0.020	0.894	0.970
Received all vaccinations	0.904	0.027	157	80	1.147	0.030	0.851	0.958
Height-for-age (below -2SD)	0.111	0.017	492	257	1.164	0.150	0.078	0.144
Weight-for-height (below -2SD)	0.015	0.006	492	257	1.068	0.377	0.004	0.027
Weight-for-age (below -2SD)	0.027	0.007	492	257	0.954	0.265	0.013	0.042
Prevalence of anemia (children 6-59 months)	0.347	0.030	433	224	1.222	0.087	0.287	0.408
Experienced physical violence since age 15 by anyone	0.233	0.031	545	288	1.695	0.132	0.171	0.294
Ever experienced any sexual violence	0.051	0.010	545	288	1.056	0.195	0.031	0.071
Experienced physical or sexual violence by husband	0.136	0.028	545	288	1.915	0.207	0.080	0.193
Experienced physical or sexual violence by husband in the last 12 months	0.094	0.016	545	288	1.315	0.175	0.061	0.127
Prevalence of anemia (women 15-49 years)	0.356	0.021	922	459	1.352	0.060	0.313	0.399
Body mass index (BMI) < 18.5	0.039	0.008	885	440	1.263	0.210	0.023	0.056
Total fertility rate (last 3 years)	3.501	0.149	4,551	2,218	1.088	0.043	3.204	3.799
Neonatal mortality rate (last 0-9 years)	13.499	3.063	1,549	808	0.891	0.227	7.373	19.624
Post-neonatal mortality rate (last 0-9 years)	5.928	2.176	1,549	805	1.020	0.367	1.576	10.279
Infant mortality rate (last 0-9 years)	19.426	4.235	1,549	808	1.008	0.218	10.957	27.895
Child mortality rate (last 0-9 years)	4.361	2.157	1,530	793	1.096	0.494	0.048	8.675
Under-5 mortality rate (last 0-9 years)	23.703	5.092	1,549	808	1.075	0.215	13.519	33.886

na = Not applicable

Table B.17 Sampling errors: Tafiela sample, Jordan 2012

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.711	0.036	819	167	2.285	0.051	0.639	0.784
No education	0.049	0.006	819	167	0.813	0.126	0.037	0.061
Secondary education	0.353	0.028	819	167	1.667	0.079	0.297	0.408
Higher education	0.378	0.026	819	167	1.538	0.069	0.325	0.430
Currently married (in union)	0.563	0.046	1,483	285	0.883	0.082	0.471	0.656
Married before age 20	0.308	0.018	844	172	1.139	0.058	0.273	0.344
Currently pregnant	0.077	0.011	1,483	285	1.175	0.148	0.054	0.100
Children ever born	2.246	0.195	1,483	285	0.872	0.087	1.856	2.635
Children surviving	2.158	0.192	1,483	285	0.897	0.089	1.774	2.543
Children ever born to women age 40-49	5.469	0.130	249	54	0.792	0.024	5.209	5.729
Knows any contraceptive method	1.000	0.000	788	161	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	788	161	na	0.000	1.000	1.000
Currently using any method	0.641	0.030	788	161	1.769	0.047	0.581	0.702
Currently using a modern method	0.415	0.027	788	161	1.508	0.064	0.362	0.468
Currently using a traditional method	0.226	0.017	788	161	1.122	0.074	0.193	0.260
Currently using pill	0.113	0.013	788	161	1.134	0.113	0.088	0.139
Currently using IUD	0.137	0.022	788	161	1.795	0.161	0.093	0.181
Currently using condoms	0.072	0.010	788	161	1.065	0.136	0.052	0.092
Currently using injectables	0.009	0.004	788	161	1.239	0.461	0.001	0.017
Currently using female sterilization	0.056	0.008	788	161	0.996	0.146	0.040	0.072
Currently using rhythm	0.021	0.005	788	161	1.044	0.254	0.010	0.032
Currently using withdrawal	0.200	0.018	788	161	1.274	0.091	0.163	0.236
Used public sector source	0.749	0.043	316	64	1.764	0.058	0.662	0.835
Want no more children	0.549	0.019	788	161	1.083	0.035	0.511	0.587
Want to delay birth at least 2 years	0.275	0.012	788	161	0.779	0.045	0.250	0.299
Ideal number of children	3.992	0.085	772	156	1.182	0.021	3.823	4.162
Mothers received antenatal care for last birth	0.993	0.004	521	103	0.963	0.004	0.985	1.000
Mothers protected against tetanus for last birth	0.291	0.025	521	103	1.217	0.085	0.242	0.341
Births with skilled attendant at delivery	0.993	0.004	811	157	1.248	0.004	0.986	1.001
Had diarrhea in the last 2 weeks	0.151	0.016	798	155	1.167	0.108	0.119	0.184
Treated with ORS	0.102	0.025	120	23	0.880	0.248	0.051	0.152
Sought medical treatment for diarrhea	0.636	0.057	120	23	1.185	0.089	0.522	0.749
Vaccination card seen	0.711	0.050	146	29	1.286	0.071	0.611	0.812
Received BCG vaccination	0.907	0.047	146	29	1.906	0.052	0.813	1.001
Received DPT (3 doses) vaccination	0.938	0.036	146	29	1.781	0.039	0.866	1.011
Received polio (3 doses) vaccination	0.938	0.036	146	29	1.781	0.039	0.866	1.011
Received measles vaccination	0.922	0.034	146	29	1.516	0.037	0.853	0.991
Received all vaccinations	0.880	0.046	146	29	1.664	0.052	0.789	0.972
Height-for-age (below -2SD)	0.099	0.012	503	98	0.820	0.121	0.075	0.123
Weight-for-height (below -2SD)	0.027	0.006	503	98	0.819	0.220	0.015	0.039
Weight-for-age (below -2SD)	0.031	0.007	503	98	0.842	0.213	0.018	0.044
Prevalence of anemia (children 6-59 months)	0.219	0.023	437	87	1.158	0.105	0.173	0.265
Experienced physical violence since age 15 by anyone	0.326	0.024	527	109	1.157	0.073	0.279	0.373
Ever experienced any sexual violence	0.074	0.017	527	109	1.474	0.228	0.040	0.107
Experienced physical or sexual violence by husband	0.220	0.019	527	109	1.033	0.085	0.182	0.257
Experienced physical or sexual violence by husband in the last 12 months	0.146	0.018	527	109	1.150	0.121	0.111	0.182
Prevalence of anemia (women 15-49 years)	0.329	0.027	822	166	1.674	0.083	0.274	0.384
Body mass index (BMI) < 18.5	0.039	0.007	767	155	0.974	0.174	0.026	0.053
Total fertility rate (last 3 years)	3.918	0.191	4,232	823	1.029	0.049	3.535	4.301
Neonatal mortality rate (last 0-9 years)	15.975	4.137	1,526	303	1.087	0.259	7.701	24.249
Post-neonatal mortality rate (last 0-9 years)	10.085	3.815	1,525	303	1.346	0.378	2.455	17.714
Infant mortality rate (last 0-9 years)	26.059	6.124	1,526	303	1.374	0.235	13.811	38.308
Child mortality rate (last 0-9 years)	5.097	1.805	1,498	300	0.933	0.354	1.486	8.707
Under-5 mortality rate (last 0-9 years)	31.023	6.305	1,528	304	1.335	0.203	18.413	43.633

na = Not applicable

Table B.18 Sampling errors: Ma'an sample, Jordan 2012

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.634	0.049	781	178	2.806	0.077	0.537	0.732
No education	0.133	0.046	781	178	3.751	0.345	0.041	0.226
Secondary education	0.292	0.036	781	178	2.230	0.125	0.219	0.365
Higher education	0.265	0.038	781	178	2.405	0.144	0.189	0.342
Currently married (in union)	0.499	0.057	1514	326	1.180	0.114	0.385	0.613
Married before age 20	0.357	0.034	861	193	2.157	0.096	0.288	0.426
Currently pregnant	0.050	0.008	1,514	326	1.139	0.164	0.034	0.066
Children ever born	2.394	0.321	1,514	326	1.299	0.134	1.752	3.037
Children surviving	2.298	0.307	1,514	326	1.295	0.134	1.684	2.911
Children ever born to women age 40-49	5.903	0.177	291	69	0.994	0.030	5.549	6.257
Knows any contraceptive method	1.000	0.000	726	163	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	726	163	na	0.000	1.000	1.000
Currently using any method	0.584	0.028	726	163	1.507	0.047	0.529	0.640
Currently using a modern method	0.307	0.026	726	163	1.533	0.086	0.254	0.360
Currently using a traditional method	0.277	0.014	726	163	0.860	0.052	0.249	0.306
Currently using pill	0.060	0.010	726	163	1.130	0.166	0.040	0.080
Currently using IUD	0.105	0.013	726	163	1.182	0.128	0.078	0.132
Currently using condoms	0.072	0.009	726	163	0.977	0.130	0.053	0.091
Currently using injectables	0.008	0.004	726	163	1.327	0.556	0.000	0.016
Currently using female sterilization	0.046	0.013	726	163	1.658	0.280	0.020	0.072
Currently using rhythm	0.035	0.008	726	163	1.095	0.212	0.020	0.050
Currently using withdrawal	0.234	0.015	726	163	0.952	0.064	0.204	0.264
Used public sector source	0.584	0.043	227	48	1.297	0.073	0.499	0.670
Want no more children	0.547	0.018	726	163	0.967	0.033	0.512	0.583
Want to delay birth at least 2 years	0.221	0.016	726	163	1.008	0.070	0.190	0.252
Ideal number of children	4.348	0.145	736	169	1.892	0.033	4.058	4.639
Mothers received antenatal care for last birth	0.975	0.007	454	104	1.016	0.008	0.960	0.990
Mothers protected against tetanus for last birth	0.305	0.017	454	104	0.795	0.056	0.270	0.339
Births with skilled attendant at delivery	0.989	0.007	708	170	1.831	0.007	0.975	1.003
Had diarrhea in the last 2 weeks	0.129	0.018	687	166	1.254	0.136	0.094	0.164
Treated with ORS	0.234	0.031	84	21	0.682	0.132	0.172	0.297
Sought medical treatment for diarrhea	0.695	0.047	84	21	0.893	0.067	0.602	0.789
Vaccination card seen	0.762	0.028	143	36	0.819	0.037	0.705	0.819
Received BCG vaccination	0.888	0.060	143	36	2.361	0.067	0.768	1.007
Received DPT (3 doses) vaccination	0.835	0.089	143	36	2.980	0.107	0.656	1.013
Received polio (3 doses) vaccination	0.835	0.089	143	36	2.980	0.107	0.656	1.013
Received measles vaccination	0.800	0.072	143	36	2.232	0.090	0.656	0.943
Received all vaccinations	0.788	0.070	143	36	2.139	0.089	0.648	0.929
Height-for-age (below -2SD)	0.185	0.036	443	105	1.839	0.193	0.114	0.257
Weight-for-height (below -2SD)	0.032	0.011	443	105	1.343	0.329	0.011	0.054
Weight-for-age (below -2SD)	0.062	0.020	443	105	1.789	0.323	0.022	0.102
Prevalence of anemia (children 6-59 months)	0.381	0.041	379	88	1.580	0.107	0.300	0.463
Experienced physical violence since age 15 by anyone	0.252	0.040	485	114	2.036	0.160	0.171	0.332
Ever experienced any sexual violence	0.075	0.013	485	114	1.062	0.169	0.050	0.101
Experienced physical or sexual violence by husband	0.200	0.021	485	114	1.150	0.105	0.158	0.242
Experienced physical or sexual violence by husband in the last 12 months	0.110	0.017	485	114	1.220	0.158	0.075	0.144
Prevalence of anemia (women 15-49 years)	0.303	0.020	830	189	1.244	0.066	0.263	0.342
Body mass index (BMI) < 18.5	0.052	0.008	799	184	0.984	0.148	0.037	0.068
Total fertility rate (last 3 years)	4.086	0.387	4,227	919	1.315	0.095	3.312	4.860
Neonatal mortality rate (last 0-9 years)	11.704	3.764	1,475	350	1.028	0.322	4.176	19.232
Post-neonatal mortality rate (last 0-9 years)	10.491	3.890	1,477	350	1.492	0.371	2.711	18.270
Infant mortality rate (last 0-9 years)	22.194	5.937	1,476	351	1.449	0.267	10.321	34.068
Child mortality rate (last 0-9 years)	6.686	2.663	1,460	344	1.297	0.398	1.360	12.012
Under-5 mortality rate (last 0-9 years)	28.732	7.266	1,477	351	1.705	0.253	14.199	43.264

na = Not applicable

Table B.19 Sampling errors: Aqaba sample, Jordan 2012

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.904	0.019	848	265	1.875	0.021	0.866	0.942
No education	0.042	0.010	848	265	1.432	0.234	0.023	0.062
Secondary education	0.465	0.033	848	265	1.895	0.070	0.400	0.530
Higher education	0.321	0.043	848	265	2.691	0.135	0.234	0.407
Currently married (in union)	0.571	0.052	1,385	442	1.316	0.091	0.467	0.675
Married before age 20	0.337	0.022	842	260	1.360	0.064	0.293	0.380
Currently pregnant	0.054	0.008	1,385	442	1.208	0.141	0.039	0.069
Children ever born	2.180	0.259	1,385	442	1.552	0.119	1.662	2.697
Children surviving	2.113	0.248	1,385	442	1.540	0.118	1.617	2.610
Children ever born to women age 40-49	5.048	0.121	319	89	0.937	0.024	4.805	5.291
Knows any contraceptive method	1.000	0.000	796	253	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	796	253	na	0.000	1.000	1.000
Currently using any method	0.637	0.018	796	253	1.065	0.029	0.601	0.673
Currently using a modern method	0.432	0.019	796	253	1.109	0.045	0.393	0.471
Currently using a traditional method	0.205	0.014	796	253	0.994	0.070	0.176	0.233
Currently using pill	0.087	0.009	796	253	0.861	0.099	0.070	0.104
Currently using IUD	0.270	0.027	796	253	1.740	0.102	0.215	0.325
Currently using condoms	0.047	0.017	796	253	2.211	0.354	0.014	0.080
Currently using injectables	0.006	0.002	796	253	0.898	0.406	0.001	0.011
Currently using female sterilization	0.011	0.004	796	253	1.117	0.375	0.003	0.019
Currently using rhythm	0.031	0.008	796	253	1.298	0.255	0.015	0.048
Currently using withdrawal	0.154	0.012	796	253	0.942	0.078	0.130	0.179
Used public sector source	0.440	0.037	315	107	1.306	0.083	0.367	0.513
Want no more children	0.528	0.016	796	253	0.880	0.029	0.497	0.559
Want to delay birth at least 2 years	0.246	0.024	796	253	1.568	0.098	0.198	0.294
Ideal number of children	4.031	0.070	813	253	1.117	0.017	3.891	4.170
Mothers received antenatal care for last birth	0.999	0.001	457	146	0.812	0.001	0.996	1.001
Mothers protected against tetanus for last birth	0.238	0.036	457	146	1.851	0.153	0.166	0.311
Births with skilled attendant at delivery	1.000	0.000	660	215	na	0.000	1.000	1.000
Had diarrhea in the last 2 weeks	0.084	0.021	646	211	1.754	0.252	0.042	0.126
Treated with ORS	0.252	0.048	71	18	0.773	0.192	0.156	0.349
Sought medical treatment for diarrhea	0.634	0.065	71	18	0.961	0.103	0.504	0.764
Vaccination card seen	0.674	0.077	124	44	1.944	0.115	0.519	0.829
Received BCG vaccination	0.971	0.017	124	44	1.182	0.017	0.937	1.004
Received DPT (3 doses) vaccination	0.958	0.025	124	44	1.457	0.026	0.909	1.007
Received polio (3 doses) vaccination	0.958	0.025	124	44	1.457	0.026	0.909	1.007
Received measles vaccination	0.953	0.020	124	44	1.100	0.020	0.914	0.992
Received all vaccinations	0.937	0.029	124	44	1.430	0.031	0.879	0.996
Height-for-age (below -2SD)	0.104	0.027	361	107	1.594	0.257	0.050	0.158
Weight-for-height (below -2SD)	0.010	0.005	361	107	0.971	0.501	0.000	0.020
Weight-for-age (below -2SD)	0.026	0.009	361	107	0.912	0.351	0.008	0.044
Prevalence of anemia (children 6-59 months)	0.286	0.057	341	104	2.205	0.200	0.171	0.400
Experienced physical violence since age 15 by anyone	0.281	0.035	538	171	1.779	0.123	0.212	0.351
Ever experienced any sexual violence	0.080	0.018	538	171	1.516	0.222	0.044	0.115
Experienced physical or sexual violence by husband	0.208	0.029	538	171	1.671	0.141	0.150	0.267
Experienced physical or sexual violence by husband in the last 12 months	0.146	0.032	538	171	2.112	0.221	0.081	0.210
Prevalence of anemia (women 15-49 years)	0.365	0.024	768	235	1.361	0.065	0.318	0.413
Body mass index (BMI) < 18.5	0.051	0.011	754	230	1.315	0.208	0.030	0.072
Total fertility rate (last 3 years)	3.690	0.234	3,844	1,233	0.795	0.063	3.223	4.157
Neonatal mortality rate (last 0-9 years)	17.177	5.917	1,412	456	1.377	0.344	5.343	29.010
Post-neonatal mortality rate (last 0-9 years)	6.104	2.501	1,415	456	1.160	0.410	1.102	11.105
Infant mortality rate (last 0-9 years)	23.280	6.868	1,412	456	1.377	0.295	9.545	37.016
Child mortality rate (last 0-9 years)	1.928	1.076	1,435	463	0.938	0.558	0.000	4.080
Under-5 mortality rate (last 0-9 years)	25.164	7.037	1,413	456	1.378	0.280	11.090	39.237

na = Not applicable

Table B.20 Sampling errors: Non Badia sample, Jordan 2012

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.869	0.004	10,087	10,647	1.331	0.005	0.860	0.878
No education	0.017	0.003	10,087	10,647	2.095	0.161	0.011	0.022
Secondary education	0.453	0.009	10,087	10,647	1.824	0.020	0.435	0.471
Higher education	0.313	0.011	10,087	10,647	2.374	0.035	0.291	0.335
Currently married (in union)	0.544	0.017	17,783	18,640	1.279	0.031	0.511	0.577
Married before age 20	0.308	0.007	10,672	11,165	1.674	0.023	0.294	0.322
Currently pregnant	0.054	0.003	17,783	18,640	1.452	0.055	0.048	0.059
Children ever born	2.018	0.069	17,783	18,640	1.331	0.034	1.879	2.156
Children surviving	1.955	0.067	17,783	18,640	1.324	0.034	1.822	2.088
Children ever born to women age 40-49	4.508	0.074	3,446	3,786	1.796	0.016	4.360	4.655
Knows any contraceptive method	1.000	0.000	9,554	10,135	1.033	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	9,554	10,135	1.033	0.000	1.000	1.000
Currently using any method	0.614	0.008	9,554	10,135	1.554	0.013	0.598	0.629
Currently using a modern method	0.427	0.008	9,554	10,135	1.528	0.018	0.411	0.442
Currently using a traditional method	0.187	0.006	9,554	10,135	1.391	0.030	0.176	0.198
Currently using pill	0.078	0.005	9,554	10,135	1.841	0.065	0.068	0.088
Currently using IUD	0.219	0.008	9,554	10,135	1.916	0.037	0.202	0.235
Currently using condoms	0.081	0.005	9,554	10,135	1.788	0.061	0.071	0.091
Currently using injectables	0.008	0.001	9,554	10,135	1.398	0.157	0.006	0.011
Currently using female sterilization	0.022	0.003	9,554	10,135	1.856	0.127	0.016	0.027
Currently using rhythm	0.036	0.004	9,554	10,135	1.927	0.101	0.029	0.044
Currently using withdrawal	0.141	0.005	9,554	10,135	1.513	0.038	0.131	0.152
Used public sector source	0.435	0.015	3,892	4,172	1.871	0.034	0.405	0.465
Want no more children	0.530	0.009	9,554	10,135	1.721	0.017	0.512	0.547
Want to delay birth at least 2 years	0.227	0.007	9,554	10,135	1.730	0.033	0.212	0.242
Ideal number of children	3.907	0.033	9,783	10,258	1.698	0.008	3.842	3.972
Mothers received antenatal care for last birth	0.991	0.002	5,972	6,108	1.696	0.002	0.987	0.995
Mothers protected against tetanus for last birth	0.316	0.012	5,972	6,108	2.028	0.039	0.291	0.341
Births with skilled attendant at delivery	0.997	0.001	9,012	9,064	1.914	0.001	0.994	0.999
Had diarrhea in the last 2 weeks	0.157	0.008	8,811	8,884	1.984	0.053	0.140	0.174
Treated with ORS	0.200	0.021	1,353	1,396	1.726	0.102	0.159	0.241
Sought medical treatment for diarrhea	0.552	0.028	1,353	1,396	1.936	0.051	0.496	0.609
Vaccination card seen	0.804	0.017	1,741	1,772	1.773	0.021	0.769	0.838
Received BCG vaccination	0.986	0.009	1,741	1,772	3.208	0.009	0.968	1.004
Received DPT (3 doses) vaccination	0.991	0.002	1,741	1,772	0.959	0.002	0.986	0.995
Received polio (3 doses) vaccination	0.991	0.002	1,741	1,772	0.968	0.002	0.986	0.995
Received measles vaccination	0.950	0.010	1,741	1,772	1.834	0.010	0.931	0.970
Received all vaccinations	0.937	0.013	1,741	1,772	2.200	0.014	0.911	0.963
Height-for-age (below -2SD)	0.073	0.006	5,552	5,383	1.545	0.087	0.060	0.086
Weight-for-height (below -2SD)	0.024	0.003	5,552	5,383	1.502	0.134	0.018	0.030
Weight-for-age (below -2SD)	0.030	0.004	5,552	5,383	1.720	0.147	0.021	0.039
Prevalence of anemia (children 6-59 months)	0.317	0.013	4,890	4,700	1.793	0.040	0.292	0.343
Experienced physical violence since age 15 by anyone	0.345	0.010	6,241	6,565	1.742	0.030	0.324	0.366
Ever experienced any sexual violence	0.092	0.007	6,241	6,565	1.975	0.079	0.078	0.106
Experienced physical or sexual violence by husband	0.236	0.010	6,241	6,565	1.916	0.044	0.216	0.257
Experienced physical or sexual violence by husband in the last 12 months	0.142	0.008	6,241	6,565	1.760	0.055	0.126	0.157
Prevalence of anemia (women 15-49 years)	0.337	0.009	9,984	10,027	1.960	0.028	0.318	0.355
Body mass index (BMI) < 18.5	0.051	0.004	9,554	9,646	1.797	0.080	0.042	0.059
Total fertility rate (last 3 years)	3.443	0.069	48,950	52,507	1.688	0.020	3.304	3.582
Neonatal mortality rate (last 0-9 years)	12.233	1.599	17,755	17,740	1.579	0.131	9.034	15.432
Post-neonatal mortality rate (last 0-9 years)	5.090	0.975	17,748	17,715	1.764	0.192	3.140	7.040
Infant mortality rate (last 0-9 years)	17.323	2.112	17,757	17,741	1.799	0.122	13.099	21.547
Child mortality rate (last 0-9 years)	3.244	0.756	17,607	17,573	1.601	0.233	1.732	4.756
Under-5 mortality rate (last 0-9 years)	20.511	2.155	17,770	17,747	1.730	0.105	16.200	24.822

Table B.21 Sampling errors: Badia sample, Jordan 2012

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.296	0.031	1,265	705	2.374	0.103	0.235	0.357
No education	0.128	0.022	1,265	705	2.338	0.172	0.084	0.172
Secondary education	0.359	0.029	1,265	705	2.146	0.081	0.301	0.417
Higher education	0.202	0.017	1,265	705	1.495	0.084	0.168	0.236
Currently married (in union)	0.533	0.034	2,232	1,250	1.174	0.064	0.465	0.601
Married before age 20	0.357	0.018	1,312	724	1.395	0.050	0.321	0.392
Currently pregnant	0.068	0.007	2,232	1,250	1.142	0.101	0.055	0.082
Children ever born	2.223	0.167	2,232	1,250	1.225	0.075	1.888	2.557
Children surviving	2.145	0.160	2,232	1,250	1.217	0.075	1.825	2.465
Children ever born to women age 40-49	5.577	0.197	391	214	1.359	0.035	5.183	5.971
Knows any contraceptive method	1.000	0.000	1,192	666	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	1,192	666	na	0.000	1.000	1.000
Currently using any method	0.578	0.017	1,192	666	1.200	0.030	0.544	0.612
Currently using a modern method	0.366	0.018	1,192	666	1.313	0.050	0.329	0.402
Currently using a traditional method	0.212	0.014	1,192	666	1.207	0.067	0.184	0.241
Currently using pill	0.124	0.011	1,192	666	1.178	0.091	0.102	0.147
Currently using IUD	0.128	0.014	1,192	666	1.454	0.110	0.100	0.156
Currently using condoms	0.041	0.005	1,192	666	0.902	0.127	0.030	0.051
Currently using injectables	0.027	0.006	1,192	666	1.343	0.236	0.014	0.039
Currently using female sterilization	0.026	0.004	1,192	666	0.912	0.160	0.018	0.035
Currently using rhythm	0.019	0.004	1,192	666	1.082	0.223	0.011	0.028
Currently using withdrawal	0.174	0.012	1,192	666	1.114	0.070	0.149	0.198
Used public sector source	0.543	0.034	416	232	1.399	0.063	0.475	0.612
Want no more children	0.495	0.017	1,192	666	1.168	0.034	0.461	0.529
Want to delay birth at least 2 years	0.290	0.012	1,192	666	0.934	0.042	0.265	0.315
Ideal number of children	4.304	0.062	1,200	680	1.092	0.015	4.179	4.429
Mothers received antenatal care for last birth	0.990	0.003	839	469	0.970	0.003	0.984	0.997
Mothers protected against tetanus for last birth	0.218	0.020	839	469	1.384	0.090	0.178	0.257
Births with skilled attendant at delivery	0.993	0.003	1,348	769	1.043	0.003	0.988	0.998
Had diarrhea in the last 2 weeks	0.140	0.015	1,317	753	1.427	0.104	0.111	0.169
Treated with ORS	0.254	0.034	187	105	1.008	0.133	0.186	0.321
Sought medical treatment for diarrhea	0.625	0.038	187	105	1.000	0.061	0.549	0.701
Vaccination card seen	0.804	0.030	289	169	1.285	0.037	0.745	0.864
Received BCG vaccination	0.948	0.023	289	169	1.785	0.024	0.902	0.994
Received DPT (3 doses) vaccination	0.913	0.030	289	169	1.838	0.033	0.854	0.973
Received polio (3 doses) vaccination	0.913	0.030	289	169	1.838	0.033	0.854	0.973
Received measles vaccination	0.881	0.032	289	169	1.704	0.036	0.818	0.945
Received all vaccinations	0.857	0.035	289	169	1.722	0.041	0.787	0.926
Height-for-age (below -2SD)	0.118	0.016	816	468	1.289	0.132	0.087	0.149
Weight-for-height (below -2SD)	0.026	0.007	816	468	1.233	0.257	0.013	0.039
Weight-for-age (below -2SD)	0.029	0.008	816	468	1.311	0.261	0.014	0.044
Prevalence of anemia (children 6-59 months)	0.393	0.022	730	420	1.178	0.057	0.348	0.438
Experienced physical violence since age 15 by anyone	0.316	0.033	786	462	1.986	0.105	0.250	0.382
Ever experienced any sexual violence	0.094	0.019	786	462	1.782	0.198	0.056	0.131
Experienced physical or sexual violence by husband	0.238	0.024	786	462	1.551	0.099	0.191	0.286
Experienced physical or sexual violence by husband in the last 12 months	0.130	0.020	786	462	1.667	0.154	0.090	0.171
Prevalence of anemia (women 15-49 years)	0.305	0.015	1,265	707	1.192	0.051	0.274	0.336
Body mass index (BMI) < 18.5	0.050	0.010	1,193	666	1.617	0.204	0.030	0.071
Total fertility rate (last 3 years)	4.442	0.181	6,055	3,430	1.364	0.041	4.079	4.804
Neonatal mortality rate (last 0-9 years)	11.657	2.915	2,508	1,405	1.276	0.250	5.828	17.487
Post-neonatal mortality rate (last 0-9 years)	6.258	1.793	2,510	1,405	1.163	0.286	2.673	9.844
Infant mortality rate (last 0-9 years)	17.916	4.148	2,509	1,406	1.458	0.232	9.620	26.211
Child mortality rate (last 0-9 years)	2.177	0.927	2,461	1,360	0.955	0.426	0.324	4.030
Under-5 mortality rate (last 0-9 years)	20.054	4.241	2,510	1,406	1.462	0.211	11.572	28.536

na = Not applicable

Table B.22 Sampling errors: Non camp sample, Jordan 2012

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	0.827	0.005	10,448	10,939	1.380	0.006	0.817	0.837
No education	0.024	0.003	10,448	10,939	2.030	0.128	0.018	0.030
Secondary education	0.446	0.009	10,448	10,939	1.857	0.020	0.428	0.465
Higher education	0.311	0.011	10,448	10,939	2.362	0.034	0.289	0.332
Currently married (in union)	0.542	0.017	18,482	19,216	1.253	0.031	0.508	0.576
Married before age 20	0.308	0.007	11,070	11,473	1.677	0.023	0.294	0.322
Currently pregnant	0.055	0.003	18,482	19,216	1.423	0.054	0.049	0.060
Children ever born	2.015	0.070	18,482	19,216	1.309	0.035	1.874	2.155
Children surviving	1.952	0.068	18,482	19,216	1.303	0.035	1.816	2.087
Children ever born to women age 40-49	4.547	0.073	3,529	3,859	1.783	0.016	4.401	4.693
Knows any contraceptive method	1.000	0.000	9,898	10,414	1.037	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	9,898	10,414	1.037	0.000	1.000	1.000
Currently using any method	0.612	0.008	9,898	10,414	1.548	0.012	0.597	0.627
Currently using a modern method	0.422	0.008	9,898	10,414	1.529	0.018	0.407	0.437
Currently using a traditional method	0.190	0.005	9,898	10,414	1.381	0.029	0.179	0.201
Currently using pill	0.080	0.005	9,898	10,414	1.825	0.062	0.070	0.090
Currently using IUD	0.213	0.008	9,898	10,414	1.927	0.037	0.197	0.229
Currently using condoms	0.079	0.005	9,898	10,414	1.794	0.062	0.069	0.088
Currently using injectables	0.009	0.001	9,898	10,414	1.353	0.139	0.007	0.012
Currently using female sterilization	0.022	0.003	9,898	10,414	1.829	0.122	0.017	0.028
Currently using rhythm	0.036	0.004	9,898	10,414	1.931	0.101	0.028	0.043
Currently using withdrawal	0.144	0.005	9,898	10,414	1.492	0.037	0.134	0.155
Used public sector source	0.453	0.015	3,932	4,232	1.861	0.033	0.423	0.482
Want no more children	0.527	0.009	9,898	10,414	1.712	0.016	0.509	0.544
Want to delay birth at least 2 years	0.233	0.007	9,898	10,414	1.697	0.031	0.218	0.247
Ideal number of children	3.921	0.032	10,118	10,543	1.692	0.008	3.857	3.985
Mothers received antenatal care for last birth	0.991	0.002	6,256	6,324	1.656	0.002	0.987	0.995
Mothers protected against tetanus for last birth	0.301	0.012	6,256	6,324	2.040	0.040	0.277	0.325
Births with skilled attendant at delivery	0.996	0.001	9,510	9,446	1.824	0.001	0.994	0.999
Had diarrhea in the last 2 weeks	0.155	0.008	9,301	9,260	1.974	0.053	0.138	0.171
Treated with ORS	0.206	0.020	1,390	1,433	1.704	0.097	0.166	0.246
Sought medical treatment for diarrhea	0.559	0.027	1,390	1,433	1.912	0.049	0.504	0.614
Vaccination card seen	0.802	0.016	1,882	1,873	1.740	0.021	0.769	0.835
Received BCG vaccination	0.982	0.009	1,882	1,873	2.873	0.009	0.965	1.000
Received DPT (3 doses) vaccination	0.983	0.004	1,882	1,873	1.183	0.004	0.976	0.991
Received polio (3 doses) vaccination	0.984	0.004	1,882	1,873	1.190	0.004	0.977	0.991
Received measles vaccination	0.943	0.010	1,882	1,873	1.772	0.010	0.924	0.963
Received all vaccinations	0.928	0.013	1,882	1,873	2.098	0.014	0.903	0.954
Height-for-age (below -2SD)	0.076	0.006	5,833	5,606	1.532	0.082	0.063	0.088
Weight-for-height (below -2SD)	0.024	0.003	5,833	5,606	1.503	0.130	0.018	0.030
Weight-for-age (below -2SD)	0.029	0.004	5,833	5,606	1.730	0.145	0.021	0.038
Prevalence of anemia (children 6-59 months)	0.322	0.012	5,135	4,897	1.755	0.038	0.297	0.346
Experienced physical violence since age 15 by anyone	0.339	0.010	6,476	6,753	1.770	0.031	0.318	0.360
Ever experienced any sexual violence	0.091	0.007	6,476	6,753	1.992	0.078	0.077	0.105
Experienced physical or sexual violence by husband	0.232	0.010	6,476	6,753	1.925	0.044	0.212	0.252
Experienced physical or sexual violence by husband in the last 12 months	0.138	0.008	6,476	6,753	1.782	0.055	0.122	0.153
Prevalence of anemia (women 15-49 years)	0.334	0.009	10,365	10,331	1.948	0.027	0.316	0.352
Body mass index (BMI) < 18.5	0.050	0.004	9,904	9,928	1.805	0.079	0.042	0.058
Total fertility rate (last 3 years)	3.493	0.069	50,331	53,776	1.690	0.020	3.355	3.631
Neonatal mortality rate (last 0-9 years)	11.851	1.552	18,524	18,351	1.601	0.131	8.747	14.956
Post-neonatal mortality rate (last 0-9 years)	5.102	0.948	18,517	18,325	1.753	0.186	3.207	6.998
Infant mortality rate (last 0-9 years)	16.954	2.057	18,526	18,352	1.817	0.121	12.840	21.067
Child mortality rate (last 0-9 years)	3.026	0.730	18,321	18,136	1.626	0.241	1.565	4.486
Under-5 mortality rate (last 0-9 years)	19.928	2.101	18,535	18,356	1.752	0.105	15.726	24.130

Table B.23 Sampling errors: Camp sample, Jordan 2012

Variable	R	SE	N	WN	DEFT	SE/R	R-2SE	R+2SE
Urban residence	1.000	0.000	904	413	na	0.000	1.000	1.000
No education	0.019	0.005	904	413	1.039	0.249	0.009	0.028
Secondary education	0.457	0.017	904	413	1.032	0.037	0.423	0.491
Higher education	0.188	0.014	904	413	1.107	0.077	0.159	0.217
Currently married (in union)	0.428	0.045	1,983	904	0.969	0.105	0.339	0.518
Married before age 20	0.380	0.015	940	430	1.014	0.039	0.350	0.410
Currently pregnant	0.039	0.005	1,983	904	0.851	0.123	0.029	0.048
Children ever born	1.849	0.196	1,983	904	0.929	0.106	1.457	2.240
Children surviving	1.786	0.190	1,983	904	0.932	0.106	1.407	2.166
Children ever born to women age 40-49	4.973	0.145	314	143	1.060	0.029	4.683	5.263
Knows any contraceptive method	1.000	0.000	848	387	na	0.000	1.000	1.000
Knows any modern contraceptive method	1.000	0.000	848	387	na	0.000	1.000	1.000
Currently using any method	0.608	0.020	848	387	1.186	0.033	0.568	0.648
Currently using a modern method	0.454	0.019	848	387	1.108	0.042	0.416	0.492
Currently using a traditional method	0.154	0.015	848	387	1.250	0.101	0.123	0.185
Currently using pill	0.122	0.010	848	387	0.908	0.084	0.101	0.142
Currently using IUD	0.212	0.014	848	387	1.029	0.068	0.184	0.241
Currently using condoms	0.082	0.011	848	387	1.209	0.139	0.059	0.105
Currently using injectables	0.007	0.003	848	387	0.977	0.404	0.001	0.012
Currently using female sterilization	0.021	0.005	848	387	1.067	0.249	0.011	0.032
Currently using rhythm	0.030	0.006	848	387	1.093	0.214	0.017	0.043
Currently using withdrawal	0.113	0.014	848	387	1.252	0.120	0.086	0.141
Used public sector source	0.142	0.020	376	172	1.109	0.140	0.102	0.183
Want no more children	0.559	0.019	848	387	1.105	0.034	0.522	0.597
Want to delay birth at least 2 years	0.190	0.016	848	387	1.163	0.083	0.159	0.221
Ideal number of children	4.214	0.071	865	395	0.993	0.017	4.072	4.356
Mothers received antenatal care for last birth	0.996	0.002	555	253	0.988	0.002	0.992	1.001
Mothers protected against tetanus for last birth	0.511	0.021	555	253	1.008	0.042	0.468	0.554
Births with skilled attendant at delivery	0.997	0.002	850	388	1.055	0.002	0.994	1.001
Had diarrhea in the last 2 weeks	0.182	0.012	827	377	0.918	0.068	0.157	0.206
Treated with ORS	0.170	0.037	150	68	1.123	0.218	0.096	0.245
Sought medical treatment for diarrhea	0.521	0.046	150	68	1.095	0.089	0.429	0.614
Vaccination card seen	0.857	0.028	148	68	0.967	0.033	0.800	0.913
Received BCG vaccination	0.992	0.007	148	68	1.051	0.008	0.977	1.007
Received DPT (3 doses) vaccination	0.992	0.007	148	68	1.051	0.008	0.977	1.007
Received polio (3 doses) vaccination	0.992	0.007	148	68	1.051	0.008	0.977	1.007
Received measles vaccination	0.976	0.012	148	68	0.982	0.013	0.951	1.001
Received all vaccinations	0.976	0.012	148	68	0.982	0.013	0.951	1.001
Height-for-age (below -2SD)	0.096	0.017	535	245	1.131	0.175	0.063	0.130
Weight-for-height (below -2SD)	0.032	0.009	535	245	1.131	0.292	0.013	0.051
Weight-for-age (below -2SD)	0.042	0.008	535	245	0.921	0.200	0.025	0.059
Prevalence of anemia (children 6-59 months)	0.365	0.027	485	222	1.240	0.075	0.310	0.419
Experienced physical violence since age 15 by anyone	0.447	0.020	551	274	0.921	0.044	0.408	0.486
Ever experienced any sexual violence	0.122	0.014	551	274	1.009	0.116	0.094	0.150
Experienced physical or sexual violence by husband	0.340	0.022	551	274	1.069	0.064	0.297	0.383
Experienced physical or sexual violence by husband in the last 12 months	0.225	0.021	551	274	1.164	0.092	0.184	0.266
Prevalence of anemia (women 15-49 years)	0.338	0.020	884	403	1.244	0.059	0.299	0.378
Body mass index (BMI) < 18.5	0.060	0.009	843	385	1.085	0.149	0.042	0.077
Total fertility rate (last 3 years)	3.729	0.147	4,945	2,265	1.081	0.040	3.434	4.023
Neonatal mortality rate (last 0-9 years)	19.816	3.866	1,761	802	1.006	0.195	12.083	27.549
Post-neonatal mortality rate (last 0-9 years)	6.758	2.125	1,763	804	1.033	0.314	2.509	11.007
Infant mortality rate (last 0-9 years)	26.574	4.443	1,762	803	1.008	0.167	17.688	35.460
Child mortality rate (last 0-9 years)	6.289	2.225	1,767	805	1.174	0.354	1.840	10.738
Under-5 mortality rate (last 0-9 years)	32.696	4.316	1,767	805	0.928	0.132	24.065	41.327

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), Jordan 2012

	Women		Men	
Age	Number	Percent	Number	Percent
0	774	2.0	960	2.5
1	908	2.4	1,036	2.7
2	956	2.5	1,006	2.6
3	973	2.5	999	2.6
4	1,005	2.6	1,033	2.7
5	884	2.3	1,003	2.6
6	917	2.4	905	2.4
7	855	2.2	908	2.4
8	946	2.5	928	2.4
9	880	2.3	904	2.4
10	817	2.1	922	2.4
11	793	2.1	924	2.4
12	875	2.3	897	2.4
13	788	2.1	778	2.1
14	755	2.0	897	2.4
15	812	2.1	874	2.3
16	863	2.2	944	2.5
17	946	2.5	933	2.5
18	894	2.3	930	2.5
19	817	2.1	829	2.2
20	790	2.1	790	2.1
21	714	1.9	835	2.2
22	806	2.1	721	1.9
23	672	1.8	751	2.0
24	646	1.7	629	1.7
25	606	1.6	686	1.8
26	610	1.6	594	1.6
27	558	1.5	535	1.4
28	612	1.6	537	1.4
29	569	1.5	505	1.3
30	611	1.6	501	1.3
31	531	1.4	434	1.1
32	531	1.4	452	1.2
33	540	1.4	369	1.0
34	480	1.3	448	1.2
35	560	1.5	382	1.0
36	522	1.4	467	1.2
37	497	1.3	400	1.1
38	485	1.3	469	1.2
39	456	1.2	454	1.2
40	503	1.3	422	1.1
41	483	1.3	425	1.1
42	408	1.1	433	1.1
43	453	1.2	428	1.1
44	448	1.2	392	1.0
45	402	1.0	376	1.0
46	320	0.8	431	1.1
47	350	0.9	337	0.9
48	316	0.8	340	0.9
49	319	0.8	289	0.8
50	350	0.9	298	0.8
51	258	0.7	222	0.6
52	318	0.8	227	0.6
53	246	0.6	212	0.6
54	263	0.7	193	0.5
55	244	0.6	172	0.5
56	278	0.7	189	0.5
57	247	0.6	205	0.5
58	206	0.5	170	0.4
59	163	0.4	172	0.5
60	189	0.5	185	0.5
61	162	0.4	135	0.4
62	166	0.4	151	0.4
63	131	0.3	145	0.4
64	208	0.5	141	0.4
65	143	0.4	132	0.3
66	125	0.3	163	0.4
67	130	0.3	120	0.3
68	105	0.3	148	0.4
69	89	0.2	74	0.2
70+	1,056	2.8	1,065	2.8
Don't know/missing	8	0.0	0	0.0
Total	38,339	100.0	37,963	100.0

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview.

Table C.2 Age distribution of eligible and interviewed women

De facto household population of women age 10-54 and interviewed women age 15-49, and percent distribution and percentage of eligible women who were interviewed (weighted), by five-year age groups, Jordan 2012

Age group	Household population of women age 10-54	Ever-married women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed
			Number	Percentage	
10-14	4,027	0	na	na	na
15-19	4,332	273	268	2.4	98.1
20-24	3,629	1,222	1,167	10.6	95.5
25-29	2,955	2,062	1,942	17.7	94.2
30-34	2,693	2,225	2,068	18.9	92.9
35-39	2,520	2,175	2,032	18.5	93.4
40-44	2,294	2,055	1,978	18.0	96.3
45-49	1,707	1,571	1,507	13.7	95.9
50-54	1,435	1,322	na	na	na
15-49	20,129	11,584	10,963	100.0	94.6

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 Questionnaire.
na = Not applicable

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Jordan 2012

Subject	Percentage with information missing	Number of cases
Birth date		
Month only (births in the 15 years preceding the survey)	0.08	27,128
Month and year (births in the 15 years preceding the survey)	0.00	27,128
Age at death (deceased children born in the 15 years preceding the survey)	0.04	676
Age/date at first union[1] (ever-married women age 15-49)	0.00	11,352
Respondent's education (ever-married women age 15-49)	0.00	11,352
Diarrhea in the past 2 weeks (living children age 0-59 months)	0.29	9,637
Anthropometry		
Height (living children age 0-59 months from the Household Questionnaire)	7.27	6,379
Weight (living children age 0-59 months from the Household Questionnaire)	6.94	6,379
Height or weight (living children age 0-59 months from the Household Questionnaire)	7.28	6,379
Anemia		
Anemia (living children age 6-59 months from the Household Questionnaire)	12.25	5,834
Anemia (all women from the Household Questionnaire)	18.40	13,028

[1] Both year and age missing.

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), Jordan 2012

Calendar year	Number of births			Percentage with complete birth date[1]			Sex ratio at birth[2]			Calendar year ratio[3]		
	L	D	T	L	D	T	L	D	T	L	D	T
2012	1,445	23	1,468	100.0	100.0	100.0	123.2	139.2	123.4	na	na	na
2011	1,890	36	1,926	100.0	100.0	100.0	118.3	49.5	116.5	na	na	na
2010	1,959	37	1,996	100.0	100.0	100.0	106.3	135.6	106.8	101.2	109.4	101.4
2009	1,980	33	2,013	100.0	100.0	100.0	100.5	98.1	100.5	101.0	68.0	100.2
2008	1,961	59	2,019	100.0	100.0	100.0	106.9	179.9	108.5	98.3	176.1	99.6
2007	2,009	34	2,043	100.0	100.0	100.0	107.2	90.1	106.9	107.4	78.4	106.7
2006	1,780	28	1,808	99.4	100.0	99.4	98.0	213.6	99.1	95.1	84.9	94.9
2005	1,735	32	1,767	100.0	100.0	100.0	112.0	84.5	111.4	93.8	87.8	93.6
2004	1,921	45	1,966	100.0	100.0	100.0	89.7	217.2	91.4	112.4	102.3	112.1
2003	1,683	55	1,739	100.0	96.9	99.9	108.0	126.9	108.5	94.2	126.8	95.0
2008-2012	9,234	188	9,422	100.0	100.0	100.0	110.0	115.9	110.1	na	na	na
2003-2007	9,128	194	9,322	99.9	99.1	99.9	102.4	134.8	103.0	na	na	na
1998-2002	7,825	285	8,110	100.0	98.1	99.9	110.9	146.8	112.0	na	na	na
1993-1997	6,911	252	7,163	100.0	99.5	100.0	107.2	134.7	108.0	na	na	na
<1993	6,022	348	6,369	100.0	99.9	100.0	106.9	111.8	107.2	na	na	na
All	39,120	1,266	40,386	100.0	99.3	99.9	107.4	127.5	108.0	na	na	na

na = Not applicable

[1] Both year and month of birth given.

[2] (B_m/B_f)x100, where B_m and B_f are the numbers of male and female births, respectively.

[3] $[2B_x/(B_{x-1}+B_{x+1})]$x100, where B_x is the number of births in calendar year x.

Table C.5 Reporting of age at death in days

Distribution of reported deaths under age one month by age at death in days and the percentage of neonatal deaths reported to occur at age 0-6 days, for five-year periods of birth preceding the survey (weighted), Jordan 2012

Age at death (days)	Number of years preceding the survey				Total
	0-4	5-9	10-14	15-19	0-19
<1	43	46	49	50	189
1	22	9	24	14	69
2	23	4	2	16	44
3	15	6	8	15	45
4	3	2	13	5	23
5	9	0	1	1	12
6	4	1	10	3	17
7	5	12	25	3	45
8	4	0	2	0	6
9	0	0	0	1	2
10	1	2	3	3	8
11	1	0	1	1	3
12	1	0	0	1	1
13	0	0	0	0	0
14	4	1	6	0	11
15	2	1	1	0	3
16	0	1	0	0	1
17	1	8	0	0	8
18	1	0	0	0	1
19	0	0	0	1	1
20	0	1	3	1	6
21	0	0	1	0	1
22	1	1	1	0	2
23	0	2	0	0	2
24	0	0	0	0	0
25	0	0	5	0	5
26	0	0	0	0	1
27	1	0	0	0	1
28	0	0	8	0	8
30	0	5	2	3	9
Total 0-30	140	101	166	118	525
Percentage early neonatal[1]	84.6	67.3	64.9	88.0	75.8

[1] ≤0-6 days / ≤0-30 days.

Table C.6 Reporting of age at death in months

Distribution of reported deaths under age two by age at death in months and the percentage of infant deaths reported to occur at under age one month, for five-year periods of birth preceding the survey, Jordan 2012

	Number of years preceding the survey				Total
Age at death (months)	0-4	5-9	10-14	15-19	0-19
<1[a]	140	101	166	118	525
1	14	7	14	6	41
2	4	3	15	8	30
3	2	9	5	8	23
4	4	7	8	15	33
5	2	13	3	8	26
6	1	9	2	5	17
7	2	7	6	10	25
8	1	1	8	7	16
9	1	2	7	4	14
10	0	0	2	2	5
11	0	0	0	1	2
12	7	1	2	4	14
13	0	0	0	0	0
14	3	0	0	5	8
15	0	0	0	0	1
16	0	1	1	0	2
17	0	0	10	0	10
18	0	2	1	7	11
19	5	0	0	0	5
20	2	0	0	0	2
22	0	0	0	0	0
23	0	4	2	0	6
Total 0-11	172	159	235	192	757
Percentage neonatal[1]	81.6	63.5	70.5	61.6	69.3

[a] Includes deaths under one month reported in days.
[1] Under one month/under one year.

Table C.7 Nutritional status of children based on the NCHS/CDC/WHO International Reference Population

Percentage of children under age five classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, based on the NCHS/CDC/WHO International Reference Population, Jordan 2012

	Height-for-age[1]			Weight-for-height				Weight-for-age				
Background characteristic	Percentage below -3 SD	Percentage below -2 SD[2]	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Number of children
Age in months												
<6	0.2	2.2	-0.0	0.2	0.8	8.5	0.5	0.0	1.6	8.0	0.5	473
6-8	0.2	2.9	-0.0	0.0	2.8	3.5	0.1	0.0	0.9	1.8	0.1	223
9-11	0.3	3.8	-0.2	0.1	1.0	2.4	-0.1	0.2	2.4	4.8	-0.3	274
12-17	0.3	7.0	-0.2	0.2	4.4	5.2	-0.1	0.7	4.4	4.7	-0.2	604
18-23	3.1	11.8	-0.6	0.1	3.3	3.0	-0.1	0.1	6.4	2.2	-0.4	599
24-35	1.5	5.4	-0.2	0.1	1.7	1.6	-0.1	0.4	4.7	0.8	-0.3	1,160
36-47	0.6	4.9	-0.3	0.1	1.7	1.3	-0.1	0.1	3.9	1.1	-0.3	1,261
48-59	1.1	3.8	-0.3	0.3	1.5	3.3	-0.1	0.3	3.4	2.1	-0.3	1,247
Sex												
Male	1.0	6.0	-0.3	0.2	2.3	2.9	-0.1	0.3	4.4	2.7	-0.2	3,006
Female	1.2	4.6	0.2	0.1	1.8	3.2	-0.0	0.3	3.4	2.3	-0.2	2,836
Birth interval in months[3]												
First birth[4]	1.0	4.5	-0.1	0.1	1.8	3.7	0.0	0.2	3.3	2.3	-0.1	1,302
<24	1.2	6.8	-0.4	0.1	1.8	2.3	-0.1	0.4	4.6	2.3	-0.3	1,445
24-47	1.4	5.9	-0.3	0.1	1.9	3.1	-0.1	0.2	4.0	2.8	-0.3	1,872
48+	0.4	3.6	-0.1	0.0	2.4	3.2	-0.0	0.1	3.0	2.6	-0.2	1,124
Size at birth[3]												
Very small	2.8	14.8	-0.7	0.0	3.6	1.0	-0.3	0.8	12.8	1.2	-0.8	321
Small	0.6	8.7	-0.6	0.1	2.4	2.1	-0.2	0.2	5.4	0.6	-0.6	768
Average or larger	1.0	4.2	-0.2	0.1	1.7	3.4	0.0	0.2	2.9	2.9	-0.1	4,652
Missing	0.0	13.0	-1.2	0.0	20.2	0.0	-0.5	0.0	20.2	0.0	-1.1	3
Mother's interview status												
Interviewed	1.1	5.4	-0.3	0.1	1.9	3.1	-0.0	0.2	3.8	2.5	-0.2	5,744
Not interviewed but in household	0.5	1.3	-0.6	5.9	15.9	3.1	-0.3	4.2	15.9	3.1	-0.6	50
Not interviewed and not in the household[5]	0.0	6.5	-0.4	0.0	0.3	3.2	0.2	0.0	3.3	1.9	-0.2	47
Mother's nutritional status[6]												
Thin (BMI <18.5)	3.3	7.0	-0.6	0.2	3.4	4.7	-0.6	0.2	7.2	0.3	-0.9	126
Normal (BMI 18.5-24.9)	1.2	6.2	-0.3	0.1	2.2	2.0	-0.2	0.1	4.5	1.6	-0.4	1,897
Overweight/ obese (BMI ≥25)	1.0	4.8	-0.2	0.1	1.7	3.6	0.1	0.3	3.2	3.1	-0.2	3,729
Residence												
Urban	1.0	5.0	-0.2	0.1	2.1	2.7	-0.1	0.2	4.0	2.5	-0.2	4,730
Rural	1.5	6.9	-0.4	0.1	1.6	4.5	0.0	0.4	3.2	2.7	-0.3	1,111
Region												
Central	1.0	5.3	-0.2	0.2	2.1	3.0	-0.1	0.3	4.0	2.3	-0.2	3,469
North	0.8	4.5	-0.2	0.0	2.0	2.6	-0.1	0.2	3.5	2.5	-0.3	1,808
South	2.0	8.2	-0.4	0.2	1.7	5.1	0.1	0.4	4.4	4.2	-0.2	565
Governorate												
Amman	1.2	5.1	-0.2	0.0	1.7	3.0	-0.0	0.2	4.0	2.1	-0.2	2,034
Balqa	0.7	3.4	-0.3	1.0	3.2	3.3	0.0	0.4	3.7	2.5	-0.2	394
Zarqa	1.0	7.3	-0.4	0.3	2.6	2.6	-0.2	0.5	4.7	2.4	-0.4	880
Madaba	0.2	2.2	-0.1	0.0	1.8	4.4	0.1	0.0	1.3	3.6	-0.0	160
Irbid	0.6	3.6	-0.1	0.0	2.6	2.1	-0.1	0.0	3.2	2.6	-0.2	1,080
Mafraq	1.2	7.1	-0.6	0.0	0.4	2.9	0.1	0.6	3.7	1.7	-0.4	368
Jarash	1.8	5.4	-0.4	0.1	2.2	3.6	-0.0	0.5	5.1	2.6	-0.3	215
Ajloun	0.4	2.7	-0.2	0.2	1.3	4.1	0.1	0.4	3.1	2.9	-0.2	146
Karak	2.0	7.7	-0.4	0.0	1.6	5.9	0.2	0.4	3.2	4.0	-0.1	256
Tafiela	0.3	6.1	-0.3	0.7	1.9	4.5	0.0	0.8	3.6	4.7	-0.2	97
Ma'an	2.5	10.9	-0.7	0.2	2.9	1.7	-0.1	0.4	7.6	2.1	-0.5	104
Aqaba	2.9	8.5	-0.4	0.0	0.5	6.9	0.2	0.0	4.6	6.0	-0.1	107
Badia												
Badia	2.2	8.2	-0.6	0.0	1.5	3.4	-0.1	0.3	6.0	1.7	-0.5	467
Non Badia	1.0	5.1	-0.2	0.1	2.1	3.0	(0.0)	0.3	3.7	2.6	-0.2	5,375
Camps												
Camp	1.9	6.6	-0.4	0.4	1.4	2.5	-0.2	0.6	4.7	1.3	-0.5	245
Non camp	1.0	5.3	-0.2	0.1	2.1	3.1	-0.0	0.2	3.8	2.6	-0.2	5,597
Mother's education[7]												
No education	2.0	5.9	-0.8	0.9	2.5	1.7	-0.2	0.2	10.6	0.9	-0.6	102
Elementary	1.6	7.6	-0.5	0.2	2.2	3.2	0.0	0.4	4.2	2.0	-0.4	385
Preparatory	2.0	7.4	-0.5	0.0	2.2	2.2	-0.1	0.0	5.3	0.8	-0.4	762
Secondary	1.0	5.5	-0.3	0.1	2.3	2.8	-0.1	0.4	4.6	2.3	-0.3	2,772
Higher	0.6	3.6	-0.0	0.2	1.5	3.9	0.0	0.2	1.7	3.8	-0.1	1,774

Continued

Table C.7—*Continued*

Percentage of children under age five classified as malnourished according to three anthropometric indices of nutritional status: height-for-age, weight-for-height, and weight-for-age, by background characteristics, based on the NCHS/CDC/WHO International Reference Population, Jordan 2012

	Height-for-age[1]			Weight-for-height				Weight-for-age				
Background characteristic	Percentage below -3 SD	Percentage below -2 SD[2]	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Percentage below -3 SD	Percentage below -2 SD[2]	Percentage above +2 SD	Mean Z-score (SD)	Number of children
Wealth quintile												
Lowest	2.6	9.8	-0.6	0.1	2.4	3.5	-0.1	0.5	6.8	1.9	-0.5	1,368
Second	0.8	4.7	-0.3	0.2	2.0	2.7	-0.0	0.3	3.3	2.8	-0.2	1,323
Middle	0.5	4.5	-0.2	0.1	1.5	2.2	-0.1	0.2	3.2	1.8	-0.3	1,308
Fourth	0.7	4.3	-0.1	0.4	2.6	3.2	-0.0	0.3	4.2	4.0	-0.2	1,059
Highest	0.3	1.5	0.1	0.0	1.4	4.3	0.0	0.0	0.5	2.3	0.0	784
Total	1.1	5.3	-0.3	0.1	2.0	3.1	-0.0	0.3	3.9	2.5	-0.2	5,842

Note: Table is based on children who slept in the household the night before the interview. Each of the indices is expressed in standard deviation units (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.

[1] Recumbent length is measured for children under age 2, or in the few cases when the age of the child is unknown and the child is less than 85 cm; standing height is measured for all other children.

[2] Includes children who are below -3 standard deviations (SD) from the International Reference Population median

[3] Excludes children whose mothers were not interviewed.

[4] First-born twins (triplets, etc.) are counted as first births because they do not have a previous birth interval.

[5] Includes children whose mothers are deceased.

[6] Excludes children whose mothers were not weighed and measured, and children whose mothers are pregnant or gave birth within the preceding 2 months. Mother's nutritional status in terms of BMI (body mass index) is presented in Table 11.9.

[7] For women who are not interviewed, information is taken from the Household Questionnaire. Excludes children whose mothers are not listed in the Household Questionnaire.

QUESTIONNAIRES APPENDIX D

March 8, 2012

Department of Statistics
Household Survey Directorate

The Hashemite Kingdom of Jordan
JORDAN POPULATION AND
FAMILY HEALTH SURVEY 2012

HOUSEHOLD QUESTIONNAIRE

Survey Contents Confidential by Statistical Law

IDENTIFICATION

QUESTIONNAIRE No.: . . . . . .

GOVERNORATE: _____

DISTRICT: _____

SUB-DISTRICT: _____

LOCALITY: _____

AREA: _____

SUB-AREA: _____

STRATUM: _____

URBAN/RURAL (Urban=1; Rural=2)

BLOCK No.: . . . . . .

BUILDING No.: _____

HOUSING UNIT No.: _____

CLUSTER No.: . . . . . .

HOUSEHOLD No.: . . . . . .

TELEPHONE/
MOBILE No.
(if available)

HOUSEHOLD SELECTED FOR ANTHROPOMETRY, ANEMIA TESTING, CHILD DISCIPLINE AND DOMESTIC VIOLENCE MODULE ? (YES = 1; NO = 2)

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY MONTH YEAR 2 0 1
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 HOUSING UNIT VACANT OR ADDRESS NO MORE A DWELLING
7 HOUSING UNIT DESTROYED
8 HOUSING UNIT NOT FOUND
9 OTHER _____ (SPECIFY)

TOTAL PERSONS IN HOUSEHOLD

TOTAL ELIGIBLE WOMEN

LINE NO. OF RESPONDENT HOUSEHOLD QUESTIONNAIRE

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____		
DATE _____	DATE _____		

HH-1

INTRODUCTION AND CONSENT

Hello. My name is _____. I am working with the Department of Statistics. We are conducting a survey about health all over Jordan. The information we collect will help the government to plan health services. Your household was selected for the survey. I would like to ask you some questions about your household. The questions usually take about 15 to 20 minutes. All of the answers you give will be confidential and will not be shared with anyone other than members of our survey team. You don't have to be in the survey, but we hope you will agree to answer the questions since your views are important. If I ask you any question you don't want to answer, just let me know and I will go on to the next question or you can stop the interview at any time.

In case you need more information about the survey, you may contact the person listed on this card.

GIVE CARD WITH CONTACT INFORMATION

Do you have any questions?
May I begin the interview now?

SIGNATURE OF INTERVIEWER: _____ DATE: _____

RESPONDENT AGREES TO BE INTERVIEWED . . . 1 ↓ RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . 2 → END

HOUSEHOLD SCHEDULE

									IF AGE 15 OR OLDER			
LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		DATE OF BIRTH	AGE	NATIONALITY	MARITAL STATUS	ELIGIBILITY		
										INDIVIDUAL INTERVIEW	CHECK COVER PAGE IF THIS HOUSEHOLD IS SELECTED FOR ANTHROPOMETRY AND ANEMIA	
											ANTHROPOMETRY AND ANEMIA MEASUREMENTS	
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household. AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-20 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	In what month and year was (NAME) born? IF DON'T KNOW MONTH, RECORD 98' FOR MONTH. IF DON'T KNOW YEAR, RECORD 9998' FOR YEAR.	How old is (NAME)? IF AGE =95+, RECORD 95. COMPARE AND CORRECT 6A AND/OR 7 IF INCONSISTENT.	What is (NAME'S) nationality? 1 = JORDANIAN 2 = EGYPTIAN 3 = SYRIAN 4= IRAQI 5 = OTHER ARAB 6 = NOT ARAB 8= DON'T KNOW	What is (NAME'S) current marital status? 1 = NEVER-MARRIED 2 = MARRIED 3 = DIVORCED 4 = WIDOWED 5 = SEPARATED	CIRCLE LINE NUMBER OF WOMEN ELIGIBLE FOR INDIVIDUAL SURVEY (EVER-MARRIED WOMEN AGE 15-49).	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49.	CIRCLE LINE NUMBER OF ALL CHILDREN BORN IN 2007 OR LATER, OR CHILDREN AGE 0-5 YEARS (IF DATE OF BIRTH NOT KNOWN).
(1)	(2)	(3)	(4)	(5)	(5A)	(6)	(6A)	(7)	(8)	(9)	(10)	(11)
			M F	Y N	Y N	MONTH YEAR	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

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = STEPSON OR STEPDAUGHTER
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = GRAND FATHER/MOTHER
10 = OTHER RELATIVE
11 = ADOPTED/ FOSTERED CHILD
12 = NOT RELATED
98 = DON'T KNOW

	IF AGE 0-17 YEARS				IF AGE 5 YEARS OR OLDER				IF AGE 5-24 YEARS	IF AGE 0-4 YEARS
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL					BIRTH REGIS-TRATION
	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother usually live in this household or was she a guest last night? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	Is (NAME)'s natural father alive?	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is his name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Has (NAME) ever attended school?	Can (NAME) read and write?	What is the highest level of school (NAME) has attended? SEE CODES.	What is the highest grade (NAME) completed at that level? SEE CODES.	Did (NAME) attend school at any time during the current (2012-13) school year?	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW
(1)	(12)	(13)	(14)	(15)	(16)	(16A)	(17)	(17A)	(18)	(20)
	Y N DK		Y N DK		Y N	Y N	LEVEL	GRADE	Y N	
01	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 NEXT LINE			1 2	
02	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 NEXT LINE			1 2	
03	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 NEXT LINE			1 2	
04	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 NEXT LINE			1 2	
05	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 NEXT LINE			1 2	
06	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 NEXT LINE			1 2	
07	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 NEXT LINE			1 2	

CODES FOR EDUCATION LEVEL (Q.17)

OLD SYSTEM
01 = OLD ELEMENTARY
02 = OLD PREPARATORY
03 = OLD SECONDARY

NEW SYSTEM
04 = NEW BASIC
05 = NEW SECONDARY
06 = INTERMEDIATE DIPLOMA
07 = BACHELOR
08 = HIGHER EDUCATION
98 = DON'T KNOW

CODES FOR GRADE (Q.17A)
00 = LESS THAN ONE YEAR COMPLETED
98 = DON'T KNOW

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		DATE OF BIRTH	AGE	NATIONALITY	MARITAL STATUS (IF AGE 15 OR OLDER)	ELIGIBILITY: INDIVIDUAL INTERVIEW	ELIGIBILITY: CHECK COVER PAGE IF THIS HOUSEHOLD IS SELECTED FOR ANTHROPOMETRY AND ANEMIA — ANTHROPOMETRY AND ANEMIA MEASUREMENTS	
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household. AFTER LISTING THE NAMES AND RECORDING THE RELATIONSHIP AND SEX FOR EACH PERSON, ASK QUESTIONS 2A-2C TO BE SURE THAT THE LISTING IS COMPLETE. THEN ASK APPROPRIATE QUESTIONS IN COLUMNS 5-20 FOR EACH PERSON.	What is the relationship of (NAME) to the head of the household? SEE CODES BELOW.	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	In what month and year was (NAME) born? IF DON'T KNOW MONTH, RECORD 98' FOR MONTH. IF DON'T KNOW YEAR, RECORD 9998' FOR YEAR.	How old is (NAME)? IF AGE =95+, RECORD 95. COMPARE AND CORRECT 6A AND/OR 7 IF INCONSISTENT.	What is (NAME'S) nationality? 1 = JORDANIAN 2 = EGYPTIAN 3 = SYRIAN 4= IRAQI 5 = OTHER ARAB 6 = NOT ARAB 8= DON'T KNOW	What is (NAME'S) current marital status? 1 = NEVER-MARRIED 2 = MARRIED 3 = DIVORCED 4 = WIDOWED 5 = SEPARATED	CIRCLE LINE NUMBER OF WOMEN ELIGIBLE FOR INDIVIDUAL SURVEY (EVER-MARRIED WOMEN AGE 15-49).	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49.	CIRCLE LINE NUMBER OF ALL CHILDREN BORN IN 2007 OR LATER, OR CHILDREN AGE 0-5 YEARS (IF DATE OF BIRTH NOT KNOWN).
(1)	(2)	(3)	(4)	(5)	(5A)	(6)	(6A)	(7)	(8)	(9)	(10)	(11)
			M F	Y N	Y N	MONTH YEAR	IN YEARS					
08			1 2	1 2	1 2					08	08	08
09			1 2	1 2	1 2					09	09	9
10			1 2	1 2	1 2					10	10	10
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

TICK HERE IF CONTINUATION SHEET USED ☐

2A) Just to make sure that I have a complete listing. Are there any other persons such as small children or infants that we have not listed? YES ☐ → ADD TO TABLE NO ☐

2B) Are there any other people who may not be members of your family, such as domestic servants, lodgers, or friends who usually live here? YES ☐ → ADD TO TABLE NO ☐

2C) Are there any guests or temporary visitors staying here, or anyone else who stayed here last night, who have not been listed? YES ☐ → ADD TO TABLE NO ☐

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = STEPSON OR STEPDAUGHTER
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09 = GRAND FATHER/MOTHER
10 = OTHER RELATIVE
11 = ADOPTED/ FOSTERED CHILD
12 = NOT RELATED
98 = DON'T KNOW

	IF AGE 0-17 YEARS				IF AGE 5 YEARS OR OLDER				IF AGE 5-24 YEARS	IF AGE 0-4 YEARS
LINE NO.	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL					BIRTH REGIS-TRATION
	Is (NAME)'s natural mother alive?	Does (NAME)'s natural mother usually live in this household or was she a guest last night? IF YES: What is her name? RECORD MOTHER'S LINE NUMBER. IF NO, RECORD '00'.	Is (NAME)'s natural father alive?	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is his name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Has (NAME) ever attended school?	Can (NAME) read and write?	What is the highest level of school (NAME) has attended? SEE CODES.	What is the highest grade (NAME) completed at that level? SEE CODES.	Did (NAME) attend school at any time during the current (2012-13) school year?	Does (NAME) have a birth certificate? IF NO, PROBE: Has (NAME)'s birth ever been registered with the civil authority? 1 = HAS CERTIFICATE 2 = REGISTERED 3 = NEITHER 8 = DON'T KNOW
(1)	(12)	(13)	(14)	(15)	(16)	(16A)	(17)	(17A)	(18)	(20)
	Y N DK		Y N DK		Y N	Y N	LEVEL	GRADE	Y N	
08	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 NEXT LINE			1 2	
09	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 NEXT LINE			1 2	
10	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 NEXT LINE			1 2	
11	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 NEXT LINE			1 2	
12	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 NEXT LINE			1 2	
13	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 NEXT LINE			1 2	
14	1 2 8 GO TO 14		1 2 8 GO TO 16		1 2 GO TO 17	1 2 NEXT LINE			1 2	

CODES FOR EDUCATION LEVEL (Qs.17)

OLD SYSTEM

01 = OLD ELEMENTARY
02 = OLD PREPARATORY
03 = OLD SECONDARY

NEW SYSTEM

04 = NEW BASIC
05 = NEW SECONDARY
06 = INTERMEDIATE DIPLOMA
07 = BACHELOR
08 = HIGHER EDUCATION
98 = DON'T KNOW

CODES FOR GRADE (Qs.17A)

00 = LESS THAN ONE YEAR COMPLETED
98 = DON'T KNOW

HOUSING UNIT AND HOUSEHOLD CHARACTERISTICS

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
100	TYPE OF HOUSING UNIT. RECORD OBSERVATION.	APARTMENT . . . . . 1 DAR . . . . . 2 VILLA . . . . . 3 HUT/BARRACK . . . . . 4 OTHER _____ 6 (SPECIFY)	
101	How often does anyone smoke cigarette/nargila inside your house? Would you say daily, weekly, monthly, less than monthly, or never?	DAILY . . . . . 1 WEEKLY . . . . . 2 MONTHLY . . . . . 3 LESS THAN MONTHLY . . . . . 4 NEVER 5	
102	What is the main source of drinking water for members of your household?	PIPED WATER PIPED INTO HOUSING UNIT . . . . . 11 PIPED TO YARD . . . . . 12 SPRING . . . . . 21 RAINWATER . . . . . 31 TANKER TRUCK . . . . . 41 BOTTLED WATER . . . . . 51 OTHER _____ 96 (SPECIFY)	
105	Do you do anything to the water to make it safer to drink?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 107
106	What do you usually do to make the water safer to drink? Anything else? RECORD ALL MENTIONED.	BOIL . . . . . A ADD BLEACH/CHLORINE . . . . . B USE WATER FILTER . . . . . C OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
107	What kind of toilet facility do members of your household usually use? IF FLUSH TOILET: Is your toilet connected to a public sewer system, a septic tank, a pit latrine or somewhere else?	FLUSH OR POUR FLUSH TOILET FLUSH TO PIPED SEWER SYSTEM . . . . . 11 FLUSH TO PIT LATRINE . . . . . 12 FLUSH TO SOMEWHERE ELSE . . . 13 PIT LATRINE VENTILATED IMPROVED PIT LATRINE . . . . . 21 PIT LATRINE WITH SLAB . . . . . 22 PIT LATRINE WITHOUT SLAB/ OPEN PIT . . . . . 23 NO FACILITY/BUSH/FIELD . . . . . 61 OTHER _____ 96 (SPECIFY)	→ 109A
108	Do you share this toilet facility with other households?	YES . . . . . 1 NO 2	→ 109A
109	How many households use this toilet facility?	NO. OF HOUSEHOLDS IF LESS THAN 10 . . . . . [0][ ] 10 OR MORE HOUSEHOLDS . . . . . 95 DON'T KNOW 98	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
109A	Is your house connected with electricity?	YES . . . . . 1 NO 2	
109B	Does your household have a bed or sofa bed? IF YES: How many beds or sofa beds does your household have? IF NONE, RECORD '0'. IF 7 OR MORE, RECORD 7.	NUMBER OF BEDS . . . . . [ ]	
110	Does your household have:	YES NO	
	A radio/tape recorder?	RADIO/TAPE RECORDER . 1 2	
	A television?	TELEVISION 1 2	
	Satellite?	SATELLITE 1 2	
	A land telephone?	LAND TELEPHONE 1 2	
	A refrigerator?	REFRIGERATOR 1 2	
	A freezer?	FREEZER 1 2	
	A washing machine?	WASHING MACHINE 1 2	
	A dish washer?	DISH WASHER 1 2	
	Solar heater?	SOLAR HEATER 1 2	
	Air conditioner?	AIR CONDITIONER 1 2	
	Fan?	FAN 1 2	
	Water cooler?	WATER COOLER 1 2	
	Microwave?	MICROWAVE 1 2	
	Digital camera?	DIGITAL CAMERA 1 2	
110A	Does your household have a computer? IF YES: How many? IF NONE, RECORD '0'. IF 7 OR MORE, RECORD 7.	NUMBER OF COMPUTERS . . . . . [ ]	
110B	Does your household have a mobile? IF YES: How many? IF NONE, RECORD '0'. IF 7 OR MORE, RECORD 7.	NUMBER OF MOBILES . . . . . [ ]	
110C	CHECK 110A and 110B: 110A OR 110B = 1 OR MORE [ ]	110A AND 110B = 0 [ ] → 111	
110D	Do you have internet access at home?	YES . . . . . 1 NO 2	
111	What type of fuel does your household mainly use for cooking?	ELECTRICITY . . . . . 1 NATURAL GAS . . . . . 2 KEROSENE . . . . . 3 COAL/WOOD . . . . . 4 OTHER _____ 6 (SPECIFY)	
113	Do you have a separate room which is used as a kitchen?	YES . . . . . 1 NO 2	
113A	Do you have an independent bathroom?	YES . . . . . 1 NO 2	
114	MAIN MATERIAL OF THE FLOOR.	NATURAL FLOOR EARTH . . . . . 11 FINISHED FLOOR PARQUET OR POLISHED WOOD . . . . . 31 TILE . . . . . 32 MARBLE/CERAMIC TILES . . . . . 33 CEMENT . . . . . 34 OTHER _____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
115	MAIN MATERIAL OF THE ROOF RECORD OBSERVATION.	RUDIMENTARY MUD BRICKS . . . . . 21 MUD BRICKS WITH STONES . . . . . 22 ASBESTOS/WOOD/ZINC . . . . . 23 FINISHED CONCRETE . . . . . 31 HAIR/WOOL/CLOTH . . . . . 41 OTHER _____ 96 (SPECIFY)	
116	MAIN MATERIAL OF THE EXTERIOR WALLS. RECORD OBSERVATION.	RUDIMENTARY MUD BRICKS . . . . . 21 MUD BRICKS WITH STONES . . . . . 22 ASBESTOS/WOOD/ZINC . . . . . 23 FINISHED CEMENT BRICKS . . . . . 31 CUT STONES . . . . . 32 CUT STONES AND CONCRETE . . . . . 33 CONCRETE . . . . . 34 HAIR/WOOL/CLOTH . . . . . 41 OTHER _____ 96 (SPECIFY)	
116A	How many rooms do you have in your house?	NUMBER OF ROOMS . . . . . [ ][ ]	
117	How many rooms in this household are used for sleeping?	ROOMS FOR SLEEPING . . . [ ][ ]	
118	Does your household own a private car or pickup? IF YES: How many? IF NONE, RECORD '0'. IF 7 OR MORE, RECORD 7.	NUMBER OF CARS/PICKUPS . . . . . [ ]	
123A	Does any member of this household have a credit card?	YES . . . . . 1 NO 2	

CHILD DISCIPLINE

141	CHECK THE COVER PAGE: **THE HOUSEHOLD IS SELECTED FOR ANTHROPOMETRY, ANEMIA, DOMESTIC VIOLENCE AND CHILD DISCIPLINE** → **CONTINUE** **THE HOUSEHOLD IS NOT SELECTED FOR ANTHROPOMETRY, ANEMIA, DOMESTIC VIOLENCE AND CHILD DISCIPLINE** → **END OF HOUSEHOLD QUESTIONNAIRE**
142	CHECK HOUSEHOLD SCHEDULE, COLUMN 6A: AT LEAST ONE CHILD AGE 2-14 ☐ NO CHILDREN AGE 2-14 ☐ → 163

LIST EACH OF THE CHILDREN AGED 2-14 YEARS BELOW IN THE ORDER THEY APPEAR IN THE HOUSEHOLD SCHEDULE. DO NOT INCLUDE OTHER HOUSEHOLD MEMBERS OUTSIDE OF THE AGE RANGE 2-14 YEARS.

143 RANK NUMBER	144 LINE NUMBER FROM COLUMN 1 IN HOUSEHOLD SCHEDULE	145 NAME OF THE CHILD FROM COLUMN 2 IN THE HOUSEHOLD SCHEDULE	146 CHILD'S AGE FROM COLUMN 6A	147 WRITE PARENT'S OR CARETAKER'S LINE NUMBER/NAME FROM COLUMN 13, 15 OR 1 IN THE HOUSEHOLD SCHEDULE
01				_____
02				_____
03				_____
04				_____
05				_____
06				_____
07				_____
08				_____

148	CHECK COLUMN 146: MORE THAN ONE CHILD AGE 2-14: ☐ ONLY ONE CHILD AGE 2-14 ☐ → 149

RANDOM NUMBER TABLE FOR SELECTION OF CHILDREN FOR THE CHILD DISCIPLINE QUESTIONS

- LOOK AT THE LAST DIGIT OF THE QUESTIONNAIRE NUMBER ON THE COVER PAGE. THIS IS THE ROW NUMBER YOU SHOULD CIRCLE.
- LOOK AT COLUMN 146 AND RECORD THE TOTAL NUMBER OF ELIGIBLE CHILDREN AGE 2-14_____. THIS IS THE COLUMN NUMBER YOU SHOULD CIRCLE.
- IF THERE ARE MORE THAN 8 ELIGIBLE CHILDREN IN THE HOUSEHOLD, CIRCLE ‘8’ IN THE ROW AT THE TOP OF THE TABLE.
- FIND THE BOX WHERE THE CIRCLED ROW AND THE CIRCLED COLUMN MEET AND CIRCLE THE NUMBER THAT APPEARS IN THE BOX. THIS IS THE RANK NUMBER OF THE ELIGIBLE CHILD WHOSE PARENT OR CARETAKER WILL BE ASKED THE QUESTIONS ON CHILD DISCIPLINE.
- THEN, GO TO COLUMN 144 AND PUT A * NEXT TO THE HOUSEHOLD LINE NUMBER OF THE SELECTED CHILD AND RECORD CHILD'S HOUSEHOLD LINE NUMBER AND NAME IN Q.149 AND RECORD CHILD'S PARENT OR OTHER MOST KNOWLEDGEABLE ADULT'S NAME AND LINE NUMBER IN Q.150.

FOR EXAMPLE , IF THE HOUSEHOLD QUESTIONNAIRE NUMBER IS ‘0716’, GO TO ROW 6 AND CIRCLE THE ROW NUMBER ('6').
- IF THERE ARE THREE ELIGIBLE CHILDREN IN THE HOUSEHOLD, GO TO COLUMN 3 AND CIRCLE THE COLUMN NUMBER ('3').
- DRAW LINES FROM ROW 6 AND COLUMN 3 AND FIND THE BOX WHERE THE TWO MEET, AND CIRCLE THE NUMBER IN IT (‘2'). THIS MEANS YOU HAVE TO SELECT THE SECOND ELIGIBLE CHILD.
- SUPPOSE THE HOUSEHOLD LINE NUMBERS OF THE THREE ELIGIBLE CHILDREN ARE ‘02', ‘03', AND ‘07’; THEN THE ELIGIBLE CHILD FOR THE QUESTIONS ON CHILD DISCIPLINE IS THE SECOND ELIGIBLE CHILD, I.E., THE CHILD WITH HOUSEHOLD LINE NUMBER ‘03'.
- PUT A * NEXT TO THIS CHILD'S LINE NUMBER IN COLUMN 144 AND ALSO ENTER THE TWO DIGIT LINE NUMBER AND CHILD'S NAME IN Q.149.
- THEN, RECORD THE LINE NUMBER AND A NAME OF CHILD'S PARENT OR OTHER MOST KNOWLEDGEABLE ADULT IN Q.150.

LAST DIGIT OF THE QUESTIONNAIRE NUMBER	TOTAL NUMBER OF CHILDREN AGE 2-14 IN THE HOUSEHOLD							
	1	2	3	4	5	6	7	8+
0	1	2	2	4	3	6	5	4
1	1	1	3	1	4	1	6	5
2	1	2	1	2	5	2	7	6
3	1	1	2	3	1	3	1	7
4	1	2	3	4	2	4	2	8
5	1	1	1	1	3	5	3	1
6	1	2	2	2	4	6	4	2
7	1	1	3	3	5	1	5	3
8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	
149	LINE NUMBER AND NAME OF THE SELECTED CHILD AGE 2-14 YEARS FROM COLUMNS 144 AND 145	LINE NUMBER . . . . . [ ][ ] NAME _____	
150	LINE NUMBER AND NAME OF CHILD'S MOTHER, FATHER OR OTHER PRIMARY CARETAKER FROM COLUMN 147	MOTHER/CARETAKER NOT AVAILABLE . . . . . 00 LINE NUMBER . . . . . [ ][ ] NAME _____	→ 163
	THE FOLLOWING QUESTIONS 150-161 ON CHILD DISCIPLINE ARE TO BE ADMINISTERED ONLY TO THE MOST KNOWLEDGEABLE ADULT (MOTHER, FATHER, OTHER PRIMARY CARETAKER OR A GUARDIAN OF A CHILD).		
	All adults use certain ways to teach or to address a behavior problem. I will read various methods that are used. I want you to tell me if you or anyone else in the household has used this method with (NAME) in the past month.		
151	Took away privileges, forbade something (NAME) liked or did not allow him/her to leave the house (in the past month)?	YES . . . . . 1 NO 2	
152	Explained why some behavior was wrong (in the past month)?	YES . . . . . 1 NO 2	
153	Shook him/her (in the past month)?	YES . . . . . 1 NO 2	
154	Shouted, yelled or screamed at (NAME) in the past month?	YES . . . . . 1 NO 2	
155	Gave him/her something else to do (in the past month)?	YES . . . . . 1 NO 2	
156	Spanked, hit or slapped him/her on the bottom with bare hand (in the past month)?	YES . . . . . 1 NO 2	
157	Hit him/her on the bottom or elsewhere on the body with something like a belt, hairbrush, stick or other (in the past month) ?	YES . . . . . 1 NO 2	
158	Called him/her dumb, lazy, or a similar name (in the past month)?	YES . . . . . 1 NO 2	
159	Hit or slapped him/her on the face, head or ears (in the past month)?	YES . . . . . 1 NO 2	
160	Hit or slapped him/her on the hand, arm or leg (in the past month)?	YES . . . . . 1 NO 2	
161	Beat her/him up with an implement (hit over and over as hard as one could) (in the past month)?	YES . . . . . 1 NO 2	
162	Do you believe that in order to bring up (raise, educate) (NAME) properly, you need to physically punish him/her?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

LIST OF EVER-MARRIED WOMEN AGE 15-49

163	CHECK HOUSEHOLD SCHEDULE, COLUMN 6A: MORE THAN ONE EVER-MARRIED WOMEN AGE 15-49 ☐ ONLY ONE EVER-MARRIED WOMEN AGE 15-49 ☐ NO EVER-MARRIED WOMEN AGE 15-49 ☐	 164 201

TABLE FOR SELECTION OF WOMEN FOR THE DOMESTIC VIOLENCE QUESTIONS

- LOOK AT THE LAST DIGIT OF THE QUESTIONNAIRE NUMBER ON THE COVER PAGE. THIS IS THE ROW NUMBER YOU SHOULD CIRCLE.
- LOOK AT COLUMN 9 AND RECORD THE TOTAL NUMBER OF ELIGIBLE WOMEN_____. THIS IS THE COLUMN NUMBER YOU SHOULD CIRCLE.
- IF THERE ARE MORE THAN 8 ELIGIBLE CHILDREN IN THE HOUSEHOLD, CIRCLE ‘8’ IN THE ROW AT THE TOP OF THE TABLE.
- FIND THE BOX WHERE THE CIRCLED ROW AND THE CIRCLED COLUMN MEET AND CIRCLE THE NUMBER THAT APPEARS IN THE BOX. THIS IS THE RANK NUMBER OF THE ELIGIBLE WOMAN WHO WILL BE ASKED THE DOMESTIC VIOLENCE MODULE.
- N COLUMN 9 OF THE HOUSEHOLD SCHEDULE, PUT A * NEXT TO THE HOUSEHOLD LINE NUMBER OF THE SELECTED WOMAN IN THAT POSITION.

EXAMPLE: THE HOUSEHOLD QUESTIONNAIRE NUMBER IS ‘716’ AND THE HOUSEHOLD SCHEDULE COLUMN 9 SHOWS THAT THERE ARE THREE ELIGIBLE WOMEN AGE 15-49 IN THE HOUSEHOLD (LINE NUMBERS 02, 04, AND 05). SINCE THE LAST DIGIT OF THE HOUSEHOLD SERIAL NUMBER IS '6' GO TO ROW '6' AND SINCE THERE ARE THREE ELIGIBLE WOMEN IN THE HOUSEHOLD, GO TO COLUMN '3'. FOLLOW THE ROW AND COLUMN AND FIND THE NUMBER IN THE CELL WHERE THEY MEET ('2') AND CIRCLE THE NUMBER. NOW GO TO THE HOUSEHOLD SCHEDULE AND FIND THE SECOND WOMAN WHO IS ELIGIBLE FOR THE DOMESTIC VIOLENCE MODULE (LINE NUMBER '04' IN THIS EXAMPLE). WRITE HER NAME AND LINE NUMBER IN THE SPACE BELOW THE TABLE (Q.164).

LAST DIGIT OF THE HOUSEHOLD QUESTIONNAIRE SERIAL NUMBER	TOTAL NUMBER OF ELIGIBLE EVER-MARRIED WOMEN AGE 15-49 IN HOUSEHOLD SCHEDULE COLUMN 9							
	1	2	3	4	5	6	7	8
0	1	2	2	4	3	6	5	4
1	1	1	3	1	4	1	6	5
2	1	2	1	2	5	2	7	6
3	1	1	2	3	1	3	1	7
4	1	2	3	4	2	4	2	8
5	1	1	1	1	3	5	3	1
6	1	2	2	2	4	6	4	2
7	1	1	3	3	5	1	5	3
8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5

164	**NAME OF SELECTED WOMAN** _____ **HH LINE NUMBER OF SELECTED WOMAN** . . . . . ☐☐

WEIGHT, HEIGHT AND HEMOGLOBIN MEASUREMENT FOR CHILDREN AGE 0-5

201	CHECK COLUMN 11 IN HOUSEHOLD SCHEDULE. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 202. IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S).			
		CHILD 1	CHILD 2	CHILD 3
202	LINE NUMBER FROM COLUMN 11 NAME FROM COLUMN 2	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____
203	IF MOTHER INTERVIEWED, COPY MONTH AND YEAR OF BIRTH FROM BIRTH HISTORY AND ASK DAY; IF MOTHER NOT INTERVIEWED, ASK: What is (NAME)'s birth date?	DAY . . . . . [ ][ ] MONTH . . . . . [ ][ ] YEAR [2][0][ ][ ]	DAY . . . . . [ ][ ] MONTH . . . . . [ ][ ] YEAR [2][0][ ][ ]	DAY . . . . . [ ][ ] MONTH . . . . . [ ][ ] YEAR [2][0][ ][ ]
204	CHECK 203: CHILD BORN IN JANUARY 2007 OR LATER?	YES . . . . . 1 NO . . . . . 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214)	YES . . . . . 1 NO . . . . . 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214)	YES . . . . . 1 NO . . . . . 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214)
205	WEIGHT IN KILOGRAMS	KG. [ ][ ] . [ ][ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. [ ][ ] . [ ][ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. [ ][ ] . [ ][ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996
206	HEIGHT IN CENTIMETERS	CM. [ ][ ][ ] . [ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. [ ][ ][ ] . [ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. [ ][ ][ ] . [ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996
207	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3
208	CHECK 203: IS CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR FIVE PREVIOUS MONTHS?	0-5 MONTHS . . . . . 1 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214) OLDER 2	0-5 MONTHS . . . . . 1 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214) OLDER 2	0-5 MONTHS . . . . . 1 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214) OLDER 2
209	LINE NUMBER OF PARENT/ OTHER ADULT RESPONSIBLE FOR THE CHILD (FROM COLUMN 1 OF HOUSEHOLD SCHEDULE). RECORD '00' IF NOT LISTED.	LINE NUMBER . . . . . [ ][ ]	LINE NUMBER . . . . . [ ][ ]	LINE NUMBER . . . . . [ ][ ]
210	ASK CONSENT FOR ANEMIA TEST FROM PARENT/OTHER ADULT IDENTIFIED IN 209 AS RESPONSIBLE FOR CHILD.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. We ask that all children born in 2007 or later take part in anemia testing in this survey and give a few drops of blood from a finger or heel. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you allow (NAME OF CHILD) to participate in the anemia test?		
211	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 _____ (SIGN) REFUSED 2	GRANTED . . . . . 1 _____ (SIGN) REFUSED 2	GRANTED . . . . . 1 _____ (SIGN) REFUSED 2
212	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA PAMPHLET	G/DL [ ][ ] . [ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL [ ][ ] . [ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL [ ][ ] . [ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996
213	GO BACK TO 203 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 214.			

		CHILD 4	CHILD 5	CHILD 6
202	LINE NUMBER FROM COLUMN 11 NAME FROM COLUMN 2	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____
203	IF MOTHER INTERVIEWED, COPY MONTH AND YEAR OF BIRTH FROM BIRTH HISTORY AND ASK DAY; IF MOTHER NOT INTERVIEWED, ASK: What is (NAME)'s birth date?	DAY . . . . . [ ][ ] MONTH . . . . . [ ][ ] YEAR [2][0][ ][ ]	DAY . . . . . [ ][ ] MONTH . . . . . [ ][ ] YEAR [2][0][ ][ ]	DAY . . . . . [ ][ ] MONTH . . . . . [ ][ ] YEAR [2][0][ ][ ]
204	CHECK 203: CHILD BORN IN JANUARY 2007 OR LATER?	YES . . . . . 1 NO . . . . . 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214)	YES . . . . . 1 NO . . . . . 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214)	YES . . . . . 1 NO . . . . . 2 (GO TO 203 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE CHILDREN, GO TO 214)
205	WEIGHT IN KILOGRAMS	KG. [ ][ ] . [ ][ ] NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. [ ][ ] . [ ][ ] NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	KG. [ ][ ] . [ ][ ] NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996
206	HEIGHT IN CENTIMETERS	CM. [ ][ ][ ] . [ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. [ ][ ][ ] . [ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. [ ][ ][ ] . [ ] NOT PRESENT . . . 9994 REFUSED . . . . . 9995 OTHER 9996
207	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3	LYING DOWN . . . . . 1 STANDING UP . . . . . 2 NOT MEASURED 3
208	CHECK 203: IS CHILD AGE 0-5 MONTHS, I.E., WAS CHILD BORN IN MONTH OF INTERVIEW OR FIVE PREVIOUS MONTHS?	0-5 MONTHS . . . . . 1 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214) OLDER 2	0-5 MONTHS . . . . . 1 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE CHILDREN, GO TO 214) OLDER 2	0-5 MONTHS . . . . . 1 (GO TO 203 IN FIRST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE CHILDREN, GO TO 214) OLDER 2
209	LINE NUMBER OF PARENT/ OTHER ADULT RESPONSIBLE FOR THE CHILD (FROM COLUMN 1 OF HOUSEHOLD SCHEDULE). RECORD '00' IF NOT LISTED.	LINE NUMBER . . . . . [ ][ ]	LINE NUMBER . . . . . [ ][ ]	LINE NUMBER . . . . . [ ][ ]
210	ASK CONSENT FOR ANEMIA TEST FROM PARENT/OTHER ADULT IDENTIFIED IN 209 AS RESPONSIBLE FOR CHILD.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. We ask that all children born in 2007 or later take part in anemia testing in this survey and give a few drops of blood from a finger or heel. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you allow (NAME OF CHILD) to participate in the anemia test?		
211	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 _____ (SIGN) REFUSED 2	GRANTED . . . . . 1 _____ (SIGN) REFUSED 2	GRANTED . . . . . 1 _____ (SIGN) REFUSED 2
212	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA PAMPHLET.	G/DL [ ][ ] . [ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL [ ][ ] . [ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996	G/DL [ ][ ] . [ ] NOT PRESENT . . . . . 994 REFUSED . . . . . 995 OTHER 996
213	GO BACK TO 203 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE NEXT PAGE; IF NO MORE CHILDREN, GO TO 214.			

WEIGHT, HEIGHT AND HEMOGLOBIN MEASUREMENT TESTING FOR WOMEN AGE 15-49

214	CHECK COLUMN 10. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE WOMEN IN 215. IF THERE ARE MORE THAN THREE WOMEN, USE ADDITIONAL QUESTIONNAIRE(S).			
		WOMAN 1	WOMAN 2	WOMAN 3
215	LINE NUMBER (COLUMN 10) NAME (COLUMN 2)	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____	LINE NUMBER . . . . . [ ][ ] NAME _____
216	WEIGHT IN KILOGRAMS	KG. [ ][ ][ ] . [ ][ ] NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	KG. [ ][ ][ ] . [ ][ ] NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996	KG. [ ][ ][ ] . [ ][ ] NOT PRESENT . . . . . 99994 REFUSED . . . . . 99995 OTHER 99996
217	HEIGHT IN CENTIMETERS	CM. [ ][ ][ ] . [ ] NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. [ ][ ][ ] . [ ] NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996	CM. [ ][ ][ ] . [ ] NOT PRESENT . . . . . 9994 REFUSED . . . . . 9995 OTHER 9996
218	AGE: CHECK COLUMN 6A.	15-17 YEARS . . . . . 1 18-49 YEARS . . . . . 2 (GO TO 223) ↵	15-17 YEARS . . . . . 1 18-49 YEARS . . . . . 2 (GO TO 223) ↵	15-17 YEARS . . . . . 1 18-49 YEARS . . . . . 2 (GO TO 223) ↵
219	MARITAL STATUS: CHECK COLUMN 8.	CODE 4 (NEVER IN UNION) . . . . . 1 OTHER . . . . . 2 (GO TO 223) ↵	CODE 4 (NEVER IN UNION) . . . . . 1 OTHER . . . . . 2 (GO TO 223) ↵	CODE 4 (NEVER IN UNION) . . . . . 1 OTHER . . . . . 2 (GO TO 223) ↵
220	RECORD LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT. RECORD '00' IF NOT LISTED.	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT [ ][ ]	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT [ ][ ]	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT [ ][ ]
221	ASK CONSENT FOR ANEMIA TEST FROM PARENT/ OTHER ADULT IDENTIFIED IN 220 AS RESPONSIBLE FOR NEVER IN UNION WOMEN AGE 15-17.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you and (NAME OF ADOLESCENT) right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes to the test for (NAME OF ADOLESCENT), or you can say no. It is up to you to decide. Will you allow (NAME OF ADOLESCENT) to take the anemia test?		
222	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, GO TO 240)	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, GO TO 242)	GRANTED . . . . . 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED . . . . . 2 _____ (SIGN) (IF REFUSED, GO TO 242)

		WOMAN 1	WOMAN 2	WOMAN 3
	NAME FROM COLUMN 2	NAME _____	NAME _____	NAME _____
223	ASK CONSENT FOR ANEMIA TEST FROM RESPONDENT.	As part of this survey, we are asking people all over the country to take an anemia test. Anemia is a serious health problem that usually results from poor nutrition, infection, or chronic disease. This survey will assist the government to develop programs to prevent and treat anemia. For the anemia testing, we will need a few drops of blood from a finger. The equipment used to take the blood is clean and completely safe. It has never been used before and will be thrown away after each test. The blood will be tested for anemia immediately, and the result will be told to you right away. The result will be kept strictly confidential and will not be shared with anyone other than members of our survey team. Do you have any questions? You can say yes to the test, or you can say no. It is up to you to decide. Will you take the anemia test?		
224	CIRCLE THE APPROPRIATE CODE AND SIGN YOUR NAME.	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) (IF REFUSED, GO TO 240)	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) (IF REFUSED, GO TO 240)	GRANTED ..... 1 RESPONDENT REFUSED ..... 2 _____ (SIGN) (IF REFUSED, GO TO 240)
225	PREGNANCY STATUS: FIRST CHECK COLUMN 8: IF EVER MARRIED (CODES 2-5), ASK: Are you pregnant? IF NEVER MARRIED (CODE 1), CIRCLE '3'	YES ..... 1 NO/DK ..... 2 NEVER MARRIED 3	YES ..... 1 NO/DK ..... 2 NEVER MARRIED 3	YES ..... 1 NO/DK ..... 2 NEVER MARRIED 3
239	CHECK 224 AND PREPARE EQUIPMENT AND SUPPLIES FOR THE TEST FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST.			
240	RECORD HEMO-GLOBIN LEVEL HERE AND IN ANEMIA PAMPHLET	G/DL ..... [ ][ ].[ ] NOT PRESENT ..... 994 REFUSED ..... 995 OTHER 996	G/DL ..... [ ][ ].[ ] NOT PRESENT ..... 994 REFUSED ..... 995 OTHER 996	G/DL ..... [ ][ ].[ ] NOT PRESENT ..... 994 REFUSED ..... 995 OTHER 996
242	GO BACK TO 216 IN NEXT COLUMN OF THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF AN ADDITIONAL QUESTIONNAIRE; IF NO MORE WOMEN, END INTERVIEW.			

Department of Statistics
Household Survey Directorate

The Hashemite Kingdom of Jordan
JORDAN POPULATION AND
FAMILY HEALTH SURVEY 2012

WOMAN'S QUESTIONNAIRE

Survey Contents Confidential by Statistical Law

IDENTIFICATION

QUESTIONNAIRE No.: . . . . . .

GOVERNORATE: _____

DISTRICT: _____

SUB-DISTRICT: _____

LOCALITY: _____

AREA: _____

SUB-AREA: _____

STRATUM: _____

URBAN/RURAL (Urban=1; Rural=2)

BLOCK No.: . . . . . .

BUILDING No.: _____

HOUSING UNIT No.: _____

CLUSTER No.: . . . . . .

HOUSEHOLD No.: . . . . . .

TELEPHONE/
MOBILE No.
(if available)

NAME AND LINE NUMBER OF WOMAN: _____

WOMAN SELECTED FOR DOMESTIC VIOLENCE SECTION (YES = 1; NO = 2) . . . . . .

INTERVIEWER VISITS

	1	2	3	FINAL VISIT
DATE				DAY
				MONTH
				YEAR 2 0 1
INTERVIEWER'S NAME				INT. NUMBER
RESULT*				RESULT
NEXT VISIT: DATE				TOTAL NUMBER OF VISITS
TIME				

*RESULT CODES:

1	COMPLETED	4	REFUSED	7	OTHER _____ (SPECIFY)
2	NOT AT HOME	5	PARTLY COMPLETED		
3	POSTPONED	6	INCAPACITATED		

SUPERVISOR	FIELD EDITOR	OFFICE EDITOR	KEYED BY
NAME _____	NAME _____		
DATE _____	DATE _____		

W-1

SECTION 1. RESPONDENT'S BACKGROUND

INTRODUCTION AND CONSENT

INFORMED CONSENT

Hello. My name is _____ and I am working with the Department of Statistics. We are conducting a national survey that asks women about the health of women and their children. We would very much appreciate your participation in this survey. This information will help the government to plan health services. The interview usually takes about 40 minutes to complete. Whatever information you provide will be kept strictly confidential and will not be shown to other persons.

Participation in this survey is voluntary, and if we should come to any question you don't want to answer, just let me know and I will go on to the next question; or you can stop the interview at any time. 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?
In case you need more information about the survey, you may contact the person listed on the card that has already been given to your household.
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 . . . . . [ ][ ] MINUTE . . . . . [ ][ ]	
101A	What is your marital status now: are you married, widowed, divorced, or separated? IF THE WOMAN IS NOT MARRIED, WIDOWED, DIVORCED OR SEPARATED, END THE INTERVIEW, AND CORRECT MARITAL STATUS AND ELIGIBILITY IN THE HOUSEHOLD QNNAIRE.	MARRIED . . . . . 1 DIVORCED . . . . . 2 WIDOWED . . . . . 3 SEPARATED . . . . . 4 NEVER MARRIED 5	→ END
102	In what month and year were you born?	MONTH . . . . . [ ][ ] DON'T KNOW MONTH . . . . . 98 YEAR . . . . . [ ][ ][ ][ ] DON'T KNOW YEAR 9998	
103	How old were you at your last birthday? COMPARE AND CORRECT 102 AND/OR 103 IF INCONSISTENT.	AGE IN COMPLETED YEARS [ ][ ]	
104	Have you ever attended school?	YES . . . . . 1 NO 2	→ 110
105	What is the highest level of school you attended: Old elementary, old preparatory, old secondary, new basic, new secondary, intermediate diploma, bachelor, or higher?	OLD SYSTEM ELEMENTARY . . . . . 1 PREPARATORY . . . . . 2 SECONDARY . . . . . 3 NEW SYSTEM BASIC . . . . . 4 SECONDARY . . . . . 5 INTERMEDIATE DIPLOMA . . . . . 6 BACHELOR . . . . . 7 HIGHER 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
106	What is the highest grade you completed at that level?	GRADE . . . . . [ ][ ]	
110	Do you read a newspaper or magazine almost every day, 3-5 times a week, once or twice a week, once a month, few times a year, or never?	ALMOST EVERY DAY . . . . . 1 3-5 TIMES A WEEK . . . . . 2 ONCE OR TWICE A WEEK . . . . . 3 ONCE A MONTH . . . . . 4 FEW TIMES A YEAR . . . . . 5 NEVER . . . . . 6 CANNOT READ/ILLITERATE 7	
111	Do you listen to the radio almost every day, at least once a week, at least once a month, few times a year, or never?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 AT LEAST ONCE A MONTH . . . . . 3 FEW TIMES A YEAR . . . . . 4 NEVER 5	
112	Do you watch television almost every day, at least once a week, at least once a month, few times a year, or never?	ALMOST EVERY DAY . . . . . 1 AT LEAST ONCE A WEEK . . . . . 2 AT LEAST ONCE A MONTH . . . . . 3 FEW TIMES A YEAR . . . . . 4 NEVER 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 are alive but do not live with you? And how many daughters are alive but do not live with you? IF NONE, RECORD '00'.	SONS ELSEWHERE . . . . . [ ][ ] DAUGHTERS ELSEWHERE . [ ][ ]	
206	Have you ever given birth to a boy or girl who was born alive but later died? IF NO, PROBE: Any baby who cried or showed signs of life but did not survive?	YES . . . . . 1 NO 2	→ 208
207	How many boys have died? And how many girls have died? IF NONE, RECORD '00'.	BOYS DEAD . . . . . [ ][ ] GIRLS DEAD . . . . . [ ][ ]	
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL BIRTHS . . . . . [ ][ ]	
209	CHECK 208: Just to make sure that I have this right: you have had in TOTAL _____ births during your life. Is that correct? YES [ ] ↓ NO [ ] → PROBE AND CORRECT 201-208 AS NECESSARY.		
210	CHECK 208: ONE OR MORE BIRTHS [ ] ↓ NO BIRTHS [ ] →		226

211 Now I would like to record the names of all your births, whether still alive or not, starting with the first one you had.
RECORD NAMES OF ALL THE BIRTHS IN 212. RECORD TWINS AND TRIPLETS ON SEPARATE LINES.
(IF THERE ARE MORE THAN 12 BIRTHS, USE AN ADDITIONAL QUESTIONNAIRE, STARTING WITH THE SECOND ROW).

212 What name was given to your (first/next) baby? RECORD NAME BIRTH HISTORY NUMBER	213 Were any of these births twins?	214 Is (NAME) a boy or a girl?	215 In what month and year was (NAME) born? PROBE: When is his/her birthday?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COMPLETED YEARS. IF LESS THAN 1 YEAR, RECORD '00'	218 IF ALIVE: Is (NAME) living with you?	219 IF ALIVE: RECORD HOUSEHOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD).	220 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.	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth?
01	SING 1 MULT 2	BOY 1 GIRL 2	MONTH YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (NEXT BIRTH)	DAYS . . . 1 MONTHS 2 YEARS . . 3	
02	SING 1 MULT 2	BOY 1 GIRL 2	MONTH YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
03	SING 1 MULT 2	BOY 1 GIRL 2	MONTH YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
04	SING 1 MULT 2	BOY 1 GIRL 2	MONTH YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
05	SING 1 MULT 2	BOY 1 GIRL 2	MONTH YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
06	SING 1 MULT 2	BOY 1 GIRL 2	MONTH YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
07	SING 1 MULT 2	BOY 1 GIRL 2	MONTH YEAR	YES . . 1 NO . . . 2 → 220	AGE IN YEARS	YES . . . 1 NO 2	LINE NUMBER (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH

212 What name was given to your next baby? RECORD NAME BIRTH HISTORY NUMBER	213 Were any of these births twins?	214 Is (NAME) a boy or a girl?	215 In what month and year was (NAME) born? PROBE: What is his/her birthday?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COMPLETED YEARS. IF LESS THAN 1 YEAR, RECORD '00'	218 IF ALIVE: Is (NAME) living with you?	219 IF ALIVE: RECORD HOUSEHOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD).	220 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.	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME), including any children who died after birth?
08	SING 1 MULT 2	BOY 1 GIRL 2	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	YES . . 1 NO . . . 2 → 220	AGE IN YEARS [ ][ ]	YES . . . 1 NO 2	LINE NUMBER [ ][ ] (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3 [ ][ ]	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
09	SING 1 MULT 2	BOY 1 GIRL 2	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	YES . . 1 NO . . . 2 → 220	AGE IN YEARS [ ][ ]	YES . . . 1 NO 2	LINE NUMBER [ ][ ] (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3 [ ][ ]	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
10	SING 1 MULT 2	BOY 1 GIRL 2	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	YES . . 1 NO . . . 2 → 220	AGE IN YEARS [ ][ ]	YES . . . 1 NO 2	LINE NUMBER [ ][ ] (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3 [ ][ ]	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
11	SING 1 MULT 2	BOY 1 GIRL 2	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	YES . . 1 NO . . . 2 → 220	AGE IN YEARS [ ][ ]	YES . . . 1 NO 2	LINE NUMBER [ ][ ] (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3 [ ][ ]	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH
12	SING 1 MULT 2	BOY 1 GIRL 2	MONTH [ ][ ] YEAR [ ][ ][ ][ ]	YES . . 1 NO . . . 2 → 220	AGE IN YEARS [ ][ ]	YES . . . 1 NO 2	LINE NUMBER [ ][ ] (GO TO 221)	DAYS . . . 1 MONTHS 2 YEARS . . 3 [ ][ ]	YES . . . . 1 ADD BIRTH NO . . . . . 2 NEXT BIRTH

222	Have you had any live births since the birth of (NAME OF LAST BIRTH)? IF YES, RECORD BIRTH(S) IN TABLE.	YES . . . . . 1 NO 2
223	COMPARE 208 WITH NUMBER OF BIRTHS IN HISTORY ABOVE AND MARK: NUMBERS ARE SAME [ ] ↓ NUMBERS ARE DIFFERENT [ ] → (PROBE AND RECONCILE)	
224	CHECK 215: ENTER THE NUMBER OF BIRTHS IN 2007 OR LATER.	NUMBER OF BIRTHS . . . . . [ ] NONE . . . . . 0 → 226

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
225	**C** FOR EACH BIRTH SINCE JANUARY 2007, ENTER 'B' IN THE MONTH OF BIRTH IN THE CALENDAR. WRITE THE NAME OF THE CHILD TO THE LEFT OF THE 'B' CODE. FOR EACH BIRTH, ASK THE NUMBER OF MONTHS THE PREGNANCY LASTED AND RECORD 'P' IN EACH OF THE PRECEDING MONTHS ACCORDING TO THE DURATION OF PREGNANCY. (NOTE: THE NUMBER OF 'P's MUST BE ONE LESS THAN THE NUMBER OF MONTHS THAT THE PREGNANCY LASTED.)		
226	Are you pregnant now?	YES . . . . . 1 NO . . . . . 2 UNSURE 8	→ 230
227	How many months pregnant are you? RECORD NUMBER OF COMPLETED MONTHS. **C** ENTER 'P's IN THE CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS.	MONTHS . . . . . [ ]	
228	When you got pregnant, did you want to get pregnant at that time?	YES . . . . . 1 NO 2	→ 230
229	Did you want to have a baby later on or did you not want any (more) children?	LATER . . . . . 1 NO MORE 2	
230	Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth?	YES . . . . . 1 NO 2	→ 238
230A	The last time you had a such pregnancy, did the pregnancy end in a miscarriage, an induced abortion or a stillbirth?	MISCARRIAGE . . . . . 1 INDUCED ABORTION . . . . . 2 STILLBIRTH 3	
231	When did the last such pregnancy end?	MONTH . . . . . [ ][ ] YEAR . . . . . [ ][ ][ ][ ]	
232	CHECK 231: LAST PREGNANCY ENDED IN JAN. 2007 OR LATER ↓ LAST PREGNANCY ENDED BEFORE JAN. 2007 [ ]		→ 238
232A	Did this (MISCARRIAGE/ABORTION/STILLBIRTH - FROM Q.230A) last such pregnancy take place in a health facility, at home, or in another place?	HEALTH FACILITY . . . . . 1 YOUR HOME/OTHER HOME . . . . . 2 OTHER PLACE _____ 6 (SPECIFY)	→ 232D
232B	Did you seek care for this (MISCARRIAGE/ABORTION/ STILLBIRTH - FROM Q.230A)?	YES . . . . . 1 NO 2	→ 233
232C 232D	Where did you go for this (MISCARRIAGE/ABORTION/ STILLBIRTH - FROM Q.230A)? What type of health facility was this? PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC MEDICAL SECTOR** GOVT. HOSPITAL . . . . . 11 GOVT. HEALTH CENTER . . . . . 12 UNIVERSITY HOSPITAL . . . . . 13 ROYAL MEDICAL HOSPITAL . . . . . 14 OTHER PUBLIC _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . . . 21 OTHER PRIVATE MEDICAL _____ 26 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
232E	Before you were discharged, did anyone in the health facility talk to you or advise you about family planning?	YES . . . . . 1 NO 2	
233	How many months pregnant were you when the last such pregnancy ended? **C** RECORD NUMBER OF COMPLETED MONTHS. ENTER 'T' IN THE CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS.	MONTHS . . . . . [ ][ ]	
234	Since January 2007, have you had any other pregnancies that did not result in a live birth?	YES . . . . . 1 NO 2	→ 236
234A	Since January 2007, how many other pregnancies that did not result in a live birth have you had?	NUMBER OF PREGNANCIES . [ ][ ]	
235	ASK THE DATE AND THE DURATION OF PREGNANCY FOR EACH EARLIER NON-LIVE BIRTH PREGNANCY BACK TO JANUARY 2007. **C** ENTER 'T' IN THE CALENDAR IN THE MONTH THAT EACH PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS.		
236	Did you have any miscarriages, abortions or stillbirths that ended before 2007?	YES . . . . . 1 NO 2	→ 238
237	When did the last such pregnancy that terminated before 2007 end?	MONTH . . . . . [ ][ ] YEAR . . . . . [ ][ ][ ][ ]	
238	When did your last menstrual period start? _____ (DATE, IF GIVEN)	DAYS AGO . . . . . 1 [ ][ ] WEEKS AGO . . . . . 2 [ ][ ] MONTHS AGO . . . . . 3 [ ][ ] YEARS AGO . . . . . 4 [ ][ ] IN MENOPAUSE/ HAS HAD HYSTERECTOMY . . . 994 BEFORE LAST BIRTH . . . . . 995 NEVER MENSTRUATED 996	
239	From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→ 301
240	Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?	JUST BEFORE HER PERIOD BEGINS . . . . . 1 DURING HER PERIOD . . . . . 2 RIGHT AFTER HER PERIOD HAS ENDED . . . . . 3 HALFWAY BETWEEN TWO PERIODS . . . . . 4 OTHER _____ 6 (SPECIFY) DON'T KNOW 8	

SECTION 3. CONTRACEPTION

301	Now I would like to talk about family planning - the various ways or methods that a couple can use to delay or avoid a pregnancy. Have you ever heard of (METHOD)?		
01	**Female Sterilization**. PROBE: Women can have an operation to avoid having any more children.	YES . . . . . 1 NO . . . . . 2 ↓	
02	**Male Sterilization**. PROBE: Men can have an operation to avoid having any more children.	YES . . . . . 1 NO . . . . . 2 ↓	
03	**IUD**. PROBE: Women can have a loop or coil placed inside them by a doctor or a midwife.	YES . . . . . 1 NO . . . . . 2 ↓	
04	**Injectables**. PROBE: Women can have an injection by a health provider that stops them from becoming pregnant usually for 3 months.	YES . . . . . 1 NO . . . . . 2 ↓	
05	**Implants**. PROBE: Women can have one or more small rods placed in their upper arm by a doctor which can prevent pregnancy usually for 3 years.	YES . . . . . 1 NO . . . . . 2 ↓	
06	**Pill**. PROBE: Women can take a pill every day to avoid becoming pregnant.	YES . . . . . 1 NO . . . . . 2 ↓	
07	**Condom**. PROBE: Men can put a rubber sheath on their penis before sexual intercourse.	YES . . . . . 1 NO . . . . . 2 ↓	
08	**Female Condom**. PROBE: Women can place a sheath in their vagina before sexual intercourse.	YES . . . . . 1 NO . . . . . 2 ↓	
09	**Lactational Amenorrhea Method (LAM)**	YES . . . . . 1 NO . . . . . 2 ↓	
10	**Rhythm Method**. PROBE: To avoid pregnancy, women do not have sexual intercourse on the days of the month they think they can get pregnant.	YES . . . . . 1 NO . . . . . 2 ↓	
11	**Withdrawal**. PROBE: Men can be careful and pull out before climax.	YES . . . . . 1 NO . . . . . 2 ↓	
12	**Emergency Contraception**. PROBE: As an emergency measure, within three days after they have unprotected sexual intercourse, women can take special pills to prevent pregnancy. **(3)**	YES . . . . . 1 NO . . . . . 2 ↓	
13	Have you heard of any other ways or methods that women or men can use to avoid pregnancy?	YES . . . . . 1 _____ (SPECIFY) _____ (SPECIFY) NO 2	
302	CHECK 226: NOT PREGNANT OR UNSURE ☐ ↓ PREGNANT ☐		→ 311
303	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	→ 311

W-9

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
304	Which method are you using? CIRCLE ALL MENTIONED. IF MORE THAN ONE METHOD MENTIONED, FOLLOW SKIP INSTRUCTION FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION . . . . . A MALE STERILIZATION . . . . . B IUD . . . . . C INJECTABLES . . . . . D IMPLANTS . . . . . E PILL . . . . . F CONDOM . . . . . G FEMALE CONDOM . . . . . H DIAPHRAGM . . . . . I FOAM/JELLY . . . . . J LACTATIONAL AMEN. METHOD . . . . . K RHYTHM METHOD . . . . . L WITHDRAWAL . . . . . M OTHER MODERN METHOD . . . . . X OTHER TRADITIONAL METHOD . . . Y	
304A	Who advised you to use this method? IF MORE THAN ONE METHOD CIRCLED IN 304, THIS QUESTION SHOULD REFER TO THE HIGHEST METHOD IN THE LIST.	NO ONE . . . . . 01 DOCTOR . . . . . 02 NURSE . . . . . 03 MIDWIFE . . . . . 04 HUSBAND . . . . . 05 MOTHER/MOTHER IN LAW . . . . . 06 OTHER RELATIVE . . . . . 07 FRIENDS . . . . . 08 NEIGHBOURS . . . . . 09 SOCIAL WORKER . . . . . 10 OTHER _____ 96 (SPECIFY)	
304B	CHECK 304: CIRCLE METHOD(S) CODE	FEMALE STERILIZATION . . . . . A MALE STERILIZATION . . . . . B IUD . . . . . C INJECTABLES . . . . . D IMPLANTS . . . . . E PILL . . . . . F CONDOM . . . . . G FEMALE CONDOM . . . . . H DIAPHRAGM . . . . . I FOAM/JELLY . . . . . J LACTATIONAL AMEN. METHOD . . . . . K RHYTHM METHOD . . . . . L WITHDRAWAL . . . . . M OTHER MODERN METHOD . . . . . X OTHER TRADITIONAL METHOD . . . Y	B → 307 C → 306C E → 308A G → 306A H, I, J, K, L, M, X, Y → 308A
305	What is the brand name of the pills you are using? IF DON'T KNOW THE BRAND, ASK TO SEE THE PACKAGE.	CERAZETTE . . . . . 11 GRACIAL . . . . . 12 MARVELON TAB . . . . . 13 MIRCRONOR . . . . . 14 CELIST . . . . . 15 MICROGYNON . . . . . 16 EXLUTEN . . . . . 17 BELARA . . . . . 18 YASMIN . . . . . 19 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
305A	The last time you obtained the pills, how many pill cycles did you get?	NUMBER OF PILL CYCLES . . . . . [ ][ ][ ] DON'T KNOW 998	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
305B	How much did you pay for the pills?	COST IN JD . . . . . [ ][ ] FREE . . . . . 95 DON'T KNOW 98	→ 308A
306A	The last time you obtained the condoms, how many condom did you get?	NUMBER OF CONDOM [ ][ ][ ] DON'T KNOW 998	
306B	How much did you pay for the condoms?	COST IN JD . . . . . [ ][ ] FREE . . . . . 95 DON'T KNOW 98	→ 308A
306C	Who inserted your IUD?	MALE DOCTOR . . . . . 1 FEMALE DOCTOR . . . . . 2 MIDWIFE . . . . . 3 OTHER _____ 6 (SPECIFY)	
306D	How much did you pay in total for the IUD, including the cost of the IUD and the consultation?	COST IN JD . . . . . [ ][ ][ ] FREE . . . . . 995 DON'T KNOW 998	
306E	Is the IUD you are using hormonal or non-hormonal? CIRCLE ONE RESPONSE ONLY	HORMONAL . . . . . 1 NON-HORMONAL . . . . . 2 DON'T KNOW 8	→ 308A
307	In what facility did the sterilization take place? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC MEDICAL SECTOR** GOVT. HOSPITAL . . . . . 11 UNIVERSITY HOSPITAL . . . . . 12 ROYAL MEDICAL SERVICES 13 OTHER PUBLIC _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . 21 OTHER PRIVATE MEDICAL _____ 26 (SPECIFY) DON'T KNOW 98	
307A	When you got sterilized, were you told that you would not be able to have any (more) children because of the operation?	YES . . . . . 1 NO 2	
307B	How much was paid in total for the sterilization, including any consultation you (he) may have had? IF MORE THAN 990 JD, RECORD 990	COST IN JD . . . . . [ ][ ][ ] FREE . . . . . 995 DON'T KNOW 998	
307C	Do you regret that you had the operation not to have any (more) children?	YES . . . . . 1 NO 2	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
308	In what month and year was the sterilization performed?		
308A	Since what month and year have you been using (CURRENT METHOD) without stopping? PROBE: For how long have you been using (CURRENT METHOD) now without stopping?	MONTH . . . . . [ ][ ] YEAR . . . . . [ ][ ][ ][ ]	
309	CHECK 308/308A, 215 AND 231: ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 308/308A GO BACK TO 308/308A, PROBE AND RECORD MONTH AND YEAR AT START OF CONTINUOUS USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH OR PREGNANCY TERMINATION).	YES ☐ NO ☐	
310	CHECK 308/308A: YEAR IS 2007 OR LATER **C** ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING. YEAR IS 2006 OR EARLIER **C** ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN THE CALENDAR AND EACH MONTH BACK TO JANUARY 2007. THEN SKIP TO → 322		
311	I would like to ask you some questions about the times you or your partner may have used a method to avoid getting pregnant during the last few years. USE CALENDAR TO PROBE FOR EARLIER PERIODS OF USE AND NONUSE, STARTING WITH MOST RECENT USE, BACK TO JANUARY 2007. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS. **C** **IN COLUMN 1**, ENTER METHOD USE CODE OR '0' FOR NONUSE IN EACH BLANK MONTH. ILLUSTRATIVE QUESTIONS: * When was the last time you used a method? Which method was that? * When did you start using that method? How long after the birth of (NAME)? * How long did you use the method then? **IN COLUMN 2**, ENTER CODES FOR DISCONTINUATION NEXT TO THE LAST MONTH OF USE. NUMBER OF CODES IN COLUMN 2 MUST BE SAME AS NUMBER OF INTERRUPTIONS OF METHOD USE IN COLUMN 1. ASK WHY SHE STOPPED USING THE METHOD. IF A PREGNANCY FOLLOWED, ASK WHETHER SHE BECAME PREGNANT UNINTENTIONALLY WHILE USING THE METHOD OR DELIBERATELY STOPPED TO GET PREGNANT. ILLUSTRATIVE QUESTIONS: * Why did you stop using the (METHOD)? Did you become pregnant while using (METHOD), or did you stop to get pregnant, or did you stop for some other reason? * IF DELIBERATELY STOPPED TO BECOME PREGNANT, ASK: How many months did it take you to get pregnant after you stopped using (METHOD)? AND ENTER ‘0’ IN EACH SUCH MONTH IN COLUMN 1.		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
312	CHECK THE CALENDAR FOR USE OF ANY CONTRACEPTIVE METHOD IN ANY MONTH NO METHOD USED ☐ ↓ ; ANY METHOD USED ☐ →		314
313	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES . . . . . 1 NO 2	 → 324
314	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	NO CODE CIRCLED . . . . . 00 FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 FOAM/JELLY . . . . . 10 LACTATIONAL AMEN. METHOD . . . . . 11 RHYTHM METHOD . . . . . 12 WITHDRAWAL . . . . . 13 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD 96	→ 324 → 317A → 326 → 315A → 326
315	You first started using (CURRENT METHOD) in (DATE FROM 308/308A). Where did you get it at that time?	**PUBLIC MEDICAL SECTOR** GOVT. HOSPITAL . . . . . 11 GOVT. HEALTH CENTER . . . . . 12 GOVT. MCH . . . . . 13 UNIVERSITY HOSPITAL/CLINIC 14 ROYAL MEDICAL SERVICES 15 OTHER PUBLIC _____ 16 (SPECIFY)	
315A	Where did you learn how to use the rhythm/lactational amenorrhea method? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . 21 PRIVATE DOCTOR . . . . . 22 PHARMACY . . . . . 23 JORDANIAN AS. OF FP AND PROTECTION (JAFPP) . . . . . 24 UNRWA CLINIC . . . . . 25 OTHER NON-GOV ORGANIZATION 26 OTHER PRIVATE MEDICAL _____ 27 (SPECIFY) **OTHER SOURCE** FRIEND/RELATIVE . . . . . 33 OTHER _____ 96 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
316	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 FOAM/JELLY . . . . . 10 LACTATIONAL AMEN. METHOD . . . . . 11 RHYTHM METHOD 12	→ 323 → 320 → 326
317	At that time, were you told about side effects or problems you might have with the method?	YES . . . . . 1 NO 2	→ 319
317A	When you got sterilized, were you told about side effects or problems you might have with the method?		
318	Were you ever told by a health or family planning worker about side effects or problems you might have with the method?	YES . . . . . 1 NO 2	 → 320
319	Were you told what to do if you experienced side effects or problems?	YES . . . . . 1 NO 2	
320	CHECK 317: CODE '1' CIRCLED → At that time, were you told about other methods of family planning that you could use? CODE '1' NOT CIRCLED → When you obtained (CURRENT METHOD FROM 314) from (SOURCE OF METHOD FROM 307 OR 315), were you told about other methods of family planning that you could use?	YES . . . . . 1 NO 2	→ 322
321	Were you ever told by a health or family planning worker about other methods of family planning that you could use?	YES . . . . . 1 NO 2	
322	CHECK 304: CIRCLE METHOD CODE: IF MORE THAN ONE METHOD CODE CIRCLED IN 304, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	FEMALE STERILIZATION . . . . . 01 MALE STERILIZATION . . . . . 02 IUD . . . . . 03 INJECTABLES . . . . . 04 IMPLANTS . . . . . 05 PILL . . . . . 06 CONDOM . . . . . 07 FEMALE CONDOM . . . . . 08 DIAPHRAGM . . . . . 09 FOAM/JELLY . . . . . 10 LACTATIONAL AMEN. METHOD . . . . . 11 RHYTHM METHOD . . . . . 12 WITHDRAWAL . . . . . 13 OTHER MODERN METHOD . . . . . 95 OTHER TRADITIONAL METHOD . . . 96	→ 326 → 326

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
323	Where did you obtain (CURRENT METHOD) the last time? PROBE TO IDENTIFY THE TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**PUBLIC MEDICAL SECTOR** GOVT. HOSPITAL . . . . . 11 GOVT. HEALTH CENTER . . . . . 12 GOVT. MCH . . . . . 13 UNIVERSITY HOSPITAL/CLINIC 14 ROYAL MEDICAL SERVICES 15 OTHER PUBLIC _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . 21 PRIVATE DOCTOR . . . . . 22 PHARMACY . . . . . 23 JORDANIAN AS. OF FP AND PROTECTION (JAFPP) . . . . . 24 UNRWA CLINIC . . . . . 25 OTHER NON-GOV ORGANIZATION 26 OTHER PRIVATE MEDICAL _____ 27 (SPECIFY) **OTHER SOURCE** FRIEND/RELATIVE . . . . . 33 OTHER _____ 96 (SPECIFY)	→ 326
324	Do you know of a place where you can obtain a method of family planning?	YES . . . . . 1 NO 2	→ 326
325	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	**PUBLIC MEDICAL SECTOR** GOVT. HOSPITAL . . . . . A GOVT. HEALTH CENTER . . . . . B GOVT. MCH . . . . . C UNIVERSITY HOSPITAL/CLINIC . . . D ROYAL MEDICAL SERVICES . . . . . E OTHER PUBLIC _____ F (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . . . G PRIVATE DOCTOR . . . . . H PHARMACY . . . . . I JORDANIAN AS. OF FP AND PROTECTION (JAFPP) . . . . . J UNRWA CLINIC . . . . . K OTHER NON-GOV ORGANIZATION L OTHER PRIVATE MEDICAL _____ M (SPECIFY) **OTHER SOURCE** FRIEND/RELATIVE . . . . . N OTHER _____ X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
326	In the last 12 months, were you visited by a fieldworker who talked to you about family planning?	YES . . . . . 1 NO 2	
327	In the last 12 months, have you visited a health facility for care for yourself (or your children)?	YES . . . . . 1 NO 2	→ 401
328	Did any staff member at the health facility speak to you about family planning methods?	YES . . . . . 1 NO 2	

SECTION 4. PREGNANCY AND POSTNATAL CARE

401	CHECK 224: ONE OR MORE BIRTHS IN 2007 OR LATER ☐ ↓ NO BIRTHS IN 2007 OR LATER ☐ → 556			
402	CHECK 215: ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2007 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE LAST 2 COLUMNS OF ADDITIONAL QUESTIONNAIRES). 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.)			
403	BIRTH HISTORY NUMBER FROM 212 IN BIRTH HISTORY	LAST BIRTH BIRTH HISTORY NUMBER ☐☐	NEXT-TO-LAST BIRTH BIRTH HISTORY NUMBER ☐☐	SECOND-FROM-LAST BIRTH BIRTH HISTORY NUMBER ☐☐
404	FROM 212 AND 216	NAME _____ LIVING ☐ DEAD ☐	NAME _____ LIVING ☐ DEAD ☐	NAME _____ LIVING ☐ DEAD ☐
405	When you got pregnant with (NAME), did you want to get pregnant at that time?	YES . . . . . 1 (SKIP TO 408) NO 2	YES . . . . . 1 (SKIP TO 430) NO 2	YES . . . . . 1 (SKIP TO 430) NO 2
406	Did you want to have a baby later on, or did you not want any (more) children?	LATER . . . . . 2 NOT AT ALL . . . . . 3 (SKIP TO 408)	LATER . . . . . 2 NOT AT ALL . . . . . 3 (SKIP TO 430)	LATER . . . . . 2 NOT AT ALL . . . . . 3 (SKIP TO 430)
407	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
408	Did you see anyone for antenatal care for this pregnancy?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 415)		
409	Whom did you see? Anyone else? PROBE TO IDENTIFY EACH TYPE OF PERSON AND RECORD ALL MENTIONED.	HEALTH PERSONNEL DOCTOR . . . . . A NURSE/MIDWIFE B OTHER PERSON _____ X (SPECIFY)		
410	Where did you receive antenatal care for this pregnancy? Anywhere else? PROBE TO IDENTIFY TYPE(S) OF SOURCE(S) AND CIRCLE THE APPROPRIATE CODE(S). IF UNABLE TO DETERMINE IF A HOSPITAL, HEALTH CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	**HOME** YOUR HOME . . . A OTHER HOME . . . B **PUBLIC MED. SECTOR** GOVT. HOSPITAL C GOVT. HEALTH CENTER . . . . . D UNIVERSITY HOSPITAL . . . E ROYAL MEDICAL SERVICES . . . F OTHER PUBLIC _____ G (SPECIFY) **PRIVATE MED. SECTOR** PVT. HOSPITAL/ CLINIC . . . . . H UNRWA HEALTH CENTER . . . . . I OTHER PRIVATE MED. _____ J (SPECIFY) OTHER_____ X (SPECIFY)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
411	How many months pregnant were you when you first received antenatal care for this pregnancy?	NUMBER OF MONTHS . . . [ ][ ] DON'T KNOW 98		
412	How many times did you receive antenatal care during this pregnancy?	NUMBER OF TIMES . [ ][ ] DON'T KNOW 98		
413	As part of your antenatal care during this pregnancy, were any of the following done at least once? Was your blood pressure measured? Were you weighed? Did you give a urine sample? Did you give a blood sample?	YES NO BP . . . . . 1 2 WEIGHT . . . 1 2 URINE . . . . . 1 2 BLOOD . . . 1 2 (SKIP TO 414)		
413A	CHECK Q413. IF 'YES' CIRCLED FOR 'BP' ONLY ASK: How many times was your blood pressure measured?	NUMBER OF TIMES . [ ][ ] DON'T KNOW 98		
414	During (any of) your antenatal care visit(s), were you told about things to look out for that might suggest problems with the pregnancy?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 414B) DON'T KNOW 8		
414A	Were you told where to go if you had any of these complications?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
414B	During (any of) your antenatal care visit(s), were you told about the signs of complications during the postnatal period?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
414C	During (any of) your antenatal care visit(s), were you told about having postnatal care visits one week and 30 days after delivery?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
415	During this pregnancy, were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 418) DON'T KNOW 8		
416	During this pregnancy, how many times did you get this tetanus injection?	TIMES . . . . . [ ] DON'T KNOW 8		
417	CHECK 416:	2 OR MORE TIMES [ ] (SKIP TO 421) OTHER [ ]		
418	At any time before this pregnancy, did you receive any tetanus injections, either to protect yourself or another baby?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 421) DON'T KNOW 8		
419	Before this pregnancy, how many other times did you receive a tetanus injection? IF 7 OR MORE TIMES, RECORD '7'.	TIMES . . . . . [ ] DON'T KNOW 8		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
420	How many years ago did you receive that tetanus injection?	YEARS AGO . . . . . [ ][ ]		
421	During this pregnancy, were you given or did you buy any iron tablets or iron syrup?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 430) ← DON'T KNOW 8		
422	During the whole pregnancy, for how many days did you take the tablets or syrup? IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER OF DAYS.	DAYS . [ ][ ][ ] DON'T KNOW . . . 998		
430	When (NAME) was born, was he/she very large, larger than average, average, smaller than average, or very small?	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . . 2 AVERAGE . . . . . 3 SMALLER THAN AVERAGE . . . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . . 2 AVERAGE . . . . . 3 SMALLER THAN AVERAGE . . . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8	VERY LARGE . . . . . 1 LARGER THAN AVERAGE . . . . . 2 AVERAGE . . . . . 3 SMALLER THAN AVERAGE . . . . . 4 VERY SMALL . . . . . 5 DON'T KNOW 8
431	Was (NAME) weighed at birth?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 433) ← DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 433) ← DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 433) ← DON'T KNOW 8
432	How much did (NAME) weigh? RECORD WEIGHT IN KILOGRAMS FROM HEALTH CARD, IF AVAILABLE.	KG FROM CARD 1 [ ] . [ ][ ][ ] KG FROM RECALL 2 [ ] . [ ][ ][ ] DON'T KNOW . 99998	KG FROM CARD 1 [ ] . [ ][ ][ ] KG FROM RECALL 2 [ ] . [ ][ ][ ] DON'T KNOW . 99998	KG FROM CARD 1 [ ] . [ ][ ][ ] KG FROM RECALL 2 [ ] . [ ][ ][ ] DON'T KNOW . 99998
433	Who assisted with the delivery of (NAME)? Anyone else? PROBE FOR THE TYPE(S) OF PERSON(S) AND RECORD ALL MENTIONED. IF RESPONDENT SAYS NO ONE ASSISTED, PROBE TO DETERMINE WHETHER ANY ADULTS WERE PRESENT AT THE DELIVERY.	HEALTH PERSONNEL DOCTOR . . . . . A NURSE/MIDWIFE . B OTHER PERSON X _____ (SPECIFY) (SKIP TO 434) ← NO ONE . . . . . Y	HEALTH PERSONNEL DOCTOR . . . . . A NURSE/MIDWIFE . B OTHER PERSON X _____ (SPECIFY) (SKIP TO 434) ← NO ONE . . . . . Y	HEALTH PERSONNEL DOCTOR . . . . . A NURSE/MIDWIFE . B OTHER PERSON X _____ (SPECIFY) (SKIP TO 434) ← NO ONE . . . . . Y

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
433A	How much did you pay the service provider for this delivery? RECORD THE TOTAL COST IN DINARS	COST IN JD [ ][ ][ ][ ] FREE . . . . . 9995 DON' T KNOW . 9998	COST IN JD [ ][ ][ ][ ] FREE . . . . . 9995 DON' T KNOW . 9998	COST IN JD [ ][ ][ ][ ] FREE . . . . . 9995 DON' T KNOW . 9998
434	Where did you give birth to (NAME)? PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. IF UNABLE TO DETERMINE IF A HOSPITAL, HEALTH CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**HOME** YOUR HOME . . . 11 (SKIP TO 438) ← OTHER HOME . . . 12 **PUBLIC MED. SECTOR** GOVT. HOSPITAL 21 GOVT. HEALTH CENTER . . . . . 22 UNIVERSITY HOSPITAL . . . 23 ROYAL MEDICAL SERVICES . . . 24 OTHER PUBLIC 26 _____ (SPECIFY) **PRIVATE MED. SECTOR** PVT. HOSPITAL/ CLINIC . . . . . 31 OTHER PRIVATE MED._____ 36 (SPECIFY) **OTHER**_____ 96 (SPECIFY) (SKIP TO 438) ←	**HOME** YOUR HOME . . . 11 (SKIP TO 448) ← OTHER HOME . . . 12 **PUBLIC MED. SECTOR** GOVT. HOSPITAL 21 GOVT. HEALTH CENTER . . . . . 22 UNIVERSITY HOSPITAL . . . 23 ROYAL MEDICAL SERVICES . . . 24 OTHER PUBLIC 26 _____ (SPECIFY) **PRIVATE MED. SECTOR** PVT. HOSPITAL/ CLINIC . . . . . 31 OTHER PRIVATE MED._____ 36 (SPECIFY) **OTHER**_____ 96 (SPECIFY) (SKIP TO 448) ←	**HOME** YOUR HOME . . . 11 (SKIP TO 448) ← OTHER HOME . . . 12 **PUBLIC MED. SECTOR** GOVT. HOSPITAL 21 GOVT. HEALTH CENTER . . . . . 22 UNIVERSITY HOSPITAL . . . 23 ROYAL MEDICAL SERVICES . . . 24 OTHER PUBLIC 26 _____ (SPECIFY) **PRIVATE MED. SECTOR** PVT. HOSPITAL/ CLINIC . . . . . 31 OTHER PRIVATE MED._____ 36 (SPECIFY) **OTHER**_____ 96 (SPECIFY) (SKIP TO 448) ←
434A	How long after (NAME) was delivered did you stay there? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 [ ][ ] DAYS 2 [ ][ ] WEEKS 3 [ ][ ] DON'T KNOW . 998		
434B	When you were discharged after (NAME) was born, were you given any free sample of infant formula by the health facility staff?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
434C	Before you were discharged after (NAME) was born, did anyone in the health facility talk to you or advise you about family planning?	YES . . . . . 1 NO 2		
435	Was (NAME) delivered by caesarean, that is, did they cut your belly open to take the baby out?	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2	YES . . . . . 1 NO 2
436	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health while you were still in the facility?	YES . . . . . 1 (SKIP TO 439) ← NO 2		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
437	Did anyone check on your health after you left the facility?	YES . . . . . 1 (SKIP TO 439) NO 2		
437A	What is the main reason you did not seek a health professional check on your health after (NAME) was born?	NO NEED/NO SICK . 01 NOT AWARE AVAI-LABILITY OF POST-NATAL SERVICE . 02 NOT SUPPOSED TO GO OUT DURING THIS PERIOD . . . 03 NO ONE TO TAKE CARE OF MY BABY DURING VISIT . . . 04 TOO FAR . . . . . 05 TOO EXPENSIVE . 06 NO QUALIFIED PERSONNEL . . . 07 HUSBAND OPPOSED . . . . . 08 OTHER _____ 96 (SPECIFY) (SKIP TO 442)		
438	I would like to talk to you about checks on your health after delivery, for example, someone asking you questions about your health or examining you. Did anyone check on your health after you gave birth to (NAME)?	YES . . . . . 1 (SKIP TO 439) NO 2		
438A	What is the main reason you did not seek a health professional check on your health after (NAME) was born?	NO NEED/NO SICK . 01 NOT AWARE AVAI-LABILITY OF POST-NATAL SERVICE . 02 NOT SUPPOSED TO GO OUT DURING THIS PERIOD . . . 03 NO ONE TO TAKE CARE OF MY BABY DURING VISIT . . . 04 TOO FAR . . . . . 05 TOO EXPENSIVE . 06 NO QUALIFIED PERSONNEL . . . 07 HUSBAND OPPOSED . . . . . 08 OTHER _____ 96 (SPECIFY) (SKIP TO 442)		
439	Who checked on your health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR . . . . . 1 NURSE/MIDWIFE 2 OTHER PERSON 6 _____ (SPECIFY)		

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NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
440	How long after delivery did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HOURS 1 [ ][ ] DAYS 2 [ ][ ] WEEKS 3 [ ][ ] DON'T KNOW . . . 998		
440A	How much did you pay for this (first) postnatal visit? RECORD THE TOTAL COST IN DINARS	COST IN JD [ ][ ][ ] FREE . . . . . 995 DON' T KNOW . . 998		
440B	After this (first) visit, did you come back a second time for a health care provider to check on your health?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 440D) ←		
440C	How long after delivery did this 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		
440D	Did anyone at the health facility talk to you or advise you about family planning during any of your postnatal check?	YES . . . . . 1 NO 2		
442	In the two months after (NAME) was born, did any health care provider or a traditional birth attendant check on his/her health?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 447) ← DON'T KNOW 8		
443	How many hours, days or weeks after the birth of (NAME) did the first check take place? IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	HRS AFTER BIRTH . . 1 [ ][ ] DAYS AFTER BIRTH . . 2 [ ][ ] WKS AFTER BIRTH . . 3 [ ][ ] DON'T KNOW . . . 998		
444	Who checked on (NAME)'s health at that time? PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR . . . . . 1 NURSE/MIDWIFE 2 OTHER PERSON 6 _____ (SPECIFY)		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
445	Where did this first check of (NAME) take place? PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE. IF UNABLE TO DETERMINE IF A HOSPITAL, HEALTH CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE THE NAME OF THE PLACE. _____ (NAME OF PLACE)	**HOME** YOUR HOME . . . 11 OTHER HOME . . . 12 **PUBLIC MED. SECTOR** GOVT. HOSPITAL 21 GOVT. HEALTH CENTER . . . . . 22 GOVT. MCH . . . 23 UNIVERSITY HOSPITAL . . . 24 ROYAL MEDICAL SERVICES . . . 25 OTHER PUBLIC 26 _____ (SPECIFY) **PRIVATE MED. SECTOR** PVT. HOSPITAL/ CLINIC . . . . . 31 UNRWA HEALTH CENTER . . . . . 32 OTHER PRIVATE MED._____ 36 (SPECIFY) **OTHER**_____ 96 (SPECIFY)		
446A	During this check did (NAME) receive a heel prick?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
446B	During this check did (NAME) have his/her hearing tested?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
447	Has your menstrual period returned since the birth of (NAME)?	YES . . . . . 1 (SKIP TO 449) NO . . . . . 2 (SKIP TO 450)		
448	Did your period return between the birth of (NAME) and your next pregnancy?		YES . . . . . 1 NO . . . . . 2 (SKIP TO 452)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 452)
449	For how many months after the birth of (NAME) did you not have a period?	MONTHS . . . [ ][ ] DON'T KNOW 98	MONTHS . . . [ ][ ] DON'T KNOW 98	MONTHS . . . [ ][ ] DON'T KNOW 98
450	CHECK 226: IS RESPONDENT PREGNANT?	NOT PREG-NANT PREGNANT OR UNSURE (SKIP TO 452)		
451	Have you had sexual intercourse since the birth of (NAME)?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 453)		
452	For how many months after the birth of (NAME) did you not have sexual intercourse?	MONTHS . . . [ ][ ] DON'T KNOW 98	MONTHS . . . [ ][ ] DON'T KNOW 98	MONTHS . . . [ ][ ] DON'T KNOW 98

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
453	Did you ever breastfeed (NAME)?	YES . . . . . 1 (SKIP TO 455) NO 2	YES . . . . . 1 (SKIP TO 458) NO 2	YES . . . . . 1 (SKIP TO 458) NO 2
454	CHECK 404: IS CHILD LIVING?	LIVING (SKIP TO 460) DEAD (GO BACK TO 405 IN NEXT COLUMN; OR IF NO MORE BIRTHS, GO TO 501)		
455	How long after birth did you first put (NAME) to the breast? IF LESS THAN 1 HOUR, RECORD '00' HOURS. IF LESS THAN 24 HOURS, RECORD HOURS. OTHERWISE, RECORD DAYS.	IMMEDIATELY . . . 000 HOURS 1 [ ][ ] DAYS 2 [ ][ ]		
456	In the first three days after delivery, was (NAME) given anything to drink other than breast milk?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 458)		
457	What was (NAME) given to drink? Anything else? RECORD ALL LIQUIDS MENTIONED.	MILK (OTHER THAN BREAST MILK) . A PLAIN WATER . . . B SUGAR OR GLUCOSE WATER . . . C GRIPE WATER . . . D SUGAR-SALT-WATER SOLUTION . . . . . E FRUIT JUICE . . . . . F INFANT FORMULA . G TEA/INFUSIONS . . . H HONEY . . . . . I OTHER _____ X (SPECIFY)		
458	CHECK 404: IS CHILD LIVING?	LIVING DEAD (GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501)	LIVING DEAD (GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501)	LIVING DEAD (GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501)
459	Are you still breastfeeding (NAME)?	YES . . . . . 1 NO 2		
460	Did (NAME) drink anything from a bottle with a nipple yesterday or last night?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
461		GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501.	GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501.	GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501.

SECTION 5. CHILD IMMUNIZATION AND HEALTH AND CHILD'S NUTRITION

501	ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2007 OR LATER. ASK THE QUESTIONS ABOUT ALL OF THESE BIRTHS. BEGIN WITH THE LAST BIRTH. (IF THERE ARE MORE THAN 3 BIRTHS, USE LAST 2 COLUMNS OF ADDITIONAL QUESTIONNAIRES).			
502	BIRTH HISTORY LINE NUMBER FROM 212	LAST BIRTH BIRTH HISTORY NUMBER	NEXT-TO-LAST BIRTH BIRTH HISTORY NUMBER	SECOND-FROM-LAST BIRTH BIRTH HISTORY NUMBER . . . . .
503	FROM 212 AND 216	NAME_____ LIVING DEAD ☐ → (GO TO 503 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 555)	NAME_____ LIVING DEAD ☐ → (GO TO 503 IN NEXT COLUMN OR, IF NO MORE BIRTHS, GO TO 555)	NAME_____ LIVING DEAD ☐ → (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE, OR IF NO MORE BIRTHS, GO TO 555)
504	Do you have a card where (NAME'S) vaccinations are written down? IF YES: May I see it please?	YES, SEEN . . . . . 1 (SKIP TO 506) YES, NOT SEEN . . . . . 2 (SKIP TO 508) NO CARD 3	YES, SEEN . . . . . 1 (SKIP TO 506) YES, NOT SEEN . . . . . 2 (SKIP TO 508) NO CARD 3	YES, SEEN . . . . . 1 (SKIP TO 506) YES, NOT SEEN . . . . . 2 (SKIP TO 508) NO CARD 3
505	Did you ever have a vaccination card for (NAME)?	YES . . . . . 1 (SKIP TO 508) NO 2	YES . . . . . 1 (SKIP TO 508) NO 2	YES . . . . . 1 (SKIP TO 508) NO 2

506 (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				
POLIO (IPV/OPV) 1				P1				P1				
POLIO (IPV/OPV) 2				P2				P2				
POLIO (OPV) 3				P3				P3				
POLIO (OPV) 4				P4				P4				
POLIO Booster				P b				P b				
DPT (TETRA/PENTA) 1				DTP1				DTP1				
DPT (TETRA/PENTA) 2				DTP2				DTP2				
DPT (TETRA/PENTA) 3				DTP3				DTP3				
DTP Booster				DTPb				DTPb				
HEPATITIS (TETRA/ PENTA) 1				HEP1				HEP1				
HEPATITIS (TETRA/ PENTA) 2				HEP2				HEP2				
HEPATITIS (TETRA/ PENTA) 3				HEP3				HEP3				
Hib (TETRA/PENTA) 1				Hib1				Hib1				
Hib (TETRA/PENTA) 2				Hib2				Hib2				
Hib (TETRA/PENTA) 3				Hib3				Hib3				
MEASLES				MEA				MEA				
MMR (Measles/ /Mumps/ Rubella)				MMR				MMR				

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
507	Has (NAME) received any vaccinations that are not recorded on this card, including vaccinations received in a immunization campaign? RECORD 'YES' ONLY IF RESPONDENT MENTIONS BCG, POLIO 1-4, POL. Booster DPT 1-3, DPT Booster, HEPATITIS 1-3, Hib 1-3, MEASLES AND/OR MMR.	YES . . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 510) NO . . . . . 2 (SKIP TO 510) DON'T KNOW 8	YES . . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 511) NO . . . . . 2 (SKIP TO 511) DON'T KNOW 8	YES . . . . . 1 (PROBE FOR VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506) (SKIP TO 511) NO . . . . . 2 (SKIP TO 511) DON'T KNOW 8
508	Did (NAME) ever receive any vaccinations to prevent him/her from getting diseases, including vaccinations received in an immunization campaign?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 510) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 511) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 511) DON'T KNOW 8
509	Please tell me if (NAME) received any of the following vaccinations:			
509A	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
509B	Polio vaccine, that is, usually drops in the mouth or sometimes an injection in the thigh?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 509D) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 509D) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 509D) DON'T KNOW 8
509C	How many times was the polio vaccine received?	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]
509D	A DPT vaccination, that is, an injection given in the thigh, sometimes at the same times as polio to prevent diphtheria, pertussis, and tetanus. Sometimes, DPT is part of the TETRA or PENTA vaccine.	YES . . . . . 1 NO . . . . . 2 (SKIP TO 509F) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 509F) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 509F) DON'T KNOW 8
509E	How many times was a DPT vaccination received?	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]
509F	An injection to prevent Hepatitis, that is an injection given sometimes at the same times as polio and DPT injection. Sometimes, DPT is part of the TETRA or PENTA vaccine.	YES . . . . . 1 NO . . . . . 2 (SKIP TO 509H) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 509H) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 509H) DON'T KNOW 8
509G	How many times was a Hepatitis vaccination received?	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]
509H	A Hib vaccination, that is an injection given sometimes at the same times as polio, DPT and Hepatitis to prevent meningitis. Sometimes, DPT is part of the TETRA or PENTA vaccine.	YES . . . . . 1 NO . . . . . 2 (SKIP TO 509J) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 509J) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 509J) DON'T KNOW 8
509I	How many times was a Hib vaccination received?	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]	NUMBER OF TIMES . . . . . [ ]

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
509J	A measles injection, that is a shot in the arm at the age of 9 months or older to prevent measles?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
509K	A MMR vaccination, that is an injection to prevent Measles, Mumps and Rubella, usually given at the age of 18 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
510	Did (NAME) receive an anemia test?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8		
511	HAS (NAME) ever received a vitamin A dose (like this/ any of these)? SHOW COMMON TYPES OF CAPSULES.	YES . . . . . 1 NO . . . . . 2 (SKIP TO 512) ←┤ DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 512) ←┤ DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 512) ←┤ DON'T KNOW 8
511A	Did (NAME) receive a vitamin A dose within the last six months?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
512	In the last seven days, was (NAME) given iron pills, sprinkles with iron, or iron syrup like (this/any of these)? SHOW COMMON TYPES OF PILLS/SPRINKLES/ SYRUPS.	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
514	Has (NAME) had diarrhea in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) ←┤ DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) ←┤ DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) ←┤ DON'T KNOW 8
515	Was there any blood in the stools?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8
516	Now I would like to know how much (NAME) was given to drink during the diarrhea (including breastmilk). Was he/she given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was he/she given much less than usual to drink or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8
517	When (NAME) had diarrhea, was he/she given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
518	Did you seek advice or treatment for the diarrhea from any source?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 521B)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 521B)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 521B)
519	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	**PUBLIC MED. SECTOR** GOVT. HOSP. . A GOVT. HEALTH CENTER . . . . . B GOVT. MCH . . . C UNIVERSITY HOSPITAL . . . D ROYAL MEDICAL SERVICES . . . E OTHER PUBLIC F _____ (SPECIFY) **PRIVATE MED. SECTOR** PVT. HOSPITAL/ CLINIC . . . . . G PHARMACY . . . H PVT DOCTOR . . . I UNRWA HEALTH CENTER . . . . . J OTHER PRIVATE MED._____ K (SPECIFY) **OTHER**_____ X (SPECIFY)	**PUBLIC MED. SECTOR** GOVT. HOSP. . A GOVT. HEALTH CENTER . . . . . B GOVT. MCH . . . C UNIVERSITY HOSPITAL . . . D ROYAL MEDICAL SERVICES . . . E OTHER PUBLIC F _____ (SPECIFY) **PRIVATE MED. SECTOR** PVT. HOSPITAL/ CLINIC . . . . . G PHARMACY . . . H PVT DOCTOR . . . I UNRWA HEALTH CENTER . . . . . J OTHER PRIVATE MED._____ K (SPECIFY) OTHER_____ X (SPECIFY)	**PUBLIC MED. SECTOR** GOVT. HOSP. . A GOVT. HEALTH CENTER . . . . . B GOVT. MCH . . . C UNIVERSITY HOSPITAL . . . D ROYAL MEDICAL SERVICES . . . E OTHER PUBLIC F _____ (SPECIFY) **PRIVATE MED. SECTOR** PVT. HOSPITAL/ CLINIC . . . . . G PHARMACY . . . H PVT DOCTOR . . . I UNRWA HEALTH CENTER . . . . . J OTHER PRIVATE MED._____ K (SPECIFY) OTHER_____ X (SPECIFY)
520	CHECK 519:	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 521A)	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 521A)	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 521A)
521	Where did you first seek advice or treatment? USE LETTER CODE FROM 519.	FIRST PLACE . . . ☐	FIRST PLACE . . . ☐	FIRST PLACE . . . ☐
521A	How many days after the diarrhea began did you first seek advice or treatment for (NAME)? IF THE SAME DAY, RECORD '00'.	DAYS . . . . . ☐☐	DAYS . . . . . ☐☐	DAYS . . . . . ☐☐
521B	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

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
522	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 Aquacell or Paralait?	AQUA-CELL/ PARALAIT 1 2 8	AQUA-CELL/ PARALAIT 1 2 8	AQUA-CELL/ PARALAIT 1 2 8
	b) Thin watery gruel made from rice, carrots, wheat, etc?	GRUEL . . 1 2 8	GRUEL . . 1 2 8	GRUEL . . 1 2 8
	c) Soup?	SOUP . . . 1 2 8	SOUP . . . 1 2 8	SOUP . . . 1 2 8
	d) Home made sugar-salt-water solution?	SU-SALT . 1 2 8	SU-SALT . 1 2 8	SU-SALT . 1 2 8
	e) Milk or infant formula?	MILK/FOR. 1 2 8	MILK/FOR. 1 2 8	MILK/FOR. 1 2 8
	f) Yoghurt-based drink?	YOGHURT 1 2 8	YOGHURT 1 2 8	YOGHURT 1 2 8
	g) Water	WATER . 1 2 8	WATER . 1 2 8	WATER . 1 2 8
	h) Any other liquid?	OTH. LIQ. 1 2 8	OTH. LIQ. 1 2 8	OTH. LIQ. 1 2 8
523	Was anything (else) given to treat the diarrhea?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) ←┤ DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) ←┤ DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 525) ←┤ DON'T KNOW 8
524	What (else) was given to treat the diarrhea? Anything else? RECORD ALL TREATMENTS GIVEN.	**PILL OR SYRUP** ANTIBIOTIC . . . . . A NON-ANTIBIO. . . B UNKNOWN PILL OR SYRUP . . . C **INJECTION** ANTIBIOTIC . . . . . D NON-ANTIBIO. . . E UNKNOWN INJECTION . . . F **(IV) INTRAVENOUS** . G **HOME REMEDY/** HERBAL MEDICINE . . . . . H OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	**PILL OR SYRUP** ANTIBIOTIC . . . . . A NON-ANTIBIO. . . B UNKNOWN PILL OR SYRUP . . . C **INJECTION** ANTIBIOTIC . . . . . D NON-ANTIBIO. . . E UNKNOWN INJECTION . . . F **(I\ (I\ (IV) INTRAVENOU** G **HOME REMEDY/** HERBAL MEDICINE . . . . . H OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	**PILL OR SYRUP** ANTIBIOTIC . . . . . A NON-ANTIBIO. . . B UNKNOWN PILL OR SYRUP . . . C **INJECTION** ANTIBIOTIC . . . . . D NON-ANTIBIO. . . E UNKNOWN INJECTION . . . F **(IV) INTRAVENOUS** . G **HOME REMEDY/** HERBAL MEDICINE . . . . . H OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z
525	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
527	Has (NAME) had an illness with a cough at any time in the last 2 weeks?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 530) ←┤ DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 530) ←┤ DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 530) ←┤ DON'T KNOW 8
528	When (NAME) had an illness with a cough, did he/she breathe faster than usual with short, rapid breaths or have difficulty breathing?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 531) ←┤ DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 531) ←┤ DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (SKIP TO 531) ←┤ DON'T KNOW 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
529	Was the fast or difficult breathing due to a problem in the chest or to a blocked or runny nose?	CHEST ONLY . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER _____ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 531)	CHEST ONLY . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER _____ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 531)	CHEST ONLY . . . 1 NOSE ONLY . . . . . 2 BOTH . . . . . 3 OTHER _____ 6 (SPECIFY) DON'T KNOW . . . . . 8 (SKIP TO 531)
530	CHECK 525: HAD FEVER?	YES ☐ NO OR DK ☐ (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 555)	YES ☐ NO OR DK ☐ (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 555)	YES ☐ NO OR DK ☐ (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 555)
531	Now I would like to know how much (NAME) was given to drink (including breastmilk) during the illness with a (fever/cough). Was he/she given less than usual to drink, about the same amount, or more than usual to drink? IF LESS, PROBE: Was he/she given much less than usual to drink or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 NOTHING TO DRINK 5 DON'T KNOW 8
532	When (NAME) had a (fever/cough), was he/she given less than usual to eat, about the same amount, more than usual, or nothing to eat? IF LESS, PROBE: Was he/she given much less than usual to eat or somewhat less?	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8	MUCH LESS . . . . . 1 SOMEWHAT LESS 2 ABOUT THE SAME 3 MORE . . . . . 4 STOPPED FOOD 5 NEVER GAVE FOOD 6 DON'T KNOW 8
533	Did you seek advice or treatment for the illness from any source?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 536B)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 536B)	YES . . . . . 1 NO . . . . . 2 (SKIP TO 536B)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
534	Where did you seek advice or treatment? Anywhere else? PROBE TO IDENTIFY EACH TYPE OF SOURCE. IF UNABLE TO DETERMINE IF PUBLIC OR PRIVATE SECTOR, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	**PUBLIC MED. SECTOR** GOVT. HOSP. . A GOVT. HEALTH CENTER . . . . . B GOVT. MCH . . . C UNIVERSITY HOSPITAL . . . D ROYAL MEDICAL SERVICES . . . E OTHER PUBLIC F _____ (SPECIFY) **PRIVATE MED. SECTOR** PVT. HOSPITAL/ CLINIC . . . . . G PHARMACY . . . H PVT DOCTOR . . . I UNRWA HEALTH CENTER . . . . . J OTHER PRIVATE MED. _____ K (SPECIFY) OTHER _____ X (SPECIFY)	**PUBLIC MED. SECTOR** GOVT. HOSP. . A GOVT. HEALTH CENTER . . . . . B GOVT. MCH . . . C UNIVERSITY HOSPITAL . . . D ROYAL MEDICAL SERVICES . . . E OTHER PUBLIC F _____ (SPECIFY) **PRIVATE MED. SECTOR** PVT. HOSPITAL/ CLINIC . . . . . G PHARMACY . . . H PVT DOCTOR . . . I UNRWA HEALTH CENTER . . . . . J OTHER PRIVATE MED. _____ K (SPECIFY) OTHER _____ X (SPECIFY)	**PUBLIC MED. SECTOR** GOVT. HOSP. . A GOVT. HEALTH CENTER . . . . . B GOVT. MCH . . . C UNIVERSITY HOSPITAL . . . D ROYAL MEDICAL SERVICES . . . E OTHER PUBLIC F _____ (SPECIFY) **PRIVATE MED. SECTOR** PVT. HOSPITAL/ CLINIC . . . . . G PHARMACY . . . H PVT DOCTOR . . . I UNRWA HEALTH CENTER . . . . . J OTHER PRIVATE MED. _____ K (SPECIFY) OTHER _____ X (SPECIFY)
535	CHECK 534:	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 536A)	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 536A)	TWO OR MORE CODES CIRCLED ☐ ONLY ONE CODE CIRCLED ☐ (SKIP TO 536A)
536	Where did you first seek advice or treatment? USE LETTER CODE FROM 534.	FIRST PLACE . . . ☐	FIRST PLACE . . . ☐	FIRST PLACE . . . ☐
536A	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 . . . . . ☐☐
536B	Is (NAME) still sick with a (fever/ cough)?	FEVER ONLY . . . . . 1 COUGH ONLY . . . 2 BOTH FEVER AND COUGH . . . . . 3 NO, NEITHER . . . . . 4 DON'T KNOW . . . 8	FEVER ONLY . . . . . 1 COUGH ONLY . . . 2 BOTH FEVER AND COUGH . . . . . 3 NO, NEITHER . . . . . 4 DON'T KNOW . . . 8	FEVER ONLY . . . . . 1 COUGH ONLY . . . 2 BOTH FEVER AND COUGH . . . . . 3 NO, NEITHER . . . . . 4 DON'T KNOW . . . 8
537	At any time during the illness, did (NAME) take any drugs for the illness?	YES . . . . . 1 NO . . . . . 2 (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 555) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 555) DON'T KNOW 8	YES . . . . . 1 NO . . . . . 2 (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 555) DON'T KNOW 8

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
538	What drugs did (NAME) take? Any other drugs? RECORD ALL MENTIONED.	**PILL OR SYRUP** ANTIBIOTIC . . . . . A NON-ANTIBIO. . . . B UNKNOWN PILL OR SYRUP . . . C **INJECTION** ANTIBIOTIC . . . . . D NON-ANTIBIO. . . . E UNKNOWN INJECTION . . . F **(IV) INTRAVENOUS** . G **HOME REMEDY/** HERBAL MEDICINE . . . . . H OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	**PILL OR SYRUP** ANTIBIOTIC . . . . . A NON-ANTIBIO. . . . B UNKNOWN PILL OR SYRUP . . . C **INJECTION** ANTIBIOTIC . . . . . D NON-ANTIBIO. . . . E UNKNOWN INJECTION . . . F **(IV) INTRAVENOUS** . G **HOME REMEDY/** HERBAL MEDICINE . . . . . H OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	**PILL OR SYRUP** ANTIBIOTIC . . . . . A NON-ANTIBIO. . . . B UNKNOWN PILL OR SYRUP . . . C **INJECTION** ANTIBIOTIC . . . . . D NON-ANTIBIO. . . . E UNKNOWN INJECTION . . . F **(IV) INTRAVENOUS** . G **HOME REMEDY/** HERBAL MEDICINE . . . . . H OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z
552		GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 555.	GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 555.	GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 555.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
555	CHECK 522(a), ALL COLUMNS: NO CHILD RECEIVED AQUACELL OR PARALAIT ☐ ↓ ANY CHILD RECEIVED AQUACELL OR PARALAIT ☐ →		557
556	Have you ever heard of a special product called Aquacell or Paralait you can get for the treatment of diarrhea?	YES . . . . . 1 NO 2	
557	CHECK 215 AND 218, ALL ROWS: NUMBER OF CHILDREN BORN IN 2010 OR LATER LIVING WITH THE RESPONDENT ONE OR MORE ☐ ↓ NONE ☐ →		601
	RECORD NAME OF YOUNGEST CHILD LIVING WITH HER AND CONTINUE WITH 558 _____ (NAME)		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES				SKIP
558	Now I would like to ask you about liquids or foods that (NAME FROM 557) had yesterday during the day or at night. I am interested in whether your child had the item I mention even if it was combined with other foods.					
	Did (NAME FROM 557) (drink/eat):		YES	NO	DK	
	a) Plain water?	**a)**	1	2	8	
	b) Juice or juice drinks?	**b)**	1	2	8	
	c) Clear broth?	**c)**	1	2	8	
	d) Milk such as tinned, powdered, or fresh animal milk?	**d)**	1	2	8	
	IF YES: How many times did (NAME) drink milk? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES DRANK MILK			☐	
	e) Infant formula?	**e)**	1	2	8	
	IF YES: How many times did (NAME) drink infant formula? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES DRANK FORMULA			☐	
	f) Any other liquids?	**f)**	1	2	8	
	g) Yogurt?	**g)**	1	2	8	
	IF YES: How many times did (NAME) eat yogurt? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES ATE YOGURT			☐	
	h) Any commercially fortified baby food, e.g., Cerelac?	**h)**	1	2	8	
	i) Bread, pasta, rice, maize, or any other food made from grains?	**i)**	1	2	8	
	j) Carrots, red sweet potatoes, or pumpkin?	**j)**	1	2	8	
	k) Any other food made from roots or tubers, such as white potatoes, or other roots/tubers?	**k)**	1	2	8	
	l) Any green leafy vegetables, such as spinach, or mouloukia?	**l)**	1	2	8	
	m) Apricot, palm nuts, or yellow melon?	**m)**	1	2	8	
	n) Any other fruits or vegetables?	**n)**	1	2	8	
	o) Liver, kidney, heart or other organ meats?	**o)**	1	2	8	
	p) Any meat, such as beef, lamb, goat, chicken, or duck?	**p)**	1	2	8	
	q) Eggs?	**q)**	1	2	8	
	r) Fresh or dried fish or shellfish?	**r)**	1	2	8	
	s) Any foods made from beans, peas, lentils, chickpeas or nuts?	**s)**	1	2	8	
	t) Cheese or other food made from milk?	**t)**	1	2	8	
	u) Any type of nuts or seeds, such as pistachio, almonds, cashew, peanuts, or sesame seeds?	**u)**	1	2	8	
	v) Any other solid, semi-solid, or soft food?	**v)**	1	2	8	
559	CHECK 558 (CATEGORIES "g" THROUGH "v"):					
	NOT A SINGLE "YES" ☐ ↓	AT LEAST ONE "YES" ☐ → 561				

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NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
560	Did (NAME) eat any solid, semi-solid, or soft foods yesterday during the day or at night? IF 'YES' PROBE: What kind of solid, semi-solid or soft foods did (NAME) eat?	YES . . . . . 1 (GO BACK TO 558 TO RECORD FOOD EATEN YESTERDAY) NO 2	→ 601
561	How many times did (NAME FROM 557) eat solid, semi-solid, or soft foods yesterday during the day or at night? IF 7 OR MORE TIMES, RECORD '7'.	NUMBER OF TIMES . . . . . [ ] DON'T KNOW 8	

SECTION 6. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	CHECK 101A: CURRENTLY MARRIED/ ↓ WIDOWED/ SEPARATED/ DIVORCED →		606
602	Is your husband living with you now or is he staying elsewhere?	LIVING WITH HER . . . . . 1 STAYING ELSEWHERE 2	
603	RECORD THE HUSBAND'S NAME AND LINE NUMBER FROM THE HOUSEHOLD QUESTIONNAIRE. IF HE IS NOT LISTED IN THE HOUSEHOLD, RECORD '00'.	NAME _____ LINE NO. . . . . [ ][ ]	
604	Does your husband have another wife (other wives) besides you?	YES . . . . . 1 NO 2	→ 606
605	Including yourself, in total, how many wives does your husband have?	TOTAL NUMBER OF WIVES . . [ ] DON'T KNOW 8	
606	Have you been married only once or more than once?	ONLY ONCE . . . . . 1 MORE THAN ONCE 2	
607	CHECK 606: MARRIED ONLY ONCE ↓ In what month and year did you start living with your husband (consummate marriage)? MARRIED MORE THAN ONCE ↓ Now I would like to ask about your first husband. In what month and year did you start living with him (consummate marriage)?	MONTH . . . . . [ ][ ] DON'T KNOW MONTH . . . . . 98 YEAR . . . . . [ ][ ][ ][ ] DON'T KNOW YEAR 9998	→ 609
608	How old were you when you first started living with him?	AGE . . . . . [ ][ ]	
609	Before you got married, was your (first) husband related to you in any way?	YES . . . . . 1 NO 2	→ 611
610	What type of relation was it?	FIRST COUSIN ON BOTH FATHER AND MOTHER'S SIDE . . . . . 01 FIRST COUSIN ON BOTH MOTHER AND FATHER'S SIDE . . . . . 02 FIRST COUSIN ON FATHER'S SIDE (IBN AL AMM) . . . . . 03 FIRST COUSIN ON MOTHER'S SIDE (IBN AL KHAL) . . . . . 04 FIRST COUSIN ON FATHER'S SIDE (IBN AL AMMAH) . . . . . 05 FIRST COUSIN ON MOTHER'S SIDE (IBN AL KHALAH) . . . . . 06 SECOND COUSIN (FATHER'S SIDE) . 07 SECOND COUSIN (MOTHER'S SIDE) . 08 OTHER RELATIVE . . . . . 09 DON'T KNOW 98	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
611	CHECK 606: MARRIED ONLY ONCE → Did your husband have a premarital medical exam? MARRIED MORE THAN ONCE → Now I would like to ask about your last marriage. Did your husband have a premarital medical exam?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
611A	Did you have a premarital medical exam?	YES . . . . . 1 NO 2	→ 612
611B	Where did you go for the premarital medical exam?	**PUBLIC MEDICAL SECTOR** GOVT. HOSPITAL . . . . . 11 GOVT. HEALTH CENTER . . . . . 12 GOVT. MCH . . . . . 13 UNIVERSITY HOSPITAL . . . . . 14 ROYAL MEDICAL SERVICES 15 OTHER PUBLIC _____ 16 (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . . . 21 PRIVATE DOCTOR . . . . . 22 JORDANIAN AS. OF FP AND PROTECTION (JAFPP) . . . . . 23 UNRWA HEALTH CENTER . . . . . 24 OTHER NON GOV. ORGANIZATION. 25 OTHER PRIVATE MEDICAL _____ 26 (SPECIFY) **OTHER** _____ 96 (SPECIFY)	
612	When was the <u>last</u> time you had sexual intercourse? IF LESS THAN 12 MONTHS, ANSWER MUST BE RECORDED IN DAYS, WEEKS OR MONTHS. IF 12 MONTHS (ONE YEAR) OR MORE, ANSWER MUST BE RECORDED IN YEARS.	DAYS AGO . . . . . 1 [ ][ ] WEEKS AGO . . . . . 2 [ ][ ] MONTHS AGO . . . . . 3 [ ][ ] YEARS AGO . . . . . 4 [ ][ ]	→ 614
613	The last time you had sexual intercourse, was a condom used?	YES . . . . . 1 NO 2	
614	Do you know of a place where a person can get condoms?	YES . . . . . 1 NO 2	→ 615A

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
615	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	**PUBLIC MEDICAL SECTOR** GOVT. HOSPITAL . . . . . A GOVT. HEALTH CENTER . . . . . B GOVT. MCH . . . . . C UNIVERSITY HOSPITAL/CLINIC D ROYAL MEDICAL SERVICES . . . E OTHER PUBLIC _____ F (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . . . G PRIVATE DOCTOR . . . . . H PHARMACY . . . . . I JORDANIAN AS. OF FP AND PROTECTION (JAFPP) . . . . . J UNRWA CLINIC . . . . . K OTHER NON-GOV ORGANIZATION L OTHER PRIVATE MEDICAL _____ M (SPECIFY) **OTHER SOURCE** FRIEND/RELATIVE . . . . . N OTHER _____ X (SPECIFY)	
615A	Have you performed a breast cancer self exam to detect breast cancer in yourself within the last 12 months?	YES . . . . . 1 NO . . . . . 2 DK BREAST CANCER/ DK SELF EXAM 8	
615B	Have you had a breast cancer clinical exam to detect breast cancer in the last 12 months?	YES . . . . . 1 NO . . . . . 2 NOT SURE 8	
615C	Have you ever heard of a pap smear, that is, an exam that consists of removing cells from the cervix to detect changes that can suggest the presence of cancer in a woman's womb?	YES . . . . . 1 NO 2	→ 700
615D	Have you ever had such an exam in your life time?	YES . . . . . 1 NO 2	

SECTION 7. FERTILITY PREFERENCES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
700	CHECK 101A: CURRENTLY MARRIED ☐ CURRENTLY WIDOWED, DIVORCED, OR SEPARATED ☐		→ 712
701	CHECK 304: NEITHER STERILIZED ☐ HE OR SHE STERILIZED ☐		→ 712
702	CHECK 226: PREGNANT ☐ NOT PREGNANT OR UNSURE ☐		→ 704
703	Now I have some questions about the future. After the child you are expecting now, would you like to have another child, or would you prefer not to have any more children?	HAVE ANOTHER CHILD . . . . . 1 NO MORE . . . . . 2 UNDECIDED/DON'T KNOW 8	→ 705 → 711
704	Now I have some questions about the future. Would you like to have (a/another) child, or would you prefer not to have any (more) children?	HAVE (A/ANOTHER) CHILD . . . . . 1 NO MORE/NONE . . . . . 2 SAYS SHE CAN'T GET PREGNANT . 3 UNDECIDED/DON'T KNOW 8	 → 707 → 712 → 710
705	CHECK 226: NOT PREGNANT OR UNSURE ☐ How long would you like to wait from now before the birth of (a/another) child? PREGNANT ☐ After the birth of the child you are expecting now, how long would you like to wait before the birth of another child?	MONTHS . . . . . 1 [ ][ ] YEARS . . . . . 2 [ ][ ] SOON/NOW . . . . . 993 SAYS SHE CAN'T GET PREGNANT . 994 OTHER _____ 996 (SPECIFY) DON'T KNOW 998	 → 710 → 712 → 710
706	CHECK 226: NOT PREGNANT OR UNSURE ☐ PREGNANT ☐		→ 711
707	CHECK 303: USING A CONTRACEPTIVE METHOD? NOT CURRENTLY USING ☐ CURRENTLY USING ☐		→ 712
708	CHECK 705: NOT ASKED ☐ 24 OR MORE MONTHS OR 02 OR MORE YEARS ☐ 00-23 MONTHS OR 00-01 YEAR ☐		→ 711

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
709	CHECK 704: WANTS TO HAVE A/ANOTHER CHILD → You have said that you do not want (a/another) child soon. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? WANTS NO MORE/ NONE → You have said that you do not want any (more) children. Can you tell me why you are not using a method to prevent pregnancy? Any other reason? RECORD ALL REASONS MENTIONED.	**FERTILITY-RELATED REASONS** NOT HAVING SEX . . . . . A INFREQUENT SEX . . . . . B MENOPAUSAL/HYSTERECTOMY . C SUBFECUND/INFECUND . . . . . D POSTPARTUM AMENORRHEIC . . . E BREASTFEEDING . . . . . F DIFFICULT TO GET PREGNANT . . . G **OPPOSITION TO USE** RESPONDENT OPPOSED . . . . . H HUSBAND OPPOSED . . . . . I OTHERS OPPOSED . . . . . J RELIGIOUS PROHIBITION . . . . . K RUMORS . . . . . 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	
710	CHECK 303: USING A CONTRACEPTIVE METHOD? NOT ASKED → NO, NOT CURRENTLY USING → YES, CURRENTLY USING		→ 712
711	Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	 → 711B → 712
711A	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 FOAM/JELLY . . . . . 10 LACTATIONAL AMEN. METHOD . . . . . 11 RHYTHM METHOD/PERIOD. ABSTIN. . 12 WITHDRAWAL . . . . . 13 OTHER _____ 96 (SPECIFY) DK/UNSURE 98	→ 712

W-40

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
711B	What is the main reason that you think you will not use a contraceptive method at any time in the future?	**FERTILITY-RELATED REASONS** INFREQUENT SEX/NO SEX . . . 11 MENOPAUSAL/HYSTERECTOMY 12 SUBFECUND/INFECUND . . . . . 13 WANTS AS MANY CHILDREN AS POSSIBLE . . . . . 14 **OPPOSITION TO USE** RESPONDENT OPPOSED . . . . . 21 HUSBAND OPPOSED . . . . . 22 OTHERS OPPOSED . . . . . 23 RELIGIOUS PROHIBITION . . . . . 24 RUMORS 25 **LACK OF KNOWLEDGE** KNOWS NO METHOD . . . . . 31 KNOWS NO SOURCE . . . . . 32 **METHOD-RELATED REASONS** HEALTH CONCERNS . . . . . 41 FEAR OF SIDE EFFECTS . . . . . 42 LACK OF ACCESS/TOO FAR . . . 43 COSTS TOO MUCH . . . . . 44 INCONVENIENT TO USE . . . . . 45 INTERFERES WITH BODY'S NORMAL PROCESSES . . . . . 46 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	712 711D 712
711C	Why does your husband disapprove of using contraception? RECORD ALL REASONS MENTIONED.	AGAINST RELIGION . . . . . A CAUSE HEALTH PROBLEMS . . . . . B FEAR OF SIDE EFFECTS . . . . . C COST TOO MUCH . . . . . D INTERFERES WITH BODY'S NORMAL PROCESSES . . . . . E FATALISTIC . . . . . F OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	712
711D	Why do you disapprove of using contraception? RECORD ALL REASONS MENTIONED.	AGAINST RELIGION . . . . . A CAUSE HEALTH PROBLEMS . . . . . B FEAR OF SIDE EFFECTS . . . . . C COST TOO MUCH . . . . . D INTERFERES WITH BODY'S NORMAL PROCESSES . . . . . E FATALISTIC . . . . . F OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
712	CHECK 216: HAS LIVING CHILDREN ☐ — If you could go back to the time you did not have any children and could choose exactly the number of children to have in your whole life, how many would that be? NO LIVING CHILDREN ☐ — If you could choose exactly the number of children to have in your whole life, how many would that be? PROBE FOR A NUMERIC RESPONSE.	NONE . . . . . 00 NUMBER . . . . . ☐☐ OTHER _____ 96 (SPECIFY)	→ 714 → 714
713	How many of these children would you like to be boys, how many would you like to be girls and for how many would it not matter if it's a boy or a girl?	BOYS GIRLS EITHER NUMBER ☐☐ ☐☐ ☐☐ OTHER _____ 96 (SPECIFY)	
713A	If you could choose exactly the number of months to wait between the birth of one child and the birth of another, how many months would that be? PROBE FOR A NUMERIC RESPONSE.	NUMBER . . . . . ☐☐ OTHER _____ 96 (SPECIFY)	
714	In the last few months have you: Heard about family planning on the radio? Seen about family planning on the television? Read about family planning in a newspaper or magazine? Seen or read about family planning on posters? Read about family planning in bulletins/booklets? Heard about family planning in lectures? Heard about family planning from women you associate with? Heard about family planning from any other people you associate with? Heard about family planning at a community event?	YES NO RADIO . . . . . 1 2 TELEVISION . . . . . 1 2 NEWSPAPER OR MAGAZINE . 1 2 POSTER . . . . . 1 2 BULLETIN/BOOKLET . . . . . 1 2 LECTURE . . . . . 1 2 WOMEN . . . . . 1 2 OTHER PEOPLE . . . . . 1 2 COMMUNITY EVENT 1 2	
714A	In the last few months have you seen, heard or read about Hayatee Ahla?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
714B	In the last few months have you ever seen this logo for the Hayatee Ahla campaign? SHOW THE HOT BALLOON CARD	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	 → 715
714C	What does Hayatee Ahla mean to you? PROBE: Anything else? CIRCLE ALL RESPONSES.	FAMILY PLANNING . . . . . A USING CONTRACEPTIVES . . . . . B ADVANTAGE OF MODERN CONTRA. C HAPPY SMALL FAMILY . . . . . D SPACING AT LEAST 3 YEARS BETWEEN PREGNANCIES . . . . . E QUALITY OF LIFE/WELL BEING/ PROSPERITY . . . . . F SUPPORT OF GENDER EQUALITY BY ISLAM . . . . . G LIFE PLANNING . . . . . H REPRODUCTIVE HEALTH . . . . . I APPROVAL OF USING MODERN CONTRACEPTIVES BY ISLAM . . . J APPROVAL OF ON SPACING PREG. BY AT LEAST 3 YEARS . . . . . K OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Y	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
715	Where and from whom would you prefer to get information about family planning? CIRCLE ONLY ONE ANSWER.	**INTERPERSONAL** GOVERN. HEALTH WORKER . . . . . 11 PRIVATE DOCTOR/NURSE . . . . . 12 JAFPP STAFF . . . . . 13 HUSBAND . . . . . 14 OTHER RELATIVES . . . . . 15 FRIENDS . . . . . 16 **MEDIA** RADIO . . . . . 21 TV . . . . . 22 PRINT MATERIALS . . . . . 23 SCHOOL, LIBRARY/ACADEMIC . . . 24 COMMUNITY/PUBLIC MEETING . . . 25 LECTURES . . . . . 26 OTHER _____ 96 (SPECIFY) DON'T KNOW 98	
716	CHECK 601: YES, CURRENTLY MARRIED ☐ CURRENTLY WIDOWED, DIVORCED, OR SEPARATED ☐ →		801
716A	CHECK 304: OTHER CODES CIRCLED ☐ CODE B, G, OR M CIRCLED ☐ →		718
	NO CODE CIRCLED ☐ →		718A
716B	Does your husband know that you are using a method of family planning?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
717	CHECK 303: USING A CONTRACEPTIVE METHOD? CURRENTLY USING ☐ NOT CURRENTLY USING OR NOT ASKED ☐ →		718A
718	Would you say that using contraception is mainly your decision, mainly your husband's decision, or did you both decide together?	MAINLY RESPONDENT . . . . . 1 MAINLY HUSBAND/PARTNER . . . . . 2 JOINT DECISION . . . . . 3 OTHER _____ 6 (SPECIFY)	
718A	Now I want to ask you about your husband's views on family planning. Do you think that your husband approves or disapproves of couples using a contraceptive method to avoid pregnancy?	APPROVES . . . . . 1 DISAPPROVES . . . . . 2 DON'T KNOW 8	
719	CHECK 304: NEITHER STERILIZED ☐ HE OR SHE STERILIZED ☐ →		801
720	Does your (husband/partner) want the same number of children that you want, or does he want more or fewer than you want?	SAME NUMBER . . . . . 1 MORE CHILDREN . . . . . 2 FEWER CHILDREN . . . . . 3 DON'T KNOW 8	

SECTION 8. HUSBAND'S BACKGROUND AND WOMAN'S WORK

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
801	CHECK 101A: CURRENTLY MARRIED ☐ ↓ CURRENTLY WIDOWED, DIVORCED, OR SEPARATED ☐ →		803
802	How old was your husband on his last birthday?	AGE IN COMPLETED YEARS ☐☐	
803	Did your (last) husband ever attend school?	YES . . . . . 1 NO 2	→ 806
804	What is the highest level of school he attended: Old elementary, old preparatory, old secondary, new basic, new secondary, intermediate diploma, bachelor, or higher?	**OLD SYSTEM** ELEMENTARY . . . . . 01 PREPARATORY . . . . . 02 SECONDARY . . . . . 03 **NEW SYSTEM** BASIC . . . . . 04 SECONDARY . . . . . 05 INTERMEDIATE DIPLOMA . . . . . 06 BACHELOR . . . . . 07 HIGHER . 08 DON'T KNOW 98	→ 806
805	What was the highest grade he completed at that level?	GRADE . . . . . ☐☐ DON'T KNOW 98	
806	CHECK 101A: CURRENTLY MARRIED ☐ ↓ CURRENTLY WIDOWED, DIVORCED, OR SEPARATED ☐ →		811
807	Has your husband done any work in the last seven days, even for one hour? By "work", I mean any paid work, any work in a business completely or partially owned by your husband, any work in a business owned by the household without payment, or work in other business?	YES . . . . . 1 NO 2	→ 809
808	Does your husband have any job, but he did not practice it during the last seven days for a reason such as vacation, travel, or illness?	YES . . . . . 1 NO 2	→ 811
809	What is your husband's current occupation, that is, what kind of work does he mainly do?	_____ ☐☐☐ _____ _____	
810	What is your husband's employment status: is he an employee, an employer, is he self-employed, is he working for his family without payment, or is he working for someone else without payment?	EMPLOYEE . . . . . 1 EMPLOYER . . . . . 2 SELF-EMPLOYED . . . . . 3 UNPAID FAMILY WORKER . . . . . 4 UNPAID WORKER 5	
811	Have you done any work in the last seven days, even for one hour? By "work", I mean any paid work, any work in a business completely or partially owned by yourself, any work in a business owned by the household without payment, or work in other business?	YES . . . . . 1 NO 2	→ 813

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
812	Do you have any job, but you did not practice it during the last seven days for a reason such as vacation, travel, or illness?	YES . . . . . 1 NO 2	→ 813
812A	Have you ever done any work before?	YES . . . . . 1 NO 2	→ 818
812B	Why did you stop working?	GOT MARRIED . . . . . A BECAME PREGNANT . . . . . B BECAME ILL . . . . . C HUSBAND OPPOSED . . . . . D OTHER OPPOSED . . . . . E DIDN'T NEED TO WORK . . . . . F DIDN'T NEED MONEY . . . . . G CAN'T FIND A JOB . . . . . H I LOST MY JOB . . . . . I I GOT FIRED . . . . . J OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Y	→ 818
813	What is your current occupation, that is, what kind of work do you mainly do?	_____ [ ][ ][ ] _____ _____	
814	What is your employment status: are you an employee, an employer, are you self-employed, are you working for your family without payment, or are you working for someone else without payment?	EMPLOYEE . . . . . 1 EMPLOYER . . . . . 2 SELF-EMPLOYED . . . . . 3 UNPAID FAMILY WORKER . . . . . 4 UNPAID WORKER 5	
818	CHECK 101A: CURRENTLY MARRIED ☐ ↓ CURRENTLY WIDOWED, DIVORCED, OR SEPARATED ☐		→ 827
819	CHECK 814: CODE 1, 2, OR 3 CIRCLED ☐ ↓ CODE 4, OR 5 CIRCLED OR 814 NOT ASKED ☐		→ 822
820	Who usually decides how the money you earn will be used: mainly you, mainly your husband, or you and your husband jointly?	RESPONDENT . . . . . 1 HUSBAND . . . . . 2 RESPONDENT AND HUSBAND JOINTLY . . . . . 3 OTHER _____ 6 (SPECIFY)	
821	Would you say that the money that you earn is more than what your husband earns, less than what he earns, or about the same?	MORE THAN HIM . . . . . 1 LESS THAN HIM . . . . . 2 ABOUT THE SAME . . . . . 3 HUSBAND DOESN'T BRING IN ANY MONEY . . . . . 4 DON'T KNOW 8	→ 822A
822	Who usually decides how your husband's earnings will be used: you, your husband, or you and your husband jointly?	RESPONDENT . . . . . 1 HUSBAND . . . . . 2 RESPONDENT AND HUSBAND JOINTLY . . . . . 3 HUSBAND HAS NO EARNINGS . . . . . 4 OTHER _____ 6 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
822A	CHECK 814: CODES 1, 2, 0R 3 CIRCLED → In addition to your employment income, do you have income from any other source, such as real estate, retirement, allowances, etc.? CODE 4, OR 5 CIRCLED OR 814 NOT ASKED → Do you have income from any source such as real estate, retirement, allowances, etc.?	YES . . . . . 1 NO 2	→ 823
822B	Who usually decides how the (additional) money you earn will be used: mainly you, mainly your husband, or you and your husband jointly?	RESPONDENT . . . . . 1 HUSBAND . . . . . 2 RESPONDENT AND HUSBAND JOINTLY . . . . . 3 OTHER _____ 6 (SPECIFY)	
823	Who usually makes decisions about health care for yourself: you, your husband, you and your husband jointly, or someone else?	RESPONDENT . . . . . 1 HUSBAND . . . . . 2 RESPONDENT AND HUSBAND JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER _____ 6 (SPECIFY)	
824	Who usually makes decisions about making major household purchases?	RESPONDENT . . . . . 1 HUSBAND . . . . . 2 RESPONDENT AND HUSBAND JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER _____ 6 (SPECIFY)	
826	Who usually makes decisions about visits to your family or relatives?	RESPONDENT . . . . . 1 HUSBAND . . . . . 2 RESPONDENT AND HUSBAND JOINTLY . . . . . 3 SOMEONE ELSE . . . . . 4 OTHER _____ 6 (SPECIFY)	
826A	Do you own this or any other house either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	
826B	Do you own any land either alone or jointly with someone else?	ALONE ONLY . . . . . 1 JOINTLY ONLY . . . . . 2 BOTH ALONE AND JOINTLY . . . . . 3 DOES NOT OWN 4	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES				SKIP
827	PRESENCE OF OTHERS AT THIS POINT (PRESENT AND LISTENING, PRESENT BUT NOT LISTENING, OR NOT PRESENT)		PRES./ LISTEN.	PRES./ NOT LISTEN.	NOT PRES.	
		CHILDREN < 10	1	2	3	
		HUSBAND	1	2	3	
		OTHER MALES	1	2	3	
		OTHER FEMALES . . .	1	2	3	
828	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 burns the food?	BURNS FOOD	1	2	8	
	If she insults him?	INSULTS	1	2	8	
	If she disobeys him?	DISOBEYS	1	2	8	
	If she argues with him?	ARGUES	1	2	8	
	If she has relation with another man?	ANOTHER MAN	1	2	8	

SECTION 9. HIV/AIDS AND STI

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	 → 916
902	Can people reduce their chance of getting the AIDS virus by having just one uninfected sex partner who has no other sex partners?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
903	Can people get the AIDS virus from mosquito bites?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
904	Can people reduce their chance of getting the AIDS virus by using a condom every time they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
905	Can people get the AIDS virus by sharing food with a person who has AIDS?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
906	Can people reduce their chance of getting the AIDS virus by not having sexual intercourse at all?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
907	Can people get the AIDS virus by shaking hands with or hugging a person who has AIDS?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
907A	Can people get the AIDS virus by sharing razors or blades when shaving their beard or having their hair cut?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
908	Is it possible for a healthy-looking person to have the AIDS virus?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
909	Can the virus that causes AIDS be transmitted from a mother to her baby: During pregnancy? During delivery? By breastfeeding?	YES NO DK DURING PREG. . . . . 1 2 8 DURING DELIVERY . . . 1 2 8 BREASTFEEDING . . . 1 2 8	
910	Do you know of a place where people can go to get tested for the AIDS virus?	YES . . . . . 1 NO 2	 → 912

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
911	Where is that? Any other place? PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S). IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER VCT CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE. _____ (NAME OF PLACE(S))	**PUBLIC MEDICAL SECTOR** GOVT. HOSPITAL . . . . . A GOVT. HEALTH CENTER . . . . . B GOVT. MCH . . . . . C UNIVERSITY HOSPITAL . . . . . D ROYAL MEDICAL SERVICES . . . . . E TESTING & COUNCELING CENTER F OTHER PUBLIC _____ G (SPECIFY) **PRIVATE MEDICAL SECTOR** PRIVATE HOSPITAL/CLINIC . . . . . H PRIVATE DOCTOR . . . . . I JORDANIAN AS. OF FP AND PROTECTION (JAFPP) . . . . . J PRIVATE LABORATORY . . . . . K OTHER NON GOV. ORGANIZATION. L OTHER PRIVATE MEDICAL _____ M (SPECIFY) **OTHER** _____ X (SPECIFY)	
912	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	
913	If a member of your close 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	
914	If a member of your close family became sick with AIDS, would you be willing to care for her or him in your own household?	YES . . . . . 1 NO . . . . . 2 DK/NOT SURE/DEPENDS 8	
915	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	
915A	CHECK 101A: CURRENTLY MARRIED ☐ ↓ WIDOWED/ DIVORCED/SEPARATED ☐		→ 915C
915B	Have you ever talked about ways to prevent getting the virus that causes AIDS with your husband?	YES . . . . . 1 NO 2	
915C	In the last 6 months have you heard, seen, or received any information about HIV/AIDS?	YES . . . . . 1 NO 2	→ 916
915D	Where did you hear or see that information? Anywhere else? RECORD ALL MENTIONED	TELEVISION . . . . . A RADIO . . . . . B NEWSPAPER/MAGAZINE . . . . . C PAMPHLET/BROCHURE . . . . . D POSTER . . . . . E COMMUNITY MEETING . . . . . F HOME VISIT BY HEALTH WORKER . G HEALTH FACILITY STAFF . . . . . H HUSBAND . . . . . I OTHER RELATIVES/ FRIENDS/ NEIGHBORS . . . . . J OTHER _____ X (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
916	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	→ 917
916A	What (other) sexually transmitted infections have you heard about? Anything else? RECORD ALL MENTIONED	GENITAL HERPES . . . . . A GENITAL WARTS/HPV . . . . . B HEPATITIS . . . . . C CHLAMYDIA . . . . . D SYPHILIS . . . . . E HIV/AIDS INFECTION . . . . . F TRICHOMONIASIS . . . . . G CHANCROID . . . . . H YEAST INFECTION . . . . . I OTHER _____ X (SPECIFY) DON'T KNOW . . . . . Z	
917	Husbands and wives do not always agree on everything. If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in refusing to have sex with him?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
918	If a wife knows her husband has a disease that she can get during sexual intercourse, is she justified in asking that they use a condom when they have sex?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
919	Is a wife justified in refusing to have sex with her husband when she is tired or not in the mood?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
920	Is a wife justified in refusing to have sex with her husband when she knows her husband has sex with women other than his wives?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

SECTION 10. OTHER HEALTH ISSUES

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1001	Have you ever heard of an illness called tuberculosis?	YES . . . . . 1 NO 2	→ 1004
1002	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	
1003	Can tuberculosis be cured?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1003A	Would you be willing to take a test for tuberculosis?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	
1004	Do you currently smoke cigarettes?	YES . . . . . 1 NO 2	→ 1006
1005	In the last 24 hours, how many cigarettes did you smoke?	NUMBER OF CIGARETTES . . . . . [ ][ ]	
1006	Do you smoke nargila?	YES . . . . . 1 NO 2	
1007	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?	BIG PROB-LEM / NOT A BIG PROB-LEM	
	Knowing where to go?	WHERE TO GO 1 2	
	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	
	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	

SECTION 11. EARLY CHILDHOOD DEVELOPMENT

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1101	CHECK 217 AND 218: ANY LIVING CHILD 0-4 YEARS OLD LIVING WITH HIS/HER MOTHER? YES ☐ NO ☐ → 1200		
1102	CHECK 217: SELECT THE YOUNGEST CHILD AGED 0-4 LIVING WITH HIS/HER MOTHER AND RECORD NAME AND LINE NUMBER NAME OF THE YOUNGEST CHILD FROM Q. 212 _____	LINE NUMBER OF THE YOUNGEST CHILD FROM Q. 219 ☐☐	
1103	READ TO THE RESPONDENT Now I would like to ask you some questions about (NAME OF THE CHILD FROM 1102), your youngest child living with you who is 0-4 years old.		
1104	How many children's books or picture books do you have for (NAME) ?	NONE . . . . . 00 NUMBER OF BOOKS FOR CHILDREN 0☐ TEN BOOKS OR MORE 10	
1105	I am interested in learning about the things that (NAME) plays with when he/she is at home. Does he/she plays with : a) homemade toys (such as dolls, cars, or other toys made at home)? b) toys from a shop or manufactured toys? c) household objects (such as bowls or pots) or objects found outside (such as sticks, rocks, animal shells or leaves)? IF THE RESPONDENT SAYS "YES" TO THE CATEGORIES ABOVE, THEN PROBE TO LEARN SPECIFICALLY WHAT THE CHILD PLAYS WITH TO ASCERTAIN THE RESPONSE	YES NO DK HOMEMADE TOYS . . . . . 1 2 8 TOYS FROM A SHOP . . . 1 2 8 HOUSEHOLD OBJECTS OR OUTSIDE OBJECTS . 1 2 8	
1106	Sometimes adults taking care of children have to leave the house to go shopping, wash clothes, or for other reasons and have to leave young children. On how many days in the past week was (NAME): a) left alone for more than an hour ? b) left in the care of another child, that is, someone less than 10 years old, for more than an hour? IF 'NEVER', 'WRITE' , '0'. IF DOESN'T KNOW WRITE '8'	NUMBER OF DAYS LEFT ALONE FOR MORE THAN AN HOUR . . . . . ☐ NUMBER OF DAYS LEFT TO ANOTHER CHILD FOR MORE THAN AN HOUR . . . . . ☐	
1107	VERIFY 217 : AGE OF THE CHILD CHILD OF 0, 1 OR 2 YEARS ☐	CHILD OF 3 OR 4YEARS ☐ → 1111	
1108	VERIFY 217 AND 218: ANY LIVING CHILD 3-4 YEARS OLD LIVING WITH HIS/HER MOTHER? YES ☐ NO ☐ → 1200		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1109	VERIFY 217: SELECT THE YOUNGEST CHILD AGED 3-4 LIVING WITH HIS/HER MOTHER AND RECORD NAME AND LINE NUMBER NAME OF THE YOUNGEST CHILD 3-4 YEARS FROM Q. 212 _____	LINE NUMBER OF THE YOUNGEST CHILD FROM Q. 219 [ ][ ]	
1110	Now, I would like to ask you some questions concerning (NAME)/ (NAME OF THE CHILD IN 1109), your youngest child age 3-4 years.		
1111	Does (NAME) attend any organized learning or early childhood education programme, such as a private or government facility, including kindergarten or community child care?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	→1113
1112	Within the last seven days, about how many hours did (NAME) attend?	NUMBER OF HOURS . . . . . [ ][ ]	
1113	In the past 3 days, did you or any household member over 15 years of age engage in any of the following activities with (name) IF YES, ASK : Who engaged in this activity with (NAME) ? CIRCLE ALL THAT APPLY	MOTHER / FATHER / OTHER / NO ONE	
	a) Read books to or look at picture books with (NAME) ?	READ BOOKS . . . . . A B X Y	
	b) Told stories to (NAME) ?	TOLD STORIES . . . . . A B X Y	
	c) Sang songs to (NAME) or with (NAME), including lullabies?	SANG SONGS . . . . . A B X Y	
	d) Took (NAME) outside of the home, compound, yard or enclosure?	TOOK OUTSIDE . . . . . A B X Y	
	e) Played with (NAME) ?	PLAYED WITH A B X Y	
	f) Named, counted, or drew things to or with (NAME)?	NAMED/COUNTED . . . A B X Y	
	I would like to ask you some questions about the health and development of your child. Children do not all develop and learn at the same rate. For example, some walk earlier than others. These questions are related to several aspects of your child's development.		

		YES	NO	DK	
1114	Can (NAME) identify or name at least ten letters of the alphabet?	1	2	8	
1115	Can (NAME) read at least four simple, popular words?	1	2	8	
1116	Does (NAME) know the name and recognize the symbol of all numbers from 1 to 10?	1	2	8	
1117	Can (NAME) pick up a small object with two fingers, like a stick or a rock from the ground?	1	2	8	
1118	Is (NAME) sometimes too sick to play?	1	2	8	
1119	Does (NAME) follow simple directions on how to do something correctly?	1	2	8	
1120	When given something to do, is (NAME) able to do it independently?	1	2	8	
1121	Does (NAME) get along well with other children or adults ?	1	2	8	
1122	Does (NAME) kick, bite, or hit other children or adults?	1	2	8	
1123	Does (NAME) get distracted easily?	1	2	8	

SECTION 12. DOMESTIC VIOLENCE MODULE

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1200	CHECK HOUSEHOLD QUESTIONNAIRE. WOMAN SELECTED FOR THIS SECTION ☐ ↓ WOMAN NOT SELECTED ☐ →		1233
1201	CHECK FOR PRESENCE OF OTHERS: DO NOT CONTINUE UNTIL PRIVACY IS ENSURED. PRIVACY OBTAINED . . . . . 1 ↓ PRIVACY NOT POSSIBLE . . . . . 2 →		1232
	READ TO THE RESPONDENT Now I would like to ask you questions about some other important aspects of a woman's life. You may find some of these questions very personal. However, your answers are crucial for helping to understand the condition of women in Jordan Let me assure you that your answers are completely confidential and will not be told to anyone and no one else in your household will know that you were asked these questions.		
1202	CHECK 601 AND 602: CURRENTLY MARRIED/ ☐ ↓ WIDOWED/SEPARATED DIVORCED ☐ ↓ (READ IN PAST TENSE AND USE 'LAST' WITH HUSBAND)		
1203	First, I am going to ask you about some situations which happen to some women. Please tell me if these apply to your relationship with your (last) husband?		

	YES	NO	DK
a) He (is/was) jealous or angry if you (talk/talked) to other men? JEALOUS	1	2	8
b) He frequently (accuses/accused) you of being unfaithful? ACCUSES	1	2	8
c) He (does/did) not permit you to meet your female friends? NOT MEET FRIENDS . . .	1	2	8
d) He (tries/tried) to limit your contact with your family? NO FAMILY	1	2	8
e) He (insists/insisted) on knowing where you (are/were) at all times? WHERE YOU ARE	1	2	8

1204 Now I need to ask some more questions about your relationship with your (last) husband.

A Did your (last) husband ever:

B How often did this happen during the last 12 months: often, only sometimes, or not at all?

	EVER		OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS
a) say or do something to humiliate you in front of others?	YES	1 →	1	2	3
	NO	2			
b) threaten to hurt or harm you or someone you care about?	YES	1 →	1	2	3
	NO	2 ↓			
c) insult you or make you feel bad about yourself?	YES	1 →	1	2	3
	NO	2 ↓			

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1205	A Did your (last) husband ever do any of the following things to you:	B How often did this happen during the last 12 months: often, only sometimes, or not at all?	

	EVER		OFTEN	SOME-TIMES	NOT IN LAST 12 MONTHS
a) push you, shake you, or throw something at you?	YES NO	1 → 2 ↓	1	2	3
b) slap you?	YES NO	1 → 2 ↓	1	2	3
c) twist your arm or pull your hair?	YES NO	1 → 2 ↓	1	2	3
d) punch you with his fist or with something that could hurt you?	YES NO	1 → 2 ↓	1	2	3
e) kick you, drag you, or beat you up?	YES NO	1 → 2 ↓	1	2	3
f) try to choke you or burn you on purpose?	YES NO	1 → 2 ↓	1	2	3
g) threaten or attack you with a knife, gun, or other weapon?	YES NO	1 → 2 ↓	1	2	3
h) physically force you to have sexual intercourse with him when you did not want to?	YES NO	1 → 2 ↓	1	2	3

1206	CHECK '1205A (a-h): AT LEAST ONE 'YES' ☐ ↓ NOT A SINGLE 'YES' ☐ → 1213		
1208	Did the following ever happen as a result of what your (last) husband did to you:		
	a) You had cuts, bruises, or aches?	YES . . . . . 1 NO 2	
	b) You had eye injuries, sprains, dislocations, or burns?	YES . . . . . 1 NO 2	
	c) You had deep wounds, broken bones, broken teeth, or any other serious injury?	YES . . . . . 1 NO 2	
1213	Are (were) you afraid of your (last) husband: most of the time, sometimes, or never?	MOST OF THE TIME AFRAID . . . . . 1 SOMETIMES AFRAID . . . . . 2 NEVER AFRAID 3	
1214	CHECK 606: MARRIED MORE THAN ONCE ☐ ↓ MARRIED ONLY ONCE ☐ → 1216		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1215	A So far we have been talking about the behavior of your (current/last) husband. Now I want to ask you about the behavior of any previous husband.	B How long ago did this last happen?	

	EVER		0 - 11 MONTHS AGO	12+ MONTHS AGO	DON'T REMEMBER
a) Did any previous husband ever hit, slap, kick, or do anything else to hurt you physically?	YES NO	1 → 2 ↓	1	2	3
b) Did any previous husband physically force you to have intercourse against your will?	YES NO	1 → 2 ↓	1	2	3

1216	From the time you were 15 years old has anyone other than (your/any) husband hit you, slapped you, kicked you, or done anything else to hurt you physically?	YES . . . . . 1 NO . . . . . 2 REFUSED TO ANSWER/ NO ANSWER 3	→ 1219
1217	Who has hurt you in this way? Anyone else? RECORD ALL MENTIONED.	MOTHER . . . . . A FATHER . . . . . B STEP-MOTHER . . . . . C STEP-FATHER . . . . . D BROTHER . . . . . E SISTER . . . . . F SON . . . . . G DAUGHTER . . . . . H MOTHER-IN-LAW . . . . . J FATHER-IN-LAW . . . . . K OTHER FEMALE RELATIVE/IN-LAW . . . L OTHER MALE RELATIVE/IN-LAW . . . . . M FEMALE FRIEND/ACQUAINTANCE . . . . . N MALE FRIEND/ACQUAINTANCE . . . . . O FEMALE TEACHER . . . . . P MALE TEACHER . . . . . Q FEMALE EMPLOYER . . . . . R MALE EMPLOYER . . . . . S FEMALE STRANGER . . . . . T MALE STRANGER . . . . . U POLICE/SOLDIER . . . . . V OTHER _____ X (SPECIFY)	
1218	In the last 12 months, how often has (this person/have these persons) physically hurt you: often, only sometimes, or not at all?	OFTEN . . . . . 1 SOMETIMES . . . . . 2 NOT AT ALL 3	
1219	CHECK 201, 226, AND 230: EVER BEEN PREGNANT (YES ON 201 OR 226 OR 230) ↓ NEVER BEEN PREGNANT		→ 1226
1220	Has any one ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant?	YES . . . . . 1 NO 2	→ 1226

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
1221	Who has done any of these things to physically hurt you while you were pregnant? Anyone else? RECORD ALL MENTIONED.	CURRENT HUSBAND . . . . . A MOTHER . . . . . B FATHER . . . . . C STEP-MOTHER . . . . . D STEP-FATHER . . . . . E BROTHER . . . . . F SISTER . . . . . G SON . . . . . H DAUGHTER . . . . . I EX-HUSBAND . . . . . J MOTHER-IN-LAW . . . . . K FATHER-IN-LAW . . . . . L OTHER FEMALE RELATIVE/IN-LAW . . . M OTHER MALE RELATIVE/IN-LAW . . . . . N FEMALE FRIEND/ACQUAINTANCE . . . . . O MALE FRIEND/ACQUAINTANCE . . . . . P FEMALE TEACHER . . . . . Q MALE TEACHER . . . . . R FEMALE EMPLOYER . . . . . S MALE EMPLOYER . . . . . T FEMALE STRANGER . . . . . U MALE STRANGER . . . . . V POLICE/SOLDIER . . . . . W OTHER _____ X (SPECIFY)	
1226	CHECK 1205A (a-h), 1215, 1216, AND 1220: AT LEAST ONE 'YES' ☐ ↓ NOT A SINGLE 'YES' ☐		→ 1230
1227	Thinking about what you yourself have experienced among the different things we have been talking about, have you ever tried to seek help?	YES . . . . . 1 NO 2	→ 1229
1228	From whom have you sought help? Anyone else? RECORD ALL MENTIONED.	MOTHER . . . . . A FATHER . . . . . B SISTER . . . . . C BROTHER . . . . . D MOTHER-IN-LAW . . . . . E FATHER-IN-LAW . . . . . F OTHER FEMALE RELATIVE/IN-LAW . G OTHER MALE RELATIVE/IN-LAW . . . H FRIEND . . . . . I NEIGHBOR . . . . . J TEACHER . . . . . K EMPLOYER . . . . . L RELIGIOUS FIGURE . . . . . M DOCTOR/MEDICAL PERSONNEL . . . N POLICE . . . . . O LAWYER . . . . . P SOCIAL SERVICE ORGANIZATION . Q OTHER _____ X (SPECIFY)	→ 1230
1229	Have you ever told any one about this?	YES . . . . . 1 NO 2	
1230	As far as you know, did your father ever beat your mother?	YES . . . . . 1 NO . . . . . 2 DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
	THANK THE RESPONDENT FOR HER COOPERATION AND REASSURE HER ABOUT THE CONFIDENTIALITY OF HER ANSWERS. FILL OUT THE QUESTIONS BELOW WITH REFERENCE TO THE DOMESTIC VIOLENCE MODULE ONLY.		
1231	DID YOU HAVE TO INTERRUPT THE INTERVIEW BECAUSE SOME ADULT WAS TRYING TO LISTEN, OR CAME INTO THE ROOM, OR INTERFERED IN ANY OTHER WAY?	YES ONCE / YES, MORE THAN ONCE / NO HUSBAND . . . . . 1 2 3 OTHER MALE ADULT . . . 1 2 3 FEMALE ADULT 1 2 3	
1232	INTERVIEWER'S COMMENTS / EXPLANATION FOR NOT COMPLETING THE DOMESTIC VIOLENCE MODULE _____ _____ _____		
1233	RECORD THE TIME.	HOUR . . . . . [ ][ ] MINUTE . . . . . [ ][ ]	

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: _____

W-59

INSTRUCTIONS:
ONLY ONE CODE SHOULD APPEAR IN ANY BOX.
COLUMN 1 REQUIRES A CODE IN EVERY MONTH.

INFORMATION TO BE CODED FOR EACH COLUMN

COLUMN 1: BIRTHS, PREGNANCIES, CONTRACEPTIVE USE

- B BIRTHS
- P PREGNANCIES
- T TERMINATIONS

- 0 NO METHOD
- 1 FEMALE STERILIZATION
- 2 MALE STERILIZATION
- 3 IUD
- 4 INJECTABLES
- 5 IMPLANTS
- 6 PILL
- 7 CONDOM
- 8 FEMALE CONDOM
- 9 DIAPHRAGM
- J FOAM OR JELLY
- K LACTATIONAL AMENORRHEA METHOD
- L RHYTHM METHOD
- M WITHDRAWAL
- X OTHER MODERN METHOD
- Y OTHER TRADITIONAL METHOD

COLUMN 2: DISCONTINUATION OF CONTRACEPTIVE USE

- 0 INFREQUENT SEX/HUSBAND AWAY
- 1 BECAME PREGNANT WHILE USING
- 2 WANTED TO BECOME PREGNANT
- 3 HUSBAND DISAPPROVED
- 4 WANTED MORE EFFECTIVE METHOD
- 5 SIDE EFFECTS/HEALTH CONCERNS
- 6 LACK OF ACCESS/TOO FAR
- 7 COSTS TOO MUCH
- 8 INCONVENIENT TO USE
- F FATALISTIC
- A DIFFICULT TO GET PREGNANT/MENOPAUSAL
- D WIDOW/DIVORCE/SEPARATION
- R RAMADAN
- X OTHER _____ (SPECIFY)
- Z DON'T KNOW

				1	2	
2						2
0	03	MAR	01			0
1	02	FEB	02			1
3	01	JAN	03			3
	12	DEC	04			
	11	NOV	05			
	10	OCT	06			
	09	SEP	07			
2	08	AUG	08			2
0	07	JUL	09			0
1	06	JUN	10			1
2	05	MAY	11			2
	04	APR	12			
	03	MAR	13			
	02	FEB	14			
	01	JAN	15			
	12	DEC	16			
	11	NOV	17			
	10	OCT	18			
	09	SEP	19			
2	08	AUG	20			2
0	07	JUL	21			0
1	06	JUN	22			1
1	05	MAY	23			1
	04	APR	24			
	03	MAR	25			
	02	FEB	26			
	01	JAN	27			
	12	DEC	28			
	11	NOV	29			
	10	OCT	30			
	09	SEP	31			
2	08	AUG	32			2
0	07	JUL	33			0
1	06	JUN	34			1
0	05	MAY	35			0
	04	APR	36			
	03	MAR	37			
	02	FEB	38			
	01	JAN	39			
	12	DEC	40			
	11	NOV	41			
	10	OCT	42			
	09	SEP	43			
2	08	AUG	44			2
0	07	JUL	45			0
0	06	JUN	46			0
9	05	MAY	47			9
	04	APR	48			
	03	MAR	49			
	02	FEB	50			
	01	JAN	51			
	12	DEC	52			
	11	NOV	53			
	10	OCT	54			
	09	SEP	55			
2	08	AUG	56			2
0	07	JUL	57			0
0	06	JUN	58			0
8	05	MAY	59			8
	04	APR	60			
	03	MAR	61			
	02	FEB	62			
	01	JAN	63			
	12	DEC	64			
	11	NOV	65			
	10	OCT	66			
	09	SEP	67			
2	08	AUG	68			2
0	07	JUL	69			0
0	06	JUN	70			0
7	05	MAY	71			7
	04	APR	72			
	03	MAR	73			
	02	FEB	74			
	01	JAN	75			