

# Jordan



Population and  
Family Health Survey

2007



THE HASHEMITE KINGDOM OF JORDAN

# Jordan Population and Family Health Survey 2007

Department of Statistics  
Amman, Jordan

Macro International Inc.  
Calverton, Maryland, USA

August 2008



# CONTRIBUTORS

## DEPARTMENT OF STATISTICS

Fathi Nsour  
Kamal Saleh  
Ikhlas Aranki  
Wajdi Akeel  
Yazid Alomari

## MINISTRY OF HEALTH

Dr. Adel Belbeisi  
Dr. Bassam Hijawi  
Dr. Ruwaida Rashid  
Dr. Khawla Kawa'a

## UNIVERSITY OF JORDAN

Dr. Issa Masarweh

## MACRO INTERNATIONAL INC.

Noah Bartlett  
Bernard Barrère  
Jasbir Sangha

This report summarizes the findings of the 2007 Jordan Population and Family Health Survey (JPFHS) carried out by the Department of Statistics (DoS). The survey 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). Macro International Inc. provided technical assistance through the MEASURE DHS program. The opinions expressed herein are those of the authors and do not necessarily reflect the views of the donor organizations.

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, Jordan (Telephone (962) 6-5-300-700; Fax (962) 6-5-300-710; e-mail [stat@dos.gov.jo](mailto:stat@dos.gov.jo)). Additional information about the MEASURE DHS program may be obtained from Macro International Inc., 11785 Beltsville Drive, Suite 300, Calverton, MD 20705 (Telephone 301-572-0200; Fax 301-572-0999; e-mail [reports@measuredhs.com](mailto:reports@measuredhs.com)).

Cover photo: Al-Deir (Petra) Jordan ©age fotostock

Suggested citation:

Department of Statistics [Jordan] and Macro International Inc. 2008. *Jordan Population and Family Health Survey 2007*. Calverton, Maryland, USA: Department of Statistics and Macro International Inc.

# CONTENTS

---

	Page
<b>TABLES AND FIGURES</b> .....	vii
<b>PREFACE</b> .....	xiii
<b>SUMMARY OF FINDINGS</b> .....	xv
<b>MAP OF JORDAN</b> .....	xx
<b>CHAPTER 1 INTRODUCTION</b>	
1.1 History, Geography, and Economy.....	1
1.2 Population .....	2
1.3 Population and Family Planning Policies and Programs.....	3
1.4 Health Priorities and Programs .....	4
1.5 Objectives of the Survey .....	4
1.6 Methodology and Organization of the Survey .....	5
1.6.1 Sample Design.....	5
1.6.2 Updating of Sampling Frame.....	6
1.6.3 Questionnaires.....	6
1.6.4 Recruitment of Staff .....	7
1.6.5 Training and Pretest .....	7
1.6.6 Main Fieldwork.....	7
1.6.7 Data Processing.....	8
1.7 Results of the Household and Individual Interviews.....	8
<b>CHAPTER 2 HOUSEHOLD CHARACTERISTICS</b>	
2.1 Population by Age and Sex.....	9
2.2 Population by Age from Other Sources .....	11
2.3 Household Size.....	12
2.4 Level of Education of the Household Population .....	13
2.5 School Attendance .....	16
2.6 Housing Characteristics .....	17
2.7 Presence of Durable Goods.....	20
2.8 Household Wealth.....	20
<b>CHAPTER 3 RESPONDENTS' BACKGROUND CHARACTERISTICS</b>	
3.1 General Characteristics.....	23
3.2 Respondents' Level of Education.....	24
3.3 Exposure to Mass Media .....	26
3.4 Respondents' Employment Characteristics.....	27
3.4.1 Working Status.....	27
3.4.2 Occupation.....	29
3.5 Smoking Tobacco.....	31

<b>CHAPTER 4</b>	<b>FERTILITY</b>	
4.1	Fertility Levels and Trends.....	33
4.2	Children Ever Born.....	38
4.3	Birth Intervals.....	39
4.4	Age at First Birth.....	41
4.5	Teenage Fertility.....	43
<b>CHAPTER 5</b>	<b>FERTILITY REGULATION</b>	
5.1	Knowledge of Family Planning Methods.....	45
5.2	Ever Use of Contraception .....	46
5.3	Current Use of Contraception .....	47
5.4	Number of Children at First Use of Contraception.....	50
5.5	Knowledge of the Fertile Period .....	50
5.6	Timing of Sterilization .....	51
5.7	Source of Supply for Modern Methods.....	52
5.8	Informed Choice.....	53
5.9	Contraceptive Discontinuation .....	54
5.10	Future Use of Family Planning.....	57
5.11	Exposure to Family Planning Messages .....	58
5.12	Contact of Nonusers with Family Planning Providers .....	60
<b>CHAPTER 6</b>	<b>NUPTIALITY AND EXPOSURE TO THE RISK OF PREGNANCY</b>	
6.1	Current Marital Status .....	63
6.2	Polygyny .....	65
6.3	Consanguinity .....	65
6.4	Age at First Marriage .....	67
6.5	Recent Sexual Activity.....	68
6.6	Postpartum Amenorrhea, Postpartum Abstinence, and Insusceptibility .....	70
6.7	Menopause.....	72
<b>CHAPTER 7</b>	<b>FERTILITY PREFERENCES</b>	
7.1	Desire for Children.....	73
7.2	Need for Family Planning Services.....	76
7.3	Ideal Number of Children .....	78
7.4	Planning Status of Births.....	81
<b>CHAPTER 8</b>	<b>INFANT AND CHILD MORTALITY</b>	
8.1	Levels and Trends .....	84
8.2	Differentials in Infant and Child Mortality.....	86
	8.2.1 Differentials by Background Characteristics .....	86
	8.2.2 Differentials by Demographic Characteristics.....	87
8.3	Perinatal Mortality.....	89
8.4	High-Risk Fertility Behavior .....	91

## **CHAPTER 9 MATERNAL HEALTH**

9.1	Antenatal Care .....	93
9.1.1	Number and Timing of ANC Visits .....	93
9.1.2	Components of Antenatal Care .....	98
9.1.3	Coverage of Tetanus Toxoid Vaccinations .....	100
9.2	Delivery .....	101
9.2.1	Place of Delivery.....	101
9.2.2	Assistance at Delivery.....	103
9.2.3	Delivery Characteristics.....	105
9.2.4	Payment for Delivery .....	105
9.3	Postnatal Care.....	106
9.4	Problems in Accessing Health Care .....	108
9.5	Premarital Medical Examinations.....	109
9.6	Cancer Screening.....	110
9.7	Knowledge of Tuberculosis.....	112

## **CHAPTER 10 CHILD HEALTH**

10.1	Birth Weight .....	115
10.2	Vaccination Coverage .....	116
10.2.1	Trends in Vaccination Coverage .....	119
10.2.2	Additional Doses.....	120
10.2.3	Additional Vaccinations.....	122
10.3	Acute Respiratory Infection .....	123
10.4	Prevalence of Fever.....	125
10.5	Prevalence of Diarrhea.....	127
10.5.1	Diarrhea Treatment.....	127
10.5.2	Nutritional Practices during Diarrhea .....	129
10.5.3	Knowledge of Diarrhea Treatment Solutions .....	131

## **CHAPTER 11 NUTRITION**

11.1	Nutritional Status of Children .....	133
11.1.1	Breastfeeding and Child Feeding Practices .....	133
11.1.2	Micronutrient Intake among Children .....	141
11.2	Nutritional Status of Women.....	143
11.2.1	Height and Body Mass Index (BMI).....	143
11.2.2	Foods Consumed by Mothers.....	144
11.2.3	Micronutrient Intake among Mothers .....	145

## **CHAPTER 12 HIV/AIDS AND SEXUALLY TRANSMITTED INFECTIONS**

12.1	Knowledge of HIV/AIDS and Methods of HIV Prevention.....	147
12.2	Stigma Associated with AIDS.....	153
12.3	Attitudes Towards Negotiating Safer Sexual Relations .....	155
12.4	Knowledge of Symptoms of Sexually Transmitted Infections .....	156
12.5	Knowledge and Use of Condoms .....	158

<b>CHAPTER 13</b>	<b>WOMEN’S EMPOWERMENT</b>	
13.1	Respondents’ Working Status .....	159
13.2	Women’s Participation in Household Decision making .....	161
13.3	Domestic Violence: Women’s Attitudes toward Wife Beating.....	163
13.4	Women’s Agreement with Reasons for Refusing Sexual Relations .....	165
13.5	Women’s Empowerment Indicators .....	167
	13.5.1 Current Use of Contraception by Women’s Empowerment .....	168
	13.5.2 Ideal Family Size and Unmet Need by Women’s Empowerment....	168
<b>CHAPTER 14</b>	<b>DOMESTIC VIOLENCE</b>	
14.1	Physical Violence .....	171
	14.1.1 Prevalence of Physical Violence .....	171
	14.1.2 Perpetrators of Physical Violence .....	173
	14.1.3 Violence during Pregnancy .....	173
14.2	Spousal Violence.....	175
	14.2.1 Prevalence of Various Forms of Spousal Violence.....	175
	14.2.2 Differentials in Prevalence of Spousal Violence .....	176
	14.2.3 Help-Seeking Behavior .....	178
<b>CHAPTER 15</b>	<b>EARLY CHILDHOOD DEVELOPMENT</b>	
15.1	Ability to Count.....	181
15.2	Frequency of Reading and Name Recognition.....	183
15.3	Participation in Family Discussions .....	185
15.4	Management of Disagreements among Friends.....	185
15.5	Teeth Brushing and Hand Washing .....	187
<b>APPENDIX A</b>	<b>SAMPLE DESIGN</b>	
A.1	Objectives of the Survey.....	191
A.2	Sampling Frame.....	191
A.3	Sample Allocation and Sample Selection .....	192
A.4	Selection Probability and Sampling Weight.....	194
A.5	Sample Implementation .....	195
<b>APPENDIX B</b>	<b>ESTIMATES OF SAMPLING ERRORS</b> .....	197
<b>APPENDIX C</b>	<b>DATA QUALITY TABLES</b> .....	219
<b>APPENDIX D</b>	<b>QUESTIONNAIRES</b> .....	225

## TABLES AND FIGURES

---

	Page
<b>CHAPTER 1</b>	<b>INTRODUCTION</b>
Table 1.1	Results of the household and individual interviews..... 8
<b>CHAPTER 2</b>	<b>HOUSEHOLD CHARACTERISTICS</b>
Table 2.1	Household population by age, sex, and residence..... 10
Table 2.2	Household composition..... 12
Table 2.3	Children's living arrangements and orphanhood..... 13
Table 2.4	Educational attainment of the household population..... 14
Table 2.5	Age-specific attendance rates of the de-jure population 6 to 24 years ..... 16
Table 2.6	Household characteristics ..... 18
Table 2.7	Household drinking water and sanitation facilities..... 19
Table 2.8	Household durable goods..... 20
Table 2.9	Wealth quintiles..... 21
Figure 2.1	Male and Female Population by Single Year of Age..... 9
Figure 2.2	Population Pyramid ..... 11
Figure 2.3	Population by Broad Age Groups, Various Surveys, 1976-2007..... 11
Figure 2.4	Age-Specific Attendance Rates ..... 17
<b>CHAPTER 3</b>	<b>RESPONDENTS' BACKGROUND CHARACTERISTICS</b>
Table 3.1	Background characteristics of respondents ..... 23
Table 3.2	Educational attainment ..... 25
Table 3.3	Exposure to mass media..... 26
Table 3.4	Working status..... 28
Table 3.5	Occupation..... 30
Table 3.6	Use of tobacco..... 31
Figure 3.1	Percent Distribution of Women who Worked in the 7 Days Preceding the Survey, by Employment Status ..... 29
<b>CHAPTER 4</b>	<b>FERTILITY</b>
Table 4.1	Trends in fertility..... 34
Table 4.2	Current fertility ..... 35
Table 4.3	Fertility by background characteristics..... 37
Table 4.4	Trends in age-specific fertility rates..... 38
Table 4.5	Children ever born and living..... 39
Table 4.6	Birth intervals..... 40
Table 4.7	Age at first birth ..... 41
Table 4.8	Median age at first birth ..... 42
Table 4.9	Teenage pregnancy and motherhood..... 43

Figure 4.1	Age-Specific Fertility Rates from Various Surveys, 1976-2007 .....	35
Figure 4.2	Age-Specific Fertility Rates by Urban-Rural Residence, 2002 and 2007 .....	36
Figure 4.3	Age-Specific Fertility Rates for Five-Year Periods Preceding the Survey .....	38

## **CHAPTER 5 FERTILITY REGULATION**

Table 5.1	Knowledge of contraceptive methods .....	45
Table 5.2	Ever use of contraception.....	46
Table 5.3	Current use of contraception by age .....	47
Table 5.4	Current use of contraception by background characteristics .....	49
Table 5.5	Number of children at first use of contraception .....	50
Table 5.6	Knowledge of fertile period.....	51
Table 5.7	Timing of sterilization.....	51
Table 5.8	Source of modern contraception methods .....	52
Table 5.9	Informed choice .....	54
Table 5.10	First-year contraceptive discontinuation rates.....	55
Table 5.11	Reasons for discontinuation .....	57
Table 5.12	Future use of contraception .....	57
Table 5.13	Reason for not intending to use contraception in the future .....	58
Table 5.14	Preferred method of contraception for future use.....	58
Table 5.15	Exposure to family planning messages.....	59
Table 5.16	Contact of nonusers with family planning providers .....	61
Figure 5.1	Current Use of Modern Contraception Among Currently Married Women, 1990-2007 .....	48
Figure 5.2	Sources of Family Planning Methods Among Current Users of Modern Methods .....	53
Figure 5.3	Contraceptive Discontinuation Rates by Reason and Method.....	56

## **CHAPTER 6 NUPTIALITY AND EXPOSURE TO THE RISK OF PREGNANCY**

Table 6.1	Trends in the proportion of ever-married by age group .....	63
Table 6.2	Current marital status.....	64
Table 6.3	Number of co-wives .....	65
Table 6.4	Consanguinity.....	66
Table 6.5	Age at first marriage .....	67
Table 6.6	Median age at first marriage.....	68
Table 6.7	Recent sexual activity.....	69
Table 6.8	Postpartum amenorrhea, abstinence and insusceptibility.....	70
Table 6.9	Median duration of amenorrhea, postpartum abstinence and postpartum insusceptibility.....	71
Table 6.10	Menopause.....	72

## **CHAPTER 7 FERTILITY PREFERENCES**

Table 7.1	Fertility preferences by number of living children .....	74
Table 7.2	Desire to limit childbearing.....	75
Table 7.3	Need and demand for family planning among currently married women .....	77
Table 7.4	Ideal number of children .....	79
Table 7.5	Mean ideal number of children.....	80
Table 7.6	Fertility planning status.....	81

Table 7.7	Wanted fertility rates.....	82
Figure 7.1	Fertility Preferences of Currently Married Women 15-49 .....	74
<b>CHAPTER 8      INFANT AND CHILD MORTALITY</b>		
Table 8.1	Early childhood mortality rates .....	84
Table 8.2	Early childhood mortality rates by socioeconomic characteristics.....	87
Table 8.3	Early childhood mortality rates by demographic characteristics.....	88
Table 8.4	Perinatal mortality.....	90
Table 8.5	High-risk fertility behavior .....	91
Figure 8.1	Trends in Infant and Child Mortality by Five-year Periods.....	85
Figure 8.2	Trends in Infant and Child Mortality, 1978-2005 .....	85
Figure 8.3	Infant Mortality by Selected Demographic Characteristics .....	88
<b>CHAPTER 9      MATERNAL HEALTH</b>		
Table 9.1	Antenatal care.....	94
Table 9.2	Number of antenatal care visits .....	96
Table 9.3	Timing of first antenatal care visit .....	97
Table 9.4	Components of antenatal care .....	99
Table 9.5	Tetanus toxoid injections .....	100
Table 9.6	Place of delivery .....	102
Table 9.7	Assistance during delivery .....	104
Table 9.8	Cost of delivery.....	106
Table 9.9	Timing of first postnatal checkup.....	107
Table 9.10	Problems in accessing health care .....	108
Table 9.11	Premarital medical examination.....	110
Table 9.12	Breast cancer exam and pap smear.....	111
Table 9.13	Knowledge and attitude concerning tuberculosis.....	113
Figure 9.1	Distribution of Births by Place of Delivery .....	101
<b>CHAPTER 10      CHILD HEALTH</b>		
Table 10.1	Child's weight at birth .....	115
Table 10.2	Vaccinations by source of information.....	117
Table 10.3	Vaccinations by background characteristics .....	119
Table 10.4	Vaccinations in first year of life.....	120
Table 10.5.1	Vaccinations of children 24-59 months by background characteristics (Part 1).....	121
Table 10.5.2	Vaccinations of children 24-59 months by background characteristics (Part 2).....	122
Table 10.6	Prevalence and treatment of symptoms of ARI .....	124
Table 10.7	Prevalence and treatment of fever.....	126
Table 10.8	Prevalence of diarrhea .....	127
Table 10.9	Diarrhea treatment .....	128
Table 10.10	Feeding practices during diarrhea .....	130
Table 10.11	Knowledge of ORS packets or pre-packaged liquids.....	131

Figure 10.1	Percentage of Children Age 12-23 Months with Specific Vaccinations.....	118
-------------	---	-----

## **CHAPTER 11 NUTRITION**

Table 11.1	Initial breastfeeding.....	134
Table 11.2	Breastfeeding status by age .....	136
Table 11.3	Median duration and frequency of breastfeeding .....	137
Table 11.4	Foods and liquids consumed by children in the day or night preceding the interview.....	138
Table 11.5	Infant and young child feeding (IYCF) practices.....	140
Table 11.6	Micronutrient intake among children .....	142
Table 11.7	Nutritional status of women .....	144
Table 11.8	Foods consumed by mothers in the day or night preceding the interview...	145
Table 11.9	Micronutrient intake among mothers .....	146

## **CHAPTER 12 HIV/AIDS AND SEXUALLY TRANSMITTED INFECTIONS**

Table 12.1	Knowledge of AIDS.....	148
Table 12.2	Knowledge of ways to avoid HIV/AIDS.....	149
Table 12.3	Knowledge of HIV prevention methods.....	150
Table 12.4	Comprehensive knowledge about AIDS .....	152
Table 12.5	Knowledge of mother to child transmission of HIV .....	153
Table 12.6	Accepting attitudes toward those living with HIV/AIDS.....	154
Table 12.7	Attitudes toward negotiating safer sexual relations with husband .....	155
Table 12.8	Discussion of HIV/AIDS with husband.....	156
Table 12.9	Knowledge of symptoms of STIs .....	157
Table 12.10	Knowledge of source of male condom .....	158
Table 12.11	Use of condoms.....	158

## **CHAPTER 13 WOMEN'S EMPOWERMENT**

Table 13.1	Employment of currently married women .....	159
Table 13.2	Control over women's cash earnings and relative magnitude of women's earnings.....	160
Table 13.3	Women's participation in decision making .....	161
Table 13.4	Women's participation in decision making by background characteristics...	162
Table 13.5	Attitude toward wife beating.....	164
Table 13.6	Attitude toward refusing sexual intercourse with husband .....	166
Table 13.7	Indicators of women's empowerment.....	167
Table 13.8	Women's empowerment and current use of contraception.....	168
Table 13.9	Women's empowerment and ideal number of children and unmet need for family planning.....	169
Figure 13.1	Distribution of Women According to the Number of Decisions in Which They Participate in the Final Say .....	163
Figure 13.2	Percentage of Women Who Agree with at Least One Reason Justifying a Husband Beating His Wife .....	165

## **CHAPTER 14 DOMESTIC VIOLENCE**

Table 14.1	Experience of physical violence.....	172
Table 14.2	Perpetrators of physical violence.....	173
Table 14.3	Violence during pregnancy.....	174
Table 14.4	Forms of spousal violence.....	175
Table 14.5	Spousal violence by background characteristics.....	177
Table 14.6	Spousal violence by husband's characteristics and empowerment indicators.....	178
Table 14.7	Help-seeking behavior by women experiencing physical or sexual violence.....	179

## **CHAPTER 15 EARLY CHILDHOOD DEVELOPMENT**

Table 15.1	Ability to count.....	182
Table 15.2	Frequency of reading or being read to and name recognition.....	184
Table 15.3	Participation in family discussions.....	185
Table 15.4	Management of disagreements among friends.....	186
Table 15.5	Teeth brushing and hand washing.....	187

## **APPENDIX A SAMPLE DESIGN**

Table A.1	Distribution of clusters by governorate and by type of residence.....	191
Table A.2	Population distribution by governorate and by type of residence.....	192
Table A.3	Distribution of households by governorate and by type of residence.....	192
Table A.4	Sample allocation of completed women interviews by governorate and by type of residence.....	193
Table A.5	Sample allocation of households and clusters by governorate and by type of residence.....	194
Table A.6	Sample implementation.....	196

## **APPENDIX B ESTIMATES OF SAMPLING ERRORS**

Table B.1	List of selected variables for sampling errors.....	199
Table B.2	Sampling errors for national sample.....	200
Table B.3	Sampling errors for urban sample.....	201
Table B.4	Sampling errors for rural sample.....	202
Table B.5	Sampling errors for Central sample.....	203
Table B.6	Sampling errors for North sample.....	204
Table B.7	Sampling errors for South sample.....	205
Table B.8	Sampling errors for Amman sample.....	206
Table B.9	Sampling errors for Balqa sample.....	207
Table B.10	Sampling errors for Zarqa sample.....	208
Table B.11	Sampling errors for Madaba sample.....	209
Table B.12	Sampling errors for Irbid sample.....	210
Table B.13	Sampling errors for Mafraq sample.....	211
Table B.14	Sampling errors for Jarash sample.....	212
Table B.15	Sampling errors for Ajloun sample.....	213
Table B.16	Sampling errors for Karak sample.....	214
Table B.17	Sampling errors for Tafiela sample.....	215
Table B.18	Sampling errors for Ma'an sample.....	216

Table B.19	Sampling errors for Aqaba sample .....	217
------------	--	-----

**APPENDIX C DATA QUALITY TABLES**

Table C.1	Household age distribution .....	219
Table C.2	Age distribution of eligible and interviewed women .....	220
Table C.3	Completeness of reporting .....	220
Table C.4	Births by calendar years .....	221
Table C.5	Reporting of age at death in days .....	222
Table C.6	Reporting of age at death in months.....	223

## PREFACE

---

The Department of Statistics (DoS) takes pleasure in presenting the principal report of the 2007 Jordan Population and Family Health Survey (JPFHS), which was conducted during June through November 2007. Like the previous three JPFHS, conducted in 1990, 1997 and 2002, the 2007 JPFHS was carried out by DoS in collaboration with Macro International Inc., which provided technical assistance through the worldwide MEASURE Demographic and Health Surveys (DHS) program. The main objective of the survey is to provide comprehensive data on fertility, mortality, family planning, maternal and child health, and nutrition, to be used as tools to evaluate existing population and health policies and programs.

The sample was nationally-representative and has been designed to produce estimates of major survey variables at the national level, for urban and rural areas, for each of the three regions (Central, North, and South), the Badia and the non-Badia areas, and for each of the twelve governorates. Almost 15,000 households and 11,000 ever-married women aged 15 to 49 were interviewed.

The 2007 JPFHS was funded primarily by the Government of Jordan and the United States Agency for International Development (USAID). Additional funding was provided by the United Nations Population Fund (UNFPA) and the United Nations Children's Fund (UNICEF).

It is hoped that the 2007 JPFHS results will meet its 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 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 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 logistic assistance. Thanks are due to the USAID, the UNFPA, and the UNICEF missions in Amman for their financial and technical support. Thanks also go to the Macro International team: Dr. Mohamed Ayad, DHS Regional Coordinator; Mr. Bernard Barrère, DHS Country Manager, who assisted in all stages of the survey; Mr. Ruilin Ren for his recommendations on the sampling design; and Mr. Nouredine Abderrahim for his valuable assistance in data processing. Special thanks are also due to the local and international experts who prepared the present report.

**Director General**

**Dr. Haidar Fraihat**



## SUMMARY OF FINDINGS

---

The 2007 Jordan Population and Family Health Survey (JPFHS) was designed to provide data for monitoring the population and health situation in Jordan. The 2007 JPFHS is the fourth Population and Family Health Survey conducted in Jordan as part of the Demographic and Health Surveys program. The objective of the survey is to provide up-to-date information on fertility, family planning, childhood mortality, infant and child feeding practices, maternal and child health, HIV/AIDS-related knowledge and behavior, domestic violence, and child development.

A nationally representative sample of 14,564 households and ever-married 10,876 women aged 15-49 were interviewed. This represents a response rate of 99 percent for households and 98 percent for women. This sample provides estimates for Jordan as a whole, for urban and rural areas, the Badia and non-Badia areas, the North, Central, and South regions, and each of the 12 governorates. Fieldwork for the 2007 JPFHS was carried out between June and November 2007.

### HOUSEHOLD CHARACTERISTICS

---

**Household Composition.** Jordanian households consist of an average of 5.3 persons. Only 10 percent of households in Jordan are headed by a woman.

**Housing Conditions.** Most households have the basic necessities. Ninety-nine percent of households have electricity, and 97 percent have an improved sanitation facility, that is, either a flush toilet, a ventilated improved pit latrine, or a pit latrine with a slab. Almost all households (97 percent) have access to improved drinking water and 98 percent of households have an independent bathroom.

**Education of Household Members.** About half of the population has attended secondary school or beyond. Females are slightly more likely than males to be uneducated, especially in the older age

groups. Overall, the same percentage of females as males has attended higher than secondary school. As expected, older females and males and those living in rural areas are least likely to be educated.

**Ownership of goods.** Almost all households own a television (97 percent) and 90 percent own a mobile phone. More than one-third (36 percent) of households own a computer and 94 percent own a washing machine. Four in ten households own a car or pickup truck. Urban households are more likely to own goods than rural households.

### FERTILITY AND ITS DETERMINANTS

---

**Total Fertility Rate (TFR).** Although fertility dropped dramatically between 1983 and 2002, it has remained almost constant since 2002. Currently, women in Jordan have an average of 3.6 children, compared to 3.7 in 2002.

Fertility is almost identical in urban and rural areas, but does vary by governorate. Fertility is the lowest in Karak, at 3.2 children per woman, compared to 4.1 in Aqaba. Fertility is much higher in the Badia areas than in the non-Badia areas (4.2 compared to 3.5).

Fertility increases as the wealth of the respondent's household decreases. Women living in the poorest households, in general, have almost twice as many children as women who live in the wealthiest households (4.8 compared to 2.5 children per woman).

**Birth intervals.** About two-fifths of children are born at least three years after their siblings. Half of children are born after an interval of 31.2 months or more.

**Desired Family Size.** Women report a mean ideal family size of 3.9 children. Ideal family size is slightly higher among women in rural areas than urban areas (4.2 compared to 3.9). Ideal family size decreases as women's education increases:

women with no education would like to have 4.7 children compared to only 3.8 among those with higher education.

**Age at First Marriage and First Birth.** In Jordan, half of women are married by age 22.2. Only 18 percent are married by age 18. The median age at first marriage ranges from 21.1 in Aqaba to 23.8 in Karak. Women with high education get married five years later than those with no education (median age of 24.7 compared to 19.7).

Childbearing begins at a relatively late age in Jordan. Half of women have their first birth by age 23.9. Only 8 percent of women had their first birth by age 18. Urban women have their first birth at a slightly younger age than rural women—23.8 years versus 24.3 years. Women with more education wait much longer to have their first birth. Women with higher education have their first birth at a median age of more than 25 years, compared to only 21.6 among those who have had no education.

**Teenage Fertility.** Teenage childbearing is rare in Jordan. Only 3 percent of teenage girls (age 15-19) have already had a birth, and another 1 percent is pregnant with their first child. In general, teenage childbearing is much more common among women with less education (16 percent among those with only elementary) and among those in the poorest households (8 percent).

## FAMILY PLANNING

---

**Knowledge of Family Planning.** Knowledge of family planning methods in Jordan is universal: almost 100 percent of ever-married women age 15-49 know at least one modern method of family planning. The most commonly known methods are the IUD and pill (99 percent each).

**Use of Family Planning.** Although contraception use increased greatly between 1990 and 2002, it has since stabilized. According to the 2007 JPFHS, 57 percent of married women are currently using a contraception method; 42 percent are using a modern method. The IUD is the most popular method, with 22 percent of married women, followed by the pill (8 percent).

Use of modern family planning does not vary significantly by residence or governorate. Modern methods are used by 43 percent of married women in urban areas, compared with 36 percent in rural areas. Modern contraceptive use ranges from a low of 34 percent of married women in Ma'an and Ma'raq to a high of 46 percent in Zarqa.

Modern contraceptive use increases slightly as women's education increases, from 36 percent of women with no education to 42 percent among those with higher education. Use of modern methods increases more markedly with wealth—47 percent of married women in the wealthiest households use a modern method compared to only 35 percent of married women in the poorest households.

Fifteen percent of married women use a traditional method of family planning. Withdrawal is used by 11 percent and 4 percent use periodic abstinence.

**Source of Family Planning Methods.** Public sources such as government hospitals, health centers, and the Royal Medical Services currently provide contraceptives to about 42 percent of current users, while private hospitals and clinics provide methods to 58 percent of users. Pills and IUDs are most frequently obtained from private sources, while injectables and female sterilization are usually obtained through public sources.

**Unmet Need for Family Planning.** Unmet need for family planning is defined as the percentage of married women who want to space their next birth or stop childbearing entirely but are not using contraception. The 2007 JPFHS reveals that 12 percent of married women have an unmet need for family planning—5 percent for spacing and 7 percent for limiting. Unmet need is highest among those with no education, and among those in the poorest households. Unmet need varies by governorate, ranging from only 9 percent in Zarqa to 21 percent in Ma'an.

## CHILDHOOD MORTALITY

---

**Levels and Trends.** Childhood mortality is quite low in Jordan and has even decreased slightly since 2002. Currently, one in every 50 children in Jordan dies before his or her fifth birthday.

The infant mortality rate for the five years before the survey (2002- 2007) is 19 deaths per 1,000 live births and the under-five mortality rate is 21 deaths per 1,000 live births. This is slightly lower than the rates of 22 and 27, respectively, reported in 2002.

Mortality rates are slightly higher in rural than urban areas, but they differ markedly by governorate. Under-five mortality ranges from only 10 deaths per 1,000 live births in Zarqa to 39 deaths per 1,000 live births in Karak (for the 10 years before the survey). Childhood mortality also decreases as women's education increases. Under-five mortality is more than twice as high among children whose mothers have no education compared to those with higher education (22 compared to 10).

**Birth Intervals and Childhood Mortality.** Spacing children at least 36 months apart reduces risk of infant death. In Jordan, the average birth interval is 31 months. Infants born less than two years after a previous birth have particularly high infant mortality rates (26 deaths per 1,000 live births compared to only 13 deaths per 1,000 live births for infants born four or more years after the previous birth). One-third of infants in Jordan are born less than two years after a previous birth. These infants are at particularly high risk of death.

## MATERNAL HEALTH

---

**Antenatal Care.** Almost all (99 percent) women receive some antenatal care from a medical professional, either a doctor (96 percent) or a nurse/midwife (3 percent). Nine in ten women had an antenatal care visit during the first trimester of pregnancy, as recommended. Most Jordanian women (74 percent) have seven or more antenatal care visits. While almost all pregnant women were weighed, had their blood pressure measured, and had urine and blood samples taken, only half were informed of signs of pregnant complications and only 38 percent were informed about complications during the postnatal period. Only about one-quarter of births were protected against neonatal tetanus.

**Delivery and Postnatal Care.** Almost all of Jordan's births occur in health facilities—64 percent in the public sector and 35 percent in private sec-

tor facilities. Three in four births are assisted by a doctor, while one in four is assisted by a nurse or midwife. Nineteen percent of births are delivered by C-section. Two in five deliveries are free of charge, while only about 15 percent cost more than 200 JD.

Postnatal care helps prevent complications after childbirth. About seven in ten women had a postnatal checkup. Only 15 percent, however, had a checkup within four hours of birth, as recommended.

**Premarital medical exam.** Eighteen percent of ever-married women report that they and/or their husband underwent a premarital medical examination. Premarital medical exams are most common in Amman (21 percent) and among women with higher education (24 percent).

**Breast cancer exam and Pap smear.** Almost four in five women had a breast cancer self-exam or an exam by a health specialist in the year before the survey. Older women, women in urban areas, women with higher levels of education, and women in the wealthiest households were most likely to have had a breast cancer exam.

Three-quarters of women have heard of a Pap smear, but only 18 percent of women have ever had a Pap smear. Pap smears are more common among older women and among the most educated and wealthiest women.

## CHILD HEALTH

---

**Vaccination Coverage.** According to the 2007 JPFHS, 87 percent of Jordanian children age 12–23 months had received all recommended vaccines—one dose of BCG, measles, and three doses each of DPT and polio. Ninety-four percent had received all the basic vaccinations except BCG (which was only added to the recommended vaccines list for Jordan in recent years). Less than 1 percent of children had not received any of the recommended vaccines.

Vaccination coverage is slightly higher in urban areas than rural areas (94 versus 91 percent of children with all basic vaccines except BCG). There is marked variation in vaccination coverage by governorate, ranging from 84 percent fully vac-

cinated (except BCG) in Ma'an to 96 percent in Irbid. Vaccination coverage increases with mother's education, but is fairly uniform across wealth quintiles.

**Childhood Illnesses.** In the two weeks before the survey, 5 percent of children under five had symptoms of an acute respiratory infection (ARI). For three-quarters of these children, treatment or advice was sought from a health provider and 87 percent received antibiotics. One in seven children under five (14 percent) had a fever in the two weeks before the survey. In 70 percent of these cases, treatment or advice was sought from a provider and 85 percent received antibiotics.

During the two weeks before the survey, 16 percent of children under five had diarrhea. The rate was highest (32 percent) among children 6-11 months old. Fifty-five percent of children received treatment or advice from a health provider. Children with diarrhea should drink more fluids and should receive oral rehydration salts (ORS). Almost all (94 percent) mothers with children born in the last five years know about ORS packets, but in the two weeks before the survey, only 20 percent of children with diarrhea were treated with ORS packets. Many more (46 percent) were offered increased fluids. In all, 57 percent of children with diarrhea were offered oral rehydration therapy (ORS or recommended home fluids) or increased fluids. Almost half of children were given antibiotic drugs. More than one in five (22 percent) received no treatment at all.

## **NUTRITION**

---

**Breastfeeding and Complementary Foods.** Breastfeeding is common in Jordan, with 93 percent of children ever breastfed. However, only about two in five infants are breastfed within one hour of birth, and more than half (58 percent) receive a prelacteal feed.

WHO recommends that children receive nothing but breast milk (exclusive breastfeeding) for the first six months of life. About 22 percent of children under six months of age in Jordan are exclusively breastfed. Infants should not be given water, juices, other milks, or complementary foods until six months of age, yet two-thirds of children under six months receive these. On average, children

breastfeed until the age of 13 months, but exclusively breastfeed for less than one month.

Complementary foods should be introduced when a child is six months old to reduce the risk of malnutrition. In Jordan, 66 percent of children ages 6-9 months are eating complementary foods.

**Women's Nutritional Status.** Almost half of Jordanian women are overweight or obese (body mass index  $\geq 25.0$ ). Only 4 percent are thin (body mass index  $< 18.5$ ).

## **KNOWLEDGE OF HIV/AIDS**

---

**Knowledge.** According to the 2007 JPFHS, almost all ever-married women have heard of AIDS, but knowledge of HIV-prevention measures is lower. Only 53 percent of women know that the risk of getting HIV can be reduced by using condoms, and only 43 percent know that abstaining from sexual intercourse reduces the risk of getting AIDS. More women (86 percent) know that limiting sexual intercourse to one uninfected partner reduces the risk. Prevention knowledge varies by governorate. Only 44 percent of women in Madaba know that using condoms can prevent HIV, compared to 58 percent of women in Irbid.

Many women still have misconceptions about HIV/AIDS. Only four in ten women know that AIDS cannot be transmitted by mosquito bites, three in four know that a person cannot become infected by sharing food with a person who has AIDS, and four in five know that AIDS cannot be transmitted by shaking hands.

**Sexually Transmitted Infections (STIs).** Two-thirds of ever-married women have not heard of any sexually transmitted infections (STIs) apart from HIV/AIDS. Only 17 percent of women know at least one STI symptom in a man or in a woman.

## **WOMEN'S EMPOWERMENT**

---

**Working status.** Only 12 percent of married women are currently working. Of these women, most earn less money than their husbands. Almost all women who receive cash earnings for employment (96 percent) report that they decide alone or along with their husbands how their earnings will be used.

**Participation in household decisions.** Women contribute to many household decisions. More than 85 percent of married women report that they participate in decisions regarding their own health care and visits to family, and more than 70 percent say they contribute to decisions about making daily and major household purchases. Fifty-five percent report that they participate in all four of these decisions. Two percent of women do not participate at all in any of the four decisions.

## **DOMESTIC VIOLENCE**

---

**Experience of violence.** One-third of ever-married women have ever experienced physical violence since age 15. Thirteen percent experienced physical violence in the year before the survey. Women with lower levels of education and those from poorer households are more likely to report having ever experienced physical violence. The most common perpetrator of physical violence is the current or previous husband (64 percent). Brothers, fathers, and mothers are also common perpetrators (about 20 percent each). Five percent of women experienced violence during pregnancy. Divorced women are the most likely to report having experienced any type of violence.

**Spousal violence.** One in five ever-married women report that they ever experienced physical violence by their husband. For 12 percent of women, this violence had occurred within the year before the survey. Eight percent of ever-married women report sexual violence by their husband. One in five women also reported to have experienced emotional violence by their husband; 14 percent reported that this had occurred in the most recent year. In all, 23 percent of ever-married women reported ever having experienced physical or sexual violence by their husbands. Fifteen percent reported that this violence took place in the year before the survey.

Women with lower levels of education and those living in poorer households are more likely to report spousal violence than those with more education or those living in the wealthier households. Reports of physical/sexual violence also vary by governorate. Only 10 percent of women in Madaba report ever experiencing physical or sexual violence by their husband, compared to 38 percent of women in Mafraq. Spousal violence is also more common in situations when the husband is better educated than the wife, and in households where women contribute to fewer decisions.

Twenty-two percent of women who experienced spousal violence in the year before the survey sought any assistance. Women who experience frequent violence are more likely to have sought help. Among those who do seek help, mothers and fathers are the most common persons from whom assistance is sought. Women rarely seek the help of medical personnel, police, lawyers, or other external sources.

# JORDAN



# INTRODUCTION

---

## 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 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 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 national 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). The share of agriculture in GDP at constant prices dropped from 7.3 percent in 1992 to 3.8 percent in 1997, then to 3.3 percent in 2002, and to 3.2 percent in 2006. The contribution of wholesale and retail trade, restaurants, and hotels to the GDP has not changed significantly; these sectors made up 9.3 percent of GDP in 1992 and 9.7 in 2006. There was a concomitant rise in the share of the manufacturing sector, rising from 12.4 percent in 1992 to 16.3 percent in 2002 and reaching about 18 percent in 2006. The share of the community and personal services sector also rose slightly during this period, from 2.4 percent in 1992 to 3.6 percent in 2006. The contribution of the transportation, storage and communication sector to the GDP has changed little over the past 15 years, rising about 2.1 percentage points between 1992 and 2002, and reaching about 16 percent in 2006.

The GDP per capita at current prices has demonstrated a steady increase over time, rising from US\$ 1,326 in 1992, to US\$ 1,610 in 1997, to US\$ 1,882 in 2002, to an average of US\$ 2,522 in 2006. The cost of living index increased by 20 percent between 1992 and 1997, and increased by 8 percent between 1997 and 2002, while the percentage of increase was about 5 percent between 2006 and 2007. 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 2007, 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 for 1997, 5.8 percent for 2002, and 6.3 percent for 2006.

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 for 2000 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 the Socioeconomic Transition Program, the E-government Initiative, the National Agenda, All of Us the Jordan Gathering, as well as to fairly distribute the development outcomes among all citizens. Thus, private local and foreign investments have significantly increased, reaching levels never previously achieved, as a result of the continuity of implementing privatization programs and a good environment for investment. The government, and in response to the directives of His Majesty, has expanded the provision of decent housing for tens of thousands of poor households and those with limited and low income in Jordan.

## 1.2 POPULATION

The first population census in Jordan was carried out in 1961. The population then totaled 901,000. 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 2.13 million; it nearly doubled to 4.14 million by 1994. As of the end of 2004, the population was estimated at about 5.35 million, while, it reached 5.72 million in 2007, and it is expected to reach 6.1 million by the year 2010.

Population growth averaged 4.8 percent during the period 1961-1979, and 4.4 percent between 1979 and 1994. 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, 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 increases in population have created several problems for the country – namely, shortages in food, water, housing, and employment opportunities, as well as strains on the education system and the urban infrastructure. Fertility declines in Jordan have contributed to slowing the population growth rate down to 3.2 percent in the second half of the 1990s, and to 2.3 percent in 2007. The average size of private household decreased from 6.7 persons in 1979 to 6.0 persons in 1994 and to 5.4 persons in 2004. In 2007, the average is estimated at about 5.2 persons.

Urbanization is a particularly important topic in Jordan. Historically, internal rural-to-urban migration, as well as immigration, has contributed to rapid urban growth. Recent international crises have also impacted flows of migration into Jordan. The percent of the population living in urban areas increased by 14 percent between 1980 and 1994 (from 70 to 79 percent), reaching 83 percent in 2004, about a 5 percent increase compared to 1994.

Results of the 2004 census indicate that the age structure of the population has changed considerably since 1979 – the result of changes in fertility, mortality, and migration dynamics. The proportion of the population under 15 years of age declined from 51 percent in 1979 to 37 percent by

2004, while the proportion of those aged 60 and over has been rising, from 4.1 percent in 1979 to 5.2 percent in 2004.

Fertility has been declining in Jordan since the mid-1970s. Surveys have found that the total fertility rate declined from 7.4 children per woman in 1976 to 5.6 in 1990, 4.4 in 1997, 3.7 in 2002 and to 3.6 children in 2007. These figures indicate a 40 percent decline (about three children fewer per woman) between 1976 and 1997; fertility fell another 19 percent, or by one child more, between 1997 and 2002. The decline was very slight between 2002 and 2007 (about 3 percent), insignificant compared to that decline that took place in the previous years.

Mortality has also been declining in Jordan, even faster than fertility. The crude death rate, estimated at 18 per thousand in the early 1960s, had declined to 12 by the early 1980s. In 2007, the crude death rate was estimated at seven per thousand. The infant mortality rate also declined from 82 per thousand in 1976 to 22 in 2002, and reached 19 per thousand in 2007, decreasing by 14 percent compared to 2002. Drops in mortality, particularly infant mortality, have translated into an increased life expectancy for the population: in 2002, life expectancy in Jordan was 68 years for males and 71 years for females, increasing to 72 years for males and 74 years for females in 2007.

With regard to the education of the population, the illiteracy rate among those aged 15 years and over has dropped by 70 percent since 1979, from 36 percent to 10 percent in 2002, reaching about 8 percent in 2007 (4 percent among males compared to 12 percent among females). In addition, almost one-third of Jordan's population is currently enrolled in school, at various educational levels. Seventy-one percent of all students attend schools run by the government, which comprise 59 percent of all schools in Jordan in 2007. This percentage has been fairly constant during the last ten years.

### **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. Because of the sensitive nature of the topic, the NPC took no distinct actions or steps. The Commission was revitalized in the late 1980s to backstop several agencies working in the population field. From that period until 1993, both the public and private sectors made efforts to provide family planning services. The Ministry of Health (MOH), through its Maternal and Child Health Centers (MCH), provided optional and predominantly free family planning services as an unofficial and indirect intervention in the population policy. 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 proposed population policy was taken in 1993, where the NPC adopted the Birth Spacing National 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; empowerment of women; and population and enhancing advocacy and media.

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 its work plan. This council is headed by the Prime Minister and is comprised of concerned ministers, in addition to relevant members from both the public and private sectors. The HPC is to continue 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 to be in line with the national socio-economic plans, the socio-economic transition program and the National Agenda of Jordan.

The HPC will work toward the promotion of public awareness in population and development issues and enhance advocacy in these areas. The HPC will collaborate and coordinate 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 MOH is committed to making health services available, accessible, and acceptable in all communities, and seeks to ensure equitable distribution of these services. The government has given priority to the health sector and has developed a national health strategy. This strategy is aimed at creating a comprehensive health care system, utilizing both public and private service providers, and covering all levels of care, from preventive care to tertiary and rehabilitative care.

The MOH developed short-term and long-term plans to improve the health care system and the delivery of services to the population, the last of which was the National Health Strategy for the period 2006-2010. These plans focus on the following areas:

1. Coordination of primary, secondary, and tertiary health service delivery, in order to improve the efficiency of the health system and to avoid duplication among health providers and waste of resources.
2. Development of health-sector human resources through training programs for medical staff to raise standards in all health-sector human resources categories and to maintain quality standards throughout the system.
3. Facility development by upgrading and/or expanding the existing health centers, hospitals, buildings, including equipping and computerization of new facilities, as needed.
4. Issuance of laws and regulations related to the organization of the health sector, in addition to reconsideration of some existing health laws and regulations expected to be approved during the plan period 2006-2010.
5. Computerization of the MOH existing health facilities all over the country, including the development of a Geographic Information System (GIS) for these facilities.
6. Increasing the coverage of health insurance to cover all people in the Jordanian society.

#### **1.5 OBJECTIVES OF THE SURVEY**

As in the previous Demographic and Health Surveys (DHS) in Jordan, conducted in 1990, 1997 and 2002, the primary objective of the Jordan Population and Family Health Survey 2007 (JPFHS) is to provide reliable estimates of demographic parameters, such as fertility, mortality, family planning, fertility preferences, as well as maternal and child health and nutrition, that can be used by program managers and policy makers to evaluate and improve existing programs. In addition, a subsample of women and children were tested for anemia and anthropometry (height and weight). 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 2007 JPFHS was significantly expanded from the 2002 survey to include additional questions on women's status, reproductive health, domestic violence, and early childhood development.

## **1.6 METHODOLOGY AND ORGANIZATION OF THE SURVEY**

The JPFHS 2007 is designed to collect data on ever-married women of reproductive age. The areas covered include demographic and socioeconomic characteristics, reproduction, family planning, health care, breastfeeding and child health care, marriage and woman employment, fertility preferences, nutritional status of children under five years of age, knowledge of Acquired Immune Deficiency Syndrome (AIDS) and sexually-transmitted infections (STIs), domestic violence and early childhood development.

The survey was funded primarily by the Jordanian government and the U.S. Agency for International Development (USAID). Additional funding was provided by UNFPA and UNICEF. Macro International Inc. provided technical assistance through the global Demographic and Health Surveys (DHS) program, in the domain of 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 mapping, listing of households, sample design, 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 in May 2007. The second stage encompassed interviewing and the collection of data. This was carried out by 14 teams, consisting of 14 controllers, 8 field editors, 57 interviewers, and 8 female health technicians (for blood testing). Each team was provided with the required number of vehicles. The field work started on 14 June 2007 and finished on 19 November 2007. The third stage involved office editing of questionnaires, coding of open-ended questions, ensuring data completion and data consistency. Data processing using CSPro software, data entry and on line data verification started soon after the beginning of field work. Data processing operations (central editing of data, data entry, double-entry of all questionnaires, final editing, and verification of data accuracy and consistency) were completed at the end of December 2007.

### **1.6.1 Sample Design**

The 2007 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 badia and non-badia areas. In order to ensure comparability with the previous surveys, the sample was designed to provide estimates for the three regions, North, Central and South. The grouping of the governorates into the regions is as follows: the North region consists of Irbid, Jarash, Ajloun, and Mafraq; the Central region consists of Amman, Madaba, Balqa and Zarqa; and the South region consists of Karak, Tafielah, Ma'an and Aqaba.

The 2007 JPFHS sample was designed using the 2004 Population and Housing Census as the sampling frame. The sampling frame was stratified by governorate, major cities, other urban, and rural within each stratum. A two-stage sampling procedure was employed. First, blocks were selected systematically as primary sampling units (PSUs) with a probability proportional to the size of the PSU. A

total of 930 PSUs were selected at this stage. In the second stage, a fixed number of 16 households were selected as final sampling units in each PSU, resulting in a sample size of about 15,000 households. Blood testing (anemia) and the measurements of height and weight were conducted among eligible individuals in the selected households in 465 PSUs (half of the sample). In addition, 310 selected PSUs (one third of the sample) which were not selected for the above measurements were chosen for collecting data on domestic violence in the household. 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 units/blocks were selected and then identified and located in the field. The selected blocks were delineated and the outer boundaries were demarcated with special signs. During this process, the numbers on buildings and housing units and households were updated, listed and documented, along with the name of the owner/tenant of the housing unit and the name of the household head. These activities were completed during the second quarter of 2007.

### 1.6.3 Questionnaires

The 2007 JPFHS used two questionnaires – namely, the Household Questionnaire and the Individual Questionnaire (See Appendix D). Both questionnaires were developed in English and Arabic, based on the questionnaires used in the 2002 survey, in collaboration with Macro International Inc. The Household Questionnaire was used to list all usual members of the sampled households and to obtain information on each household member's age, sex, educational attainment, relationship to the head of household, and marital status. In addition, questions were included on the socio-economic characteristics of the household, such as source of water, sanitation facilities, and the availability of durable goods. The Household Questionnaire was also used to identify women who are eligible for the individual interview: ever-married women aged 15-49. In addition, in half of the households, all women aged 15-49 and children under five years of age were measured to determine nutritional status and tested for anemia.

The household and women's questionnaires were based on the DHS standard Questionnaire. Additions and modifications to the model questionnaire were made in order to provide detailed information specific to Jordan, using experience gained from the 1990, 1997 and 2002 Jordan Population and Family Health Surveys. For each ever-married woman aged 15-49, information on the following topics was collected:

- Respondent's general background
- Birth history
- Family planning
- Pregnancy, postnatal health care and breastfeeding
- Children immunization and children and mothers nutrition.
- Marriage
- Fertility preferences
- Husband's background and respondent's employment
- AIDS and STIs
- Other health issues
- Domestic violence
- Early childhood development

The last two sections of the questionnaire (domestic violence and early childhood development) were used for the first time in Jordan. In addition, information on births and pregnancies, contraceptive

use and discontinuation, and marriage during the five years prior to the survey was collected using a monthly calendar.

As previously mentioned, anthropometric data were collected during the JPFHS in a subsample of 50 percent of clusters. All women aged 15-49 and children aged 0-4 of these households were measured using Shorr height boards and electronic Seca scales were used to measure their weight. In addition, a drop of capillary blood was taken from these women and children to measure, in the field, their hemoglobin level using the HemoCue system. Hemoglobin testing was used to estimate the prevalence of anemia. Analysis of the anthropometric and hemoglobin data has revealed anomalies in the individual values resulting in unreliable estimates of children's nutritional status and anemia prevalence among children and women. Therefore, these data are not included in this report.

#### **1.6.4 Recruitment of Staff**

Different supervisory and executive levels of survey staff members were recruited according to certain 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 2004 census as well as those who took part in other demographic surveys conducted by the Department of Statistics (DoS), especially the 2002 JPFHS. The interviewers were all highly qualified females. Supervisors and field editors were selected from the DoS permanent staff or from those with good past experience in such surveys.

#### **1.6.5 Training and Pretest**

Training of the interviewers took place in Amman for four weeks in May and June 2007. The training course consisted of instructions regarding interviewing techniques and field procedures, a detailed review of items on the questionnaires, instructions and practice in weighing and measuring children and women, anemia testing, mock interviews between participants in the classroom, and practice interviews. After the training, pretest fieldwork was conducted over a one-week period in three urban clusters and one rural cluster.

Field practice in anemia testing was carried out during the pretest for persons who were assigned as team health technicians. In addition, team members practiced their ability to weigh and measure women and children. 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. Conducting training in the Prince Hamzah Hospital was an advantage, as the interviewers who were assigned to take measurements of height and weight and conduct blood testing for anemia were able to practice with out-patients. Debriefing sessions were held with the pretest field staff, and modifications to the questionnaires and instructions were made based on lessons drawn from the exercise. The survey technical staff, MOH specialists, and experts from Macro International Inc. participated and lectured in the training program. Those are specialized in conducting height and weight measurements and blood testing for anemia as well as conducting training and technical application of the survey inputs.

#### **1.6.6 Main Fieldwork**

The survey fieldwork was organized in such a way as 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 14 controllers, 8 editors, 57 interviewers and 8 female health technicians (for blood testing). All teams were supervised by three controllers and two inspectors. During field work, these teams were combined or reformulated as necessary. Fieldwork was carried out between 14 June and 19 November 2007.

To facilitate data collection, each interviewing team was assigned a number of blocks in the sample area. Each inspector, in collaboration with the supervisor, 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/or the supervisor to ensure completeness and consistency of data. Under the supervision of controllers and inspectors, the field editor and/or the supervisor conducted spot checks by randomly visiting some sampled households and re-interviewing some respondents. The original questionnaires were then matched to the re-interview questionnaires and any differences were discussed.

Interviewers made repeated attempts to obtain the responses of eligible respondents by calling back to interview eligible women who were not home at the time of the first visit, or by attempting to persuade eligible women who were reluctant to be interviewed. Once a cluster was finished, the questionnaires were delivered to the central office in Amman for processing.

### 1.6.7 Data Processing

Fieldwork and data processing activities overlapped. After two weeks of data collection, and 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 one hundred percent re-entry, 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 the end of December 2007. A data processing specialist from Macro International made a trip to Jordan in January 2008 to follow up data editing and cleaning and to work on the tabulation of results for the survey preliminary report, that was published in February 2008. The tabulations for the present final report were completed in May 2008.

## 1.7 RESULTS OF THE HOUSEHOLD AND INDIVIDUAL INTERVIEWS

Table 1.1 is a summary of the results from both the household and the individual interviews. A total of 14,880 households were selected for the survey from the sampling frame; among those selected households, 14,748 households were found. Of those households, 14,564 (99 percent) were successfully interviewed. In those households, 11,113 eligible women were identified, and complete interviews were obtained with 10,876 of them (98 percent of all eligible women). The overall response rate (the households response rate multiplied by the eligible woman response rate) was about 97 percent.

Result	Residence		Total
	Urban	Rural	
<b>Household interviews</b>			
Households selected	10,192	4,688	14,880
Households found	10,099	4,649	14,748
Households interviewed	9,954	4,610	14,564
Household response rate <sup>1</sup>	98.6	99.2	98.8
<b>Interviews with women age 15-49</b>			
Number of eligible women	7,690	3,423	11,113
Number of eligible women interviewed	7,509	3,367	10,876
Eligible women response rate <sup>2</sup>	97.6	98.4	97.9

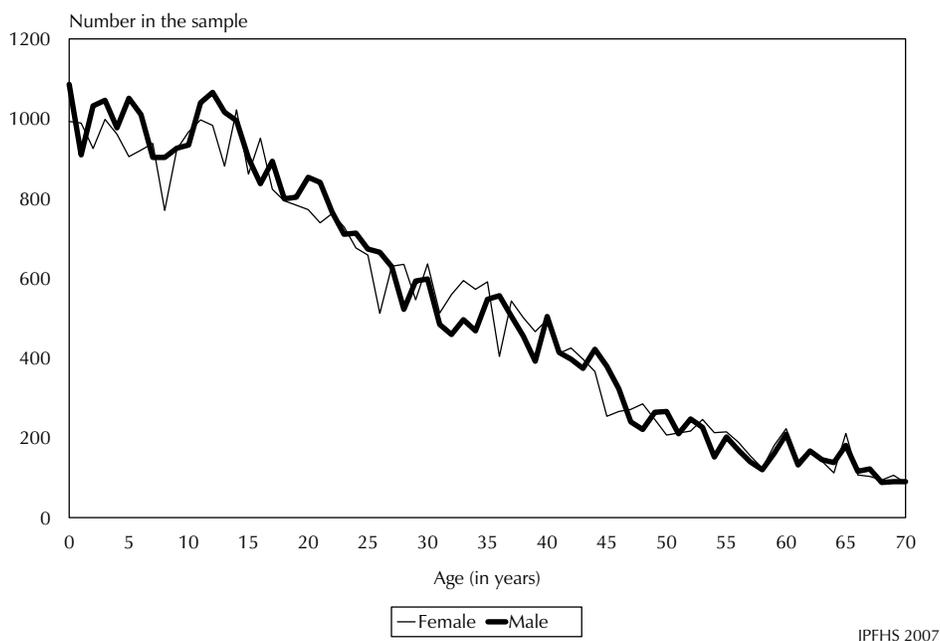
This chapter describes the general characteristics of the sample population, including composition by age and sex, residence, household size, education, housing facilities, and presence of durable goods in the household.

The questionnaire for the 2007 Jordan Population and Family Health Survey (JPFHS) included two questions distinguishing between the *de jure* population (persons who usually live in the selected household) and the *de facto* population (persons who spent the night before the interview in the household). It was found, however, that the difference between them was small, and since sample selection for the JPFHS was based on the *de facto* population, as it had been in past demographic surveys, tabulations for the JPFHS household data have been carried out using the *de facto* population only, unless otherwise specified.

## 2.1 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 not only a respondent's age but the month and year of their birth are usually recorded. Also, the distribution of the population by single years of age (Figure 2.1) indicates that, although there is some preference for ages ending in 0 or 5, the problem is limited.

**Figure 2.1 Male and Female Population by Single Year of Age**



JPFHS 2007

Table 2.1 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 are operating.

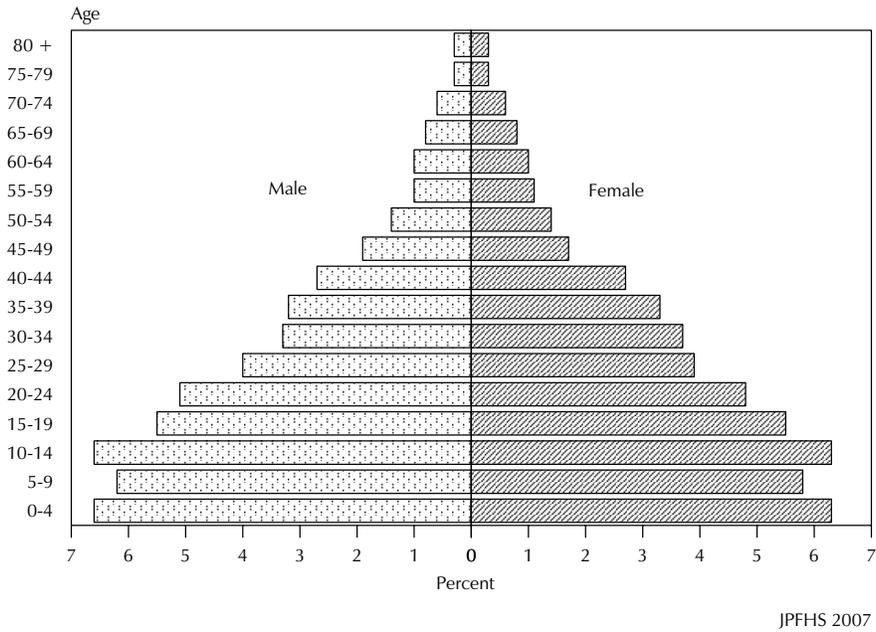
Age	Urban			Rural			Total		
	Male	Female	Total	Male	Female	Total	Male	Female	Total
<5	13.1	12.8	12.9	12.8	12.6	12.7	13.0	12.8	12.9
5-9	12.4	11.6	12.0	12.3	12.1	12.2	12.4	11.7	12.0
10-14	12.8	12.7	12.7	14.1	13.1	13.6	13.0	12.7	12.9
15-19	10.7	10.9	10.8	11.9	11.8	11.9	10.9	11.1	11.0
20-24	9.8	9.6	9.7	10.9	9.9	10.4	10.0	9.7	9.8
25-29	8.0	7.8	7.9	7.8	7.7	7.8	7.9	7.8	7.9
30-34	6.5	7.6	7.0	6.2	7.4	6.8	6.5	7.5	7.0
35-39	6.5	6.6	6.6	5.5	6.2	5.9	6.3	6.6	6.5
40-44	5.5	5.6	5.6	4.9	5.0	5.0	5.4	5.5	5.5
45-49	3.8	3.6	3.7	3.1	3.0	3.1	3.7	3.5	3.6
50-54	2.9	2.8	2.9	2.7	3.1	2.9	2.8	2.9	2.9
55-59	2.0	2.3	2.2	2.0	2.1	2.1	2.0	2.3	2.2
60-64	2.1	2.0	2.1	1.7	2.2	2.0	2.0	2.1	2.1
65-69	1.5	1.7	1.6	1.5	1.4	1.5	1.5	1.6	1.6
70-74	1.2	1.1	1.1	1.0	1.1	1.1	1.1	1.1	1.1
75-79	0.6	0.6	0.6	0.8	0.6	0.7	0.6	0.6	0.6
80 +	0.5	0.6	0.6	0.6	0.7	0.6	0.5	0.6	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	32,319	31,704	64,023	6,454	6,380	12,834	38,774	38,084	76,857

Table 2.1 shows that 38 percent of the population is under 15 years of age, an indicator that fertility remains high. The proportion under 15 years old is slightly higher in rural areas (39 percent) than it is in urban areas (38 percent); this relationship holds for those under 20 as well. The opposite is true in the broad age category of 20-44 years old (37 percent and 36 percent in urban and rural areas, respectively). However, differences in the age composition of the urban and rural populations tend to disappear as age increases.

One may note an unusual pattern at the youngest ages in the population pyramid (Figure 2.2): while there are fewer children in the 5-9 age group than in the 10-14 age group, there are more children aged 0-4 years than 5-9 years. It is possible that the reduced proportion of children aged 5-9 was the consequence of the fast decline in fertility in the 1990s, while the increased proportion of the 0-4 age group may be a result of a pause in the decline in fertility.

There are more males than females in Jordan with an overall sex ratio of 102 males for 100 females. The sex ratio varies by age: from 104 among those under 30 years of age, the sex ratio drops to 97 in the middle age group (30-59 years), and is just above 100 among people age 60 and above.

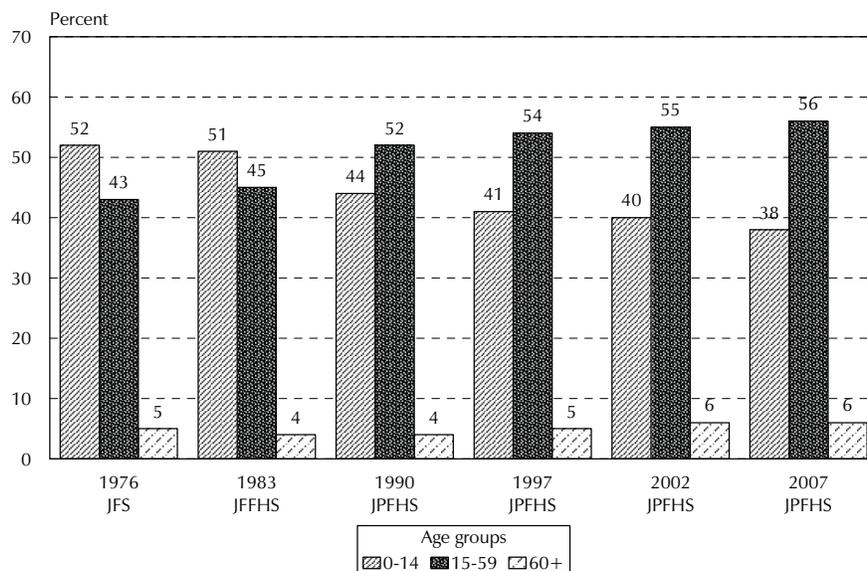
**Figure 2.2 Population Pyramid**



## 2.2 POPULATION BY AGE FROM OTHER SOURCES

The percentage of the population under 15 years of age has declined substantially, from 51 percent in 1983, to 44 percent in 1990, 39 percent in 2002 and to its current 2007 level of 38 percent, with proportional increases in the 15-59 age group (Figure 2.3). That pattern is typical of populations that are experiencing a fertility decline (see Chapter 4 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 130 in 1976, to 86 in 1997, to 82 in 2002 and to 78 in 2007.

**Figure 2.3 Population by Broad Age Groups, Various Surveys, 1976-2007**



## 2.3 HOUSEHOLD SIZE

Table 2.2 provides information on the size of the sampled households. Household characteristics affect the social and economic well-being of the members of the household. Large household size 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.

The average number of members in a household is 5.3. Household size is slightly smaller in urban areas (5.2) than in rural areas (5.7). Ten percent of households, on average, are composed of nine or more persons. The figure is higher in rural areas (16 percent) than in urban areas (9 percent). The table shows that 10 percent of households in urban areas are headed by females, compared with 11 percent in rural areas.

The table shows also that about 1 percent of households has at least one child under the age of 18 years 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). The percentage of households with single orphans is higher in rural areas (4 percent) than in urban areas (2 percent).

Table 2.3 indicates that the majority of children under 18 years of age (94 percent) are living with both parents: this proportion is 95 percent for children under 15 years of age. The range is between 98 percent for children aged 0-4 years and 92 percent for children aged 10-14 years. No variations were noted according to sex, urban-rural residence, region, or Badia area, while there are slight variations in these percentages by governorate, ranging between 92 percent for Ma'an and 95 percent for Amman and Zarqa. In addition, 3 percent of children under the age of 18 have experienced the death of one or both parents. No variations were noted in this percentage for children under the age of 18 years according to sex. Meanwhile, significant variations were noted according to urban-rural residence (3 and 4 percent, respectively), governorates (ranging from 2 percent in Amman and Irbid to 5 percent in Ma'an and Karak), region (particularly the South region, 4 percent), and Badia area (4 percent).

Table 2.2 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, according to residence, Jordan 2007

Characteristic	Residence		Total
	Urban	Rural	
<b>Household headship</b>			
Male	89.8	89.1	89.7
Female	10.2	10.9	10.3
Total	100.0	100.0	100.0
<b>Number of usual members</b>			
0	0.1	0.1	0.1
1	5.0	6.6	5.3
2	10.1	8.1	9.8
3	10.9	9.9	10.7
4	14.0	11.0	13.5
5	16.3	12.1	15.7
6	15.8	14.4	15.6
7	11.2	12.6	11.5
8	7.4	9.2	7.7
9+	9.1	16.0	10.2
Total	100.0	100.0	100.0
Mean size of households	5.2	5.7	5.3
<b>Percentage of households with orphans and foster children under 18 years of age</b>			
Foster children <sup>1</sup>	0.9	1.3	0.9
Double orphans	0.1	0.1	0.1
Single orphans	2.4	3.8	2.6
Foster and/or orphan children	3.2	4.7	3.4
Number of households	12,272	2,292	14,564

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

<sup>1</sup> Foster children are those under age 18 living in households with neither their mother nor their father present.

Table 2.3 Children's living arrangements and orphanhood

Percent distribution of de jure children under age 18 by living arrangements and survival status of parents, 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 2007

Background characteristic	Living with both parents	Living with mother but not father		Living with father but not mother		Not living with either parent					Total	Percentage not living with a biological parent	Percentage with one or both parents dead	Number of children	
		Father alive	Father dead	Mother alive	Mother dead	Both alive	Only father alive	Only mother alive	Both dead	Information missing on father/mother					
<b>Age</b>															
0-4	98.0	1.2	0.4	0.2	0.1	0.1	0.0	0.0	0.0	0.0	100.0	0.1	0.5	9,491	
<2	98.2	1.4	0.2	0.1	0.0	0.1	0.0	0.0	0.0	0.0	100.0	0.1	0.2	3,779	
2-4	97.8	1.1	0.6	0.2	0.1	0.1	0.0	0.0	0.0	0.0	100.0	0.1	0.7	5,711	
5-9	95.7	1.7	1.5	0.7	0.2	0.2	0.0	0.0	0.0	0.0	100.0	0.2	1.7	8,984	
10-14	92.2	2.5	3.3	1.1	0.5	0.3	0.0	0.0	0.1	0.0	100.0	0.5	3.9	9,770	
15-17	88.9	2.2	5.1	1.2	0.8	1.4	0.0	0.1	0.2	0.2	100.0	1.7	6.1	5,266	
<b>Sex</b>															
Male	94.4	2.0	2.2	0.7	0.3	0.2	0.0	0.0	0.1	0.0	100.0	0.4	2.6	17,103	
Female	94.0	1.8	2.4	0.8	0.4	0.5	0.0	0.0	0.0	0.0	100.0	0.6	2.9	16,408	
<b>Residence</b>															
Urban	94.3	2.0	2.1	0.8	0.3	0.3	0.0	0.0	0.1	0.1	100.0	0.4	2.5	27,773	
Rural	93.8	1.2	3.1	0.6	0.5	0.6	0.1	0.1	0.1	0.0	100.0	0.8	3.8	5,738	
<b>Governorate</b>															
Amman	94.5	2.4	2.0	0.7	0.1	0.2	0.0	0.0	0.1	0.0	100.0	0.3	2.2	12,242	
Balqa	93.9	1.0	2.9	0.9	0.6	0.5	0.1	0.0	0.1	0.0	100.0	0.7	3.7	2,145	
Zarqa	94.6	1.2	2.3	0.9	0.5	0.3	0.0	0.0	0.0	0.0	100.0	0.4	2.8	5,246	
Madaba	93.3	1.9	2.7	1.1	0.8	0.2	0.0	0.0	0.0	0.0	100.0	0.2	3.5	853	
Irbid	94.3	2.2	1.8	0.8	0.1	0.5	0.0	0.1	0.0	0.1	100.0	0.6	2.1	6,448	
Ma'raq	93.9	1.0	2.6	0.8	0.6	0.7	0.2	0.1	0.1	0.0	100.0	1.1	3.5	1,580	
Jarash	93.3	2.0	2.6	0.4	0.7	0.8	0.0	0.1	0.0	0.0	100.0	0.9	3.4	1,046	
Ajloun	94.4	1.3	2.7	0.4	1.0	0.1	0.0	0.0	0.0	0.0	100.0	0.2	3.8	807	
Karak	92.8	1.2	3.9	0.6	0.4	0.8	0.1	0.1	0.1	0.0	100.0	1.1	4.6	1,267	
Tafiela	94.4	1.0	2.9	0.1	1.0	0.3	0.1	0.1	0.1	0.0	100.0	0.6	4.2	541	
Ma'an	92.4	1.8	3.9	1.0	0.2	0.4	0.1	0.1	0.1	0.0	100.0	0.7	4.5	596	
Aqaba	94.4	1.5	2.2	0.7	0.5	0.6	0.0	0.0	0.1	0.0	100.0	0.7	2.8	741	
<b>Region</b>															
Central	94.4	1.9	2.2	0.8	0.3	0.3	0.0	0.0	0.1	0.0	100.0	0.4	2.6	20,485	
North	94.2	1.9	2.1	0.7	0.3	0.5	0.0	0.1	0.0	0.1	100.0	0.7	2.6	9,881	
South	93.4	1.3	3.3	0.6	0.5	0.6	0.1	0.1	0.1	0.0	100.0	0.8	4.1	3,146	
<b>Badia area</b>															
Badia	93.9	1.5	3.1	0.6	0.3	0.3	0.1	0.1	0.0	0.0	100.0	0.5	3.6	2,815	
Other	94.3	1.9	2.2	0.8	0.3	0.4	0.0	0.0	0.1	0.0	100.0	0.5	2.6	30,697	
Total <15	95.3	1.8	1.7	0.7	0.2	0.2	0.0	0.0	0.0	0.0	100.0	0.3	2.1	28,245	
Total <18	94.2	1.9	2.3	0.7	0.3	0.4	0.0	0.0	0.1	0.0	100.0	0.5	2.7	33,511	

Note: Table is based on de jure household members, i.e., usual members. Total includes one child with information missing on sex.

## 2.4 LEVEL OF 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 of cost 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 2007 JPFHS, questions on education were asked for persons six years of age and older, to be used to calculate rates of school enrollment as well as overall education levels of the population.

Table 2.4 presents data on educational attainment as reported in the household questionnaire. In the 2007 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: 94 percent of males in Jordan have had some schooling, whereas about 90 percent of females have attended school. Furthermore, men tend to stay in school slightly longer than women.

Table 2.4 Educational attainment of the household population								
Percent distribution of the de facto household populations age six and over by highest level of schooling attended and median grade completed, according to sex and background characteristics, Jordan 2007								
Background characteristic	No education	Elementary	Preparatory	Secondary	Higher	Total <sup>1</sup>	Number	Median years completed
<b>MALE</b>								
<b>Age</b>								
6-9	13.7	85.8	0.0	0.3	0.1	100.0	3,742	1.4
10-14	0.7	52.3	46.2	0.7	0.0	100.0	5,051	5.9
15-19	0.5	3.4	21.1	64.8	10.2	100.0	4,233	10.0
20-24	1.7	4.1	7.6	45.4	41.0	100.0	3,882	11.2
25-29	3.2	5.8	10.6	47.8	32.5	100.0	3,082	11.0
30-34	2.9	9.9	13.9	46.1	27.1	100.0	2,505	10.8
35-39	3.8	11.0	21.1	35.4	28.6	100.0	2,456	10.7
40-44	4.4	10.3	19.8	33.5	32.0	100.0	2,111	10.8
45-49	2.2	14.2	19.3	30.7	33.6	100.0	1,427	11.0
50-54	5.8	16.9	26.8	17.6	32.5	100.0	1,100	9.4
55-59	7.4	18.0	20.8	21.4	32.4	100.0	791	10.2
60-64	12.2	26.7	13.6	19.9	27.7	100.0	791	8.6
65+	38.0	28.9	9.0	11.7	12.0	100.0	1,499	3.9
<b>Residence</b>								
Urban	5.0	25.0	18.7	29.8	21.4	100.0	27,202	9.2
Rural	8.3	26.6	18.8	32.5	13.7	100.0	5,470	8.5
<b>Governorate</b>								
Amman	4.7	24.0	17.8	29.1	24.2	100.0	12,692	9.5
Balqa	7.8	24.3	16.6	31.4	19.9	100.0	2,178	9.2
Zarqa	4.5	27.1	20.3	31.3	16.8	100.0	4,900	8.8
Madaba	6.5	24.2	16.8	33.2	19.3	100.0	806	9.4
Irbid	5.6	24.3	20.2	30.3	19.6	100.0	6,050	9.0
Mafraq	9.9	28.4	20.1	30.2	11.4	100.0	1,417	8.0
Jarash	4.7	28.4	18.4	30.7	17.8	100.0	938	8.8
Ajloun	4.9	26.5	19.9	33.4	15.2	100.0	710	8.8
Karak	8.3	26.1	16.1	32.0	17.4	100.0	1,244	8.9
Tafiela	6.1	27.8	20.5	32.3	13.3	100.0	473	8.4
Ma'an	8.2	28.4	19.9	29.0	14.5	100.0	553	8.1
Aqaba	5.6	28.9	19.1	30.9	15.5	100.0	712	8.4
<b>Region</b>								
Central	5.1	24.8	18.2	30.0	21.8	100.0	20,576	9.2
North	6.1	25.6	20.0	30.5	17.8	100.0	9,114	8.8
South	7.3	27.5	18.2	31.2	15.7	100.0	2,981	8.6
<b>Badia area</b>								
Badia	9.8	28.7	19.1	31.2	11.1	100.0	2,552	8.0
Other	5.2	25.0	18.7	30.2	20.9	100.0	30,119	9.1
Total	5.6	25.2	18.7	30.3	20.1	100.0	32,671	9.1

Continued...

Table 2.4—Continued

Background characteristic	No education	Elementary	Preparatory	Secondary	Higher	Total <sup>1</sup>	Number	Median years completed
<b>FEMALE</b>								
<b>Age</b>								
6-9	11.2	88.4	0.1	0.4	0.0	100.0	3,553	1.4
10-14	0.5	53.2	45.7	0.6	0.0	100.0	4,851	5.8
15-19	0.8	1.9	19.8	62.6	15.0	100.0	4,212	10.2
20-24	1.5	4.1	6.1	39.1	48.8	100.0	3,678	11.9
25-29	3.2	5.2	10.0	43.7	37.9	100.0	2,981	11.3
30-34	3.4	6.4	12.8	46.4	31.0	100.0	2,875	11.0
35-39	4.2	7.7	17.1	39.6	31.4	100.0	2,505	10.8
40-44	7.4	11.0	17.5	35.9	28.1	100.0	2,096	10.6
45-49	11.7	16.3	20.8	26.8	24.4	100.0	1,322	9.3
50-54	23.8	18.0	21.2	18.4	18.5	100.0	1,095	7.6
55-59	39.9	26.4	11.6	12.5	9.6	100.0	864	3.9
60-64	48.9	25.5	8.3	11.3	5.4	100.0	788	1.4
65+	78.5	11.9	3.6	4.4	1.6	100.0	1,488	0.0
<b>Residence</b>								
Urban	9.1	23.7	17.0	29.4	20.7	100.0	26,902	9.0
Rural	15.6	25.0	16.6	25.9	17.0	100.0	5,410	7.8
<b>Governorate</b>								
Amman	8.4	22.6	16.7	29.5	22.6	100.0	12,775	9.3
Balqa	12.5	25.7	15.8	24.2	21.8	100.0	1,984	8.4
Zarqa	8.4	26.4	17.8	32.6	14.8	100.0	4,597	8.6
Madaba	11.6	24.6	15.3	28.3	20.3	100.0	801	8.7
Irbid	10.6	23.1	17.3	29.0	20.0	100.0	6,098	8.9
Mafrq	16.8	26.7	17.7	24.8	14.1	100.0	1,432	7.2
Jarash	11.3	25.6	17.4	27.8	17.8	100.0	934	8.4
Ajloun	10.9	23.0	16.1	29.2	20.8	100.0	722	9.0
Karak	13.9	22.6	15.8	25.2	22.6	100.0	1,332	8.6
Tafiela	14.6	24.2	17.5	24.2	19.4	100.0	483	7.9
Ma'an	15.8	26.5	15.9	23.5	18.2	100.0	530	7.4
Aqaba	10.6	27.3	17.3	27.6	17.2	100.0	624	8.1
<b>Region</b>								
Central	8.9	23.9	16.8	29.6	20.6	100.0	20,156	9.0
North	11.7	23.9	17.3	28.2	18.9	100.0	9,187	8.6
South	13.7	24.5	16.4	25.2	20.2	100.0	2,970	8.2
<b>Badia area</b>								
Badia	17.1	27.9	16.9	26.8	11.3	100.0	2,428	7.0
Other	9.6	23.6	16.9	29.0	20.8	100.0	29,884	9.0
Total	10.2	23.9	16.9	28.8	20.1	100.0	32,312	8.8

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. Total includes 1 male and 5 females for whom information on age is missing.

<sup>1</sup> Including "Don't know/Missing"

This table also shows that about half of males and females (50 and 49 percent, respectively) have attended secondary education or higher. Overall education levels have increased for both men and women since 2002 (46 percent of men and 43 percent of women had at least a secondary education in 2002) and the gender gap in education has decreased. Variations were noted in this percentage for both sexes according to urban-rural residence (educational attainment is higher in urban areas than in rural areas) and governorate (the percentage varies from 39 percent for females in Mafraq to 52 percent in Amman; for males, it ranges from 42 percent in Mafraq to 53 percent in Amman and Madaba). The variation is quite large between the Badia and non-Badia areas: 38 percent of women have at least a secondary education in Badia areas compared to 50 percent in non-Badia areas (for men, these percentages are 42 and 51 percent, respectively). The median number of years of schooling is 9.1 years for males and 8.8 years for females.

Medians presented in Table 2.4 indicate an increase in the number of years of schooling as well as a reduction in the gender gap among the younger generations. The medians have increased from 8.6 for men and 8.0 for women in 2002 to 9.1 and 8.8, respectively, in 2007. Men aged 50-54 have a median of 9.4 years of education, while women in the same age cohort have 7.6 years. By ages 40-44, however, the median number of years of education is almost the same for males and females (10.8 and 10.6 years, respectively).

The level of education is associated with residence, although differences by residence and by region are not great. In urban areas and in the Central region, the median years of education attained are higher than in the rest of the country, for both sexes.

## 2.5 SCHOOL ATTENDANCE

Table 2.5 and Figure 2.4 show the proportion of the household population aged 6-24 years attending school, by age and sex. The data reflect the fact that school attendance in Jordan is very high, at almost 99 percent for both sexes among those aged 8 through 13. Few differences in attendance are observed between males and females of younger ages (7-13 years).

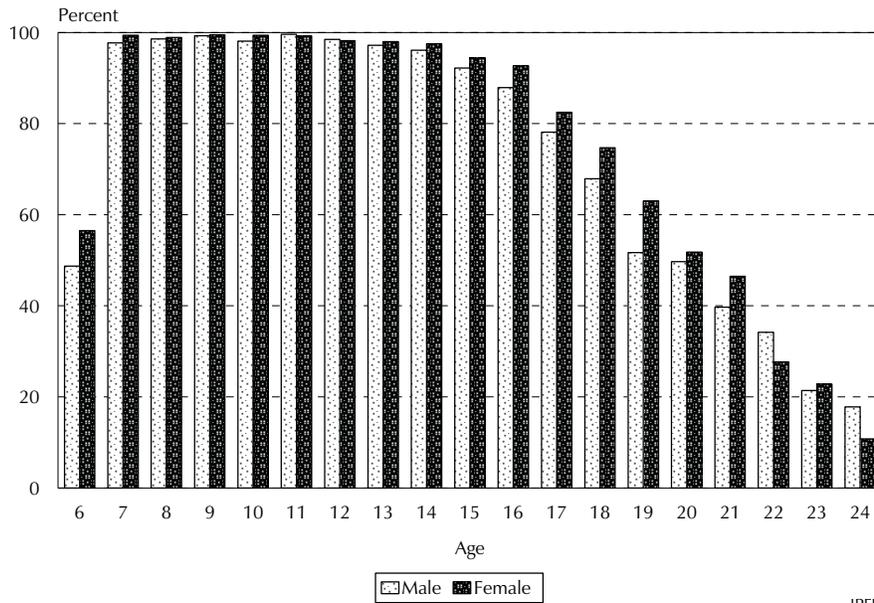
Beyond the age of 13, attendance rates start to decline, especially for males. Nevertheless, the overall rate exceeds 92 percent for both sexes up to age 15. Age 15 marks the beginning of a gender-based divergence in attendance, where 94 percent of females and 92 percent of males are attending school. This gender gap continues through age 21, with 47 percent of females attending school as compared to 40 percent of males. Gender gaps in attendance are directionally inconsistent for the ages of 21 to 24.

**Table 2.5 Age-specific attendance rates of the de-jure population 6 to 24 years**

Percentage of the de jure household population age 6-24 years attending school, by age and sex, Jordan 2007

Age	Percentage attending	Number
MALE		
6	48.7	976
7	97.7	877
8	98.6	870
9	99.3	903
10	98.1	922
11	99.6	1,023
12	98.5	1,053
13	97.2	1,009
14	96.1	984
15	92.2	905
16	87.9	841
17	78.1	903
18	67.9	828
19	51.7	863
20	49.7	886
21	39.7	884
22	34.2	812
23	21.4	752
24	17.8	784
FEMALE		
6	56.5	885
7	99.4	916
8	98.9	765
9	99.5	905
10	99.4	956
11	99.2	979
12	98.2	979
13	98.0	864
14	97.5	1,002
15	94.4	857
16	92.7	950
17	82.5	810
18	74.7	793
19	63.0	784
20	51.8	774
21	46.5	742
22	27.7	731
23	22.8	710
24	10.8	654

**Figure 2.4 Age-Specific Attendance Rates**  
(Percentage of the Population Age 6-24 Years Attending School)



JPFHS 2007

## 2.6 HOUSING CHARACTERISTICS

In the 2007 JPFHS, information on housing characteristics was collected in the household questionnaire. Table 2.6 indicates that more than three-fifths of housing units (63 percent) in urban areas are apartments, as compared to nearly one-fifth (19 percent) in rural areas. *Dars*, which are homes that are built with an enclosed central courtyard, form 80 percent of the dwellings in rural areas, compared to only 36 percent in urban areas. In general, 99 percent of total housing units in Jordan are either apartments or *dars*.

About half of the housing units (46 percent) consist of two or three rooms and 45 percent consist of four or five rooms, whereas 6 percent consist of six or more rooms; only 4 percent of housing units consist of one room, with slight differences according to the place of residence. As for rooms used for sleeping, one in four housing units (26 percent) has one sleeping room, more than two-fifths (44 percent) have two, and about a quarter (26 percent) has three sleeping rooms, with slight differences according to place of residence.

Table 2.6 also indicates that seven in ten dwellings have walls built from cement bricks and about a quarter built from clean cut-stone or from clean cut-stone and cement (27 percent). Dwellings in urban areas are more likely to be built from clean cut-stone or cut-stone and cement than those in rural areas (30 percent vs. 8 percent). Conversely, dwellings are more likely to be built from cement bricks in rural areas than in urban areas (84 and 67 percent, respectively).

The data indicate that most of the households in urban areas (98 percent) and in rural areas (94 percent) have an independent kitchen, while most of the households in urban areas (98 percent) and in rural areas (96 percent) have an independent bathroom.

Table 2.6 indicates that almost all households (99 percent) in urban areas have electricity, which differs little from rural areas (98 percent). Moreover, nearly all households use natural gas for cooking regardless of the place of residence.

Table 2.6 Household characteristics

Percent distribution of households and *de jure* population by housing characteristics, according to residence, Jordan 2007

Housing characteristic	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
<b>Type of housing unit</b>						
Apartment	62.9	18.7	55.9	59.2	17.4	52.1
Dar	35.7	79.6	42.6	39.3	81.5	46.5
Villa	1.1	0.7	1.0	1.2	0.8	1.1
Hut/barrack/other	0.3	1.1	0.4	0.2	0.4	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b>Electricity</b>						
Yes	99.0	97.8	98.8	99.0	98.6	99.0
No	1.0	2.2	1.2	1.0	1.4	1.0
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b>Flooring material</b>						
Tile	86.6	82.4	85.9	87.5	85.4	87.1
Marble/ceramic tiles	8.1	1.2	7.0	7.7	1.1	6.6
Cement	5.2	16.2	6.9	4.8	13.3	6.2
Parquet, polished wood	0.1	0.1	0.1	0.0	0.0	0.0
Earth	0.0	0.2	0.1	0.1	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b>Main wall material</b>						
Cement bricks	67.1	83.8	69.8	69.7	84.1	72.1
Cut stone	23.6	4.5	20.6	21.1	4.4	18.2
Cut stone and concrete	6.4	3.3	5.9	6.3	3.1	5.7
Concrete	2.2	7.3	3.0	2.3	7.8	3.3
Other	0.6	1.2	0.6	0.6	0.8	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b>Number of rooms</b>						
One	3.3	5.2	3.6	1.4	1.9	1.5
Two	13.7	13.5	13.6	11.2	10.3	11.1
Three	32.3	29.9	31.9	31.5	29.1	31.1
Four	28.7	30.4	29.0	30.5	33.4	31.0
Five	16.2	15.0	16.0	18.2	17.9	18.1
Six or more	5.9	6.0	5.9	7.1	7.4	7.2
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b>Rooms used for sleeping</b>						
One	25.5	29.4	26.1	14.7	16.1	14.9
Two	43.8	43.5	43.7	45.6	47.0	45.8
Three	26.9	22.8	26.3	34.2	30.1	33.5
Four or more	3.8	4.3	3.9	5.6	6.8	5.8
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b>Household has separate room used as kitchen</b>						
No	2.0	6.0	2.7	1.2	3.8	1.6
Yes	98.0	94.0	97.3	98.8	96.2	98.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b>Household has an independent bathroom</b>						
No	1.6	4.1	2.0	1.3	3.0	1.6
Yes	98.3	95.9	97.9	98.7	97.0	98.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
<b>Cooking fuel</b>						
LPG/natural gas	99.6	99.0	99.5	99.7	99.4	99.7
Other	0.4	1.0	0.5	0.3	0.5	0.4
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	12,272	2,292	14,564	63,681	13,000	76,681

LPG = Liquid petroleum gas

Table 2.7 indicates that 70 percent of households in urban areas use piped-in water compared to 74 percent in rural areas. Four percent of households in urban areas use rainwater compared to 13 percent of households in rural areas. About 25 percent of urban households and only 6 percent of rural households use bottled water for drinking. Overall, the majority of households in urban areas (98 percent) and in rural areas (93 percent) use safe water for drinking. Some households treat their water to make it safe for drinking. The table indicates that 4 percent of households in urban areas and 5 percent in rural areas boil water, whereas 18 percent of households in urban areas and 9 percent in rural areas use water filters for water purification. The results also indicate that four-fifths of households do not do anything for treating water (86 percent in rural areas compared to 78 percent in urban areas).

Table 2.7 also shows that 80 percent of households have a private flush toilet, with marked differences between urban and rural households (83 and 62 percent, respectively). Only 3 percent of households share toilets with other households.

Table 2.7 Household drinking water and sanitation facilities						
Percent distribution of households and <i>de jure</i> population by source of drinking water, percentage of households and <i>de jure</i> population by treatment of drinking water, and percent distribution of households and <i>de jure</i> population by type of toilet/latrine facilities according to residence, Jordan 2007						
	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
<b>Household drinking water</b>						
<b>Source of drinking water</b>						
Improved source	73.8	87.2	75.9	76.1	88.8	78.3
Piped water into dwelling/yard	69.6	74.0	70.3	71.6	75.7	72.3
Rainwater	4.2	13.2	5.6	4.6	13.1	6.0
Tanker truck	1.5	5.7	2.1	1.6	4.8	2.1
Bottled water, improved source for cooking/washing <sup>1</sup>	24.5	5.6	21.5	22.0	5.0	19.1
Other	0.2	1.5	0.4	0.3	1.4	0.5
Total	100.0	100.0	100.0	100.0	100.0	100.0
Percentage using any improved source of drinking water	98.3	92.8	97.4	98.2	93.8	97.4
<b>Water treatment prior to drinking<sup>2</sup></b>						
Boiled	3.5	4.7	3.7	3.5	4.7	3.7
Bleach/chlorine	1.0	0.6	0.9	1.2	0.6	1.1
Ceramic, sand, or other filter	17.8	9.0	16.4	18.1	9.7	16.7
Other	0.1	0.2	0.1	0.1	0.2	0.1
No treatment	77.5	85.5	78.8	77.2	84.8	78.5
Percentage using an appropriate treatment method <sup>3</sup>	22.0	14.3	20.8	22.5	14.9	21.2
Number	12,272	2,292	14,564	63,681	13,000	76,681
<b>Sanitation facilities</b>						
<b>Improved, not shared facility</b>						
Flush to piped sewer system	64.5	5.7	55.3	62.0	5.7	52.5
Flush to pit latrine	18.6	55.9	24.5	20.5	57.3	26.7
Ventilated improved pit (VIP) latrine	3.8	5.5	4.0	3.7	5.6	4.1
Pit latrine with slab	9.8	28.9	12.8	10.6	28.0	13.5
<b>Non-improved facility</b>						
Any facility shared with other households	3.0	2.3	2.9	3.0	2.1	2.8
Pit latrine without slab/open pit	0.2	0.9	0.3	0.2	1.0	0.3
No facility/field	0.0	0.8	0.2	0.1	0.3	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number	12,272	2,292	14,564	63,681	13,000	76,681

<sup>1</sup> Because the quality of bottled water is not known, households using bottled water for drinking are classified as using an improved or non-improved source according to their water source for cooking and washing.

<sup>2</sup> Respondents may report multiple treatment methods so the sum of treatment may exceed 100 percent.

<sup>3</sup> Appropriate water treatment methods include boiling, bleaching, straining, filtering, and solar disinfecting.

## 2.7 PRESENCE OF DURABLE GOODS

Jordan is a modern society, and most of the population enjoy the convenience of electrical appliances (Table 2.8). Ninety-seven percent of households have television sets, 95 percent have a refrigerator, 94 percent have a washing machine and 87 percent have a satellite.

Possession	Households			Population		
	Urban	Rural	Total	Urban	Rural	Total
Bed or sofa bed	80.8	57.6	77.2	77.6	53.6	73.6
Radio/tape recorder	60.8	47.5	58.7	60.3	47.7	58.2
Television	97.7	94.5	97.2	98.5	96.9	98.3
Satellite	88.5	77.6	86.8	89.8	81.0	88.3
Mobile telephone	90.8	85.9	90.0	93.6	90.3	93.0
Land telephone	37.5	26.0	35.7	38.4	28.3	36.7
Refrigerator	95.1	91.5	94.6	96.6	94.8	96.3
Washing machine	94.6	89.6	93.8	96.9	94.1	96.5
Solar heater	13.9	8.6	13.0	14.1	8.9	13.2
Air conditioner	10.7	4.0	9.7	10.5	4.4	9.5
Fan	85.6	76.4	84.1	86.9	78.3	85.5
Water cooler	21.3	4.6	18.7	21.1	4.6	18.3
Microwave	24.6	6.3	21.7	23.3	5.9	20.3
Digital camera	9.8	3.9	8.8	9.8	4.1	8.8
Computer	38.6	23.5	36.2	43.3	28.1	40.8
Internet access at home	9.3	2.6	8.3	9.3	2.9	8.2
Credit cards	13.6	6.4	12.5	13.0	6.7	11.9
Car/pickup	40.5	38.3	40.2	43.5	43.6	43.5
Number	12,272	2,292	14,564	63,681	13,000	76,681

As further testament to the level of development in Jordan, 90 percent of households possess a mobile phone (with 64 percent of households owning 2 or more mobile phones), the results also indicate that 36 percent own a computer, and 8 percent have internet access. The possession of computer-related assets varies considerably between urban and rural areas: ownership of a computer in urban areas is 1.6 times than in rural areas, and internet access is about 3.6 times higher in urban than in rural areas.

Of further interest is the fact that two in five households own a private car, with 4 percent owning two or more private cars. Thirteen percent of households have a solar heater. One in ten households owns an air conditioner, with differences according to urban-rural residence. Seventy-seven percent of households possess beds or a sofa bed for sleeping, with significant variations according to urban-rural residence (81 percent for urban areas compared to 58 percent in rural areas).

Households in urban areas are more likely to have a water cooler (21 percent), a microwave (25 percent), and a digital camera (10 percent) than those in rural areas (5 percent, 6 percent and 4 percent respectively); households are also more likely to own a credit card in urban areas than in rural areas (14 vs. 6 percent).

## 2.8 HOUSEHOLD WEALTH

One of the characteristics used for analysis in this report is the household wealth index. The data required for calculating this index includes household assets and property and is used to represent the 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 the source of drinking water, type of toilet, type of the dwelling floor and other characteristics. Each asset is assigned a weight (factor score) generated through principal components analysis, and the resulting asset scores were standardized in relation to a normal distribution with a mean of zero and standard deviation of one (Gwatkin et al., 2000). Each household was then assigned a score for each asset and the scores were summed for each household; individuals were ranked according to the score of the household in which they resided. The sample was then divided into quintiles from one (lowest) to five (highest). A single asset index was developed for the whole sample; no separate indices were prepared for the urban and rural population. This classification of population by quintiles is used as a background variable in the following sections to assess the demographic and health outcomes in relation to socio-economic status.

Table 2.9 shows the distribution of the household population according to the wealth quintiles, from the lowest to the highest. About 44 percent of household members in urban areas fall into either the fourth or the highest wealth quintiles, while six in ten households in rural areas fall into either the lowest or the second quintiles.

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 (55 percent) fall into either the fourth or the highest quintiles in Amman, more than half of the household members in Madaba (51 percent), Jarash (62 percent), Ajloun (58 percent), Karak (52 percent), Mafraq (64 percent), and Tafiela (56 percent) fall in the lowest or second quintiles.

Residence/ region	Wealth quintile					Total	Number of population
	Lowest	Second	Middle	Fourth	Highest		
<b>Residence</b>							
Urban	17.1	19.0	19.7	21.3	22.9	100.0	63,681
Rural	34.0	25.1	21.4	13.8	5.6	100.0	13,000
<b>Governorate</b>							
Amman	12.5	15.0	17.2	21.8	33.5	100.0	29,618
Balqa	28.0	18.5	17.8	18.7	17.0	100.0	4,909
Zarqa	15.7	22.9	24.7	23.1	13.7	100.0	11,289
Madaba	26.7	24.4	21.7	14.8	12.4	100.0	1,897
Irbid	23.0	23.3	21.2	20.4	12.2	100.0	14,330
Mafraq	37.0	27.0	20.3	11.2	4.6	100.0	3,419
Jarash	37.3	24.5	19.8	11.4	6.9	100.0	2,256
Ajloun	31.4	26.5	22.0	13.9	6.1	100.0	1,752
Karak	29.4	22.9	22.8	16.8	8.2	100.0	3,091
Tafiela	28.7	27.7	23.5	15.3	4.8	100.0	1,166
Ma'an	30.9	24.9	22.8	14.5	6.9	100.0	1,339
Aqaba	23.0	18.0	21.3	22.8	14.9	100.0	1,615
<b>Region</b>							
Central	15.4	17.6	19.2	21.5	26.2	100.0	47,713
North	27.3	24.3	21.0	17.5	10.0	100.0	21,757
South	28.1	22.9	22.6	17.5	8.9	100.0	7,210
<b>Badia area</b>							
Badia	40.4	26.6	18.8	10.4	3.8	100.0	6,078
Other	18.2	19.4	20.1	20.8	21.4	100.0	70,602
Total	20.0	20.0	20.0	20.0	20.0	100.0	76,681



## RESPONDENTS' BACKGROUND CHARACTERISTICS

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

### 3.1 GENERAL CHARACTERISTICS

Table 3.1 presents the distribution of respondents by background characteristics, including age, marital status, residence, educational level attended, and household wealth. The distribution of ever-married women shows that, in 2007, 14 percent were under age 25, compared with 15 percent in 2002, 18 percent in 1997, and 22 percent in 1990. It is noteworthy that the proportion of women in the youngest age group (15-19) has dropped to 2.2 percent, whereas in 1990, women in this age group made up 6 percent of respondents. This decline in the proportion of young ever-married women is the consequence of increasing age at first marriage (see Chapter 6). Despite the decrease in the proportion of women aged 25-34 between 2002 and 2007 (from 42 percent to 39 percent), the proportion of women aged 40-49 was slightly higher in 2007 than it was in 2002 (from 25 percent to 29 percent). Among ever-married women, the percentage distribution by marital status indicates that 95 percent are currently married; the rest are either divorced (3 percent) or widowed (2 percent). The proportion of those currently married has remained the same as in 2002.

Table 3.1 shows that 85 percent of respondents reside in urban areas (defined as localities with a population of 5,000 or more, as stated in the 2004 Census). Only 8 percent of all ever-married women live in the governorates of the South region (Karak, Tafiela, Ma'an and Aqaba) compared with 64 percent in the Central region and 27 percent in the North region. Two-fifths of women live in Amman, 18 percent in Irbid and 15 percent in Zarqa, compared to 1.3 percent in Tafiela and 1.5 percent in Ma'an. About 8 percent of women live in Badia areas.

Table 3.1 also presents the weighted and unweighted numbers of women in the sample. The

Table 3.1 Background characteristics of respondents

Percent distribution of ever-married women by background characteristics, Jordan 2007

Background characteristic	Weighted percent	Number of ever-married women	
		Weighted	Unweighted
<b>Age</b>			
15-19	2.2	236	222
20-24	11.7	1,276	1,272
25-29	18.2	1,977	2,014
30-34	20.3	2,213	2,251
35-39	18.9	2,052	2,063
40-44	17.3	1,884	1,809
45-49	11.4	1,239	1,245
<b>Marital status</b>			
Married	95.2	10,354	10,360
Divorced	2.7	292	244
Widowed	2.1	230	272
<b>Residence</b>			
Urban	85.0	9,249	7,509
Rural	15.0	1,627	3,367
<b>Governorate</b>			
Amman	40.8	4,442	1,341
Balqa	5.9	645	822
Zarqa	15.1	1,645	1,076
Madaba	2.4	262	893
Irbid	18.3	1,993	896
Mafraq	4.2	460	886
Jarash	2.7	293	860
Ajloun	2.1	228	848
Karak	3.5	378	775
Tafiela	1.3	146	842
Ma'an	1.5	164	793
Aqaba	2.0	221	844
<b>Region</b>			
Central	64.3	6,993	4,132
North	27.4	2,975	3,490
South	8.4	908	3,254
<b>Badia area</b>			
Badia	7.6	823	1,556
Other	92.4	10,053	9,320
<b>Education</b>			
No education	3.8	416	744
Elementary	7.5	813	1,026
Preparatory	15.5	1,681	1,761
Secondary	44.0	4,788	4,372
Higher	29.2	3,179	2,973
<b>Wealth quintile</b>			
Lowest	20.3	2,211	3,054
Second	21.1	2,296	2,707
Middle	20.3	2,206	2,267
Fourth	19.6	2,135	1,732
Highest	18.6	2,028	1,116
Total	100.0	10,876	10,876

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

unweighted numbers of women in the Central region (Amman, Zarqa, Balqa, and Madaba) are smaller than the weighted numbers. The opposite is true in the South and North region (because of oversampling). For example, in the South region, although the weighted number of women is 908, in reality, data were collected from 3,254 women. The South region was oversampled to obtain sufficient women to yield statistically reliable estimates. The same also applies to the weighted and unweighted numbers in the governorates; for example, although the weighted number of women in Jarash is 293 women, in reality, data were collected from 860 women. This also applies to the Badia areas where data were collected from about twice the weighted number of women (1,556 women).

Table 3.1 indicates that in 2007, 4 percent of ever-married women had not received any formal education, compared with 6 percent in 2002, 9 percent in 1997 and 24 percent in 1990. It is clear the degree to which access to education has spread in Jordanian society in a relatively short period of time. Education has spread deeply as well as broadly over time in Jordan: only 54 percent of women had ever attended preparatory or higher levels of schooling in 1990; the corresponding figure in 1997 was 76 percent, in 2002 it was 83 percent and it was 89 percent of women who had attained preparatory or higher education in 2007. The table also indicates the semi-equal distribution of woman according to household wealth, as about 19 percent of women are concentrated in the highest quintile, compared with 21 percent in the second quintile.

### **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 received greater emphasis over the past sixty years. The data indicate that older women are less likely to have had education than younger women; almost 11 percent of women aged 45-49 have had no education, while less than 1 percent of women between the ages of 15 and 29 have had no education.

The median number of years of schooling according to age group reflects no major difference, except among women aged 45-49. The median number of years of education for all women is 10.8 years. While women aged 20-39 have a median of about 11 years of education, while those aged 45-49 have a median of 9.1 years of education.

Women in urban areas are more likely to have had any education, as well as higher education, than their rural counterparts; three percent of women in urban areas have no education, compared to 10 percent of women in rural areas. There are no differences in terms of the median number of years of schooling according to urban-rural residence. There are pronounced differences in women's educational attainment by region and governorate. In the Central region, 3 percent of women have no education, whereas in the South region, the proportion is 10 percent. Only 2 percent of women in Amman and Zarqa have no education, compared to 15 percent in Ma'an. In Badia areas, 14 percent of women have no education, compared with 3 percent in non-Badia areas.

Regional differences also persist with regard to secondary or higher education: a greater proportion of women in the Central region attained secondary or higher education (76 percent) than in either the North (70 percent) or South (65 percent) regions. Significant differences also exist in terms of higher education by governorate; the percentage of women who have attained higher education is about one third of women in Amman, Balqa, Madaba, Ajloun and Karak, dropping to 18 percent in Mafraq.

There is also a significant and notable difference for the woman residing in Badia areas, whereas the percentage of woman attaining higher education in non-Badia areas is about twofold that of women in Badia areas (30 and 16 percent, respectively).

The table also shows a higher proportion of women with no education in the lowest wealth quintile (11 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 (49 percent) and the lowest in the poorest households (13 percent).

Background characteristic	Education					Total	Median years completed	Number of women
	No education	Elementary	Preparatory	Secondary	Higher			
<b>Age</b>								
15-19	0.8	6.6	25.9	64.7	2.1	100.0	9.7	236
20-24	0.5	4.8	11.5	59.5	23.7	100.0	10.7	1,276
25-29	1.0	3.9	10.4	50.0	34.7	100.0	11.2	1,977
30-34	2.4	5.2	13.6	46.6	32.2	100.0	11.0	2,213
35-39	3.0	6.4	17.2	42.0	31.4	100.0	10.9	2,052
40-44	7.1	11.1	18.4	35.9	27.5	100.0	10.6	1,884
45-49	11.4	16.5	21.5	25.6	25.0	100.0	9.1	1,239
<b>Residence</b>								
Urban	2.7	6.9	15.2	45.2	29.9	100.0	10.9	9,249
Rural	10.4	10.5	16.7	37.1	25.3	100.0	10.3	1,627
<b>Governorate</b>								
Amman	2.3	6.2	14.2	44.6	32.7	100.0	11.1	4,442
Balqa	6.4	8.7	15.1	37.3	32.5	100.0	10.9	645
Zarqa	2.0	7.1	16.9	51.3	22.6	100.0	10.8	1,645
Madaba	6.8	9.0	12.0	39.7	32.4	100.0	11.1	262
Irbid	3.1	7.0	16.4	45.5	28.0	100.0	10.7	1,993
Mafraq	10.9	14.6	20.7	36.4	17.5	100.0	9.5	460
Jarash	4.1	8.3	19.3	40.9	27.4	100.0	10.5	293
Ajloun	2.8	5.6	14.9	43.8	32.9	100.0	10.7	228
Karak	8.4	8.4	12.3	35.4	35.6	100.0	10.8	378
Tafiela	10.1	11.7	18.8	32.1	27.3	100.0	10.1	146
Ma'an	14.6	15.9	14.6	29.3	25.6	100.0	9.7	164
Aqaba	9.1	9.8	15.4	43.4	22.3	100.0	10.4	221
<b>Region</b>								
Central	2.8	6.8	14.8	45.3	30.3	100.0	11.0	6,993
North	4.4	8.2	17.2	43.5	26.7	100.0	10.5	2,975
South	9.9	10.6	14.5	35.7	29.2	100.0	10.4	908
<b>Badia area</b>								
Badia	14.1	14.5	17.8	37.8	15.8	100.0	9.5	823
Other	3.0	6.9	15.3	44.5	30.3	100.0	10.9	10,053
<b>Wealth quintile</b>								
Lowest	10.6	14.6	21.4	40.8	12.6	100.0	9.4	2,211
Second	4.0	8.6	16.9	48.8	21.8	100.0	10.5	2,296
Middle	3.1	6.9	15.4	46.3	28.4	100.0	10.8	2,206
Fourth	0.8	4.2	13.5	45.3	36.1	100.0	11.3	2,135
Highest	0.2	2.5	9.4	38.3	49.4	100.0	12.0	2,028
Total	3.8	7.5	15.5	44.0	29.2	100.0	10.8	10,876

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 women to television, radio, and newspapers is shown in Table 3.3. Ninety-seven percent of women watch television, 31 percent listen to the radio, and 35 percent read newspapers at least once a week. While 16 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 8 percent of women aged 15-19 were exposed to all three forms of mass media, the proportion goes up to 19 percent among women aged 40-49. As expected, there is positive association between education and newspaper reading: a higher proportion of women with at least secondary education read newspapers than those with less education.

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 2007						
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	All three media at least once a week	No media at least once a week	Number
<b>Age</b>						
15-19	19.9	96.0	23.7	7.9	3.0	236
20-24	30.5	98.2	24.9	10.6	1.6	1,276
25-29	32.7	97.7	31.9	15.9	1.1	1,977
30-34	35.5	96.2	30.0	15.8	2.4	2,213
35-39	37.0	97.1	34.8	18.4	1.6	2,052
40-44	41.2	94.9	32.8	19.1	2.7	1,884
45-49	36.4	94.6	33.7	18.6	4.3	1,239
<b>Residence</b>						
Urban	37.5	96.5	32.3	17.6	2.0	9,249
Rural	23.6	96.0	26.2	9.8	3.2	1,627
<b>Governorate</b>						
Amman	44.8	95.8	38.3	22.5	2.2	4,442
Balqa	31.9	96.4	23.0	13.5	2.5	645
Zarqa	28.1	99.0	26.8	13.4	0.9	1,645
Madaba	32.8	98.1	24.4	13.8	1.4	262
Irbid	29.7	96.7	27.3	11.6	2.2	1,993
Mafraq	23.3	95.0	24.9	9.2	3.7	460
Jarash	19.9	96.6	24.4	7.4	2.3	293
Ajloun	25.6	97.2	27.5	10.8	1.8	228
Karak	33.1	95.1	30.9	14.2	3.6	378
Tafiela	27.6	96.6	30.7	12.0	2.2	146
Ma'an	26.0	93.3	28.8	11.5	4.4	164
Aqaba	39.8	93.0	26.1	14.9	5.1	221
<b>Region</b>						
Central	39.2	96.7	33.7	19.2	1.9	6,993
North	27.5	96.5	26.7	10.7	2.4	2,975
South	32.6	94.5	29.3	13.5	3.9	908
<b>Badia area</b>						
Badia	21.4	95.1	21.3	7.8	4.1	823
Other	36.6	96.6	32.2	17.1	2.1	10,053
<b>Education</b>						
No education	2.4	87.5	13.8	0.1	11.9	416
Elementary	9.6	95.2	23.1	3.1	3.7	813
Preparatory	23.5	96.3	25.2	10.9	2.7	1,681
Secondary	35.4	96.9	30.3	14.9	1.7	4,788
Higher	52.7	97.3	40.8	27.1	1.1	3,179
<b>Wealth quintile</b>						
Lowest	15.3	93.7	17.4	4.9	5.2	2,211
Second	25.6	97.1	24.3	9.1	1.5	2,296
Middle	34.3	97.3	30.9	13.6	1.4	2,206
Fourth	42.3	97.1	33.5	18.2	1.6	2,135
Highest	62.5	97.1	53.1	38.5	1.3	2,028
Total	35.4	96.5	31.4	16.4	2.2	10,876

There is no consistent relationship between television viewing or radio listenership and education. However, those who fall into the educational extremes do tend to differ somewhat with regard to their exposure to these kinds of media: women with the highest levels of education are more likely to report that they watch television and listen to the radio weekly. 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 the newspaper (38 percent) than women in rural areas (24 percent), while there is no variation as for watching television. The extent to which women listen to the radio varies substantially by urban-rural residence (32 percent in urban against 26 percent in rural). 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 (19 percent exposed to all three media in the Central region against 11 percent in the North and 14 percent in the South).

Women in Amman and Aqaba are more likely to read the newspaper than women in other governorates, moreover women in Ma'an and Aqaba are less likely to watch television than women in the other governorates. While more than one-fifth of women in Amman (23 percent) are exposed to all three forms of mass media, this figure is only 9 percent in Mafraq and 7 percent in Jarash.

The table also indicates the variation in these percentages by residence in Badia areas; 8 percent of women in Badia areas are exposed to all three media compared to 17 percent of women residing in non-Badia areas.

Table 3.3 indicates significant variation in regard to the exposure of women to mass media according to the household wealth index. Women in the fourth and the highest quintiles are more likely to be exposed to mass media than women in the other quintiles. Only 5 percent of women in the lowest quintile are exposed to all three mass media compared to 39 percent in the highest quintile.

### **3.4 RESPONDENTS' EMPLOYMENT CHARACTERISTICS**

In the 2007 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.

#### **3.4.1 Working Status**

The majority of women (88 percent) are not working, nor have they worked during the last seven days preceding the survey (Table 3.4) while only 12 percent of women were working during the seven days preceding the survey. The proportion of women who were not working ranges from 100 percent among those aged 15-19 to 85 percent among those aged 35-39.

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 working (17 percent) compared to other regions. This finding seems contrary to the conventional wisdom that higher education increases the likelihood of employment, as women in the South region have the lowest levels of education. The table indicates also that there are notable variations in work status by governorates. Women in Balqa, Madaba, Ajloun, Karak, and Ma'an are more likely to work than woman residing in the other governorates. In addition, women in Badia areas are less likely to work compared to women residing in non-Badia areas. Women with post-secondary education are much more likely to report having been employed in the week preceding the survey (30 percent) than women with any other educational level.

Table 3.4 Working status

Percent distribution of ever-married women by working status, according to background characteristics, Jordan 2007

Background characteristic	Worked in the 7 days preceding the survey <sup>1</sup>	Did not work in the 7 days preceding the survey	Total	Number of women
<b>Age</b>				
15-19	0.0	100.0	100.0	236
20-24	5.5	94.5	100.0	1,276
25-29	12.8	87.2	100.0	1,977
30-34	14.7	85.3	100.0	2,213
35-39	15.4	84.6	100.0	2,052
40-44	12.2	87.8	100.0	1,884
45-49	9.8	90.2	100.0	1,239
<b>Marital status</b>				
Married	11.8	88.2	100.0	10,354
Divorced/widowed	18.4	81.6	100.0	522
<b>Number of living children</b>				
0	13.4	86.6	100.0	1,021
1-2	16.6	83.4	100.0	2,787
3-4	12.3	87.7	100.0	3,471
5+	8.0	92.0	100.0	3,597
<b>Residence</b>				
Urban	11.9	88.1	100.0	9,249
Rural	13.0	87.0	100.0	1,627
<b>Governorate</b>				
Amman	11.9	88.1	100.0	4,442
Balqa	16.5	83.5	100.0	645
Zarqa	7.6	92.4	100.0	1,645
Madaba	18.0	82.0	100.0	262
Irbid	11.9	88.1	100.0	1,993
Mafraq	11.9	88.1	100.0	460
Jarash	10.4	89.6	100.0	293
Ajloun	15.0	85.0	100.0	228
Karak	21.3	78.7	100.0	378
Tafiela	14.5	85.5	100.0	146
Ma'an	16.2	83.8	100.0	164
Aqaba	10.7	89.3	100.0	221
<b>Region</b>				
Central	11.5	88.5	100.0	6,993
North	12.0	88.0	100.0	2,975
South	16.7	83.3	100.0	908
<b>Badia area</b>				
Badia	10.4	89.6	100.0	823
Other	12.2	87.8	100.0	10,053
<b>Education</b>				
No education	6.3	93.7	100.0	416
Elementary	5.4	94.6	100.0	813
Preparatory	3.2	96.8	100.0	1,681
Secondary	4.8	95.2	100.0	4,788
Higher	30.2	69.8	100.0	3,179
<b>Wealth quintile</b>				
Lowest	6.7	93.3	100.0	2,211
Second	7.7	92.3	100.0	2,296
Middle	12.3	87.7	100.0	2,206
Fourth	14.3	85.7	100.0	2,135
Highest	20.5	79.5	100.0	2,028
Total	12.1	87.9	100.0	10,876

<sup>1</sup> "Worked" is defined as having done work in the past seven days. Includes persons who did not work in the past seven days but who are regularly employed and were absent from work for leave, illness, vacation, or any other such reason.

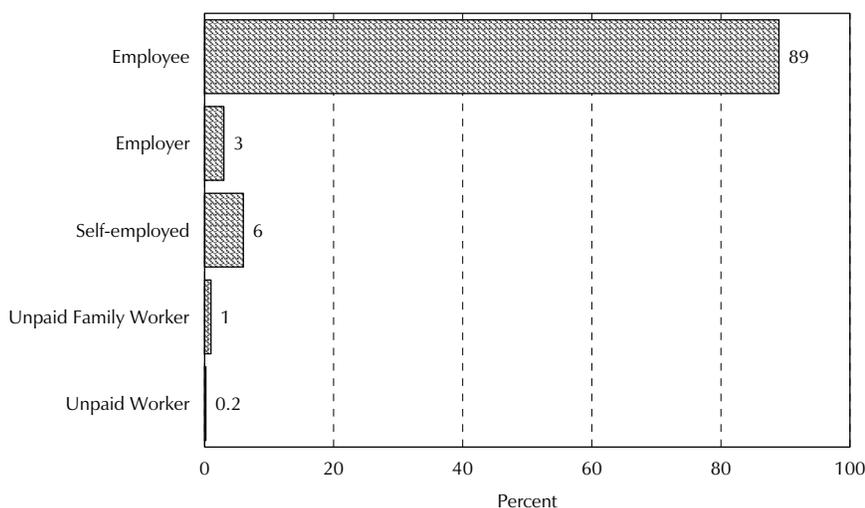
Marital status seems to have a bearing on working status. The proportion of working women rises from 12 percent among those married to 18 percent among widowed or divorced women. When the number of living children is considered, the percentage of working women rises from 13 percent for those with no children to 17 percent for those with one or two children, dropping to 8 percent for those with five or more children.

Table 3.4 shows that there is a clear variation in work status of women according to wealth index. Women in the highest wealth quintile are much more likely to work than those in other wealth quintiles (21 percent in the highest wealth quintile compared to 7 percent in the lowest and 8 percent in the second wealth quintiles).

### 3.4.2 Occupation

Table 3.5 shows that among women who report having been employed in the seven days preceding the survey, a large proportion is engaged in professional (46 percent) and technical occupations (27 percent). Seven percent are employed in sales, 7 percent as clerks, and 5 percent are craft and related trade workers. The percentages vary considerably by background characteristics of women, particularly by marital status, education and household wealth. The data also indicate that 89 percent of employed women are paid employees and 6 percent are self-employed (Figure 3.1).

**Figure 3.1 Percent Distribution of Women who Worked in the 7 Days Preceding the Survey, by Employment Status**



JPFHS 2007

It is of interest to note that while the data reflect expected urban-rural differences for skilled agricultural employment (1 percent and 4 percent, respectively), there are not pronounced urban-rural differences in the professional and technical-managerial sectors (Table 3.5). The proportion of women employed in these two sectors has risen steadily from 64 percent in 1997 to 70 percent in 2002, and to 73 percent in 2007.

Table 3.5 Occupation

Percent distribution of ever-married women who worked in the 7 days preceding the survey by occupation, according to background characteristics, Jordan 2007

Background characteristic	Professionals	Technicians and associate professionals	Clerks	Service workers, shop, and market sales workers	Skilled agricultural workers	Craft and related trades workers	Plant and machine operators and related occupations	Elementary occupations <sup>1</sup>	Total	Number of women
<b>Age</b>										
20-24	60.2	30.2	2.4	0.0	1.3	5.3	0.0	0.6	100.0	70
25-29	58.9	22.9	5.4	4.9	0.8	2.6	0.0	4.5	100.0	253
30-34	51.1	27.3	5.6	6.3	0.1	4.8	0.0	4.8	100.0	325
35-39	39.2	29.3	8.6	8.9	0.2	4.5	0.0	9.3	100.0	316
40-44	37.6	25.6	10.3	9.0	2.3	5.8	1.7	7.8	100.0	230
45-49	27.9	33.2	2.3	10.6	6.6	9.8	0.0	9.7	100.0	122
<b>Marital status</b>										
Married	48.6	28.2	5.6	6.0	1.2	4.0	0.3	6.0	100.0	1,220
Divorced/widowed	9.0	15.7	20.2	21.8	2.9	17.2	0.0	13.3	100.0	96
<b>Number of living children</b>										
0	48.1	24.3	7.2	10.0	0.0	3.6	0.0	6.8	100.0	137
1-2	54.5	25.2	7.8	5.1	1.3	2.2	0.0	3.8	100.0	464
3-4	48.4	29.2	6.5	5.6	0.2	4.1	0.0	5.9	100.0	426
5+	26.4	29.3	4.7	11.4	3.7	11.2	1.4	12.0	100.0	289
<b>Residence</b>										
Urban	45.8	27.1	6.9	7.8	0.8	5.4	0.4	5.7	100.0	1,104
Rural	45.2	28.2	5.1	4.0	3.8	2.5	0.0	11.1	100.0	212
<b>Governorate</b>										
Amman	49.3	25.7	6.9	7.9	0.1	5.2	0.7	4.2	100.0	528
Balqa	39.7	29.2	6.9	10.2	0.0	2.7	0.0	11.4	100.0	106
Zarqa	38.0	25.4	6.9	12.7	0.0	7.8	0.0	9.2	100.0	126
Madaba	48.5	29.9	8.3	5.0	0.0	4.3	0.0	4.0	100.0	47
Irbid	42.4	28.6	4.9	4.4	4.8	6.8	0.0	8.2	100.0	237
Mafraq	51.6	17.2	5.8	2.8	4.2	6.5	0.0	11.9	100.0	55
Jarash	45.9	28.4	3.5	11.0	1.1	3.3	0.0	6.8	100.0	31
Ajloun	46.1	40.0	2.4	6.1	1.5	1.5	0.0	2.3	100.0	34
Karak	42.1	30.6	11.4	5.5	1.7	1.0	0.0	7.6	100.0	81
Tafila	51.3	34.1	8.4	0.8	0.9	0.8	0.0	3.8	100.0	21
Ma'an	52.0	29.1	5.0	2.3	1.5	1.6	0.0	8.6	100.0	27
Aqaba	48.4	33.0	8.5	5.0	0.9	1.4	0.0	2.8	100.0	24
<b>Region</b>										
Central	46.2	26.3	7.0	8.8	0.1	5.2	0.5	5.9	100.0	807
North	44.5	27.9	4.7	4.8	4.1	6.0	0.0	8.1	100.0	357
South	46.1	31.2	9.4	4.2	1.4	1.1	0.0	6.5	100.0	152
<b>Badia area</b>										
Badia	46.8	27.7	4.3	3.0	3.8	4.0	0.0	10.3	100.0	86
Other	45.6	27.3	6.8	7.5	1.1	5.0	0.3	6.3	100.0	1,230
<b>Education</b>										
No education	(0.0)	(0.0)	(0.0)	(4.6)	(26.9)	(5.8)	(0.0)	(62.7)	100.0	26
Elementary	(0.0)	(0.0)	(0.0)	(13.0)	(7.9)	(38.0)	(0.0)	(41.0)	100.0	44
Preparatory	0.0	13.4	9.4	31.0	6.3	16.2	0.0	23.6	100.0	53
Secondary	0.0	9.2	33.7	23.0	1.4	16.1	0.0	16.6	100.0	232
Higher	62.7	34.5	0.4	1.8	0.0	0.1	0.4	0.1	100.0	960
<b>Wealth quintile</b>										
Lowest	14.8	22.2	9.6	7.5	8.8	8.4	0.0	28.7	100.0	149
Second	37.0	25.2	8.0	6.1	1.0	7.4	0.0	15.2	100.0	176
Middle	37.9	37.0	6.3	9.4	0.3	6.2	0.0	2.9	100.0	271
Fourth	47.2	31.4	5.7	8.1	0.4	6.0	0.0	1.2	100.0	304
Highest	64.5	20.8	5.9	5.3	0.1	1.1	0.9	1.3	100.0	415
<b>Total</b>	45.7	27.3	6.6	7.2	1.3	5.0	0.3	6.6	100.0	1,316

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

<sup>1</sup> Mainly in sales, services, and agriculture

### 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 ulcer disease, reproductive disturbances, esophageal reflux and hypertension. Tobacco and its various components have been associated with an increased risk of cancer of various body organs. 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 intra-uterine 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 use tobacco for smoking. Overall, 11 percent of women smoke cigarettes and 5 percent smoke nargila, a slight increase since 2002 when 10 percent of women reported smoking cigarettes and 4 percent nargila. The data also indicate that older women are more likely to smoke cigarettes and nargila than younger women. Women living in urban areas are more likely to smoke cigarettes (11 percent) than women living in rural areas (6 percent). Also, women in the Central region are more likely to smoke cigarettes compared with women from the other regions.

The data indicate that there are significant differences in regard to women who smoke cigarettes and nargila according to governorates and residence in Badia area; women living in Amman and Aqaba governorates and in non-Badia areas are more likely to smoke cigarettes than other women. Differences are also significant among governorates: 4 percent of women in Tafiela smoke cigarettes compared to 14 percent of those living in Amman. Women living in Badia areas are less likely to smoke nargila (2 percent) than women in non-Badia areas (6 percent).

Table 3.6 indicates that there is an evident and significant variation in woman smoking cigarettes and nargila according to the wealth index. Women in the lowest wealth quintile are less likely to smoke cigarettes and nargila than woman in the highest quintile (8 and 3 percent, respectively in the lowest wealth quintile, compared to 17 and 12 percent in the highest wealth quintile).

Table 3.6 Use of tobacco

Percentage of ever-married women who smoke cigarettes or a nargila, according to background characteristics, Jordan 2007

Background characteristic	Cigarettes	Nargila	Number of women
<b>Age</b>			
15-19	0.4	3.1	236
20-24	5.7	4.3	1,276
25-29	7.6	4.8	1,977
30-34	9.5	5.4	2,213
35-39	12.6	6.5	2,052
40-44	13.9	6.1	1,884
45-49	15.7	4.9	1,239
<b>Residence</b>			
Urban	11.3	6.0	9,249
Rural	6.4	1.7	1,627
<b>Governorate</b>			
Amman	14.3	8.7	4,442
Balqa	8.2	3.6	645
Zarqa	8.5	3.2	1,645
Madaba	5.8	2.3	262
Irbid	8.7	3.8	1,993
Mafraq	6.9	1.5	460
Jarash	6.9	2.5	293
Ajloun	4.3	2.0	228
Karak	7.0	2.2	378
Tafiela	4.4	0.7	146
Ma'an	7.7	1.7	164
Aqaba	11.5	3.0	221
<b>Region</b>			
Central	12.0	6.7	6,993
North	7.9	3.2	2,975
South	7.8	2.1	908
<b>Badia area</b>			
Badia	7.9	1.8	823
Other	10.8	5.7	10,053
<b>Education</b>			
No education	15.8	0.9	416
Elementary	13.3	2.9	813
Preparatory	12.0	4.7	1,681
Secondary	9.1	5.9	4,788
Higher	10.7	6.2	3,179
<b>Maternity status</b>			
Pregnant	4.1	2.6	1,315
Breastfeeding (not pregnant)	5.2	3.4	2,117
Neither	13.2	6.4	7,444
<b>Wealth quintile</b>			
Lowest	8.3	2.8	2,211
Second	7.4	2.6	2,296
Middle	9.8	3.3	2,206
Fourth	10.5	6.7	2,135
Highest	17.4	12.1	2,028
Total	10.6	5.4	10,876

Women with no education are more likely to smoke cigarettes (16 percent) than women who have secondary education (9 percent) or higher (11 percent). However, there is a different pattern of women who smoke nargila according to educational level; 1 percent of women with no education compared to 6 percent of women with secondary education and above smoke nargila. During pregnancy and lactation, more than 95 percent of women do not use tobacco. However, 4 percent of women smoke cigarettes during pregnancy and 5 percent during lactation, while about 3 percent of each category smoke nargila.

Fertility measures in this chapter are based on the reported birth histories of ever-married women age 15 to 49 who were interviewed in the 2007 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. Next, 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 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 2007 JPFHS is the high quality of age and date reporting. Virtually 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 direct measures derived from 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 also analyzed.

#### 4.1 FERTILITY LEVELS AND TRENDS

Age-specific fertility rates and Total Fertility Rates (TFR) for the three-year period preceding the 2007 JPFHS are shown in Table 4.1, along with data from five previous surveys for comparison – the 1976 Jordan Fertility Survey (JFS), the 1983 Jordan Fertility and Family Health Survey (JFFHS), and the 1990, 1997 and 2002 JPFHS. Data for the 1976 survey were calculated based on the two years preceding the survey (1975-1976), while those for 1983, 1990, 1997, 2002, and 2007 refer to the three years preceding the survey (1981-1983, 1988-1990, 1995-1997, 2000-2002, and 2005-2007 respectively). Comparison of the findings from the six surveys shows trends in fertility levels over about a 30-year period.

The TFR is the sum of the age-specific fertility rates; it represents the average number of children a woman in Jordan would have at the end of her reproductive years if she were subject to the currently observed age-specific rates. At current levels, a woman would give birth to an average of 3.6 children in her lifetime. This figure is 50 percent lower than the rate recorded in 1976 (7.4 births per woman). Data in Table 4.1 indicate that the pace of fertility decline increased until 1997, and has since slowed down. Fertility declined 11 percent between 1976 and 1983 (dropping from 7.4 to 6.6 births per woman), 15 percent between 1983 and 1990 (dropping from 6.6 to 5.6 births per woman), and 21 percent between 1990 and 1997 (dropping from 5.6 to 4.4 births per woman). Between 1997 and 2002, the pace of fertility decline decreased by 16 percent (dropping from 4.4 to 3.7 births per woman). Recently, between 2002 and 2007, the level of fertility has remained almost unchanged (from 3.7 to 3.6 births per women). Overall, in the past seventeen years (1990-2007), the total fertility rate in Jordan has declined by 36 percent.

Age group	JFS 1976	JFFHS 1983	JPFHS 1990	JPFHS 1997	JPFHS 2002	JPFHS 2007
15-19	71	49	49	43	28	28
20-24	300	229	219	172	150	148
25-29	367	335	296	246	202	212
30-34	332	305	264	206	184	162
35-39	240	233	188	144	122	121
40-44	112	127	79	48	43	41
45-49	47	40	19	11	5	6
TFR 15-49	7.4	6.6	5.6	4.4	3.7	3.6

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

A decline in fertility levels has occurred among all age groups over the last three decades; however, the most significant proportional decline has been observed among teenagers: a 60 percent drop from 71 births per 1,000 women in 1976 to 28 births in 2007. Figure 4.1 shows that the bulk of the decline in fertility since 1990 can be attributed to the decrease in the number of births among women between the ages of 20 and 39. At the same time, the age-specific fertility rates in all of the surveys are highest for the 25-29 age group. The 2007 JPFHS data indicate that there has not been a significant decline in fertility overall or among any age group. There was even a slight increase in the fertility level among the 25-29 age group (from 202 children per 1,000 women in 2002 to 212 children in 2007).

**Figure 4.1 Age-Specific Fertility Rates from Various Surveys, 1976-2007**

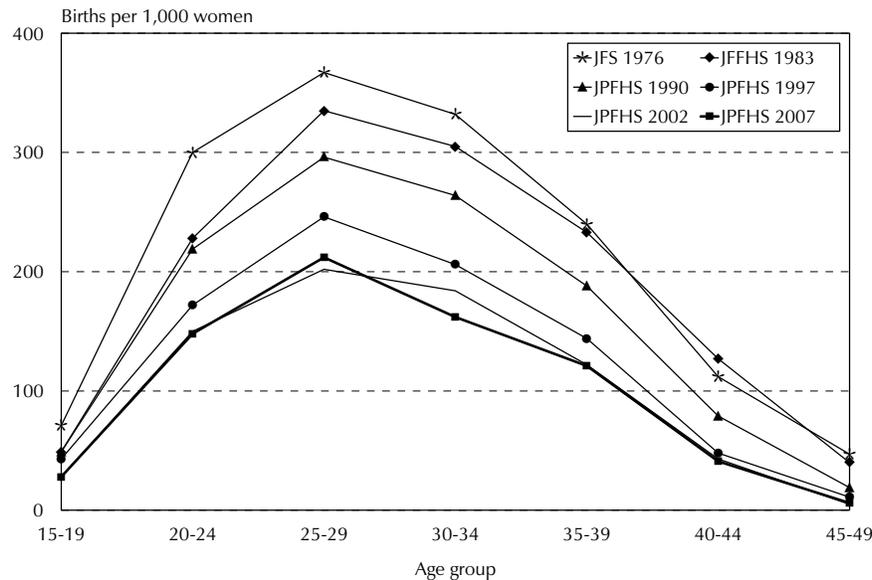


Table 4.2 and Figure 4.2 present the age-specific fertility rates and cumulative fertility by urban-rural residence for the three-year period preceding the survey. Table 4.2 also presents the General Fertility Rate (GFR), that is the annual number of live births per 1,000 women aged 15-44 for the three 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. Fertility levels are slightly higher in rural areas compared to urban areas (3.7 compared to 3.6 births per woman). The most significant differences are found in the middle of the women’s reproductive period (age 30-34), where rural women have an average of 0.043 more births than urban women. However, what is more interesting in this context is that fertility rates are higher in urban areas compared to rural areas among women under 30 years. For example, women aged 20-24 years living in urban areas give birth to 0.024 more children than those living in rural areas. According to the age-specific fertility rates shown in the table, women in Jordan have, on average, less than one child (0.9 child) by age 25, but have almost three children (2.8) at the age of 35 years.

Table 4.2 also indicates that the overall CBR is 28 per 1,000. The GFR reached 119 births per 1,000 women aged 15-44. As the case with the TFR, the CBR and the GFR do not differ according urban-rural residence.

**Table 4.2 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 2007

Age group	Residence		Total
	Urban	Rural	
15-19	30	19	28
20-24	152	128	148
25-29	214	208	212
30-34	155	198	162
35-39	118	137	121
40-44	40	49	41
45-49	5	7	6
TFR	3.6	3.7	3.6
GFR	119	118	119
CBR	28.1	28.2	28.1

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.

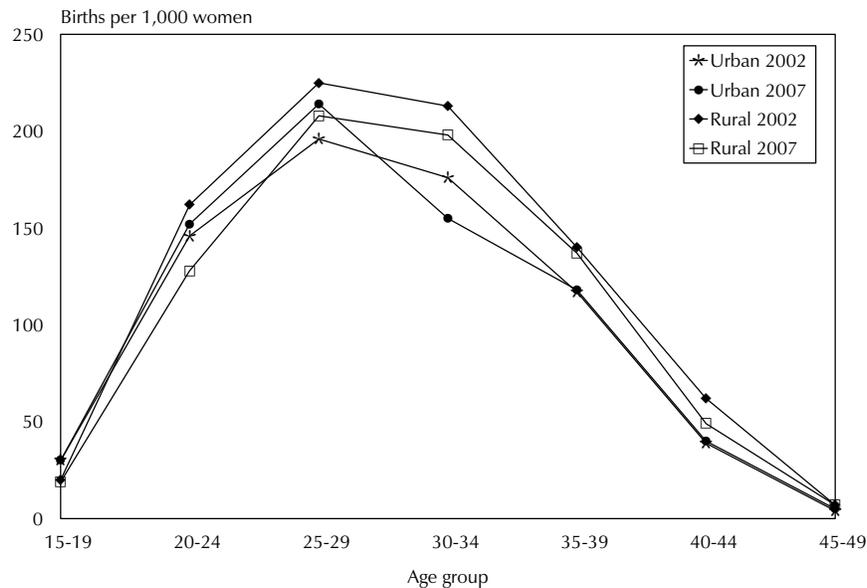
TFR: Total fertility rate expressed per woman

GFR: General fertility rate expressed per 1,000 women

CBR: Crude birth rate, expressed per 1,000 population

Figure 4.2 also shows that the TFR has slightly increased since 2002 in urban areas, from 3.5 to 3.6 births per woman in 2007. However, during the same period, the TFR has dropped significantly in rural areas (from 4.2 to 3.7 births per woman), and the level of fertility is now almost the same in urban and rural areas (3.6 and 3.7 respectively).

**Figure 4.2 Age-Specific Fertility Rates by Urban-Rural Residence, 2002 and 2007**



The fertility differentials according to background characteristics of women are shown in Table 4.3. The first column 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 aged 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 2007 JPFHS, however, the fact that the completed fertility rate (5.3 children per woman) is much higher than the total fertility rate (3.6 children per woman) indicates a considerable decline in fertility; this finding corresponds to the decline in fertility over time demonstrated by the comparison of data from the surveys implemented in Jordan over the past thirty years (Table 4.1, Figure 4.1).

Fertility levels do not show considerable variations by regions, although the TFR is highest in the North (3.8 children per woman). Fertility levels do vary according to governorate; the TFR ranges from 3.2 children per woman in Karak, to 3.8 in Zarqa, Irbid and Jarash, 4.0 children per women in Mafraq and Ma'an, and 4.1 in Aqaba. In addition, women living in Badia areas have higher fertility rates than other women (4.2 against 3.5 children per woman).

Fertility varies significantly by education (2.6 children among women with no education and 3.9 children among women with an elementary education). The rate peaks at 4.5 births among women who have had a preparatory education. However, women who have had higher than secondary education have had almost one birth less than women who have had a secondary education. These figures suggest that post-secondary education for women is associated with lower levels of fertility. It is of interest to note

that the relationship of education to fertility is not in fact linear; rather, in Jordan it has an inverted U-shape.

The TFR for Jordanian woman also varies considerably according to wealth index. In general, women in the lowest and the second quintiles have more children than women in the fourth and the highest quintiles. The rate varies from 4.8 children for the lowest wealth quintile to 2.5 children for the highest quintile: in other words, women in the poorest households would have, on average, 2.3 more children than women in the wealthiest households.

The 2007 JPFHS data show that 7 percent of all women of reproductive age were pregnant at the time of the survey. The geographical variation in the proportion of pregnant women follows a pattern similar to that of fertility. However, women with secondary education and above are more likely to be pregnant than other women (see Table 4.3). Otherwise, the other variations follow a pattern similar to that of fertility.

Comparing data from previous surveys is but one means of studying trends in fertility. Trends can also be investigated by using retrospective data from a single survey. The birth history information collected in the JPFHS is used for this purpose. Data in Table 4.4 and Figure 4.3 indicate that the fertility rate has been declining in all age groups<sup>1</sup>, mainly during the 5-19 year period preceding the survey. For example, the age-specific fertility rate for women aged 25-29 declined from 305 births per 1,000 women in the 15-19 years preceding the survey to 212 births per 1,000 women in the 5-9 year period before the survey, a 31 percent decline. More recently, between the 5-9 and 0-4 year period prior to the survey the pace of fertility decline has drastically decreased. The TFR limited to women aged 15-34 for which data are available for the four preceding periods, has dropped from 4.3 births per women 15-19 years before the survey, to 3.9 births 10-14 years before, and 3.1 births 5-9 years prior to the survey. The decline has been more limited between the last most two recent periods, from 3.1 to 2.8 births per women.

Table 4.3 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 2007

Background characteristic	Total fertility rate	Percentage of women age 15-49 currently pregnant	Mean number of children ever born to women age 40-49
<b>Residence</b>			
Urban	3.6	7.0	5.2
Rural	3.7	6.8	5.9
<b>Governorate</b>			
Amman	3.4	6.6	5.0
Balqa	3.7	6.9	5.3
Zarqa	3.8	7.6	5.3
Madaba	3.6	6.4	5.1
Irbid	3.8	7.0	5.5
Mafraq	4.0	7.2	6.2
Jarash	3.8	6.6	6.1
Ajloun	3.7	7.7	6.1
Karak	3.2	7.0	5.2
Tafiela	3.7	5.1	6.8
Ma'an	4.0	7.1	6.0
Aqaba	4.1	7.8	6.0
<b>Region</b>			
Central	3.5	6.9	5.1
North	3.8	7.0	5.7
South	3.6	6.9	5.7
<b>Badia area</b>			
Badia	4.2	8.0	6.1
Other	3.5	6.8	5.3
<b>Education</b>			
No education	2.6	3.8	5.9
Elementary	3.9	6.5	6.4
Preparatory	4.5	5.9	6.1
Secondary	3.9	7.7	5.0
Higher	3.2	6.7	4.4
<b>Wealth quintile</b>			
Lowest	4.8	2.7	5.2
Second	4.4	2.7	6.0
Middle	3.6	2.0	5.5
Fourth	2.8	2.2	5.6
Highest	2.5	1.7	4.7
Total	3.6	6.9	5.3

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

<sup>1</sup> Omitted figures represented by dashes reflect the fact that women age 50 and older were not included in the survey: the further back in time that rates are calculated, the more severe the truncation. For example, rates cannot be calculated for women in the age group 45-49 years for the period 5-19 years before the survey, because these women would have been age 50 or older at the time of the survey and, thus, were not interviewed.

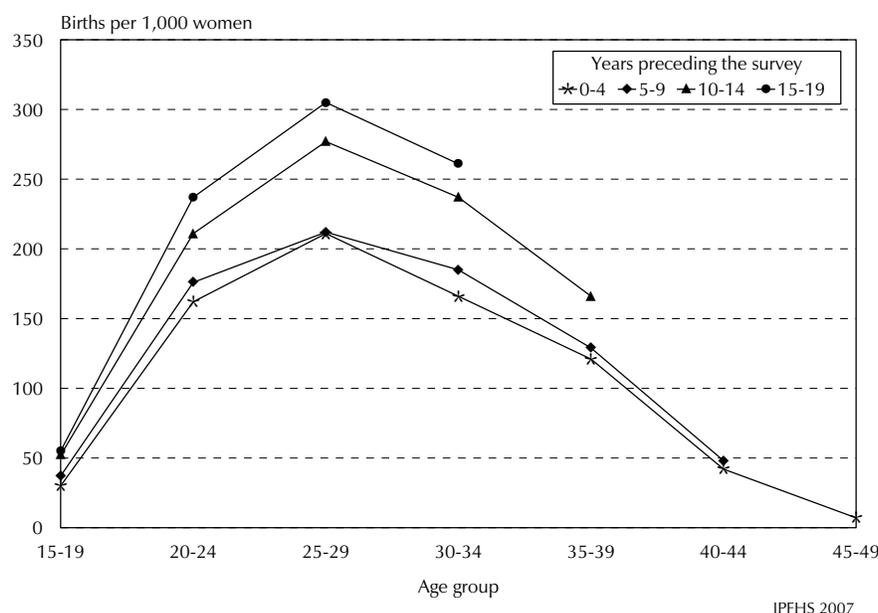
Table 4.4 Trends in age-specific fertility rates

Age-specific fertility rates for five-year periods preceding the survey, by mother's age at the time of the birth, Jordan 2007

Mother's age at birth	Number of years preceding survey			
	0-4	5-9	10-14	15-19
15-19	30	37	52	55
20-24	162	176	211	237
25-29	211	212	277	305
30-34	166	185	237	[261]
35-39	121	129	[166]	
40-44	42	[48]		
45-49	[7]			

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

**Figure 4.3 Age-Specific Fertility Rates for Five-Year Periods Preceding the Survey**



## 4.2 CHILDREN EVER BORN

Table 4.5 presents the distribution of all women and currently married women by the number of children they have had. In the 2007 JPFHS, since the respondents are ever-married women, 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, 3.8 children by their late thirties, and 5.8 children by the end of their reproductive period.

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 4.5 indicate very little variation between the mean number of children ever born and the mean number of children still living for all women aged 15-49 (2.16 and 2.10 children, respectively). The data also indicate that, on average, currently married women have given birth to 2.4 children by their late twenties, 4.6 children by their late thirties, and about six children by the end of their reproductive period. The mean number of children ever born is 3.8 births, compared with 3.7 children still living.

Table 4.5 Children ever born and living

Percent distribution of all women and currently married women by number of children ever born, mean number of children ever born and mean number of living children, according to age group, Jordan 2007

Age	Number of children ever born											Total	Number of women	Mean number of children ever born	Mean number of living children
	0	1	2	3	4	5	6	7	8	9	10+				
ALL WOMEN															
15-19	97.0	2.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	4,091	0.04	0.04
20-24	71.4	12.1	11.5	3.9	1.1	0.0	0.0	0.0	0.0	0.0	0.0	100.0	3,478	0.51	0.50
25-29	38.4	11.7	18.6	18.1	9.4	2.7	1.1	0.1	0.0	0.0	0.0	100.0	2,852	1.61	1.57
30-34	26.3	5.9	11.7	17.6	19.0	11.0	5.3	2.2	0.9	0.1	0.0	100.0	2,786	2.69	2.63
35-39	18.9	2.4	6.8	13.2	16.9	16.8	11.9	7.1	3.3	1.5	1.2	100.0	2,404	3.81	3.72
40-44	12.2	2.0	4.5	7.6	13.5	16.1	13.5	12.0	7.7	5.4	5.4	100.0	2,057	5.03	4.85
45-49	8.7	1.9	3.8	7.0	11.0	13.1	14.1	11.7	10.7	6.8	11.1	100.0	1,292	5.76	5.55
Total	48.0	6.0	8.4	9.0	8.8	6.8	4.9	3.3	2.1	1.3	1.5	100.0	18,960	2.16	2.10
CURRENTLY MARRIED WOMEN															
15-19	47.0	43.5	9.3	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	233	0.63	0.62
20-24	20.5	33.3	32.1	11.0	3.0	0.1	0.0	0.0	0.0	0.0	0.0	100.0	1,233	1.43	1.40
25-29	10.7	16.6	27.0	26.3	13.6	4.0	1.6	0.1	0.0	0.0	0.0	100.0	1,932	2.35	2.29
30-34	6.0	7.0	14.5	22.7	24.4	14.3	6.9	2.9	1.1	0.2	0.0	100.0	2,127	3.46	3.39
35-39	4.4	2.3	7.1	15.4	20.4	20.2	14.4	8.6	4.0	1.7	1.5	100.0	1,968	4.55	4.44
40-44	3.6	1.7	4.2	7.7	14.8	18.2	15.4	13.4	8.9	6.2	5.9	100.0	1,746	5.61	5.42
45-49	4.3	1.8	3.3	6.6	11.6	14.1	14.7	12.9	11.3	7.3	12.0	100.0	1,115	6.12	5.92
Total	8.6	10.4	14.5	15.8	15.6	12.1	8.6	5.9	3.7	2.2	2.6	100.0	10,354	3.80	3.70

### 4.3 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 4.6.

Women in Jordan prefer relatively long birth intervals: the median birth interval among children born in the five years preceding the survey is 31.2 months—1.1 month longer than that recorded in the 2002 JPFHS. This slight increase in birth intervals (4 percent longer) may be a reflection of the implementation of Jordan’s National Health Program for Birth Spacing, which is one component of the National Population Strategy that was ratified by the government of Jordan in 1996.

Table 4.6 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 2007

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+			
<b>Age</b>									
15-19	*	*	*	*	*	*	*	22	*
20-29	22.0	26.8	28.8	14.6	5.9	2.0	100.0	2,834	24.3
30-39	11.7	13.1	25.8	19.4	11.7	18.4	100.0	3,909	35.7
40-49	6.6	8.8	20.4	14.7	9.9	39.7	100.0	902	47.4
<b>Birth order</b>									
2-3	21.7	22.9	27.1	14.6	7.5	6.2	100.0	3,764	25.8
4-6	8.9	13.3	24.5	19.5	11.4	22.4	100.0	2,985	38.0
7+	7.6	11.1	28.2	18.4	9.7	25.0	100.0	918	38.1
<b>Sex of preceding birth</b>									
Male	14.2	16.7	25.3	17.4	9.1	17.4	100.0	3,931	32.6
Female	15.9	18.9	27.1	16.6	9.6	12.0	100.0	3,736	29.8
<b>Survival of preceding birth</b>									
Living	14.4	17.8	26.1	17.2	9.5	15.0	100.0	7,497	31.6
Dead	43.6	15.7	29.7	5.5	1.3	4.3	100.0	170	19.6
<b>Residence</b>									
Urban	15.3	17.6	25.4	17.2	9.6	15.0	100.0	6,401	31.5
Rural	13.8	18.6	30.3	16.0	7.7	13.6	100.0	1,266	30.2
<b>Governorate</b>									
Amman	16.4	18.7	22.5	16.9	10.2	15.3	100.0	2,858	31.8
Balqa	13.4	18.2	30.8	16.5	9.7	11.5	100.0	486	30.0
Zarqa	16.2	17.8	26.7	17.0	9.4	12.9	100.0	1,199	30.2
Madaba	15.0	17.7	29.7	16.1	8.2	13.3	100.0	186	29.6
Irbid	11.9	15.7	26.0	18.8	8.3	19.4	100.0	1,453	33.7
Mafraq	15.1	19.7	32.8	14.7	7.6	10.1	100.0	389	28.8
Jarash	16.6	17.2	28.5	16.5	10.0	11.2	100.0	226	29.9
Ajloun	15.0	17.6	29.9	16.0	7.6	13.8	100.0	181	29.1
Karak	12.0	18.1	32.9	16.4	8.7	11.9	100.0	271	30.5
Tafiela	16.6	16.2	31.3	14.9	9.7	11.4	100.0	112	29.5
Ma'an	15.3	15.6	33.6	14.7	8.7	12.1	100.0	130	30.0
Aqaba	15.4	16.2	27.9	15.9	8.7	15.9	100.0	175	31.1
<b>Region</b>									
Central	16.0	18.4	24.7	16.9	9.9	14.2	100.0	4,729	31.1
North	13.2	16.7	27.7	17.6	8.3	16.5	100.0	2,249	31.7
South	14.2	16.8	31.5	15.7	8.9	12.9	100.0	688	30.3
<b>Badia area</b>									
Badia	18.2	18.9	31.2	14.2	8.0	9.5	100.0	693	27.9
Other	14.7	17.6	25.7	17.3	9.4	15.3	100.0	6,974	31.7
<b>Education</b>									
No education	8.7	14.5	41.5	15.2	8.6	11.5	100.0	220	31.0
Elementary	17.0	19.1	25.7	13.1	9.2	15.9	100.0	511	30.1
Preparatory	9.7	15.1	26.4	18.5	10.4	19.8	100.0	1,151	35.5
Secondary	16.3	19.0	25.3	17.0	8.5	13.8	100.0	3,673	29.8
Higher	15.8	16.9	26.2	17.2	10.2	13.7	100.0	2,112	31.4
<b>Wealth quintile</b>									
Lowest	17.7	22.0	32.1	13.8	6.0	8.4	100.0	1,916	27.2
Second	15.5	18.7	27.5	17.0	8.5	12.8	100.0	1,814	29.9
Middle	13.8	16.7	25.7	17.7	9.5	16.5	100.0	1,605	32.9
Fourth	13.3	16.1	20.6	19.8	10.8	19.5	100.0	1,330	36.1
Highest	13.4	11.7	20.7	18.1	14.9	21.3	100.0	1,002	38.4
Total	15.0	17.7	26.2	17.0	9.3	14.8	100.0	7,667	31.2

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.

About two-thirds of all children (67 percent) are born at least two years after their siblings. This figure is identical to that found in 2002, but represents an increase compared with 1997 (56 percent). Almost two in five (41 percent) are born after an interval of three years or longer, compared with 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 (20 months, compared with 32 months). The length of birth intervals varies little according to education. There exists only a small amount of variation in birth interval by residence; the data show that women in rural areas and those living in the South region and in Ajloun, Tafiela and Mafraq as well as those women in Badia areas are more likely than other subgroups to have shorter birth intervals. The data also indicate a shorter birth interval for births following a female child. In addition, woman with elementary and secondary education and those in the lowest quintile have shorter birth intervals than other women.

#### 4.4 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 made a large contribution to the overall decline in fertility. Table 4.7 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 2002 and 2007 (from 23.5 years in 2002 to 23.9 in 2007). 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. Women aged 30-34 (median age 24.6) give birth for the first time one year later than women aged 35-39 (median age 23.7), and 2.7 years later than women aged 45-49 (median age 21.9).

Current age	Percentage who gave birth by exact age					Percentage who have never given birth	Number of women	Median age at first birth
	15	18	20	22	25			
15-19	0.0	na	na	na	na	97.0	4,091	a
20-24	0.1	4.0	12.8	na	na	71.4	3,478	a
25-29	0.0	4.7	15.0	29.5	49.7	38.4	2,852	a
30-34	0.2	5.9	19.4	34.3	52.2	26.3	2,786	24.6
35-39	0.3	8.1	18.0	36.7	58.0	18.9	2,404	23.7
40-44	0.4	10.8	26.5	43.5	63.3	12.2	2,057	23.0
45-49	0.7	14.0	31.7	50.5	67.4	8.7	1,292	21.9
25-49	0.3	7.9	20.7	37.1	56.5	23.2	11,391	23.9

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

Table 4.8 presents the differentials in age at first birth among women aged 25-49 by background characteristics. Overall, the median age at first birth is 23.9 years for women aged 25-49: this is slightly higher than for women aged 30-49 (23.5). This last value is equal to the median age at first birth found in 2002 for women aged 25-49. Rural women begin childbearing half a year later than urban women (24.3 years compared with 23.8 years). There are no significant differences in the median age at first birth by region or Badia areas, while there are variations according to governorates. Median age at first birth varies from 22.9 years in Aqaba, to 24.0 years in Irbid and Amman, 24.3 in Madaba and 24.6 years in Balqa. Women with a secondary education had a median age at first birth of 22.8 years; less than half of women with higher education have given birth before the age of 25, so a median age could not be calculated for them. Data revealed also that women in the lowest and the highest wealth quintiles are more likely to have a higher median age at first birth than women in other wealth quintiles.

Table 4.8 Median age at first birth							
Median age at first birth among women age 25-49 years, according to background characteristics, Jordan 2007							
Background characteristic	Current age					Women age 25-49	Women age 30-49
	25-29	30-34	35-39	40-44	45-49		
<b>Residence</b>							
Urban	24.8	24.4	23.7	23.1	21.9	23.8	23.5
Rural	a	25.2	23.6	22.6	22.1	24.3	23.6
<b>Governorate</b>							
Amman	a	25.3	23.8	23.0	21.8	24.0	23.7
Balqa	a	25.3	24.4	23.4	23.4	24.6	24.3
Zarqa	23.9	22.8	23.7	22.4	22.1	23.1	22.9
Madaba	a	24.7	23.8	24.1	22.4	24.3	23.8
Irbid	a	24.5	23.6	23.5	22.4	24.0	23.7
Mafraq	a	23.5	22.9	22.3	21.0	23.5	22.6
Jarash	24.8	23.6	23.4	22.8	21.1	23.5	23.0
Ajloun	a	24.2	22.7	23.7	21.9	23.9	23.1
Karak	a	27.3	24.9	23.8	22.3	a	24.7
Tafiela	a	23.6	23.2	20.9	20.1	23.2	22.4
Ma'an	a	24.7	22.1	22.1	21.3	23.5	22.8
Aqaba	24.3	23.3	22.6	21.7	20.8	22.9	22.2
<b>Region</b>							
Central	24.9	24.6	23.8	22.9	22.0	23.9	23.6
North	a	24.2	23.4	23.4	21.9	23.9	23.4
South	a	25.0	23.6	22.6	21.3	24.1	23.5
<b>Badia area</b>							
Badia	a	23.9	23.3	21.5	20.8	23.6	22.8
Other	a	24.6	23.7	23.1	22.0	23.9	23.6
<b>Education</b>							
No education	a	25.7	23.2	20.8	19.9	21.6	21.2
Elementary	22.8	24.4	24.0	20.8	19.8	21.5	21.3
Preparatory	23.0	20.4	21.9	20.1	20.1	20.8	20.5
Secondary	22.8	23.5	22.5	22.7	21.9	22.8	22.8
Higher	a	26.2	25.9	25.5	25.4	a	25.8
<b>Wealth quintile</b>							
Lowest	24.4	25.1	23.8	24.3	22.8	24.3	24.3
Second	24.1	23.2	23.6	22.2	20.8	23.3	23.0
Middle	24.3	24.2	23.8	22.7	21.4	23.6	23.3
Fourth	a	24.4	23.8	22.8	21.3	23.8	23.5
Highest	a	25.9	23.4	23.2	22.9	24.6	23.9
Total	a	24.6	23.7	23.0	21.9	23.9	23.5

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

## 4.5 TEENAGE FERTILITY

Table 4.9 shows the extent of fertility among women aged 15-19. This issue is a major social and health concern because teenage mothers and their children usually have higher risk of illness and death. At the same time, women who become mothers in their teens are more likely to curtail their education.

The level of fertility among teenagers in Jordan is low. Only 4 percent of women have begun childbearing during their teens, the same figure as found in 2002, compared with 6 percent in 1997. Levels of teenage pregnancy vary markedly by urban-rural residence (4 percent in urban and 3 percent in rural area). Teens in the Central region, Badia areas and in Amman, Mafraq, and Jarash are more likely to have begun childbearing than women in other areas. The most significant differentials are found by age and education. At age 15, only 0.1 percent of women have begun childbearing, and only 0.5 percent at age 16. By age 19, one in ten will have become a mother or will be pregnant with her first child. Women's education plays an important part in determining the onset of childbearing. The proportion of teens that has begun childbearing declines as level of education increases; from 16 percent of elementary educated women to 4 percent of women with secondary and 0.1 percent with higher than secondary education. Results also indicate that teenage mothers are more common in the lowest and the second wealth quintiles (8 and 6 percent, respectively) than in the highest wealth quintile (1 percent).

Table 4.9 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 2007

Background characteristic	Percentage who:		Percentage who have begun childbearing	Number of women
	Have had a live birth	Are pregnant with first child		
<b>Age</b>				
15	0.1	0.0	0.1	850
16	0.4	0.1	0.5	906
17	3.0	1.4	4.4	826
18	4.0	2.1	6.1	755
19	8.6	1.8	10.4	753
<b>Residence</b>				
Urban	3.2	1.1	4.3	3,359
Rural	2.2	0.7	2.9	735
<b>Governorate</b>				
Amman	3.8	1.3	5.1	1,607
Balqa	2.6	1.2	3.8	250
Zarqa	2.2	1.7	4.0	551
Madaba	0.9	0.5	1.4	102
Irbid	2.6	0.0	2.6	811
Mafraq	3.7	1.4	5.2	193
Jarash	5.2	1.3	6.5	129
Ajloun	1.7	0.6	2.3	92
Karak	1.1	1.7	2.8	144
Tafiela	0.7	1.2	1.9	70
Ma'an	1.7	0.0	1.7	81
Aqaba	3.5	0.3	3.8	87
<b>Region</b>				
Central	3.2	1.4	4.6	2,487
North	3.0	0.4	3.4	1,233
South	1.7	0.9	2.6	382
<b>Badia area</b>				
Badia	4.1	0.5	4.6	319
Other	2.9	1.1	4.0	3,775
<b>Education</b>				
No education	0.9	0.0	0.9	51
Elementary	14.6	1.2	15.8	79
Preparatory	5.0	1.3	6.3	791
Secondary	2.8	1.2	4.0	2,564
Higher	0.1	0.0	0.1	620
<b>Wealth quintile</b>				
Lowest	6.3	1.3	7.6	620
Second	4.5	1.8	6.3	738
Middle	2.3	0.9	3.2	883
Fourth	2.2	1.4	3.7	878
Highest	1.3	0.0	1.3	928
Total	3.0	1.0	4.1	4,091



This chapter considers a number of indicators from the 2007 JPFHS related to knowledge, attitudes, and use of family planning. This chapter also presents information on intended future use of contraception and exposure to mass media messages about family planning. Trends over time are examined by comparing the 2007 JPFHS findings with those of three earlier surveys: the 1990, 1997 and 2002 JPFHS.

## 5.1 KNOWLEDGE OF FAMILY PLANNING METHODS

Determining the level of knowledge of contraceptive methods was a major objective of the 2007 JPFHS, since knowledge of specific methods is a precondition for using them. Information about women’s knowledge of contraceptive methods was collected by asking the respondents an open-ended question about which contraceptive methods they had heard of. When a respondent failed to mention any of the listed methods, the interviewer would describe a method and ask whether the respondent had heard of it. All methods mentioned spontaneously or recognized by the respondent after hearing a description of it 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 and withdrawal. In addition, provision was made in the questionnaire to record any other methods that respondents named without any prompting.

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 2007 JPFHS results indicate that all ever-married women in Jordan know at least one method of family planning (Table 5.1). Among modern methods, the pill and IUD are the best known (99 percent), followed by lactational amenorrhea method (LAM), male condom, injectables and female sterilization (91 percent, 89, 85, and 80 percent of ever-married women, respectively). The least recognized methods were emergency contraception and female condom, with 20 percent and 19 percent, respectively, of ever-married women having knowledge of these methods. Withdrawal is also known to most ever-married women (92 percent). On average, an ever-married woman knows about nine methods of family planning.

Method	Ever-married women	Currently married women
<b>Any method</b>	99.7	99.8
<b>Any modern method</b>	99.7	99.8
Female sterilization	79.7	79.8
Male sterilization	25.3	25.7
Pill	98.7	98.9
IUD	99.4	99.5
Injectables	85.4	85.8
Implants	55.8	56.3
Male condom	89.3	90.0
Female condom	19.4	19.6
Lactational amenorrhea (LAM)	91.1	91.5
Emergency contraception	20.4	20.5
<b>Any traditional method</b>	95.7	96.1
Periodic abstinence	87.4	88.0
Withdrawal	92.3	92.9
Folk method	4.7	4.8
Mean number of methods known	8.5	8.5
Number of women	10,876	10,354

Since knowledge of any family planning method or any modern method is universal, there is almost no variation in knowledge of any method or any modern method of contraception among subgroups by background characteristics (varying from 98 to 100 percent – Data not shown).

## 5.2 EVER USE OF CONTRACEPTION

All ever-married women interviewed in the 2007 JPFHS who report having heard of a method of family planning were asked whether they had ever used the method. Table 5.2 shows that eight in ten ever-married women reported that they have used a contraceptive method at some time. Ever use among currently married women (81 percent) is almost the same as for ever-married women (80 percent). Modern methods have been used by 73 percent of currently married women. The IUD is the most popular method (47 percent) followed by the pill (38 percent). The percentage reporting ever use of other modern methods varies from 4 percent for female sterilization to 21 percent for lactational amenorrhea method (LAM) to 23 percent for male condoms. One percent or less have ever used either the female condom, implants, male sterilization or emergency contraception.

The level of ever use of traditional contraceptive methods is fairly high in Jordan. Withdrawal, the most frequently used traditional method, has been used by 33 percent of currently married women, followed by periodic abstinence (18 percent).

Table 5.2 Ever use of contraception																	
Percentage of ever-married women and currently married women age 15-49 who have ever used any contraceptive method by method, according to age, Jordan 2007																	
Age	Modern method											Traditional method					Number of women
	Any modern method	Female sterilization	Male sterilization	Pill	IUD	Injectables	Implants	Male condom	Female condom	LAM	Emergency contraception	Any traditional method	Periodic abstinence	Withdrawal	Folk method		
ALL EVER-MARRIED WOMEN																	
15-19	31.4	21.9	0.0	0.0	9.8	6.1	0.4	0.0	8.9	0.0	4.9	0.0	17.6	1.0	16.5	0.0	236
20-24	65.4	53.1	0.0	0.0	22.7	19.8	2.0	0.0	21.1	0.0	17.3	0.1	28.7	8.0	24.6	0.7	1,276
25-29	77.9	66.9	0.0	0.4	33.5	34.5	2.6	0.2	21.2	0.0	18.8	0.8	39.4	14.8	32.3	0.5	1,977
30-34	83.9	76.0	0.9	0.0	41.8	48.1	5.5	0.1	26.8	0.0	22.4	1.8	42.3	19.9	34.1	1.3	2,213
35-39	84.5	79.9	3.5	0.0	42.4	56.6	7.1	0.5	26.1	0.2	23.5	0.8	47.2	24.1	38.9	1.8	2,052
40-44	84.3	78.2	7.5	0.2	41.3	59.2	4.8	0.5	20.4	0.4	22.1	1.2	43.0	21.0	34.5	2.8	1,884
45-49	81.9	77.9	12.8	0.0	42.1	57.2	3.5	0.9	18.2	1.0	19.3	1.3	33.0	17.5	24.3	2.6	1,239
Total	79.5	71.8	3.6	0.1	37.4	46.0	4.4	0.4	22.5	0.2	20.5	1.0	39.6	17.9	32.1	1.5	10,876
CURRENTLY MARRIED WOMEN																	
15-19	31.8	22.1	0.0	0.0	9.9	6.2	0.4	0.0	9.0	0.0	5.0	0.0	17.8	1.0	16.7	0.0	233
20-24	66.8	54.2	0.0	0.0	23.1	20.5	2.1	0.0	21.5	0.0	17.3	0.1	29.3	8.3	25.1	0.4	1,233
25-29	78.8	67.5	0.0	0.4	34.0	34.5	2.6	0.2	21.4	0.0	19.2	0.8	40.0	14.9	32.7	0.5	1,932
30-34	85.7	77.6	1.0	0.0	42.5	49.5	5.7	0.1	27.6	0.0	22.9	1.9	43.5	20.6	34.9	1.3	2,127
35-39	86.0	81.2	3.6	0.0	43.2	57.5	6.7	0.5	26.3	0.2	23.7	0.9	48.0	24.8	39.4	1.9	1,968
40-44	87.0	80.7	8.0	0.2	43.1	61.8	5.0	0.5	21.2	0.4	22.5	1.1	45.0	22.0	36.0	2.9	1,746
45-49	85.5	81.9	13.6	0.0	44.2	61.2	3.8	1.0	19.7	1.1	20.5	1.3	34.6	18.0	25.3	2.7	1,115
Total	81.2	73.4	3.7	0.1	38.3	47.1	4.4	0.4	23.1	0.2	21.0	1.0	40.7	18.4	32.9	1.5	10,354
LAM = Lactational amenorrhea method																	

### 5.3 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 in analyzing the determinants of fertility.

Results from the 2007 JPFHS indicate that 57 percent of currently married women are using a contraceptive method; 42 percent using modern methods and 15 percent using traditional methods. The IUD is the most widely adopted modern method (22 percent), followed by the pill (8 percent), male condom (5 percent), female sterilization (4 percent), and LAM (1 percent). Less than 1 percent of women rely on other modern methods. Withdrawal (11 percent) and periodic abstinence (4 percent) are the most common traditional methods.

Table 5.3 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, 2007

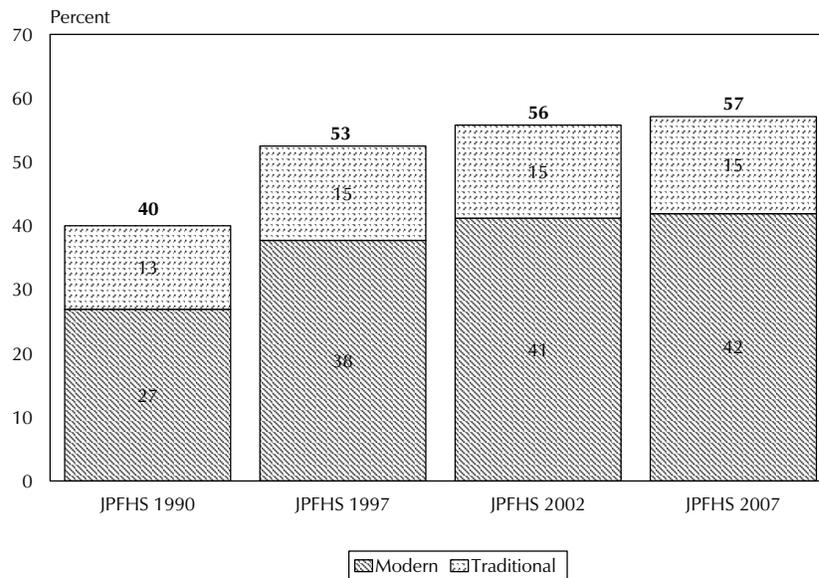
Age	Modern method									Any traditional method	Traditional method			Not currently using	Total	Number of women
	Any modern method	Female sterilization	Pill	IUD	Injectables	Male condom	LAM	Other modern	Periodic abstinence		Withdrawal	Folk method				
ALL EVER-MARRIED WOMEN																
15-19	24.1	14.9	0.0	7.0	1.9	0.1	3.3	2.6	0.0	9.1	0.1	9.1	0.0	75.9	100.0	236
20-24	42.7	31.7	0.0	7.7	12.7	0.2	7.8	3.2	0.0	11.0	2.1	8.9	0.0	57.3	100.0	1,276
25-29	49.0	35.1	0.0	9.7	18.4	0.5	5.0	1.4	0.0	13.9	2.2	11.6	0.1	51.0	100.0	1,977
30-34	60.2	45.0	0.9	10.8	23.9	0.9	6.6	1.8	0.0	15.2	3.8	11.3	0.2	39.8	100.0	2,213
35-39	61.3	45.8	3.5	9.1	25.5	1.2	5.3	1.0	0.2	15.6	4.9	10.5	0.2	38.7	100.0	2,052
40-44	61.8	44.1	7.5	5.8	26.4	0.6	3.3	0.4	0.2	17.7	5.9	11.0	0.9	38.2	100.0	1,884
45-49	48.4	36.6	12.8	2.7	18.2	0.4	1.6	0.0	0.7	11.8	4.9	6.7	0.2	51.6	100.0	1,239
Total	54.5	40.0	3.6	8.0	21.2	0.7	5.0	1.3	0.1	14.5	3.9	10.3	0.3	45.5	100.0	10,876
CURRENTLY MARRIED WOMEN																
15-19	24.4	15.1	0.0	7.1	1.9	0.1	3.3	2.7	0.0	9.3	0.1	9.2	0.0	75.6	100.0	233
20-24	44.2	32.9	0.0	8.0	13.2	0.3	8.1	3.4	0.0	11.4	2.2	9.2	0.0	55.8	100.0	1,233
25-29	50.1	35.9	0.0	9.9	18.9	0.6	5.1	1.4	0.0	14.2	2.3	11.9	0.1	49.9	100.0	1,932
30-34	62.5	46.8	1.0	11.3	24.9	0.9	6.9	1.9	0.0	15.7	3.8	11.7	0.2	37.5	100.0	2,127
35-39	63.9	47.7	3.6	9.5	26.6	1.2	5.6	1.1	0.2	16.2	5.1	10.9	0.2	36.1	100.0	1,968
40-44	66.6	47.5	8.0	6.2	28.5	0.6	3.5	0.4	0.2	19.1	6.3	11.8	1.0	33.4	100.0	1,746
45-49	53.1	40.0	13.6	3.1	20.3	0.4	1.8	0.0	0.8	13.1	5.5	7.4	0.2	46.9	100.0	1,115
Total	57.1	41.9	3.7	8.4	22.3	0.7	5.3	1.4	0.1	15.2	4.1	10.8	0.3	42.9	100.0	10,354

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

Overall, the level of current contraceptive use 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 survey, 56 percent in the 2002 JPFHS and 57 percent in the 2007 JPFHS (Figure 5.1). The relative increase in current use since the 2002 JPFHS survey is 2 percent for all methods and 2 percent for all modern methods.

Comparing specific methods, there has been considerable change in the use of specific contraceptive methods in the period between 1990 and 2007. Most noticeable is the increased use of the IUD, which rose from 15 percent in 1990 to 22 percent in 2007. Use of the male condom has also increased during the same period, rising from less than 1 percent to 5 percent.

**Figure 5.1 Current Use of Modern Contraception Among Currently Married Women, 1990-2007**



Contraceptive use differs according to age (Table 5.3). Use among currently married women is lowest among those aged 15-19 (24 percent), peaks among women aged 40-44 (67 percent), then declines sharply among those aged 45-49 (53 percent). Most women in the younger age cohorts use contraception for spacing births, relying on the pill and male condom, 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 4 percent among 35-39 year-olds, to 8 percent among 40-44 year-olds, and 14 percent among currently married women aged 45-49. The use of IUDs is also very popular among older women.

Current use of contraceptive methods also differs by background characteristics (Table 5.4). The level of contraceptive use is higher by 13 percent among women living in urban areas (58 percent) than among women in rural areas (52 percent). The percentage using modern methods among women living in urban areas is 19 percent higher than the percentage among those living in rural areas (43 percent and 36 percent, respectively).

There are also regional variations in current use of family planning. The Central region (which includes the capital, Amman) has the highest level of any contraceptive use (58 percent), followed by the North region (55 percent). The lowest level is the South region (53 percent). Differentials in the use of modern methods are similar to those for the use of any method. Current use of contraceptive methods also differs by governorates, ranging from one-half of women in Mafraq and Ma'an, to 59 percent in Amman and Zarqa and 60 percent in Tafila. Considerable variation is also observed according to Badia areas: 46 percent in the Badia areas compared to 58 percent in the non-Badia areas.

There are also differences in current use of contraception between currently married women who have attended school and those with little or no education. Current use of contraception increases steadily with women's education. This pattern also holds for the current use of modern methods: 44 percent of women with no education are currently using a method and 58 percent of women with secondary education or higher are currently using a contraceptive method. However, it should be noted that use of the IUD increases with level of education, whereas use of female sterilization is negatively correlated

with level of education. Those correlations could be due in part to the fact that women with no education tend to be older and have more children than women who have attended school, and thus the former are more likely to want to stop childbearing altogether. The use of traditional methods also increases with level of education.

Use of contraception increases with the number of living children, from 1 percent among currently married women with no children to 70 percent among women with five or more children (Table 5.4). Use of contraceptive methods also increases with the increased level of household wealth, whether for any methods or any modern methods: for example, use of female sterilization and male condom increase with increases in household wealth, which is in contrast to use of withdrawal.

Table 5.4 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 2007

Background characteristic	Modern method									Traditional method				Not currently using	Total	Number of women
	Any method	Any modern method	Female sterilization	Pill	IUD	Injectables	Male condom	LAM	Other modern	Any traditional method	Periodic abstinence	Withdrawal	Folk method			
<b>Residence</b>																
Urban	<b>58.1</b>	43.0	3.7	8.7	23.0	0.6	5.5	1.3	0.1	15.1	4.2	10.6	0.3	41.9	100.0	8,803
Rural	<b>51.6</b>	36.0	3.6	7.1	18.2	1.2	4.0	1.9	0.0	15.6	3.5	11.8	0.4	48.4	100.0	1,551
<b>Governorate</b>																
Amman	<b>59.0</b>	44.4	4.1	9.4	23.3	0.5	5.0	1.8	0.4	14.6	4.3	9.9	0.3	41.0	100.0	4,242
Balqa	<b>54.6</b>	39.1	5.1	7.1	19.2	1.0	4.6	2.1	0.0	15.5	6.5	8.8	0.2	45.4	100.0	620
Zarqa	<b>59.2</b>	45.6	2.3	9.7	25.6	0.8	6.6	0.6	0.0	13.6	2.2	11.2	0.2	40.8	100.0	1,548
Madaba	<b>53.0</b>	39.1	3.3	9.0	20.4	1.0	4.1	1.4	0.0	14.0	4.7	8.9	0.3	47.0	100.0	248
Irbid	<b>56.2</b>	38.2	3.5	6.4	21.5	0.3	5.8	0.7	0.0	17.9	4.7	13.1	0.2	43.8	100.0	1,892
Mafrq	<b>49.5</b>	33.7	2.0	7.4	17.2	1.6	3.9	1.5	0.1	15.7	2.4	13.0	0.4	50.5	100.0	441
Jarash	<b>55.7</b>	39.9	5.1	7.3	19.7	1.7	4.6	1.4	0.0	15.8	1.9	14.0	0.0	44.3	100.0	278
Ajloun	<b>58.4</b>	41.5	4.0	4.1	28.5	0.4	3.9	0.7	0.0	16.8	2.9	13.7	0.2	41.6	100.0	218
Karak	<b>51.1</b>	40.2	4.6	9.7	16.6	1.3	6.4	1.5	0.2	10.9	4.3	6.3	0.3	48.9	100.0	363
Tafiela	<b>60.0</b>	41.5	6.4	8.5	19.3	1.0	4.4	1.7	0.0	18.5	4.9	13.6	0.0	40.0	100.0	139
Ma'an	<b>50.0</b>	34.4	6.5	6.8	13.2	1.6	4.4	1.8	0.0	15.7	5.2	10.1	0.3	50.0	100.0	154
Aqaba	<b>53.7</b>	38.4	2.2	8.4	22.0	1.1	3.6	1.1	0.0	15.3	6.3	8.5	0.5	46.3	100.0	212
<b>Region</b>																
Central	<b>58.4</b>	44.0	3.7	9.3	23.3	0.6	5.3	1.6	0.3	14.4	4.1	10.0	0.3	41.6	100.0	6,658
North	<b>55.2</b>	37.9	3.4	6.4	21.2	0.7	5.3	0.9	0.0	17.3	3.9	13.2	0.2	44.8	100.0	2,830
South	<b>53.0</b>	38.9	4.6	8.7	17.7	1.3	5.0	1.5	0.1	14.0	5.1	8.7	0.3	47.0	100.0	867
<b>Badia area</b>																
Badia	<b>45.6</b>	33.4	2.3	7.6	16.0	1.5	3.6	2.4	0.0	12.1	3.2	8.5	0.4	54.4	100.0	783
Other	<b>58.0</b>	42.6	3.8	8.5	22.8	0.6	5.4	1.3	0.1	15.4	4.2	11.0	0.3	42.0	100.0	9,571
<b>Education</b>																
No education	<b>43.9</b>	36.1	10.1	8.2	12.1	2.9	1.9	0.7	0.1	7.8	1.2	6.3	0.4	56.1	100.0	365
Elementary	<b>51.9</b>	39.5	6.8	6.2	20.6	1.4	3.2	1.2	0.0	12.5	1.6	10.8	0.0	48.1	100.0	734
Preparatory	<b>57.1</b>	45.3	7.0	9.0	23.2	0.8	2.6	2.1	0.4	11.9	2.7	9.0	0.1	42.9	100.0	1,581
Secondary	<b>58.1</b>	41.8	2.7	9.8	22.1	0.7	5.2	1.2	0.1	16.4	3.4	12.7	0.3	41.9	100.0	4,586
Higher	<b>58.3</b>	41.8	2.0	6.8	23.7	0.3	7.5	1.3	0.1	16.5	6.7	9.5	0.4	41.7	100.0	3,089
<b>Number of living children</b>																
0	<b>0.9</b>	0.6	0.0	0.6	0.0	0.0	0.1	0.0	0.0	0.3	0.0	0.2	0.0	99.1	100.0	903
1-2	<b>47.1</b>	31.0	0.2	8.3	13.0	0.2	7.1	2.2	0.0	16.2	3.7	12.3	0.2	52.9	100.0	2,627
3-4	<b>67.1</b>	50.1	2.2	10.2	29.0	0.8	6.0	1.4	0.4	17.0	4.5	12.2	0.3	32.9	100.0	3,351
5+	<b>69.6</b>	53.1	8.8	8.9	28.6	1.2	4.5	1.1	0.1	16.5	5.1	11.1	0.4	30.4	100.0	3,474
<b>Wealth quintile</b>																
Lowest	<b>48.1</b>	34.7	2.5	9.0	16.0	1.3	3.7	2.1	0.0	13.4	2.6	10.8	0.1	51.9	100.0	2,083
Second	<b>52.7</b>	38.3	3.5	6.6	19.6	1.1	5.5	2.0	0.0	14.3	3.7	10.5	0.1	47.3	100.0	2,184
Middle	<b>60.0</b>	41.0	2.4	7.9	22.9	0.5	6.0	1.2	0.2	18.9	4.0	14.6	0.4	40.0	100.0	2,104
Fourth	<b>63.7</b>	49.4	4.6	10.2	27.9	0.3	5.4	1.1	0.0	14.3	4.8	9.2	0.3	36.3	100.0	2,018
Highest	<b>61.7</b>	46.8	5.7	8.6	25.5	0.2	5.7	0.4	0.7	14.9	5.6	8.8	0.5	38.3	100.0	1,966
Total	<b>57.1</b>	41.9	3.7	8.4	22.3	0.7	5.3	1.4	0.1	15.2	4.1	10.8	0.3	42.9	100.0	10,354

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

## 5.4 NUMBER OF CHILDREN AT FIRST USE OF CONTRACEPTION

Table 5.5 shows the number of living children at the time of first use of contraception by age among ever-married women. In general, the results show that the majority of women prefer to start using a contraceptive method after they have had one or two children (33 percent and 22 percent, respectively). In other words, 57 percent of women started using a method before having a third child. With the increasing adoption of family planning – particularly among younger women – the average parity of women at first use of contraception has been declining. Women are beginning to use family planning fairly early in the family building process. The proportion that started using contraception after marriage in order to delay the first birth has increased from less than 2 percent among women aged 35-49 to 4 percent among those aged 20-24. The proportion of women who started using contraception after the birth of the first child has increased sharply from 17 percent among women 45-49 to almost half of women aged 20-29.

Current age	Never used	Number of living children at time of first use of contraception					Total	Number of women
		0	1	2	3	4+		
15-19	68.6	0.5	24.4	6.5	0.0	0.0	100.0	236
20-24	34.6	3.6	47.9	11.0	1.9	0.9	100.0	1,276
25-29	22.1	2.5	46.6	21.7	4.6	2.6	100.0	1,977
30-34	16.1	2.3	37.9	25.6	11.5	6.7	100.0	2,213
35-39	15.5	1.7	26.4	28.8	13.6	14.1	100.0	2,052
40-44	15.7	1.1	22.5	22.9	13.5	24.4	100.0	1,884
45-49	18.1	1.5	16.7	19.6	13.9	30.2	100.0	1,239
Total	20.5	2.0	33.1	22.2	9.9	12.3	100.0	10,876

## 5.5 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 even more so for the practice of periodic abstinence. As noted earlier, periodic abstinence has been used by 18 percent of currently married women at some time, and it is currently being used by 4 percent of women. Since the failure rate for periodic abstinence 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 5.6 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 periodic abstinence. 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 periodic abstinence method. Three fifths of ever-married women can correctly identify a woman's fertile period. Among women using periodic abstinence, 78 percent answered correctly, while 18 percent gave the response "right after the period ended." Overall, women's knowledge of the fertile period has declined slightly since 2002 (from 68 percent to 61 percent.)

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 periodic abstinence is 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.

**Table 5.6 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 periodic abstinence, Jordan 2007

Perceived fertile period	Users of periodic abstinence	Nonusers of periodic abstinence	All women
Just before her menstrual period begins	0.1	2.6	2.5
During her menstrual period	0.0	0.3	0.3
Right after her menstrual period has ended	18.2	25.2	24.9
Halfway between two menstrual periods	77.7	60.7	61.3
Other	0.0	0.1	0.1
No specific time	3.8	4.2	4.2
Don't know	0.2	6.8	6.5
Total	100.0	100.0	100.0
Number of women	426	10,450	10,876

## 5.6 TIMING OF STERILIZATION

Although use of female sterilization increased between 2002 and 2007 (from 3 to 4 percent), it still represents only 9 percent of the contraceptive use among users of modern methods. The age at which the operation takes place is of particular interest to family planning officials (Table 5.7). For 8 percent of women who have been sterilized, the operation took place before they were 30 years old; 27 percent were sterilized at 30-34 years, 45 percent at 35-39 years, and 20 percent at 40-49. Overall, women's age at sterilization remained almost the same in Jordan between 2002 and 2007: the median age for women under age 40 was 35.4 years in 2002, compared with 35.5 years in 2007.

**Table 5.7 Timing of sterilization**

Percent distribution of sterilized women age 15-49 by age at the time of sterilization and median age at sterilization, according to the number of years since the operation, Jordan 2007

Years since operation	Age at time of sterilization						Total	Number of women	Median age <sup>1</sup>
	<25	25-29	30-34	35-39	40-44	45-49			
<2	0.0	0.0	13.6	61.1	22.5	2.9	100.0	78	37.8
2-3	0.0	0.5	13.6	29.5	47.7	8.8	100.0	42	36.4
4-5	(0.0)	(6.0)	(31.4)	(39.9)	(18.1)	(4.6)	100.0	47	(35.1)
6-7	0.0	0.0	22.5	54.2	23.3	0.0	100.0	59	36.6
8-9	0.8	12.3	30.4	42.1	14.3	0.0	100.0	63	35.0
10+	0.2	19.3	41.1	39.4	0.0	0.0	100.0	104	a
Total	0.2	7.9	27.0	45.4	17.5	2.1	100.0	393	35.5

Note: Figures in parentheses are based on 25-49 unweighted cases.  
a = Not calculated due to censoring  
<sup>1</sup> Median age at sterilization is calculated only for women sterilized before age 40 to avoid problems of censoring.

## 5.7 SOURCE OF SUPPLY FOR MODERN METHODS

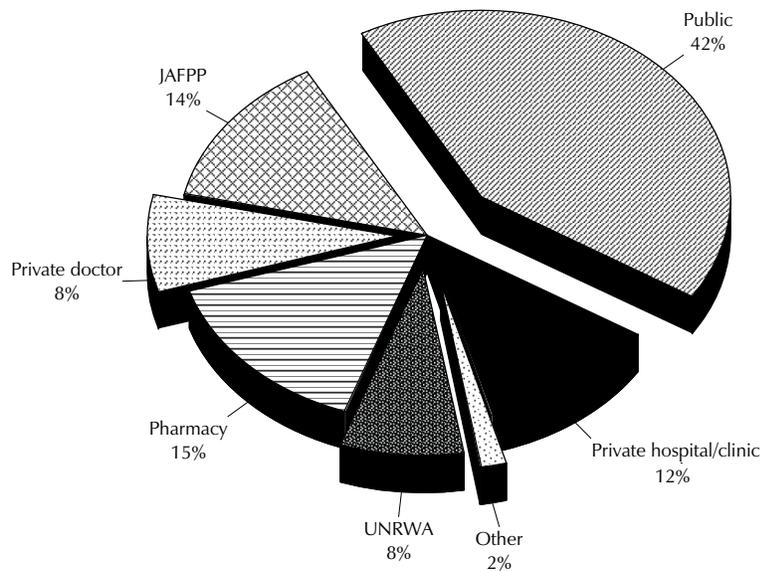
In addition to information about the level of contraceptive use, program officials need to know where users obtain their methods. As in the 2002 JPFHS, the 2007 JPFHS survey included a question for current users of modern methods regarding the source of their method. Private sources serve about three fifths (58 percent) of current users, compared with 66 percent in 2002 survey. The Jordanian Association of Family Planning and Protection (JAFPP), pharmacies, and private hospitals are the major private sources of supply for modern contraceptive methods (Table 5.8 and Figure 5.2). The share of the public sector increased to 42 percent in 2007, compared with 34 percent in the 2002 survey.

The sources of contraceptive methods vary by method used. Pharmacies are the primary source for users of methods that require resupply, including the pill (43 percent) and condoms (39 percent). Family planning clinics (JAFPP) are the primary source for IUDs (23 percent). Government hospitals are the major source for most female sterilizations (48 percent), followed by the private hospitals (31 percent) and Royal Medical Services (16 percent). Government health centers are the major source of injectables (45 percent), followed by public MCH (18 percent).

Source	Female sterilization	Pill	IUD	Injectables	Male condom	Total <sup>1</sup>
<b>Public</b>	67.8	38.1	36.8	74.4	45.4	41.8
Public government hospital	48.2	1.1	3.1	3.7	1.5	6.9
Public government health center	0.0	22.4	16.6	44.6	27.9	18.2
Public MCH	0.0	14.1	13.9	18.0	15.1	12.8
University hospital	3.4	0.1	0.5	0.9	0.0	0.6
Royal Medical Services	16.2	0.4	2.2	7.2	0.9	3.1
Other public	0.0	0.0	0.5	0.0	0.0	0.3
<b>Private medical</b>	32.2	61.3	62.7	25.0	53.1	57.6
Private hospital/clinic	30.8	1.1	15.8	0.7	0.9	12.0
Private doctor	0.0	1.1	14.3	7.0	0.1	8.2
Private pharmacy	0.0	43.2	1.7	5.4	39.0	15.0
JAFPP	0.0	3.0	22.8	2.4	3.7	13.6
UNRWA clinic	0.0	12.3	6.8	9.4	9.4	7.8
Other NGO	0.0	0.5	0.3	0.0	0.0	0.3
Other private	1.4	0.0	1.0	0.0	0.1	0.7
<b>Other</b>	0.0	0.6	0.5	0.7	1.5	0.6
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	393	875	2,308	73	544	4,209

<sup>1</sup> Total includes 14 users of implants, 4 users of diaphragm, 1 user of foam/jelly, but excludes lactational amenorrhea method (LAM)

**Figure 5.2 Sources of Family Planning Methods Among Current Users of Modern Methods**



## 5.8 INFORMED CHOICE

Women who are 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 have been sterilized were asked if they were informed that they could not have any more children because of the operation.

Table 5.9 shows that 72 percent of women were informed about the side effects of their method, while 64 percent were informed about what to do should they experience side effects. Seventy percent of women were also informed about alternative methods. The majority of women who use injectables were well informed: 77 percent had been told about side effects, 61 percent knew what to do when they had side effects, and 83 percent were informed about other available methods of contraception. Users of the IUD and pill were similarly well informed about side effects (IUD: 75 percent; pill: 70 percent), and were told in different proportions about other methods they could use (pill: 80 percent; IUD: 73 percent); however, those who use an IUD were more likely to have been told about what to do in case of side effects (68 percent) than users of the pill (59 percent). It should be noted that only 49 percent of sterilized women were informed about side effects and only 47 percent were informed about what to do if they experienced side effects; 40 percent were informed about other methods.

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 (76 percent and 69 percent, respectively). Women who obtained their methods from public health centers or from the Royal Medical Services were the most likely to have received information about side effects (82 percent and 81 percent, respectively) and what to do if they experienced side effects (71 percent and 77 percent), followed by those who obtained their method from JAFPP (76 percent about side effect and 69 percent on what to do about them).

Table 5.9 Informed choice

Among current users of modern methods age 15-49 who started the last episode of use within the five years preceding the survey, 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 that could use, by method and source; and among sterilized women, the percentage who were informed that the method is permanent, by initial source of method, Jordan 2007

Method/source	Among women who started last episode of modern contraceptive method within five years preceding the survey:				Among women who were sterilized:	
	Percentage who were informed about side effects or problems of method used	Percentage who were informed about what to do if side effects experienced	Percentage who were informed by a health or family planning worker of other methods that could be used	Number of women	Percentage who were informed that sterilization is permanent <sup>1</sup>	Number of women
<b>Method</b>						
Female sterilization	48.7	47.4	39.9	142	95.9	142
Pill	69.6	59.2	79.8	768	na	0
IUD	74.6	68.0	73.2	1,707	na	0
Injectables	77.4	61.4	83.0	69	na	0
Implants	*	*	*	14	na	0
Other	na	na	2.5	146	na	0
<b>Initial source of method<sup>2</sup></b>						
<b>Public</b>	75.6	65.0	74.9	1,103	96.3	95
Public government hospital	54.7	41.5	51.0	143	96.6	71
Public government health center	81.7	70.8	81.2	515	na	0
Public MCH	75.2	64.2	75.9	376	na	0
University hospital	*	*	*	10	*	8
Royal medical services	80.7	77.1	73.2	55	*	16
Other public	*	*	*	4	na	0
<b>Private medical</b>	69.3	63.3	70.8	1,629	(95.1)	47
Private hospital/clinic	69.5	62.8	62.7	309	(95.0)	46
Private doctor	63.7	61.6	62.5	266	na	0
Private pharmacy	60.4	56.0	72.8	323	na	0
JAFPP	76.4	69.1	74.8	453	na	0
UNRWA clinic	72.2	67.0	81.5	246	na	0
Other NGO	*	*	*	10	na	0
Other private	*	*	*	22	*	1
<b>Other</b>	(64.0)	(64.0)	(2.5)	33	na	0
<b>Total</b>	71.9	64.1	69.8	2,846	95.9	142

Note: Table excludes users who obtained their method from friends/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.

na = Not applicable

<sup>1</sup> Among women who were sterilized in the five years preceding the survey

<sup>2</sup> Source at start of current episode of use.

## 5.9 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 calendar are presented in Table 5.10. Discontinuation rates were calculated for each method based on use during the first 12 months after beginning the method. The reasons for discontinuation were examined, then classified into four main categories: method failure (became pregnant while using), desire to become pregnant, women's switching to another method, and other reasons (including problems related to the use of a particular method, husband's disapproval, health reasons, cost, and absence of need to use a family planning method). Table 5.10 indicates that 7 percent of users stopped using before the end of the first year because the method failed; 9 percent said they stopped

because they wanted to become pregnant; 13 percent because they switched to another method; and 11 percent for other reasons.<sup>1</sup> These discontinuation rates remain the same as those found in the 2002 JPFHS.

Discontinuation rates were highest for LAM (94 percent) – in part because, by definition, LAM can be used for a maximum of 6 months postpartum – followed by the pill (47 percent), the male condom (44 percent) and injectables (41 percent). The lowest discontinuation rate was for the IUD (the most common method), with 12 percent of women discontinuing the method during the first year of use. 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 periodic abstinence (21 percent) and withdrawal (13 percent) (Figure 5.3). Eleven percent of women who used periodic abstinence, 11 percent of women who used withdrawal, 12 percent who used the male condom, 12 percent who used LAM and 10 percent who used the pill discontinued the method in order to become pregnant.

**Table 5.10 First-year contraceptive discontinuation rates**

Percentage of contraceptive users who discontinued use of a method within 12 months after beginning its use, by reason for discontinuation and specific method, Jordan 2007

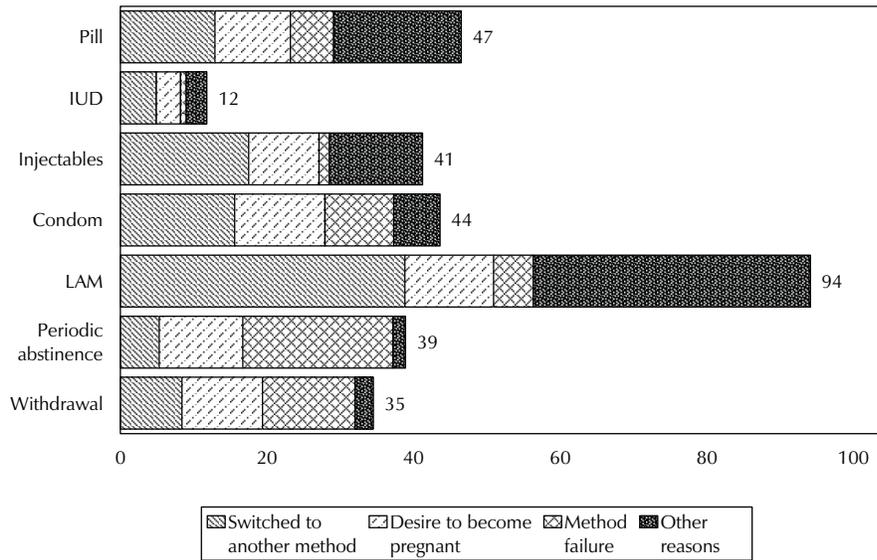
Method	Method failure	Desire to become pregnant	Switched to another method <sup>1</sup>	Other reason	Total
Pill	5.9	10.3	12.9	17.4	46.5
IUD	0.8	3.3	4.9	2.9	11.8
Injectables	1.4	9.6	17.5	12.7	41.2
Male condom	9.4	12.3	15.6	6.2	43.6
Lactational amenorrhea	5.4	12.1	38.8	37.8	94.1
Periodic abstinence	20.5	11.4	5.3	1.6	38.9
Withdrawal	12.6	11.0	8.4	2.6	34.5
All methods	7.1	8.9	12.9	10.8	39.7
Number of episodes of use	658	831	1,241	1,040	3,770

Note: Table is based on episodes of contraceptive use that began 3-59 months prior to the survey

<sup>1</sup> Used a different method in the month following discontinuation or said that they wanted a more effective method and started another method within two months of discontinuation

<sup>1</sup> The rates are calculated from information collected in the calendar portion of the questionnaire. All episodes of contraceptive use between January 2002 and the date of interview are recorded in the calendar. Thus, discontinuation rates presented in this table refer to 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 5.10 refer to the period 3-59 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.

**Figure 5.3 Contraceptive Discontinuation Rates by Reason and Method**



JPFHS 2007

Table 5.11 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 (38 percent), followed by method failure (17 percent) and health concerns (12 percent). The other reasons women cited for discontinuation were the desire to have a more effective method (11 percent), side effects (7 percent), and inconvenience of use (2 percent). About 2 percent of currently married women report husband’s disapproval of family planning as their reason for discontinuation.

Discontinuation due to method failure is particularly high for the traditional methods of periodic abstinence (44 percent) and withdrawal (35 percent). Method failure was one of the main reasons given for discontinuation of male condoms (24 percent). Side effects were most frequently cited as the reason for discontinuation among women who had been using injectables (19 percent), pill (13 percent), and IUD (12 percent).

Table 5.11 Reasons for discontinuation

Percent distribution of discontinuations of contraceptive methods in the five years preceding the survey by main reason reported for discontinuation, according to specific method, Jordan 2007

Reason	Pill	IUD	Injectables	Male condom	Lactational amenorrhea	Periodic abstinence	Withdrawal	All methods <sup>1</sup>
Became pregnant while using	12.2	6.3	6.2	23.5	7.3	43.6	35.1	17.4
Wanted to become pregnant	38.3	49.3	28.1	38.8	13.2	41.6	43.7	38.4
Husband disapproved	0.8	0.6	0.1	8.5	0.2	1.3	3.1	1.8
Side effects	12.5	12.2	19.0	0.9	0.3	0.1	1.0	6.7
Health concerns	17.5	23.8	34.5	7.9	1.2	0.9	1.5	11.9
Access/availability	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Wanted a more effective method	3.6	0.9	5.8	10.4	38.5	8.6	10.9	10.5
Inconvenient to use	1.7	1.7	3.3	3.4	2.6	0.8	0.3	1.7
Infrequent sex/husband away	10.7	1.2	0.4	2.2	1.0	1.8	1.8	3.6
Costs too much	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Fatalistic	0.0	0.0	0.0	0.0	0.1	0.1	0.2	0.1
Difficult to get pregnant/menopausal	0.5	1.1	0.5	1.0	0.1	0.3	0.5	0.6
Marital dissolution/separation	0.7	0.8	0.3	0.7	0.0	0.0	1.1	0.6
Ramadan	0.7	1.5	0.6	1.2	21.0	0.2	0.5	3.9
End of BF period	0.0	0.0	0.0	0.0	0.0	0.6	0.0	0.0
Husband sick	0.2	0.3	0.1	0.0	14.0	0.0	0.0	2.2
Other	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.1
Don't know	0.2	0.2	0.9	0.3	0.0	0.0	0.0	0.2
Missing	0.0	0.2	0.0	1.1	0.4	0.0	0.2	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of discontinuations	2,003	2,113	186	757	1,271	616	1,605	8,602

<sup>1</sup> Includes 4 users of implants, 49 users of other methods

## 5.10 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 5.12 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. It is noted that 58 percent of women not currently using a contraceptive method in the 2007 JPFHS said that they intended to use family planning in the future, while more than one-third (37 percent) of nonusers said they do not intend to use in the future. In the 2002 JPFHS, the proportion of nonusers who intended to use a family planning method in the future was 60 percent.

Table 5.12 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 2007

Intention	Number of living children <sup>1</sup>					Total
	0	1	2	3	4+	
Intends to use	42.9	66.9	66.5	68.1	52.9	58.2
Unsure	13.0	5.0	5.4	2.5	2.9	5.0
Does not intend to use	44.1	28.0	28.1	29.4	44.2	36.9
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	614	729	675	675	1,750	4,442

<sup>1</sup> Includes current pregnancy

Intention to use contraception in the future appears not to have a strong positive association with the number of living children a woman has. Specifically, 68 percent of women with three children said they intend to use a method of family planning, compared with 43 percent of childless women and 53 percent of women with four or more children.

The reasons women choose not to use family planning are of particular interest to family planning program officials. Table 5.13 presents the distribution of women who are not using contraception and have no intention to do so by their reason for not using and not intending to use. The primary reason given is the desire to have more children (20 percent), infecundity (17 percent), and health concerns (16 percent). The next most common reason for not using is menopause (11 percent). Other reasons for not intending to use contraceptive methods are fear of side effects (6 percent), and infrequent sexual relations (9 percent). Another 5 percent mention husband's or respondent's disapproval of contraception.

Married women who were not using contraception at the time of the survey but reported that they intended to use, were asked about the method they intend to use. The results are shown in Table 5.14. The majority of women (79 percent) say they want to use a modern method of contraception and 11 percent want to use a traditional method. About half of the women (48 percent) who intend to use contraception say they want to use the IUD. The second most popular modern method is the pill (21 percent).

Method	Percent distribution
Female sterilization	2.4
Male sterilization	0.1
Pill	20.6
IUD	48.3
Injectables	1.8
Implants	0.6
Male condom	4.2
Female condom	0.0
Lactation amenorrhea	0.5
Periodic abstinence	3.5
Withdrawal	6.4
Other	1.2
Unsure	10.4
Total	100.0
Number of women	2,585

Some programmatic implications can be drawn from the data in Table 5.14. Because of the popularity of the IUD, the pill, male condom, and female sterilization, several issues need to be considered in anticipation of women's carrying out their intentions to use those methods. First, the supply of pills must be adequate to meet the needs of women who want to use that method; second, for women who want to use the IUD or female sterilization, trained personnel must be available to provide the services; lastly, for women whose husbands desire to use condoms, they should be accessible with low prices.

### 5.11 EXPOSURE TO FAMILY PLANNING MESSAGES

Radio and television are major sources of information about family planning, in addition to print and other media. To assess the effectiveness of those media 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 mentioned sources during the months preceding the survey. The results indicate that, overall, 67 and 24 percent of ever-married women are exposed to family planning messages via the electronic media of television and radio, respectively (Table 5.15). Differentials in access to family planning messages by age, place of residence, region, governorates, Badia area and

Table 5.13 Reason for not intending to use contraception in the future

Percent distribution of currently married women age 15-49 who are not using contraception and who do not intend to use in the future by main reason for not intending to use, Jordan 2007

Reason	Percent distribution
<b>Fertility-related reasons</b>	
Infrequent sex	8.8
Menopausal, hysterectomy	10.9
Subfecund, infecund	16.5
Wants more children	19.6
Spouse ill	2.2
Difficult pregnancy	8.2
<b>Opposition to use</b>	
Respondent opposed	3.1
Husband opposed	2.1
Religious prohibition	0.4
<b>Lack of knowledge</b>	
Knows no method	0.3
<b>Method-related reasons</b>	
Health concerns	16.3
Fear side effects	6.0
Costs too much	0.5
Inconvenient to use	0.8
Interferes with body's normal process	0.3
Other	3.3
Don't know	0.7
Total	100.0
Number of women	1,637

education are generally evident, with those sources of information that require literacy showing particularly striking differentials by education. Nevertheless, 44 percent of women had been exposed to family planning information via bulletins and booklets followed by posters (42 percent) and newspapers and magazines (31 percent). Lectures were the least common sources of exposure to family planning messages (11 percent).

The results also show that 18 percent of respondents reported that they hadn't been exposed to family planning information via any of the six media sources. Younger women (15-19 years), older women (40-49 years), women living in Madaba and Aqaba, women living in the Badia areas, women with no education or elementary education and women in the lowest wealth quintiles were less likely to have been exposed to family planning messages through media than other women.

Background characteristic	Radio	Television	Newspaper/ magazine	Posters	Bulletin, booklet	Lecture	None of these six media sources	Number
<b>Age</b>								
15-19	20.7	59.0	25.4	36.3	38.6	7.6	21.2	236
20-24	18.1	65.6	28.4	43.6	43.9	8.1	17.6	1,276
25-29	23.2	67.6	28.2	42.6	48.8	9.2	17.3	1,977
30-34	24.6	67.4	30.7	45.4	49.3	11.5	15.8	2,213
35-39	26.0	68.9	32.1	42.8	46.5	11.4	16.6	2,052
40-44	26.2	67.5	34.3	39.9	41.5	11.5	21.0	1,884
45-49	26.5	63.4	29.6	32.6	30.8	12.2	24.0	1,239
<b>Residence</b>								
Urban	24.6	66.1	31.8	41.8	44.9	10.7	18.4	9,249
Rural	22.5	71.5	24.1	40.4	41.3	10.6	17.9	1,627
<b>Governorate</b>								
Amman	28.6	64.3	36.8	41.0	45.6	12.0	19.1	4,442
Balqa	23.1	72.3	33.6	47.4	47.0	11.3	19.1	645
Zarqa	29.2	66.9	21.5	39.2	42.3	10.0	16.9	1,645
Madaba	19.1	68.1	29.8	38.6	45.1	20.4	20.9	262
Irbid	14.2	66.3	26.4	42.5	44.8	6.4	18.1	1,993
Mafrq	17.2	73.1	23.2	38.2	32.8	5.2	17.9	460
Jarash	20.0	69.8	21.8	45.8	41.9	13.1	17.0	293
Ajloun	18.9	69.4	24.8	50.5	48.1	9.9	15.4	228
Karak	24.1	73.8	31.9	45.3	50.5	14.8	17.3	378
Tafiela	25.8	74.3	33.2	44.2	45.7	16.2	16.3	146
Ma'an	29.1	72.0	31.0	37.1	38.3	12.1	18.4	164
Aqaba	22.1	68.6	34.6	36.1	38.8	11.9	20.7	221
<b>Region</b>								
Central	27.9	65.8	32.6	41.1	44.9	11.8	18.7	6,993
North	15.6	67.9	25.3	42.8	42.9	7.1	17.8	2,975
South	24.8	72.3	32.6	41.4	44.7	13.8	18.2	908
<b>Badia area</b>								
Badia	21.7	71.5	20.8	31.8	36.8	13.5	19.9	823
Other	24.5	66.5	31.4	42.4	45.0	10.4	18.3	10,053
<b>Education</b>								
No education	19.8	58.9	5.3	11.5	8.1	6.4	37.7	416
Elementary	20.2	59.9	14.2	23.5	21.4	8.1	26.9	813
Preparatory	20.6	65.4	23.9	37.0	38.6	8.6	20.3	1,681
Secondary	24.3	68.4	30.6	43.3	46.7	9.7	16.0	4,788
Higher	27.8	68.4	41.8	49.9	54.5	14.4	16.2	3,179
<b>Wealth quintile</b>								
Lowest	17.4	65.6	17.0	33.7	34.9	7.6	21.3	2,211
Second	21.5	68.1	25.3	40.1	42.9	9.5	17.8	2,296
Middle	24.6	71.3	30.6	45.6	49.2	11.3	15.4	2,206
Fourth	26.4	67.5	34.6	43.2	46.2	11.8	18.2	2,135
Highest	32.2	61.5	47.3	45.8	49.2	13.5	19.2	2,028
Total	24.3	66.9	30.6	41.6	44.4	10.7	18.4	10,876

## 5.12 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 last 12 months was collected in the 2007 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 5.16 shows that 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 women aged 20-39 years, urban women, women living in the North region, and in Ajloun, and Irbid, and non-Badia areas, more educated women and those women in the second quintile were more likely to have discussed family planning during a visit to a health facility than other women.

The data also reveal that 21 percent of women were visited by a fieldworker who discussed family planning. Women among age group 45-44, women living in urban areas, in Zarqa, Irbid and Ajloun, women living in non-Badia areas and the North region, more educated women and those in the first three wealth quintiles are more likely to have discussed family planning during the visit of a fieldworker than other women.

Table 5.16 Contact of nonusers with family planning providers

Among ever-married women age 15-49 who are not using contraception, the percentage who during the last 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 neither discussed family planning with a fieldworker nor at a health facility, by background characteristics, Jordan 2007

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 neither discussed family planning with fieldworker nor at a health facility	Number of women
		Discussed family planning	Did not discuss family planning		
<b>Age</b>					
15-19	13.9	14.9	59.1	77.5	179
20-24	19.5	18.2	63.7	71.5	731
25-29	22.7	23.9	58.8	63.5	1,009
30-34	23.8	21.8	59.9	63.9	881
35-39	21.4	17.5	59.9	68.7	793
40-44	21.8	10.6	59.1	73.3	719
45-49	14.8	7.9	57.3	80.0	640
<b>Residence</b>					
Urban	22.0	17.7	59.3	68.7	4,128
Rural	14.5	15.3	62.4	74.4	824
<b>Governorate</b>					
Amman	17.6	16.6	56.2	72.6	1,939
Balqa	17.0	11.0	66.7	76.6	304
Zarqa	32.4	19.1	64.5	60.5	725
Madaba	12.2	13.2	48.1	79.1	129
Irbid	29.3	20.2	59.2	62.4	931
Mafraq	14.8	14.6	66.0	74.3	242
Jarash	10.7	19.1	68.1	74.1	138
Ajloun	23.6	25.1	59.8	58.7	100
Karak	12.1	18.5	57.5	74.2	190
Tafiela	8.4	15.5	65.1	77.7	62
Ma'an	5.0	12.1	62.8	84.7	86
Aqaba	5.6	16.6	66.5	80.4	107
<b>Region</b>					
Central	20.8	16.5	58.8	70.4	3,097
North	24.6	19.5	61.2	65.4	1,411
South	8.6	16.4	61.7	78.2	445
<b>Badia area</b>					
Badia	16.6	13.0	63.4	74.2	465
Other	21.2	17.8	59.4	69.2	4,488
<b>Education</b>					
No education	12.3	6.5	51.4	81.9	253
Elementary	17.1	14.8	61.9	76.3	429
Preparatory	22.0	17.3	59.5	69.3	776
Secondary	23.2	18.5	60.2	67.1	2,116
Higher	19.0	18.4	60.1	69.4	1,378
<b>Wealth quintile</b>					
Lowest	18.2	16.5	61.0	72.2	1,206
Second	26.0	22.5	58.0	62.1	1,143
Middle	23.3	15.7	62.4	68.5	941
Fourth	18.1	14.5	57.2	73.1	848
Highest	16.9	16.2	60.1	74.3	815
Total	20.8	17.3	59.8	69.7	4,952



This chapter addresses the principal factors, other than contraception, that affect a woman's risk of becoming pregnant: nuptiality, 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.

## 6.1 CURRENT MARITAL STATUS

Table 6.1 compares data on ever-married women from the 2007 JPFHS with previous surveys: the 1976 Jordan Fertility Survey (JFS), the 1983 Jordan Fertility and Family Health Survey (JFFHS), and the 1990, 1997, and 2002 Jordan Population and Family Health Surveys (JPFHS). During the 26 years between 1976 and 2002, the percentage of ever-married women decreased from 66 to 54 percent, a drop of 18 percent. However, between 2002 and 2007, the percentage of ever-married women has increased from 54 to 57 percent. This increase is mainly concentrated among young women of age groups 20-24 and 25-29.

Age	JFS 1976	JFFHS 1983	JPFHS 1990	JPFHS 1997	JPFHS 2002	JPFHS 2007
15-19	19.5	9.4	10.6	8.2	6.2	5.8
20-24	64.1	42.0	45.2	38.8	34.1	36.7
25-29	87.4	76.3	73.7	66.2	65.3	69.3
30-34	95.3	90.1	89.1	80.7	79.6	79.4
35-39	97.4	94.9	94.6	89.9	87.3	85.4
40-44	98.0	96.8	97.3	94.4	92.6	91.6
45-49	98.3	97.1	98.0	96.0	95.4	95.9
Total 15-49	65.7	56.0	56.2	54.6	54.4	57.4

In Jordan, marriage is almost universal. In 2007, only 4 percent of women have not married by the end of their reproductive years (see Table 6.2). However, the percentage of women who have never married has increased over the years. For example, in 1976, less than 3 percent of women aged 35-39 had never married (see Figure 6.1); the proportion of never married women increased in this age group to about 5 percent between 1983 and 1990, doubled in 1997 (10 percent), rose again to 13 percent in 2002, and reached 15 percent in 2007. The pattern is similar for women in the younger age groups. The proportion of never-married women aged 20-24 increased from 36 percent in 1976 to 55 percent in 1990, then to 66 percent in 2002, but dropped to 63 percent in 2007. This same pattern also holds for the age group 25-29 years. Echoing this trend, the proportion of women aged 15-19 who had never married increased from 80 to 94 percent between 1976 and 2007. This change is the consequence of an increase of the age at first marriage among the youngest women.

**Figure 6.1 Percentage of Never-married Women 15-39 by Age Group, 1976-2007**

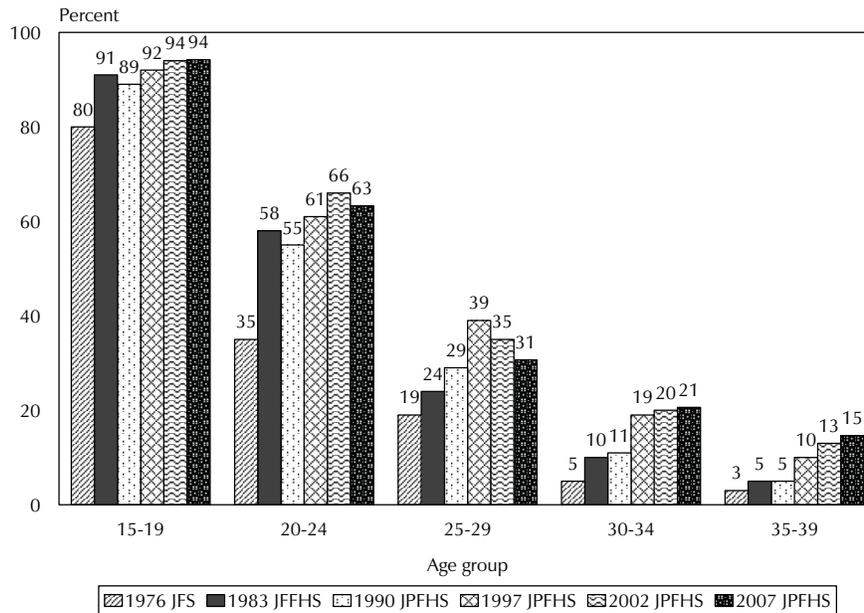


Table 6.2 presents the distribution of women by current marital status. Of the 18,960 women aged 15-49 listed in the household schedule, 43 percent had never married, 55 percent were currently married, and the remaining 3 percent were either divorced or widowed.

The proportion of women who are currently married increases steadily from 6 percent among women aged 15-19 to 82 percent among those aged 35-39, then to 86 percent for women in the oldest age group 45-49. As expected, the proportion of widows increases with age, reaching 7 percent among women aged 45-49. Less than 2 percent of women are divorced in Jordan.

Age	Marital status				Total	Number of women
	Never married	Married	Divorced	Widowed		
15-19	94.2	5.7	0.0	0.0	100.0	4,091
20-24	63.3	35.4	1.0	0.2	100.0	3,478
25-29	30.7	67.7	1.5	0.1	100.0	2,852
30-34	20.6	76.4	2.6	0.4	100.0	2,786
35-39	14.6	81.9	2.3	1.2	100.0	2,404
40-44	8.4	84.9	2.6	4.1	100.0	2,057
45-49	4.1	86.3	2.2	7.3	100.0	1,292
Total 15-49	42.6	54.6	1.5	1.2	100.0	18,960

## 6.2 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 6.3.

Overall, 5 percent of currently married women in 2007 are in a polygynous union, compared to 7 percent in 2002. Older women are more likely to be in a polygynous union than younger women (8 percent at aged 40-49 compared to less than 2 percent at ages 15-24). The prevalence of polygyny is also higher in rural areas. There are significant differences in type of marital union by region, governorate and particularly residence in Badia: in the Badia areas, 13 percent of married women are in polygynous union compared to 4 percent in the non-Badia areas. There are also large differences in polygynous union by household wealth quintile. The proportion of polygynous union among those in the lowest wealth quintile is 8 percent, compared to 4 percent in the highest wealth quintile, giving 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 20 percent; this decreases to 5 percent among women with preparatory education and to 3 percent among women with a secondary or higher education.

## 6.3 CONSANGUINITY

Kinship marriage, also called consanguineous marriage, is relatively common in Jordan. Data in Table 6.4 indicated that 40 percent of women aged 15-49 reported that they are related to their current husband (or last husband, for divorced or widowed women). Data indicated that 5 percent were dual first cousin marriages (i.e., both 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 to 7 percent). Fifteen percent were marriages to second cousins or other relatives.

Table 6.3 Number of co-wives

Percent distribution of currently married women age 15-49 by number of co-wives, according to background characteristics, Jordan 2007

Background characteristic	Number of co-wives		Total	Number of women
	0	1+		
<b>Age</b>				
15-19	99.0	1.0	100.0	233
20-24	98.2	1.8	100.0	1,233
25-29	97.6	2.4	100.0	1,932
30-34	96.4	3.6	100.0	2,127
35-39	94.2	5.8	100.0	1,968
40-44	91.6	8.4	100.0	1,746
45-49	93.3	6.7	100.0	1,115
<b>Residence</b>				
Urban	95.9	4.1	100.0	8,803
Rural	92.3	7.7	100.0	1,551
<b>Governorate</b>				
Amman	96.1	3.9	100.0	4,242
Balqa	93.4	6.6	100.0	620
Zarqa	96.0	4.0	100.0	1,548
Madaba	94.6	5.4	100.0	248
Irbid	96.3	3.7	100.0	1,892
Mafraq	90.2	9.8	100.0	441
Jarash	93.8	6.2	100.0	278
Ajloun	96.8	3.2	100.0	218
Karak	94.3	5.7	100.0	363
Tafiela	94.0	6.0	100.0	139
Ma'an	89.1	10.9	100.0	154
Aqaba	92.7	7.3	100.0	212
<b>Region</b>				
Central	95.8	4.2	100.0	6,658
North	95.2	4.8	100.0	2,830
South	92.9	7.1	100.0	867
<b>Badia area</b>				
Badia	87.2	12.8	100.0	783
Other	96.0	4.0	100.0	9,571
<b>Education</b>				
No education	80.5	19.5	100.0	365
Elementary	90.1	9.9	100.0	734
Preparatory	95.2	4.8	100.0	1,581
Secondary	96.2	3.8	100.0	4,586
Higher	97.2	2.8	100.0	3,089
<b>Wealth quintile</b>				
Lowest	92.3	7.7	100.0	2,083
Second	95.5	4.5	100.0	2,184
Middle	96.1	3.9	100.0	2,104
Fourth	96.4	3.6	100.0	2,018
Highest	96.5	3.5	100.0	1,966
Total	95.4	4.6	100.0	10,354

Table 6.4 Consanguinity

Percent distribution of all ever-married women by their relationship to their current or first husband, according to background characteristics, Jordan 2007

Background characteristic	Relationship to husband										Total	Number of women
	No relation	First cousin: father and mother	First cousin: mother and father	First cousin: father	First cousin: mother	First cousin: father's sister	First cousin: mother's sister	Second cousin: father	Second cousin: mother	Other relative		
<b>Age</b>												
15-19	62.1	2.7	1.2	8.3	3.3	2.8	7.8	7.0	4.7	0.1	100.0	236
20-24	62.4	3.3	2.0	7.2	4.5	4.6	5.0	7.6	3.0	0.5	100.0	1,276
25-29	63.0	2.4	1.4	8.6	2.9	3.9	3.8	8.6	4.6	0.7	100.0	1,977
30-34	61.8	2.5	1.9	8.5	1.7	3.5	5.1	9.8	4.3	0.9	100.0	2,213
35-39	59.6	2.9	2.7	8.7	2.8	3.3	3.9	9.6	4.6	1.9	100.0	2,052
40-44	60.4	2.4	1.1	9.6	3.7	3.3	5.0	8.7	5.0	0.8	100.0	1,884
45-49	53.8	3.9	1.3	8.7	2.1	2.9	5.8	15.0	6.0	0.6	100.0	1,239
<b>Age at first marriage</b>												
Under 15	48.8	2.3	2.1	18.4	2.8	2.8	3.0	13.0	4.3	2.6	100.0	333
15-17	49.0	3.4	2.2	12.6	2.9	3.6	5.8	13.8	5.9	0.8	100.0	2,178
18-19	54.8	3.9	2.5	9.2	3.5	4.4	6.0	11.4	3.7	0.7	100.0	2,272
20-21	57.7	3.8	1.6	8.8	3.2	3.6	4.7	10.0	5.6	1.0	100.0	2,072
22-24	67.6	1.6	1.3	6.4	3.0	3.9	4.2	6.6	4.1	1.2	100.0	2,234
25 or older	78.5	1.1	0.8	3.7	1.6	2.0	2.9	5.0	3.6	0.7	100.0	1,786
<b>Co-wives</b>												
0	60.2	2.7	1.8	8.6	3.0	3.6	4.9	9.6	4.7	1.0	100.0	10,371
1+	66.5	4.7	0.6	8.7	1.3	2.5	2.4	10.5	2.0	0.8	100.0	505
<b>Marital duration</b>												
0-4 years	59.9	2.2	1.4	8.9	2.9	4.1	5.0	9.4	5.0	1.2	100.0	2,137
5-9 years	58.4	4.2	1.3	9.7	3.4	2.9	4.1	9.6	4.7	1.7	100.0	2,118
10-14 years	59.4	2.8	2.4	8.6	2.5	4.0	5.6	9.8	4.1	0.6	100.0	1,805
15-19 years	61.3	3.2	2.1	8.7	2.1	3.2	4.4	9.4	4.9	0.7	100.0	1,696
20-24 years	63.6	0.9	1.7	8.1	2.7	3.1	5.1	9.8	4.4	0.6	100.0	1,301
25+ years	59.1	3.7	2.0	8.5	3.6	3.2	5.6	8.9	5.0	0.4	100.0	1,057
Married more than once	65.3	2.1	0.5	4.8	2.5	4.5	2.7	12.3	5.1	0.2	100.0	238
<b>Residence</b>												
Urban	62.2	2.7	1.7	8.0	2.7	3.4	4.8	9.1	4.5	1.0	100.0	9,249
Rural	51.3	3.7	1.7	11.9	4.1	4.4	4.4	12.3	5.2	0.9	100.0	1,627
<b>Governorate</b>												
Amman	64.2	3.6	2.2	6.6	2.6	2.7	4.5	7.6	4.7	1.4	100.0	4,442
Balqa	55.6	0.7	0.6	11.3	4.1	3.9	5.3	12.6	5.3	0.6	100.0	645
Zarqa	61.6	1.7	1.1	9.1	3.2	4.2	4.9	10.4	3.8	0.0	100.0	1,645
Madaba	61.1	4.2	2.2	10.4	3.3	5.2	3.9	6.7	2.9	0.1	100.0	262
Irbid	59.3	2.5	1.9	9.5	2.2	4.0	4.6	11.3	4.3	0.6	100.0	1,993
Mafraq	52.6	3.9	1.5	10.8	3.2	4.0	4.9	13.4	4.7	1.0	100.0	460
Jarash	49.2	3.2	1.7	12.2	3.4	5.6	6.3	13.0	5.1	0.2	100.0	293
Ajloun	58.2	2.9	2.2	8.8	2.6	3.9	4.9	10.8	5.4	0.2	100.0	228
Karak	51.2	3.9	1.4	10.1	4.5	3.6	5.6	12.0	5.2	2.5	100.0	378
Tafiela	59.9	1.8	0.7	9.7	2.7	3.4	5.4	9.0	5.6	2.0	100.0	146
Ma'an	52.6	1.1	1.1	14.9	3.6	4.7	4.9	9.2	5.4	2.3	100.0	164
Aqaba	60.3	1.2	1.1	11.1	4.1	4.3	4.5	7.1	5.2	1.1	100.0	221
<b>Region</b>												
Central	62.7	2.9	1.8	7.7	2.9	3.2	4.6	8.7	4.5	1.0	100.0	6,993
North	57.2	2.8	1.8	9.9	2.5	4.1	4.9	11.7	4.6	0.6	100.0	2,975
South	55.1	2.4	1.2	11.2	3.9	3.9	5.2	9.8	5.3	2.0	100.0	908
<b>Badia area</b>												
Badia	52.9	4.5	1.7	11.3	3.6	4.3	3.7	12.4	4.0	1.6	100.0	823
Other	61.2	2.7	1.7	8.4	2.8	3.5	4.8	9.4	4.6	0.9	100.0	10,053
<b>Education</b>												
No education	52.6	3.3	1.0	14.1	2.6	4.0	6.1	12.9	2.0	1.4	100.0	416
Elementary	54.1	5.2	1.2	8.3	1.3	4.6	4.1	14.0	4.1	3.2	100.0	813
Preparatory	52.6	3.0	2.6	10.7	3.4	3.8	4.3	12.5	6.3	0.9	100.0	1,681
Secondary	59.3	2.8	2.1	9.1	3.0	3.6	5.4	9.7	4.6	0.4	100.0	4,788
Higher	69.3	2.1	0.9	6.1	2.9	2.9	4.0	6.4	4.1	1.2	100.0	3,179
<b>Wealth quintile</b>												
Lowest	56.2	3.2	1.5	8.5	3.5	4.8	5.0	11.9	3.8	1.6	100.0	2,211
Second	58.0	2.0	2.2	10.0	2.7	4.2	4.8	10.7	4.8	0.7	100.0	2,296
Middle	58.2	3.3	2.3	9.7	3.2	3.2	4.8	9.6	5.0	0.8	100.0	2,206
Fourth	63.5	2.8	1.1	8.5	2.9	3.1	5.0	7.6	4.9	0.7	100.0	2,135
Highest	67.6	2.7	1.6	6.2	2.1	2.3	4.1	8.0	4.3	1.1	100.0	2,028
Total	60.5	2.8	1.7	8.6	2.9	3.5	4.7	9.6	4.6	0.9	100.0	10,876

As expected, kinship marriages are more common among rural women (49 percent) than among urban women (38 percent). Women in the North and South regions are more likely than those in the Central region to marry a relative (43 and 45 percent respectively, compared to 37 percent). The same is true for women in Badia areas compared to non-Badia areas (47 percent compared to 39 percent). Data reveal also that there are significant differences in kinship marriages by governorates. Women in Amman, Zarqa, Madaba, and Aqaba are more likely to marry a non-relative than women in other governorates. Further, less educated women are more likely to marry a relative than higher educated women: 31 percent of women with higher than secondary education married a relative, while 47 percent of women with no education did so.

Little variations in consanguineous marriage exist by current age, with the exception of women aged 45-49, where kinship marriages are more common than among women in other age groups. Age at first marriage has an inverse relationship with kinship marriages; women who married at younger ages were more likely to marry a relative than those who first married at older ages. Data also show that there is an inverse relationship with household wealth quintile and kinship marriage: women in the poorest households are more likely to marry relatives than those living in the wealthiest households (44 percent in lowest quintile compared to 32 percent in the highest wealth quintile). Table 6.4 also shows that there are no significant differences in consanguinity among women according to duration of marriage. Women who married more than once are less likely to be in a consanguineous marriage.

#### 6.4 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. In Jordan, the minimum age at marriage for both sexes is 18 years.

Table 6.5 shows the percentages of women who have ever married by specified ages and the median age at first marriage according to their age at the time of the survey. Comparing percentages across age groups, the data indicate an increase in women's age at first marriage. For example, among women aged 20-24, only 1 percent were married by age 15, 10 percent by age 18, and 22 percent by age 20. For women aged 25-29, the percentages at each specific age are all higher than those for the younger women. Older women married at even younger ages: 6 percent of women aged 45-49 were married by age 15, compared with less than 2 percent of women aged 30-34. This holds for all other ages at first marriage.

Current age	Percentage first married by exact age:					Percentage never married	Number of women	Median age at first marriage
	15	18	20	22	25			
15-19	0.3	na	na	na	na	94.2	4,091	a
20-24	1.1	9.6	21.9	na	na	63.3	3,478	a
25-29	1.4	13.0	25.6	40.2	58.9	30.7	2,852	23.3
30-34	1.7	15.3	30.9	45.7	63.0	20.6	2,786	22.7
35-39	1.8	14.8	32.0	49.9	66.9	14.6	2,404	22.0
40-44	3.4	23.4	39.3	55.1	73.4	8.4	2,057	21.2
45-49	6.3	28.8	47.7	60.3	79.1	4.1	1,292	20.4
20-49	2.2	15.7	30.6	na	na	28.4	14,869	a
25-49	2.5	17.6	33.2	48.6	66.5	17.8	11,391	22.2

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

The last column in Table 6.5 provides further indications of later marriage among younger women. The median age at first marriage has steadily increased, from 20.4 years among the cohort of women aged 45-49 at the time of the survey to 23.3 years among the cohort of women aged 25-29 at the time of the survey. The trend toward later marriage is supported, as mentioned earlier, by data showing that the proportion of women who married by age 15 has declined from 6 percent among women aged 45-49 to less than 1 percent among women aged 15-19. Overall, among Jordanian women aged 25-49, 18 percent of women were married by age 18 and one in three was married by age 20. While the median age at first marriage increased significantly between 1990 and 2002 (from 19.6 to 21.8 years), there was a very slight change between 2002 and 2007 (from 21.8 to 22.2 years).

Data reveal that there are only minor differences in median age at first marriage by residence and region. However, there are significant variations by governorates: median age at first marriage varies from 21.1 years in Aqaba to 23.8 years in Karak. Education plays an important role in determining women's age at marriage (Table 6.6). The improvement of educational opportunities, particularly for girls, has increased their age at first marriage. Women with secondary education tend to marry almost two years later than those with no education or with an elementary or preparatory education, while the median age at first marriage for women with a higher than secondary education is 24.7 years. Thus, women with higher than secondary education marry at least five years later than those with no education or than those with elementary or preparatory education. The table also shows that women in the highest wealth quintile tend to get married at older ages than those in other wealth quintiles.

## 6.5 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 6.7. Overall, nine in ten women stated that the most recent sexual intercourse was during the four weeks prior to the day of interview, 8 percent during the year preceding the survey, and 1 percent during one or more years before the survey.

Table 6.6 Median age at first marriage

Median age at first marriage among women age 25-49 by five-year age groups, according to background characteristics, Jordan 2007

Background characteristic	Age					Women age 25-49
	25-29	30-34	35-39	40-44	45-49	
<b>Residence</b>						
Urban	23.1	22.6	22.1	21.3	20.4	22.2
Rural	24.5	23.4	21.6	21.1	20.2	22.5
<b>Governorate</b>						
Amman	23.3	23.5	22.4	21.0	20.4	22.4
Balqa	24.3	23.4	22.6	21.8	21.4	23.0
Zarqa	22.3	21.2	22.2	20.8	20.5	21.5
Madaba	24.2	22.9	22.0	21.5	20.6	22.5
Irbid	23.3	22.6	21.6	22.0	20.7	22.2
Mafraq	23.5	20.9	21.2	20.5	19.6	21.5
Jarash	23.2	21.7	21.3	21.0	18.9	21.7
Ajloun	23.7	22.1	21.2	22.3	20.3	22.2
Karak	a	25.4	23.2	22.0	20.9	23.8
Tafiela	23.7	21.8	21.7	19.3	17.6	21.5
Ma'an	23.3	22.7	20.7	20.6	18.8	21.7
Aqaba	22.7	21.0	20.7	20.2	19.2	21.1
<b>Region</b>						
Central	23.1	22.8	22.3	21.1	20.6	22.2
North	23.4	22.1	21.5	21.7	20.3	22.0
South	24.3	23.4	21.9	20.9	19.4	22.4
<b>Badia area</b>						
Badia	23.4	21.7	21.3	20.2	19.5	21.7
Other	23.3	22.8	22.1	21.3	20.5	22.2
<b>Education</b>						
No education	a	22.2	20.4	18.9	18.5	19.7
Elementary	20.7	22.3	21.8	18.9	17.8	19.4
Preparatory	20.6	18.7	20.0	18.0	18.3	19.0
Secondary	21.3	21.7	20.9	21.0	20.5	21.2
Higher	a	24.7	24.3	24.1	24.1	24.7
<b>Wealth quintile</b>						
Lowest	22.5	22.4	21.7	22.3	20.4	22.2
Second	22.5	21.3	21.9	20.5	19.3	21.6
Middle	22.9	22.5	22.0	20.9	19.9	21.9
Fourth	23.8	22.7	22.5	21.2	19.7	22.3
Highest	a	24.7	21.8	21.5	21.8	23.1
Total	23.3	22.7	22.0	21.2	20.4	22.2

a = Omitted because less than 50 percent of the women married for the first time before reaching the beginning of the age group

Table 6.7 Recent sexual activity

Percent distribution of currently married women age 15-49 by timing of last sexual intercourse, according to background characteristics, Jordan 2007

Background characteristic	Timing of last sexual intercourse				Total	Number of women
	Within the past 4 weeks	Within 1 year <sup>1</sup>	One or more years	Missing		
<b>Age</b>						
15-19	90.0	10.0	0.0	0.0	100.0	233
20-24	91.2	8.3	0.5	0.1	100.0	1,233
25-29	89.6	9.7	0.6	0.2	100.0	1,932
30-34	92.0	7.1	0.6	0.3	100.0	2,127
35-39	92.7	6.4	0.7	0.2	100.0	1,968
40-44	90.5	7.0	1.8	0.7	100.0	1,746
45-49	86.2	9.5	4.1	0.2	100.0	1,115
<b>Marital duration</b>						
0-4 years	88.0	11.1	0.7	0.2	100.0	2,133
5-9 years	92.2	7.1	0.4	0.3	100.0	2,119
10-14 years	94.1	5.4	0.4	0.1	100.0	1,805
15-19 years	92.6	5.5	1.4	0.5	100.0	1,705
20-24 years	89.5	7.3	2.7	0.6	100.0	1,301
25+ years	86.4	10.3	3.0	0.3	100.0	1,050
Married more than once	85.8	13.7	0.5	0.0	100.0	241
<b>Current contraceptive method</b>						
Not using	84.3	12.9	2.5	0.3	100.0	4,442
Pill	95.7	4.1	0.0	0.2	100.0	875
IUD	95.4	4.0	0.1	0.5	100.0	2,307
Condom	96.9	3.1	0.0	0.0	100.0	544
Female sterilization	90.5	8.0	1.4	0.1	100.0	384
Periodic abstinence	96.1	3.9	0.0	0.0	100.0	424
Withdrawal	96.2	3.6	0.0	0.2	100.0	1,117
Lactational amenorrhea	92.2	7.7	0.0	0.2	100.0	142
Other	97.7	1.6	0.0	0.6	100.0	119
<b>Residence</b>						
Urban	90.5	8.0	1.1	0.3	100.0	8,803
Rural	91.3	7.1	1.3	0.3	100.0	1,551
<b>Governorate</b>						
Amman	88.5	9.8	1.4	0.2	100.0	4,242
Balqa	92.0	6.9	0.8	0.4	100.0	620
Zarqa	94.3	4.5	1.0	0.1	100.0	1,548
Madaba	94.0	5.2	0.6	0.1	100.0	248
Irbid	91.1	7.5	1.1	0.3	100.0	1,892
Mafraq	90.4	7.9	1.3	0.4	100.0	441
Jarash	93.8	5.2	0.9	0.1	100.0	278
Ajloun	91.2	7.6	1.0	0.2	100.0	218
Karak	89.3	9.3	0.9	0.5	100.0	363
Tafiela	92.4	5.9	0.7	1.0	100.0	139
Ma'an	91.4	5.3	1.8	1.5	100.0	154
Aqaba	90.9	7.2	1.1	0.8	100.0	212
<b>Region</b>						
Central	90.4	8.2	1.2	0.2	100.0	6,658
North	91.3	7.3	1.1	0.3	100.0	2,830
South	90.6	7.5	1.1	0.8	100.0	867
<b>Badia area</b>						
Badia	91.0	7.5	1.2	0.2	100.0	783
Other	90.6	7.9	1.2	0.3	100.0	9,571
<b>Education</b>						
No education	86.8	6.1	6.7	0.5	100.0	365
Elementary	93.5	5.0	1.4	0.1	100.0	734
Preparatory	91.3	7.2	1.0	0.4	100.0	1,581
Secondary	90.7	8.2	0.8	0.4	100.0	4,586
Higher	90.1	8.7	1.0	0.2	100.0	3,089
<b>Wealth quintile</b>						
Lowest	91.4	6.6	1.9	0.1	100.0	2,083
Second	92.2	7.0	0.7	0.1	100.0	2,184
Middle	91.7	7.0	0.8	0.5	100.0	2,104
Fourth	92.6	6.4	0.7	0.3	100.0	2,018
Highest	85.2	12.6	1.7	0.5	100.0	1,966
Total	90.7	7.9	1.2	0.3	100.0	10,354

<sup>1</sup> Excludes women who had sexual intercourse in the past 4 weeks

Variations of the frequency of recent sexual intercourse (in the four weeks preceding the interview) do not follow a clear pattern by age and duration of marriage. No significant differences in the frequency of recent sexual intercourse were noticed according to urban-rural residence, region, governorate, or Badia areas. However, users of contraception were more likely than nonusers to have had sexual intercourse with their husbands during the four weeks prior to the interview (95 percent compared to 84 percent).

## 6.6 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 (see Chapter 11), 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 *x* months 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 6.8 presents the proportion of births in the 36 months preceding the survey for which mothers are amenorrheic, abstaining and insusceptible. Fifteen percent of mothers had not experienced the return of menstruation and 6 percent had not resumed sexual relations following their last birth. Combining the two conditions indicates that for 16 percent of births, mothers were still insusceptible to the risk of pregnancy. The mean duration of amenorrhea is about six months; the mean duration of abstinence is about three months.

For 90 percent of births, mothers were still amenorrheic up to two months following childbirth. The percentage drops to 56 between two and three months after birth, and drops further to 35 percent in the next 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 2007 JPFHS data. Mothers of 77 percent of the children born during the two months before the survey were still abstaining from sexual relations at the time

Table 6.8 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 2007

Months since birth	Percentage of births for which the mother is:			Number of births
	Amenorrheic	Abstaining	Insusceptible <sup>1</sup>	
< 2	90.3	77.0	94.3	269
2-3	56.1	20.8	60.6	410
4-5	34.9	2.6	35.6	373
6-7	24.3	2.8	26.7	351
8-9	21.0	0.0	21.0	311
10-11	12.3	2.0	14.2	288
12-13	9.5	3.9	13.3	305
14-15	5.7	4.2	8.6	322
16-17	1.0	1.3	2.4	313
18-19	1.0	2.6	3.6	309
20-21	1.8	0.0	1.8	325
22-23	0.0	0.0	0.0	298
24-25	0.2	0.0	0.2	352
26-27	0.3	0.6	0.9	333
28-29	0.0	0.4	0.4	283
30-31	0.3	0.1	0.4	317
32-33	1.6	1.8	3.4	320
34-35	0.1	0.0	0.1	310
Total	14.8	6.3	16.3	5,791
Median	3.3	1.7	3.6	na
Mean	5.5	2.8	6.0	na

Note: Estimates are based on status at the time of the survey interview.  
na = Not applicable

<sup>1</sup> Includes births for which mothers are either still amenorrheic or still abstaining (or both) following birth

of the survey. For births two and three months before the survey, 21 percent of mothers were still abstaining, with the percentage declining to less than 2 percent in subsequent months.

Table 6.9 presents the median duration of postpartum amenorrhea (3.3 months), postpartum abstinence (1.7 months), and postpartum insusceptibility (3.6 months). There is no clear pattern for the three medians by background characteristics. For example, the duration of postpartum amenorrhea and, consequently, insusceptibility substantially vary by level of education, without following a clear pattern: the median duration of amenorrhea among women with elementary education (5.0 months) is about twice the median among women with no education and those with higher education (2.1 and 2.8 months, respectively).

Table 6.9 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 2007			
Background characteristic	Postpartum amenorrhea	Postpartum abstinence	Postpartum insusceptibility <sup>1</sup>
<b>Mother's age</b>			
15-29	3.0	1.7	3.3
30-49	3.7	1.8	4.1
<b>Residence</b>			
Urban	3.3	1.7	3.7
Rural	3.3	1.8	3.5
<b>Governorate</b>			
Amman	3.1	1.7	3.7
Balqa	3.9	1.8	4.0
Zarqa	3.1	1.3	3.2
Madaba	2.7	1.3	2.7
Irbid	3.3	1.8	3.4
Mafrq	4.2	2.1	4.2
Jarash	3.4	1.7	3.4
Ajloun	3.7	1.8	3.8
Karak	3.3	1.7	3.6
Tafiela	3.8	1.9	3.9
Ma'an	4.1	1.5	4.2
Aqaba	2.8	1.8	3.1
<b>Region</b>			
Central	3.2	1.6	3.6
North	3.5	1.8	3.6
South	3.4	1.7	3.6
<b>Badia area</b>			
Badia	3.2	1.8	3.3
Other	3.3	1.7	3.7
<b>Education</b>			
No education	2.1	1.4	2.2
Elementary	5.0	1.8	5.0
Preparatory	4.2	1.8	4.5
Secondary	3.3	1.6	3.6
Higher	2.8	1.9	3.2
<b>Wealth quintile</b>			
Lowest	3.5	1.7	3.6
Second	4.0	1.9	4.3
Middle	2.9	1.8	3.5
Fourth	3.1	1.1	3.4
Highest	2.5	1.8	2.8
Total	3.3	1.7	3.6

Note: Medians are based on the status at the time of the survey (current status).  
<sup>1</sup> Includes births for which mothers are either still amenorrheic or still abstaining (or both) following birth

## 6.7 MENOPAUSE

This section addresses menopause (i.e. termination of exposure to pregnancy and childbearing) for women aged 30-49. Exposure to pregnancy is affected by the terminal amenorrhea of older women. Table 6.10 shows the percentage of women aged 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 6.10 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 about 2 percent among women aged 40-43 to 12 percent among those aged 46-47, then further to more than one-fifth for older women (ages 48-49).

Table 6.10 Menopause

Percentage of women age 30-49 who are menopausal, by age, Jordan 2007

Age	Percentage menopausal <sup>1</sup>	Number of women
30-34	0.5	2,213
35-39	0.8	2,052
40-41	1.6	821
42-43	1.6	742
44-45	5.0	552
46-47	12.3	500
48-49	22.1	508
Total	3.4	7,387

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

This chapter addresses questions about the need for contraception and the extent of unwanted fertility. Information collected from respondents includes whether they want more children and, if so, the gender they would prefer and how long they would want to wait before their next child. The 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, since 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.

## 7.1 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. The data on fertility preference also provide information on the potential need for contraceptive services for spacing and limiting births.

Table 7.1 and Figure 7.1 show that half (51 percent) of currently married women want no more children at any time in the future, including 4 percent who are sterilized. These figures show an increase of about seven percentage points since the 2002 JPFHS (44 percent). The findings also show that about 26 percent of currently married women want to have another child later (after two or more years); this figure is about five percentage points less than that recorded in the 2002 JPFHS (31 percent). In general, about 73 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 2002 JPFHS (72 percent).

The desire for childbearing is strongly associated with the number of children that a woman has. It is found that 88 percent of women who have not started childbearing by the time of the survey want to have a child, and the majority of them (86 percent) want to have this child soon, that is, within the next two years. About 89 percent of women who have one child want to have another child, but the majority (55 percent) want to wait for 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 22 percent among women who have two children to 89 percent among those with six children or more, including 11 percent who are sterilized. More than 11 percent of childless women declared themselves infecund, probably because they are or believe that they are sterile. The proportions of both sterilized and infecund women have increased since the 2002 JPFHS.

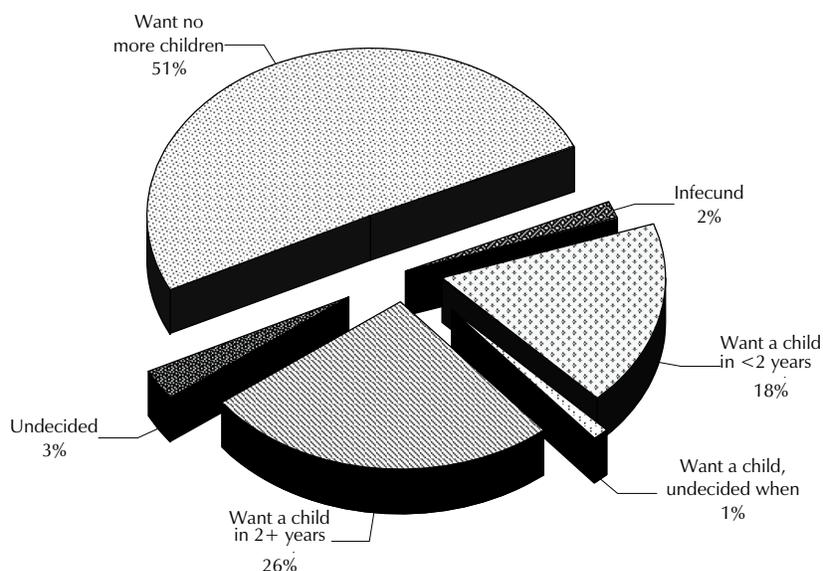
Table 7.1 Fertility preferences by number of living children

Percent distribution of currently married women age 15-49 by desire for children, according to number of living children, Jordan 2007

Desire for children	Number of living children <sup>1</sup>							Total
	0	1	2	3	4	5	6+	
Have another soon <sup>2</sup>	85.6	34.4	20.7	16.3	11.0	5.1	3.1	17.9
Have another later <sup>3</sup>	2.2	55.0	51.8	38.3	19.5	9.8	4.7	25.8
Have another, undecided when	0.1	1.9	1.8	1.3	1.0	0.9	1.1	1.2
Undecided	0.2	1.9	3.5	4.6	3.7	4.3	1.3	3.0
Want no more	0.7	5.2	21.6	37.6	60.9	74.2	77.6	46.8
Sterilized	0.0	0.0	0.3	1.3	3.1	4.1	10.9	3.7
Declared infecund	11.2	1.7	0.4	0.6	0.8	1.5	1.3	1.6
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	622	1,135	1,507	1,794	1,701	1,286	2,311	10,354

<sup>1</sup> The number of living children includes current pregnancy  
<sup>2</sup> Wants next birth within 2 years  
<sup>3</sup> Wants to delay next birth for 2 or more years

**Figure 7.1 Fertility Preferences of Currently Married Women 15-49**



JPFHS 2007

Differentials in the desire to stop childbearing are presented in Table 7.2. 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 those women in the North region. This preference also varies according to governorates (ranging from 44 percent in Mafraq to 56 percent in Tafiela) and according to residence in Badia areas (46 percent of women living in Badia areas compared to 51 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.

Background characteristic	Number of living children <sup>1</sup>							Total
	0	1	2	3	4	5	6+	
<b>Residence</b>								
Urban	0.6	5.5	23.0	39.3	66.0	79.8	88.7	50.8
Rural	1.3	3.4	14.5	35.3	51.1	70.1	87.7	48.9
<b>Governorate</b>								
Amman	0.0	6.1	28.8	43.0	70.3	80.3	88.8	50.9
Balqa	1.8	5.0	15.8	38.4	60.4	77.4	89.1	50.9
Zarqa	0.0	1.4	18.8	41.5	64.3	82.0	92.4	54.0
Madaba	10.9	5.7	15.5	38.7	61.2	78.7	89.1	50.1
Irbid	1.9	6.3	15.5	29.7	57.2	80.3	85.0	48.2
Mafraq	1.5	3.1	9.8	27.3	42.0	60.9	84.1	43.5
Jarash	0.0	2.7	10.4	26.4	62.0	56.3	89.5	46.8
Ajloun	0.0	4.0	9.8	30.8	48.7	66.1	87.8	46.3
Karak	0.0	3.0	26.0	42.8	60.8	77.6	90.6	52.2
Tafiela	0.0	4.9	19.5	39.9	51.9	75.4	93.1	55.7
Ma'an	0.0	8.8	17.9	37.2	61.8	74.2	90.3	52.6
Aqaba	2.0	3.5	18.6	41.1	65.5	76.9	88.6	52.5
<b>Region</b>								
Central	0.5	5.2	25.0	42.2	67.7	80.4	89.8	51.6
North	1.5	5.3	13.7	29.1	54.7	73.8	85.6	47.2
South	0.4	4.4	21.5	41.0	60.7	76.6	90.6	52.9
<b>Badia area</b>								
Badia	0.8	2.5	14.7	33.7	52.8	64.2	85.0	45.9
Other	0.7	5.4	22.5	39.2	64.7	79.3	88.9	50.9
<b>Education</b>								
No education	2.7	25.5	49.5	65.9	70.5	79.6	88.7	73.2
Elementary	0.7	1.0	28.4	39.6	65.1	71.9	88.4	63.2
Preparatory	0.7	0.7	20.6	41.3	62.0	75.6	90.4	61.5
Secondary	0.2	5.6	20.2	36.7	61.3	78.4	88.3	47.5
Higher	1.3	5.2	22.8	40.3	68.5	82.0	86.0	43.7
<b>Wealth quintile</b>								
Lowest	0.7	6.4	11.7	40.2	51.5	69.2	85.8	41.8
Second	0.0	2.6	12.9	29.4	59.1	80.2	86.1	46.7
Middle	0.2	9.4	27.1	35.5	59.1	77.7	90.6	51.3
Fourth	2.3	3.0	17.9	45.2	64.6	79.9	88.9	54.6
Highest	0.4	3.5	40.9	44.4	81.7	81.8	92.0	59.1
Total	0.7	5.2	21.9	38.9	64.0	78.3	88.5	50.5

Note: Women who have been sterilized are considered to want no more children.  
<sup>1</sup> 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 73 percent among uneducated women to 44 percent among women who have more than secondary education. However, the fact that the effect of education diminishes when these women are analyzed by their number of living children suggests that the reason uneducated women are more likely to want to stop childbearing is that they already have more children than educated women.

The data presented in Table 7.2 also show that there is a positive association between the desire of women to stop childbearing and household wealth quintile. The percentage of women who want no more children increases as the wealth quintile increases (from 42 percent of women in the lowest quintile to 59 percent of women in the highest quintile). This also holds for when analyzing data on the basis of number of living children.

## 7.2 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 this analysis, unmet need for family planning is defined as pertaining to women 1) who are pregnant or amenorrheic and not using any method of family planning and whose last birth was mistimed or unwanted and 2) women who are neither pregnant nor amenorrheic and who are not using any method of family planning and say either that they want to delay their next childbirth for at least two years or that they want no more children.

Table 7.3 presents information on the need for family planning services. The distribution of women who have an unmet need for family planning is shown in columns 1-3. Columns 4-6 show the distribution of women whose need for family planning has been met, i.e., women who are currently using a family planning method for spacing (want to wait 2 years or more for their next child) or for limiting births (want no more children).

The total demand for family planning is shown in columns 7-9. Total demand is defined as the total number of women who have unmet need plus those women whose need has been met (current users).<sup>1</sup> Column 10 of the table shows the percentage of the total demand for family planning that is satisfied – that is, the proportion of women using a method to the total demand.

Data in Table 7.3 indicate that 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 them (7 percent). Total unmet need in the 2007 JPFHS is slightly higher than that recorded in 2002, when 11 percent of women had an unmet contraceptive need. This is a result of an increase in unmet need for limiting births.

---

<sup>1</sup> Nonusers who are pregnant or amenorrheic and women whose pregnancy was the result of a contraceptive failure are not included in the category of unmet need, but are included in total demand for contraception (since they would have been using had their method not failed).

Table 7.3 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 for the demand for contraception that is satisfied, by background characteristics, Jordan 2007

Background characteristic	Unmet need for family planning <sup>1</sup>			Met need for family planning <sup>2</sup> (currently using)			Total demand for family planning <sup>3</sup>			Percentage of demand satisfied	Number of women
	For spacing	For limiting	Total	For spacing	For limiting	Total	For spacing	For limiting	Total		
<b>Age</b>											
15-19	9.1	0.1	9.2	24.2	0.2	24.4	37.3	0.3	37.6	75.6	233
20-24	11.7	1.0	12.7	37.4	6.8	44.2	52.0	8.1	60.1	78.8	1,233
25-29	8.7	3.3	12.0	39.5	10.6	50.1	51.3	14.9	66.2	81.8	1,932
30-34	4.6	4.4	9.0	33.1	29.4	62.5	39.6	34.1	73.7	87.8	2,127
35-39	2.5	6.9	9.4	13.2	50.7	63.9	16.7	59.2	75.9	87.7	1,968
40-44	1.3	12.6	13.9	3.2	63.4	66.6	4.5	76.9	81.5	83.0	1,746
45-49	0.5	18.1	18.6	1.2	51.9	53.1	1.8	70.0	71.8	74.1	1,115
<b>Residence</b>											
Urban	4.5	7.0	11.5	22.8	35.2	58.1	28.9	43.0	71.9	84.0	8,803
Rural	7.1	7.4	14.5	19.6	32.0	51.6	28.5	39.9	68.4	78.8	1,551
<b>Governorate</b>											
Amman	4.3	7.0	11.3	23.3	35.7	59.0	29.2	43.5	72.7	84.5	4,242
Balqa	5.0	6.6	11.6	20.0	34.6	54.6	26.4	41.4	67.8	82.9	620
Zarqa	3.2	6.1	9.4	21.1	38.1	59.2	25.8	44.7	70.4	86.7	1,548
Madaba	5.3	7.4	12.7	21.2	31.9	53.0	27.9	39.7	67.7	81.2	248
Irbid	5.9	7.3	13.2	23.0	33.1	56.2	30.8	41.4	72.2	81.8	1,892
Mafraq	8.2	7.0	15.2	22.8	26.7	49.5	32.6	34.5	67.1	77.3	441
Jarash	4.8	5.0	9.7	23.9	31.8	55.7	30.2	37.1	67.3	85.5	278
Ajloun	4.5	5.5	9.9	26.1	32.3	58.4	32.6	38.6	71.2	86.1	218
Karak	7.4	9.2	16.6	18.2	32.9	51.1	26.9	43.4	70.3	76.4	363
Tafiela	5.7	8.1	13.8	21.0	39.0	60.0	28.4	47.7	76.2	81.8	139
Ma'an	10.3	10.7	21.0	18.1	32.0	50.0	30.1	43.5	73.6	71.5	154
Aqaba	5.6	9.7	15.3	19.6	34.1	53.7	26.5	44.7	71.2	78.5	212
<b>Region</b>											
Central	4.1	6.8	10.9	22.4	36.0	58.4	28.1	43.5	71.5	84.7	6,658
North	6.0	6.9	12.9	23.3	31.9	55.2	31.2	39.7	70.9	81.8	2,830
South	7.2	9.4	16.6	18.9	34.0	53.0	27.6	44.4	72.0	76.9	867
<b>Badia area</b>											
Badia	9.2	9.5	18.7	20.1	25.5	45.6	31.4	35.3	66.7	72.0	783
Other	4.6	6.8	11.4	22.5	35.5	58.0	28.7	43.1	71.8	84.1	9,571
<b>Education</b>											
No education	2.4	14.5	17.0	7.5	36.4	43.9	10.4	51.3	61.7	72.5	365
Elementary	3.9	10.8	14.8	10.1	41.8	51.9	14.8	54.2	69.0	78.6	734
Preparatory	4.9	9.4	14.3	14.4	42.7	57.1	20.6	52.5	73.2	80.4	1,581
Secondary	5.6	6.1	11.8	25.1	33.1	58.1	32.5	40.2	72.7	83.8	4,586
Higher	4.3	5.4	9.7	27.0	31.3	58.3	33.3	37.0	70.3	86.2	3,089
<b>Wealth quintile</b>											
Lowest	7.9	7.0	14.9	23.5	24.6	48.1	33.3	32.6	65.9	77.3	2,083
Second	6.1	7.0	13.1	22.4	30.3	52.7	30.7	38.1	68.9	81.0	2,184
Middle	5.2	7.1	12.3	24.3	35.7	60.0	31.4	43.4	74.7	83.6	2,104
Fourth	2.6	5.8	8.4	22.2	41.4	63.7	26.1	48.4	74.5	88.7	2,018
Highest	2.4	8.2	10.7	19.1	42.6	61.7	22.4	50.9	73.3	85.4	1,966
<b>Total</b>	4.9	7.0	11.9	22.3	34.7	57.1	28.9	42.5	71.4	83.3	10,354

<sup>1</sup> *Unmet need for spacing*: Includes women who are fecund and not using family planning and who say they want to wait two or more years for their next birth, or who say they are unsure whether they want another child, or who want another child but are unsure when to have the child. In addition, unmet need for spacing includes pregnant women whose current pregnancy was mistimed, or whose last pregnancy was unwanted but who now say they want more children. Unmet need for spacing also includes amenorrheic women whose last birth was mistimed, or whose last birth was unwanted but who now say they want more children. *Unmet need for limiting*: Includes women who are fecund and not using family planning and who say they do not want another child. In addition, unmet need for limiting includes pregnant women whose current pregnancy was unwanted but who now say they do not want more children or who are undecided whether they want another child. Unmet need for limiting also includes amenorrheic women whose last birth was unwanted but who now say they do not want more children or who are undecided whether they want another child.

<sup>2</sup> *Using for spacing* is defined as women who are using some method of family planning and say they want to have another child or are undecided whether to have another. *Using for limiting* is defined as women who are using and who want no more children. Note that the specific methods used are not taken into account here.

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

Fifty-seven percent of women have a met need for contraception; in other words, they are currently using a method. Twenty-two percent of women are using contraception to delay their next birth, while 35 percent want to stop childbearing. When the proportion of women with a met need is combined with the proportion of women who are considered to have an unmet need, it is found that the total demand for family planning among currently married women in Jordan is 71 percent, of whom 83 percent of women have had their demand for family planning satisfied. Comparison with the findings of the 2002 JPFHS shows that the level of unmet need for family planning has not significantly changed (from 11 to 12 percent), compared with a 50 percent decline (from 22 percent to 11 percent) between 1990 and 2002. The proportion of total demand that is satisfied has decreased by 1 percentage point (from 84 percent to 83 percent) between 2002 and 2007. 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 varies little by age of the woman. Unlike unmet need for spacing births, unmet need for limiting births increases linearly with women's age, which is the combined effect of rising number of children as women age.

Unmet need is related to place of residence in urban-rural, region, governorate and Badia areas. Women living in rural areas, in the South region, in Badia areas and in Mafraq, Karak, Ma'an and Aqaba tend to have a greater unmet need than their counterparts in urban areas, other regions and governorates, and non-Badia areas. Twelve percent of urban women have an unmet need, as compared with 15 percent for rural women. Because urban women are more likely than rural women to use contraception (58 percent and 52 percent, respectively), a greater percentage of their total demand for family planning is satisfied.

Unmet need is also associated with education. Women with no education have a higher level of unmet need (17 percent) than women who have secondary or higher education (12 and 10 percent, respectively). 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 quintile. Unmet need is greater among women in the lowest wealth quintile (15 percent) than in the other wealth quintiles.

### **7.3 IDEAL NUMBER OF CHILDREN**

The focus of this chapter has been 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 (see Table 7.4). The data in Table 7.4 can be grouped into three categories. The first group is women who have reached their ideal family size – i.e., women whose ideal number of children is exactly the same as their number of living children; it is represented by diagonal figures from 0 to 6+ children. The second group consists of women whose surviving children have exceeded their ideal family size (shown by the figures above the diagonal); the last group consists of women who have not reached their ideal family size (shown by the figures 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).

**Table 7.4 Ideal number of children**  
Percent distribution of women 15-49 by ideal number of children, and mean ideal number of children for all women and for currently married women, according to number of living children, Jordan 2007

Ideal number of children	Number of living children <sup>1</sup>							Total
	0	1	2	3	4	5	6+	
0	1.3	1.4	2.6	1.9	2.8	1.5	2.2	2.1
1	5.2	1.6	1.6	1.9	0.2	0.4	0.3	1.2
2	24.1	22.1	20.8	13.6	10.5	8.3	4.2	13.1
3	13.2	19.2	11.2	11.2	6.5	7.6	5.3	9.7
4	31.0	32.3	42.2	41.1	43.7	31.6	29.6	36.3
5	3.9	4.9	5.6	8.7	7.5	16.2	7.9	8.1
6+	5.4	4.2	4.1	8.0	11.9	15.1	23.6	11.8
Non-numeric responses	16.0	14.3	11.9	13.6	16.9	19.4	26.9	17.7
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number	737	1,215	1,590	1,860	1,754	1,333	2,387	10,876
<b>Mean ideal number children for:<sup>2</sup></b>								
All women	3.2	3.4	3.4	3.8	4.0	4.4	4.8	3.9
Number	619	1,041	1,401	1,607	1,458	1,075	1,744	8,946
Currently married women	3.3	3.4	3.4	3.8	4.0	4.4	4.8	4.0
Number	522	988	1,330	1,551	1,417	1,043	1,694	8,546

<sup>1</sup> The number of living children includes current pregnancy.  
<sup>2</sup> Means are calculated excluding women who gave non-numeric responses.

The data in Table 7.4 indicate that more than one-half of women (56 percent) consider the ideal family size to be at least 4 children, compared with 70 percent in the 2002 JPFHS. Only 13 percent of ever-married women report an ideal family size of two children, the number that is required for replacement level fertility. The mean ideal number of children is 3.9 among ever-married women and 4.0 among currently married women. Of concern to family planning program managers is the fact that half of women with 6 or more children have already exceeded their ideal family size, in many cases, by 2 children or more.

Compared with the 2002 JPFHS, the percentage of women in the 2007 JPFHS who did not give a numeric response to the hypothetical question on ideal family size increased substantially from 4 percent to 18 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. Women who have one to three children are most likely to state a numeric ideal family size; childless women are less likely to do so, perhaps indicating either that they want to have as many children as possible or that they have reached the end of their reproductive years, or that they have given up hope of having a child. Women who already have five or more children may avoid specifying a number, possibly because they have exceeded their ideal family size. Because of the significant increase in the percentage of women who did not give a numeric answer between 2002 and 2007, comparison of the mean ideal number of children (which is based only on women who gave a numeric answer) should be made with caution.

Table 7.5 presents the mean ideal number of children by background characteristics. The mean ideal number of children in Jordan increases with age, from 3.6 children for ever-married women in the youngest age group (15-19) to 4.1 children among women aged 35-39 and to 4.4 among the oldest women (45-49). This trend indicates that the ideal family size has decreased in the younger cohorts. In general, women living in rural areas, women in the North and South regions, in Badia areas, and women in Balqa, Mafraq, Jarash and Ajloun have a slightly higher ideal family size.

Ideal number of children is also associated with education. Women with no education have a higher ideal number of children (4.7) than women who have secondary or higher education (3.9 and 3.8, respectively). The ideal number of children does not show a clear association with household wealth.

Table 7.5 Mean ideal number of children

Mean ideal number of children for all ever-married women age 15-49 by background characteristics, Jordan 2007

Background characteristic	Mean	Number of women <sup>1</sup>
<b>Age</b>		
15-19	3.6	202
20-24	3.7	1,118
25-29	3.7	1,674
30-34	3.8	1,848
35-39	4.1	1,679
40-44	4.3	1,503
45-49	4.4	922
<b>Residence</b>		
Urban	3.9	7,667
Rural	4.2	1,279
<b>Governorate</b>		
Amman	3.8	3,929
Balqa	4.2	489
Zarqa	4.1	1,249
Madaba	3.7	204
Irbid	4.1	1,579
Mafrq	4.2	347
Jarash	4.3	223
Ajloun	4.3	169
Karak	3.9	336
Tafiela	4.1	117
Ma'an	4.1	132
Aqaba	4.0	171
<b>Region</b>		
Central	3.9	5,872
North	4.1	2,318
South	4.0	757
<b>Badia area</b>		
Badia	4.1	630
Other	3.9	8,316
<b>Education</b>		
No education	4.7	261
Elementary	4.1	603
Preparatory	4.2	1,293
Secondary	3.9	4,035
Higher	3.8	2,753
<b>Wealth quintile</b>		
Lowest	3.9	1,740
Second	4.0	1,890
Middle	3.9	1,803
Fourth	4.0	1,753
Highest	3.8	1,761
Total	3.9	8,946

<sup>1</sup> Number of women who gave a numeric response

## 7.4 PLANNING STATUS OF BIRTHS

Respondents in the 2007 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 yielded 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 truthfulness, 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 7.6 shows that about three-quarters (74 percent) of births during the five years preceding the survey were wanted at the time of conception, 15 percent were wanted later, and 11 percent were not wanted at all at the time of conception. The percentage of births wanted when conceived has significantly increased between 2002 and 2007 (from 67 to 74 percent), indicating better reproductive control exercised by couples. The percentage of births wanted at conception is negatively associated with birth order; conversely, the percentage of unwanted births increases with birth order. In other words, higher order (later) births are more likely than first or second births to have been either mistimed or unwanted. The low percentage of first births wanted later or not wanted at all indicates that almost all first order births are wanted.

Table 7.6 Fertility planning status						
Percent distribution of births to women 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 2007						
Birth order and mother's age at birth	Planning status of birth				Total	Number of births
	Wanted then	Wanted later	Wanted no more	Missing		
<b>Birth order</b>						
1	93.3	5.9	0.8	0.0	100.0	2,437
2	74.5	22.6	2.9	0.0	100.0	2,344
3	72.4	20.5	6.9	0.1	100.0	1,961
4+	63.5	12.9	23.5	0.1	100.0	4,436
<b>Mother's age at birth</b>						
<20	88.7	9.5	1.8	0.0	100.0	595
20-24	77.6	18.7	3.7	0.0	100.0	2,824
25-29	74.9	17.3	7.6	0.2	100.0	3,343
30-34	73.7	14.9	11.4	0.0	100.0	2,437
35-39	65.8	6.6	27.5	0.0	100.0	1,544
40-44	52.5	4.4	43.1	0.0	100.0	408
45-49	41.3	0.0	58.7	0.0	100.0	27
Total	73.9	14.7	11.3	0.0	100.0	11,179

Births to young women tend to be wanted, whereas births to older women are more likely to be unwanted (Table 7.6). Although 89 percent of births to women under 20 years of age were wanted at the time of conception, the percentage declines to 41 percent among women aged 45-49.

Another way of measuring the extent of unwanted fertility is to calculate the fertility rate if all unwanted births were avoided. This is known as the wanted fertility rate (Table 7.7). In Jordan, if all unwanted births were prevented, the total wanted fertility rate would be 2.8 children per woman, or 0.8 child less than the actual total fertility rate. That theoretical rate implies that the total fertility rate is inflated by 29 percent because of unwanted births. This is an improvement compared to 2002, when the TFR was inflated by 42 percent because of unwanted births.

Table 7.7 also shows that the gap between actual and wanted fertility rates is slightly higher among women living in the North and South regions, women residing in Badia areas, and women who have elementary education or who have preparatory education. Women in the Central region and those who have more than secondary education, who also have the lowest fertility, are generally more successful in narrowing the gap between wanted and actual fertility rates (0.7 and 0.6 child respectively).

Data indicate that the gap between wanted and actual fertility rates is higher among women in lowest wealth quintiles, in contrast women in highest wealth quintiles (who also have the lowest fertility) are more successful in narrowing the gap between wanted and actual fertility rates (ranging from 0.4 child in the highest wealth quintile to 1.1 child in the lowest wealth quintile).

Table 7.7 Wanted fertility rates

Total wanted fertility rates and total fertility rates for the three years preceding the survey, by background characteristics, Jordan 2007

Background characteristic	Total wanted fertility rate	Total fertility rate
<b>Residence</b>		
Urban	2.8	3.6
Rural	2.8	3.7
<b>Governorate</b>		
Amman	2.6	3.4
Balqa	2.9	3.7
Zarqa	3.1	3.8
Madaba	2.9	3.6
Irbid	2.8	3.8
Mafraq	3.0	4.0
Jarash	2.9	3.8
Ajloun	2.9	3.7
Karak	2.3	3.2
Tafiela	2.6	3.7
Ma'an	2.8	4.0
Aqaba	3.3	4.1
<b>Region</b>		
Central	2.8	3.5
North	2.9	3.8
South	2.7	3.6
<b>Badia area</b>		
Badia	3.2	4.2
Other	2.8	3.5
<b>Education</b>		
No education	1.8	2.6
Elementary	2.7	3.9
Preparatory	3.4	4.5
Secondary	3.0	3.9
Higher	2.6	3.2
<b>Wealth quintile</b>		
Lowest	3.7	4.8
Second	3.4	4.4
Middle	2.7	3.6
Fourth	2.1	2.8
Highest	2.1	2.5
Total	2.8	3.6

Note: Rates are calculated based on births to women age 15-49 in the period 1-36 months preceding the survey. The total fertility rates are the same as those presented in Table 4.3.

## INFANT AND CHILD MORTALITY

---

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 after the first month of life but before the first birthday (the difference between infant and neonatal mortality rates)

**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-five 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 individual questionnaire. In the 2007 JPFHS, each 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 has had. Next, the respondent was asked to give 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 his/her age at last birthday and whether the child lived with his/her mother. It should be noted that birth histories are often subject to inaccuracies in the reporting of events, errors that 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 the mortality data depends on 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 that their classification as child deaths tends to negatively bias infant mortality estimates and positively bias child mortality estimates. The distribution of death by age at death in months (see Table C.6 in Appendix C), shows that there is no heaping at 12 months for deaths reported during the most recent period (0-4 years prior to the survey), while a minor heaping appears during the preceding period (5-9 years prior to the survey). Therefore, current mortality levels (0-4 years prior to the survey) are not affected, while estimates for the period 5-9 years before are very slightly affected; however, the heaping is so limited that it does not justify any adjustment.

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 at coping with the elevated risks.

## 8.1 LEVELS AND TRENDS

It is seldom possible to establish mortality levels with confidence for a period of more than 15 years before a survey. Even within the recent 15-year period considered here, apparent trends in mortality rates should be interpreted with caution. First, completeness of death reporting may be affected by the length of time before the survey. Second, the accuracy of reports of age at death and of date of birth may deteriorate with time. Thus, without a detailed evaluation of the quality of birth history data (which is not attempted in this report), conclusions regarding changes in mortality should be made with caution.

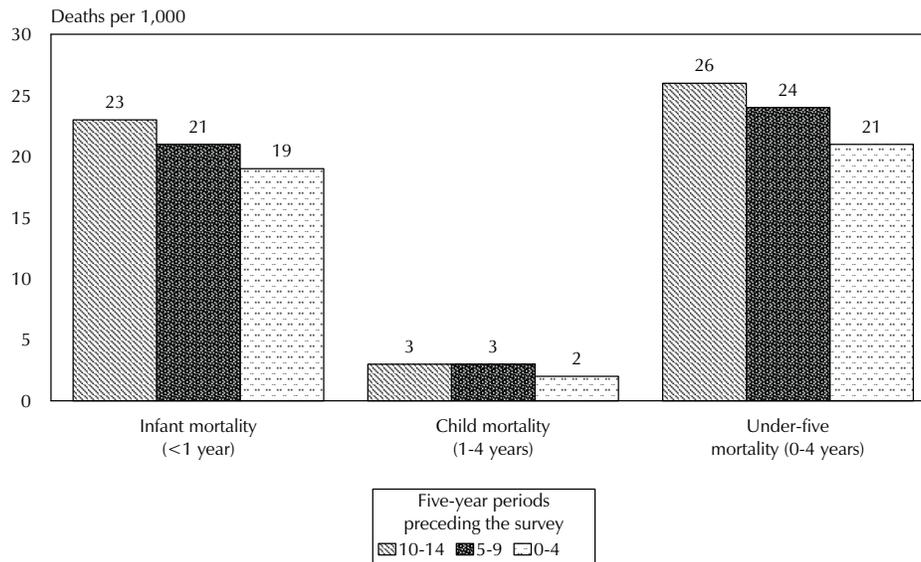
Table 8.1 shows early childhood mortality rates in the 15 years preceding the survey. The under-five mortality rate in the 0-4 years before the survey (2002-2007) was 21 deaths per 1,000 live births. Most deaths included in the under-five mortality rate occur during the first year of life, where the rate was 19 per 1,000 live births. The child mortality rate ( ${}_4q_1$ ) reached 2 per 1,000 children still living on their first birthday. As expected, neonatal mortality is higher than postneonatal mortality (14 per 1,000 and 6 per 1,000, respectively) and accounts for 74 percent of total infant mortality.

Years preceding the survey	Neonatal mortality (NN)	Postneonatal mortality <sup>1</sup> (PNN)	Infant mortality ( ${}_1q_0$ )	Child mortality ( ${}_4q_1$ )	Under-five mortality ( ${}_5q_0$ )
0-4	14	6	19	2	21
5-9	16	5	21	3	24
10-14	15	8	23	3	26
0-9	15	5	20	2	22

<sup>1</sup> Computed as the difference between the infant and neonatal mortality rates

It is apparent from Table 8.1 and Figure 8.1 that infant mortality has been declining steadily for many years – from 23 deaths per 1,000 live births during the period 10-14 years preceding the survey (around 1995) to 19 deaths during the five years preceding the survey (around 2005). However, child mortality has not changed during the last ten years. In general, under-five mortality declined from 26 deaths per 1,000 live births in the period 10-14 years preceding the survey to about 21 deaths per 1,000 in the last period (0-4 years).

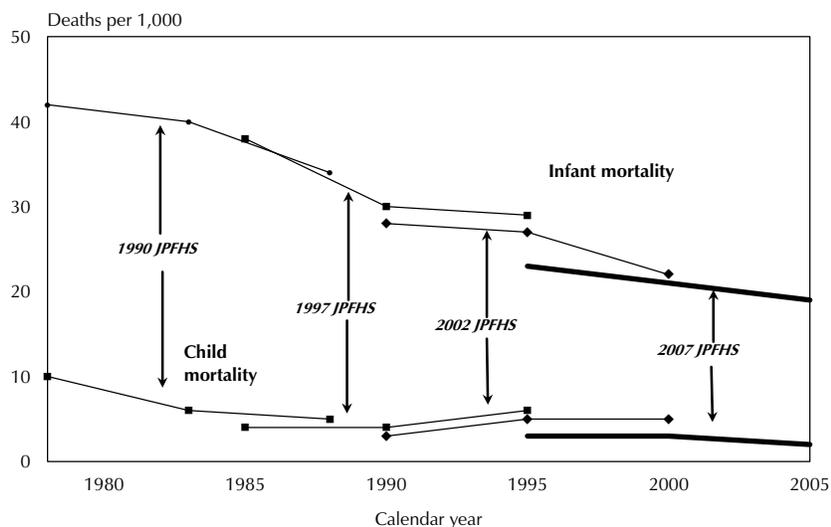
**Figure 8.1 Trends in Infant and Child Mortality by Five-year Periods**



JPFHS 2007

The rates presented in Table 8.1 approximate the calendar periods 2002-2007, 1997-2002 and 1992-1997. Because fieldwork for the 2007, the 2002, and the 1997 JPFHS was carried out in the third quarter of the year, whereas the 1990 JPFHS was fielded in the fourth quarter of the year, comparison between estimates derived from those surveys is not absolutely precise. However, for purposes of trend analysis, the results of the four surveys have been compared (Figure 8.2). Ideally, the estimates for overlapping periods should be the same; although the estimates from the four surveys are very close, they are not exact due to some discrepancies caused by internal biases in each of the estimates. It is apparent, however, that infant mortality has been declining for many years.

**Figure 8.2 Trends in Infant and Child Mortality, 1978-2005**



The pace of decline in infant and child mortality varies. Infant mortality shows a regular and continuous decline, from about 40 per thousand at the beginning of the 1980s, to about 30 per thousand at the beginning of the 1990s, and down to 19 per thousand at the beginning of the millennium in the most recent period. Child mortality declined at the beginning of the 1980s (from about 10 per thousand to 6 per thousand) and to 5 child deaths per thousand during the early part of this decade, but declined sharply and tangibly to 2 per thousand in 2007. It is also noted that there is a significant and tangible change during the last fifteen years of under-five mortality rate. To understand the differences in the patterns of decline between infant and child mortality, it should be recognized that the factors affecting infant mortality are different from those affecting child mortality. Infant mortality is dependent on the health of the mother during pregnancy, the length of the birth interval, and receipt of services such as antenatal and postnatal care – all factors that are relatively amenable to programmatic intervention. Child mortality, however, is more dependent on broader environmental, economic, and social factors that are less tractable.

## **8.2 DIFFERENTIALS IN INFANT AND CHILD MORTALITY**

### **8.2.1 Differentials by Background Characteristics**

Differentials in neonatal, postneonatal, infant, child, and under-five mortality by socioeconomic characteristics are shown in Table 8.2. A ten-year period is used to calculate the mortality estimates by background characteristics, so as to obtain enough cases in each category. The use of the ten-year reference period improves the reliability of the mortality estimates.

There are substantial differences in under-five mortality by type of residence. Children in urban areas have lower mortality rates than their counterparts in the rural areas (22 and 27 deaths per 1,000 live births, respectively). A similar pattern is found for infant mortality, as well as postneonatal mortality.

Childhood mortality vary across regions. Infant and child mortality are higher in the South region (27 and 6 per 1,000, respectively) than in the North region (21 and 2 per 1,000, respectively) and Central region (19 and 2 deaths per 1,000, respectively).

The data do not reveal a clear association between under-five mortality and mother's education. Children of mothers who received elementary or secondary education, and those of mothers with no education are more likely to die in the first five years of life than children of mothers with preparatory education or higher education. Under-five mortality ranges from 35 per 1,000 for children of women who attended elementary school to 11 per 1,000 for children of women with more than secondary education.

The data also indicate that there is no clear association between household wealth and under-five mortality. Children in the lowest (30 per 1,000) and highest (27 per 1,000) wealth quintiles are more likely to die during the first five years of age than children of mothers in other wealth quintiles. The under-five mortality rate reaches its lowest level in the third wealth quintile (14 per 1,000). The same pattern also holds for infant mortality rates.

**Table 8.2 Early childhood mortality rates by socioeconomic characteristics**  
 Neonatal, postneonatal, infant, child, and under-five mortality rates for the 10-year period preceding the survey, by background characteristic, Jordan 2007

Background characteristic	Neonatal mortality (NN)	Postneonatal mortality <sup>1</sup> (PNN)	Infant mortality ( <sub>1</sub> q <sub>0</sub> )	Child mortality ( <sub>4</sub> q <sub>1</sub> )	Under-five mortality ( <sub>5</sub> q <sub>0</sub> )
<b>Residence</b>					
Urban	15	5	20	2	22
Rural	13	9	23	4	27
<b>Governorate</b>					
Amman	18	5	22	2	24
Balqa	14	5	18	6	24
Zarqa	7	3	10	0	10
Madaba	12	10	22	3	25
Irbid	14	4	19	2	21
Mafraq	15	14	30	2	32
Jarash	12	5	16	4	20
Ajloun	12	9	20	6	26
Karak	22	10	32	7	39
Tafiela	19	8	27	3	30
Ma'an	13	11	24	7	31
Aqaba	17	4	21	5	25
<b>Region</b>					
Central	14	5	19	2	21
North	14	6	21	2	23
South	19	8	27	6	32
<b>Badia area</b>					
Badia	10	8	18	3	21
Other	15	5	20	2	23
<b>Education</b>					
No education	12	10	22	4	27
Elementary	16	12	28	7	35
Preparatory	12	7	19	4	23
Secondary	21	5	25	2	27
Higher	6	4	10	1	11
<b>Wealth quintile</b>					
Lowest	17	8	25	5	30
Second	16	5	21	1	22
Middle	7	5	13	1	14
Fourth	13	4	17	2	19
Highest	21	4	25	2	27
Total	15	5	20	2	22

<sup>1</sup> Computed as the difference between the infant and neonatal mortality rates

## 8.2.2 Differentials by Demographic Characteristics

Besides socio-economic 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 8.3.

Mortality levels do not significantly differ by sex. The relationship between mother's age at delivery and infant mortality shows a U-shaped curve. These mortality measures are substantially higher among children born to mothers less than 20 (37 per thousand births) and those aged 40 and over (27 per thousand births).

Table 8.3 Early childhood mortality rates by demographic characteristics

Neonatal, postneonatal, infant, child, and under-five mortality rates for the 10-year period preceding the survey, by demographic characteristics, Jordan 2007

Demographic characteristic	Neonatal mortality (NN)	Postneonatal mortality <sup>1</sup> (PNN)	Infant mortality ( <sub>1</sub> q <sub>0</sub> )	Child mortality ( <sub>4</sub> q <sub>1</sub> )	Under-five mortality ( <sub>5</sub> q <sub>0</sub> )
<b>Child's sex</b>					
Male	16	4	20	2	22
Female	13	7	20	3	23
<b>Mother's age at birth</b>					
<20	30	6	37	1	38
20-29	13	5	18	2	20
30-39	15	6	21	3	24
40-49	12	(15)	(27)	*	*
<b>Birth order</b>					
1	15	4	20	2	22
2-3	13	6	18	2	20
4-6	13	5	18	3	21
7+	24	10	34	2	36
<b>Previous birth interval<sup>2</sup></b>					
<2 years	18	8	26	3	28
2 years	15	6	22	3	25
3 years	11	5	16	2	18
4+ years	10	2	13	1	14
<b>Birth size<sup>3</sup></b>					
Small/very small	30	16	46	na	na
Average or larger	9	5	14	na	na
Total	15	5	20	2	22

Note: An asterisk indicates that the rate is based on fewer than 250 births and has been suppressed. Figures in parentheses are based on 250-499 unweighted births.

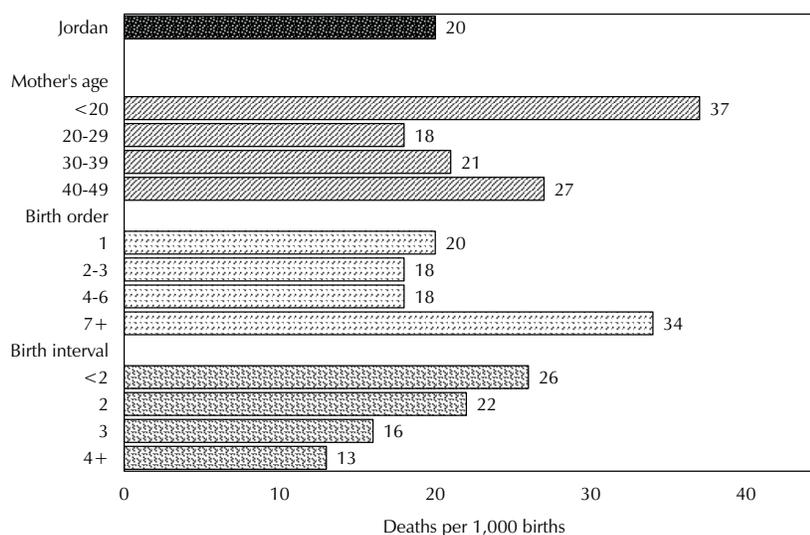
na = Not applicable

<sup>1</sup> Computed as the difference between the infant and neonatal mortality rates

<sup>2</sup> Excludes first-order births

<sup>3</sup> Rates for the five-year period before the survey

Figure 8.3 Infant Mortality by Selected Demographic Characteristics



Note: Rates refer to the 10-year period preceding the survey.

JPFHS 2007

First births and higher-order births experience higher mortality, indicating a shallow U-shaped relationship between birth order and mortality. For example, infant mortality rates for first births and births of order seven and higher are 20 per 1,000 births and 34 per 1,000 births, respectively, compared with 18 per 1,000 births for second through sixth-order births.

Mortality among children is negatively associated with the length of the previous birth interval. Infant mortality decreases sharply from a high of 26 per 1,000 for children born less than two years after a previous birth to 16 per 1,000 live births for children born three years after a previous birth and to 13 per 1,000 live births for children born four years or more 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 at three times the risk of dying compared with children whose size at birth was reported as "average or larger." Of children reported to be "small or very small," 46 per 1,000 did not survive to their first birthday, compared with 14 per 1,000 children reported to be average or larger.

### **8.3 PERINATAL MORTALITY**

The 2007 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. The routine collection of data to estimate rates of perinatal mortality is relatively new to sample survey research. An important consideration in the evaluation of the results of this new initiative 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 estimated to be 15 perinatal deaths per 1,000 pregnancies reaching seven months of gestation. Perinatal mortality does not follow the expected reversed U-shaped pattern with regards to the mother's age; the youngest and oldest women having the lowest perinatal mortality rates (3 per 1,000 and 8 per 1,000, respectively) while the highest rates are found among pregnancies of women aged 30-39 (18 per 1,000). Pregnancies with a short-preceding interpregnancy interval are also at high perinatal risk (29 per 1,000 for an interpregnancy interval of less than 15 months).

Perinatal mortality is slightly higher in urban areas (15 per 1,000) than in rural areas (13 per 1,000). At the regional level, the perinatal mortality rates are the highest in the North region (17 per 1,000), while they are the lowest in the Badia areas than the non-Badia areas (11 per 1,000 and 15 per 1,000 respectively); however, it is worth noting that perinatal mortality is higher for women with elementary education or secondary education (19 and 18 per 1,000 respectively) than for those with preparatory education (about 8 per 1,000) and for those with higher than secondary or with no education (12 per 1,000).

By wealth quintile, the data indicate that perinatal mortality is higher among those living in the lowest, fourth and the highest wealth quintiles than among those living in the second and third wealth quintiles (18-21 per 1,000, compared to 8-10 per 1,000 respectively).

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 2007

Background characteristic	Number of stillbirths <sup>1</sup>	Number of early neonatal deaths <sup>2</sup>	Perinatal mortality rate <sup>3</sup>	Number of pregnancies of 7+ months duration
<b>Mother's age at birth</b>				
<20	1	1	3	541
20-29	28	52	15	5,481
30-39	29	34	18	3,546
40-49	0	3	8	354
<b>Previous pregnancy interval in months<sup>4</sup></b>				
First pregnancy	19	12	15	2,029
<15	6	29	29	1,242
15-26	4	11	5	2,677
27-38	7	14	13	1,601
39+	22	24	19	2,373
<b>Residence</b>				
Urban	47	79	15	8,309
Rural	11	11	13	1,612
<b>Governorate</b>				
Amman	19	32	13	3,802
Balqa	4	7	18	619
Zarqa	10	11	14	1,496
Madaba	1	2	14	243
Irbid	10	21	17	1,872
Mafraq	5	5	20	484
Jarash	2	2	14	293
Ajloun	2	1	11	235
Karak	1	5	18	350
Tafiela	1	1	15	141
Ma'an	1	1	15	169
Aqaba	1	1	10	218
<b>Region</b>				
Central	34	52	14	6,161
North	19	29	17	2,884
South	5	9	15	878
<b>Badia area</b>				
Badia	5	5	11	881
Other	52	85	15	9,040
<b>Education</b>				
No education	2	1	12	243
Elementary	5	7	19	596
Preparatory	7	4	8	1,372
Secondary	24	62	18	4,759
Higher	20	16	12	2,951
<b>Wealth quintile</b>				
Lowest	16	33	19	2,557
Second	11	13	10	2,353
Middle	6	11	8	2,067
Fourth	19	15	21	1,653
Highest	6	18	18	1,291
Total	58	90	15	9,922

<sup>1</sup> Stillbirths are fetal deaths in pregnancies lasting seven or more months.

<sup>2</sup> Early neonatal deaths are deaths at age 0-6 days among live-born children.

<sup>3</sup> 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

<sup>4</sup> Categories correspond to birth intervals of <24 months, 24-35 months, 36-47 months, and 48+ months.

## 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 at a higher risk of dying if the mother was too young or too old at 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 "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.

Sixty percent of the children born during the five years preceding the survey were at an elevated and avoidable risk of dying. In 38 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 22 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 and those whose preceding birth interval was shorter than 24 months. Six percent of children were born with a preceding birth interval of less than 24 months and with birth order higher than three.

Table 8.5 also 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. Column 2 of Table 8.5 presents the risk ratios for births during the five years preceding the survey (i.e., the ratio of the proportion dead in each risk category to the proportion dead among children who were not in any risk category). The single most detrimental factors are short birth intervals and birth to a women aged 35 and older. Children born less than 24 months after the previous birth and children born to a women aged 35 or older are three times (3.12 and 3.07 respectively as likely to die as children not in

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 2007

Risk category	Births in the 5 years preceding the survey		Percentage of currently married women <sup>1</sup>
	Percentage of births	Risk ratio	
Not in any high-risk category	20.1	1.00	15.5 <sup>a</sup>
<b>Unavoidable risk category</b>			
First-order births between ages 18 and 34 years	20.1	1.33	6.3
<b>Single high-risk category</b>			
Mother's age <18	1.3	0.18	0.1
Mother's age >34	2.0	3.07	5.4
Birth interval <24 months	16.3	3.12	9.3
Birth order >3	18.6	2.05	14.1
Subtotal	38.2	2.49	28.8
<b>Multiple high-risk category</b>			
Age <18 and birth interval <24 months <sup>2</sup>	0.2	*	0.1
Age >34 and birth interval <24 months	0.6	1.18	0.5
Age >34 and birth order >3	12.5	1.82	35.6
Age >34 and birth interval <24 months and birth order >3	2.3	0.60	4.7
Birth interval <24 months and birth order >3	6.1	1.57	8.4
Subtotal	21.7	1.59	49.4
In any avoidable high-risk category	59.8	2.17	78.2
Total	100.0	na	100.0
Number of births/women	9,864	na	10,354

Note: Risk ratio is the ratio of the proportion dead among births in a specific high-risk category to the proportion dead among births not in any high-risk category. An asterisk indicates that the figure is based on fewer than 25 unweighted cases and has been suppressed.

na = Not applicable

<sup>1</sup> 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.

<sup>2</sup> Includes the category age <18 and birth order >3

<sup>a</sup> Includes sterilized women

any risk category. Children of birth order four or higher are about twice (2.05) as likely to die as children not in any risk category. The combination of a mother's giving birth at an older age and the child's birth order higher than three is detrimental to children's survival (1.82), as is the combination of a short birth interval and a high birth order (1.57). Children born to mothers over 34 years of age, and born less than 24 months after a preceding birth with a birth order higher than three are less likely to die (0.6 times) than children not in any risk category.

The last column of Table 8.5 presents the distribution of currently married women according to category of increased risk. Women are placed in a categories according to the status they would have at the birth of a child conceived at the time of the survey: women who were 17 years and 3 months old or younger or 34 years and 2 months old or older, women whose most recent birth was less than 15 months before the survey, and women whose most recent birth was of order 3 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 (78 percent) are susceptible to conceiving a child who will be at an increased risk of dying. About one half of married women fall in the multiple high-risk category, mainly those who are older than 34 and with a birth order of 4 or higher, while 29 percent of women fall in the single high-risk category, mainly because of a high birth order (14 percent). The figures in Table 8.5 demonstrate the strong influence of parity (the number of children the mother has had) on the risk of dying among children under five years of age.

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, breast and cervical cancer prevention, and knowledge of tuberculosis are also 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

### 9.1.1 Number and Timing of ANC Visits

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 the time of 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, stage 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 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 and their households.

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.

Women less than 20 years of age are more likely to receive antenatal care from nurse/midwives compared with older women. 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). There are also small differences in the use of antenatal care services between urban and rural residence. Health professionals provided antenatal care for 99 percent of mothers in urban areas and 98 percent of mothers in rural areas. There are small differences in women receiving ANC by governorates and regions, however, the variation is greater by Badia area (96 percent of women receive ANC in the Badia areas compared to 99 percent in other areas).

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, according to background characteristics, Jordan 2007

Background characteristic	Doctor	Nurse/ midwife	No one	Total	Number of women
<b>Mother's age at birth</b>					
<20	94.4	3.4	2.2	100.0	273
20-34	96.6	2.5	0.9	100.0	4,766
35-49	94.7	3.0	2.3	100.0	1,407
<b>Birth order</b>					
1	98.0	1.5	0.5	100.0	979
2-3	96.5	2.7	0.8	100.0	2,447
4-5	96.3	2.7	1.0	100.0	1,827
6+	93.4	3.4	3.1	100.0	1,193
<b>Residence</b>					
Urban	96.3	2.6	1.1	100.0	5,417
Rural	95.1	2.8	2.1	100.0	1,029
<b>Governorate</b>					
Amman	96.3	2.6	1.2	100.0	2,469
Balqa	94.9	4.1	1.0	100.0	396
Zarqa	97.9	0.8	1.3	100.0	966
Madaba	95.1	3.4	1.5	100.0	157
Irbid	95.8	3.7	0.5	100.0	1,261
Mafrq	94.6	2.1	3.3	100.0	298
Jarash	93.4	4.1	2.5	100.0	185
Ajloun	96.8	2.1	1.1	100.0	150
Karak	96.2	2.3	1.5	100.0	229
Tafiela	94.7	3.4	1.8	100.0	88
Ma'an	92.6	5.1	2.3	100.0	107
Aqaba	97.6	1.5	0.9	100.0	140
<b>Region</b>					
Central	96.5	2.3	1.2	100.0	3,987
North	95.4	3.4	1.2	100.0	1,894
South	95.7	2.8	1.5	100.0	564
<b>Badia area</b>					
Badia	92.6	3.5	3.9	100.0	536
Other	96.4	2.6	1.0	100.0	5,910
<b>Education</b>					
No education	83.7	5.8	10.6	100.0	155
Elementary	90.1	5.7	4.2	100.0	351
Preparatory	95.5	3.0	1.5	100.0	917
Secondary	96.2	2.8	1.0	100.0	3,058
Higher	98.2	1.5	0.3	100.0	1,964
<b>Wealth quintile</b>					
Lowest	92.0	4.8	3.2	100.0	1,508
Second	95.0	3.8	1.2	100.0	1,501
Middle	97.7	1.6	0.7	100.0	1,378
Fourth	98.3	1.5	0.2	100.0	1,153
Highest	99.6	0.2	0.1	100.0	906
Total	96.1	2.7	1.2	100.0	6,446

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

The use of antenatal care services is strongly associated with the mother's level of education. Women with a secondary education or higher are more likely to receive antenatal care from any trained personnel (99 and 100 percent) than women with elementary education (96 percent) and, in particular, women with no education (89 percent).

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 fourth and highest wealth quintiles (100 percent for each). Whereas almost all women in the highest wealth quintile received antenatal care from a doctor, this proportion drops to 92 percent for women in the lowest wealth quintile.

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 28<sup>th</sup> week (seventh month), fortnightly until the 36<sup>th</sup> week, and then weekly until the 40<sup>th</sup> 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 84 percent of women make six or more antenatal care visits during their entire pregnancy. The percentage of women who make six or more antenatal care visits is higher in urban areas (85 percent) than rural areas (79 percent), while it is higher in the Central region (86 percent) than in the North and South regions (80 percent and 77 percent respectively). There is a notable variation in antenatal care services by residence in the Badia and the non-Badia areas: women in the Badia areas make fewer antenatal care visits (75 percent have 6 or more visits) than those women residing in the non-Badia areas (84 percent).

Data indicate that there is a strong association between the proportions of women who make six or more visits for receiving antenatal care during their entire pregnancy, and educational level and household wealth. The results show that the proportion of women who make six or more visits for antenatal care services increases with higher educational level and higher household wealth quintile.

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 2007

Background characteristic	Number of ANC visits								Total <sup>1</sup>	Number of women
	None	1	2	3	4	5	6	7+		
<b>Mother's age at birth</b>										
<20	2.2	0.0	0.3	1.1	2.4	2.8	6.5	84.7	100.0	273
20-34	0.9	0.7	1.4	2.5	3.7	6.7	9.7	74.3	100.0	4,766
35-49	2.3	0.5	1.1	3.3	3.7	7.9	10.9	70.2	100.0	1,407
<b>Birth order</b>										
1	0.5	0.4	0.2	0.5	1.7	3.6	6.7	86.5	100.0	979
2-3	0.8	0.3	1.6	2.7	3.5	6.8	9.2	75.0	100.0	2,447
4-5	1.0	0.8	1.3	2.4	4.1	7.1	11.2	71.8	100.0	1,827
6+	3.1	1.1	1.5	4.6	4.8	8.9	11.7	64.1	100.0	1,193
<b>Residence</b>										
Urban	1.1	0.5	1.1	2.4	3.4	6.8	9.8	74.8	100.0	5,417
Rural	2.1	1.1	2.5	3.6	4.7	7.0	10.3	68.7	100.0	1,029
<b>Governorate</b>										
Amman	1.2	0.3	1.2	2.5	3.4	5.1	7.4	78.7	100.0	2,469
Balqa	1.0	0.8	0.6	2.4	2.6	5.7	8.7	78.0	100.0	396
Zarqa	1.3	0.9	0.7	1.3	2.5	6.8	11.2	75.3	100.0	966
Madaba	1.5	0.1	0.9	3.6	3.8	3.6	3.8	82.6	100.0	157
Irbid	0.5	0.6	1.6	2.6	2.8	8.8	14.5	68.6	100.0	1,261
Mafraq	3.3	0.7	2.0	3.9	7.7	12.7	9.8	59.6	100.0	298
Jarash	2.5	1.1	2.4	3.2	4.5	8.0	9.8	68.4	100.0	185
Ajloun	1.1	1.2	2.0	3.4	7.8	6.8	13.5	63.8	100.0	150
Karak	1.5	1.3	2.1	4.6	5.8	7.8	9.8	67.2	100.0	229
Tafiela	1.8	0.6	2.3	3.3	7.2	11.0	7.8	65.3	100.0	88
Ma'an	2.3	2.2	2.8	7.2	6.7	8.4	10.6	59.2	100.0	107
Aqaba	0.9	1.0	0.8	2.1	3.6	5.7	8.1	77.9	100.0	140
<b>Region</b>										
Central	1.2	0.5	1.0	2.3	3.1	5.5	8.3	78.0	100.0	3,987
North	1.2	0.7	1.7	2.9	4.1	9.2	13.2	66.8	100.0	1,894
South	1.5	1.3	1.9	4.3	5.7	7.9	9.2	68.0	100.0	564
<b>Badia area</b>										
Badia	3.9	0.9	2.5	4.0	6.0	7.3	8.5	66.9	100.0	536
Other	1.0	0.6	1.2	2.5	3.4	6.8	10.0	74.4	100.0	5,910
<b>Education</b>										
No education	10.6	2.5	3.0	7.4	5.4	11.0	12.2	47.2	100.0	155
Elementary	4.2	0.9	2.7	5.7	2.8	6.6	10.2	65.5	100.0	351
Preparatory	1.5	1.0	1.3	2.9	5.3	9.1	9.3	69.6	100.0	917
Secondary	1.0	0.5	1.1	2.5	3.8	6.8	10.6	73.7	100.0	3,058
Higher	0.3	0.4	1.2	1.8	2.6	5.5	8.7	79.6	100.0	1,964
<b>Wealth quintile</b>										
Lowest	3.2	0.9	2.0	3.8	4.7	8.7	12.0	64.6	100.0	1,508
Second	1.2	0.7	1.6	2.7	3.3	5.9	12.0	72.6	100.0	1,501
Middle	0.7	0.8	1.0	1.9	4.6	7.6	10.2	73.0	100.0	1,378
Fourth	0.2	0.2	1.2	2.9	3.5	5.4	7.1	78.9	100.0	1,153
Highest	0.1	0.1	0.1	1.3	1.0	5.8	5.8	85.9	100.0	906
Total	1.2	0.6	1.3	2.6	3.6	6.8	9.9	73.8	100.0	6,446

<sup>1</sup> Includes "don't know/missing"

Eighty-nine percent of women make their first antenatal care visit before the fourth month of pregnancy (Table 9.3). The proportion of women seeking antenatal care increases to almost 97 percent before six months of pregnancy. The median duration of pregnancy for the first antenatal care visit is 2.2 months. This indicates that, in Jordan, women start antenatal care at a relatively early stage of their 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 the timing of the first visit of antenatal care (ANC) for the most recent live birth, and median months pregnant at first visit for those with ANC, according to background characteristic, Jordan 2007

Background characteristic	No antenatal care	Number of months pregnant at time of first ANC visit				Total <sup>1</sup>	Median months pregnant at first visit (for those with ANC)	Number of women
		<4	4-5	6-7	8+			
<b>Mother's age at birth</b>								
<20	2.2	93.8	4.0	0.0	0.0	100.0	1.9	273
20-34	0.9	90.5	7.2	1.2	0.3	100.0	2.2	4,766
35-49	2.3	84.0	11.0	2.1	0.6	100.0	2.5	1,407
<b>Birth order</b>								
1	0.5	96.9	2.5	0.1	0.0	100.0	1.8	979
2-3	0.8	91.1	6.5	1.2	0.4	100.0	2.1	2,447
4-5	1.0	88.5	8.9	1.3	0.2	100.0	2.3	1,827
6+	3.1	79.9	13.5	2.7	0.8	100.0	2.7	1,193
<b>Residence</b>								
Urban	1.1	89.7	7.8	1.2	0.3	100.0	2.2	5,417
Rural	2.1	86.5	8.4	2.2	0.7	100.0	2.2	1,029
<b>Governorate</b>								
Amman	1.2	91.3	6.6	0.9	0.1	100.0	2.1	2,469
Balqa	1.0	89.5	6.7	1.2	1.3	100.0	1.9	396
Zarqa	1.3	89.5	7.9	0.8	0.5	100.0	2.4	966
Madaba	1.5	92.5	4.5	1.4	0.2	100.0	1.8	157
Irbid	0.5	87.9	9.4	2.0	0.2	100.0	2.4	1,261
Mafraq	3.3	86.3	8.4	0.9	0.9	100.0	2.2	298
Jarash	2.5	84.2	9.3	2.5	1.3	100.0	2.3	185
Ajloun	1.1	83.3	12.6	3.1	0.0	100.0	2.4	150
Karak	1.5	85.9	9.1	2.8	0.8	100.0	2.3	229
Tafiela	1.8	82.0	13.9	1.7	0.5	100.0	2.6	88
Ma'an	2.3	81.7	11.3	3.8	0.8	100.0	2.5	107
Aqaba	0.9	90.9	7.4	0.8	0.1	100.0	2.3	140
<b>Region</b>								
Central	1.2	90.7	6.8	0.9	0.3	100.0	2.1	3,987
North	1.2	87.0	9.5	1.9	0.4	100.0	2.4	1,894
South	1.5	85.7	9.8	2.3	0.6	100.0	2.4	564
<b>Badia area</b>								
Badia	3.9	86.3	7.1	1.9	0.8	100.0	2.1	536
Other	1.0	89.4	7.9	1.3	0.3	100.0	2.2	5,910
<b>Education</b>								
No education	10.6	74.4	11.2	2.5	0.8	100.0	2.8	155
Elementary	4.2	80.3	11.6	3.1	0.9	100.0	2.5	351
Preparatory	1.5	86.9	9.1	2.0	0.4	100.0	2.4	917
Secondary	1.0	90.1	7.6	1.2	0.2	100.0	2.3	3,058
Higher	0.3	91.6	6.8	0.8	0.4	100.0	2.0	1,964
<b>Wealth quintile</b>								
Lowest	3.2	84.7	9.9	1.5	0.6	100.0	2.4	1,508
Second	1.2	90.3	6.6	1.6	0.3	100.0	2.3	1,501
Middle	0.7	89.2	8.4	1.3	0.4	100.0	2.2	1,378
Fourth	0.2	90.3	7.7	1.7	0.2	100.0	2.2	1,153
Highest	0.1	93.4	6.1	0.3	0.1	100.0	1.9	906
Total	1.2	89.2	7.9	1.3	0.4	100.0	2.2	6,446

<sup>1</sup> Includes "don't know/missing"

The table also indicates that the women who are the most likely to receive antenatal care services before the fourth month of pregnancy are those in younger age groups, those having their first birth, those living in urban areas, in the Central region and in the non-Badia areas, those with secondary education and higher and those in the highest wealth quintile.

### **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 2007 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 half of mothers who received antenatal care reported that they were informed about pregnancy-related complications during their visits. About two-fifths of women (38 percent) were informed about pregnancy-related complications after delivery, while about two-thirds of mothers (68 percent) were informed that they should make two visits for medical checkup: 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 94 and 95 percent of women, respectively, while 97 percent of mothers have had their weight taken. In addition, 81 percent of women either received or purchased iron tablets or syrup during pregnancy (Table 9.4).

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, and the non-Badia areas are more likely to receive each of the antenatal care components, compared to women in the North and South regions and the Badia areas. Antenatal care content also varies significantly according to the mother's education level. Women with secondary or higher education are more likely to have received 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.

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 2007

Background characteristic	Percentage of women who during the pregnancy of their last birth		Among women who received antenatal care for their most recent birth in the last five years, the percentage with selected services:							
	Took iron tablets or syrup	Number of women with a live birth in the last five years	Informed of signs of pregnancy complications	Informed of signs of complications 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
<b>Mother's age at birth</b>										
<20	81.6	273	51.4	36.4	61.8	96.5	98.3	91.9	94.2	267
20-34	82.0	4,766	51.3	39.5	68.1	97.5	98.2	94.0	94.4	4,724
35-49	75.1	1,407	44.9	34.7	66.7	96.7	98.4	94.9	95.3	1,376
<b>Birth order</b>										
1	85.9	979	57.3	40.8	66.0	98.0	98.8	95.2	96.8	974
2-3	82.6	2,447	50.2	40.2	70.1	97.4	98.5	94.1	94.4	2,429
4-5	79.3	1,827	49.3	37.8	68.4	97.2	98.3	94.0	94.4	1,808
6+	73.5	1,193	43.8	33.2	61.9	96.6	97.2	93.4	93.5	1,155
<b>Residence</b>										
Urban	82.0	5,417	50.7	39.1	69.5	97.5	98.6	94.8	95.3	5,359
Rural	72.7	1,029	45.6	34.2	56.9	96.1	96.7	90.4	90.6	1,007
<b>Governorates</b>										
Amman	86.1	2,469	52.2	40.9	73.0	97.8	98.9	95.5	96.1	2,439
Balqa	87.2	396	46.4	41.7	77.5	98.7	99.5	97.1	97.3	392
Zarqa	81.4	966	49.5	44.1	70.7	98.3	98.6	96.4	96.4	953
Madaba	81.2	157	61.7	54.3	65.0	98.1	98.7	96.8	96.8	155
Irbid	75.0	1,261	46.9	29.7	58.8	96.4	97.9	92.8	93.9	1,254
Mafraq	60.7	298	41.7	27.8	58.2	96.7	97.9	83.3	84.8	288
Jarash	73.1	185	51.3	37.2	68.3	97.5	97.9	93.7	93.7	180
Ajlun	70.2	150	51.8	36.7	75.8	97.1	97.7	92.6	92.5	149
Karak	77.6	229	53.3	39.9	53.8	93.8	94.7	87.7	87.0	226
Tafiela	74.1	88	48.5	31.8	47.8	92.6	93.4	91.7	91.7	86
Ma'an	71.0	107	51.0	35.1	47.8	92.0	94.3	91.2	89.4	105
Aqaba	82.6	140	42.4	34.1	60.4	97.4	97.3	93.7	93.1	139
<b>Region</b>										
Central	84.9	3,987	51.4	42.3	72.6	98.0	98.9	95.9	96.3	3,939
North	72.2	1,894	46.9	30.7	61.0	96.7	97.9	91.4	92.4	1,872
South	77.1	564	49.4	36.3	53.3	94.2	95.1	90.5	89.7	556
<b>Badia</b>										
Badia	69.2	536	43.8	34.6	58.4	95.3	95.8	88.5	89.0	515
Other	81.5	5,910	50.4	38.7	68.3	97.5	98.5	94.6	95.1	5,851
<b>Mother's education</b>										
No education	56.0	155	33.1	26.7	42.1	86.8	88.9	78.2	78.0	139
Elementary	68.5	351	42.1	28.3	59.4	92.4	95.2	90.5	92.5	337
Preparatory	75.6	917	41.9	27.4	59.2	97.0	97.7	94.4	94.6	903
Secondary	81.5	3,058	50.2	39.5	68.9	97.8	98.6	94.4	94.8	3,029
Higher	85.2	1,964	55.6	44.2	72.4	98.1	99.2	95.2	95.8	1,959
<b>Wealth quintile</b>										
Lowest	71.1	1,508	46.8	34.7	61.4	95.4	96.4	91.9	92.3	1,460
Second	80.3	1,501	48.0	34.6	64.4	96.7	98.4	92.7	94.2	1,482
Middle	82.0	1,378	52.0	39.7	66.4	97.6	98.7	94.9	94.1	1,368
Fourth	86.3	1,153	50.0	37.8	68.6	98.6	99.1	94.8	96.6	1,150
Highest	86.7	906	54.5	49.2	82.5	99.1	99.3	97.9	97.2	905
Total	80.5	6,446	49.9	38.4	67.5	97.3	98.3	94.1	94.6	6,366

### 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 un-specialized 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 her last pregnancy with a live birth, or two or more injections (the last within 3 years of the last live birth), or three or more injections (the last within 5 years of the last birth), or four or more injections (the last within ten years of the last live birth), or five or more injections prior to the last birth. When the mother is vaccinated, immunity against tetanus is transferred to the fetus through the placenta.

In the 2007 JPFHS, information was collected on the lifetime number of doses of tetanus toxoid that the mother received. Table 9.5 shows that 6 percent of women received two or more doses of tetanus toxoid vaccine during the last pregnancy, which is less than that observed in 2002 JPFHS (9 percent). However, for 27 percent of women the last birth was protected against tetanus because of the injections received during this pregnancy and injections received prior to the current pregnancy.

Women residing in the North, in the non-Badia areas, and in Irbid, Jarash, and Ajloun are more likely to provide full protection against tetanus than women residing in other areas. The percentage of women providing full protection to their children increases with the mother's age and the birth order. This is due to the cumulative effect of past vaccinations (whether during prior pregnancies or not). Because of this cumulative effect of injections received during prior pregnancies, full protection also

Table 9.5 Tetanus toxoid injections

Among women age 15-49 with a live birth in the five years preceding the survey, the percentage receiving two or more tetanus toxoid injections (TTI) 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 2007

Background characteristic	Percentage receiving two or more injections during last pregnancy	Percentage whose last birth was protected against neonatal tetanus <sup>1</sup>	Number of women
<b>Mother's age at birth</b>			
<20	9.8	22.7	273
20-34	6.3	26.9	4,766
35-49	5.3	28.7	1,407
<b>Birth order</b>			
1	13.1	23.6	979
2-3	4.9	27.6	2,447
4-5	4.6	27.3	1,827
6+	5.6	28.8	1,193
<b>Residence</b>			
Urban	5.9	27.4	5,417
Rural	8.0	25.6	1,029
<b>Governorate</b>			
Amman	5.5	22.8	2,469
Balqa	4.3	27.7	396
Zarqa	5.9	26.0	966
Madaba	10.5	30.6	157
Irbid	6.0	33.9	1,261
Mafraq	2.7	19.5	298
Jarash	7.9	36.7	185
Ajloun	12.2	45.4	150
Karak	10.6	26.2	229
Tafiela	9.8	33.0	88
Ma'an	12.6	38.0	107
Aqaba	7.5	18.4	140
<b>Region</b>			
Central	5.7	24.3	3,987
North	6.2	32.8	1,894
South	10.1	27.6	564
<b>Badia area</b>			
Badia	7.0	22.4	536
Other	6.1	27.6	5,910
<b>Education</b>			
No education	8.3	22.2	155
Elementary	7.5	28.7	351
Preparatory	5.9	24.2	917
Secondary	5.4	29.3	3,058
Higher	7.1	25.3	1,964
<b>Wealth quintile</b>			
Lowest	9.2	30.5	1,508
Second	6.6	29.5	1,501
Middle	4.2	29.5	1,378
Fourth	5.1	25.1	1,153
Highest	5.1	16.5	906
Total	6.2	27.1	6,446

<sup>1</sup> Includes women with two injections during the pregnancy of her last birth, or two or more injections (the last within 3 years of the last live birth), or three or more injections (the last within 5 years of the last birth), or four or more injections (the last within ten years of the last live birth), or five or more injections prior to the last birth

increases as household wealth decreases, a consequence of the highest fertility rates being among women of the lowest quintiles.

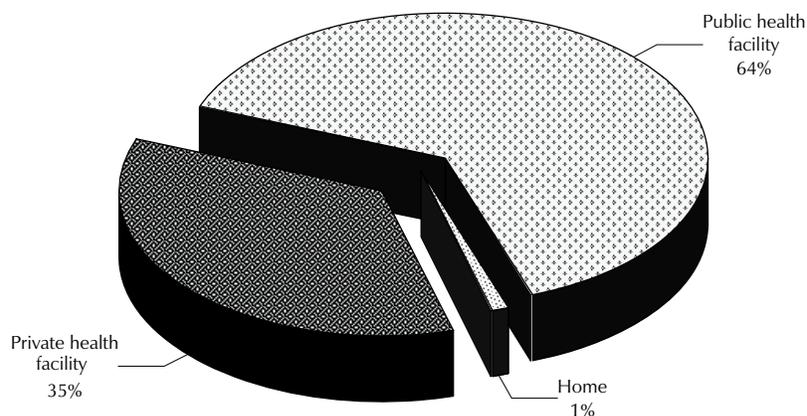
## 9.2 DELIVERY

### 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 by ensuring the safe delivery of the 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 medical facility (Table 9.6 and Figure 9.1), an increase of two percentage points from the 2002 JPFHS survey. Of the deliveries that took place in medical facilities, 64 percent took place in public health facilities and 35 percent in private medical facilities. Only 1 percent of women gave births at home in 2007, a drop of 2 percentage points from the 2002 JPFHS survey (3 percent).

**Figure 9.1** Distribution of Births by Place of Delivery



JPFHS 2007

Table 9.6 Place of delivery

Percent distribution of live births in the five years preceding the survey by place of delivery, according to background characteristics, Jordan 2007

Background characteristic	Government hospitals	Royal Medical Services	Other public health facility	Any public health facility	Private health sector	Home	Total <sup>1</sup>	Number of births
<b>Mother's age at birth</b>								
<20	52.0	7.3	1.3	60.5	37.6	1.9	100.0	541
20-34	47.6	14.3	2.0	63.8	34.8	1.2	100.0	7,612
35-49	47.3	14.1	3.2	64.6	34.1	1.3	100.0	1,712
<b>Birth order</b>								
1	44.0	13.7	2.6	60.3	39.4	0.3	100.0	2,161
2-3	47.2	11.9	2.1	61.2	37.2	1.5	100.0	3,797
4-5	49.7	14.6	2.0	66.3	32.5	1.1	100.0	2,390
6+	51.5	17.8	2.1	71.4	26.3	2.3	100.0	1,516
<b>Residence</b>								
Urban	46.7	11.4	2.2	60.2	38.5	1.2	100.0	8,262
Rural	53.4	26.5	2.2	82.2	16.2	1.4	100.0	1,601
<b>Governorate</b>								
Amman	36.8	6.9	2.5	46.3	53.0	0.7	100.0	3,784
Balqa	54.1	14.8	5.8	74.7	23.4	1.9	100.0	615
Zarqa	54.8	13.6	1.0	69.4	29.2	1.4	100.0	1,486
Madaba	58.7	17.2	1.1	77.0	21.8	1.2	100.0	242
Irbid	54.2	15.5	2.1	71.9	26.0	1.8	100.0	1,861
Mafraq	64.2	12.0	2.5	78.7	19.4	1.8	100.0	479
Jarash	61.4	23.7	2.3	87.5	11.1	1.3	100.0	290
Ajloun	69.5	16.3	2.1	87.9	11.8	0.2	100.0	233
Karak	54.7	29.7	0.1	84.6	13.8	1.4	100.0	348
Tafiela	19.7	66.3	0.1	86.1	12.5	1.3	100.0	140
Ma'an	74.6	9.1	0.8	84.4	13.5	2.1	100.0	167
Aqaba	13.3	48.1	0.0	61.4	36.1	2.3	100.0	217
<b>Region</b>								
Central	43.8	9.7	2.4	55.9	43.0	1.0	100.0	6,127
North	57.9	15.8	2.2	75.9	22.2	1.6	100.0	2,864
South	42.6	36.2	0.2	79.1	19.1	1.8	100.0	873
<b>Badia area</b>								
Badia	63.1	14.2	1.4	78.7	18.8	2.4	100.0	876
Other	46.3	13.8	2.2	62.3	36.4	1.2	100.0	8,988
<b>Mother's education</b>								
No education	72.2	11.9	0.8	84.9	8.6	6.3	100.0	241
Elementary	67.7	13.9	1.7	83.3	12.8	3.8	100.0	591
Preparatory	58.5	15.7	2.1	76.2	22.0	1.8	100.0	1,365
Secondary	49.5	13.9	1.4	64.8	33.9	1.1	100.0	4,735
Higher	34.0	13.0	3.6	50.6	49.0	0.3	100.0	2,932
<b>Antenatal care visits</b>								
None	76.8	5.1	0.0	81.9	4.9	13.2	100.0	79
1-3	58.4	10.4	2.7	71.4	26.3	2.2	100.0	292
4+	44.9	14.6	2.3	61.9	37.2	0.9	100.0	6,066
<b>Wealth quintile</b>								
Lowest	68.1	15.1	0.8	83.9	13.2	2.7	100.0	2,541
Second	56.2	18.5	2.3	77.0	21.3	1.6	100.0	2,342
Middle	45.7	15.4	2.3	63.4	36.0	0.5	100.0	2,061
Fourth	33.6	10.2	4.1	47.9	51.7	0.4	100.0	1,634
Highest	13.7	5.0	2.1	20.7	79.2	0.1	100.0	1,285
Total <sup>2</sup>	47.8	13.8	2.2	63.8	34.9	1.3	100.0	9,864

<sup>1</sup> Includes "don't know/missing"

<sup>2</sup> Total includes 8 missing cases for number of ANC visits

Seventy-nine percent of births took place in a public health facility in the South region compared with 56 percent in the Central region. More women in the Central region (43 percent) went to a private health facility than women from the North or South regions (22 percent and 19 percent respectively). Younger women are more likely to deliver at a private health facility than older women. In rural areas, more children are born in public health facilities than in private health facilities. The percentage of children born at public health facilities is higher in the Badia areas than in the non-Badia areas (79 percent and 62 percent, respectively).

There is also a strong association between mother's level of education and the place of delivery. The proportion of births delivered in a public health facility is higher (85 percent) for uneducated mothers, compared to 51 percent of births to mothers with higher education. Similarly, about half of births delivered at private health facilities are to mothers with higher education, compared to 9 percent for mothers with no education. There is a six-percentage point difference in the proportion of births at home by uneducated women (6 percent) compared with women with higher education (less than 1 percent).

Table 9.6 also shows that there is a strong, negative relationship between household wealth and delivery in the public sector. While 84 percent of births to mothers of the lowest wealth quintile took place in public sector, this proportion drops to about one-fifth (21 percent) for those mothers in the highest wealth quintile.

### **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.

In all regions, the proportion of births assisted by a health professional is similar. However, women residing in the Central region are more likely to get assistance from a doctor than those in the North and South regions. Both urban and rural women get assistance from a health professional during delivery. However, urban women are more likely to receive assistance from a doctor (76 percent) than rural women (60 percent). First births are more likely to be assisted by a doctor than higher-order births (82 percent for the first birth compared to 65 percent for the sixth birth). Results also indicate that women in the non-Badia areas are more likely to get assistance from a doctor (75 percent) than those in the Badia areas (63 percent). The results also show that the proportion of women who got assistance from a doctor is lower (about one-half) in Mafraq, Jarash, Ajloun, Karak, Tafiela and Ma'an than in other governorates.

Women's education is positively associated with delivery by a medical professional. Almost all births to women with preparatory, secondary and higher education were assisted by a health professional. A relatively lower percentage (94 percent) of women with no education received delivery assistance from a health professional. The remaining women with no education sought assistance during delivery from relatives or other sources (5 percent) and about 2 percent of women did not receive any assistance during delivery. The same pattern also holds true for wealth quintile. All women in the highest wealth quintile got assistance during delivery from a health professional (93 percent from a doctor, and 7 percent from a nurse or midwife), compared with 98 percent of women in the lowest wealth quintile (62 percent from a doctor and 36 percent from 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 delivered by caesarean-section, and percentage whose the mother was given free sample of infant formula and was advised about family planning before discharge, according to background characteristics, Jordan 2007

Background characteristic	Person providing assistance during delivery				Total	Percentage delivered by C-section	Given free sample of infant formula	Talked to about family planning before discharge	Number of births
	Doctor	Nurse/ midwife	Relative/ other	No one					
<b>Mother's age at birth</b>									
<20	79.3	18.4	1.0	1.3	100.0	14.1	13.0	11.5	541
20-34	73.0	26.1	0.6	0.3	100.0	16.6	13.1	12.8	7,612
35-49	75.4	23.7	0.8	0.1	100.0	28.7	11.9	14.5	1,712
<b>Birth order</b>									
1	81.5	18.1	0.2	0.2	100.0	21.5	14.8	12.9	2,161
2-3	73.9	25.1	0.7	0.3	100.0	16.3	13.8	11.6	3,797
4-5	71.9	27.2	0.4	0.4	100.0	18.4	11.2	13.1	2,390
6+	65.3	32.9	1.4	0.5	100.0	20.3	10.5	16.7	1,516
<b>Place of delivery</b>									
Health facility	74.7	25.2	0.0	0.1	100.0	18.8	13.1	13.2	9,731
Elsewhere	4.9	33.3	44.3	17.5	100.0	na	na	na	128
<b>Residence</b>									
Urban	76.4	22.7	0.6	0.3	100.0	18.8	13.1	13.3	8,262
Rural	60.3	38.3	0.8	0.6	100.0	17.4	11.6	11.7	1,601
<b>Governorate</b>									
Amman	85.8	13.4	0.3	0.5	100.0	19.7	17.5	14.2	3,784
Balqa	82.2	16.7	1.0	0.1	100.0	20.3	9.7	10.5	615
Zarqa	78.8	20.2	0.7	0.3	100.0	16.0	7.1	10.9	1,486
Madaba	80.7	18.8	0.3	0.1	100.0	22.6	20.0	11.3	242
Irbid	64.5	34.5	0.8	0.2	100.0	18.5	10.6	15.9	1,861
Mafrq	46.2	52.0	1.8	0.0	100.0	13.3	8.5	9.0	479
Jarash	50.1	49.2	0.5	0.2	100.0	14.6	8.8	16.7	290
Ajloun	48.0	51.7	0.1	0.2	100.0	14.2	8.4	12.8	233
Karak	54.5	44.5	0.3	0.7	100.0	22.1	12.8	11.0	348
Tafiela	48.8	49.9	0.5	0.8	100.0	18.9	16.5	8.2	140
Ma'an	50.8	47.6	1.0	0.5	100.0	19.1	10.6	5.2	167
Aqaba	63.6	34.5	1.5	0.4	100.0	20.0	11.6	6.9	217
<b>Region</b>									
Central	83.5	15.6	0.5	0.4	100.0	19.0	14.3	12.9	6,127
North	58.6	40.3	0.9	0.2	100.0	16.9	9.9	14.6	2,864
South	55.1	43.5	0.8	0.6	100.0	20.5	12.7	8.4	873
<b>Badia area</b>									
Badia	62.6	35.6	1.4	0.4	100.0	13.6	9.4	8.3	876
Other	74.9	24.3	0.5	0.3	100.0	19.0	13.2	13.5	8,988
<b>Mother's education</b>									
No education	55.6	38.3	4.7	1.5	100.0	20.5	5.6	9.3	241
Elementary	65.5	30.8	3.5	0.2	100.0	24.5	6.7	13.7	591
Preparatory	66.8	32.2	0.4	0.7	100.0	17.1	7.2	7.8	1,365
Secondary	72.3	27.0	0.4	0.3	100.0	17.0	13.4	14.0	4,735
Higher	82.6	17.0	0.2	0.3	100.0	20.3	16.5	14.0	2,932
<b>Wealth quintile</b>									
Lowest	61.5	36.5	1.6	0.4	100.0	15.4	8.1	12.2	2,541
Second	68.1	30.7	0.7	0.5	100.0	15.5	9.2	12.5	2,342
Middle	75.7	23.6	0.2	0.5	100.0	17.9	13.3	11.7	2,061
Fourth	83.2	16.6	0.1	0.2	100.0	21.3	16.1	12.6	1,634
Highest	93.3	6.7	0.0	0.0	100.0	27.8	24.3	18.4	1,285
Total <sup>1</sup>	73.8	25.3	0.6	0.3	100.0	18.5	12.9	13.0	9,864

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

na = Not applicable

<sup>1</sup> Total includes 6 missing cases for place of delivery

### 9.2.3 Delivery Characteristics

Caesarean section (C-section) rates 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, WHO has determined that the rate of C-sections in a given population should not be less than 5 percent and not more than 15 percent of all pregnancies if the lives of women and infants are to be protected (UNICEF, 1999). Rates below 5 percent indicate that many women and babies may be dying because of inadequate access to the whole spectrum of obstetric services. Rates above 15 percent indicate 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 2007 JPFHS obtained information on a number of key aspects of deliveries, including the frequency of C-sections. Table 9.7 shows that about one in five deliveries in the five-year period preceding the survey were by C-section (19 percent), a significant increase from the 2002 JPFHS (16 percent). Given the high C-section rates (19 percent) and the large increase in the proportion of births delivered by C-section since 1997, the indications for the performance of a Caesarean section needs to be reviewed and addressed in Jordan. C-sections are more frequent in the South region (21 percent) compared with the North (17 percent) and Central (19 percent) regions. Among older women, proportion of C-section is 29 percent while for younger women it is 14 percent. The percentage of C-section is also higher among women living in the non-Badia areas compared with women living in the Badia areas (19 and 14 percent, respectively). It is also higher among women with no education, elementary education, and those with higher than secondary education, in addition to women living in the highest wealth quintiles: this may be related to a woman's previous history of having a C-section and the 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. Thirteen percent of women received infant formula by a health facility staff. This practice is particularly high in Amman (18 percent), Madaba (20 percent), and Tafila (17 percent). The proportion of women who received infant formula increases significantly as level of education and wealth quintile increase.

During the survey, women 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 13 percent of women talked about family planning before checking out of the health facility after delivery. This percentage varies significantly according to various background characteristics. In particular, this percentage ranges from 5 percent in Ma'an to 17 percent in Jarash.

### 9.2.4 Payment for Delivery

Table 9.8 shows that in the five years preceding the survey, 40 percent of births were free of charge for the respondents or their families: the corresponding figure for deliveries in public facilities was 56 percent compared to only 12 percent of births delivered in private health facilities. For about one fifth of births, the cost of delivery was less than JD 50, however, for 14 percent of births, the cost of delivery was 200 JD or more. In private sector, 39 percent of deliveries cost more than 100 but less than 200 JD, and 38 percent cost 200 JD or more. In the public sector, only 6 percent of deliveries cost 100 JD or more.

Data in the table indicate that births to women residing in rural areas, the South and North regions, the Badia areas, women with preparatory education or less, and women in the lowest wealth quintiles are more likely to deliver free of charge. It is likely that they used government or private health insurance or any type of insurance including the Royal Medical Services for payment for delivery.

Table 9.8 Cost of delivery

Percent distribution of live births in the five years preceding the survey by cost of delivery to the mother or her family, according to background characteristics, Jordan 2007

Background characteristic	Cost of delivery (in JD)						Don't know/missing	Total	Number of births
	Free	<50	50-<100	100-<200	200-<500	500+			
<b>Place of delivery</b>									
Public	55.9	28.2	6.7	4.3	1.3	0.2	3.3	100.0	6,292
Private	11.9	2.9	4.3	38.7	25.9	12.5	3.8	100.0	3,439
Other	11.3	21.1	4.2	0.0	0.0	0.0	63.4	100.0	128
<b>Residence</b>									
Urban	34.6	20.7	6.1	17.7	11.2	5.0	4.7	100.0	8,262
Rural	67.5	12.2	4.2	8.5	3.1	1.8	2.6	100.0	1,601
<b>Governorate</b>									
Amman	21.4	21.3	6.6	21.2	16.1	8.4	5.0	100.0	3,784
Balqa	48.7	19.1	6.4	9.5	5.5	4.8	5.9	100.0	615
Zarqa	30.9	28.1	7.2	17.3	9.7	2.6	4.3	100.0	1,486
Madaba	60.4	12.0	3.5	9.3	6.3	5.0	3.6	100.0	242
Irbid	52.3	16.2	4.4	17.0	6.0	1.0	3.1	100.0	1,861
Mafraq	63.7	12.2	8.4	9.5	2.3	1.0	2.9	100.0	479
Jarash	65.5	17.6	4.2	6.5	3.1	0.9	2.2	100.0	290
Ajloun	77.7	7.4	3.5	6.1	3.0	0.6	1.7	100.0	233
Karak	67.2	15.5	2.4	6.2	3.6	2.3	2.8	100.0	348
Tafiela	78.2	7.9	2.0	3.8	1.6	1.4	5.0	100.0	140
Ma'an	66.5	12.5	3.8	4.8	3.0	1.6	7.9	100.0	167
Aqaba	56.7	10.3	3.5	14.1	6.4	2.8	6.3	100.0	217
<b>Region</b>									
Central	28.0	22.3	6.6	18.6	13.1	6.5	4.9	100.0	6,127
North	57.6	14.9	5.0	13.8	4.8	1.0	2.9	100.0	2,864
South	66.2	12.4	2.9	7.5	3.9	2.2	5.0	100.0	873
<b>Badia area</b>									
Badia	56.4	17.3	5.6	10.5	4.4	1.5	4.2	100.0	876
Other	38.3	19.5	5.8	16.8	10.4	4.8	4.3	100.0	8,988
<b>Mother's education</b>									
No education	52.1	15.1	9.3	5.5	2.2	1.2	14.4	100.0	241
Elementary	44.8	26.2	4.6	10.6	4.4	1.8	7.6	100.0	591
Preparatory	44.2	26.6	6.8	11.0	4.7	1.8	4.8	100.0	1,365
Secondary	37.5	21.1	6.5	17.6	9.7	4.2	3.4	100.0	4,735
Higher	39.9	12.0	4.2	18.5	14.3	7.1	4.0	100.0	2,932
<b>Wealth quintile</b>									
Lowest	49.0	24.5	6.0	10.0	3.2	1.4	5.8	100.0	2,541
Second	46.8	24.6	5.6	13.2	4.7	1.7	3.5	100.0	2,342
Middle	38.2	20.5	7.0	20.4	8.3	3.1	2.5	100.0	2,061
Fourth	33.2	13.5	4.6	24.2	14.9	5.4	4.3	100.0	1,634
Highest	21.0	5.0	5.5	17.2	28.8	16.8	5.8	100.0	1,285
Total <sup>1</sup>	40.0	19.3	5.8	16.2	9.9	4.5	4.3	100.0	9,864

<sup>1</sup> Total includes 6 missing cases for place of delivery

### 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.

Each woman with a birth in the five years preceding the survey was asked questions on the postnatal care she received for her latest birth, depending on where she gave birth. If she gave birth outside of a health facility, she was asked whether or not a health professional checked on her health after the birth. If she gave birth at a health facility, as did 99 percent of women, she was asked whether or not she received initial postnatal care shortly after birth while still in the facility; these women then were asked whether or not they received a postnatal check after they had been discharged from the facility.

Table 9.9 shows that about one-third of women received a postnatal check-up less than 24 hours after delivery, 6 percent in the 2 days after delivery, and 28 percent between 3 and 41 days after delivery. The remaining 32 percent received no postnatal care.

Table 9.9 Timing of first postnatal checkup								
Among women age 15-49 who had a live birth in the five years preceding the survey, the percent distribution of the woman's first postnatal check-up for the last live birth by time after delivery, according to background characteristics, Jordan 2007								
Background characteristic	Timing after delivery of woman's first postnatal checkup					No postnatal checkup <sup>1</sup>	Total	Number of women
	Less than 4 hours	4-23 hours	2 days	3-41 days	Don't know/missing			
<b>Mother's age at birth</b>								
<20	11.4	19.4	7.4	19.8	0.2	41.8	100.0	273
20-34	15.7	18.4	6.4	28.0	0.3	31.3	100.0	4,766
35-49	13.9	19.4	6.4	27.6	0.8	31.9	100.0	1,407
<b>Birth order</b>								
1	13.7	16.4	7.8	35.0	0.1	27.0	100.0	979
2-3	15.9	18.1	5.3	29.7	0.2	30.6	100.0	2,447
4-5	15.2	18.6	7.1	24.7	0.7	33.7	100.0	1,827
6+	14.4	21.5	6.4	21.5	0.6	35.7	100.0	1,193
<b>Residence</b>								
Urban	15.0	18.7	6.5	29.1	0.4	30.3	100.0	5,417
Rural	15.5	18.3	5.7	19.7	0.4	40.3	100.0	1,029
<b>Governorate</b>								
Amman	13.9	17.1	6.9	38.6	0.5	23.1	100.0	2,469
Balqa	21.2	25.1	8.4	20.2	1.0	24.0	100.0	396
Zarqa	16.1	14.0	7.3	22.7	0.2	39.7	100.0	966
Madaba	17.4	13.9	4.0	25.0	0.6	39.2	100.0	157
Irbid	12.8	25.9	4.7	20.0	0.2	36.4	100.0	1,261
Mafraq	17.4	13.2	4.7	16.4	0.4	47.9	100.0	298
Jarash	17.7	18.9	5.8	17.4	0.0	40.3	100.0	185
Ajloun	15.7	22.4	3.9	15.8	0.0	42.3	100.0	150
Karak	13.2	14.4	6.5	24.9	0.6	40.4	100.0	229
Tafiela	18.1	15.7	7.5	19.9	0.2	38.6	100.0	88
Ma'an	21.3	12.4	6.6	19.0	0.4	40.3	100.0	107
Aqaba	17.7	19.8	10.8	26.3	0.6	24.7	100.0	140
<b>Region</b>								
Central	15.3	17.0	7.0	32.4	0.5	27.9	100.0	3,987
North	14.2	23.0	4.7	18.8	0.2	39.1	100.0	1,894
South	16.6	15.6	7.7	23.3	0.5	36.2	100.0	564
<b>Badia area</b>								
Badia	18.8	15.0	6.7	18.0	0.1	41.4	100.0	536
Other	14.8	19.0	6.4	28.5	0.4	31.0	100.0	5,910
<b>Education</b>								
No education	10.9	18.6	9.8	15.8	0.0	45.0	100.0	155
Elementary	14.1	17.0	5.8	23.9	0.9	38.2	100.0	351
Preparatory	16.1	14.1	6.0	26.2	0.5	37.1	100.0	917
Secondary	15.5	18.3	6.6	26.6	0.4	32.6	100.0	3,058
Higher	14.5	21.5	6.2	31.4	0.3	26.2	100.0	1,964
<b>Wealth quintile</b>								
Lowest	16.3	16.8	7.5	19.6	0.3	39.6	100.0	1,508
Second	15.4	19.1	6.5	19.6	0.7	38.7	100.0	1,501
Middle	15.7	17.5	6.7	28.2	0.6	31.4	100.0	1,378
Fourth	13.6	21.5	5.0	34.7	0.1	25.1	100.0	1,153
Highest	13.6	18.9	5.9	44.4	0.0	17.1	100.0	906
Total	15.1	18.6	6.4	27.6	0.4	31.9	100.0	6,446

<sup>1</sup> Includes women who received a checkup after 41 days

The table shows that women in older age groups and women with first-order births, women in urban areas, in the Central region, in the non-Badia areas, women with secondary education and above and women in the highest wealth quintile are more likely to receive postnatal checkups than other women.

## 9.4 PROBLEMS IN ACCESSING HEALTH CARE

Many different factors can prevent women from getting medical advice or treatment for themselves. In the 2007 JPFHS, women were asked about various problems they face in accessing health care. Table 9.10 shows that 73 percent of women reported having at least one problem in accessing health care for themselves.

Table 9.10 Problems in accessing health care

Percentage of women age 15-49 who reported that they have serious problems in accessing health care for themselves when they are sick, by type of problem, according to background characteristics, Jordan 2007

Background characteristic	Problems in accessing health care								Number of women
	Knowing where to go	Getting permission to go for treatment	Getting money for treatment	Distance to health facility	Having to take transport	Not wanting to go alone	Concern no female provider available	At least one problem accessing health care	
<b>Age</b>									
15-19	25.1	10.6	32.3	44.6	44.0	55.0	54.4	87.6	236
20-34	23.3	11.6	30.7	36.4	38.0	39.5	45.7	74.9	5,466
35-49	22.7	9.4	35.4	35.3	35.8	31.5	39.6	70.5	5,174
<b>Number of living children</b>									
0	23.8	10.8	26.4	32.5	34.1	40.1	41.3	71.5	1,021
1-2	23.2	10.9	31.0	35.5	36.9	39.3	43.1	72.8	2,787
3-4	21.8	9.9	31.7	34.0	35.8	32.9	42.0	71.9	3,471
5+	23.9	10.9	37.5	39.5	39.2	35.3	44.3	74.8	3,597
<b>Marital status</b>									
Married	23.2	10.6	31.9	36.2	37.1	36.2	43.3	73.1	10,354
Divorced /widowed	20.3	9.2	53.3	33.7	36.0	32.5	35.7	72.6	522
<b>Employment</b>									
Currently employed	18.0	4.8	20.0	29.4	30.5	27.9	31.8	60.3	1,316
Not employed	23.7	11.3	34.7	37.0	38.0	37.1	44.5	74.8	9,560
<b>Residence</b>									
Urban	22.6	10.4	32.4	34.0	34.8	34.7	42.5	72.1	9,249
Rural	25.8	11.6	35.8	47.6	50.1	43.3	45.4	78.4	1,627
<b>Governorate</b>									
Amman	23.1	12.0	31.4	31.1	32.4	35.1	43.3	72.9	4,442
Balqa	14.1	7.3	39.1	37.3	38.8	27.5	37.3	66.8	645
Zarqa	19.5	8.9	36.0	36.7	36.7	29.9	45.0	69.4	1,645
Madaba	9.8	8.1	25.1	26.0	26.0	30.4	33.7	51.6	262
Irbid	25.4	8.7	29.4	38.3	38.8	38.3	40.7	74.1	1,993
Mafraq	28.5	12.1	37.0	44.6	46.8	48.9	48.6	83.2	460
Jarash	18.4	8.3	38.5	43.0	44.8	38.1	42.9	74.3	293
Ajloun	26.2	6.2	29.4	42.3	41.8	40.4	48.4	77.4	228
Karak	35.3	16.5	32.0	51.2	55.5	42.9	47.1	83.8	378
Tafiela	28.3	13.8	40.5	48.2	50.9	51.6	44.9	82.5	146
Ma'an	33.9	18.1	43.8	52.0	51.0	54.7	51.3	86.8	164
Aqaba	27.7	10.5	40.2	39.9	40.3	40.6	38.0	75.8	221
<b>Region</b>									
Central	20.9	10.7	33.0	32.8	33.7	33.0	42.8	70.7	6,993
North	25.2	9.0	31.5	40.0	40.8	40.1	42.8	75.8	2,975
South	32.1	14.9	37.5	48.1	50.2	45.9	45.3	82.2	908
<b>Badia area</b>									
Badia	24.3	13.8	42.0	49.5	51.2	48.5	44.3	79.0	823
Other	22.9	10.3	32.2	35.0	35.9	35.0	42.9	72.6	10,053
<b>Education</b>									
No education	26.5	16.9	57.5	49.9	51.2	48.4	48.4	81.9	416
Elementary	27.5	14.9	49.1	43.7	48.3	42.7	45.3	78.7	813
Preparatory	22.9	12.2	41.6	41.0	41.8	39.7	46.5	78.6	1,681
Secondary	23.8	11.6	32.4	35.6	36.5	36.9	43.4	74.0	4,788
Higher	20.3	6.2	21.9	30.3	30.7	29.4	39.1	66.2	3,179
<b>Wealth quintile</b>									
Lowest	25.4	14.6	49.4	47.0	47.6	41.8	44.9	81.0	2,211
Second	26.3	13.3	39.1	43.1	45.5	40.2	45.7	78.5	2,296
Middle	21.9	10.5	33.0	34.7	37.7	37.7	44.9	73.8	2,206
Fourth	21.3	8.5	24.4	30.8	30.6	30.6	43.6	68.4	2,135
Highest	20.0	5.3	17.1	23.2	22.1	28.8	35.0	62.4	2,028
<b>Total</b>	23.0	10.6	33.0	36.1	37.1	36.0	43.0	73.1	10,876

Two in five women were concerned that there might not be a female provider at the health facility. The other major problems women reported in accessing health care were taking transport (37 percent), distance to health facility (36 percent), not wanting to go alone (36 percent), and getting money for treatment (33 percent). Younger women, women not employed, those living in rural areas and in the South region, women with lower or no education, and those in the lowest wealth quintiles 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, need for transportation, and not wanting to go alone.

Table 9.10 also shows that with the rise in educational level or household wealth, women face less problems in accessing health care than women with less education and lower household wealth. While eight of ten women with no education or living in the lowest wealth quintile faced at least one problem in accessing health care, two-thirds of women with higher education and 62 percent of women in the highest wealth quintile face at least one problem.

## **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 increase in poor health outcomes for children if their parents are too closely related to one another by blood.

Table 9.11 indicates that only 18 percent of ever-married women and/or their husbands underwent premarital medical examinations. This is particularly worrisome given that 40 percent of ever-married women are related in some way to their husband, and 16 percent of women report that they are first relatives to their spouses. The table also indicates that premarital examination is more frequent among women with older ages at first marriage, those residing in urban areas, in the Central region and in the non-Badia areas than among other women. Women with higher education (24 percent) are more likely to go for a premarital medical examination than women with no education (5 percent). Also, women in the highest wealth quintile (20 percent) are more likely to have had premarital examination than those in lowest wealth quintiles (16 percent).

Table 9.11 Premarital medical examination

Percent distribution of all ever-married women by whether they and/or their husband underwent a premarital medical examination, according to background characteristics, Jordan 2007

Background characteristic	Premarital medical exam			Total	Number of women
	Yes	No	Don't know/missing		
<b>Age at first marriage</b>					
0-19	13.1	86.7	0.2	100.0	4,784
20-24	19.1	80.8	0.1	100.0	4,306
25-29	24.5	75.3	0.2	100.0	1,379
30-34	24.3	75.6	0.1	100.0	305
35+	41.5	58.5	0.0	100.0	102
<b>Residence</b>					
Urban	17.8	82.0	0.2	100.0	9,249
Rural	15.7	84.2	0.1	100.0	1,627
<b>Governorate</b>					
Amman	21.0	78.8	0.2	100.0	4,442
Balqa	14.2	85.7	0.1	100.0	645
Zarqa	13.3	86.7	0.0	100.0	1,645
Madaba	14.3	85.7	0.0	100.0	262
Irbid	16.6	83.0	0.4	100.0	1,993
Mafraq	15.4	84.4	0.2	100.0	460
Jarash	15.5	84.5	0.0	100.0	293
Ajloun	14.6	85.4	0.0	100.0	228
Karak	16.0	83.9	0.1	100.0	378
Tafiela	14.9	85.0	0.1	100.0	146
Ma'an	14.2	85.7	0.2	100.0	164
Aqaba	16.4	83.4	0.2	100.0	221
<b>Region</b>					
Central	18.3	81.5	0.1	100.0	6,993
North	16.2	83.5	0.3	100.0	2,975
South	15.6	84.3	0.2	100.0	908
<b>Badia area</b>					
Badia	14.1	85.7	0.1	100.0	823
Other	17.8	82.0	0.2	100.0	10,053
<b>Education</b>					
No education	4.5	95.3	0.2	100.0	416
Elementary	9.2	90.1	0.6	100.0	813
Preparatory	13.3	86.5	0.2	100.0	1,681
Secondary	17.2	82.7	0.1	100.0	4,788
Higher	24.1	75.8	0.2	100.0	3,179
<b>Wealth quintile</b>					
Lowest	15.7	83.7	0.6	100.0	2,211
Second	16.4	83.6	0.0	100.0	2,296
Middle	18.5	81.5	0.1	100.0	2,206
Fourth	17.6	82.3	0.0	100.0	2,135
Highest	19.5	80.3	0.2	100.0	2,028
Total	17.5	82.3	0.2	100.0	10,876

## 9.6 CANCER SCREENING

Women themselves detect most breast cancers. Therefore, 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 9.12 shows the percentage of women who have had a breast cancer self-exam or an exam by a health specialist.

Table 9.12 Breast cancer exam and pap smear

Percentage of women who had a breast cancer self exam or an exam by a health specialist to detect breast cancer in the twelve months preceding the survey, percentage who have heard of Pap smear, and percentage who ever had a Pap smear, according to background characteristics, Jordan 2007

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
<b>Age</b>						
15-19	13.0	8.8	17.1	43.4	2.8	236
20-29	27.4	15.0	33.1	68.1	9.2	3,253
30-39	33.6	20.4	39.9	81.1	19.7	4,265
40-49	34.9	22.2	41.5	81.9	25.7	3,122
<b>Number of living children</b>						
0	26.6	15.6	31.4	61.6	10.2	1,021
1-2	30.0	16.6	35.5	71.4	10.5	2,787
3-4	34.7	21.3	41.0	81.1	20.4	3,471
5+	31.5	19.7	38.4	80.6	23.5	3,597
<b>Residence</b>						
Urban	32.8	19.8	39.1	77.4	18.8	9,249
Rural	24.9	14.9	30.3	72.4	12.7	1,627
<b>Governorate</b>						
Amman	31.8	21.2	38.1	74.1	20.5	4,442
Balqa	33.4	15.4	37.0	69.2	13.5	645
Zarqa	41.1	19.4	46.2	83.6	15.9	1,645
Madaba	31.8	24.4	37.3	71.6	19.4	262
Irbid	31.7	18.7	38.8	81.2	19.1	1,993
Mafraq	20.4	11.8	26.5	75.3	12.8	460
Jarash	29.4	26.0	40.1	84.0	24.5	293
Ajlun	29.2	16.5	37.8	86.4	20.5	228
Karak	23.5	13.3	28.9	67.4	8.1	378
Tafiela	17.3	9.9	21.9	70.4	7.3	146
Ma'an	14.9	7.4	18.5	62.6	5.2	164
Aqaba	16.6	13.5	23.7	74.1	12.2	221
<b>Region</b>						
Central	34.2	20.3	39.9	75.8	18.8	6,993
North	29.5	18.2	37.0	81.0	18.8	2,975
South	19.3	11.7	24.6	68.6	8.5	908
<b>Badia area</b>						
Badia	23.7	15.4	28.3	64.9	10.5	823
Other	32.3	19.3	38.6	77.6	18.5	10,053
<b>Mother's education</b>						
No education	13.6	11.6	16.8	56.6	9.1	416
Elementary	19.8	13.0	25.6	63.1	12.6	813
Preparatory	24.9	16.3	30.2	73.3	17.1	1,681
Secondary	30.2	19.1	36.8	77.3	17.7	4,788
Higher	42.9	22.9	49.3	83.4	21.2	3,179
<b>Wealth quintile</b>						
Lowest	25.4	13.7	29.7	65.9	9.4	2,211
Second	28.8	15.9	34.2	74.9	15.2	2,296
Middle	32.9	19.2	39.3	78.1	15.3	2,206
Fourth	31.9	17.9	37.4	80.2	21.1	2,135
Highest	40.1	29.3	49.5	84.9	29.5	2,028
Total	31.7	19.0	37.8	76.6	17.9	10,876

About two-fifths of women (38 percent) had a breast cancer exam in the twelve months preceding the survey, either by a self-examination (32 percent) or a clinical exam (19 percent). This represents a significant increase from 2002 (17 percent). Older women, those who have three children or more, women who live in urban areas, in the Central region in the non-Badia areas, women with higher education, and those in highest wealth quintiles are more likely to have had a breast cancer self-exam or an examination by a health professional than other women.

Pap smear or the Pap test checks for changes in the cells of the cervix (a 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 aged 21 or older or sexually active should have an annual Pap smear. During the survey, women were also 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 9.12 shows that 77 percent of women have heard about the Pap smear for detecting cervical cancer and 18 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, in the non-Badia areas, women with higher education and those in highest wealth quintiles are more likely to have had a Pap smear than other women.

## **9.7 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 air when an infectious person coughs, sneeze or spits. In the 2007 JPFHS, women were asked if they have ever heard of tuberculosis. They were also asked which means of TB transmission they knew, if TB can be cured, and if they would be willing to take a TB test.

Table 9.13 shows that 95 percent of women have ever heard of TB. No significant variation in knowledge of TB was observed according to most background characteristics of women. However, only 75 percent of ever-married women aged 15-19 have heard of TB; in addition, there are variations by women's educational level and household wealth quintile. Results indicate that women with higher education and women in highest wealth quintiles are more knowledgeable about TB than women with less education and those in lowest wealth quintiles.

Data indicate that, among women who have heard of TB, only 42 percent know how TB is transmitted from one person to another. Knowledge of the means of transmission of TB is the highest among women aged 40-49, women residing in the Central region and in the non-Badia areas. However, even among these women, only less than 50 percent know that TB is spread through the air by coughing or sneezing by an infected person.

Wider variations are found by educational level of women and household wealth quintile. Knowledge of the mean of transmission of TB increases as educational level and wealth quintile increase. However, only 59 percent of women with higher education and 60 percent of women in the highest wealth quintile know how TB is spread from person to person.

Table 9.13 also shows that 62 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 the knowledge of the route of transmission of TB, however differences are negligible. Data also indicate that 59 percent of women would be willing to take a TB test: variations by background characteristics are smaller (from a minimum of 51 percent in Mafraq to a maximum of 67 percent in Jarash and Zarqa) and do not follow any clear pattern.

Background characteristic	Among all respondents		Among respondents who have heard of TB, the percentage who:			
	Percentage who have heard of TB	Number	Report that TB is spread through the air by coughing	Believe that TB can be cured	Would be willing to take a TB test	Number
<b>Age</b>						
15-19	75.2	236	21.4	46.6	61.3	178
20-24	92.0	1,276	29.0	51.2	56.4	1,174
25-29	95.3	1,977	38.0	58.4	60.6	1,883
30-34	95.5	2,213	41.6	61.7	59.9	2,114
35-39	95.6	2,052	44.3	65.2	57.0	1,962
40-44	95.9	1,884	49.5	67.4	58.4	1,806
45-49	96.0	1,239	49.8	70.6	57.8	1,190
<b>Residence</b>						
Urban	94.9	9,249	42.9	62.3	58.1	8,775
Rural	94.1	1,627	36.6	62.4	61.3	1,530
<b>Governorate</b>						
Amman	95.1	4,442	46.0	62.6	57.9	4,225
Balqa	90.5	645	46.3	57.1	60.0	583
Zarqa	96.3	1,645	49.8	62.7	66.5	1,584
Madaba	93.8	262	47.6	70.6	64.8	246
Irbid	95.1	1,993	32.3	63.1	52.6	1,896
Mafraq	93.4	460	35.3	65.6	50.7	430
Jarash	94.6	293	38.2	59.0	67.2	277
Ajloun	95.5	228	26.5	57.1	66.4	218
Karak	94.0	378	34.3	60.4	55.3	355
Tafiela	93.0	146	32.4	58.1	55.3	136
Ma'an	91.0	164	34.2	63.2	56.5	149
Aqaba	93.5	221	31.5	60.2	62.3	207
<b>Region</b>						
Central	94.9	6,993	47.0	62.4	60.4	6,637
North	94.8	2,975	32.9	62.6	54.8	2,821
South	93.2	908	33.3	60.5	57.2	846
<b>Badia area</b>						
Badia	92.9	823	34.9	65.5	59.4	765
Other	94.9	10,053	42.6	62.1	58.5	9,540
<b>Education</b>						
No education	80.8	416	25.2	55.2	57.9	336
Elementary	87.9	813	26.7	51.8	51.9	715
Preparatory	92.6	1,681	32.9	56.7	59.0	1,557
Secondary	95.5	4,788	37.3	60.4	59.8	4,573
Higher	98.3	3,179	58.7	71.2	58.3	3,124
<b>Wealth quintile</b>						
Lowest	89.9	2,211	29.7	53.2	57.9	1,988
Second	94.4	2,296	36.2	61.8	61.3	2,166
Middle	95.0	2,206	38.6	62.0	57.7	2,096
Fourth	96.7	2,135	46.4	63.2	57.3	2,064
Highest	98.2	2,028	59.6	71.3	58.6	1,991
Total	94.7	10,876	42.0	62.3	58.6	10,305



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 2007 JPFHS, for all births during the five-year period 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, about 11 percent were classified as low birth weight (i.e., they weighed less than 2.5 kilograms at birth) and 89 percent weighed 2.5 kilograms or more.

Table 10.1 Child's weight at birth						
Percentage of live births in the five years preceding the survey with a reported birth weight, and percent distribution of live births in the five years preceding the survey with a reported birth weight by birth weight, according to background characteristics, Jordan 2007						
Background characteristic	Percentage of all births with a reported birth weight	Number of births	Percent distribution of births with a reported birth weight <sup>1</sup>			
			Less than 2.5 kg	2.5 kg or more	Total	Number of births
<b>Mother's age at birth</b>						
<20	99.6	541	12.3	87.7	100.0	539
20-34	99.2	7,612	11.1	88.9	100.0	7,547
35-49	98.8	1,712	10.3	89.7	100.0	1,691
<b>Birth order</b>						
1	99.5	2,161	12.5	87.5	100.0	2,150
2-3	99.5	3,797	11.4	88.6	100.0	3,778
4-5	98.9	2,390	9.7	90.3	100.0	2,363
6+	98.0	1,516	10.0	90.0	100.0	1,486
<b>Mother's smoking status</b>						
Smokes cigarettes/nargila	99.2	904	16.7	83.3	100.0	897
Does not smoke	99.1	8,960	10.5	89.5	100.0	8,879
<b>Residence</b>						
Urban	99.2	8,262	10.7	89.3	100.0	8,200
Rural	98.4	1,601	13.0	87.0	100.0	1,576
<b>Governorate</b>						
Amman	99.5	3,784	11.2	88.8	100.0	3,765
Balqa	99.2	615	10.1	89.9	100.0	610
Zarqa	99.7	1,486	7.8	92.2	100.0	1,481
Madaba	99.1	242	13.4	86.6	100.0	240
Irbid	98.8	1,861	10.0	90.0	100.0	1,838
Mafraq	98.1	479	15.4	84.6	100.0	470
Jarash	99.4	290	12.4	87.6	100.0	289
Ajloun	99.9	233	12.4	87.6	100.0	233
Karak	98.9	348	10.3	89.7	100.0	344
Tafiela	98.2	140	17.0	83.0	100.0	138
Ma'an	95.6	167	23.0	77.0	100.0	160
Aqaba	96.1	217	15.2	84.8	100.0	209

Continued...

Table 10.1—Continued

Background characteristic	Percentage of all births with a reported birth weight	Percent distribution of births with a reported birth weight <sup>1</sup>				
		Number of births	Less than 2.5 kg	2.5 kg or more	Total	Number of births
<b>Region</b>						
Central	99.5	6,127	10.4	89.6	100.0	6,096
North	98.8	2,864	11.3	88.7	100.0	2,830
South	97.5	873	15.0	85.0	100.0	851
<b>Badia area</b>						
Badia	97.4	876	14.5	85.5	100.0	853
Other	99.3	8,988	10.7	89.3	100.0	8,923
<b>Mother's education</b>						
No education	93.8	241	23.6	76.4	100.0	226
Elementary	95.9	591	19.8	80.2	100.0	567
Preparatory	99.3	1,365	13.1	86.9	100.0	1,355
Secondary	99.5	4,735	10.5	89.5	100.0	4,713
Higher	99.4	2,932	8.2	91.8	100.0	2,915
<b>Wealth quintile</b>						
Lowest	98.0	2,541	16.6	83.4	100.0	2,491
Second	99.6	2,342	9.9	90.1	100.0	2,333
Middle	99.4	2,061	8.7	91.3	100.0	2,049
Fourth	99.3	1,634	7.2	92.8	100.0	1,623
Highest	99.6	1,285	10.9	89.1	100.0	1,281
Total	99.1	9,864	11.0	89.0	100.0	9,776

<sup>1</sup> Based on either a written record or the mother's recall

Births to mothers younger than 20 years, first-order births, and births to women who smoke are more likely to weigh less than 2.5 kg at birth. The proportion of low birth weight is higher in rural areas than in urban areas (13 percent, compared to 11 percent), in the Badia areas than the non-Badia areas (15 and 11 percent, respectively) and in the South region than in the North and Central regions (15 percent, compared to 11 and 10 percent, respectively). By governorate, the proportion of low birth weight varies from 8 percent in Zarqa to 23 percent in Ma'an. Low birth weight is also associated with mother's education, ranging from 24 percent when the mother has no education to 8 percent for mothers with higher education.

## 10.2 VACCINATION COVERAGE

Universal immunization of children from 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 survey 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 the age of 12 months. BCG should be given at birth or at first clinical contact, DPT and polio require three vaccinations at approximately 4, 8, and 12 weeks of age, and measles should be given at nine months of age.

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. The proportion of vaccination cards seen by the interviewer (90 percent) is higher compared to 2002 JPFHS (78 percent). 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 is 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 12 months of age, Jordan 2007

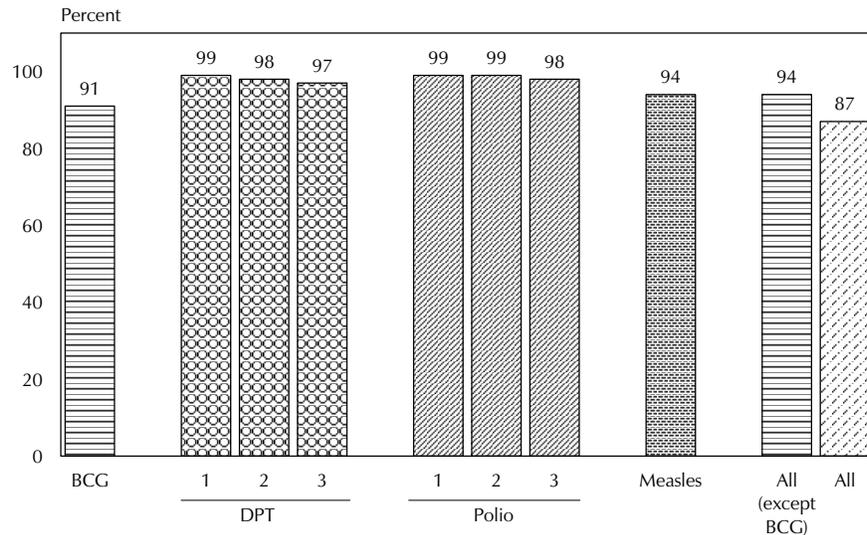
Source of information	BCG	DPT			Polio			Measles	All basic vaccinations except BCG <sup>1</sup>	All basic vaccinations including BCG <sup>2</sup>	No vaccinations	Number of children
		1	2	3	1	2	3					
<b>Vaccinated at any time before survey</b>												
Vaccination card	82.7	90.0	89.6	88.9	90.2	89.9	89.4	85.8	85.5	79.0	0.0	1,688
Mother's report	8.6	8.9	8.8	8.6	8.9	8.9	8.6	8.5	8.2	8.0	0.8	182
Both sources	91.3	98.9	98.4	97.4	99.1	98.7	98.0	94.3	93.7	87.0	0.8	1,870
<b>Vaccinated by 12 months of age<sup>3</sup></b>												
	89.5	98.4	97.4	96.0	98.6	97.6	96.6	85.8	85.2	79.2	1.3	1,870

<sup>1</sup> Measles and three doses each of DPT and polio vaccine  
<sup>2</sup> BCG, measles, and three doses each of DPT and polio vaccine  
<sup>3</sup> For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccination.

Ninety-four percent of children have received all vaccines with the exception of BCG, which is similar to that of the previous survey in 2002. However, the percentage of children fully immunized including BCG (87 percent) has increased significantly compared to 2002 JPFHS (28 percent). Before 2002, children in Jordan did not always receive the BCG vaccine; it was only included as part of the national vaccination program following the 2002 JPFHS survey, hence the sharp increase in the percentage of children fully immunized (including BCG) in the 2007 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.

**Figure 10.1 Percentage of Children Age 12-23 Months with Specific Vaccinations**



JPFHS 2007

Coverage for the first and second doses of DPT is slightly higher (about 99 percent for the first dose and 98 percent for the second dose) than that for the third dose of DPT (97 percent). Although DPT and polio vaccines are often administered at the same time, polio coverage is slightly higher than DPT coverage. The dropout between the first and third doses of the polio vaccine is slightly higher than that between the first and third doses of DPT.

Table 10.3 shows the vaccination coverage by background characteristics among children aged 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.

There are slight variations in vaccination coverage by sex: 86 percent of boys were fully vaccinated compared to 88 percent of girls. There are also slight variations in vaccination coverage between urban and rural areas (89 percent were fully vaccinated in urban areas compared to 77 percent in rural areas). Vaccination coverage in the Central and North regions and the non-Badia areas is higher than that for other children.

Table 10.3 also shows significant variations according to the level of education of the mother. Women with no education show relatively low vaccination coverage for their children, particularly that of BCG (59 percent of children of women with no education are fully vaccinated compared to 89 percent of children of women with higher than secondary education). There are also differences in vaccination coverage by household wealth quintile. Children in the poorest households are least likely to be fully vaccinated (82 percent), while children living in households in the middle wealth quintile are more likely to be fully vaccinated (90 percent) than children in other households.

Table 10.3 Vaccinations 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 2007

Background characteristic	DPT			Polio			Measles	All basic vaccinations except BCG <sup>1</sup>	All basic vaccinations including BCG <sup>2</sup>	No vaccinations	Percentage with a vaccination card seen	Number of children	
	BCG	1	2	3	1	2							3
<b>Sex</b>													
Male	90.9	99.0	98.3	96.6	99.1	98.5	97.2	93.3	92.0	85.7	0.9	87.9	899
Female	91.6	98.7	98.5	98.2	99.2	98.9	98.7	95.3	95.2	88.2	0.8	92.4	971
<b>Birth order</b>													
1	92.8	97.8	97.7	97.7	97.8	97.7	97.7	94.5	94.4	90.0	2.2	83.8	391
2-3	92.2	99.6	99.3	97.8	99.6	99.3	98.6	95.1	93.8	87.7	0.4	90.0	761
4-5	90.7	99.0	97.9	97.6	100.0	99.2	98.5	93.9	93.4	85.8	0.0	93.6	470
6+	87.1	98.0	97.7	95.8	98.2	97.7	95.8	92.8	92.6	82.3	1.7	95.0	248
<b>Residence</b>													
Urban	92.7	98.8	98.6	97.5	99.1	98.8	98.1	94.9	94.3	89.0	0.9	91.0	1,564
Rural	83.9	99.5	97.6	97.0	99.5	98.3	97.2	91.5	90.6	77.1	0.5	86.8	306
<b>Governorate</b>													
Amman	94.8	98.4	98.4	96.7	99.0	99.0	98.0	94.3	93.1	90.0	1.0	88.5	755
Balqa	92.5	100.0	100.0	100.0	100.0	100.0	100.0	96.2	96.2	89.6	0.0	96.2	108
Zarqa	90.6	99.3	98.7	98.7	99.3	98.7	98.7	95.8	95.8	87.3	0.7	96.9	260
Madaba	88.1	99.3	98.7	98.7	99.3	98.7	98.7	95.4	95.4	86.2	0.7	96.8	43
Irbid	95.3	99.2	98.7	98.7	99.2	99.2	98.7	96.8	96.3	92.4	0.8	87.7	348
Mafraq	90.2	98.9	97.2	96.6	98.9	97.2	96.6	90.5	90.5	82.3	1.1	86.1	85
Jarash	89.1	99.4	99.4	98.3	99.4	99.4	98.3	94.1	94.1	85.0	0.6	91.5	59
Ajloun	96.3	98.8	96.3	94.3	98.8	96.3	94.3	89.8	89.8	87.9	0.6	88.8	43
Karak	47.0	99.0	99.0	98.3	99.0	99.0	98.3	92.1	92.1	45.5	1.0	87.0	62
Tafiela	78.8	99.3	97.9	97.4	99.3	97.9	97.4	89.8	89.1	72.6	0.7	91.3	26
Ma'an	87.6	96.3	92.6	88.9	98.4	93.7	89.4	86.4	83.8	77.2	1.1	92.9	38
Aqaba	77.3	99.0	97.6	96.3	99.0	97.6	96.7	86.6	86.2	71.8	1.0	90.2	46
<b>Region</b>													
Central	93.4	98.8	98.6	97.5	99.2	99.0	98.3	94.9	94.1	89.2	0.8	91.4	1,165
North	93.9	99.1	98.3	97.9	99.1	98.6	97.9	94.9	94.6	89.6	0.8	88.0	535
South	68.8	98.5	97.1	95.5	98.9	97.3	95.8	89.0	88.2	63.5	1.0	89.8	170
<b>Badia area</b>													
Badia	88.1	98.9	96.8	95.6	99.1	96.9	95.9	90.3	89.6	80.8	0.8	88.2	181
Other	91.6	98.9	98.6	97.6	99.1	98.9	98.2	94.8	94.1	87.7	0.8	90.5	1,689
<b>Mother's education</b>													
No education	67.1	94.7	91.5	89.3	95.6	92.0	89.3	86.1	84.6	58.9	4.4	88.2	40
Elementary	84.3	96.8	95.3	90.8	96.8	95.3	90.8	82.0	82.0	71.6	3.1	89.5	116
Preparatory	87.7	98.9	96.9	96.4	98.9	97.8	96.4	93.9	93.0	82.8	1.1	93.5	203
Secondary	92.6	99.1	98.9	98.2	99.1	98.9	98.8	95.9	95.3	89.8	0.9	89.1	909
Higher	93.5	99.2	99.2	98.4	100.0	99.9	99.3	95.1	94.3	89.0	0.0	91.2	602
<b>Wealth quintile</b>													
Lowest	88.1	98.7	97.9	96.6	98.8	97.9	96.6	91.9	91.8	82.2	1.2	91.4	494
Second	92.2	99.0	98.4	97.3	99.0	98.5	97.4	94.8	94.0	87.9	1.0	92.4	464
Middle	92.2	99.5	99.5	97.8	99.6	99.5	99.4	97.0	95.4	90.0	0.3	90.1	386
Fourth	92.3	98.7	98.1	98.1	98.7	98.7	98.1	93.2	92.6	87.8	1.3	89.5	300
Highest	93.4	98.0	98.0	98.0	99.8	99.8	99.8	95.8	95.8	89.4	0.2	84.9	226
Total	91.3	98.9	98.4	97.4	99.1	98.7	98.0	94.3	93.7	87.0	0.8	90.3	1,870

<sup>1</sup> Measles and three doses each of DPT and polio vaccine

<sup>2</sup> BCG, measles, and three doses each of DPT and polio vaccine

### 10.2.1 Trends in Vaccination Coverage

One way of measuring trends in vaccination coverage is to compare coverage among children of different ages. Table 10.4 shows the percentage of children aged 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 10.4 Vaccinations in first year of life

Percentage of children age 12-59 months at the time of the survey who received specific vaccines by 12 months of age, and percentage with a vaccination card, by current age of child, Jordan 2007

Age in months	BCG	DPT			Polio			Measles	All basic vaccinations except BCG <sup>1</sup>	All basic vaccinations including BCG <sup>2</sup>	No vaccinations	Percentage with a vaccination card seen	Number of children
		1	2	3	1	2	3						
12-23	89.5	98.4	97.4	96.0	98.6	97.6	96.6	85.8	85.2	79.2	1.3	90.3	1,870
24-35	77.1	98.2	98.0	97.3	98.2	97.8	97.3	86.9	83.3	68.2	1.6	90.2	1,907
36-47	76.8	97.9	97.8	96.6	98.0	97.9	97.0	87.4	84.1	69.2	1.7	88.7	1,976
48-59	72.0	97.2	96.5	95.5	97.3	96.6	95.7	89.1	85.4	66.2	2.6	73.1	1,900
Total	78.9	97.9	97.5	96.4	98.1	97.5	96.7	87.3	84.7	70.7	1.8	85.6	7,652

Note: Information was obtained from the vaccination card or if there was no written record, from the mother. For children whose information was based on the mother's report, the proportion of vaccinations given during the first year of life was assumed to be the same as for children with a written record of vaccinations.

<sup>1</sup> Measles and three doses each of DPT and polio vaccine

<sup>2</sup> BCG, measles, and three doses each of DPT and polio vaccine

There has been little change in the vaccination coverage over the past five years. Table 10.4 does not show any change in vaccination coverage for any vaccination, with the exception of BCG. There has been an increase of 16 percentage points in BCG coverage (72 percent in age group 48-59 months to 90 percent in age group 12-23 months). In the past five years, full vaccination coverage (including BCG) has increased from 66 to 79 percent, while the percentage of children receiving measles vaccination declined slightly (from 89 percent of children aged 48-59 months to 86 percent aged 12-23 months). Vaccination cards were seen by the interviewer for 90 percent of children aged 12-23 months compared to 73 percent of children aged 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 would not be available at the time of the survey.

## 10.2.2 Additional Doses

Tables 10.5.1 and 10.5.2 show the percentage of children aged 24-59 months who received polio, DPT, Hepatitis, Hib, Measles and MMR vaccines at any time before the survey.

Children generally receive the three polio doses at one-month intervals. In addition, a fourth dose of polio is given at nine months of age and a booster dose is given at 18 months of age. There are no significant differences observed in polio vaccination coverage for three doses of polio (more than 99 percent of children aged 24-59 months). However, there is a significant decrease between the proportion of children vaccinated with the fourth dose of polio (92 percent) and those vaccinated with the booster (87 percent). This drop in vaccination coverage for the polio booster could be due to the fact that only children less than five years of age were included in the 2007 JPFHS, while the booster dose is generally given to the children between the ages of 5 and 6 years. Therefore, a large percentage of children included in the survey were still too young to have received the booster dose.

Coverage of the three doses of DPT in children aged 24-59 months is high (more than 99 percent). As is the case for polio, coverage for the DPT booster (88 percent), usually given at 18 months, is considerably lower than DPT 3 (99 percent).

Table 10.5.1 Vaccinations of children 24-59 months by background characteristics (Part 1)

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 2007

Background characteristic	Polio					DPT				Number of children
	1	2	3	4	Booster	1	2	3	Booster	
<b>Sex</b>										
Male	99.6	99.4	99.2	91.8	87.1	99.5	99.4	99.3	88.5	2,963
Female	99.3	99.2	98.9	91.4	86.7	99.2	99.1	98.8	87.7	2,819
<b>Birth order</b>										
1	99.2	99.1	99.1	92.0	87.3	99.0	98.9	98.9	88.5	1,311
2-3	99.5	99.4	99.1	90.7	86.3	99.6	99.4	99.3	87.9	2,163
4-5	99.5	99.5	99.4	92.8	88.8	99.5	99.5	99.4	89.6	1,402
6+	99.4	99.2	98.4	91.4	85.1	99.1	99.0	98.1	85.9	906
<b>Residence</b>										
Urban	99.4	99.4	99.1	91.9	87.5	99.3	99.2	99.1	88.8	4,887
Rural	99.4	99.1	98.8	89.8	83.6	99.4	99.2	98.8	84.5	895
<b>Governorate</b>										
Amman	99.8	99.8	99.3	91.1	86.3	99.8	99.8	99.5	87.7	2,195
Balqa	100.0	100.0	100.0	90.9	88.7	100.0	100.0	100.0	89.6	367
Zarqa	99.1	98.7	98.7	93.4	89.4	99.1	98.7	98.7	90.8	943
Madaba	99.4	99.4	98.8	96.1	92.3	99.4	99.4	98.8	91.4	141
Irbid	99.2	99.2	99.2	94.0	89.6	98.7	98.7	98.7	90.9	1,053
Mafrsq	98.4	98.4	98.3	92.2	89.3	98.6	98.6	98.4	89.7	280
Jarash	99.5	99.5	99.5	95.3	91.5	99.5	99.5	99.5	91.9	158
Ajloun	99.5	99.5	99.5	95.9	94.2	99.5	99.5	99.5	94.2	144
Karak	99.5	99.3	99.1	85.2	72.6	99.5	98.9	98.7	74.5	201
Tafiela	99.8	99.8	99.4	84.0	78.5	99.8	99.6	99.4	79.1	83
Ma'an	98.1	96.3	95.6	81.5	70.3	97.0	96.0	94.9	70.8	94
Aqaba	99.0	98.6	97.6	76.0	67.9	98.8	98.2	97.1	69.8	124
<b>Region</b>										
Central	99.6	99.5	99.2	91.9	87.6	99.6	99.5	99.3	88.8	3,645
North	99.1	99.1	99.1	94.0	90.1	98.9	98.9	98.8	91.1	1,635
South	99.2	98.7	98.1	82.0	72.0	98.9	98.3	97.7	73.4	502
<b>Badia area</b>										
Badia	99.0	98.5	97.9	90.1	84.4	98.9	98.5	97.8	84.7	502
Other	99.5	99.4	99.2	91.7	87.2	99.4	99.3	99.2	88.4	5,281
<b>Mother's education</b>										
No education	99.1	98.7	93.6	80.2	72.6	98.8	98.5	93.6	76.6	154
Elementary	98.9	98.8	97.2	89.5	82.8	98.9	98.7	98.4	87.0	362
Preparatory	99.6	99.6	99.6	94.1	90.7	99.6	99.6	99.6	90.0	810
Secondary	99.4	99.2	99.2	91.9	87.4	99.2	99.1	99.0	88.4	2,743
Higher	99.6	99.6	99.5	91.4	86.6	99.6	99.5	99.5	88.1	1,713
<b>Wealth quintile</b>										
Lowest	99.5	99.2	98.2	91.1	85.8	99.3	99.0	98.4	87.5	1,428
Second	99.5	99.4	99.4	93.9	90.2	99.3	99.3	99.2	90.5	1,319
Middle	99.6	99.6	99.6	92.9	89.3	99.7	99.6	99.6	89.7	1,210
Fourth	98.7	98.5	98.5	89.3	85.2	98.7	98.5	98.5	86.1	1,017
Highest	100.0	100.0	99.9	89.7	82.4	100.0	100.0	99.9	85.6	808
Total	99.4	99.3	99.1	91.6	86.9	99.4	99.2	99.0	88.1	5,782

Table 10.5.2 Vaccinations of children 24-59 months by background characteristics (Part 2)

Background characteristic	Hepatitis B			Hib			Measles	MMR	Percentage with a vaccination card seen	Number of children
	1	2	3	1	2	3				
<b>Sex</b>										
Male	99.6	99.3	99.0	99.4	99.2	99.1	98.5	96.1	84.2	2,963
Female	99.2	99.1	98.6	99.0	99.0	98.6	98.4	95.7	83.9	2,819
<b>Birth order</b>										
1	99.0	98.9	98.6	99.0	98.9	98.9	98.2	96.8	84.5	1,311
2-3	99.6	99.4	99.1	99.3	99.2	99.1	98.7	95.9	83.4	2,163
4-5	99.5	99.4	99.2	99.5	99.4	99.2	98.9	97.0	86.2	1,402
6+	99.1	98.9	98.0	99.0	98.8	97.8	97.6	92.9	82.0	906
<b>Residence</b>										
Urban	99.4	99.2	98.9	99.2	99.1	99.0	98.5	96.3	84.6	4,887
Rural	99.4	99.1	98.6	99.2	98.9	98.6	98.0	93.5	81.5	895
<b>Governorate</b>										
Amman	99.8	99.8	99.1	99.8	99.8	99.5	98.9	96.0	87.1	2,195
Balqa	100.0	100.0	100.0	100.0	100.0	99.8	99.6	98.5	86.1	367
Zarqa	99.1	98.7	98.7	99.1	98.7	98.7	98.6	98.0	88.0	943
Madaba	99.4	99.0	98.0	98.9	98.4	98.0	97.4	94.8	90.6	141
Irbid	98.7	98.7	98.7	98.5	98.5	98.5	97.9	95.5	77.8	1,053
Mafrsq	98.6	98.6	98.4	98.4	98.4	98.3	97.7	95.0	78.4	280
Jarash	99.5	99.5	99.5	99.5	99.5	99.5	98.5	96.4	81.1	158
Ajloun	99.5	99.5	99.5	99.5	99.5	99.5	98.5	96.7	75.3	144
Karak	99.8	98.4	97.9	98.2	97.5	97.0	99.3	92.2	78.8	201
Tafiela	99.8	99.6	99.4	99.8	99.6	99.4	98.8	96.7	81.4	83
Ma'an	97.0	96.0	94.7	96.7	95.8	94.4	94.6	85.0	84.1	94
Aqaba	98.6	97.9	96.9	98.6	97.9	96.9	94.8	90.9	78.4	124
<b>Region</b>										
Central	99.6	99.5	99.0	99.6	99.5	99.3	98.9	96.7	87.4	3,645
North	98.9	98.9	98.8	98.7	98.7	98.7	98.0	95.6	78.0	1,635
South	99.0	98.0	97.3	98.3	97.6	96.9	97.2	91.3	80.1	502
<b>Badia area</b>										
Badia	98.9	98.4	97.6	98.8	98.3	97.6	96.7	92.5	84.6	502
Other	99.4	99.3	99.0	99.3	99.2	99.0	98.6	96.2	84.0	5,281
<b>Mother's education</b>										
No education	98.8	98.0	93.0	98.7	97.9	93.2	91.6	89.5	77.9	154
Elementary	98.9	98.6	98.2	98.9	98.6	98.2	96.2	93.9	83.7	362
Preparatory	99.6	99.6	99.5	99.6	99.6	99.5	99.1	95.3	87.8	810
Secondary	99.2	99.0	98.7	99.0	98.9	98.8	98.5	95.8	85.0	2,743
Higher	99.6	99.5	99.4	99.5	99.5	99.4	99.3	97.4	81.5	1,713
<b>Wealth quintile</b>										
Lowest	99.3	99.0	97.7	99.2	98.8	98.2	97.4	94.5	85.2	1,428
Second	99.3	99.2	99.1	99.2	99.1	99.0	98.8	97.1	86.0	1,319
Middle	99.7	99.6	99.5	99.5	99.5	99.5	99.5	97.5	85.0	1,210
Fourth	98.6	98.4	98.4	98.5	98.4	98.4	98.2	94.3	82.5	1,017
Highest	100.0	100.0	99.9	99.9	99.9	99.9	98.8	96.1	79.8	808
Total	99.4	99.2	98.8	99.2	99.1	98.9	98.5	95.9	84.1	5,782

### 10.2.3 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, and the second and third doses are given between the third and fourth month, and between the second and seventeenth month, respectively. The percentage of children vaccinated against Hepatitis B is shown in Table 10.5.2. Ninety-nine percent of children received three doses of Hepatitis vaccination. There is very little variation in vaccination coverage according to background characteristics.

## **Haemophilus influenza type b (Hib)**

Haemophilus influenza 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 doses of Hib vaccine at two and three months of age, respectively, and a third dose may be given at four months of age. Results in Table 10.5.2 show that 99 percent of children age 24-59 months received the Hib vaccine, with a substantial increase compared to the 2002 JPFHS (only 11 percent of children received the first dose of Hib). 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 9 months of age and the second dose, as part of the MMR vaccine, is recommended at 18 months. Ninety-nine percent of children age 24-59 months received the first dose of the measles vaccine (Table 10.5.2) and a combined MMR was given to 96 percent of children.

A higher proportion of measles coverage (99 percent) is observed for children of mothers who have at least a preparatory education compared to children of mothers have no education (92 percent). There are slight variations in MMR coverage by birth order and residence and according to the mother's level of education (97 percent for children of mothers with higher than secondary education compared to 90 percent for children of mothers with no education).

## **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 2007 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, which the mother considered to be chest-related. It should be noted that the morbidity data collected are subjective, as they are based on mother's perception of illness with no validation from medical personnel.

Table 10.6 shows the percentage of children under age five with symptoms of ARI during the two weeks preceding the survey. In total, 5 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 aged 6-11 months are more likely to have ARI symptoms (9 percent) than children in any other age group. There are slight differences in the prevalence of ARI by sex of the child, urban-rural residence and residence in Badia areas. Prevalence of ARI also varies widely by governorate, from a minimum of 2 percent in Madaba and Tafiela to a maximum of 7 percent in Amman and Ajloun.

Mother's smoking status is directly proportional to the presence of ARI symptoms in children. Use of tobacco results in a higher prevalence of ARI symptoms in children (8 percent) compared to children of mothers who do not smoke (5 percent).

Table 10.6 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 percentage who received antibiotics as treatment, according to background characteristics, Jordan 2007

Background characteristic	Children under age five		Children under age five with symptoms of ARI		
	Percentage with symptoms of ARI <sup>1</sup>	Number of children	Percentage for whom advice or treatment was sought from a health facility or provider <sup>2</sup>	Percentage who received antibiotics	Number of children
<b>Age in months</b>					
<6	3.1	1,062	(92.9)	(88.0)	33
6-11	8.9	955	78.2	68.5	85
12-23	6.4	1,870	74.9	82.5	120
24-35	5.1	1,907	67.3	86.7	96
36-47	4.1	1,976	65.8	70.3	81
48-59	3.8	1,900	83.8	82.9	72
<b>Sex</b>					
Male	5.7	4,917	78.5	84.1	282
Female	4.3	4,751	70.1	72.7	206
<b>Mother's smoking status</b>					
Smokes cigarettes/nargila	8.1	879	(84.2)	(81.3)	72
Does not smoke	4.7	8,790	73.4	78.9	416
<b>Residence</b>					
Urban	5.4	8,096	74.0	79.1	433
Rural	3.5	1,572	83.2	80.8	54
<b>Governorate</b>					
Amman	6.8	3,692	73.3	72.4	250
Balqa	2.2	605	*	*	13
Zarqa	2.8	1,469	(73.2)	(82.2)	42
Madaba	1.5	237	*	*	4
Irbid	5.2	1,826	(74.7)	(94.3)	95
Mafraq	4.7	468	(86.3)	(83.6)	22
Jarash	3.8	287	(59.7)	(75.3)	11
Ajloun	6.7	230	69.6	79.8	15
Karak	6.3	338	(86.9)	(83.7)	21
Tafiela	1.6	137	*	*	2
Ma'an	2.8	164	*	*	5
Aqaba	3.6	215	(63.4)	(64.3)	8
<b>Region</b>					
Central	5.1	6,003	74.3	74.3	308
North	5.1	2,811	74.8	89.7	144
South	4.2	854	81.4	80.5	36
<b>Badia area</b>					
Badia	3.9	863	83.9	71.9	33
Other	5.2	8,806	74.3	79.8	455
<b>Mother's education</b>					
No education	4.7	238	*	*	11
Elementary	7.2	573	(55.6)	(61.1)	41
Preparatory	6.5	1,345	73.0	72.0	88
Secondary	5.7	4,612	77.2	85.0	264
Higher	2.9	2,901	77.8	81.9	84
<b>Wealth quintile</b>					
Lowest	4.9	2,480	66.0	71.4	122
Second	5.0	2,298	80.1	85.6	115
Middle	5.6	2,038	84.9	79.7	115
Fourth	6.0	1,597	67.1	73.2	96
Highest	3.2	1,255	*	*	40
<b>Total</b>	5.0	9,669	75.0	79.3	488

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.

<sup>1</sup> Symptoms of ARI (cough accompanied by short, rapid breathing which was chest-related) is considered a proxy for pneumonia.

<sup>2</sup> Excludes pharmacy, shop, and traditional practitioner

Prevalence of ARI varies significantly by the level of education of the mother. While 7 percent of children of mothers with elementary education had ARI symptoms, this percentage drops to 3 percent for children of mothers with higher than secondary education. The percentage of children with ARI symptoms varies also according to household wealth. Prevalence of ARI is lowest among children living in the wealthiest households.

Table 10.6 also shows that medical advice or treatment was sought for three-quarters of children who had ARI symptoms and 79 percent 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 health facility 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.

#### **10.4 PREVALENCE OF FEVER**

Fever is a major manifestation of acute infections in children. Table 10.7 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, 14 percent of children had fever in the two weeks before the interview, compared to 9 percent in 2002.

The prevalence of fever is high among children aged 6-11 months and 12-23 months (27 and 18 percent, respectively). There are no significant variations in the prevalence of fever by the sex of the child. However, there are noticeable variations by urban-rural residence (15 and 12 percent, respectively) and by governorate, ranging from 5 percent in Zarqa to 20 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 16 percent among children of mothers with secondary education.

Table 10.7 shows that medical advice or treatment was sought for 70 percent of children with fever and 85 percent received antibiotics to treat fever. These percentages vary widely by background characteristics. Female children are more likely to be taken to health facility and given antibiotics than male children. 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 most common in rural areas, in the North and the South regions, and in the non-Badia areas.

Table 10.7 Prevalence and treatment of fever

Among children under age five, the percentage who had a fever in the two weeks preceding the survey; and among children with fever, the percentage of children for whom advice or treatment was sought from a health facility or provider, the percentage who took antibiotic drugs, by background characteristics, Jordan 2007

Background characteristic	Among children under age five:		Children under age five with fever		
	Percentage with fever	Number of children	Percentage for whom advice or treatment was sought from a health facility or provider <sup>1</sup>	Percentage who took antibiotic drugs	Number of children
<b>Age in months</b>					
<6	10.4	1,062	60.8	74.6	110
6-11	26.7	955	72.2	82.2	255
12-23	18.2	1,870	69.2	82.8	340
24-35	12.3	1,907	72.1	86.0	234
36-47	13.2	1,976	71.2	90.0	261
48-59	9.4	1,900	69.8	87.3	178
<b>Sex</b>					
Male	14.7	4,917	69.4	82.1	722
Female	13.8	4,751	70.7	87.2	655
<b>Residence</b>					
Urban	14.7	8,096	68.9	84.2	1,190
Rural	11.9	1,572	77.0	86.8	187
<b>Governorate</b>					
Amman	16.8	3,692	66.5	82.1	621
Balqa	7.4	605	80.1	83.8	45
Zarqa	5.2	1,469	(81.9)	(85.5)	77
Madaba	7.2	237	78.0	81.3	17
Irbid	19.6	1,826	67.4	87.0	359
Mafraq	15.8	468	77.5	86.8	74
Jarash	12.8	287	78.3	89.0	37
Ajloun	17.3	230	70.8	85.1	40
Karak	16.4	338	77.5	89.8	55
Tafiela	8.9	137	80.7	89.1	12
Ma'an	11.6	164	73.9	81.7	19
Aqaba	9.9	215	77.8	83.1	21
<b>Region</b>					
Central	12.7	6,003	69.1	82.5	760
North	18.1	2,811	69.9	87.0	509
South	12.6	854	77.3	87.0	108
<b>Badia area</b>					
Badia	11.8	863	71.5	79.4	102
Other	14.5	8,806	69.9	84.9	1,275
<b>Mother's education</b>					
No education	8.3	238	(84.5)	(87.9)	20
Elementary	12.7	573	57.1	71.6	73
Preparatory	14.6	1,345	72.0	92.0	196
Secondary	16.1	4,612	68.8	85.0	743
Higher	11.9	2,901	73.4	81.8	345
<b>Wealth quintile</b>					
Lowest	13.3	2,480	69.2	80.8	330
Second	14.3	2,298	70.5	87.0	329
Middle	13.9	2,038	69.7	83.7	283
Fourth	15.7	1,597	65.0	84.2	252
Highest	14.6	1,255	78.1	88.3	183
Total	14.2	9,669	70.0	84.5	1,377

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

<sup>1</sup> Excludes pharmacy, shop, and traditional practitioner

## 10.5 PREVALENCE OF DIARRHEA

Table 10.8 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 years experienced diarrhea at some time in the two weeks preceding the interview, an increase of one percentage point compared to 2002. The occurrence of diarrhea varies by age of the child; children aged 6-23 months are more prone to diarrhea than children in the other age groups. There are variations in the prevalence of diarrhea by region (21 percent in the North region compared to 13 percent in the Central region) and by governorate (from a minimum of 9 percent in Zarqa and Madaba to a maximum of 22 percent in Irbid and Karak). Prevalence of diarrhea in children also varies according to the source of drinking water. Children who consume water from an improved source are less likely to have experienced diarrhea (16 percent) compared to those who consume water from sources that are not safe for drinking (26 percent). Similarly, children who use improved and unshared toilet facilities are less likely to experience diarrhea (16 percent) compared with those who use non-improved or shared toilet facilities (21 percent).

Table 10.8 also shows that less than 1 percent of children have experienced diarrhea with blood in their stool. The prevalence of this type of severe diarrhea shows little variation, but is 2 percent among children who use non-improved toilet facilities and children from Mafraq.

### 10.5.1 Diarrhea Treatment

Table 10.9 shows the percentage of children with diarrhea who received specific treatments and management practices by background characteristics. Treatment and/or advice was sought from a health facility or a provider for more than half (55 percent) of children with diarrhea in the two weeks preceding the survey. Treatment was more commonly sought for children aged 6-35 months (who also have the highest prevalence of diarrhea) and for children who had blood in their stools. The proportion of children for which a treatment or advice was sought is higher in rural areas (60 percent) than in urban areas (54 percent). Variations are also found by governorate and residence in Badia areas.

Table 10.8 Prevalence of diarrhea

Percentage of children under age five who had diarrhea in the two weeks preceding the survey, by background characteristics, Jordan 2007

Background characteristic	Diarrhea in the two weeks preceding the survey		Number of children
	All diarrhea	Diarrhea with blood	
<b>Age in months</b>			
<6	17.2	1.2	1,062
6-11	32.2	1.3	955
12-23	24.7	0.7	1,870
24-35	12.9	0.5	1,907
36-47	9.9	0.6	1,976
48-59	7.9	0.3	1,900
<b>Sex</b>			
Male	15.8	0.9	4,917
Female	16.1	0.5	4,751
<b>Source of drinking water<sup>1</sup></b>			
Improved	15.7	0.7	9,422
Not improved	26.1	0.5	247
<b>Toilet facility<sup>1</sup></b>			
Improved, not shared	15.8	0.6	9,336
Non-improved or shared	21.0	2.3	333
<b>Residence</b>			
Urban	15.7	0.7	8,096
Rural	17.4	0.8	1,572
<b>Governorate</b>			
Amman	15.7	0.2	3,692
Balqa	11.4	0.6	605
Zarqa	8.9	0.1	1,469
Madaba	8.6	0.6	237
Irbid	21.6	1.3	1,826
Mafraq	19.9	2.0	468
Jarash	17.8	1.7	287
Ajloun	16.2	1.1	230
Karak	22.3	1.3	338
Tafiela	16.8	1.7	137
Ma'an	21.4	1.2	164
Aqaba	16.2	1.2	215
<b>Region</b>			
Central	13.3	0.3	6,003
North	20.5	1.4	2,811
South	19.7	1.3	854
<b>Badia area</b>			
Badia	15.9	1.2	863
Other	16.0	0.6	8,806
<b>Mother's education</b>			
No education	9.9	0.6	238
Elementary	14.3	0.6	573
Preparatory	18.4	1.1	1,345
Secondary	17.0	0.7	4,612
Higher	13.9	0.4	2,901
<b>Wealth quintile</b>			
Lowest	18.3	0.9	2,480
Second	14.8	0.7	2,298
Middle	17.0	1.0	2,038
Fourth	14.0	0.6	1,597
Highest	14.2	0.0	1,255
Total	16.0	0.7	9,669

<sup>1</sup> See Table 2.7 for definition of categories.

Table 10.9 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 2007

Background characteristic	Percentage of children with diarrhea for whom advice or treatment was sought from a health facility or provider <sup>1</sup>	Oral rehydration therapy (ORT)					Other treatments					No treatment	Number of children
		ORS packets or pre-packaged liquid	Recommended home fluids (RHF)	Either ORS or RHF	Increased fluids	ORT or increased fluids	Anti-biotic drugs	Intra-venous solution	Home remedy/ other	Missing			
<b>Age in months</b>													
<6	54.4	16.9	16.8	28.7	31.0	48.7	37.5	0.0	20.8	0.0	33.0	182	
6-11	60.7	21.7	11.4	26.0	38.5	52.5	45.9	1.3	33.4	0.0	24.4	307	
12-23	57.3	23.6	6.5	27.2	49.9	62.2	54.2	0.5	28.3	0.0	15.1	462	
24-35	56.5	22.8	6.9	27.0	56.2	65.9	51.1	0.2	28.2	0.0	15.5	246	
36-47	48.5	14.2	8.7	20.5	46.9	55.4	46.6	0.6	30.5	0.9	21.2	196	
48-59	46.7	9.9	3.8	13.1	47.0	51.5	47.4	0.5	21.1	1.2	32.2	150	
<b>Sex</b>													
Male	56.1	17.1	9.1	22.7	47.5	58.3	48.8	0.7	29.6	0.0	19.7	778	
Female	54.6	22.5	8.4	27.1	43.9	56.4	48.1	0.4	26.3	0.5	23.5	765	
<b>Type of diarrhea</b>													
Non bloody	54.2	19.0	8.2	23.9	45.4	56.4	47.6	0.5	27.7	0.2	22.3	1,467	
Bloody	79.6	33.5	21.3	43.5	54.1	74.1	63.2	1.1	37.7	0.0	6.7	67	
<b>Residence</b>													
Urban	54.3	19.7	8.9	24.7	46.0	57.8	47.8	0.4	27.2	0.3	21.5	1,269	
Rural	60.3	19.9	8.2	25.9	44.5	55.2	51.4	1.2	31.9	0.0	22.0	274	
<b>Governorate</b>													
Amman	53.0	25.4	9.6	30.1	46.6	60.6	39.5	0.8	31.5	0.0	19.3	578	
Balqa	52.7	24.8	4.3	28.0	39.4	56.4	49.4	0.0	28.1	0.0	23.3	69	
Zarqa	60.5	16.9	5.6	19.1	47.1	56.3	60.3	0.0	20.7	2.7	16.6	131	
Madaba	55.2	22.1	7.9	28.4	41.0	52.4	51.8	4.2	22.3	0.0	25.4	20	
Irbid	52.1	13.8	7.9	19.0	45.4	53.4	55.2	0.0	22.6	0.0	26.2	395	
Mafraq	64.4	15.4	10.6	22.6	43.7	53.1	57.8	1.7	30.6	0.0	21.6	93	
Jarash	67.4	21.1	11.6	28.4	44.2	57.7	55.7	1.3	37.0	0.0	21.1	51	
Ajloun	48.0	18.0	6.4	23.6	50.1	59.3	55.8	0.0	28.6	0.0	21.3	37	
Karak	62.8	16.3	9.8	21.3	39.7	52.7	39.4	0.7	27.5	0.0	27.6	75	
Tafiela	56.6	11.0	15.2	23.2	57.2	67.9	51.0	0.0	29.9	0.0	17.5	23	
Ma'an	58.2	20.5	10.7	28.0	49.2	63.3	44.9	0.0	32.3	0.0	16.6	35	
Aqaba	65.3	17.7	11.3	25.9	50.4	63.7	51.0	1.3	36.4	0.0	15.0	35	
<b>Region</b>													
Central	54.2	23.9	8.4	28.1	45.9	59.3	44.1	0.7	29.2	0.4	19.3	798	
North	55.2	15.0	8.6	20.7	45.3	54.1	55.7	0.4	25.5	0.0	24.7	576	
South	61.5	16.7	11.1	23.9	46.3	59.3	44.5	0.6	30.7	0.0	21.3	168	
<b>Badia area</b>													
Badia	66.1	27.2	18.6	34.6	42.1	57.5	48.1	1.1	34.5	0.0	20.0	137	
Other	54.3	19.0	7.8	23.9	46.1	57.4	48.5	0.5	27.4	0.2	21.7	1,406	
<b>Mother's education</b>													
No education	73.5	31.3	9.8	35.3	33.3	59.9	59.6	0.0	33.7	0.0	18.5	24	
Elementary	54.6	33.1	15.8	34.1	52.7	66.4	46.7	0.0	35.7	0.0	14.0	82	
Preparatory	54.2	18.1	14.6	27.5	44.5	59.2	47.2	1.7	26.5	0.0	19.0	248	
Secondary	58.4	18.5	6.8	22.5	46.1	56.9	48.7	0.2	26.6	0.4	22.1	785	
Higher	49.2	19.8	7.5	25.5	45.1	55.2	48.5	0.6	29.7	0.0	23.8	404	
<b>Wealth quintile</b>													
Lowest	57.0	18.3	13.1	26.2	41.0	55.6	49.4	0.2	27.0	0.8	23.6	453	
Second	52.1	14.7	4.0	18.2	43.0	51.1	45.6	0.4	20.9	0.0	28.0	340	
Middle	54.1	24.3	11.4	29.7	53.2	62.9	44.6	0.4	31.6	0.0	20.9	347	
Fourth	53.2	15.3	5.6	20.0	41.9	56.4	49.7	0.5	34.7	0.0	18.2	223	
Highest	62.8	29.9	5.7	30.9	53.2	64.3	57.7	2.2	28.7	0.0	9.5	179	
Total	55.4	19.8	8.8	24.9	45.7	57.4	48.5	0.6	28.0	0.2	21.6	1,543	

Note: ORT includes solution prepared from oral rehydration salt (ORS), pre-packaged ORS packet, and recommended home fluids (RHF).

<sup>1</sup> Excludes pharmacy, shop, and traditional practitioner

Children of mothers with no education are more likely to be taken to a health facility than children of mothers with higher education. The data also reveal that children of mothers in the highest and lowest wealth quintiles are more likely to be taken to health facilities for advice or treatment than other children.

About a quarter (25 percent) of children with diarrhea were treated with some kind of oral rehydration therapy (ORT): 20 percent were treated with solution prepared from packets of oral rehydration salts (ORS) and 9 percent were given recommended home fluids (RHF) which were prepared at home. In addition, about half of children with diarrhea (46 percent) were given increased fluids. Overall, 57 percent of children received ORT and/or increased fluids. In addition, about half of children were given antibiotic drugs and 28 percent were given home remedies. However, twenty-two percent of children with diarrhea did not receive any type of treatment at all.

Diarrhea treatment varies slightly with age. More children in the younger age groups are given RHF than older children. Slight variations also exist between urban and rural areas and with respect to the sex of the children. Children in urban areas (58 percent) are slightly more likely to receive ORT or an increase in fluids than children in rural areas (55 percent).

### **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 knowledge of proper treatment practices, mothers with a child who suffered from diarrhea within two weeks preceding the survey were asked about the relative amounts of fluids and foods given to the child during the diarrheal episode. Table 10.10 shows that 46 percent of children with diarrhea were given more fluids during the illness while 36 percent were given the same amount of fluids as usual, and 18 percent were given less fluids (10 percent somewhat less and 7 percent much less). With respect to food intake during diarrheal episodes, 4 percent of children were given more food and 27 percent maintained their usual food intake. Three-fifths of children (57 percent) were given less food than usual, and about 3 percent were not given any food.

Only a quarter of children with diarrhea (24 percent) were fed according to recommendations (more liquids and same amount of food) while they are sick. However, 32 percent of children with diarrhea continued to receive usual feedings and were given ORT and/or increased fluids for management of diarrhea. This practice is more common for children with bloody diarrhea.

Table 10.10 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 2007

Background characteristic	Amount of liquids offered						Amount of food offered						Percentage given increased fluids and continued feeding <sup>1,2</sup>	Percentage who continued feeding and were given ORT and/or increased fluids	Number of children with diarrhea		
	More	Same as usual	Some-what less	Much less	None	Total	More	Same as usual	Some-what less	Much less	None	Never gave food				Don't know/missing	Total
<b>Age in months</b>																	
<6	31.0	51.2	9.1	3.2	5.4	100.0	2.2	23.4	9.1	1.3	1.8	60.0	2.3	100.0	11.3	19.5	182
6-11	38.5	40.9	11.5	8.5	0.6	100.0	6.1	37.1	25.1	18.3	1.8	11.6	0.0	100.0	25.4	35.5	307
12-23	49.9	31.1	10.7	8.2	0.1	100.0	2.8	23.6	36.7	32.0	3.1	1.7	0.0	100.0	26.9	36.7	462
24-35	56.2	24.0	9.2	10.5	0.0	100.0	1.8	26.2	31.7	35.7	4.4	0.1	0.0	100.0	25.3	31.7	246
36-47	46.9	33.5	14.0	5.5	0.2	100.0	6.6	22.3	41.1	27.9	0.9	1.2	0.0	100.0	26.9	32.9	196
48-59	47.0	42.4	6.8	2.7	1.1	100.0	0.5	29.9	37.9	29.7	2.0	0.0	0.0	100.0	22.8	26.7	150
<b>Sex</b>																	
Male	47.5	36.8	8.1	6.4	1.2	100.0	3.3	26.6	27.3	27.0	3.4	11.8	0.5	100.0	23.3	29.7	778
Female	43.9	34.7	12.8	8.0	0.7	100.0	3.7	27.6	34.8	23.9	1.6	8.3	0.0	100.0	25.0	34.7	765
<b>Type of diarrhea</b>																	
Non bloody	45.4	36.7	10.2	6.8	0.9	100.0	3.7	27.3	30.9	25.1	2.5	10.3	0.3	100.0	24.0	32.0	1,467
Bloody	54.1	18.4	16.0	10.3	1.2	100.0	0.0	25.5	36.7	27.9	3.4	6.6	0.0	100.0	29.7	40.1	67
<b>Residence</b>																	
Urban	46.0	36.2	9.4	7.8	0.7	100.0	3.9	27.9	29.3	26.6	2.5	9.5	0.3	100.0	23.3	31.3	1,269
Rural	44.5	33.6	15.3	4.4	2.2	100.0	1.7	23.4	39.0	20.5	2.7	12.7	0.0	100.0	28.0	36.2	274
<b>Governorate</b>																	
Amman	46.6	34.4	8.1	10.7	0.2	100.0	5.5	25.9	25.7	30.4	1.9	9.8	0.7	100.0	18.4	28.2	578
Balqa	39.4	31.0	17.1	11.3	1.2	100.0	0.0	19.1	37.8	21.9	10.5	10.7	0.0	100.0	23.7	33.9	69
Zarqa	47.1	29.3	9.6	12.1	2.0	100.0	3.7	20.5	28.8	31.2	6.4	9.4	0.0	100.0	20.2	24.4	131
Madaba	41.0	35.0	6.8	15.3	1.9	100.0	1.9	40.7	21.4	25.3	0.0	10.7	0.0	100.0	21.6	30.0	20
Irbid	45.4	41.4	10.0	2.2	1.1	100.0	2.6	31.8	31.4	23.1	1.1	9.9	0.0	100.0	27.8	34.3	395
Mafrāq	43.7	40.2	11.7	1.6	2.8	100.0	3.8	29.5	35.7	15.3	3.3	12.3	0.0	100.0	29.6	36.8	93
Jarash	44.2	34.8	18.9	2.1	0.0	100.0	2.0	26.8	43.2	12.3	2.7	12.9	0.0	100.0	30.8	41.1	51
Ajloun	50.1	30.6	16.4	2.1	0.8	100.0	3.6	25.1	42.3	15.1	3.0	10.9	0.0	100.0	34.3	41.5	37
Karak	39.7	40.1	12.9	6.7	0.7	100.0	0.0	32.9	36.2	22.0	0.7	8.2	0.0	100.0	25.7	36.8	75
Tafila	57.2	26.3	12.9	3.0	0.7	100.0	0.9	26.2	35.3	26.4	2.4	8.9	0.0	100.0	40.3	43.7	23
Ma'an	49.2	27.3	15.4	5.3	2.7	100.0	0.6	22.0	45.9	18.2	0.6	12.7	0.0	100.0	38.1	45.3	35
Aqaba	50.4	28.3	11.8	8.0	1.4	100.0	0.0	17.2	42.9	28.0	3.0	8.9	0.0	100.0	30.7	35.2	35
<b>Region</b>																	
Central	45.9	33.3	9.1	11.1	0.6	100.0	4.7	24.8	27.2	29.7	3.3	9.8	0.5	100.0	19.2	28.1	798
North	45.3	39.9	11.5	2.1	1.2	100.0	2.8	30.6	33.9	20.4	1.7	10.6	0.0	100.0	28.8	35.8	576
South	46.3	33.1	13.2	6.2	1.3	100.0	0.2	26.5	39.5	23.1	1.4	9.4	0.0	100.0	31.3	39.2	168
<b>Badia area</b>																	
Badia	42.1	38.7	10.6	6.6	2.0	100.0	2.2	29.7	28.9	23.9	3.9	11.3	0.0	100.0	24.9	36.0	137
Other	46.1	35.4	10.4	7.2	0.8	100.0	3.6	26.9	31.2	25.7	2.4	10.0	0.3	100.0	24.0	31.8	1,406
<b>Mother's education</b>																	
No education	33.3	44.8	15.4	1.6	4.9	100.0	0.0	32.0	31.7	22.0	3.7	10.5	0.0	100.0	11.9	29.5	24
Elementary	52.7	32.9	7.8	5.6	0.9	100.0	5.4	28.9	29.9	16.4	1.1	13.2	5.1	100.0	32.7	41.3	82
Preparatory	44.5	36.5	11.0	6.8	1.1	100.0	5.6	29.7	23.3	24.9	2.0	14.5	0.0	100.0	22.3	32.0	248
Secondary	46.1	34.3	12.1	6.9	0.8	100.0	2.0	27.8	34.1	22.5	3.5	10.1	0.0	100.0	26.0	33.2	785
Higher	45.1	38.1	7.2	8.7	0.9	100.0	4.9	23.6	29.9	33.7	1.2	6.7	0.0	100.0	20.6	28.7	404
<b>Wealth quintile</b>																	
Lowest	41.0	39.6	12.0	6.7	0.7	100.0	3.0	32.1	27.8	21.8	2.1	12.3	0.9	100.0	21.1	32.4	453
Second	43.0	37.3	12.6	6.1	0.9	100.0	3.0	27.2	35.0	21.7	2.2	10.9	0.0	100.0	24.2	30.1	340
Middle	53.2	32.7	7.0	5.3	1.8	100.0	2.0	29.5	32.4	21.3	3.3	11.7	0.0	100.0	30.5	36.7	347
Fourth	41.9	29.7	12.2	15.7	0.4	100.0	5.0	15.9	29.7	41.3	2.2	5.9	0.0	100.0	19.7	25.2	223
Highest	53.2	36.2	6.8	3.6	0.3	100.0	6.6	24.0	30.7	30.6	3.2	4.8	0.0	100.0	24.7	35.4	179
<b>Total</b>	45.7	35.7	10.4	7.2	0.9	100.0	3.5	27.1	31.0	25.5	2.5	10.1	0.3	100.0	24.1	32.2	1,543

<sup>1</sup> Equivalent to the UNICEF/WHO indicator "home management of diarrhea"

<sup>2</sup> Continue feeding practices includes children who were given more, same as usual, or somewhat less food during the diarrhea episode

### 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 "Aquacall." Women were asked whether they know about ORS or Aquacall packets. Table 10.11 shows that the majority of women (94 percent) have knowledge about ORS packets for the treatment of diarrhea. Knowledge is high (over 90 percent) among all women, with the exception of young mothers aged 15-19 (69 percent), women with no education (74 percent), and those residing in Aqaba (89 percent).

Table 10.11 Knowledge of ORS packets or pre-packaged liquids

Percentage of women age 15-49 who gave 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 2007

Background characteristic	Percentage of women who know about ORS packets or ORS pre-packaged liquids	Number of women
<b>Age</b>		
15-19	69.3	124
20-24	91.7	986
25-34	94.9	3,344
35-49	95.6	1,992
<b>Residence</b>		
Urban	94.3	5,417
Rural	93.5	1,029
<b>Governorate</b>		
Amman	93.7	2,469
Balqa	91.7	396
Zarqa	95.5	966
Madaba	91.2	157
Irbid	95.5	1,261
Mafraq	93.5	298
Jarash	95.1	185
Ajloun	96.8	150
Karak	95.1	229
Tafiela	93.3	88
Ma'an	92.2	107
Aqaba	89.2	140
<b>Region</b>		
Central	93.8	3,987
North	95.2	1,894
South	92.8	564
<b>Badia area</b>		
Badia	91.3	536
Other	94.4	5,910
<b>Education</b>		
No education	74.3	155
Elementary	92.4	351
Preparatory	94.4	917
Secondary	93.8	3,058
Higher	96.4	1,964
<b>Wealth quintile</b>		
Lowest	91.5	1,508
Second	93.1	1,501
Middle	96.4	1,378
Fourth	95.3	1,153
Highest	95.5	906
Total	94.2	6,446

ORS = Oral rehydration salts



This chapter focuses on infant feeding practices and the nutritional and micronutrient status of women and children.

As mentioned in Chapter 1, anthropometric data were collected during the JPFHS in a subsample of 50 percent of clusters. All women aged 15-49 and children aged 0-4 living in these households were measured using Shorr height boards and weighed using electronic Seca scales. In addition, a drop of capillary blood was taken from these women and children to measure hemoglobin levels using the HemoCue system, in order to estimate the prevalence of anemia. However, analysis of the anthropometric and hemoglobin data has revealed anomalies in the individual values resulting in unreliable estimates of children's nutritional status and anemia prevalence among children and women. Therefore, these data are not included in this report.

The nutritional status of children is presented first in this chapter, beginning with infant feeding practices, including breastfeeding and complementary feeding practices. This is followed by a discussion of micronutrient intake among children. The second portion of the chapter focuses on the nutritional status of women. Anthropometric data (height and weight) collected in the survey are used to assess the current nutritional status of women. Other important nutritional issues, including mothers' food consumption and micronutrient intake are also discussed.

## 11.1 NUTRITIONAL STATUS OF CHILDREN

### 11.1.1 Breastfeeding and Child Feeding Practices

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.

#### Initiation of Breastfeeding

Breast milk excels as 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 2-3 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 (ACC/SCN, 2000).

Table 11.1 shows that breastfeeding is common in Jordan. Among children born in the five years preceding the survey, 93 percent were breastfed. There are small differences in the percentage of infants ever breastfed by sex, residence, mother's education and household wealth. Among children who were breastfed, Table 11.1 shows that 39 percent begin breastfeeding within an hour after delivery, and more than four-fifths (82 percent) of infants were breastfed within the first day. The North region shows a lower percentage of infants breastfeeding within an hour after delivery compared with the Central and South regions.

Table 11.1 Initial breastfeeding						
Percentage of children born in the five years preceding the survey who were ever breastfed, and for the last children born in the five years preceding the survey ever breastfed, the percentage who started breastfeeding within one hour and within one day of birth and the percentage who received a prelacteal feed, by background characteristics, Jordan 2007						
Background characteristic	Breastfeeding among children born in past five years		Among last-born children ever breastfed:			
	Percentage ever breastfed	Number of children born in past five years	Percentage who started breastfeeding within 1 hour of birth	Percentage who started breastfeeding within 1 day of birth <sup>1</sup>	Percentage who received a prelacteal feed <sup>2</sup>	Number of last-born children ever breastfed
<b>Sex</b>						
Male	92.9	4,994	38.2	80.0	59.2	3,106
Female	93.3	4,870	39.5	83.1	57.1	2,970
<b>Residence</b>						
Urban	93.0	8,262	38.6	81.2	57.4	5,101
Rural	93.7	1,601	39.9	83.0	62.0	976
<b>Governorate</b>						
Amman	92.1	3,784	35.8	78.9	55.7	2,313
Balqa	95.3	615	40.1	81.1	54.9	380
Zarqa	93.9	1,486	49.1	86.1	51.7	917
Madaba	89.5	242	63.7	86.0	53.9	141
Irbid	94.2	1,861	31.4	82.3	65.8	1,194
Mafraq	94.0	479	32.1	79.2	73.6	286
Jarash	93.7	290	44.3	85.8	61.1	175
Ajloun	96.1	233	36.0	86.9	56.0	145
Karak	89.6	348	48.0	80.9	58.0	209
Tafiela	93.9	140	47.0	82.9	51.4	84
Ma'an	92.6	167	51.2	80.5	52.5	101
Aqaba	93.6	217	39.4	77.8	65.0	131
<b>Region</b>						
Central	92.8	6,127	40.5	81.2	54.6	3,751
North	94.2	2,864	33.1	82.5	65.8	1,800
South	91.9	873	46.3	80.4	57.6	525
<b>Badia area</b>						
Badia	90.9	876	46.4	84.1	61.1	499
Other	93.3	8,988	38.2	81.3	57.9	5,577
<b>Mother's education</b>						
No education	91.4	241	47.8	84.8	54.8	140
Elementary	92.3	591	45.4	81.2	54.8	324
Preparatory	93.7	1,365	42.6	81.4	57.5	866
Secondary	93.0	4,735	40.9	82.4	56.4	2,894
Higher	93.3	2,932	32.0	79.9	62.1	1,852
<b>Wealth quintile</b>						
Lowest	92.5	2,541	48.3	85.8	51.0	1,404
Second	93.8	2,342	41.9	83.8	59.0	1,429
Middle	94.0	2,061	37.6	79.5	58.9	1,305
Fourth	92.8	1,634	35.0	82.3	57.4	1,093
Highest	92.0	1,285	24.8	72.5	68.4	846
Total	93.1	9,864	38.8	81.5	58.2	6,076

Note: Table is based on births in the past five years whether the children are living or dead at the time of interview

<sup>1</sup> Includes children who started breastfeeding within one hour of birth

<sup>2</sup> Children given something other than breast milk during the first three days of life

Prelacteal feeding is the practice of giving other liquids to a child during the period after birth before the mother's milk is flowing freely. Table 11.1 shows that a total of 58 percent received a prelacteal feed. The proportion of infants receiving a prelacteal feed is higher in the North region (66 percent) compared with the Central and South regions (55 and 58 percent, respectively). Also, the proportion receiving a prelacteal feed is highest among infants born to mothers living in the wealthiest quintile of households (68 percent). Among children receiving prelacteal liquid, 41 percent received sugar water, 39 percent received infant formula, 27 percent received tea, and 23 percent received milk other than breast milk (data not shown).

### **Introduction of Complementary Feeding**

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 6 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 six months of age, 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 all children under five years of age, and about the foods (liquids and solids) given to the child the day before the survey. Although information on breastfeeding was collected for all children born in the five years preceding the survey, the tables are restricted to the youngest children born in the three years before the survey because most children are weaned by age three.

Table 11.2 shows the percent distribution of living children in the three years before the survey by breastfeeding status. According to the World Health Organization's recommendation, children should receive exclusive breastfeeding for up to first 6 months of life. However, only 39 percent of Jordanian children under 2 months of age are exclusively breastfed. By age 4-5 months, only 10 percent of children are exclusively breastfed. After the age of five months almost no children receive exclusive breastfeeding. For all children under six months, 22 percent are exclusively breastfed.

The table shows that almost one third (31 percent) of children under six months of age consume other milk (e.g., fresh milk or powdered milk), 18 percent of children consume plain water and breast milk and 17 percent are given complementary food. More than two-thirds of children are still breastfed and consuming complementary food at 6-8 months. By 18-23 months, only 14 percent of children are still breastfed.

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. The practice of bottle-feeding with a nipple is prevalent in 35 percent of children under two months of age and more than half of children aged 2-8 months are bottle-fed.

Table 11.2 Breastfeeding status by age

Percent distribution of youngest children under three years who are living with their mother by breastfeeding status and the percentage currently breastfeeding; and the percentage of all children under three years using a bottle with a nipple, according to age in months, Jordan 2007

Age in months	Not breast-feeding	Breastfeeding and consuming:					Total	Percentage currently breast-feeding	Number of youngest child under three years	Percentage using a bottle with a nipple <sup>1</sup>	Number of children
		Exclusively breastfed	Plain water only	Non-milk liquids/juice	Other milk	Comple-mentary foods					
0-1	6.2	39.1	20.2	3.0	30.3	1.3	100.0	93.8	268	35.3	270
2-3	8.2	21.0	21.9	0.3	37.7	10.9	100.0	91.8	406	52.6	414
4-5	16.2	10.2	12.2	2.6	23.7	35.0	100.0	83.8	372	52.4	378
6-8	22.0	0.4	4.5	0.9	3.8	68.5	100.0	78.0	493	53.6	510
9-11	34.3	0.1	3.0	0.0	0.3	62.3	100.0	65.7	438	45.1	445
12-17	58.9	0.0	0.0	0.0	0.8	40.2	100.0	41.1	868	46.1	929
18-23	85.6	0.0	0.0	0.0	0.0	14.4	100.0	14.4	786	34.8	941
24-35	96.8	0.0	0.0	0.0	0.0	3.2	100.0	3.2	1,190	18.8	1,907
0-3	7.4	28.2	21.2	1.4	34.7	7.1	100.0	92.6	674	45.8	684
0-5	10.5	21.8	18.0	1.8	30.8	17.0	100.0	89.5	1,046	48.1	1,062
6-9	25.8	0.3	4.5	0.7	3.0	65.7	100.0	74.2	649	51.5	670
12-15	54.0	0.0	0.0	0.1	0.1	45.8	100.0	46.0	586	47.4	621
12-23	71.6	0.0	0.0	0.0	0.4	28.0	100.0	28.4	1,654	40.4	1,870
20-23	89.1	0.0	0.0	0.0	0.0	10.9	100.0	10.9	514	31.5	626

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

<sup>1</sup> Based on all children under three years

## Duration and Frequency of Breastfeeding

The median duration of breastfeeding by background characteristics is shown in Table 11.3. 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.

The median duration of any breastfeeding is 12.5 months (Table 11.3). There is a slight difference in the duration of breastfeeding by sex of the child. Male children are breastfed for a slightly longer duration than female children. There are slight variations among different governorates, however, these do not appear to be significant. The duration of breastfeeding is inversely associated with mother's education.

Both duration and frequency of breastfeeding can affect the length of postpartum amenorrhea. Table 11.3 shows that the majority of children (91 percent) under six months of age were breastfed six or more times in the past 24 hours. Breastfeeding is more frequent in the daytime than at night, with the mean number of feeds in the daytime being 5.8 compared with 3.7 at night.

Table 11.3 Median duration and frequency of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children born in the three years preceding the survey interview, percentage of breastfeeding children under six months living with the mother who were breastfed six or more times in the 24 hours preceding the survey interview, and mean number of feeds (day/night), by background characteristics, Jordan 2007

Background characteristic	Median duration (months) of breastfeeding among children born in the past three years <sup>1</sup>			Frequency of breastfeeding among children under six months <sup>2</sup>			
	Any breast-feeding	Exclusive breast-feeding	Predominant breast-feeding <sup>3</sup>	Percentage breastfed 6+ times in past 24 hours	Mean number of day feeds	Mean number of night feeds	Number of children
<b>Sex</b>							
Male	13.8	0.6	1.7	91.7	6.0	3.7	498
Female	11.6	0.6	1.7	90.8	5.6	3.6	438
<b>Residence</b>							
Urban	12.4	0.6	1.9	91.6	5.9	3.8	767
Rural	13.3	0.6	0.7	90.1	5.5	3.4	168
<b>Governorate</b>							
Amman	11.7	0.5	1.0	88.2	5.8	4.1	360
Balqa	13.4	0.6	2.0	96.4	5.7	3.6	61
Zarqa	11.9	0.6	2.3	94.0	6.0	3.6	130
Madaba	11.3	0.6	0.7	91.3	5.8	3.7	24
Irbid	13.3	1.1	2.3	94.9	5.8	3.4	175
Mafraq	12.2	0.6	2.3	90.6	6.1	3.3	49
Jarash	13.6	1.2	1.7	92.5	6.3	3.4	27
Ajloun	14.1	0.8	1.8	92.2	5.6	3.2	24
Karak	12.8	0.5	0.7	85.2	5.4	3.5	37
Tafiela	12.8	0.6	0.7	90.2	5.4	3.6	14
Ma'an	11.4	0.7	1.1	94.4	5.2	3.6	17
Aqaba	13.1	0.5	0.5	92.4	5.4	3.6	18
<b>Region</b>							
Central	12.0	0.6	1.6	90.5	5.8	3.9	574
North	13.3	0.9	2.2	93.6	5.9	3.3	275
South	12.6	0.5	0.7	89.3	5.4	3.6	86
<b>Badia area</b>							
Badia	12.4	0.5	2.1	90.8	5.7	3.2	86
Other	12.6	0.6	1.7	91.4	5.8	3.7	849
<b>Mother's education</b>							
No education	(15.5)	(0.5)	(1.5)	(92.6)	(4.9)	(3.5)	15
Elementary	14.1	0.7	3.0	94.7	5.8	2.6	45
Preparatory	14.3	0.7	1.7	94.1	6.6	3.5	154
Secondary	12.2	0.6	2.0	91.9	5.8	3.9	449
Higher	11.6	0.6	1.2	88.2	5.5	3.7	273
<b>Wealth quintile</b>							
Lowest	12.4	0.6	2.1	94.4	5.7	4.0	260
Second	13.0	1.3	2.7	94.2	6.1	3.6	231
Middle	13.0	0.5	1.9	89.7	6.0	3.4	189
Fourth	12.4	0.7	0.8	89.0	5.6	3.8	134
Highest	10.0	0.4	0.5	84.5	5.3	3.6	122
Total	12.5	0.6	1.7	91.3	5.8	3.7	935
Mean for all children	13.0	2.0	3.3	na	na	na	na

Note: Median and mean durations are based on current status. Includes children living and deceased at the time of the survey. Figures in parentheses are based on 25-49 unweighted cases.

na = Not applicable

<sup>1</sup> It is assumed that non-last-born children and last-born children not currently living with the mother are not currently breastfeeding.

<sup>2</sup> Excludes children without a valid answer on the number of times breastfed

<sup>3</sup> Either exclusively breastfed or received breast milk and plain water, and/or non-milk liquids only

## Types of Supplemental Food

Information on the types of food given to children under three years of age in the 24 hours preceding the survey, according to breastfeeding status, is shown in Table 11.4. In Jordan, the introduction of other liquids such as water, juice, and formula takes place earlier than the recommended age of about 6 months. Even among the youngest breastfed children (under 2 months of age), almost one in three children receives infant formula, 13 percent receive milk other than breast milk and 7 percent consume other liquids.

Table 11.4 Foods and liquids consumed by children in the day or night preceding the interview

Percentage of youngest children under three 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 2007

Age in months	Liquids			Solid or semi-solid foods										Number of children
	Infant formula	Other milk <sup>1</sup>	Other liquids <sup>2</sup>	Food made from grains	Fruits and vege-tables rich in vitamin A <sup>3</sup>	Other fruits and vege-tables	Food made from roots and tubers	Food made from legumes and nuts	Meat, fish, poultry, and eggs	Cheese, yogurt, other milk product	Any solid or semi-solid food	Food made with oil, fat, and butter	Sugary foods	
BREASTFEEDING CHILDREN														
0-1	32.7	13.4	6.6	1.4	0.0	0.0	0.0	0.0	0.0	0.0	1.4	0.0	0.0	252
2-3	48.1	26.1	6.3	10.5	0.3	0.2	0.3	0.2	0.4	1.7	11.6	0.1	0.5	373
4-5	45.1	34.3	26.1	34.6	5.3	10.3	7.5	1.2	4.8	17.9	41.4	7.1	7.8	311
6-8	42.7	37.6	55.7	78.6	34.3	50.5	23.7	16.6	30.4	56.7	86.7	37.6	34.5	384
9-11	21.7	35.9	69.9	84.8	49.8	56.9	36.9	30.1	52.1	78.0	93.8	63.2	58.5	287
12-17	32.6	49.1	84.7	94.0	61.3	69.5	42.0	45.1	69.7	82.8	97.8	79.6	63.4	357
18-23	16.1	50.1	83.0	99.6	62.6	79.5	36.1	56.4	83.5	92.0	100.0	93.2	73.8	113
24-35	19.8	73.1	99.1	100.0	61.0	82.5	31.3	55.7	86.5	80.6	100.0	97.1	70.0	38
6-23	31.6	42.0	71.1	87.0	49.4	60.9	34.0	32.9	53.4	73.7	93.3	62.7	53.5	1,142
Total	36.4	35.2	45.9	55.9	28.6	35.9	20.0	18.9	31.2	44.2	60.4	36.6	31.4	2,116
NONBREASTFEEDING CHILDREN														
0-1	*	*	*	*	*	*	*	*	*	*	*	*	*	17
2-3	(99.1)	(55.1)	(2.4)	(33.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(12.6)	(46.4)	(11.1)	(10.0)	33
4-5	94.6	56.7	26.8	52.6	13.5	13.6	9.6	10.6	8.8	18.1	59.1	6.8	13.7	60
6-8	83.1	78.0	61.0	74.9	29.6	38.5	18.4	8.4	31.7	44.7	79.8	40.4	45.1	108
9-11	77.5	86.9	75.3	93.6	58.9	70.5	33.5	33.5	71.3	90.0	98.9	69.6	62.8	150
12-17	48.6	84.3	92.8	96.1	62.3	79.3	39.6	43.0	78.7	81.1	99.7	82.0	75.7	511
18-23	37.9	71.2	93.9	96.8	62.9	76.6	41.5	49.2	81.6	80.5	99.1	82.3	78.8	672
24-35	27.4	66.3	97.2	97.4	65.5	77.5	45.2	53.5	85.5	85.4	100.0	90.1	78.1	1,152
6-23	49.2	78.0	89.1	94.6	59.8	74.1	38.3	42.3	75.7	79.0	97.8	77.7	73.5	1,442
Total	41.9	72.2	89.6	93.7	60.1	72.8	39.9	45.6	77.0	79.1	96.8	80.1	72.9	2,705

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.

<sup>1</sup> Other milk includes fresh, tinned and powdered cow or other animal milk

<sup>2</sup> Does not include plain water

<sup>3</sup> Includes carrots, red sweet potatoes, pumpkin, apricot, palm nuts, yellow melon, and green leafy vegetables

WHO recommends the introduction of solid food to infants around the age of 6 months because by that age breast milk by itself is no longer sufficient to maintain a child's optimal growth. Among children, cereals, grains and some solid and semi-solid foods are introduced even before 6 months of age. Breastfed children consume breads, cereals, grains and semi-solid or solid types of foods early in life. Among infants aged 4-5 months, 41 percent consume solid or semi-solid food. Beginning at age 6 months, the percentage of children who are fed solid or semi-solid food increases rapidly; 87 percent of children aged 6-8 months receive solid or semi-solid food. Among children who are not breastfed, almost half receive solid or semi-solid food by the age of 2-3 months.

Overall, 56 percent of breastfed children under three years of age consume foods made with grain and 31 percent receive meat, fish, poultry or eggs. In comparison, consumption of roots, tubers, legumes, and foods rich in vitamin A is lower in children.

### **Appropriate Infant and Young Child Feeding (IYCF) Practices**

Appropriate Infant and Young Child Feeding (IYCF) practices include breastfeeding through the age of two years, the introduction of solid and semisolid foods at age 6 months, and a gradual increase in the amount of food given and the frequency of feeding as the child gets older. The average, healthy breastfed child should receive solid and semisolid foods 2-3 times per day at age 6-8 months and 3-4 times per day at age 9-23 months, with an additional snack 1-2 times per day. Infants with low breast-milk intake need to be fed more frequently than those with high breast-milk intake. For non-breastfed children, it is recommended that they be given solid and semisolid foods 4-5 times per day at age 6-23 months with an additional snack 1-2 times per day (PAHO/WHO, 2003).

Appropriate nutrition includes feeding children a variety of foods to ensure that nutrient requirements are met. Studies have shown that plant-based complementary foods by themselves are not sufficient to meet the needs of some children for certain micronutrients (WHO/UNICEF, 1998). Therefore, it is advised that children eat meat, poultry, fish, or eggs daily, or as often as possible. Vegetarian diets may not meet children's nutrient requirements unless supplements or fortified foods are also provided. Vitamin A-rich fruits and vegetables should be consumed daily, and the diets of children should include an adequate amount of fat. Tea and coffee are not recommended for children because they contain compounds that inhibit iron absorption. Sugary drinks and excessive juice consumption should be avoided because other than energy they contribute little to the diet and decrease the child's appetite for more nutritious foods (PAHO/WHO, 2003).

In summary,

- Breastfed children aged 6-23 months should receive animal-source foods and vitamin A-rich fruits and vegetables daily. Three food groups are considered the minimum number appropriate for breastfed children.
- Breastfed infants aged 6-8 months should receive complementary foods 2-3 times per day, with 1-2 snacks; breastfed children aged 9-23 months should be receive meals 3-4 times per day, with 1-2 snacks (PAHO/WHO, 2003).
- Non-breastfed children aged 6-23 months should receive milk or milk products to ensure that their calcium needs are met. In addition, they need animal-source foods and vitamin A-rich fruits and vegetables. Four food groups are considered the minimum number appropriate for nonbreastfed young children.
- Non-breastfed children aged 12-23 months should be fed meals 4-5 times per day, with 1-2 snacks (WHO, 2005).

Table 11.5 shows the percentage of breastfed, non-breastfed, and all children aged 6-23 who were fed according to the appropriate Infant and Young Child Feeding (IYCF) practices. Overall, 99 percent of (youngest) children aged 6-23 months in Jordan living with the mother received breast milk or breast milk substitutes during the 24-hour period before the survey and 85 percent had an adequately diverse diet—i.e., they had been fed foods from the appropriate number of food groups depending on their age and breastfeeding status. Two-fifths of children (42 percent) had been fed the minimum standard number of times appropriate for their age. Feeding practices for 38 percent of children aged 6-23 months in Jordan met the minimum standard with respect to all three of these feeding practices.

Table 11.5 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 upon number of food groups and times they are fed during the day or night preceding the survey by breastfeeding status and background characteristics, Jordan 2007

Background characteristic	Among breastfed children 6-23 months, percentage fed:				Among non-breastfed children 6-23 months, percentage fed:				Number of non-breastfed children 6-23 months	Among all children 6-23 months, percentage fed:				Number of all children 6-23 months
	3+ food groups <sup>1</sup>		Both 3+ food groups and minimum times or more		Milk or milk products <sup>3</sup>	4+ food groups	4+ times or more	With 3 IYCF practices <sup>4</sup>		Breast-milk or milk products <sup>3</sup>	3+ or 4+ food groups <sup>5</sup>	Mini-mum times or more <sup>6</sup>	With all 3 IYCF practices	
	3+ food groups <sup>1</sup>	or more <sup>2</sup>	Minimum times	food groups and minimum times or more										
<b>Age</b>														
6-8	61.1	72.6	57.4	384	93.2	42.5	20.4	14.2	108	98.5	57.0	61.1	47.9	493
9-11	79.4	46.7	43.4	287	99.6	88.7	19.7	19.5	150	99.9	82.6	37.4	35.2	438
12-17	91.2	61.4	59.6	357	98.5	92.5	28.1	25.8	511	99.1	92.0	41.8	39.7	868
18-23	98.8	70.2	70.2	113	96.8	95.3	27.9	26.0	672	97.3	95.8	34.0	32.4	786
<b>Sex</b>														
Male	81.2	67.4	60.8	618	97.7	89.7	27.6	25.4	654	98.8	85.6	46.9	42.6	1,272
Female	76.1	56.5	50.0	524	97.2	89.6	25.7	23.6	789	98.3	84.2	38.0	34.1	1,313
<b>Residence</b>														
Urban	78.9	61.3	54.8	916	97.6	90.1	27.5	25.3	1,221	98.6	85.3	42.0	38.0	2,137
Rural	78.7	66.6	60.1	226	96.6	87.1	21.4	19.2	221	98.3	82.9	44.2	39.9	447
<b>Governorates</b>														
Amman	79.0	62.5	57.5	414	97.2	89.0	31.7	28.4	594	98.4	84.9	44.4	40.3	1,008
Balqa	78.4	67.4	58.3	77	97.0	97.9	22.5	22.5	78	98.5	88.2	44.9	40.3	155
Zarqa	84.9	61.7	57.3	152	96.7	89.7	17.1	16.2	189	98.1	87.6	37.0	34.5	341
Madaba	81.2	61.4	57.9	26	98.4	86.0	17.4	15.9	36	99.1	84.0	35.9	33.5	62
Irbid	73.4	60.3	50.4	234	99.3	91.4	29.1	27.8	287	99.6	83.3	43.1	37.9	522
Mafrq	72.8	57.2	49.9	65	97.4	87.9	28.9	27.2	58	98.8	80.0	43.8	39.2	123
Jarash	82.1	63.8	55.6	46	95.9	90.9	13.0	13.0	41	98.1	86.3	39.7	35.4	87
Ajloun	83.8	59.1	54.3	27	99.1	95.4	20.3	19.4	28	99.5	89.7	39.2	36.4	55
Karak	85.0	64.2	60.0	35	95.0	83.8	27.7	23.0	51	97.0	84.3	42.6	38.0	85
Tafiela	87.9	64.6	61.7	18	96.1	84.9	22.8	21.8	17	98.1	86.4	44.0	42.0	35
Ma'an	75.6	75.2	64.3	19	95.4	82.4	22.7	19.9	28	97.3	79.7	43.8	37.8	47
Aqaba	80.5	68.3	61.8	30	95.6	84.0	8.3	6.6	35	97.6	82.4	35.7	31.8	65
<b>Region</b>														
Central	80.4	62.8	57.6	669	97.1	89.8	27.3	24.8	896	98.4	85.8	42.5	38.8	1,565
North	75.2	60.1	51.2	372	98.7	91.1	26.9	25.7	415	99.3	83.6	42.6	37.7	787
South	82.4	67.6	61.6	101	95.4	83.7	20.8	17.8	131	97.4	83.1	41.1	36.9	232
<b>Badia area</b>														
Badia	75.3	63.9	55.3	119	96.9	84.8	21.0	16.9	114	98.5	79.9	42.9	36.5	233
Other	79.3	62.2	55.9	1,023	97.5	90.0	27.0	25.0	1,328	98.6	85.4	42.3	38.5	2,351
<b>Mother's education</b>														
No education	72.2	65.0	57.0	28	93.3	77.4	29.2	29.2	23	96.9	74.5	48.8	44.4	52
Elementary	84.8	59.8	55.7	80	95.9	91.4	45.6	43.4	65	98.2	87.8	53.4	50.2	145
Preparatory	69.3	57.7	52.5	184	99.1	88.3	24.1	24.0	154	99.6	78.0	42.4	39.5	339
Secondary	77.4	62.7	54.1	539	96.3	88.5	24.3	22.4	713	97.9	83.7	40.9	36.0	1,251
Higher	86.1	64.9	60.9	311	98.9	92.0	27.9	24.7	486	99.4	89.7	42.3	38.8	797
<b>Wealth quintile</b>														
Lowest	76.7	62.2	55.0	317	96.6	86.2	20.6	19.5	361	98.2	81.8	40.0	36.1	679
Second	76.5	63.8	54.5	297	95.2	87.7	22.7	18.2	359	97.4	82.6	41.3	34.6	656
Middle	83.1	61.2	55.4	281	99.2	93.2	32.5	29.9	286	99.6	88.2	46.7	42.6	567
Fourth	78.1	57.3	55.6	146	98.2	90.8	21.1	21.1	245	98.8	86.1	34.6	34.0	391
Highest	81.6	69.4	64.3	101	99.7	92.9	43.3	41.2	191	99.8	89.0	52.3	49.2	292
<b>Total</b>	78.9	62.4	55.9	1,142	97.4	89.6	26.6	24.4	1,442	98.6	84.9	42.4	38.3	2,584

<sup>1</sup> Food groups: a. infant formula, milk other than breastmilk, cheese or yogurt or other milk products; b. foods made from grains, roots, and tubers, including porridge and fortified baby food from grains; c. vitamin A-rich fruits and vegetables; d. other fruits and vegetables; e. eggs; f. meat, poultry, fish, and shellfish; g. legumes and nuts; h. foods made with oil, fat, or butter

<sup>2</sup> At least twice a day for breastfed infants 6-8 months and at least three times a day for breastfed children 9-23 months

<sup>3</sup> Includes commercial infant formula, fresh, tinned and powdered animal milk, and cheese, yogurt and other milk products

<sup>4</sup> Non-breastfed children ages 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 and are fed at least the minimum number of times per day with at least the minimum number of food groups

<sup>5</sup> 3+ food groups for breastfed children and 4+ food groups for non-breastfed children

<sup>6</sup> Fed solid or semi-solid food at least twice a day for infants 6-8 months, 3+ times for other breastfed children, and 4+ times for non-breastfed children

### 11.1.2 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 11.6 looks at measures relating to intake of several key micronutrients among children.

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.

The 2007 JPFHS collected information on the consumption of vitamin A-rich foods and on the coverage of supplements. Table 11.6 shows that 84 percent of last-born children aged 6-35 months living with the mother consumed vitamin A-rich foods in the 24-hour period before the survey. Consumption of vitamin A-rich foods increases from 46 percent among children aged 6-8 months to over 90 percent among children aged 18-35 months. Not surprisingly, breastfeeding children are much less likely to consume vitamin A-rich foods than non-breastfeeding children. Seventy-two 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 9 percent of children aged 6-59 months received a vitamin A supplement in the six months before the survey.

Table 11.6 Micronutrient intake among children

Among youngest children age 6-35 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 interview, and among all children 6-59 months, the percentages who were given vitamin A supplements in the six months preceding the survey interview, by background characteristics, Jordan 2007

Background characteristic	Among youngest children age 6-35 months living with the mother:			Among all children age 6-59 months:	
	Percentage who consumed foods rich in vitamin A in past 24 hours <sup>1</sup>	Percentage who consumed foods rich in iron in past 24 hours <sup>2</sup>	Number of children	Percentage given vitamin A supplements in past 6 months	Number of children
<b>Age in months</b>					
6-8	45.8	30.7	493	15.1	510
9-11	74.1	58.7	438	13.3	445
12-17	88.3	75.0	868	19.2	929
18-23	90.6	81.9	786	13.0	941
24-35	94.4	85.5	1,190	7.6	1,907
36-47	na	na	na	4.4	1,976
48-59	na	na	na	3.6	1,900
<b>Sex</b>					
Male	82.6	72.3	1,898	9.1	4,357
Female	84.4	71.8	1,876	7.9	4,250
<b>Breastfeeding status</b>					
Breastfeeding	69.2	54.5	1,180	16.7	1,210
Not breastfeeding	90.0	80.0	2,594	7.2	7,388
<b>Residence</b>					
Urban	84.5	73.2	3,165	8.7	7,223
Rural	78.4	66.3	610	7.6	1,384
<b>Governorate</b>					
Amman	85.3	73.4	1,459	9.6	3,277
Balqa	82.8	69.7	222	6.2	536
Zarqa	85.1	77.5	560	13.0	1,325
Madaba	78.7	65.5	90	10.1	209
Irbid	83.0	71.0	738	5.6	1,629
Mafraq	76.7	61.4	172	4.8	416
Jarash	81.8	72.0	114	5.8	254
Ajloun	85.7	78.8	84	3.3	204
Karak	85.6	67.6	128	8.8	296
Tafiela	79.4	68.5	53	9.2	122
Ma'an	76.7	66.8	67	9.6	146
Aqaba	72.7	62.9	88	5.9	195
<b>Region</b>					
Central	84.8	73.7	2,332	10.1	5,348
North	82.1	70.2	1,107	5.3	2,502
South	79.5	66.4	335	8.3	758
<b>Badia area</b>					
Badia	75.5	63.7	319	6.6	764
Other	84.2	72.8	3,455	8.7	7,843
<b>Mother's education</b>					
No education	71.6	58.7	77	7.1	213
Elementary	80.8	66.6	210	4.1	524
Preparatory	79.5	67.7	523	9.5	1,173
Secondary	82.1	69.6	1,786	9.3	4,109
Higher	88.6	79.5	1,179	7.9	2,588
<b>Mother's age at birth</b>					
15-19	69.1	54.4	68	6.1	90
20-29	82.9	71.1	1,715	10.1	3,795
30-39	84.3	72.5	1,676	7.7	3,882
40-49	86.2	78.6	316	5.4	841
<b>Wealth quintile</b>					
Lowest	77.6	64.3	938	6.8	2,187
Second	82.7	71.9	939	9.2	2,043
Middle	86.2	76.1	783	8.9	1,816
Fourth	85.8	72.4	621	11.3	1,442
Highest	89.0	80.2	494	6.9	1,119
<b>Total</b>	<b>83.5</b>	<b>72.1</b>	<b>3,775</b>	<b>8.5</b>	<b>8,607</b>

Note: Information on vitamin A and iron supplements is based on the mother's recall.

na = Not applicable

<sup>1</sup> Includes meat, fish, poultry, eggs, carrots, red sweet potatoes, pumpkin, apricot, palm nuts, yellow melon, and green leafy vegetables.

<sup>2</sup> Includes meat, fish, poultry, and eggs.

## 11.2 NUTRITIONAL STATUS OF WOMEN

### 11.2.1 Height and Body Mass Index (BMI)

In the 2007 JPFHS, data were collected on the height and weight of all women aged 15-49 in half 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 11.7: height and body mass index (BMI). Maternal height is a measure of past nutritional status and reflects in part the cumulative effect of social and economic outcomes on access to nutritional foods during childhood and adolescence. It can be used to predict the risks associated with difficult deliveries, since small stature is often associated with small pelvis size and a greater likelihood of obstructed labor. Short stature is also correlated with low birth weight in infants, high risk of stillbirths, and high rates of miscarriage.

The BMI, which utilizes both height and weight and provides a better measure of thinness than weight alone, is defined as weight in kilograms divided by the square of the height in meters ( $\text{kg}/\text{m}^2$ ). In classifying BMI, a cutoff of 18.5 has been recommended for assessing chronic energy deficiency among non-pregnant women. At the other end of the BMI scale, women are considered overweight if their BMI ranges between 25.0 and 29.9 and obese if their BMI is 30.0 or greater. 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 body mass measure.

The cutoff point for height, below which a woman can be identified as nutritionally at risk, varies among populations, but it is usually considered to be in the range of 140-150 centimeters (cm). The 2007 JPFHS found that only 1 percent of women are under 145 cm in height and can be considered short. The mean BMI of women in Jordan is 25.8, higher than the normal BMI range of 18.5-24.9. Half of women fall in the normal BMI category. Four percent of women fall below the cutoff of 18.5, indicating that the level of chronic energy deficiency is relatively low in Jordan. However, a very high proportion of women have a BMI of 25.0-29.9 and can be considered overweight (27 percent) or have a BMI of 30.0 or more and can be considered obese (20 percent). In total, almost half of women are either overweight or obese. Very young women (15-19) are more likely than other women to suffer from chronic energy deficiency. Older women and women with no education or elementary education are more likely to be overweight or obese.

Table 11.7 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 2007

Background characteristic	Height		Body Mass Index <sup>1</sup>								Number of women
	Percent- age below 145 cm	Number of women	Mean Body Mass Index (BMI)	18.5-24.9 (total normal)	<18.5 (total thin)	17.0-18.4 (mildly thin)	<17 (moderately and severely thin)	≥25.0 (total over-weight or obese)	25.0-29.9 (over-weight)	≥30.0 (obese)	
<b>Age</b>											
15-19	1.5	719	23.0	71.2	7.3	4.6	2.8	21.4	15.7	5.7	675
20-29	1.1	2,650	24.3	60.9	3.7	2.7	1.0	35.4	23.3	12.1	2,209
30-39	0.7	2,748	26.4	41.4	3.4	2.8	0.6	55.2	33.1	22.2	2,511
40-49	1.5	2,382	27.3	38.2	3.7	2.3	1.4	58.1	28.4	29.7	2,364
<b>Residence</b>											
Urban	1.1	7,028	25.7	49.3	3.9	2.7	1.2	46.8	27.2	19.7	6,418
Rural	1.6	1,471	26.3	45.3	4.0	3.0	1.0	50.7	28.2	22.4	1,341
<b>Governorate</b>											
Amman	0.2	3,242	25.4	51.2	3.9	2.9	1.0	45.0	27.8	17.2	2,993
Balqa	1.2	544	25.6	51.7	5.1	3.3	1.8	43.2	21.7	21.5	491
Zarqa	1.3	1,248	25.0	56.2	2.9	2.1	0.7	40.9	27.8	13.1	1,129
Madaba	1.6	218	26.8	39.8	2.6	2.3	0.3	57.6	30.7	26.9	202
Irbid	1.8	1,571	27.0	41.2	3.9	2.1	1.8	54.9	26.3	28.5	1,414
Mafraq	3.6	359	26.5	40.2	5.5	4.7	0.7	54.3	28.3	25.9	327
Jarash	1.8	256	25.4	52.7	4.2	2.6	1.6	43.0	24.6	18.4	233
Ajloun	2.1	178	27.0	40.4	3.3	2.7	0.6	56.3	28.5	27.8	157
Karak	1.9	393	26.0	44.9	4.6	3.4	1.2	50.5	30.4	20.2	358
Tafiela	1.0	140	26.8	43.1	2.0	1.6	0.4	54.8	29.9	24.9	131
Ma'an	1.5	152	25.7	46.4	5.3	4.0	1.4	48.3	27.8	20.5	140
Aqaba	1.7	198	25.6	46.7	6.1	4.7	1.3	47.2	29.1	18.1	183
<b>Region</b>											
Central	0.6	5,252	25.4	51.9	3.7	2.7	1.0	44.4	27.3	17.1	4,815
North	2.1	2,364	26.7	42.3	4.1	2.6	1.6	53.6	26.6	27.0	2,131
South	1.6	883	26.0	45.3	4.6	3.5	1.1	50.1	29.6	20.5	813
<b>Badia area</b>											
Badia	2.3	694	25.7	45.4	4.7	4.0	0.8	49.8	31.6	18.2	620
Other	1.0	7,806	25.8	48.9	3.8	2.7	1.2	47.3	27.0	20.3	7,139
<b>Education</b>											
No education	6.0	278	29.2	24.1	2.7	1.5	1.2	73.3	35.6	37.7	266
Elementary	1.7	516	29.4	29.2	0.5	0.2	0.4	70.2	26.7	43.5	476
Preparatory	1.4	1,259	27.2	37.8	5.1	3.7	1.4	57.0	28.3	28.8	1,160
Secondary	0.9	3,876	25.1	52.4	4.5	3.1	1.4	43.2	26.5	16.7	3,491
Higher	0.8	2,567	25.1	54.8	3.4	2.5	0.9	41.8	27.4	14.4	2,361
<b>Wealth quintile</b>											
Lowest	1.6	1,677	26.1	46.1	4.9	2.8	2.1	49.0	27.4	21.6	1,464
Second	1.6	1,641	26.2	45.1	3.9	3.0	0.8	51.1	29.9	21.2	1,449
Middle	1.3	1,748	25.9	48.1	3.4	2.8	0.6	48.5	27.5	21.0	1,607
Fourth	0.6	1,748	25.5	50.8	4.5	3.0	1.4	44.7	24.8	19.9	1,625
Highest	0.7	1,686	25.4	52.3	3.0	2.2	0.8	44.8	27.5	17.3	1,614
Total <sup>2</sup>	1.1	8,499	25.8	48.6	3.9	2.8	1.2	47.5	27.4	20.1	7,759

Note: The Body Mass Index (BMI) is expressed as the ratio of weight in kilograms to the square of height in meters (kg/m<sup>2</sup>).

<sup>1</sup> Excludes pregnant women and women with a birth in the preceding 2 months

<sup>2</sup> Includes 5 women with information missing on education

## 11.2.2 Foods Consumed by Mothers

The quality and quantity of food that mothers consume influences their health and that of their children, especially the health of breastfeeding children. The 2007 JPFHS included questions on the type of foods consumed by mothers of children under age three during the day and night preceding the interview.

Table 11.8 shows that most mothers of young children consume foods made from grains (92 percent), foods made with oil, fat or butter (88 percent), meat, fish, shellfish, poultry or eggs (84 percent) and cheese or yogurt (82 percent). Two-thirds of mothers consume fruits or vegetables rich in vitamin A and three-fourths consume other types of fruits and vegetables. Eighty-two percent of mothers drink tea or coffee while one-third drink milk.

Table 11.8 Foods consumed by mothers in the day or night preceding the interview

Among mothers age 15-49 with a child under age three years living with them, the percentage who consumed specific types of foods in the day or night preceding the interview, by background characteristics, Jordan 2007

Background characteristic	Solid or semi-solid foods													Number of women
	Liquids			Foods made from grains	Foods made from roots/tubers	Foods made from legumes	Meat/fish/shellfish/poultry/eggs	Cheese/yogurt	Vitamin A-rich fruits/vegetables <sup>1</sup>	Other fruits/vegetables	Other solid or semi-solid food	Foods made with oil/fat/ butter	Sugary foods	
	Milk	Tea/coffee	Other liquids											
<b>Age</b>														
15-19	26.2	66.7	81.4	95.2	41.1	45.1	75.9	75.9	58.4	74.0	46.4	85.7	69.1	123
20-29	37.0	77.5	89.8	92.1	40.4	57.4	84.8	80.1	67.1	75.2	34.8	87.7	63.1	2,301
30-39	35.3	85.4	86.4	90.9	40.6	57.2	83.3	83.2	64.2	76.8	37.3	87.5	59.0	2,027
40-49	31.2	93.3	83.2	94.5	47.9	68.1	84.9	85.5	69.1	75.9	41.9	93.0	53.6	369
<b>Residence</b>														
Urban	35.6	80.6	88.0	91.7	40.1	58.4	84.6	81.7	66.3	75.5	38.0	88.2	61.5	4,024
Rural	35.6	87.6	85.9	92.9	46.1	54.9	80.9	81.6	63.5	78.1	30.1	87.0	57.4	796
<b>Governorate</b>														
Amman	36.7	79.0	85.4	90.3	42.3	60.4	84.6	80.5	70.7	76.8	39.2	87.4	63.9	1,871
Balqa	39.6	87.2	89.6	97.1	45.4	62.4	82.8	80.2	63.0	77.9	35.3	86.2	57.4	288
Zarqa	36.3	87.1	90.9	86.9	32.7	50.3	84.2	77.5	50.1	72.2	37.1	85.3	52.1	701
Madaba	39.0	84.5	85.7	91.6	43.0	58.0	75.8	72.1	57.8	71.2	35.8	83.6	48.6	118
Irbid	30.8	76.9	90.7	94.6	40.3	57.7	87.6	88.0	72.6	73.6	38.3	91.4	64.7	934
Mafraq	45.7	88.2	84.9	95.6	43.3	53.0	77.4	85.9	64.6	77.5	31.8	91.2	60.1	224
Jarash	26.6	85.0	84.4	93.9	37.6	52.8	85.1	80.1	50.4	79.6	23.1	86.5	56.4	146
Ajloun	31.6	87.7	87.9	97.6	46.6	58.8	89.0	89.1	65.9	89.5	22.9	95.3	62.2	108
Karak	24.8	86.7	88.2	91.4	41.7	60.2	79.6	78.5	72.5	78.3	31.8	85.8	60.3	170
Tafiela	34.6	91.9	87.5	93.3	48.6	60.5	78.6	81.3	60.2	79.8	36.8	85.9	59.8	68
Ma'an	45.4	85.8	86.7	93.7	49.9	60.2	75.3	79.9	64.4	74.9	35.3	86.2	59.2	85
Aqaba	43.7	76.7	85.3	95.8	48.5	58.8	77.2	82.4	57.2	76.4	34.0	88.3	61.3	108
<b>Region</b>														
Central	37.0	82.0	87.1	90.2	40.4	58.1	84.0	79.4	64.6	75.6	38.2	86.6	59.9	2,978
North	32.8	80.4	88.9	94.9	41.0	56.5	85.8	87.0	68.5	76.0	34.5	91.2	62.9	1,412
South	35.2	84.9	87.1	93.3	46.1	59.9	78.0	80.2	65.1	77.4	33.8	86.5	60.3	431
<b>Badia area</b>														
Badia	46.6	88.9	79.8	91.1	46.9	58.3	75.8	81.4	58.9	74.7	35.3	84.4	51.1	418
Other	34.6	81.1	88.4	91.9	40.5	57.8	84.7	81.7	66.5	76.0	36.8	88.3	61.7	4,403
<b>Education</b>														
No education	34.9	94.2	78.6	94.1	43.8	40.5	59.3	63.5	45.0	64.4	38.5	87.4	32.6	101
Elementary	29.7	82.6	83.2	89.7	40.6	43.5	76.0	73.9	62.1	64.1	37.4	91.4	46.6	260
Preparatory	35.7	87.2	87.3	90.5	39.2	57.3	82.4	81.0	60.3	70.3	36.4	87.3	56.0	690
Secondary	33.4	80.6	86.1	91.7	37.5	58.4	83.4	81.9	64.4	75.3	37.7	87.7	60.0	2,284
Higher	39.9	80.0	91.5	92.9	47.3	60.8	88.7	84.3	72.5	82.2	35.0	88.1	68.7	1,486
<b>Wealth quintile</b>														
Lowest	32.4	81.4	84.6	91.6	40.8	52.8	77.9	76.4	59.9	68.3	37.3	86.6	51.9	1,227
Second	36.1	84.4	86.0	91.4	43.4	57.7	84.5	83.2	62.5	73.8	36.9	89.9	60.6	1,192
Middle	33.0	81.3	89.1	93.1	39.0	61.7	88.7	85.1	68.4	78.6	36.4	89.1	66.8	1,000
Fourth	39.1	81.2	91.0	92.2	37.1	61.4	84.3	83.8	70.7	79.3	35.9	85.0	58.4	773
Highest	40.9	78.9	90.2	90.8	45.1	57.1	86.9	81.3	73.4	86.2	36.6	88.7	72.0	629
Total	35.6	81.7	87.6	91.9	41.1	57.8	84.0	81.7	65.8	75.9	36.7	88.0	60.8	4,821

Note: Foods consumed in the past "24-hour" period (yesterday and last night)

<sup>1</sup> Includes , carrots, red sweet potatoes, pumpkin, apricot, palm nuts, yellow melon, and green leafy vegetables

### 11.2.3 Micronutrient Intake among Mothers

A mother's nutritional status during pregnancy is important both for the child's intrauterine development and for protection against maternal morbidity and mortality. Table 11.9 shows the micronutrient intake among mothers of young children by background characteristics. Nearly all mothers consumed vitamin A-rich foods and 84 percent consumed iron-rich foods in the 24 hours preceding the survey. Consumption of vitamin A and iron-rich foods is higher among mothers with a higher education and among women living in wealthier households.

In addition, women who had given birth during the five years prior to the survey were asked for how many days they took iron supplements during their last pregnancy. Half of mothers report taking iron tablets or syrup for more than three months during their last pregnancy. Nineteen percent of mothers report not taking any iron supplementation during their last pregnancy. Mothers with higher levels of education and those living in the wealthiest households were most likely to take at least 90 days worth of iron supplements.

Table 11.9 Micronutrient intake among mothers

Among women age 15-49 with a child under age three years living with her, the percentages who consumed vitamin A-rich and iron-rich foods in the 24 hours preceding the survey; among mothers age 15-49 percentage who, during the pregnancy of the last child born in the five years prior to the survey, took iron tablets or syrup for specific numbers of days, by background characteristics, Jordan 2007

Background characteristic	Among women with a child under three years living with her			Number of days women took iron tablets or syrup during pregnancy of last birth					Number of women
	Percentage consumed Vitamin A rich foods <sup>1</sup>	Percentage consumed iron-rich foods <sup>2</sup>	Number of women	None	<60	60-89	90+	Don't know/missing	
<b>Age</b>									
15-19	86.7	75.9	123	17.1	19.5	10.9	52.3	0.3	124
20-29	92.9	84.8	2,301	17.9	16.7	11.7	51.8	2.0	2,676
30-39	93.6	83.3	2,027	18.8	14.4	13.6	51.4	1.8	2,912
40-49	90.8	84.9	369	26.4	14.5	11.1	44.7	3.2	735
<b>Residence</b>									
Urban	93.2	84.6	4,024	17.8	15.5	12.5	52.2	2.0	5,417
Rural	90.9	80.9	796	27.2	15.1	12.6	43.3	1.8	1,029
<b>Governorate</b>									
Amman	93.8	84.6	1,871	13.7	16.5	11.1	56.0	2.7	2,469
Balqa	90.8	82.8	288	12.6	7.3	10.5	68.6	1.0	396
Zarqa	90.9	84.2	701	18.0	14.0	16.5	49.8	1.8	966
Madaba	88.5	75.8	118	18.1	12.0	10.6	53.9	5.4	157
Irbid	96.0	87.6	934	24.8	15.6	14.2	44.1	1.3	1,261
Ma'raq	89.2	77.4	224	39.2	18.8	10.0	31.4	0.7	298
Jarash	92.7	85.1	146	26.3	13.2	12.4	46.8	1.3	185
Ajloun	95.4	89.0	108	29.8	15.7	12.2	41.3	1.1	150
Karak	92.7	79.6	170	22.4	20.8	11.7	42.4	2.7	229
Tafiela	88.7	78.6	68	25.7	20.4	12.6	39.6	1.7	88
Ma'an	86.2	75.3	85	28.8	18.4	10.2	40.8	1.7	107
Aqaba	85.5	77.2	108	17.3	12.5	11.1	58.2	0.9	140
<b>Region</b>									
Central	92.6	84.0	2,978	14.8	14.8	12.3	55.7	2.4	3,987
North	94.5	85.8	1,412	27.6	15.9	13.2	42.1	1.2	1,894
South	89.0	78.0	431	22.8	18.3	11.4	45.6	1.9	564
<b>Badia area</b>									
Badia	87.7	75.8	418	30.6	15.8	8.1	43.6	1.9	536
Other	93.4	84.7	4,403	18.2	15.4	12.9	51.5	2.0	5,910
<b>Education</b>									
No education	71.6	59.3	101	42.1	15.7	10.4	28.5	3.3	155
Elementary	85.8	76.0	260	31.4	16.8	13.3	35.6	2.9	351
Preparatory	92.8	82.4	690	24.2	15.6	14.1	45.8	0.4	917
Secondary	92.7	83.4	2,284	18.1	16.1	12.0	51.3	2.5	3,058
Higher	95.8	88.7	1,486	14.8	14.1	12.6	56.9	1.7	1,964
<b>Wealth quintile</b>									
Lowest	89.0	77.9	1,227	28.6	17.8	10.6	40.5	2.4	1,508
Second	93.3	84.5	1,192	19.6	16.4	14.0	48.8	1.2	1,501
Middle	94.3	88.7	1,000	17.4	15.0	12.6	52.0	3.0	1,378
Fourth	94.9	84.3	773	13.5	13.0	14.4	56.6	2.5	1,153
Highest	94.9	86.9	629	13.3	13.6	10.4	62.1	0.5	906
<b>Total</b>	<b>92.9</b>	<b>84.0</b>	<b>4,821</b>	<b>19.3</b>	<b>15.4</b>	<b>12.5</b>	<b>50.8</b>	<b>2.0</b>	<b>6,446</b>

<sup>1</sup> Includes meat, fish, poultry, eggs, carrots, red sweet potatoes, pumpkin, apricot, palm nuts, yellow melon, and green leafy vegetables

<sup>2</sup> Includes meat, fish, poultry, and eggs

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 33 million people worldwide were living with HIV in 2007. An estimated 2 million lost their lives to AIDS (UNAIDS, 2008).

The first case of AIDS reported in Jordan was in 1986. By December 2007, there were 550 reported HIV infections in Jordan; a total of 185 cases among Jordanian nationals and the remaining among members of the expatriate community. As surveillance systems are not fully developed, and there exists 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, however, it is possible to discern that transmission occurs primarily among those aged 20-49 years. The modes of transmission are estimated to be 60 percent via sexual contact, 17 percent via blood or blood products, 3 percent via injecting drug use, 2 percent via mother to child transmission and 18 percent of unknown routes.

In 1986, Jordan launched a National AIDS Program within the Ministry of Health and is working with international bodies such as UNAIDS and the World Health Organization to combat the threat of AIDS in Jordan.

The 2007 JPFHS collected information from ever-married women about HIV/AIDS, as well as information about knowledge of symptoms of sexually transmitted infections (STIs), which are known to be important predisposing factors for HIV epidemics. This chapter summarizes information on knowledge, perceptions, and behaviors of ever-married women aged 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. At least 96 percent of women of all background characteristics have heard of AIDS with the exception of women with no education (86 percent).

To evaluate the level of knowledge about HIV/AIDS, women who had heard of the infection were asked whether there is anything a person can do to avoid getting infected with the virus that causes AIDS. If a woman reported that HIV infection could be prevented, she was asked two types of questions were asked about ways to prevent HIV infection. First, an open-ended question was asked and women were allowed to indicate any means that they know without prompting. Next, women were asked specific questions on whether condom use, having only one sexual partner, and abstaining from sex can reduce their chances of becoming infected with HIV.

Table 12.1 Knowledge of AIDS

Percentage of ever married women age 15-49 who have heard of AIDS, by background characteristics, Jordan 2007

Background characteristic	Has heard of AIDS	Number of women
<b>Age</b>		
15-24	98.7	1,512
15-19	97.6	236
20-24	98.9	1,276
25-29	98.8	1,977
30-39	99.3	4,265
40-49	97.7	3,122
<b>Marital status</b>		
Married	98.7	10,354
Divorced/widowed	96.8	522
<b>Residence</b>		
Urban	98.9	9,249
Rural	97.2	1,627
<b>Governorate</b>		
Amman	99.0	4,442
Balqa	97.3	645
Zarqa	98.4	1,645
Madaba	97.2	262
Irbid	99.6	1,993
Mafraq	97.4	460
Jarash	99.3	293
Ajloun	98.7	228
Karak	97.0	378
Tafiela	98.0	146
Ma'an	96.9	164
Aqaba	96.6	221
<b>Region</b>		
Central	98.6	6,993
North	99.2	2,975
South	97.0	908
<b>Badia area</b>		
Badia	96.6	823
Other	98.8	10,053
<b>Education</b>		
No education	86.3	416
Elementary	96.9	813
Preparatory	98.8	1,681
Secondary	99.3	4,788
Higher	99.6	3,179
<b>Wealth quintile</b>		
Lowest	96.3	2,211
Second	98.9	2,296
Middle	99.0	2,206
Fourth	99.3	2,135
Highest	100.0	2,028
Total	98.7	10,876

Table 12.2 shows the percentage of all women who spontaneously mentioned specific ways to avoid contracting the disease. The most frequently reported means to prevent HIV is avoidance of blood transfusions (56 percent), with limiting sex to one partner being the next most frequently mentioned way to prevent HIV (38 percent). Twenty-seven percent of women believe that avoiding sex with persons having multiple sexual partners would help to avoid HIV and 26 percent mentioned avoidance of injections; only one percent of women spontaneously mentioned condoms as a means of avoiding HIV.

Ways to avoid HIV/AIDS	Percentage of women
Does not know of AIDS or if AIDS can be avoided	5.5
Believes no way to avoid AIDS	5.1
Does not know specific way <sup>1</sup>	5.3
Abstain from sexual intercourse	6.5
Use condoms	1.2
Limit sex to spouse	38.3
Limit number of sexual partners	6.8
Avoid prostitutes	14.1
Avoid sex with persons who have multiple partners	27.3
Avoid sex with homosexuals	11.3
Avoid sex with person taking injected drugs	9.7
Avoid blood transfusion	55.9
Avoid injections	26.2
Avoid sharing razors, blades	6.6
Avoid kissing	1.4
Avoid mosquito bites	0.1
Other	3.4
Number of women	10,876

HIV/AIDS prevention programs focus their messages and efforts on three important aspects of behavior: delaying sexual debut in young persons (abstinence), limiting the number of sexual partners or staying faithful to one partner, and use of condoms (the ABC message). 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, using a condom at every sexual encounter, and abstaining from sex. Table 12.3 presents the results on knowledge about these three key prevention strategies by background characteristics. It should be noted that this table is based on prompted questions on these three aspects of AIDS-prevention behavior, while Table 12.2 is based on spontaneous answers.

Table 12.3 Knowledge of HIV prevention methods

Percentage of ever married women who, in response to prompted questions, say that people can reduce the risk of getting the AIDS virus by using condoms every time they have sexual intercourse, by having one sex partner who is not infected and has no other partners, and by abstaining from sexual intercourse, by background characteristics, Jordan 2007

Background characteristic	Percentage who say HIV can be prevented by				Number of women
	Using condoms <sup>1</sup>	Limiting sexual intercourse to one uninfected partner <sup>2</sup>	Using condoms and limiting sexual intercourse to one uninfected partner <sup>1,2</sup>	Abstaining from sexual intercourse	
<b>Age</b>					
15-24	51.0	85.0	48.4	36.9	1,512
15-19	44.5	80.2	42.7	33.5	236
20-24	52.2	85.8	49.4	37.5	1,276
25-29	55.2	86.6	52.2	43.8	1,977
30-39	54.3	86.5	50.7	44.0	4,265
40-49	51.5	86.0	48.8	45.1	3,122
<b>Marital status</b>					
Married	53.7	86.5	50.6	43.3	10,354
Divorced/widowed	43.3	79.5	40.2	42.6	522
<b>Residence</b>					
Urban	53.9	86.6	50.9	43.6	9,249
Rural	49.2	83.5	45.7	41.2	1,627
<b>Governorate</b>					
Amman	55.9	89.9	53.8	47.3	4,442
Balqa	52.0	85.8	49.3	40.7	645
Zarqa	44.8	74.5	40.7	40.7	1,645
Madaba	43.7	84.1	39.3	36.2	262
Irbid	57.6	90.1	54.0	39.6	1,993
Mafraq	54.5	88.0	52.1	40.3	460
Jarash	48.9	90.7	47.2	37.3	293
Ajloun	56.3	93.8	54.3	36.3	228
Karak	51.0	80.0	43.9	45.0	378
Tafiela	48.8	77.0	41.9	48.6	146
Ma'an	48.3	76.0	42.1	45.7	164
Aqaba	47.4	71.6	42.5	44.6	221
<b>Region</b>					
Central	52.5	85.7	49.7	44.7	6,993
North	56.1	90.1	53.1	39.2	2,975
South	49.3	76.8	42.9	45.6	908
<b>Badia area</b>					
Badia	47.0	82.2	44.4	39.6	823
Other	53.7	86.5	50.5	43.6	10,053
<b>Education</b>					
No education	28.2	61.5	26.2	35.7	416
Elementary	43.1	79.1	40.2	39.2	813
Preparatory	47.7	86.9	45.9	42.0	1,681
Secondary	53.6	86.7	50.2	44.1	4,788
Higher	61.3	89.9	57.8	44.7	3,179
<b>Wealth quintile</b>					
Lowest	44.5	80.4	42.0	37.4	2,211
Second	50.8	84.6	47.8	43.5	2,296
Middle	52.8	84.5	49.2	44.0	2,206
Fourth	56.0	89.3	52.0	42.0	2,135
Highest	62.8	92.6	60.4	50.0	2,028
Total	53.2	86.2	50.1	43.3	10,876

<sup>1</sup> Using condoms every time they have sexual intercourse

<sup>2</sup> Partner who has no other partners

Ever-married women are most knowledgeable about limiting sexual intercourse to one uninfected partner (86 percent). Far fewer women know that using condoms or abstaining from sexual intercourse can reduce the risk of contracting HIV (53 percent and 43 percent, respectively). Not surprisingly, knowledge of these means of prevention is highest among urban women, women with higher levels of education and women living in wealthier households. There is a particularly strong relationship between education and knowledge of condom use as a means of HIV prevention; 28 percent of women with no education cite using condoms as a means of preventing HIV compared to 61 percent of women with a higher than secondary education.

The 2007 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 shaking hands with someone who has AIDS or by sharing food with a person who has AIDS. The results in Table 12.4 indicate that many women lack accurate knowledge about the ways in which HIV can and cannot be transmitted. Only 66 percent of women know that a healthy-looking person can have (and thus transmit) the virus that causes AIDS. This represents however a significant increase from 2002, when only 46 percent of women reported knowing this.

Many women also erroneously believe that AIDS can be transmitted by mosquito bites; only 40 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 (73 percent) or by shaking hands with an infected person (79 percent). However, only one fourth of women (24 percent) are able to 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 12.4 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 14 percent of ever-married women have a comprehensive knowledge of HIV/AIDS prevention and transmission. Comprehensive knowledge is positively associated with education; twenty-two percent of the highest educated women have a comprehensive knowledge about AIDS, compared to only 3 percent of women with no education.

Table 12.4 Comprehensive knowledge about AIDS

Percentage of ever-married women who say that a healthy-looking person can have the AIDS virus and who, in response to prompted questions, correctly reject local misconceptions about AIDS transmission or prevention, and the percentage with a comprehensive knowledge about AIDS by background characteristics, Jordan 2007

Background characteristic	Percentage of women who say that:				Percentage who say that a healthy-looking person can have the AIDS virus and who reject the two most common local misconceptions <sup>1</sup>	Percentage with a comprehensive knowledge about AIDS <sup>2</sup>	Number of women
	A healthy-looking person can have the AIDS virus	AIDS cannot be transmitted by mosquito bites	AIDS cannot be transmitted by shaking hands	A person cannot become infected by sharing food with a person who has AIDS			
<b>Age</b>							
15-24	64.0	41.6	80.2	71.4	23.0	12.9	1,512
15-19	56.3	33.9	79.2	67.6	17.4	12.3	236
20-24	65.4	43.1	80.4	72.2	24.0	13.0	1,276
25-29	63.5	38.9	81.1	70.9	22.2	14.1	1,977
30-39	68.1	41.5	80.7	75.4	25.6	14.9	4,265
40-49	64.3	37.9	76.2	71.9	23.5	14.6	3,122
<b>Marital status</b>							
Married	65.9	40.0	79.8	73.3	24.2	14.6	10,354
Divorced/widowed	59.9	39.4	72.7	67.7	21.4	10.5	522
<b>Residence</b>							
Urban	66.1	40.9	80.6	74.4	24.6	14.8	9,249
Rural	62.4	34.8	72.5	65.3	21.0	12.0	1,627
<b>Governorate</b>							
Amman	70.3	42.2	84.7	78.8	27.0	16.3	4,442
Balqa	69.7	32.1	71.9	67.0	22.8	14.4	645
Zarqa	56.2	49.0	75.3	72.8	22.0	11.8	1,645
Madaba	66.5	48.1	75.2	69.8	34.4	12.8	262
Irbid	62.8	36.4	79.7	69.2	22.3	15.2	1,993
Mafraq	57.6	29.6	72.7	60.9	17.2	11.2	460
Jarash	67.8	34.2	79.1	73.1	21.2	11.9	293
Ajloun	66.5	30.5	76.1	67.7	20.4	12.8	228
Karak	67.1	33.4	72.6	65.9	20.6	11.7	378
Tafiela	64.0	31.3	70.0	64.1	16.8	8.7	146
Ma'an	63.3	31.6	65.9	61.1	17.9	8.9	164
Aqaba	65.2	35.7	72.9	71.8	22.5	13.0	221
<b>Region</b>							
Central	66.8	43.1	81.0	76.0	25.7	14.9	6,993
North	62.8	34.7	78.3	68.2	21.3	14.1	2,975
South	65.5	33.3	71.1	66.2	20.0	11.1	908
<b>Badia area</b>							
Badia	56.8	33.2	70.0	62.5	18.5	8.5	823
Other	66.3	40.6	80.2	73.9	24.5	14.9	10,053
<b>Education</b>							
No education	42.8	21.1	40.6	39.5	9.5	3.4	416
Elementary	48.0	28.5	62.6	55.4	13.6	8.5	813
Preparatory	55.4	37.4	73.9	67.2	17.9	9.8	1,681
Secondary	65.1	39.9	81.4	74.9	22.3	12.9	4,788
Higher	79.2	46.9	88.7	82.1	34.4	21.9	3,179
<b>Wealth quintile</b>							
Lowest	55.7	34.5	67.7	60.4	17.6	10.0	2,211
Second	61.6	40.9	77.9	70.2	22.1	12.3	2,296
Middle	64.9	37.5	78.9	71.6	22.5	12.6	2,206
Fourth	69.2	42.5	84.4	78.7	26.1	15.1	2,135
Highest	77.8	45.1	89.2	85.5	32.7	22.7	2,028
Total	65.6	40.0	79.4	73.0	24.0	14.4	10,876

<sup>1</sup> Two most common local misconceptions: mosquito bites and sharing food

<sup>2</sup> Comprehensive knowledge means knowing that consistent use of 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 AIDS transmission or prevention.

The 2007 JPFHS asked women whether they thought the AIDS virus could be transmitted from mother to child during pregnancy, during delivery, and through breastfeeding (Table 12.5). The results indicate that while 86 percent know that HIV can be transmitted from mother to child during pregnancy and three-fourths (74 percent) know that the virus can be transmitted during delivery, only half know that it can be transmitted through breastfeeding (51 percent). 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 12.5 Knowledge of mother to child transmission of HIV**

Percentage of ever-married women who know about transmission from mother to child of HIV by background characteristics, Jordan 2007

Background characteristic	Percentage who say HIV/AIDS can be transmitted from mother to child:			Number of women
	During delivery	During pregnancy	Through breastfeeding	
<b>Age</b>				
15-24	70.5	87.6	61.3	1,512
15-19	65.2	88.9	69.4	236
20-24	71.5	87.4	59.8	1,276
25-29	74.3	85.5	50.5	1,977
30-39	74.4	85.4	50.1	4,265
40-49	75.3	85.8	48.5	3,122
<b>Marital status</b>				
Married	74.3	85.9	51.1	10,354
Divorced/widowed	70.6	85.2	55.0	522
<b>Currently pregnant</b>				
Pregnant	70.5	83.6	49.9	1,315
Not pregnant or not sure	74.6	86.2	51.5	9,561
<b>Residence</b>				
Urban	74.6	86.4	50.6	9,249
Rural	71.3	82.5	55.3	1,627
<b>Governorate</b>				
Amman	73.9	87.4	47.6	4,442
Balqa	72.7	78.4	51.9	645
Zarqa	78.3	86.1	49.6	1,645
Madaba	74.1	80.9	58.3	262
Irbid	74.0	85.8	57.5	1,993
Mafraq	72.0	85.4	59.3	460
Jarash	77.9	88.0	62.9	293
Ajloun	73.4	86.3	58.1	228
Karak	73.7	85.1	51.8	378
Tafiela	68.1	84.0	45.8	146
Ma'an	65.0	83.3	48.5	164
Aqaba	65.6	83.3	38.1	221
<b>Region</b>				
Central	74.8	86.0	48.8	6,993
North	74.0	86.0	58.4	2,975
South	69.3	84.1	46.9	908
<b>Badia area</b>				
Badia	70.0	82.0	56.3	823
Other	74.4	86.2	50.9	10,053
<b>Education</b>				
No education	51.3	61.9	46.2	416
Elementary	65.2	74.7	55.4	813
Preparatory	72.7	86.3	54.5	1,681
Secondary	72.3	86.7	51.6	4,788
Higher	82.8	90.3	48.7	3,179
<b>Wealth quintile</b>				
Lowest	66.7	80.5	58.2	2,211
Second	72.7	84.2	54.1	2,296
Middle	73.8	88.0	51.9	2,206
Fourth	77.9	88.7	48.0	2,135
Highest	80.2	88.2	43.3	2,028
Total	74.1	85.9	51.3	10,876

## 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 2007 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 three-fourths of women would be willing to care for a relative with AIDS at home (74 percent). However, far fewer women would be willing to buy fresh vegetables from a shopkeeper with AIDS (24 percent) or allow a female teacher with AIDS to keep teaching (29 percent). Approximately one-third of women say that they would not keep secret the fact that a family member is HIV positive. Accepting attitudes are expressed on all four indicators of tolerance by only four percent of women, indicating that stigma surrounding AIDS is 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 AIDS, by background characteristics, Jordan 2007

Background characteristic	Percentage of women who:					Percentage expressing acceptance attitudes on all four indicators	Number of women who have heard of AIDS
	Are willing to care for a family member with the AIDS virus in the woman's home	Would buy fresh vegetables from shopkeeper who has the AIDS virus	Say that a female teacher with the AIDS virus and 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			
<b>Age</b>							
15-24	73.1	25.8	29.0	33.5	4.8	1,492	
15-19	61.5	29.3	27.2	36.1	4.8	230	
20-24	75.2	25.1	29.3	33.0	4.8	1,262	
25-29	73.3	23.0	25.5	35.9	4.1	1,953	
30-39	74.7	25.8	30.7	34.7	4.6	4,233	
40-49	74.7	22.1	28.0	36.0	2.9	3,050	
<b>Marital status</b>							
Married	74.0	24.4	28.8	35.1	4.2	10,224	
Divorced/widowed	78.9	21.8	28.0	34.9	2.1	505	
<b>Residence</b>							
Urban	73.3	24.6	29.4	34.6	4.1	9,148	
Rural	79.6	22.4	25.2	38.4	3.6	1,582	
<b>Governorate</b>							
Amman	72.9	27.6	33.7	31.0	4.8	4,397	
Balqa	60.6	24.6	29.3	27.0	1.9	627	
Zarqa	60.6	24.4	23.6	33.3	2.5	1,618	
Madaba	81.0	28.3	28.2	28.5	1.8	254	
Irbid	81.5	18.1	23.5	38.0	3.7	1,986	
Mafraq	82.9	19.6	24.0	38.6	3.0	448	
Jarash	76.1	24.3	28.4	41.9	3.1	291	
Ajloun	82.2	18.8	27.6	45.8	4.6	225	
Karak	90.2	24.3	29.2	51.3	6.6	367	
Tafiela	90.3	22.2	26.1	53.9	6.1	143	
Ma'an	89.8	22.2	25.4	53.0	5.9	158	
Aqaba	91.2	23.5	28.3	56.3	7.7	214	
<b>Region</b>							
Central	69.2	26.6	30.7	31.1	3.9	6,897	
North	81.2	19.0	24.4	39.1	3.6	2,951	
South	90.4	23.4	27.8	53.2	6.6	882	
<b>Badia area</b>							
Badia	81.6	23.8	25.1	38.6	3.4	795	
Other	73.6	24.3	29.0	34.8	4.1	9,934	
<b>Education</b>							
No education	78.0	16.9	14.1	47.6	1.2	359	
Elementary	77.5	17.6	19.8	39.3	2.5	787	
Preparatory	71.4	23.3	26.9	37.8	3.3	1,660	
Secondary	74.0	25.3	28.8	34.0	4.1	4,756	
Higher	74.8	25.7	33.5	32.9	5.1	3,167	
<b>Wealth quintile</b>							
Lowest	74.9	21.1	22.6	36.6	3.6	2,128	
Second	74.8	22.9	27.2	36.1	4.1	2,271	
Middle	75.5	22.8	27.0	36.1	3.2	2,183	
Fourth	72.8	28.0	30.0	34.6	4.7	2,120	
Highest	73.0	26.8	37.5	31.9	4.7	2,028	
Total	74.2	24.3	28.7	35.1	4.1	10,729	

## 12.3 ATTITUDES TOWARDS NEGOTIATING SAFER SEXUAL RELATIONS

Knowledge about HIV transmission and ways to prevent it are of little use if people feel powerless to negotiate safer sex practices with their partner. In an effort to assess the ability of women to negotiate safer sex with a spouse who has a sexually transmitted infection (STI), women were asked if they thought a wife is justified in refusing to have sex with her husband when she knows he has a disease that can be transmitted through sexual contact, and if a woman in the same circumstances is justified in asking her husband to use a condom.

Table 12.7 shows that nearly all women 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 (99 percent). Considering the two actions separately, a large majority of women believe that a woman is justified in refusing to have sexual intercourse (97 percent) or asking that they use a condom (89 percent).

Background characteristic	Woman is justified to:			Number of women
	Refusing to have sexual intercourse	Asking that they use a condom	Refusing sexual intercourse or asking that they use a condom	
<b>Age</b>				
15-24	96.1	87.5	97.6	1,512
15-19	92.1	83.4	94.1	236
20-24	96.9	88.3	98.2	1,276
25-29	99.1	91.9	99.4	1,977
30-39	96.9	90.2	98.7	4,265
40-49	96.6	87.7	98.3	3,122
<b>Marital status</b>				
Married	97.2	89.6	98.6	10,354
Divorced/widowed	95.6	84.7	96.9	522
<b>Residence</b>				
Urban	97.3	89.7	98.7	9,249
Rural	96.4	87.6	97.8	1,627
<b>Governorate</b>				
Amman	96.2	87.9	98.2	4,442
Balqa	98.0	91.1	98.3	645
Zarqa	98.4	92.5	99.1	1,645
Madaba	97.4	92.2	98.5	262
Irbid	98.6	90.8	99.2	1,993
Ma'raq	97.7	90.4	99.2	460
Jarash	98.4	94.6	99.1	293
Ajloun	97.8	93.2	99.1	228
Karak	92.0	80.8	95.2	378
Taffela	95.9	85.9	98.4	146
Ma'an	96.0	84.7	98.1	164
Aqaba	97.5	83.3	98.7	221
<b>Region</b>				
Central	96.9	89.4	98.5	6,993
North	98.4	91.3	99.2	2,975
South	94.7	83.0	97.1	908
<b>Badia area</b>				
Badia	96.4	85.9	97.5	823
Other	97.2	89.7	98.6	10,053
<b>Education</b>				
No education	89.3	77.2	92.3	416
Elementary	93.0	84.8	96.6	813
Preparatory	97.3	87.5	98.7	1,681
Secondary	97.5	89.5	98.8	4,788
Higher	98.6	93.1	99.4	3,179
<b>Wealth quintile</b>				
Lowest	95.4	87.4	97.7	2,211
Second	97.1	89.6	99.1	2,296
Middle	96.7	89.1	97.8	2,206
Fourth	98.2	89.8	98.8	2,135
Highest	98.4	91.4	99.4	2,028
Total	97.1	89.4	98.6	10,876

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 (36 percent) had discussed HIV/AIDS prevention with their husband while two-thirds (62 percent) had not. Again, young, rural, less educated women, as well as 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 who had a higher-than-secondary education (45 percent), women living in the wealthiest households (45 percent) and women living in Zarqa (41 percent).

Table 12.8 Discussion of HIV/AIDS with husband					
Percent distribution of women who are currently married by whether they ever discussed HIV/AIDS prevention with their husband, by background characteristics, Jordan 2007					
Background characteristic	Discussed HIV/AIDS prevention with husband	Never discussed HIV/AIDS prevention with husband	Has not heard of AIDS	Total	Number of women
<b>Age</b>					
15-24	28.8	69.9	1.4	100.0	1,466
15-19	22.5	75.0	2.5	100.0	233
20-24	29.9	68.9	1.2	100.0	1,233
25-29	35.5	63.3	1.2	100.0	1,932
30-39	38.7	60.6	0.7	100.0	4,095
40-49	37.5	60.5	2.0	100.0	2,861
<b>Residence</b>					
Urban	37.0	62.0	1.0	100.0	8,803
Rural	32.7	64.6	2.8	100.0	1,551
<b>Governorate</b>					
Amman	35.7	63.4	0.8	100.0	4,242
Balqa	36.9	60.4	2.7	100.0	620
Zarqa	40.9	57.5	1.6	100.0	1,548
Madaba	28.1	69.2	2.6	100.0	248
Irbid	37.2	62.6	0.3	100.0	1,892
Mafrqa	33.1	64.1	2.8	100.0	441
Jarash	28.5	70.9	0.6	100.0	278
Ajloun	35.4	63.3	1.3	100.0	218
Karak	38.2	58.8	3.0	100.0	363
Tafiela	32.0	66.3	1.8	100.0	139
Ma'an	36.3	60.6	3.1	100.0	154
Aqaba	33.2	63.5	3.3	100.0	212
<b>Region</b>					
Central	36.8	62.0	1.3	100.0	6,658
North	35.6	63.7	0.8	100.0	2,830
South	35.7	61.5	2.9	100.0	867
<b>Badia area</b>					
Badia	29.7	66.8	3.5	100.0	783
Other	36.9	62.0	1.1	100.0	9,571
<b>Education</b>					
No education	14.4	72.2	13.4	100.0	365
Elementary	25.1	72.1	2.8	100.0	734
Preparatory	30.5	68.4	1.1	100.0	1,581
Secondary	36.0	63.3	0.7	100.0	4,586
Higher	45.0	54.6	0.4	100.0	3,089
<b>Wealth quintile</b>					
Lowest	27.2	69.3	3.5	100.0	2,083
Second	34.2	64.6	1.1	100.0	2,184
Middle	35.9	63.2	0.9	100.0	2,104
Fourth	40.4	58.9	0.7	100.0	2,018
Highest	44.6	55.3	0.0	100.0	1,966
Total	36.3	62.4	1.3	100.0	10,354

## 12.4 KNOWLEDGE OF SYMPTOMS 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 and knowledge of the symptoms of STIs among both men and women.

Table 12.9 shows that 69 percent of women had never heard of sexually transmitted infections, apart from AIDS. As expected, younger women, rural residents, women with less education, and women living in poorer households are more likely than others to have never heard about STIs. Only 17 percent of women were able to name at least one symptoms of an STI in a man; the same proportion was able to name at least one symptom in a woman.

Table 12.9 Knowledge of symptoms of STIs								
Percent distribution of ever married women by knowledge of symptoms associated with sexually transmitted diseases (STIs) in a man and in a woman, according to background characteristics, Jordan 2007								
Background characteristic	Has not heard of STIs (apart from AIDS)	Knowledge of symptoms of STIs in a man			Knowledge of symptoms of STIs in a woman			Number of women
		No symptoms mentioned	One symptom mentioned	Two or more symptoms mentioned	No symptoms mentioned	One symptom mentioned	Two or more symptoms mentioned	
<b>Age</b>								
15-24	77.9	11.0	3.7	7.4	10.9	4.1	7.1	1,512
15-19	82.6	9.2	4.3	3.9	7.7	5.9	3.9	236
20-24	77.0	11.3	3.6	8.1	11.5	3.8	7.7	1,276
25-29	71.7	13.2	4.8	10.4	13.7	3.6	11.1	1,977
30-39	66.2	15.0	4.2	14.6	14.8	3.3	15.6	4,265
40-49	67.1	15.0	5.3	12.6	14.8	4.6	13.4	3,122
<b>Marital status</b>								
Married	68.9	14.2	4.5	12.4	14.2	3.9	13.1	10,354
Divorced/widowed	73.7	11.2	5.3	9.8	12.3	3.1	10.9	522
<b>Residence</b>								
Urban	67.8	14.6	4.7	12.9	14.6	3.9	13.7	9,249
Rural	76.2	11.2	3.7	8.8	11.3	3.4	9.1	1,627
<b>Governorate</b>								
Amman	60.2	19.3	5.3	15.2	19.3	4.1	16.4	4,442
Balqa	71.7	9.8	4.5	14.0	9.0	4.2	15.1	645
Zarqa	73.9	11.1	2.6	12.4	10.7	2.2	13.1	1,645
Madaba	60.7	27.1	4.0	8.3	27.2	3.9	8.2	262
Irbid	77.5	8.7	5.3	8.5	8.8	4.7	8.9	1,993
Mafrq	82.8	7.4	2.9	7.0	7.8	2.8	6.7	460
Jarash	74.6	13.0	3.2	9.3	13.3	3.1	9.0	293
Ajloun	81.3	6.9	4.6	7.2	7.3	3.5	7.8	228
Karak	69.9	11.3	4.7	14.0	12.5	4.7	12.9	378
Tafiela	76.2	8.9	4.9	10.0	9.1	4.2	10.5	146
Ma'an	80.3	9.3	2.9	7.4	8.9	3.0	7.7	164
Aqaba	75.9	10.9	3.5	9.7	10.5	3.7	9.9	221
<b>Region</b>								
Central	64.5	16.8	4.6	14.1	16.7	3.7	15.2	6,993
North	78.3	8.8	4.6	8.2	9.0	4.2	8.5	2,975
South	74.3	10.5	4.1	11.1	10.8	4.1	10.8	908
<b>Badia area</b>								
Badia	76.9	13.9	2.6	6.6	14.5	2.5	6.1	823
Other	68.5	14.1	4.7	12.7	14.0	4.0	13.6	10,053
<b>Education</b>								
No education	92.1	5.5	0.9	1.5	5.9	0.5	1.5	416
Elementary	89.9	5.7	1.3	3.1	5.7	1.6	2.8	813
Preparatory	86.4	7.0	2.4	4.1	8.1	0.8	4.6	1,681
Secondary	73.4	13.5	3.4	9.7	12.7	3.5	10.4	4,788
Higher	45.2	22.0	8.7	24.2	22.4	7.0	25.4	3,179
<b>Wealth quintile</b>								
Lowest	84.8	8.5	1.7	5.0	8.9	1.6	4.6	2,211
Second	75.5	11.2	4.2	9.1	11.7	3.7	9.1	2,296
Middle	71.6	12.6	5.0	10.8	12.1	3.6	12.7	2,206
Fourth	63.8	16.5	5.7	14.1	16.5	4.7	15.0	2,135
Highest	47.5	22.5	6.5	23.5	22.0	5.7	24.7	2,028
Total	69.1	14.1	4.5	12.3	14.1	3.8	13.0	10,876

## 12.5 KNOWLEDGE AND USE OF CONDOMS

In Chapter 5, the data indicated that 89 percent of ever-married women know about male condoms. Because of the important role that the condom plays in combating the transmission of HIV, women were asked if they knew where condoms could be obtained.

Table 12.10 shows that three-fourths of women (75 percent) knew about condoms and could cite a place where they could obtain a condom. Knowledge of a source for condoms follows expected patterns by background characteristics, with the exception being that women in the North region were somewhat more likely to know of a source for condoms than women in the South and Central regions (78 percent compared with 75 and 73 percent, respectively). However, knowledge of where to obtain condoms does not seem to translate into condom use in Jordan. Table 12.11 shows that, among women who had had sexual intercourse in the past year, only 6 percent say that they used a condom during the last sexual intercourse, a slight increase in condom use compared to the 2002 JPFHS (4 percent).

Table 12.10 Knowledge of source of male condom

Percentage of ever married women who know a source for male condoms by background characteristics, Jordan 2007

Background characteristic	Knows source for male condoms	Number of women
<b>Age</b>		
15-24	69.1	1,512
15-19	45.7	236
20-24	73.4	1,276
25-29	77.9	1,977
30-39	79.0	4,265
40-49	69.6	3,122
<b>Marital status</b>		
Married	75.6	10,354
Divorced/widowed	57.1	522
<b>Residence</b>		
Urban	75.6	9,249
Rural	69.7	1,627
<b>Governorate</b>		
Amman	74.6	4,442
Balqa	74.8	645
Zarqa	71.0	1,645
Madaba	61.5	262
Irbid	79.2	1,993
Mafraq	71.7	460
Jarash	76.4	293
Ajloun	83.8	228
Karak	75.4	378
Tafiela	75.5	146
Ma'an	70.6	164
Aqaba	76.2	221
<b>Region</b>		
Central	73.3	6,993
North	78.1	2,975
South	74.8	908
<b>Badia area</b>		
Badia	65.2	823
Other	75.5	10,053
<b>Education</b>		
No education	42.6	416
Elementary	59.2	813
Preparatory	68.5	1,681
Secondary	76.9	4,788
Higher	83.0	3,179
<b>Wealth quintile</b>		
Lowest	65.7	2,211
Second	73.4	2,296
Middle	76.3	2,206
Fourth	76.7	2,135
Highest	82.4	2,028
Total	74.7	10,876

Table 12.11 Use of condoms

Among ever-married women who had sexual intercourse in the past year, percentage who used a condom during last sexual intercourse, by background characteristics, Jordan 2007

Background characteristic	Percentage who used a condom during last sexual intercourse	Number of women
<b>Age</b>		
15-24	6.4	1,478
15-19	3.9	236
20-24	6.9	1,241
25-29	6.2	1,924
30-39	6.7	4,065
40-49	3.9	2,779
<b>Residence</b>		
Urban	6.0	8,709
Rural	4.6	1,537
<b>Governorate</b>		
Amman	5.3	4,186
Balqa	5.5	614
Zarqa	7.4	1,544
Madaba	4.8	248
Irbid	6.4	1,870
Mafraq	4.2	436
Jarash	5.2	276
Ajloun	4.6	217
Karak	7.3	359
Tafiela	5.0	136
Ma'an	4.4	150
Aqaba	4.3	210
<b>Region</b>		
Central	5.8	6,592
North	5.8	2,799
South	5.7	855
<b>Badia area</b>		
Badia	3.5	776
Other	6.0	9,470
<b>Education</b>		
No education	3.5	340
Elementary	3.4	725
Preparatory	4.2	1,566
Secondary	5.2	4,557
Higher	8.3	3,059
<b>Wealth quintile</b>		
Lowest	4.2	2,049
Second	5.7	2,180
Middle	6.4	2,086
Fourth	6.1	2,006
Highest	6.6	1,926
Total	5.8	10,246

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 RESPONDENTS' WORKING STATUS**

In the 2007 JPFHS, respondents 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 a number of 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.

The majority of currently married women (88 percent) are not currently working, that is, they have not worked during the seven days prior to the interview (Table 13.1). The proportion of currently married women who are currently employed ranges from no women employed among those aged 15-19 to 15 percent among those aged 35-39.

Among those who are currently working, the majority are employees, that is they work for someone else (89 percent), 3 percent are employers, 6 percent are self-employed, and 2 percent are unpaid workers. Women aged 45-49 are more likely to be self employed (18 percent) than younger women.

Table 13.1 Employment of currently married women

Percentage of currently married women age 15-49 who were employed at any time in the last 7 days and the percent distribution of currently married women employed in the last 7 days by employment status, according to age, Jordan 2007

Age	Currently married women:		Type of employment status				Total	Number of women
	Percentage employed	Number of women	Employee	Employer	Self-employed	Unpaid worker		
15-19	0.0	233	na	na	na	na	na	0
20-24	5.2	1,233	86.9	0.0	7.3	5.8	100.0	65
25-29	12.9	1,932	96.9	0.0	1.8	1.3	100.0	249
30-34	14.4	2,127	93.9	2.0	3.7	0.4	100.0	305
35-39	14.8	1,968	89.5	4.2	4.8	1.5	100.0	292
40-44	11.6	1,746	82.1	7.1	9.3	1.4	100.0	202
45-49	9.6	1,115	72.7	3.3	17.9	6.1	100.0	107
Total 15-49	11.8	10,354	89.3	3.0	5.9	1.8	100.0	1,220

na = Not applicable

Currently married women earning cash for their work were asked who mainly decides how the woman's earnings will be used and whether she earns more or less than her husband. Table 13.2 shows that 59 percent of women reported that they decide jointly with their husband how her earnings are to be spent, and 38 percent of women stated that it is the respondent's sole decision. Women who reside in the South region, the Badia areas, and those with no children are less likely than other women to make independent decisions on spending their earnings.

Regarding the comparison between a woman's earnings to those of her husband, Table 13.2 also shows that 56 percent of women reported earning less than their husband. Twenty-three percent of women report earning more than their husband while 18 percent report earning about the same amount. Women living in the poorest households are the most likely to earn more than their husbands (42 percent). In addition, older women, those living in rural areas, those living in the South region and those with a preparatory level of education are more likely to report earning more than their husbands.

Table 13.2 Control over women's cash earnings and relative magnitude of women's earnings

Percent distribution of currently married women age 15-49 who received cash earnings for employment in the 7 days preceding the survey interview 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 2007

Background characteristic	Person who decides how the wife's cash earnings are used:				Women's cash earnings compared with husband's cash earnings:				Total <sup>1</sup>	Number of women
	Mainly wife	Wife and husband jointly	Mainly husband	Total	More	Less	About the same	Husband/partner has no earnings		
<b>Age</b>										
20-24	29.4	70.3	0.3	100.0	23.7	64.5	11.1	0.6	100.0	61
25-29	44.1	51.3	4.7	100.0	22.1	52.1	24.1	1.8	100.0	246
30-34	38.9	60.0	1.0	100.0	20.5	61.9	17.1	0.5	100.0	304
35-39	32.9	65.0	2.2	100.0	22.5	59.1	14.3	4.1	100.0	287
40-44	32.0	58.0	10.0	100.0	22.7	52.2	21.3	3.5	100.0	200
45-49	48.0	51.7	0.4	100.0	28.4	37.2	16.1	17.8	100.0	100
<b>Number of living children</b>										
0	33.8	65.7	0.5	100.0	20.9	45.4	24.6	9.0	100.0	119
1-2	40.8	57.4	1.8	100.0	24.2	56.9	17.2	1.7	100.0	411
3-4	34.1	62.5	3.5	100.0	22.3	59.6	17.8	0.3	100.0	408
5+	40.1	52.4	7.5	100.0	20.9	52.3	17.2	9.0	100.0	259
<b>Residence</b>										
Urban	37.9	58.8	3.3	100.0	22.0	56.6	17.9	3.4	100.0	1,003
Rural	36.3	59.5	4.2	100.0	25.2	51.1	19.3	4.4	100.0	195
<b>Governorate</b>										
Amman	37.0	59.8	3.1	100.0	21.7	51.5	23.3	3.5	100.0	482
Balqa	50.3	46.6	3.1	100.0	22.2	55.0	19.6	2.3	100.0	99
Zarqa	34.0	65.1	0.9	100.0	22.2	55.7	16.2	5.9	100.0	113
Madaba	35.2	57.4	7.4	100.0	23.4	56.0	18.6	2.1	100.0	44
Irbid	41.2	53.4	5.4	100.0	21.2	62.8	11.7	4.4	100.0	206
Mafraq	43.9	52.8	3.4	100.0	24.1	53.8	17.2	3.9	100.0	50
Jarash	30.8	64.2	5.0	100.0	13.7	61.8	19.2	5.3	100.0	27
Ajloun	35.0	64.1	0.9	100.0	25.6	58.6	15.8	0.0	100.0	33
Karak	25.6	72.3	2.1	100.0	31.0	56.1	11.1	1.9	100.0	76
Tafiela	28.2	68.2	3.5	100.0	21.6	63.4	12.6	2.4	100.0	20
Ma'an	38.9	59.8	1.3	100.0	30.8	52.5	12.6	4.0	100.0	25
Aqaba	31.8	60.0	8.1	100.0	18.8	68.9	9.1	3.2	100.0	23
<b>Region</b>										
Central	38.2	58.7	3.1	100.0	22.0	52.9	21.4	3.6	100.0	738
North	40.1	55.3	4.6	100.0	21.5	60.8	13.6	3.9	100.0	316
South	29.3	67.6	3.1	100.0	27.7	58.5	11.2	2.5	100.0	144
<b>Badia area</b>										
Badia	32.2	65.3	2.5	100.0	32.1	48.5	14.8	4.5	100.0	80
Other	38.0	58.4	3.5	100.0	21.8	56.2	18.4	3.5	100.0	1,118
<b>Education</b>										
No education	*	*	*	*	*	*	*	*	*	14
Elementary	(42.2)	(32.7)	(25.1)	100.0	(19.6)	(33.4)	(27.4)	(19.6)	100.0	35
Preparatory	37.0	54.3	8.7	100.0	38.5	38.7	8.1	13.0	100.0	45
Secondary	49.2	49.2	1.6	100.0	20.0	61.2	14.1	4.7	100.0	174
Higher	35.2	62.1	2.7	100.0	22.6	56.7	18.8	1.9	100.0	931
<b>Wealth quintile</b>										
Lowest	33.6	55.1	11.4	100.0	41.5	27.6	19.9	11.0	100.0	120
Second	40.7	54.7	4.6	100.0	26.3	54.3	13.8	5.6	100.0	164
Middle	37.0	60.4	2.6	100.0	23.3	54.6	17.9	3.9	100.0	244
Fourth	38.2	59.4	2.4	100.0	20.6	60.9	17.4	0.9	100.0	269
Highest	37.6	60.5	1.9	100.0	16.2	61.7	20.0	2.1	100.0	402
<b>Total</b>	<b>37.6</b>	<b>58.9</b>	<b>3.5</b>	<b>100.0</b>	<b>22.5</b>	<b>55.7</b>	<b>18.1</b>	<b>3.6</b>	<b>100.0</b>	<b>1,198</b>

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.

<sup>1</sup> Includes "don't know/missing"

## 13.2 WOMEN'S PARTICIPATION IN HOUSEHOLD DECISION MAKING

In order to identify the role of women in household decision making, respondents were asked about the person who usually has the final decision on the following four issues: the respondent's own health care, major household purchases, daily household purchases, and visits to family or relatives.

Table 13.3 shows that the purchase of either large or daily household needs is often likely to be the decision of the husband alone (28 percent and 24 percent respectively) than any other category of decision making; however, most currently married women (71 percent and 74 percent, respectively) have a say in these matters, either alone or jointly with their spouse.

Issue	Mainly wife	Wife and husband jointly	Mainly husband	Someone else	Total	Number of women
Own health care	46.2	44.4	9.0	0.4	100.0	10,354
Major household purchases	11.0	59.6	28.4	0.9	100.0	10,354
Purchases of daily household needs	31.4	43.0	24.0	1.5	100.0	10,354
Visits to her family or relatives	11.4	73.6	14.4	0.5	100.0	10,354

As regards the respondents' own health care, 46 percent of currently married women reported that they decide for themselves about seeking their own health care, and 44 percent said that such decision is made jointly with the husband. Nine percent of women reported that their husbands have the final say over their wives' health care.

Table 13.4 demonstrates women's participation in household decision making according to background characteristics. Fifty-five percent of women decided alone or jointly with another person on all four of the cited issues (Figure 13.1), whereas only 2 percent of women did not have a say in making decisions on any of these issues. Women are most likely to have the final or joint say with regard to what their own health care (91 percent) and visits to her family or relatives (85 percent), while they are least likely to participate in decision making about large or daily household purchases (71 percent and 74 percent, respectively).

Women with higher education, women living in the wealthiest households and women who work are more likely than women in other categories to participate in household decision making on all of the four issues. Fifty-three percent of women who are not currently working participate in all four decisions, in contrast to 68 percent of those who are working. Two-fifths of women with no education participate in all decisions, compared with two-thirds of women with higher than secondary education.

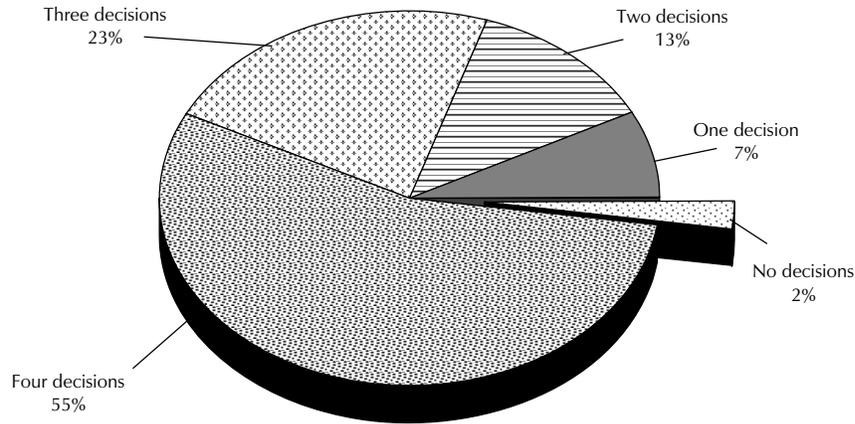
It is interesting that there is very little regional variation within each of the specified categories of decision making. The decision that demonstrates the greatest regional variation is that regarding daily purchases: women living in the Central region are more likely to have a say in daily purchases (78 percent) than women living in the North or South regions (69 percent and 68 percent, respectively). Largely because of this, women in the Central region are the most likely to have a say in all specified decisions.

Table 13.4 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 2007

Background characteristic	Own health care	Making major household purchases	Making purchases for daily household needs	Visits to her family or relatives	Percentage who participate in all four decisions	Percentage who participate in none of the four decisions	Number of women
<b>Age</b>							
15-19	86.8	64.1	70.5	79.1	51.5	4.8	233
20-24	87.7	67.3	66.4	77.8	49.0	3.5	1,233
25-29	90.3	68.9	73.9	84.9	53.6	1.8	1,932
30-34	90.5	70.4	76.3	86.7	56.1	2.1	2,127
35-39	91.9	73.1	77.2	87.2	58.1	2.0	1,968
40-44	91.4	73.0	76.1	87.4	55.6	1.8	1,746
45-49	92.1	70.8	73.6	83.8	57.5	3.0	1,115
<b>Working status</b>							
Working	94.0	85.6	81.3	92.5	67.7	0.9	1,220
Not working	90.2	68.6	73.5	84.0	53.4	2.5	9,134
<b>Number of living children</b>							
0	88.6	70.1	71.7	81.5	55.4	3.9	903
1-2	89.7	69.7	70.8	83.3	53.7	2.5	2,627
3-4	90.6	72.7	77.0	87.3	57.1	2.0	3,351
5+	91.9	69.4	75.3	85.0	54.2	2.1	3,474
<b>Residence</b>							
Urban	91.1	71.1	75.9	85.5	56.2	2.2	8,803
Rural	88.2	67.6	65.9	82.2	49.2	3.0	1,551
<b>Governorate</b>							
Amman	91.1	73.2	79.9	84.5	59.6	2.1	4,242
Balqa	89.1	59.6	66.2	80.4	50.7	4.4	620
Zarqa	94.2	71.0	76.2	92.1	60.0	2.2	1,548
Madaba	91.5	69.2	73.8	88.0	60.9	3.7	248
Irbid	89.3	71.2	70.9	84.1	49.8	1.8	1,892
Mafrq	87.5	61.5	62.8	76.0	39.6	3.3	441
Jarash	90.0	69.3	66.9	85.0	50.8	2.1	278
Ajloun	90.8	72.1	67.9	83.7	51.2	1.7	218
Karak	89.0	72.1	68.2	84.8	48.9	1.7	363
Tafiela	87.0	65.0	68.1	86.5	44.7	1.8	139
Ma'an	85.0	69.6	68.2	81.3	47.3	2.8	154
Aqaba	86.1	65.5	66.8	84.7	48.4	4.0	212
<b>Region</b>							
Central	91.7	71.3	77.5	86.0	58.9	2.4	6,658
North	89.2	69.6	69.0	82.9	48.4	2.1	2,830
South	87.3	68.9	67.9	84.4	47.9	2.5	867
<b>Badia area</b>							
Badia	87.9	64.0	67.0	78.5	47.7	4.2	783
Other	90.9	71.1	75.0	85.6	55.7	2.2	9,571
<b>Education</b>							
No education	83.9	54.4	57.8	73.8	40.6	6.6	365
Elementary	86.0	62.3	64.9	73.0	40.8	4.0	734
Preparatory	91.5	66.5	71.1	80.2	50.4	3.1	1,581
Secondary	90.1	68.6	73.9	85.4	53.9	2.6	4,586
Higher	92.9	79.6	81.0	91.1	64.4	0.5	3,089
<b>Wealth quintile</b>							
Lowest	88.6	62.5	68.2	78.8	47.3	3.5	2,083
Second	89.5	64.9	72.7	82.6	50.2	2.8	2,184
Middle	91.3	71.1	73.3	85.3	55.3	2.4	2,104
Fourth	90.8	76.6	77.8	88.4	59.8	1.3	2,018
Highest	93.2	78.9	80.5	90.6	63.9	1.5	1,966
Total	90.6	70.6	74.4	85.0	55.1	2.3	10,354

**Figure 13.1 Distribution of Women According to the Number of Decisions in Which They Participate in the Final Say**



JPFHS 2007

### 13.3 DOMESTIC VIOLENCE: 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. In the 2007 JPFHS, women were asked questions with regard to whether they viewed wife beating as justified.

Learning more about attitudes toward domestic violence is important in a context such as Jordan where, in some cases, domestic violence and even the murder of one's wife or daughter, called "honor killing" (Faqir, 2001), has 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 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 him, insults the husband, disobeys the husband, goes out without telling him, neglects the children or has relations with another man. 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 13.5 gives the percentages of ever-married women who agree with various reasons for wife beating by background characteristics.

The vast majority (90 percent) of women accept at least one reason as a justification for wife beating. Women are most likely to agree that betraying the husband justifies wife beating (88 percent), while relatively few believe that a man is justified in hitting his wife if she burns the food (8 percent) or argues with him (16 percent). Sixty-six percent of women agree that a husband is justified in using violence against his wife if she insults him, and 55 percent believe the same if she disobeys her husband.

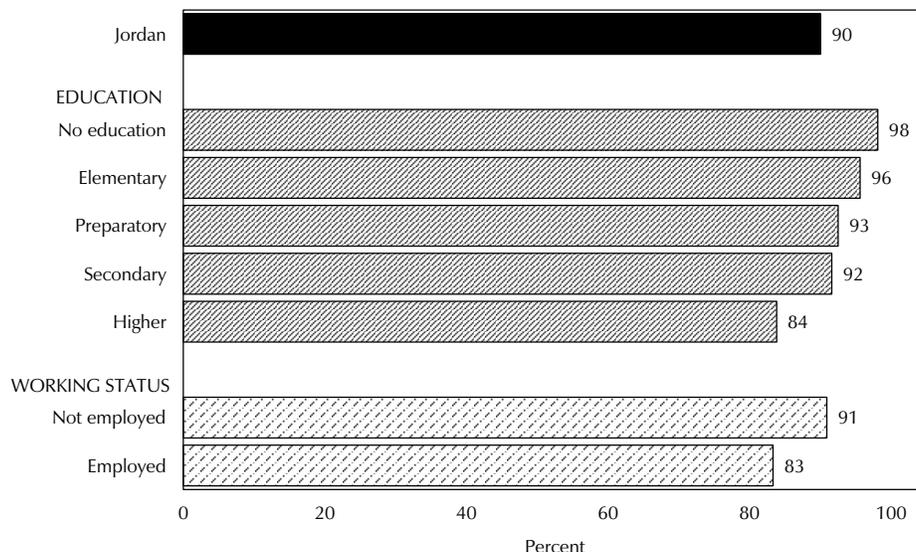
Table 13.5 Attitude toward wife beating

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 2007

Background characteristic	Husband is justified in hitting or beating his wife if she:							Percentage who agree with at least one specified reason	Number
	Burns the food	Argues with him	Insults	Disobeys	Goes out without telling him	Neglects the children	Has relations with another man		
<b>Age</b>									
15-19	8.0	21.1	70.0	55.9	44.9	47.7	87.8	91.1	236
20-24	7.5	16.3	65.0	56.5	38.9	42.9	91.2	94.1	1,276
25-29	6.1	13.8	65.8	56.5	36.1	43.7	89.6	91.3	1,977
30-34	7.3	13.8	67.5	55.5	31.3	40.9	88.2	90.5	2,213
35-39	6.7	15.9	66.5	57.0	33.7	41.4	88.3	90.1	2,052
40-44	8.7	18.3	64.4	53.0	33.6	37.6	84.3	87.4	1,884
45-49	11.5	21.5	64.1	52.6	36.7	45.0	82.6	86.3	1,239
<b>Working status</b>									
Working	4.5	12.7	55.0	48.9	25.1	35.4	79.4	83.3	1,316
Not working	8.2	16.8	67.3	56.2	36.2	42.7	88.6	90.9	9,560
<b>Marital status</b>									
Married	7.5	16.1	66.0	55.4	35.1	42.0	87.6	90.1	10,354
Divorced/ widowed	12.5	21.3	63.5	53.2	31.0	37.9	84.8	88.8	522
<b>Number of living children</b>									
0	9.2	19.1	64.7	57.0	37.4	41.5	87.6	88.7	1,021
1-2	6.3	14.7	60.8	51.8	32.2	39.2	85.7	88.7	2,787
3-4	6.7	13.9	64.3	52.2	32.0	40.2	86.6	89.1	3,471
5+	9.4	19.0	71.6	60.6	38.9	45.4	89.7	92.3	3,597
<b>Residence</b>									
Urban	6.8	15.2	64.1	52.9	32.5	39.7	86.5	89.1	9,249
Rural	12.8	22.5	75.9	69.1	48.1	53.7	93.1	95.1	1,627
<b>Governorate</b>									
Amman	5.9	15.8	61.5	48.6	28.2	34.8	83.3	87.0	4,442
Balqa	4.9	9.7	48.1	35.7	22.1	20.6	85.9	87.5	645
Zarqa	4.4	15.3	61.9	45.1	32.3	34.4	82.8	85.5	1,645
Madaba	7.9	36.0	60.5	60.9	35.5	34.1	88.4	90.5	262
Irbid	11.8	12.6	75.2	69.1	44.8	58.9	95.3	96.3	1,993
Mafraq	13.3	22.8	82.0	77.3	52.4	62.7	94.7	96.7	460
Jarash	11.5	18.6	75.2	68.3	43.2	52.0	91.4	93.7	293
Ajloun	13.8	16.3	79.2	77.3	47.2	59.0	94.9	96.1	228
Karak	12.5	26.8	77.0	71.3	47.6	56.5	95.7	96.6	378
Tafiela	10.2	22.3	74.3	68.5	43.8	48.0	92.8	93.8	146
Ma'an	9.4	28.2	77.7	73.7	49.5	54.7	95.5	96.8	164
Aqaba	7.0	17.0	65.1	58.3	36.8	39.6	88.9	90.5	221
<b>Region</b>									
Central	5.5	15.9	60.3	47.0	28.8	33.4	83.6	86.8	6,993
North	12.1	15.0	76.5	70.9	46.0	58.8	94.8	96.1	2,975
South	10.2	23.9	73.8	68.1	44.7	50.7	93.5	94.7	908
<b>Badia area</b>									
Badia	13.9	30.4	77.9	70.0	49.5	54.7	93.1	95.7	823
Other	7.2	15.2	64.9	54.1	33.7	40.7	87.0	89.5	10,053
<b>Education</b>									
No education	29.7	48.3	88.0	82.8	65.5	68.9	95.5	98.1	416
Elementary	15.3	27.0	77.0	66.8	52.4	53.9	91.2	95.6	813
Preparatory	9.5	18.8	71.1	59.7	42.2	47.0	90.9	92.5	1,681
Secondary	6.4	15.1	68.1	56.8	34.2	42.6	89.2	91.6	4,788
Higher	4.0	9.9	54.0	44.2	23.4	31.1	81.1	83.8	3,179
<b>Wealth quintile</b>									
Lowest	12.4	23.8	76.7	67.8	45.1	52.0	94.4	96.4	2,211
Second	8.7	19.5	74.9	63.2	41.4	47.3	92.8	94.9	2,296
Middle	7.2	14.7	65.8	55.4	35.8	44.4	90.0	92.2	2,206
Fourth	6.5	12.8	62.0	51.2	28.9	38.2	83.9	85.9	2,135
Highest	3.4	10.0	47.9	37.0	21.6	25.2	75.0	79.4	2,028
Total	7.7	16.3	65.9	55.3	34.9	41.8	87.5	90.0	10,876

There are also differences in terms of justification of violence between those who live in urban compared to rural areas, with urban women being less likely to accept justifications of violence (89 percent, compared to 95 percent in rural areas). Table 13.5 and Figure 13.2 also indicate that women who have more education or who are working are the least likely to agree with any of the reasons for justifying wife beating.

**Figure 13.2 Percentage of Women Who Agree with at Least One Reason Justifying a Husband Beating His Wife**



JPFHS 2007

### 13.4 WOMEN'S AGREEMENT WITH REASONS FOR REFUSING SEXUAL RELATIONS

The extent of control women have over when they have sex has important implications for demographic and health outcomes. To measure women's agreement with a woman's right to refuse her husband sex, the 2007 JPFHS asked women whether a wife is justified in refusing to have sex with her husband under three circumstances: she is tired or not in the mood, she knows her husband has intercourse with other women or she knows her husband has a sexually transmitted infection. These three circumstances for which women's opinions are sought were chosen because they are effective in combining women's rights and women's health issues. Table 13.6 shows the percentage of women who say that women are justified in refusing sex to their husband for specific reasons by background characteristics. Note that, unlike in the case of the previous indicator of empowerment, this indicator is positively related to empowerment: the more reasons women agree with, the higher is their "empowerment" in terms of their belief in women's sexual rights.

For any given reason, the majority of women aged 15-49 agree that women can refuse to have sex with their husband: 97 percent believe a wife is justified in refusing her husband sex if he has a sexually transmitted infection, 95 percent believe the same if a wife knows her husband has intercourse with other women, and 75 percent also agree that a wife is justified in refusing sex with her husband if she is tired or not in the mood. In total, 72 percent of women agree that a woman can refuse sex for each of the above reasons. A very small proportion of women (1 percent) said that women were not justified in refusing their husband sex for any of the given reasons.

Table 13.6 Attitude toward refusing sexual intercourse with husband

Percentage of ever-married women age 15-49 who believe that a wife is justified in refusing to have sexual intercourse with her husband in specific circumstances, by background characteristics, Jordan 2007

Background characteristic	Wife is justified in refusing intercourse with her husband if she:			Percentage who agree with all of the specified reasons	Percentage who agree with none of the specified reasons	Number
	Knows husband has a sexually transmitted infection	Knows husband has intercourse with other women	Is tired or not in the mood			
<b>Age</b>						
15-19	92.1	92.3	79.3	74.2	3.3	236
20-24	96.9	94.7	72.5	69.7	0.6	1,276
25-29	99.1	94.7	75.3	73.3	0.2	1,977
30-34	96.5	95.6	73.8	70.8	0.7	2,213
35-39	97.4	93.7	74.3	71.2	0.7	2,052
40-44	96.2	95.0	74.7	71.2	0.9	1,884
45-49	97.3	93.1	76.1	72.1	0.7	1,239
<b>Working status</b>						
Working	98.5	95.5	76.6	74.9	0.4	1,316
Not working	96.9	94.4	74.2	71.0	0.7	9,560
<b>Marital status</b>						
Married	97.2	94.5	74.6	71.5	0.6	10,354
Divorced/ widowed	95.6	94.4	73.2	71.2	2.0	522
<b>Number of living children</b>						
0	96.6	93.8	75.2	71.4	0.9	1,021
1-2	97.0	94.4	76.8	73.7	0.7	2,787
3-4	97.9	95.8	74.7	72.2	0.3	3,471
5+	96.6	93.6	72.5	69.1	0.9	3,597
<b>Residence</b>						
Urban	97.3	94.6	74.4	71.5	0.6	9,249
Rural	96.4	94.0	75.1	71.4	1.1	1,627
<b>Governorate</b>						
Amman	96.2	92.7	72.9	69.0	1.0	4,442
Balqa	98.0	92.5	75.5	73.6	1.4	645
Zarqa	98.4	97.0	73.3	71.6	0.1	1,645
Madaba	97.4	94.3	72.0	69.6	0.9	262
Irbid	98.6	96.9	76.2	74.2	0.1	1,993
Mafraq	97.7	95.1	76.0	72.5	0.3	460
Jarash	98.4	97.1	81.6	79.8	0.1	293
Ajloun	97.8	96.2	77.3	75.2	0.5	228
Karak	92.0	90.6	76.7	69.0	2.0	378
Tafiela	95.9	96.2	75.9	72.4	0.8	146
Ma'an	96.0	95.2	79.5	76.0	0.8	164
Aqaba	97.5	95.2	78.5	75.6	0.2	221
<b>Region</b>						
Central	96.9	93.8	73.2	70.1	0.8	6,993
North	98.4	96.6	76.8	74.6	0.2	2,975
South	94.7	93.4	77.5	72.4	1.1	908
<b>Badia area</b>						
Badia	96.4	92.8	72.2	69.0	1.8	823
Other	97.2	94.6	74.7	71.7	0.6	10,053
<b>Education</b>						
No education	89.3	85.9	65.7	60.0	5.7	416
Elementary	93.0	90.6	68.2	63.8	2.2	813
Preparatory	97.3	94.9	72.5	70.0	0.5	1,681
Secondary	97.5	94.9	74.6	71.4	0.4	4,788
Higher	98.6	95.7	78.3	75.9	0.1	3,179
<b>Wealth quintile</b>						
Lowest	95.4	92.9	72.2	68.7	1.2	2,211
Second	97.1	94.9	72.3	69.5	0.5	2,296
Middle	96.7	93.8	72.2	69.5	1.3	2,206
Fourth	98.2	95.7	76.9	73.7	0.2	2,135
Highest	98.4	95.3	79.7	76.7	0.1	2,028
Total	97.1	94.5	74.5	71.5	0.7	10,876

Because almost all women agree that wives are justified in refusing sex under the stated circumstances, there is little variation in agreement by background characteristics, especially regarding refusal due to husband's STI or due to recent childbirth. Nevertheless, some patterns of agreement do emerge: agreement with reasons for refusing sex increases with level of education, and women who work are marginally more likely to agree with any reason than women who are not currently working. For example, 89 percent of women with no education agree that a wife is justified in refusing sexual relations with her husband if he has an STI; among those with higher than secondary education, 99 percent agree with the wife's right to refuse.

### 13.5 WOMEN'S EMPOWERMENT INDICATORS

Table 13.7 provides a brief overview on how the three basic empowerment indicators—number of decisions in which women participate, number of reasons for which wife beating is justified, and number of reasons given for refusing to have sexual intercourse with husband—relate to each other. The findings indicate that women who participate in three or four of the specified household decisions more often tend to justify their right to refuse sexual intercourse with their husband for all reasons (73 percent). Similarly, women who do not support wife beating for any reason at all are most likely to think all the reasons for refusing sexual intercourse with their husband are justified (77 percent).

Table 13.7 Indicators of women's empowerment					
Percentage of currently married women age 15-49 who participate in all decision making, percentage of ever-married women age 15-49 who disagree with all reasons for justifying wife beating, and percentage of all ever-married women age 15-49 who agree with all reasons for refusing sexual intercourse with husband, by value on each of the indicators of women's empowerment, Jordan 2007					
Empowerment indicator	Currently married women		Ever-married women		
	Percentage who participate in all decision making <sup>1</sup>	Number of women	Percentage who disagree with all the reasons justifying wife beating	Percentage who agree with all the reasons for refusing sexual intercourse with husband	Number of women
<b>Number of decisions in which women participate</b>					
0	na	240	8.1	62.5	240
1-2	na	2,078	6.4	65.2	2,078
3-4	na	8,036	10.9	73.4	8,036
<b>Number of reasons for which wife beating is justified<sup>2</sup></b>					
0	68.4	1,029	na	77.2	1,088
1-2	56.8	3,208	na	73.0	3,388
3-4	54.6	3,063	na	74.7	3,193
5-7	49.5	3,054	na	64.8	3,208
<b>Number of reasons given for refusing to have sexual intercourse with husband<sup>3</sup></b>					
0	50.2	63	14.6	na	73
1-2	49.9	2,888	7.8	na	3,028
3	57.2	7,403	10.8	na	7,775
Total	55.1	10,354	10.0	71.5	10,876

<sup>1</sup> Restricted to currently married women. See Table 13.4 for the list of decisions.  
<sup>2</sup> See Table 13.5 for the list of reasons.  
<sup>3</sup> See Table 13.6 for the list of reasons.  
na = Not applicable

### 13.5.1 Current Use of Contraception by Women's Empowerment

A woman's desire and ability to control her fertility and her choice of 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 13.8 shows the distribution of currently married women by contraceptive method use, according to the three 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 33 percent among women who participate in none of the household decisions to 44 percent among women who participate in 3-4 household decisions.

Also noteworthy is the finding that women who believe that a wife is never justified in refusing to have sex with her husband are far less likely to use a modern method of contraception than women who believe that all three reasons justify her refusal (23 percent and 43 percent, respectively).

Table 13.8 Women's empowerment and current use of contraception

Percent distribution of currently married women age 15-49 by current contraceptive method, by indicators of women's empowerment, Jordan 2007

Empowerment indicator	Any method	Any modern method	Modern methods			Any traditional method	Not currently using	Total	Number of women
			Female sterilization	Temporary modern female methods <sup>1</sup>	Male condom				
<b>Number of decisions in which women participate<sup>2</sup></b>									
0	44.9	33.3	4.3	28.8	0.3	11.6	55.1	100.0	240
1-2	51.7	36.3	3.4	29.1	3.8	15.4	48.3	100.0	2,078
3-4	58.9	43.7	3.8	34.1	5.8	15.2	41.1	100.0	8,036
<b>Number of reasons for which wife beating is justified<sup>3</sup></b>									
0	62.2	44.9	3.8	36.3	4.9	17.3	37.8	100.0	1,029
1-2	57.8	43.4	3.2	34.2	6.0	14.5	42.2	100.0	3,208
3-4	59.0	42.3	4.5	32.5	5.3	16.8	41.0	100.0	3,063
5-7	52.7	39.1	3.5	31.1	4.5	13.6	47.3	100.0	3,054
<b>Number of reasons given for refusing to have sexual intercourse with husband<sup>4</sup></b>									
0	39.7	22.7	5.3	16.5	0.9	17.1	60.3	100.0	63
1-2	53.8	40.4	3.2	32.9	4.3	13.4	46.2	100.0	2,888
3	58.5	42.7	3.9	33.1	5.7	15.8	41.5	100.0	7,403
Total	57.1	41.9	3.7	33.0	5.3	15.2	42.9	100.0	10,354

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

<sup>1</sup> Pill, IUD, injectables, implants, diaphragm, foam/jelly, and lactational amenorrhea method

<sup>2</sup> See Table 13.4 for the list of decisions.

<sup>3</sup> See Table 13.5 for the list of reasons.

<sup>4</sup> See Table 13.6 for the list of reasons.

### 13.5.2 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

desired family size and its positive association with women's ability to meet their own family-size goals through the effective use of contraception.

Table 13.9 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 cites justifying wife beating 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 3.6, compared to 4.0 for women who believe that there is at least one reason. There is no apparent relationship between the mean ideal number of children and the other indicators of women's empowerment.

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 3 or 4 decision have a lower level of unmet need (11 percent) than women who participate in no decisions (17 percent). There is no clear linear relationship between unmet need and the other indicators of women's empowerment.

Table 13.9 Women's empowerment and ideal number of children and unmet need for family planning						
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 2007						
Empowerment indicator	Mean ideal number of children <sup>1</sup>	Number of women	Percentage of currently married women with an unmet need for family planning <sup>2</sup>			Number of women
			For spacing	For limiting	Total	
<b>Number of decisions in which women participate<sup>3</sup></b>						
0	4.0	173	5.8	11.2	16.9	240
1-2	4.1	1,674	6.8	7.5	14.2	2,078
3-4	3.9	6,700	4.4	6.8	11.2	8,036
<b>Number of reasons for which wife beating is justified<sup>4</sup></b>						
0	3.6	965	4.0	8.8	12.8	1,029
1-2	4.0	2,880	4.0	6.7	10.7	3,208
3-4	4.0	2,666	4.9	6.0	10.9	3,063
5-7	4.0	2,436	6.2	7.9	14.0	3,054
<b>Number of reasons given for refusing to have sexual intercourse with husband<sup>5</sup></b>						
0	3.5	57	1.2	9.3	10.5	63
1-2	4.1	2,479	5.9	6.5	12.4	2,888
3	3.9	6,411	4.6	7.2	11.8	7,403
Total	3.9	8,946	4.9	7.0	11.9	10,354

<sup>1</sup> Mean excludes respondents who gave non-numeric responses.  
<sup>2</sup> See table 7.3.1 for the definition of unmet need for family planning.  
<sup>3</sup> Restricted to currently married women. See Table 13.4 for the list of decisions.  
<sup>4</sup> See Table 13.5 for the list of reasons.  
<sup>5</sup> See Table 13.6 for the list of reasons.



Domestic 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 (United Nations General Assembly, 1991; Heise et al., 1994, 1998; Jejeebhoy, 1998).

The 2007 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 one-third of the JPFHS clusters. To ensure confidentiality, only one woman in each household in the subsample was 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 also was 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

#### 14.1.1 Prevalence of Physical Violence

Approximately one-third 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 four percent who reported that they had often experienced some form of physical violence during the period.

A woman's marital status was strongly related to the likelihood that she had ever experienced physical violence; the prevalence of violence is more than twice as high among divorced women (74 percent) than among either currently-married or widowed women (31 percent and 38 percent, respectively). About one fifth of divorced women report having been subjected to violence often in the 12 months preceding the survey.

Urban and rural women were equally likely to have experienced physical violence. Women living in the Mafrq and Irbid were more likely to report have ever experienced physical violence than women living in other governorates.

The prevalence of physical violence was 33 percent and 26 percent among women with either a secondary or higher education, respectively, compared to 43 percent among women with either no education or only an elementary education. Women living in the poorest households were more likely than other women to report physical violence.

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 physical violence during the 12 months preceding the survey, by background characteristics, Jordan 2007

Background characteristic	Percentage who have ever experienced physical violence since age 15 <sup>1</sup>	Percentage who have experienced physical violence in the past 12 months			Number of women
		Often	Sometimes	At least once	
<b>Woman's age</b>					
15-19	(19.8)	(8.0)	(1.7)	(9.7)	53
20-29	32.1	3.9	11.3	15.3	1,098
30-39	33.6	3.8	9.4	13.2	1,361
40-49	31.5	3.1	8.4	11.5	932
<b>Respondent currently working</b>					
Employed	34.3	2.2	9.7	11.9	420
Not employed	32.0	3.9	9.6	13.5	3,024
<b>Marital status</b>					
Married	31.0	3.3	9.7	13.0	3,286
Divorced	73.9	18.8	4.5	23.3	98
Widowed	37.7	0.0	13.4	13.4	60
<b>Number of living children</b>					
0	29.5	5.7	8.4	14.1	336
1-2	31.9	3.8	11.6	15.4	904
3-4	34.1	4.0	9.7	13.6	1,106
5+	31.6	2.8	8.3	11.2	1,098
<b>Residence</b>					
Urban	32.2	3.8	9.6	13.4	2,938
Rural	33.1	3.2	9.5	12.8	506
<b>Governorate</b>					
Amman	30.7	4.5	10.7	15.1	1,384
Balqa	23.8	5.5	6.8	12.3	205
Zarqa	22.9	4.0	3.5	7.5	542
Madaba	21.1	1.3	3.5	4.8	84
Irbid	43.4	1.4	12.9	14.3	628
Mafraq	48.2	3.3	16.4	19.7	151
Jarash	34.5	2.1	8.3	10.3	97
Ajloun	37.6	0.3	7.8	8.1	73
Karak	31.4	6.1	9.8	15.9	117
Tafiela	28.8	4.2	9.9	14.1	43
Ma'an	30.4	2.8	12.5	15.3	54
Aqaba	37.2	9.2	9.3	18.5	66
<b>Region</b>					
Central	27.8	4.3	8.3	12.6	2,215
North	42.8	1.7	12.6	14.3	949
South	32.2	5.9	10.2	16.1	280
<b>Badia area</b>					
Badia	28.2	2.9	8.9	11.7	278
Other	32.7	3.8	9.7	13.5	3,166
<b>Education</b>					
No education	42.5	7.3	8.8	16.1	129
Elementary	43.1	6.3	12.5	18.8	217
Preparatory	36.9	3.1	9.7	12.8	488
Secondary	32.5	4.7	9.2	13.9	1,572
Higher	26.3	1.6	9.7	11.3	1,037
<b>Wealth quintile</b>					
Lowest	37.8	4.6	11.6	16.2	646
Second	37.6	3.2	11.0	14.3	761
Middle	29.7	3.6	6.5	10.2	707
Fourth	27.7	3.7	9.5	13.2	701
Highest	28.4	3.6	9.5	13.0	629
Total	32.3	3.7	9.6	13.3	3,444

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

<sup>1</sup> Includes in the past 12 months

### 14.1.2 Perpetrators of Physical Violence

Table 14.2 shows the proportions of women who have ever experienced violence according to the persons identified as perpetrators of the violence. Husbands were named most frequently; almost two-thirds of women identified their current or previous husband as the perpetrator in at least one episode of physical violence. Approximately one in five women had experienced some form of physical violence by either their brother (22 percent), their father (20 percent), or their mother (19 percent).

Table 14.2 Perpetrators of 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 woman's marital status, Jordan 2007

Marital status	Current/ previous husband	Father	Brother	Male perpetrator other than father/brother/ husband	Mother	Sister	Female teacher	Female perpetrator other than mother/sister/ teacher	Number of women ever experiencing violence
Married	61.5	20.4	23.6	1.9	19.0	6.7	10.7	2.0	1,018
Divorced	(94.7)	(7.1)	(5.0)	(5.0)	(7.4)	(2.1)	(5.4)	(0.7)	73
Widowed	(91.4)	(37.6)	(9.3)	(0.0)	(30.5)	(1.7)	(27.9)	(2.2)	23
Total	64.2	19.9	22.1	2.0	18.5	6.3	10.7	1.9	1,113

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

### 14.1.3 Violence during Pregnancy

Violence during pregnancy may threaten not only a woman's well-being but that of her unborn child. Table 14.3 presents information on the proportion of women who have experienced some form of physical violence during pregnancy. Among women who had ever been pregnant, five percent were hit, slapped, kicked, or subjected to some other form of physical violence at least once during a pregnancy. Women who were divorced were far more likely to report violence during pregnancy (39 percent) than either currently-married women or widowed women. Women with no education or an elementary education were more likely to have experienced violence during pregnancy than women with a secondary or higher education.

Table 14.3 Violence during pregnancy

Among women age 15-49 who have ever been pregnant, percentage who have ever experienced physical violence during pregnancy, by background characteristics, Jordan 2007

Background characteristic	Percentage who have ever experienced physical violence during pregnancy	Number of women who have ever been pregnant
<b>Age</b>		
15-29	5.0	1,015
30-39	5.7	1,305
40-49	5.6	893
<b>Marital status</b>		
Married	4.8	3,090
Divorced	38.9	64
Widowed	2.8	59
<b>Number of living children</b>		
0	0.0	104
1-2	6.0	904
3-4	5.5	1,106
5+	5.5	1,098
<b>Residence</b>		
Urban	5.2	2,729
Rural	7.0	483
<b>Governorate</b>		
Amman	5.6	1,264
Balqa	5.5	193
Zarqa	4.6	513
Madaba	2.3	80
Irbid	5.3	593
Mafraq	5.8	143
Jarash	7.9	91
Ajloun	2.1	70
Karak	9.3	114
Tafiela	6.0	41
Ma'an	4.5	51
Aqaba	8.2	62
<b>Region</b>		
Central	5.2	2,049
North	5.4	896
South	7.6	267
<b>Badia area</b>		
Badia	6.4	265
Other	5.4	2,948
<b>Education</b>		
No education	10.9	122
Elementary	9.2	192
Preparatory	7.1	460
Secondary	5.3	1,458
Higher	3.6	981
<b>Wealth quintile</b>		
Lowest	8.1	598
Second	4.3	703
Middle	6.1	673
Fourth	4.8	645
Highest	4.1	594
Total	5.4	3,213

## 14.2 SPOUSAL VIOLENCE

### 14.2.1 Prevalence of Various Forms of Spousal Violence

The domestic violence module obtained more detailed information on the forms of violence ever-married women had experienced in the relationships with their current husband or, in the case of widowed or divorced women, their most recent husband. Table 14.4 shows the proportions of women reporting they had ever and recently experienced episodes of physical, sexual or emotional violence in their relationship with their husband.

Physical violence is the most common form of violence; 21 percent of ever-married women report being subjected to some form of physical violence by their current or most recent husband, and 12 percent report violence taking place within the 12 months preceding the survey.

Form of violence	Ever	In the past 12 months		
		Often	Sometimes	At least once
<b>Physical violence</b>				
<b>Any</b>	20.6	3.2	9.0	12.2
Pushed her, shook her, or threw something at her	15.6	2.4	7.1	9.5
Slapped her	13.5	2.8	5.2	8.0
Punched her with his fist or with something that could hurt her	9.8	2.2	3.8	5.9
Kicked her, dragged her, or beat her up	6.1	1.6	2.3	3.9
Tried to choke her or burn her on purpose	1.5	0.4	0.6	1.0
Threatened her with a knife, gun, or any other weapon	0.8	0.2	0.4	0.5
Attacked her with a knife, gun, or any other weapon	0.5	0.0	0.2	0.3
<b>Sexual violence</b>				
Physically forced her to have sexual intercourse with him even when she did not want to	7.6	1.7	3.9	5.6
<b>Emotional violence</b>				
<b>Any</b>	20.0	5.2	8.8	14.0
Said or did something to humiliate her in front of others	15.2	3.8	6.4	10.3
Threatened to hurt or harm her or someone close to her	14.3	4.2	6.3	10.5
<b>Any form of physical and/or sexual violence</b>	23.0	4.1	10.5	14.6
<b>Any form of physical and sexual violence</b>	5.2	0.9	1.7	2.6
<b>Any form of emotional, physical and/or sexual violence</b>	30.2	6.6	13.6	20.2
<b>Any form of emotional, physical and sexual violence</b>	4.0	0.8	1.3	2.1
Number of ever-married women	3,444	3,444	3,444	3,444

The results indicate that the most common forms of physical violence included being pushed or shaken or having objects thrown at her by the husband (16 percent) and being slapped (14 percent). Ten percent of ever-married women report being punched with a fist or something that could hurt her while six percent report being kicked, dragged or beat up.

Eight percent of women indicated that their spouse had at some point physically forced them to have sex and six percent reported that they had been forced to have sex by their spouse in the past 12 months.

Table 14.4 also indicates that 20 percent of ever-married women reported they had ever experienced emotional violence, and 14 percent had experienced a recent episode of emotional violence. Fifteen percent report that their husbands said or did something to humiliate them in front of others, and 14 percent report that their husbands threatened to hurt or harm them, or someone close to them.

### **14.2.2 Differentials in Prevalence of Spousal Violence**

Table 14.5 presents differences in the levels of various forms of spousal violence by background characteristics, and Table 14.6 shows differences in the levels of violence by spousal characteristics.

The results in Table 14.5 indicate that women who are divorced or widowed women and currently married women who have been married more than once were the most likely to have ever experienced either physical or sexual violence committed by the husbands (57 percent and 33 percent, respectively). By governorate, women in Mafraq (38 percent), Irbid (29 percent), Jarash (27 percent) and Ma'an (26 percent) are most likely to have ever experienced physical or sexual violence at the hands of their husbands. Women with less education and those living in poorer households were also more likely to have experienced violence from their husbands.

As Table 14.6 shows, a woman was somewhat more likely to have ever experienced physical or sexual violence if the husband had no education (27 percent), an elementary education (25 percent), or a preparatory education (29 percent), than if he had a secondary or higher education (23 percent and 18 percent, respectively). Physical or sexual violence was least common when both partners had the same level of education (18 percent) or if neither had been educated (15 percent).

In terms of the indicators of women's empowerment, the more empowered a woman is, the less likely she is to have experienced violence. Thirty-seven percent of woman who do not participate in any household decisions have experienced physical or sexual violence at the hands of their husband, compared to one-fifth of women who participate in three or four household decisions (20 percent). In addition, 18 percent of women who believe that there are no reasons that justify a husband beating his wife have ever experienced physical or sexual violence, compared to 34 percent of women who believe that there are three or four reasons to justify wife-beating.

Table 14.5 Spousal violence by background characteristics

Percentage of ever-married women age 15-49 by whether they have ever experienced emotional, physical or sexual violence committed by their husband, according to background characteristics, Jordan 2007

Background characteristic	Type of violence										Number of ever-married women
	Emotional		Physical		Sexual		Physical or sexual		Emotional, physical, or sexual		
	Ever	Within past 12 months	Ever	Within past 12 months	Ever	Within past 12 months	Ever	Within past 12 months	Ever	Within past 12 months	
<b>Age</b>											
15-29	17.2	11.9	19.5	14.2	8.4	6.6	22.3	16.6	26.9	19.6	1,151
30-39	19.5	14.9	21.8	12.0	7.8	6.1	23.9	14.4	30.2	20.2	1,361
40-49	24.3	15.2	20.2	10.0	6.1	3.6	22.4	12.5	34.5	20.8	932
<b>Respondent currently working</b>											
Working	17.8	11.2	24.8	11.6	7.1	4.6	26.5	14.1	31.3	16.9	420
Not working	20.4	14.3	20.0	12.3	7.6	5.7	22.5	14.7	30.1	20.6	3,024
<b>Number of living children</b>											
0	23.3	16.4	19.2	13.5	6.7	3.8	19.3	13.6	29.2	21.4	336
1-2	17.0	12.8	21.1	13.8	7.4	5.6	24.2	16.4	28.5	20.4	904
3-4	21.6	13.9	20.8	11.9	9.4	7.4	23.4	15.0	31.6	19.2	1,106
5+	20.0	14.3	20.5	10.8	6.1	4.3	22.6	13.0	30.6	20.6	1,098
<b>Marital status and duration</b>											
Currently married woman	18.8	13.9	18.9	11.9	6.7	5.5	21.3	14.4	28.9	20.2	3,286
Married only once	18.5	13.6	18.5	11.6	6.6	5.4	21.1	14.2	28.6	20.0	3,204
0-4 years	11.1	9.9	15.2	12.0	5.3	5.3	18.4	15.1	21.6	18.7	690
5-9 years	18.5	12.8	16.4	12.1	6.7	5.4	18.7	13.8	25.2	18.1	661
10+ years	21.3	15.2	20.5	11.3	7.0	5.4	22.9	13.9	32.5	21.2	1,853
Married more than once	30.8	26.9	32.7	23.4	10.6	8.9	32.7	23.4	37.8	27.5	82
Divorced/widowed	45.3	14.4	56.4	19.1	26.3	8.2	56.7	19.3	58.8	19.5	158
<b>Residence</b>											
Urban	20.2	14.0	20.5	12.2	7.0	5.3	22.8	14.4	30.2	19.9	2,938
Rural	18.9	13.9	21.2	12.4	10.6	7.3	24.0	15.6	30.4	21.6	506
<b>Governorate</b>											
Amman	22.9	17.3	20.2	13.2	8.6	6.2	22.4	15.3	31.6	22.3	1,384
Balqa	34.2	26.8	19.5	12.3	5.8	4.4	20.2	13.3	35.2	27.1	205
Zarqa	17.1	8.9	15.3	6.6	2.9	2.1	15.6	7.4	21.9	11.2	542
Madaba	10.3	5.3	9.8	4.8	1.9	0.6	10.1	5.1	13.5	6.7	84
Irbid	14.7	8.7	25.7	14.3	6.6	5.0	28.8	17.4	32.9	19.7	628
Mafraq	21.8	15.3	33.6	19.0	15.9	11.1	37.9	24.2	41.4	29.4	151
Jarash	14.7	7.9	21.5	10.3	11.1	6.6	27.1	14.5	31.6	17.7	97
Ajloun	14.2	11.4	16.7	8.1	8.7	7.3	21.0	12.5	28.4	20.1	73
Karak	16.9	11.3	21.0	15.5	9.3	8.1	24.4	19.4	28.1	21.4	117
Tafila	18.0	14.4	18.3	12.2	11.1	9.2	23.3	17.2	28.6	22.8	43
Ma'an	22.5	17.6	18.2	11.6	13.6	10.1	26.1	17.8	33.6	23.8	54
Aqaba	19.6	16.2	17.4	14.0	10.3	9.6	21.5	17.7	28.3	24.2	66
<b>Region</b>											
Central	22.0	15.7	18.5	11.2	6.7	4.8	20.1	12.8	28.9	19.5	2,215
North	15.8	9.9	25.8	14.2	8.7	6.3	29.5	17.8	33.8	21.1	949
South	18.8	14.1	19.2	13.9	10.6	9.0	23.9	18.3	29.3	22.7	280
<b>Badia area</b>											
Badia	20.0	15.2	19.6	11.4	9.7	6.9	22.0	14.1	28.3	20.6	278
Other	20.0	13.9	20.7	12.3	7.4	5.5	23.1	14.7	30.4	20.1	3,166
<b>Education</b>											
No education	32.5	22.9	29.2	15.6	13.7	6.5	33.5	18.8	42.9	26.5	129
Elementary	31.9	20.1	27.4	17.0	12.4	8.6	31.9	21.9	41.5	27.6	217
Preparatory	19.9	13.6	22.8	12.6	8.1	5.9	26.0	16.2	32.0	20.9	488
Secondary	20.4	14.6	21.6	13.1	7.4	5.9	23.5	15.3	30.9	21.3	1,572
Higher	15.5	10.8	15.6	9.2	5.7	4.3	17.6	10.8	24.4	15.8	1,037
<b>Wealth quintile</b>											
Lowest	23.9	17.0	25.9	15.9	8.4	7.0	28.7	19.4	35.5	24.2	646
Second	17.3	13.7	22.2	13.8	7.7	5.7	24.6	16.1	29.7	21.1	761
Middle	17.0	11.5	18.1	9.7	10.7	7.6	22.0	13.4	27.7	18.0	707
Fourth	21.0	14.5	18.8	12.2	5.7	4.8	21.2	14.4	28.7	20.7	701
Highest	21.8	13.5	18.1	9.4	5.0	2.6	18.2	9.5	30.2	16.7	629
<b>Total</b>	20.0	14.0	20.6	12.2	7.6	5.6	23.0	14.6	30.2	20.2	3,444

Table 14.6 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, according to his characteristics, marital characteristics, and empowerment indicators, Jordan 2007

Characteristic	Type of violence										Number of ever-married women
	Emotional		Physical		Sexual		Physical or sexual		Emotional, physical or sexual		
	Ever	Within past 12 months	Ever	Within past 12 months	Ever	Within past 12 months	Ever	Within past 12 months	Ever	Within past 12 months	
<b>Husband's education</b>											
No education	25.9	22.9	25.2	12.5	10.7	4.6	27.1	15.3	35.1	26.9	69
Elementary	23.1	16.2	22.6	12.5	9.4	6.6	24.9	15.1	33.3	22.3	407
Preparatory	24.5	17.2	24.4	13.4	7.8	5.7	28.7	16.6	38.4	25.3	655
Secondary	19.4	12.3	20.4	13.1	7.8	6.2	23.0	16.2	30.1	19.8	1,273
Higher	16.4	12.5	17.3	10.2	6.2	4.4	18.3	11.2	23.7	16.2	1,037
<b>Spousal age difference <sup>1</sup></b>											
Wife older	13.9	8.8	18.7	13.0	7.6	6.1	22.2	16.8	26.4	18.1	185
Wife is same age	11.4	9.0	16.8	8.9	2.1	1.6	17.0	9.3	22.1	15.8	230
Wife's 1-4 years younger	20.1	14.6	19.1	12.3	7.4	5.4	21.7	14.3	29.4	19.9	987
Wife's 5-9 years younger	18.9	14.1	17.8	11.1	6.5	5.5	20.3	14.1	28.5	20.1	1,262
Wife's 10+ years younger	21.0	16.0	21.6	13.7	7.2	6.8	24.2	16.2	32.1	23.2	622
<b>Spousal education difference</b>											
Husband better educated	21.7	14.7	23.4	13.7	9.5	6.9	26.2	16.7	32.2	21.4	1,228
Wife better educated	19.9	14.1	20.1	11.9	6.9	5.6	23.0	14.5	30.9	20.9	1,391
Both equally educated	17.5	12.3	16.9	10.7	5.6	3.7	17.9	11.7	25.7	17.1	786
Neither educated	24.7	21.3	14.5	8.4	5.6	3.9	14.5	10.3	28.9	23.3	32
<b>Number of decisions in which women participate <sup>1</sup></b>											
0	29.4	16.2	33.4	16.8	14.6	12.3	36.8	18.9	40.3	20.6	75
1-2	22.5	15.6	21.6	15.3	6.7	5.4	24.0	17.8	32.1	22.0	747
3-4	17.4	13.4	17.6	10.7	6.4	5.3	20.1	13.2	27.5	19.7	2,465
<b>Number of reasons given for refusing to have sexual intercourse with husband</b>											
0	*	*	*	*	*	*	*	*	*	*	9
1-2	19.1	13.8	19.3	11.2	5.8	4.2	20.6	12.8	27.5	18.4	964
3	20.3	13.9	21.0	12.5	8.2	6.1	23.8	15.2	31.2	20.8	2,471
<b>Number of reasons for which wife beating is justified</b>											
0	19.6	12.4	16.4	9.0	6.4	4.4	18.3	10.9	27.5	17.2	1,634
1-2	19.6	15.2	23.0	14.6	8.1	6.4	25.7	17.3	31.4	22.3	1,480
3-4	24.4	16.1	30.9	17.4	10.7	7.8	33.7	21.2	38.7	25.7	331
Total	20.0	14.0	20.6	12.2	7.6	5.6	23.0	14.6	30.2	20.2	3,444

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

<sup>1</sup> Currently married women

### 14.2.3 Help-Seeking Behavior

The 2007 JPFHS also collected information to assess the extent to which women seek help to deal with domestic violence episodes. To obtain these data, women who had experienced an episode of physical or sexual violence at the hands of their husband within the 12-month period before the survey were asked whether they had sought any help at any time during the year when their husband had done something to physically hurt them and, if so, from whom they had sought help.

The results in Table 14.7 indicate that about one-fifth of women who had experienced violence at least once within the 12 months preceding the survey sought assistance to deal with the violence. Women were almost three times as likely to seek help if the violence had occurred often (40 percent) rather than sometimes (15 percent). Most of the women who asked for help looked to relatives for assistance; among women who reported frequently being subject to violence, 23 percent sought help from their mother, 15 percent from their father and 10 percent from their brother. Seven percent of women who reported frequent violence sought help from the police, while 3 percent sought help from medical personnel or a lawyer.

**Table 14.7 Help-seeking behavior by women experiencing physical or sexual violence**

Percentage of women age 15-49 who have ever experienced physical or sexual violence committed by their husband within the past 12 months who reported seeking help from anyone to prevent or stop violence, by persons from whom assistance was sought, according to frequency of violence, Jordan 2007

Help-seeking behavior	Frequency of violence within past 12 months		
	At least once	Often	Sometimes
Sought any assistance	22.2	40.1	15.3
<b>Percentage who sought help from:</b>			
Mother	12.2	22.5	8.3
Sister	1.1	3.7	0.1
Mother-in-law	4.6	6.3	4.0
Other female relative/in-law	1.5	4.6	0.3
Father	7.4	15.1	4.5
Brother	4.8	10.0	2.9
Father-in-law	4.1	6.0	3.3
Other male relative/in-law	1.8	3.8	1.0
Friend	1.5	2.4	1.1
Neighbor	1.3	4.1	0.2
Doctor/medical personnel	1.4	2.5	1.0
Police	2.0	7.2	0.0
Lawyer	0.7	2.5	0.0
Social service organization	0.2	0.4	0.1
Children	0.4	0.1	0.5
Relatives	0.2	0.7	0.0
Number of women	503	140	363



Early childhood, roughly described as ages 3 to 8, is a time of tremendous physical, social, emotional, and intellectual growth for children. One of the stated goals of the United Nation's World Fit for Children is that children should be "physically healthy, mentally alert, emotionally secure, socially competent and able to learn." 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.<sup>1</sup> 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.

In order to obtain an overview of certain early childhood development indicators in Jordan, women were asked about basic developmental milestones regarding their youngest child aged 3-8. The results are presented in this chapter.

### 15.1 ABILITY TO COUNT

Basic numerical abilities are present very early on in children's development. Based on their daily interaction with the world, many young children begin developing basic mathematical concepts such as counting spontaneously. These early math skills serve as a starting point from which most children become ready for more formal mathematical instruction in school. Because mathematical skills build on each other, children lacking basic skills (such as understanding that numbers are used to count and counting to 10 forwards and backwards), will have difficulty with math in later years. To assess basic numerical skills among children, respondents in the 2007 JPFHS were asked how high their youngest children can count to. These results are presented in Table 15.1.

Overall, for half of children aged 3-8, the highest number they can count to is between 1 and 10. Twenty percent of children can count to a number between 11 and 96 and 23 percent can count to the number 97 or higher. Overall, 7 percent of children cannot count. A child's ability to count is strongly correlated to age. At age three, 14 percent cannot count while 76 percent cannot count past 10. At age four, 73 percent can count to a number up to ten and 19 percent can count to a number higher than 10. By age five, more than half of children can count to a number higher than 10.

<sup>1</sup> Child Trends and Center for Child Health Research, 2004. *Early Child Development in Social Context*, New York.

Table 15.1 Ability to count

Percent distribution of youngest children aged 3-8 years, according to the highest number that the child can count to, by background characteristics, Jordan 2007

Background characteristic	The highest number that the child can count to					Total	Number of children
	Cannot count	1-10	11-96	97 or higher	Don't know/missing		
<b>Age</b>							
3	14.3	76.1	9.0	0.4	0.3	100.0	1,963
4	7.9	72.8	16.5	2.1	0.7	100.0	1,623
5	2.8	45.2	40.9	10.9	0.1	100.0	1,193
6	0.7	13.7	36.1	48.3	1.2	100.0	785
7	1.3	1.9	10.0	85.7	1.1	100.0	620
8	0.7	3.7	3.8	89.2	2.6	100.0	464
<b>Sex</b>							
Male	8.1	49.4	19.4	22.3	0.8	100.0	3,515
Female	5.6	51.6	19.6	22.7	0.7	100.0	3,133
<b>Residence</b>							
Urban	6.3	49.9	19.9	23.2	0.7	100.0	5,645
Rural	10.2	53.2	17.4	18.5	0.8	100.0	1,003
<b>Governorate</b>							
Amman	5.9	46.8	22.0	24.4	0.9	100.0	2,607
Balqa	6.7	57.0	19.2	16.2	1.0	100.0	410
Zarqa	7.0	52.5	19.0	21.0	0.5	100.0	1,040
Madaba	7.6	53.5	15.1	23.7	0.2	100.0	158
Irbid	7.1	50.0	17.6	24.6	0.7	100.0	1,242
Mafraq	13.4	56.1	16.2	13.9	0.3	100.0	291
Jarash	9.3	53.0	17.3	19.8	0.6	100.0	184
Ajloun	4.1	60.4	14.1	21.3	0.2	100.0	151
Karak	7.6	49.6	19.3	23.1	0.4	100.0	227
Tafiela	6.4	55.8	15.2	22.6	0.0	100.0	95
Ma'an	9.3	53.6	19.3	17.2	0.6	100.0	101
Aqaba	8.2	52.3	16.9	22.0	0.6	100.0	142
<b>Region</b>							
Central	6.3	49.4	20.8	22.7	0.8	100.0	4,216
North	8.1	52.1	17.1	22.2	0.6	100.0	1,868
South	7.9	52.0	18.0	21.7	0.4	100.0	565
<b>Badia area</b>							
Badia	12.7	58.6	13.5	14.6	0.6	100.0	535
Other	6.4	49.7	20.0	23.2	0.7	100.0	6,113
<b>Mother's education</b>							
No education	17.0	47.7	11.3	23.1	0.9	100.0	230
Elementary	7.5	53.0	14.3	24.1	1.0	100.0	461
Preparatory	7.6	50.9	18.6	21.8	1.1	100.0	979
Secondary	7.1	53.6	19.8	18.7	0.7	100.0	3,049
Higher	4.9	44.7	21.7	28.3	0.3	100.0	1,929
<b>Father's education</b>							
No education	17.7	41.7	20.1	19.5	1.0	100.0	136
Elementary	8.4	49.7	16.8	23.8	1.3	100.0	769
Preparatory	6.4	49.2	19.3	24.5	0.6	100.0	1,345
Secondary	8.0	54.7	19.4	17.6	0.3	100.0	2,450
Higher	4.6	46.7	20.8	26.9	1.0	100.0	1,940
<b>Wealth quintile</b>							
Lowest	12.1	59.5	13.4	14.1	0.9	100.0	1,349
Second	6.3	53.7	19.6	20.2	0.2	100.0	1,435
Middle	7.2	53.9	18.4	19.6	0.8	100.0	1,385
Fourth	4.2	44.1	24.0	27.3	0.4	100.0	1,378
Highest	4.4	38.3	22.6	33.4	1.2	100.0	1,101
Total <sup>1</sup>	6.9	50.4	19.5	22.5	0.7	100.0	6,648

<sup>1</sup> Total includes 9 cases for which father's education is missing

The inability of a child to count is strongly related to both mother's and father's education; 17 percent of children whose mother has no education and 18 percent of children whose father has no education cannot count. In addition, 12 percent of children living in the poorest households cannot count.

## 15.2 FREQUENCY OF READING AND NAME RECOGNITION

Young children who are read to regularly by their parents develop better early literacy skills and are better readers when they reach basic school. Children who do not read well within the first few years of school are at greater risk of poor academic performance later on. Reading to young children also encourages children to enjoy books and to read on their own. Living in a strong literacy environment (as indicated by such characteristics as the number of children's books in the home) contributes to children's language and literacy development, which, in turn, are related to later success in school. In order to assess literacy skills among young children, the 2007 JPFHS asked how often respondent's youngest children read or were read to in the last month. These results are presented in Table 15.2.

More than half of children aged 3-8 read or are read to. Twelve percent of children often read or are read to, while 42 percent sometimes read or are read to. Thirty-eight percent of children do not read or are not read to and seven percent of children have no story books at home.

The likelihood that a child reads or is read to increases with the parents education and with the wealth of the household. Two-thirds of children whose mother has no education and more than half of children whose father has no education do not read or are not read to, compared to approximately one-fourth of children of mothers or fathers with higher than secondary education.

Identifying and understanding a child's own name and the names of family members in a story is an important milestone in a early childhood development, particularly among pre-readers. In the 2007 JPFHS, respondents were asked if their youngest children can recognize their own name or the name of siblings/friends when heard in a story.

Overall, just less than half of children aged 3-8 can recognize their own name or the names of family members when told in a story (Table 15.2). As expected, this ability is influenced by age; from 15 percent of children aged three and 24 percent of children aged four, the percentage climbs to over 95 percent by age seven. As with other child development indicators, children of higher educated parents and children living in wealthier households are more likely to possess this ability.

Table 15.2 Frequency of reading or being read to and name recognition

Percent distribution of youngest children aged 3-8 years, according to how often they read or are read to in the last month, and proportion who can recognize their own name or the name of siblings/friends in a story, by background characteristics, Jordan 2007

Background characteristic	Frequency of reading or being read to in the past month					Total	Can recognize a name in a story	Number of children
	Often	Sometimes	Did not read	No story book	Don't know/missing			
<b>Age</b>								
3	9.8	38.8	42.0	8.9	0.5	100.0	15.4	1,963
4	12.6	40.4	39.6	6.6	0.8	100.0	24.0	1,623
5	11.8	42.3	38.2	7.5	0.2	100.0	53.3	1,193
6	12.6	46.2	36.1	3.8	1.3	100.0	86.3	785
7	11.3	51.9	28.8	7.3	0.8	100.0	95.4	620
8	17.0	40.4	34.3	7.0	1.3	100.0	96.1	464
<b>Sex</b>								
Male	11.4	41.5	38.8	7.7	0.5	100.0	45.8	3,515
Female	12.2	42.6	37.7	6.6	0.9	100.0	45.7	3,133
<b>Residence</b>								
Urban	12.1	43.1	37.9	6.3	0.7	100.0	46.8	5,645
Rural	10.3	36.1	40.5	12.6	0.4	100.0	40.0	1,003
<b>Governorate</b>								
Amman	15.0	43.5	37.4	3.3	0.9	100.0	54.2	2,607
Balqa	12.1	42.1	24.8	20.4	0.6	100.0	35.6	410
Zarqa	6.7	41.8	45.0	5.9	0.5	100.0	33.0	1,040
Madaba	11.8	35.9	42.9	8.9	0.6	100.0	43.7	158
Irbid	11.1	42.6	36.5	9.1	0.7	100.0	44.8	1,242
Mafraq	8.0	31.9	43.1	16.3	0.8	100.0	32.8	291
Jarash	5.3	32.8	41.6	19.7	0.5	100.0	34.7	184
Ajloun	8.9	40.8	43.0	7.4	0.0	100.0	39.0	151
Karak	13.0	45.2	37.0	4.0	0.8	100.0	59.0	227
Tafiela	13.2	43.1	38.2	4.9	0.6	100.0	50.3	95
Ma'an	11.1	45.3	39.3	4.1	0.2	100.0	47.5	101
Aqaba	12.9	44.7	36.1	6.1	0.2	100.0	46.0	142
<b>Region</b>								
Central	12.5	42.7	38.3	5.8	0.7	100.0	46.8	4,216
North	9.9	39.8	38.6	11.1	0.6	100.0	41.5	1,868
South	12.6	44.7	37.4	4.7	0.5	100.0	52.2	565
<b>Badia area</b>								
Badia	8.4	31.0	46.1	13.9	0.6	100.0	34.4	535
Other	12.1	43.0	37.6	6.6	0.7	100.0	46.8	6,113
<b>Mother's education</b>								
No education	6.1	11.9	66.1	15.1	0.8	100.0	38.6	230
Elementary	5.0	26.6	52.7	14.4	1.4	100.0	42.0	461
Preparatory	7.6	39.6	41.6	10.0	1.3	100.0	42.6	979
Secondary	10.4	43.2	39.0	7.1	0.4	100.0	43.1	3,049
Higher	18.5	48.8	28.7	3.3	0.7	100.0	53.4	1,929
<b>Father's education</b>								
No education	10.6	19.2	56.2	12.7	1.3	100.0	42.4	136
Elementary	7.9	31.1	46.6	13.2	1.2	100.0	41.4	769
Preparatory	10.4	37.6	41.5	10.0	0.6	100.0	44.3	1,345
Secondary	9.4	42.5	41.4	6.3	0.4	100.0	42.2	2,450
Higher	17.5	50.5	27.5	3.7	0.9	100.0	53.0	1,940
<b>Wealth quintile</b>								
Lowest	7.0	29.8	49.1	12.7	1.4	100.0	31.9	1,349
Second	10.7	38.2	41.0	9.9	0.1	100.0	42.3	1,435
Middle	10.7	45.3	37.9	5.6	0.5	100.0	44.6	1,385
Fourth	12.7	46.2	35.5	5.4	0.1	100.0	52.4	1,378
Highest	19.2	52.7	25.2	1.2	1.6	100.0	60.4	1,101
Total <sup>1</sup>	11.8	42.0	38.3	7.2	0.7	100.0	45.8	6,648

<sup>1</sup> Total includes 9 cases for which father's education is missing.

### 15.3 PARTICIPATION IN FAMILY DISCUSSIONS

Children's participation in family discussions is an important indicator of family involvement in child development. It is also seen as an important factor in a child's psychosocial development, such as a means of providing children with a moral framework and providing them with social problem solving skills. Table 15.3 shows the proportion of children who participate in family discussions.

In all, 84 percent of children are reported to participate in family discussions. Participation in family discussions is somewhat related to both mother's and father's education; only 71 percent of children whose mother has no education and 70 percent of children whose father has no education participate in family discussions. There are slight differences in the participation of children in family discussions by other background characteristics.

### 15.4 MANAGEMENT OF DISAGREEMENTS AMONG FRIENDS

An important step in social development is the ability to get along with others in a constructive manner and attaining personal goals while maintaining positive relationships with others. Young children who demonstrate this ability are more likely to have positive developmental outcomes, including higher overall intelligence, positive self-worth and better mental health. Management of disagreements is also related to a child's overall self-control, as well as a child's compliance and positive social behavior. The 2007 JPFHS asked women about how their youngest child aged 3-8 years manage disagreements with their friends in the neighborhood. This information is presented in Table 15.4.

When faced with a disagreement with their friends in the neighborhood, the majority of children aged 3-8 resort to shouting and/or violence (71 percent), while 16 percent withdraw from the situation. Ten percent of children discuss disagreements with friends in a positive way, while two percent cry and less than one percent run to their mother.

The way children manage disputes varies according to age. Children are more likely to discuss disagreements in a positive way as they get older; only five percent of children aged three and six percent of children aged four are reported to discuss disagreements, compared to 20 percent of children aged eight. The percentage of children resorting to shouting and violence to resolve disputes declines somewhat according to the child's age; from 77 percent of children aged three resorting to shouting and violence, this figure declines to 60 percent of children aged eight.

Table 15.3 Participation in family discussions

Proportion of youngest children aged 3-8 years who participate in family discussions, by background characteristics, Jordan 2007

Background characteristic	Participate in family discussions	Number of children
<b>Age</b>		
3	76.1	1,963
4	80.5	1,623
5	88.9	1,193
6	91.3	785
7	94.3	620
8	91.3	464
<b>Sex</b>		
Male	84.2	3,515
Female	83.8	3,133
<b>Residence</b>		
Urban	84.7	5,645
Rural	80.4	1,003
<b>Governorate</b>		
Amman	84.5	2,607
Balqa	85.4	410
Zarqa	83.4	1,040
Madaba	83.1	158
Irbid	85.9	1,242
Mafraq	76.9	291
Jarash	83.0	184
Ajloun	84.1	151
Karak	83.7	227
Tafiela	81.3	95
Ma'an	77.0	101
Aqaba	82.8	142
<b>Region</b>		
Central	84.3	4,216
North	84.1	1,868
South	81.9	565
<b>Badia area</b>		
Badia	77.0	535
Other	84.6	6,113
<b>Mother's education</b>		
No education	71.4	230
Elementary	80.1	461
Preparatory	82.0	979
Secondary	85.0	3,049
Higher	86.0	1,929
<b>Father's education</b>		
No education	70.3	136
Elementary	80.2	769
Preparatory	85.9	1,345
Secondary	83.4	2,450
Higher	85.9	1,940
<b>Wealth quintile</b>		
Lowest	78.4	1,349
Second	82.8	1,435
Middle	84.0	1,385
Fourth	88.0	1,378
Highest	87.5	1,101
Total <sup>1</sup>	84.0	6,648

<sup>1</sup> Total includes 9 cases for which father's education is missing.

Children are more likely to discuss disagreements in a positive way if the mother or father has a higher than secondary education, or if they live in a wealthier household. Children living in Madaba, Amman and Zarqa are most likely to manage disagreements in this way.

Table 15.4 Management of disagreements among friends

Percent distribution of youngest children aged 3-8 years, according to how they manage disagreements with their friends in the neighborhood, by background characteristics, Jordan 2007

Background characteristic	Managing disagreements							Total	Number of children
	Discusses disagreements with friends in a positive way	Withdraws from the situation	Resorts to shouting and violence	Crying	Running to the mother	Other	Don't know/missing		
<b>Age</b>									
3	5.3	14.2	76.9	2.1	0.2	0.4	0.8	100.0	1,963
4	5.7	16.9	74.4	1.4	0.3	0.6	0.6	100.0	1,623
5	8.4	15.1	72.3	2.0	0.1	0.8	1.3	100.0	1,193
6	15.8	15.9	64.6	1.6	0.1	1.0	1.1	100.0	785
7	22.2	15.9	58.8	0.3	1.3	1.1	0.5	100.0	620
8	20.2	15.7	60.2	1.2	0.2	1.2	1.3	100.0	464
<b>Sex</b>									
Male	9.6	14.8	73.3	1.0	0.1	0.4	0.8	100.0	3,515
Female	10.1	16.2	68.7	2.4	0.5	1.0	1.0	100.0	3,133
<b>Residence</b>									
Urban	10.3	15.6	70.4	1.7	0.3	0.7	1.0	100.0	5,645
Rural	7.3	14.8	75.3	1.3	0.2	0.7	0.5	100.0	1,003
<b>Governorate</b>									
Amman	12.9	16.6	66.1	1.6	0.4	0.8	1.6	100.0	2,607
Balqa	8.7	9.3	80.1	0.6	0.2	0.3	0.8	100.0	410
Zarqa	10.6	11.4	76.0	1.3	0.0	0.4	0.3	100.0	1,040
Madaba	14.1	12.1	70.1	2.6	0.0	0.7	0.5	100.0	158
Irbid	6.8	16.5	73.6	2.2	0.0	0.5	0.4	100.0	1,242
Mafraq	3.4	17.6	76.1	2.1	0.0	0.2	0.5	100.0	291
Jarash	6.2	15.7	75.5	1.4	0.2	0.6	0.4	100.0	184
Ajloun	3.4	15.8	77.7	2.5	0.0	0.6	0.0	100.0	151
Karak	9.0	17.6	67.6	1.5	1.3	2.3	0.6	100.0	227
Tafiela	5.5	21.4	68.1	1.6	1.3	1.1	0.9	100.0	95
Ma'an	4.1	20.6	69.8	1.8	0.9	1.7	1.0	100.0	101
Aqaba	5.2	21.9	68.6	0.9	1.4	1.7	0.2	100.0	142
<b>Region</b>									
Central	12.0	14.4	70.0	1.4	0.3	0.6	1.2	100.0	4,216
North	5.9	16.5	74.5	2.1	0.0	0.5	0.4	100.0	1,868
South	6.6	19.9	68.3	1.4	1.2	1.9	0.6	100.0	565
<b>Badia area</b>									
Badia	6.9	17.4	71.0	3.4	0.1	0.5	0.7	100.0	535
Other	10.1	15.3	71.2	1.5	0.3	0.7	0.9	100.0	6,113
<b>Mother's education</b>									
No education	5.6	11.0	80.8	1.5	0.1	0.3	0.8	100.0	230
Elementary	9.6	15.9	70.1	2.2	0.1	0.4	1.6	100.0	461
Preparatory	9.1	13.3	74.1	1.6	0.3	0.6	1.1	100.0	979
Secondary	7.8	16.2	72.5	1.7	0.2	0.7	1.0	100.0	3,049
Higher	13.9	16.0	66.7	1.5	0.5	0.8	0.6	100.0	1,929
<b>Father's education</b>									
No education	10.7	14.7	65.6	3.0	2.9	1.5	1.6	100.0	136
Elementary	7.0	15.7	73.6	0.6	0.3	1.2	1.7	100.0	769
Preparatory	7.7	14.3	74.2	2.4	0.1	0.6	0.8	100.0	1,345
Secondary	9.2	15.1	72.5	1.5	0.2	0.7	0.8	100.0	2,450
Higher	13.2	16.9	66.7	1.6	0.4	0.5	0.8	100.0	1,940
<b>Wealth quintile</b>									
Lowest	6.1	16.6	73.8	1.6	0.1	0.6	1.3	100.0	1,349
Second	7.6	14.1	74.3	2.1	0.4	1.0	0.5	100.0	1,435
Middle	7.7	15.3	72.9	2.0	0.5	0.6	1.0	100.0	1,385
Fourth	12.4	12.4	71.6	1.6	0.4	0.9	0.6	100.0	1,378
Highest	16.7	20.1	61.0	0.6	0.0	0.3	1.3	100.0	1,101
Total <sup>1</sup>	9.8	15.5	71.2	1.6	0.3	0.7	0.9	100.0	6,648

<sup>1</sup> Total includes 9 cases for which father's education is missing.

## 15.5 TEETH BRUSHING AND HAND WASHING

Educating children on good hygiene, such as brushing teeth and washing hands before eating, after using the toilet and when they are ill, is one of the best ways to avoid the spread of infection and illness among children. Teaching children the principles of correct hygiene at an early age can help keep individuals healthy in later life.

Overall, 60 percent of children aged 3-8 years brush their teeth (Table 15.5). Children living in urban households were more likely to brush their teeth than those living in rural households (61 percent and 54 percent, respectively). The proportion who brush their teeth is highest in Tafiela and Amman and lowest in Mafraq. In general, the higher the parents' education, the more likely the child is to brush his or her teeth half of children whose parents have no education brush their teeth, compared to 71 percent of children whose parents have a higher than secondary education.

Almost all of the youngest children aged 3-8 years wash their hands after using the bathroom (90 percent). The variations according to background characteristics are similar to those seen in teeth brushing.

Table 15.5 Teeth brushing and hand washing

Proportion of youngest children aged 3-8 years who brush their teeth, and the proportion who wash their hands after using the toilet, by background characteristics, Jordan 2007

Background characteristic	Brush teeth	Wash hands	Number of children
<b>Age</b>			
3	42.1	84.2	1,963
4	53.7	88.1	1,623
5	67.9	94.7	1,193
6	77.5	95.4	785
7	80.0	97.3	620
8	76.9	96.0	464
<b>Sex</b>			
Male	59.5	89.6	3,515
Female	59.9	91.3	3,133
<b>Residence</b>			
Urban	60.8	90.7	5,645
Rural	53.5	88.6	1,003
<b>Governorate</b>			
Amman	66.1	92.4	2,607
Balqa	54.4	90.2	410
Zarqa	50.3	88.0	1,040
Madaba	61.8	91.3	158
Irbid	59.8	89.8	1,242
Mafraq	43.5	81.2	291
Jarash	49.0	86.1	184
Ajloun	57.3	89.0	151
Karak	60.9	93.0	227
Tafiela	67.1	96.1	95
Ma'an	65.1	93.2	101
Aqaba	62.0	93.9	142
<b>Region</b>			
Central	60.9	91.0	4,216
North	56.0	88.0	1,868
South	63.0	93.8	565
<b>Badia area</b>			
Badia	49.4	85.1	535
Other	60.6	90.9	6,113
<b>Mother's education</b>			
No education	48.5	85.4	230
Elementary	50.7	88.8	461
Preparatory	49.4	87.0	979
Secondary	58.1	91.5	3,049
Higher	70.9	91.4	1,929
<b>Father's education</b>			
No education	50.0	79.9	136
Elementary	51.8	88.0	769
Preparatory	53.5	89.6	1,345
Secondary	57.3	91.0	2,450
Higher	71.0	91.9	1,940
<b>Wealth quintile</b>			
Lowest	41.7	84.5	1,349
Second	53.8	89.6	1,435
Middle	61.0	92.1	1,385
Fourth	69.7	92.7	1,378
Highest	75.2	93.9	1,101
Total <sup>1</sup>	59.7	90.4	6,648

<sup>1</sup> Total includes 9 cases for which father's education is missing



## REFERENCES

---

- ACC/SCN. 2000. *Fourth report on the world nutrition situation*. Geneva: ACC/SCN in collaboration with IFPRI.
- Child Trends and Center for Child Health Research. 2004. *Early Child Development in Social Context*, New York.
- Department of Statistics [Jordan]. 1979. *National Fertility Survey 1976*. 2 vols. Amman, Jordan.
- Department of Statistics [Jordan]. 1989. *Jordan Fertility and Family Health Survey 1983*. Amman, Jordan.
- Department of Statistics [Jordan]. 2006. *Population and Housing Census 2004*. Amman, Jordan.
- Department of Statistics [Jordan] and ORC Macro. 2003. *Jordan Population and Family health Survey 2002*. Calverton, Maryland, USA: Department of Statistics and ORC Macro.
- Department of Statistics [Jordan] and Macro International Inc. 1998. *Jordan Population and Family Health Survey 1997*. Calverton, Maryland: Department of Statistics and Macro International.
- Faqir, F. 2001. Intrafamily femicide in defence of honour: The case of Jordan. *Third World Quarterly* 22(1):65-82.
- Gwatkin, D.R., S. Rutstein, K. Johnson, R.P. Pande, and A. Wagstaff. 2000. *Socio-economic differences in health, nutrition and poverty*. HNP/Poverty Thematic Group of The World Bank. Washington, D.C.: The World Bank.
- Heise, L., J. Pitanguy, and A. Germain. 1994. *Violence against women: The hidden health burden*. Washington, D.C.: The World Bank.
- Heise, L., M. Ellsberg, and M. Goettemoeller. 1998. *Ending violence among women*. Population Reports, Series L, No. 11. Baltimore, Maryland: Population Information Program, Johns Hopkins University School of Public Health.
- Jejeebhoy, S.J. 1998. Associations between wife-beating and fetal and infant death: Impressions from a survey in rural India. *Studies in Family Planning* 29(3):300-308.
- PAHO/WHO. 2003. *Guiding principles for complementary feeding of the breastfed child*. Washington, D.C./Geneva, Switzerland: PAHO/WHO.
- Rutstein, S. 1999. *Wealth versus expenditure: Comparison between the DHS wealth index and household expenditures in four departments of Guatemala*. Calverton, Maryland: ORC Macro.
- UNICEF. 1999. Lack of obstetric care: Mothers and babies at risk. In *The progress of nations 1999*, p 15. New York, New York: UNICEF.

UNAIDS. 2008. *Report on the Global HIV/AIDS Epidemic 2008*. Geneva, Switzerland: UNAIDS.

United Nations General Assembly. 1991. *Advancement of women: Convention on the elimination of all forms of discrimination against women*. Report of the Secretary General. New York: United Nations.

World Health Organization (WHO). 2005. *Guiding principles for feeding nonbreastfed children 6 to 24 months of age*. Geneva, Switzerland: WHO.

WHO/UNICEF. 1998. *Complementary feeding of young children in developing countries: A review of current scientific knowledge*. Geneva: World Health Organization.

Zou'bi, A.A.A., S. Poedjastoeti, and M. Ayad. 1992. *Jordan Population and Family Health Survey 1990*. Columbia, Maryland, USA: Department of Statistics [Jordan], and IRD/Macro International Inc.

**A.1 OBJECTIVES OF THE SURVEY**

The main objectives of the 2007 JPFHS 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 slept in the selected households the night before the survey interview were eligible for the survey. The sample is designed to produce representative results for the country as a whole, for the urban and rural areas, the Badia and non-Badia areas, and for each of the 12 governorates.

**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 socio-economic characteristics etc. 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 could be widely used in various surveys. The sample of the 2007 JPFHS was selected from the frame of cluster units provided by the Department of Statistics (DOS). The frame excluded 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 gives the distribution of the clusters and their average size, by governorate and by urban-rural residence.

Governorate	Number of clusters			Average cluster size		
	Urban	Rural	Total	Urban	Rural	Total
Amman	4,657	329	4,986	77	61	76
Balqa	549	248	797	82	68	77
Zarqa	1,875	128	2,003	72	51	71
Madaba	234	112	346	70	56	65
Irbid	1,931	422	2,353	71	66	70
Mafrq	224	353	577	72	63	67
Jarash	217	142	359	75	66	72
Ajloun	222	80	302	71	59	68
Karak	176	373	549	66	64	65
Tafiela	152	61	213	63	56	61
Ma'an	133	121	254	64	55	60
Aqaba	249	38	287	62	57	62
Total	10,619	2,407	13,025	74	62	72

Source: 2004 Population and Housing Census

In total, there are 13,025 clusters in Jordan. The average size of a 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 16 households per cluster for the 2007 JPFHS. Table A.2 and Table A.3 present the distribution of household population and the number of households by governorate and by urban-rural residence. In Jordan, 83 percent of the population live in urban areas (a locality with a population of 5,000 or more), occupying 84 percent of the households, according to the sampling frame. The urban-rural distribution was modified following the 2004 census.

Governorate	Household population			Proportion	
	Urban	Rural	Total	Urban	Governorate
Amman	1,790,064	115,035	1,905,099	0.940	0.380
Balqa	247,080	94,800	341,880	0.723	0.068
Zarqa	717,841	34,924	752,765	0.954	0.150
Madaba	91,760	37,347	129,107	0.711	0.026
Irbid	757,960	158,787	916,747	0.827	0.183
Mafrsq	95,077	140,274	235,351	0.404	0.047
Jarash	95,371	57,242	152,613	0.625	0.030
Ajloun	89,954	28,834	118,788	0.757	0.024
Karak	65,553	135,199	200,752	0.327	0.040
Tafiela	53,616	20,482	74,098	0.724	0.015
Ma'an	49,618	40,340	89,958	0.552	0.018
Aqaba	81,467	13,622	95,089	0.857	0.019
Total	4,135,361	876,886	5,012,247	0.825	1.000

Source: 2004 Population and Housing Census

Governorate	Number of households			Proportion	
	Urban	Rural	Total	Urban	Governorate
Amman	357,977	19,980	377,957	0.947	0.404
Balqa	44,805	16,827	61,632	0.727	0.066
Zarqa	135,770	6,578	142,348	0.954	0.152
Madaba	16,344	6,245	22,589	0.724	0.024
Irbid	137,550	27,668	165,218	0.833	0.177
Mafrsq	16,234	22,150	38,384	0.423	0.041
Jarash	16,352	9,351	25,703	0.636	0.027
Ajloun	15,733	4,698	20,431	0.770	0.022
Karak	11,541	23,993	35,534	0.325	0.038
Tafiela	9,566	3,437	13,003	0.736	0.014
Ma'an	8,529	6,609	15,138	0.563	0.016
Aqaba	15,510	2,173	17,683	0.877	0.019
Total	785,911	149,709	935,620	0.840	1.000

Source: 2004 Population and Housing Census

### A.3 SAMPLE ALLOCATION AND SAMPLE SELECTION

The sample for 2007 JPFHS is a stratified sample selected in two stages from the 2004 census frame. Stratification is achieved by separating each governorate into urban and rural areas. The rural areas of each governorate form a single stratum. The urban areas of each governorate form a single stratum if the governorate has no cities having a population of 100,000 or more; otherwise, the urban areas are further stratified in such a way that each city having a population of 100,000 or more forms a single stratum, while the rest of the urban areas together form a stratum. Therefore, the number of urban strata in

a governorate depends on the number of cities having a population of 100,000 or more. In three governorates, there are cities having a population of 100,000 or more: Amman, Zarqa, and Irbid. In total, 30 sampling strata have been constructed. Samples were selected independently in each stratum, by a two-stage selection. By using a probability proportional to size selection during the first sampling stage, an implicit stratification and proportional allocation was achieved at each of the lower administrative levels. This was done by sorting the clusters within each sampling stratum, according to the administrative levels and then by their socio-economic characteristics.

In the first stage, 890 clusters were selected with probability proportional to the cluster size and with an independent selection in each sampling stratum. The cluster size is the number of residential households residing in the cluster given in the sampling frame. The sample allocation was designed to take the governorate level into account. The ideal sample would allocate the 10,000 completed women interviews proportionally to each sampling stratum according to the stratum size. But the proportional allocation would allocate too small a sample size for certain governorates (Tafiela, Ma'an and Aqaba, with less than 200 completed interviews each). 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 aged 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 an equal size allocation with an adjustment for the governorates of Amman, Zarqa and Irbid as they represent 38 percent, 15 percent and 18 percent, respectively, of the population in the Kingdom. After the sample allocation by governorate, the samples were proportionally allocated to each sampling stratum within each governorate. Table A.4 shows the sample allocation by governorate and by urban-rural areas within each governorate. The proportional allocation is also presented.

Governorate	Proportional allocation			Final allocation		
	Urban	Rural	Total	Urban	Rural	Total
Amman	3,571	230	3,801	977	68	1,045
Balqa	493	189	682	591	227	818
Zarqa	1,432	70	1,502	807	46	853
Madaba	183	75	258	580	238	818
Irbid	1,512	317	1,829	693	160	853
Mafraq	190	280	470	330	488	818
Jarash	190	114	304	511	307	818
Ajloun	179	58	237	624	194	818
Karak	131	270	401	273	545	818
Tafiela	107	41	148	591	227	818
Ma'an	99	80	179	455	363	818
Aqaba	163	27	190	704	113	818
Total	8,250	1,750	10,000	7,136	2,976	10,112

Table A.5 shows the sample allocation of households and clusters to be selected in the urban and rural areas of each governorate based on the final allocation given in Table A.4. The parameters used to convert the number of completed women interviews to number of households and then to number of clusters were obtained by referencing the survey results of the 2002 JPFHS: 16 households were selected per cluster; the household response rate was assumed to be 95 percent; the individual response rate was assumed to be 95 percent; there are 0.795 ever-married women 15-49 per household. Both the household response rate and the women individual response rate were down-modified compared to the 2002 JPFHS survey to reflect the situation changes in the country. Since 2003, for example, a lot of foreigners such as Egyptians and Iraqis have come to Jordan for work. These people usually live in groups in ordinary housing units and form households of only men, as shown in the 2004 Population and Housing Census.

After the sample had been selected, it was decided to oversample the Badia Area located in the Central region. In total, 40 complementary clusters were selected in Amman and Zarqa: 2 urban clusters and 25 rural clusters in Amman; 7 urban clusters and 6 rural clusters in Zarqa. This oversampling increased the total number of clusters to 930, with 637 urban clusters and 293 rural clusters.

Governorate	Allocation of households			Allocation of clusters		
	Urban	Rural	Total	Urban	Rural	Total
Amman	1,366	99	1,465	86	6	92
Balqa	826	317	1,142	52	20	72
Zarqa	1,169	70	1,240	71	4	75
Madaba	812	330	1,142	51	21	72
Irbid	1,014	225	1,240	61	14	75
Ma'raq	461	681	1,142	29	43	72
Jarash	714	428	1,142	45	27	72
Ajloun	865	277	1,142	55	17	72
Karak	373	769	1,142	24	48	72
Tafiela	827	316	1,142	52	20	72
Ma'an	630	512	1,142	40	32	72
Aqaba	979	164	1,142	62	10	72
Total	10,036	4,189	14,225	628	262	890

Before the main survey, a household listing operation was 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. Household selection in the second stage was an equal probability systematic selection of fixed size: 16 households per cluster. With a fixed second stage sample size, it is easy to allocate the fieldwork load to different interviewers and easy to control the fieldwork quality.

A spreadsheet was prepared for the household selection with selected household numbers highlighted for each cluster. The survey interviewer was asked to interview only the pre-selected households. In order to prevent bias, no replacements and no changes of the pre-selected households were allowed in the implementing stages. All ever-married women aged 15-49 who slept in the selected households the night before the survey interview were eligible for the survey.

#### A.4 SELECTION PROBABILITY AND SAMPLING WEIGHT

Sampling probabilities were calculated separately for each sampling stage and for each cluster. The following notations are used:

- $P_{1hi}$ : first-stage sampling probability of the  $i^{th}$  cluster in stratum  $h$
- $P_{2hi}$ : second-stage sampling probability within the  $i^{th}$  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  $i^{th}$  cluster, and  $\sum M_{hi}$  the total number of households in the stratum. The probability of selecting the  $i^{th}$  cluster in the 2007 JPFHS 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's selection probability for each household in the cluster is calculated as follows:

$$P_{2hi} = \frac{g_{hi}}{L_{hi}}$$

The overall selection probability of each household in cluster  $i$  of stratum  $h$  is therefore the product of the two stages selection probabilities:

$$P_{hi} = P_{1hi} \times P_{2hi}$$

Because of the non-proportional allocation of the sample to the different governorates, sampling weights are required to ensure the actual representativity of the sample at the national level and at the governorate level as well. 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 weight were calculated: one set for the households, one set for individual women. The difference of the household weight and the individual weight was introduced by the women non-response. The final weights were normalized in order to give the total number of unweighted cases equal to the total number of weighted cases at national level, for both household weights and individual weights.

## A.5 SAMPLE IMPLEMENTATION

Table A.6 presents the sample implementation results by giving the number of households selected and interviewed, ever-married women found and interviewed. According to the definition of each category, the response rates for household survey and woman survey were calculated based on the following formulas. The household response rate was calculated by:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

In a similar way, the woman individual response rate was calculated by:

$$\frac{100 * EWC}{EWC + EWNH + EWR + EWPC + EWI + EWO}$$

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 response rates, according to urban-rural residence and region, Jordan 2007

Result	Residence		Region			Total
	Urban	Rural	Central	North	South	
<b>Selected households</b>						
Completed (C)	97.7	98.3	97.7	97.4	98.5	97.9
Household present but no competent respondent at home (HP)	0.6	0.4	0.5	1.2	0.1	0.6
Postponed (P)	0.0	0.0	0.0	0.0	0.0	0.0
Refused (R)	0.8	0.4	0.5	0.8	0.7	0.7
Dwelling not found (DNF)	0.0	0.0	0.0	0.0	0.0	0.0
Household absent (HA)	0.4	0.2	0.4	0.5	0.0	0.3
Dwelling vacant/address not a dwelling (DV)	0.3	0.6	0.7	0.1	0.4	0.4
Dwelling destroy (DD)	0.1	0.0	0.0	0.0	0.2	0.1
Other (O)	0.1	0.1	0.1	0.0	0.1	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of sampled households	10,192	4,688	5,616	4,656	4,608	14,880
Household response rate (HRR) <sup>1</sup>	98.6	99.2	99.0	98.0	99.2	98.8
<b>Eligible women</b>						
Completed (EWC)	97.6	98.4	97.9	97.9	97.8	97.9
Not at home (EWNH)	0.5	0.6	0.3	0.8	0.5	0.5
Refused (EWR)	0.6	0.6	0.3	0.6	1.0	0.6
Partly completed (EWPC)	0.1	0.0	0.1	0.0	0.0	0.0
Incapacitated (EWI)	0.8	0.4	0.7	0.7	0.7	0.7
Other (EWO)	0.4	0.1	0.7	0.0	0.0	0.3
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of women	7,690	3,423	4,221	3,564	3,328	11,113
Eligible women response rate (EWRR) <sup>2</sup>	97.6	98.4	97.9	97.9	97.8	97.9
Overall response rate (ORR) <sup>3</sup>	96.2	97.5	96.9	96.0	97.0	96.6

<sup>1</sup> Using the number of households falling into specific response categories, the household response rate (HRR) is calculated as:

$$\frac{100 * C}{C + HP + P + R + DNF}$$

<sup>2</sup> Using the number of eligible women falling into specific response categories, the eligible woman response rate (EWRR) is calculated as:

$$\frac{100 * EWC}{EWC + EWNH + EWR + EWPC + EWI + EWO}$$

<sup>3</sup> The overall response rate (ORR) is calculated as:

$$ORR = HRR * EWRR/100$$

The estimates from a sample survey are affected by two types of errors: non-sampling errors and sampling errors. Non-sampling errors are the results of mistakes made in implementing data collection and data processing, such as failure to locate and interview the correct household, misunderstanding of the questions on the part of either the interviewer or the respondent, and data entry errors. Although numerous efforts were made during the implementation of the 2007 Jordan Population and Family Health Survey (2007 JPFHS) to minimize this type of error, non-sampling errors are impossible to avoid and difficult to evaluate statistically.

Sampling errors, on the other hand, can be evaluated statistically. The sample of respondents selected in the 2007 JPFHS is only one of many samples that could have been selected from the same population, using the same design and expected size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between all possible samples. Although the degree of variability is not known exactly, it can be estimated from the survey results.

A sampling error is usually measured in terms of the *standard error* for a particular statistic (mean, percentage, etc.), which is the square root of the variance. The standard error can be used to calculate confidence intervals within which the true value for the population can reasonably be assumed to fall. For example, for any given statistic calculated from a sample survey, the value of that statistic will fall within a range of plus or minus two times the standard error of that statistic in 95 percent of all possible samples of identical size and design.

If the sample of respondents had been selected as a simple random sample, it would have been possible to use straightforward formulas for calculating sampling errors. However, the 2007 JPFHS sample is the result of a multi-stage stratified design, and, consequently, it was necessary to use more complex formulae. The computer software used to calculate sampling errors for the 2007 JPFHS is a Macro SAS procedure. This procedure used the Taylor linearization method of 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:

$$SE^2(r) = var(r) = \frac{1-f}{x^2} \sum_{h=1}^H \left[ \frac{m_h}{m_h-1} \left( \sum_{i=1}^{m_h} z_{hi}^2 - \frac{z_h^2}{m_h} \right) \right]$$

in which

$$z_{hi} = y_{hi} - rx_{hi}, \text{ and } z_h = y_h - rx_h$$

where  $h$  represents the stratum which varies from 1 to  $H$ ,  
 $m_h$  is the total number of clusters selected in the  $h^{\text{th}}$  stratum,  
 $y_{hi}$  is the sum of the weighted values of variable  $y$  in the  $i^{\text{th}}$  cluster in the  $h^{\text{th}}$  stratum,  
 $x_{hi}$  is the sum of the weighted number of cases in the  $i^{\text{th}}$  cluster in the  $h^{\text{th}}$  stratum, and  
 $f$  is the overall sampling fraction, which is so small that it is ignored.

The Jackknife repeated replication method derives estimates of complex rates from each of several replications of the parent sample, and calculates standard errors for these estimates using simple formulae. Each replication considers *all but one* clusters in the calculation of the estimates. Pseudo-independent replications are thus created. In the 2007 JPFHS, there were 930 non-empty clusters. Hence, 930 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 930 clusters,  
 $r_{(i)}$  is the estimate computed from the reduced sample of 929 clusters ( $i^{\text{th}}$  cluster excluded),  
and  
 $k$  is the total number of clusters.

In addition to the standard error, the design effect (DEFT) for each estimate is calculated, 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. The relative standard error and confidence limits for the estimates are also calculated.

Sampling errors for the 2007 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, for the three geographical regions, and for each of the 12 governorates. 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.19 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 ( $R \pm 2SE$ ), 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 child-bearing.

The confidence interval (e.g., as calculated for *children ever born to women aged 40-49*) can be interpreted as follows: the overall average from the national sample is 5.307 and its standard error is 0.074. Therefore, to obtain the 95 percent confidence limits, one adds and subtracts twice the standard error to the sample estimate, i.e.,  $5.307 \pm 2 \times 0.074$ . There is a high probability (95 percent) that the *true* average number of children ever born to all women aged 40 to 49 is between 5.159 and 5.455.

For the total sample, the value of the DEFT, averaged over all variables, is 1.6. This means that, due to multi-stage clustering of the sample, the average standard error is increased by a factor of 1.6 over that in an equivalent simple random sample.

Table B.1 List of selected variables for sampling errors, Jordan 2007

Variable	Estimate	Base population
Urban residence	Proportion	Ever-married women
No education	Proportion	Ever-married women
Secondary education or higher	Proportion	Ever-married women
Currently married	Proportion	Ever-married women
Married before age 20	Proportion	Ever-married women
Currently pregnant	Proportion	All women
Children ever born	Mean	All women
Children surviving	Mean	All women
Children ever born to women age 40-49	Mean	All women age 40-49
Knows any contraceptive method	Proportion	Currently married women
Ever used any contraceptive method	Proportion	Currently married women
Currently using any contraceptive method	Proportion	Currently married women
Currently using pill	Proportion	Currently married women
Currently using IUD	Proportion	Currently married women
Currently using female sterilization	Proportion	Currently married women
Currently using periodic abstinence	Proportion	Currently married women
Using public sector source	Proportion	Current users of modern method
Want no more children	Proportion	Currently married women
Want to delay birth at least 2 years	Proportion	Currently married women
Ideal family size	Mean	Ever-married women
Mother completely protected against tetanus	Proportion	Women with at least one live birth in five years before survey
Mother received medical assistance at delivery	Proportion	Births in past 5 years
Had diarrhea in the 2 weeks before survey	Proportion	Children age 0 to 59 months
Treated with oral rehydration salts (ORS)	Proportion	Children with diarrhea in two weeks before interview
Taken to a health provider	Proportion	Children with diarrhea in two weeks before interview
Vaccination card seen	Proportion	Children 12-23 months
Received BCG vaccination	Proportion	Children 12-23 months
Received DPT vaccination (3 doses)	Proportion	Children 12-23 months
Received polio vaccination (3 doses)	Proportion	Children 12-23 months
Received measles vaccination	Proportion	Children 12-23 months
Received all vaccinations (BCG)	Proportion	Children 12-23 months
Total fertility rate (3 years)	Rate	All women
Neonatal mortality	Rate	Children exposed to the risk of mortality
Post-neonatal mortality	Rate	Children exposed to the risk of mortality
Infant mortality	Rate	Children exposed to the risk of mortality
Child mortality	Rate	Children exposed to the risk of mortality
Under-five mortality	Rate	Children exposed to the risk of mortality

Note: Mortality rates are calculated for the past 0-4 years for the national sample and past 0-9 years for regional samples.

Table B.2 Sampling errors for national sample, Jordan 2007

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
Urban residence	0.850	0.003	10876	10876	0.878	0.004	0.844	0.856
No education	0.038	0.003	10876	10876	1.501	0.072	0.033	0.044
Secondary education or higher	0.887	0.005	10876	10876	1.752	0.006	0.876	0.898
Currently married	0.952	0.004	10876	10876	1.927	0.004	0.944	0.960
Married before age 20	0.332	0.007	11437	11391	1.752	0.022	0.318	0.347
Currently pregnant	0.069	0.004	19482	18960	1.476	0.053	0.062	0.077
Children ever born	2.159	0.073	19482	18960	1.215	0.034	2.014	2.305
Children surviving	2.098	0.070	19482	18960	1.212	0.034	1.957	2.239
Children ever born to women age 40-49	5.307	0.074	3274	3348	1.598	0.014	5.159	5.455
Knowing any contraceptive method	0.998	0.001	10360	10354	1.501	0.001	0.997	0.999
Ever used any contraceptive method	0.812	0.007	10360	10354	1.764	0.008	0.798	0.825
Currently using any method	0.571	0.008	10360	10354	1.637	0.014	0.555	0.587
Currently using pill	0.084	0.004	10360	10354	1.639	0.053	0.076	0.093
Currently using IUD	0.223	0.006	10360	10354	1.575	0.029	0.210	0.236
Currently using female sterilization	0.037	0.003	10360	10354	1.596	0.080	0.031	0.043
Currently using periodic abstinence	0.041	0.003	10360	10354	1.575	0.075	0.035	0.047
Using public sector source	0.417	0.015	3954	4200	1.906	0.036	0.387	0.447
Want no more children	0.505	0.007	10360	10354	1.433	0.014	0.491	0.519
Want to delay birth at least 2 years	0.258	0.007	10360	10354	1.591	0.026	0.244	0.272
Ideal family size	3.948	0.036	8613	8946	1.868	0.009	3.875	4.020
Mother completely protected against tetanus	0.271	0.010	6725	6446	1.755	0.036	0.252	0.291
Mother received medical care at birth	0.990	0.002	10426	9864	1.457	0.002	0.987	0.994
Had diarrhea in the 2 weeks before survey	0.160	0.007	10237	9669	1.731	0.043	0.146	0.173
Treated with oral rehydration salts (ORS)	0.198	0.016	1659	1543	1.501	0.082	0.165	0.230
Taken to a health provider	0.554	0.022	1659	1543	1.634	0.039	0.510	0.597
Vaccination card seen	0.903	0.011	1980	1870	1.567	0.012	0.881	0.924
Received BCG vaccination	0.913	0.009	1980	1870	1.379	0.010	0.895	0.931
Received DPT vaccination (3 doses)	0.974	0.006	1980	1870	1.598	0.006	0.963	0.986
Received polio vaccination (3 doses)	0.980	0.005	1980	1870	1.467	0.005	0.970	0.989
Received measles vaccination	0.943	0.007	1980	1870	1.371	0.008	0.929	0.958
Received all vaccinations (BCG)	0.870	0.010	1980	1870	1.335	0.012	0.849	0.891
Total fertility rate (last 3 years)	3.591	0.064	na	53012	1.387	0.018	3.464	3.719
Neonatal mortality (0-4 years)	13.616	2.234	10520	9970	1.697	0.164	9.148	18.084
Post-neonatal mortality (0-4 years)	5.690	1.213	10475	9938	1.613	0.213	3.264	8.116
Infant mortality (0-4 years)	19.306	2.476	10523	9971	1.646	0.128	14.353	24.259
Child mortality (0-4 years)	2.031	0.597	10323	9763	1.346	0.294	0.837	3.225
Under-five mortality (0-4 years)	21.298	2.600	10536	9982	1.626	0.122	16.097	26.499

na = Not applicable

Table B.3 Sampling errors for urban sample, Jordan 2007

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
Urban residence	1.000	0.000	7509	9249	0.000	0.000	1.000	1.000
No education	0.027	0.003	7509	9249	1.428	0.099	0.021	0.032
Secondary education or higher	0.904	0.006	7509	9249	1.722	0.006	0.892	0.916
Currently married	0.952	0.005	7509	9249	1.846	0.005	0.943	0.961
Married before age 20	0.332	0.008	7807	9576	1.665	0.026	0.315	0.349
Currently pregnant	0.070	0.004	13381	15805	1.426	0.063	0.061	0.078
Children ever born	2.165	0.086	13381	15805	1.171	0.040	1.994	2.337
Children surviving	2.106	0.083	13381	15805	1.168	0.039	1.939	2.272
Children ever born to women age 40-49	5.197	0.084	2283	2857	1.540	0.016	5.030	5.365
Knowing any contraceptive method	0.998	0.001	7152	8803	1.503	0.001	0.997	1.000
Ever used any contraceptive method	0.820	0.008	7152	8803	1.705	0.009	0.804	0.835
Currently using any method	0.581	0.009	7152	8803	1.559	0.016	0.562	0.599
Currently using pill	0.087	0.005	7152	8803	1.558	0.060	0.076	0.097
Currently using IUD	0.230	0.007	7152	8803	1.484	0.032	0.215	0.245
Currently using female sterilization	0.037	0.003	7152	8803	1.523	0.092	0.030	0.044
Currently using periodic abstinence	0.042	0.004	7152	8803	1.476	0.083	0.035	0.049
Using public sector source	0.394	0.017	2862	3671	1.822	0.042	0.361	0.428
Want no more children	0.508	0.008	7152	8803	1.350	0.016	0.492	0.524
Want to delay birth at least 2 years	0.253	0.008	7152	8803	1.521	0.031	0.238	0.269
Ideal family size	3.911	0.041	5996	7667	1.759	0.011	3.828	3.993
Mother completely protected against tetanus	0.274	0.011	4563	5417	1.675	0.041	0.252	0.297
Mother received medical care at birth	0.991	0.002	7001	8262	1.426	0.002	0.987	0.995
Had diarrhea in the 2 weeks before survey	0.157	0.008	6879	8096	1.688	0.052	0.140	0.173
Treated with oral rehydration salts (ORS)	0.197	0.019	1100	1269	1.441	0.097	0.159	0.236
Taken to a health provider	0.543	0.026	1100	1269	1.591	0.047	0.492	0.595
Vaccination card seen	0.910	0.012	1323	1564	1.517	0.013	0.885	0.934
Received BCG vaccination	0.927	0.010	1323	1564	1.403	0.011	0.907	0.948
Received DPT vaccination (3 doses)	0.975	0.007	1323	1564	1.560	0.007	0.962	0.989
Received polio vaccination (3 doses)	0.981	0.006	1323	1564	1.444	0.006	0.970	0.992
Received measles vaccination	0.949	0.008	1323	1564	1.358	0.009	0.932	0.966
Received all vaccinations (BCG)	0.890	0.012	1323	1564	1.336	0.013	0.866	0.913
Total fertility rate (last 3 years)	3.571	0.074	na	44166	1.336	0.021	3.423	3.718
Neonatal mortality (0-9 years)	14.921	2.208	13680	15937	1.695	0.148	10.505	19.337
Post-neonatal mortality (0-9 years)	4.722	0.885	13676	15926	1.474	0.187	2.953	6.492
Infant mortality (0-9 years)	19.644	2.311	13688	15940	1.617	0.118	15.022	24.266
Child mortality (0-9 years)	1.931	0.506	13505	15732	1.379	0.262	0.919	2.943
Under-five mortality (0-9 years)	21.537	2.376	13698	15953	1.591	0.110	16.784	26.289

na = Not applicable

Table B.4 Sampling errors for rural sample, Jordan 2007

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
Urban residence	0.000	0.000	3367	1627	na	na	0.000	0.000
No education	0.104	0.010	3367	1627	1.975	0.100	0.083	0.125
Secondary education or higher	0.791	0.012	3367	1627	1.736	0.015	0.766	0.815
Currently married	0.953	0.005	3367	1627	1.352	0.005	0.944	0.963
Married before age 20	0.335	0.012	3773	1813	1.601	0.035	0.312	0.359
Currently pregnant	0.068	0.005	6569	3157	1.140	0.073	0.058	0.077
Children ever born	2.130	0.124	6569	3157	1.141	0.058	1.882	2.377
Children surviving	2.057	0.119	6569	3157	1.142	0.058	1.819	2.296
Children ever born to women age 40-49	5.855	0.119	1015	499	1.354	0.020	5.617	6.092
Knowing any contraceptive method	0.997	0.001	3208	1551	0.889	0.001	0.996	0.999
Ever used any contraceptive method	0.768	0.011	3208	1551	1.428	0.014	0.746	0.789
Currently using any method	0.516	0.013	3208	1551	1.457	0.025	0.490	0.542
Currently using pill	0.071	0.005	3208	1551	1.107	0.071	0.061	0.081
Currently using IUD	0.182	0.010	3208	1551	1.413	0.053	0.162	0.201
Currently using female sterilization	0.036	0.004	3208	1551	1.241	0.113	0.028	0.044
Currently using periodic abstinence	0.035	0.005	3208	1551	1.523	0.141	0.025	0.045
Using public sector source	0.576	0.022	1092	529	1.439	0.037	0.533	0.619
Want no more children	0.489	0.013	3208	1551	1.420	0.026	0.464	0.514
Want to delay birth at least 2 years	0.284	0.010	3208	1551	1.313	0.037	0.263	0.305
Ideal family size	4.168	0.055	2617	1279	1.641	0.013	4.058	4.278
Mother completely protected against tetanus	0.256	0.014	2162	1029	1.450	0.053	0.229	0.284
Mother received medical care at birth	0.986	0.003	3425	1601	1.211	0.003	0.981	0.992
Had diarrhea in the 2 weeks before survey	0.174	0.009	3358	1572	1.181	0.049	0.157	0.192
Treated with oral rehydration salts (ORS)	0.199	0.023	559	274	1.294	0.115	0.153	0.245
Taken to a health provider	0.603	0.029	559	274	1.271	0.048	0.545	0.661
Vaccination card seen	0.868	0.020	657	306	1.491	0.023	0.827	0.908
Received BCG vaccination	0.839	0.016	657	306	1.066	0.019	0.807	0.870
Received DPT vaccination (3 doses)	0.970	0.008	657	306	1.180	0.008	0.954	0.986
Received polio vaccination (3 doses)	0.972	0.008	657	306	1.197	0.008	0.956	0.988
Received measles vaccination	0.915	0.013	657	306	1.176	0.014	0.889	0.941
Received all vaccinations (BCG)	0.771	0.020	657	306	1.163	0.025	0.732	0.810
Total fertility rate (last 3 years)	3.727	0.080	na	8827	1.162	0.022	3.567	3.888
Neonatal mortality (0-9 years)	13.312	1.687	6690	3127	1.056	0.127	9.938	16.687
Post-neonatal mortality (0-9 years)	9.267	1.694	6644	3107	1.437	0.183	5.879	12.654
Infant mortality (0-9 years)	22.579	2.295	6690	3127	1.174	0.102	17.988	27.170
Child mortality (0-9 years)	4.376	0.974	6564	3063	1.182	0.223	2.428	6.325
Under-five mortality (0-9 years)	26.857	2.466	6696	3130	1.146	0.092	21.925	31.788

na = Not applicable

Table B.5 Sampling errors for Central sample, Jordan 2007

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
Urban residence	0.927	0.003	4132	6993	0.705	0.003	0.921	0.932
No education	0.028	0.003	4132	6993	1.256	0.116	0.021	0.034
Secondary education or higher	0.905	0.007	4132	6993	1.531	0.008	0.891	0.919
Currently married	0.952	0.006	4132	6993	1.683	0.006	0.941	0.963
Married before age 20	0.322	0.010	4305	7236	1.466	0.031	0.302	0.342
Currently pregnant	0.069	0.005	7562	11844	1.135	0.072	0.059	0.079
Children ever born	2.142	0.088	7562	11844	0.818	0.041	1.967	2.318
Children surviving	2.088	0.085	7562	11844	0.812	0.041	1.918	2.258
Children ever born to women age 40-49	5.080	0.098	1267	2170	1.377	0.019	4.884	5.275
Knowing any contraceptive method	0.998	0.001	3929	6658	1.253	0.001	0.996	1.000
Ever used any contraceptive method	0.814	0.010	3929	6658	1.569	0.012	0.794	0.833
Currently using any method	0.584	0.011	3929	6658	1.419	0.019	0.562	0.607
Currently using pill	0.093	0.006	3929	6658	1.368	0.068	0.080	0.105
Currently using IUD	0.233	0.009	3929	6658	1.342	0.039	0.215	0.251
Currently using female sterilization	0.037	0.004	3929	6658	1.396	0.113	0.029	0.046
Currently using periodic abstinence	0.041	0.004	3929	6658	1.340	0.104	0.032	0.049
Using public sector source	0.361	0.020	1564	2827	1.625	0.055	0.322	0.401
Want no more children	0.516	0.010	3929	6658	1.206	0.019	0.497	0.535
Want to delay birth at least 2 years	0.241	0.009	3929	6658	1.354	0.038	0.223	0.260
Ideal family size	3.872	0.050	3297	5872	1.568	0.013	3.771	3.972
Mother completely protected against tetanus	0.243	0.014	2450	3987	1.559	0.056	0.216	0.271
Mother received medical care at birth	0.991	0.002	3786	6127	1.149	0.002	0.987	0.995
Had diarrhea in the 2 weeks before survey	0.133	0.010	3720	6003	1.585	0.073	0.114	0.152
Treated with oral rehydration salts (ORS)	0.239	0.029	430	798	1.372	0.120	0.182	0.296
Taken to a health provider	0.542	0.037	430	798	1.548	0.068	0.468	0.617
Vaccination card seen	0.914	0.015	700	1165	1.419	0.017	0.884	0.944
Received BCG vaccination	0.934	0.012	700	1165	1.292	0.013	0.909	0.959
Received DPT vaccination (3 doses)	0.975	0.009	700	1165	1.464	0.009	0.958	0.992
Received polio vaccination (3 doses)	0.983	0.007	700	1165	1.400	0.007	0.970	0.997
Received measles vaccination	0.949	0.011	700	1165	1.252	0.011	0.928	0.970
Received all vaccinations (BCG)	0.892	0.014	700	1165	1.214	0.016	0.863	0.921
Total fertility rate (last 3 years)	3.503	0.087	na	33249	1.146	0.025	3.329	3.678
Neonatal mortality (0-9 years)	14.361	2.797	7411	11829	1.537	0.195	8.768	19.954
Post-neonatal mortality (0-9 years)	4.573	1.112	7399	11807	1.406	0.243	2.349	6.797
Infant mortality (0-9 years)	18.934	2.914	7412	11830	1.482	0.154	13.106	24.762
Child mortality (0-9 years)	1.829	0.623	7290	11669	1.280	0.341	0.582	3.076
Under-five mortality (0-9 years)	20.728	2.986	7418	11840	1.446	0.144	14.755	26.700

na = Not applicable

Table B.6 Sampling errors for North sample, Jordan 2007

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
Urban residence	0.756	0.006	3490	2975	0.871	0.008	0.744	0.769
No education	0.044	0.006	3490	2975	1.727	0.136	0.032	0.056
Secondary education or higher	0.874	0.009	3490	2975	1.651	0.011	0.856	0.893
Currently married	0.951	0.006	3490	2975	1.600	0.006	0.939	0.963
Married before age 20	0.357	0.013	3646	3137	1.757	0.037	0.331	0.384
Currently pregnant	0.070	0.007	6403	5382	1.549	0.093	0.057	0.083
Children ever born	2.202	0.148	6403	5382	1.499	0.067	1.905	2.499
Children surviving	2.130	0.144	6403	5382	1.502	0.067	1.842	2.417
Children ever born to women age 40-49	5.716	0.135	1000	885	1.522	0.024	5.446	5.987
Knowing any contraceptive method	1.000	0.000	3330	2830	0.685	0.000	0.999	1.000
Ever used any contraceptive method	0.814	0.009	3330	2830	1.335	0.011	0.796	0.832
Currently using any method	0.552	0.012	3330	2830	1.400	0.022	0.528	0.577
Currently using pill	0.064	0.006	3330	2830	1.522	0.100	0.052	0.077
Currently using IUD	0.212	0.010	3330	2830	1.357	0.045	0.193	0.231
Currently using female sterilization	0.034	0.004	3330	2830	1.350	0.124	0.026	0.043
Currently using periodic abstinence	0.039	0.005	3330	2830	1.497	0.129	0.029	0.049
Using public sector source	0.492	0.024	1239	1048	1.664	0.048	0.445	0.540
Want no more children	0.472	0.012	3330	2830	1.381	0.025	0.448	0.496
Want to delay birth at least 2 years	0.296	0.012	3330	2830	1.509	0.040	0.272	0.320
Ideal family size	4.132	0.056	2663	2318	1.643	0.014	4.019	4.245
Mother completely protected against tetanus	0.328	0.015	2241	1894	1.535	0.047	0.298	0.359
Mother received medical care at birth	0.990	0.004	3476	2864	1.739	0.004	0.982	0.997
Had diarrhea in the 2 weeks before survey	0.205	0.012	3415	2811	1.571	0.058	0.181	0.229
Treated with oral rehydration salts (ORS)	0.150	0.018	646	576	1.190	0.117	0.115	0.185
Taken to a health provider	0.552	0.027	646	576	1.322	0.048	0.498	0.605
Vaccination card seen	0.880	0.017	655	535	1.328	0.020	0.845	0.914
Received BCG vaccination	0.939	0.013	655	535	1.395	0.014	0.912	0.966
Received DPT vaccination (3 doses)	0.979	0.007	655	535	1.238	0.007	0.965	0.993
Received polio vaccination (3 doses)	0.979	0.007	655	535	1.238	0.007	0.965	0.993
Received measles vaccination	0.949	0.011	655	535	1.207	0.011	0.928	0.970
Received all vaccinations (BCG)	0.896	0.016	655	535	1.297	0.018	0.865	0.928
Total fertility rate (last 3 years)	3.809	0.106	na	14906	1.377	0.028	3.598	4.021
Neonatal mortality (0-9 years)	14.088	2.326	6756	5524	1.472	0.165	9.435	18.740
Post-neonatal mortality (0-9 years)	6.463	1.303	6737	5521	1.282	0.202	3.857	9.069
Infant mortality (0-9 years)	20.551	2.627	6758	5525	1.403	0.128	15.297	25.805
Child mortality (0-9 years)	2.408	0.719	6640	5434	1.153	0.298	0.970	3.845
Under-five mortality (0-9 years)	22.909	2.763	6765	5531	1.404	0.121	17.383	28.435

na = Not applicable

Table B.7 Sampling errors for South sample, Jordan 2007

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
Urban residence	0.572	0.010	3254	908	1.123	0.017	0.552	0.591
No education	0.099	0.009	3254	908	1.762	0.093	0.081	0.118
Secondary education or higher	0.794	0.014	3254	908	1.949	0.017	0.767	0.822
Currently married	0.955	0.004	3254	908	1.067	0.004	0.947	0.963
Married before age 20	0.330	0.011	3638	1013	1.444	0.033	0.308	0.351
Currently pregnant	0.069	0.005	6248	1742	1.082	0.067	0.060	0.078
Children ever born	2.134	0.113	6248	1742	1.078	0.053	1.907	2.361
Children surviving	2.056	0.109	6248	1742	1.079	0.053	1.837	2.274
Children ever born to women age 40-49	5.749	0.120	1033	293	1.374	0.021	5.510	5.988
Knowing any contraceptive method	0.997	0.001	3101	867	0.946	0.001	0.995	0.999
Ever used any contraceptive method	0.794	0.009	3101	867	1.174	0.011	0.777	0.811
Currently using any method	0.530	0.012	3101	867	1.387	0.023	0.505	0.555
Currently using pill	0.087	0.006	3101	867	1.263	0.074	0.074	0.100
Currently using IUD	0.177	0.009	3101	867	1.365	0.053	0.159	0.196
Currently using female sterilization	0.046	0.004	3101	867	1.056	0.086	0.038	0.054
Currently using periodic abstinence	0.051	0.005	3101	867	1.226	0.095	0.041	0.060
Using public sector source	0.665	0.019	1151	324	1.371	0.029	0.627	0.703
Want no more children	0.529	0.010	3101	867	1.133	0.019	0.509	0.549
Want to delay birth at least 2 years	0.263	0.010	3101	867	1.214	0.036	0.244	0.282
Ideal family size	3.971	0.038	2653	757	1.206	0.009	3.896	4.047
Mother completely protected against tetanus	0.276	0.013	2034	564	1.329	0.048	0.250	0.302
Mother received medical care at birth	0.986	0.003	3164	873	1.163	0.003	0.981	0.992
Had diarrhea in the 2 weeks before survey	0.197	0.009	3102	854	1.166	0.046	0.179	0.215
Treated with oral rehydration salts (ORS)	0.167	0.019	583	168	1.159	0.111	0.130	0.205
Taken to a health provider	0.615	0.022	583	168	1.026	0.036	0.571	0.659
Vaccination card seen	0.898	0.015	625	170	1.181	0.016	0.869	0.927
Received BCG vaccination	0.688	0.025	625	170	1.327	0.037	0.638	0.739
Received DPT vaccination (3 doses)	0.955	0.010	625	170	1.174	0.011	0.935	0.975
Received polio vaccination (3 doses)	0.958	0.010	625	170	1.199	0.011	0.937	0.978
Received measles vaccination	0.890	0.014	625	170	1.091	0.016	0.862	0.918
Received all vaccinations (BCG)	0.635	0.025	625	170	1.271	0.039	0.585	0.686
Total fertility rate (last 3 years)	3.612	0.087	na	4865	1.111	0.024	3.438	3.785
Neonatal mortality (0-9 years)	18.556	2.335	6203	1711	1.207	0.126	13.886	23.227
Post-neonatal mortality (0-9 years)	8.397	1.212	6184	1705	1.014	0.144	5.974	10.821
Infant mortality (0-9 years)	26.954	2.487	6208	1712	1.090	0.092	21.980	31.928
Child mortality (0-9 years)	5.572	1.189	6139	1691	1.199	0.213	3.194	7.950
Under-five mortality (0-9 years)	32.376	2.687	6211	1712	1.084	0.083	27.001	37.750

na = Not applicable

Table B.8 Sampling errors for Amman sample, Jordan 2007

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
Urban residence	0.950	0.002	1341	4442	0.415	0.003	0.945	0.955
No education	0.023	0.004	1341	4442	1.068	0.189	0.014	0.032
Secondary education or higher	0.915	0.010	1341	4442	1.280	0.011	0.895	0.934
Currently married	0.955	0.008	1341	4442	1.413	0.008	0.939	0.971
Married before age 20	0.315	0.015	1386	4600	1.225	0.047	0.285	0.344
Currently pregnant	0.066	0.007	2654	7593	0.884	0.105	0.053	0.080
Children ever born	2.053	0.121	2654	7593	0.603	0.059	1.811	2.295
Children surviving	1.995	0.117	2654	7593	0.598	0.058	1.761	2.228
Children ever born to women age 40-49	4.964	0.142	406	1362	1.136	0.029	4.679	5.248
Knowing any contraceptive method	0.998	0.001	1277	4242	1.074	0.001	0.995	1.001
Ever used any contraceptive method	0.833	0.014	1277	4242	1.344	0.017	0.805	0.861
Currently using any method	0.590	0.016	1277	4242	1.166	0.027	0.558	0.622
Currently using pill	0.094	0.009	1277	4242	1.133	0.098	0.076	0.113
Currently using IUD	0.233	0.013	1277	4242	1.077	0.055	0.207	0.258
Currently using female sterilization	0.041	0.006	1277	4242	1.134	0.155	0.028	0.053
Currently using periodic abstinence	0.043	0.006	1277	4242	1.101	0.145	0.031	0.056
Using public sector source	0.302	0.027	512	1808	1.340	0.090	0.247	0.356
Want no more children	0.509	0.013	1277	4242	0.964	0.026	0.483	0.536
Want to delay birth at least 2 years	0.227	0.013	1277	4242	1.148	0.059	0.200	0.254
Ideal family size	3.756	0.071	1174	3929	1.273	0.019	3.614	3.898
Mother completely protected against tetanus	0.228	0.020	775	2469	1.327	0.089	0.187	0.269
Mother received medical care at birth	0.992	0.003	1199	3784	0.982	0.003	0.987	0.997
Had diarrhea in the 2 weeks before survey	0.157	0.015	1173	3692	1.292	0.095	0.127	0.186
Treated with oral rehydration salts (ORS)	0.254	0.038	185	578	1.084	0.149	0.178	0.329
Taken to a health provider	0.530	0.048	185	578	1.243	0.091	0.433	0.627
Vaccination card seen	0.885	0.022	243	755	1.065	0.025	0.840	0.930
Received BCG vaccination	0.948	0.017	243	755	1.125	0.018	0.914	0.981
Received DPT vaccination (3 doses)	0.967	0.013	243	755	1.097	0.013	0.941	0.993
Received polio vaccination (3 doses)	0.980	0.010	243	755	1.068	0.010	0.960	1.000
Received measles vaccination	0.943	0.015	243	755	0.981	0.016	0.913	0.973
Received all vaccinations (BCG)	0.900	0.020	243	755	0.997	0.022	0.861	0.940
Total fertility rate (last 3 years)	3.358	0.119	na	21865	0.935	0.035	3.121	3.596
Neonatal mortality (0-9 years)	17.504	4.456	2278	7185	1.188	0.255	8.591	26.417
Post-neonatal mortality (0-9 years)	4.889	1.729	2265	7161	1.154	0.354	1.430	8.348
Infant mortality (0-9 years)	22.393	4.606	2278	7185	1.152	0.206	13.182	31.604
Child mortality (0-9 years)	1.877	0.965	2241	7071	1.071	0.514	0.000	3.807
Under-five mortality (0-9 years)	24.228	4.711	2280	7193	1.124	0.194	14.806	33.650

na = Not applicable

Table B.9 Sampling errors for Balqa sample, Jordan 2007

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
Urban residence	0.755	0.018	822	645	1.169	0.023	0.720	0.790
No education	0.064	0.012	822	645	1.456	0.195	0.039	0.089
Secondary education or higher	0.849	0.021	822	645	1.679	0.025	0.807	0.891
Currently married	0.961	0.008	822	645	1.115	0.008	0.946	0.976
Married before age 20	0.283	0.016	912	718	1.127	0.057	0.250	0.315
Currently pregnant	0.069	0.007	1509	1153	0.974	0.106	0.054	0.084
Children ever born	2.191	0.168	1509	1153	1.070	0.077	1.854	2.527
Children surviving	2.128	0.163	1509	1153	1.071	0.077	1.801	2.454
Children ever born to women age 40-49	5.280	0.181	267	210	1.152	0.034	4.918	5.642
Knowing any contraceptive method	0.998	0.001	789	620	0.913	0.001	0.995	1.001
Ever used any contraceptive method	0.785	0.018	789	620	1.211	0.023	0.749	0.820
Currently using any method	0.546	0.021	789	620	1.189	0.039	0.504	0.588
Currently using pill	0.071	0.009	789	620	1.030	0.133	0.052	0.090
Currently using IUD	0.192	0.015	789	620	1.047	0.077	0.163	0.221
Currently using female sterilization	0.051	0.008	789	620	1.082	0.166	0.034	0.068
Currently using periodic abstinence	0.065	0.009	789	620	1.065	0.144	0.046	0.084
Using public sector source	0.537	0.036	290	229	1.242	0.068	0.464	0.610
Want no more children	0.509	0.022	789	620	1.211	0.042	0.466	0.552
Want to delay birth at least 2 years	0.247	0.015	789	620	0.961	0.060	0.217	0.276
Ideal family size	4.169	0.078	622	489	1.246	0.019	4.013	4.325
Mother completely protected against tetanus	0.277	0.023	506	396	1.170	0.084	0.230	0.324
Mother received medical care at birth	0.989	0.005	786	615	1.070	0.005	0.979	1.000
Had diarrhea in the 2 weeks before survey	0.114	0.015	773	605	1.150	0.129	0.085	0.144
Treated with oral rehydration salts (ORS)	0.248	0.051	91	69	1.012	0.208	0.145	0.351
Taken to a health provider	0.527	0.051	91	69	0.885	0.097	0.425	0.628
Vaccination card seen	0.962	0.016	136	108	0.974	0.017	0.930	0.994
Received BCG vaccination	0.925	0.025	136	108	1.131	0.027	0.874	0.976
Received DPT vaccination (3 doses)	1.000	0.000	136	108	na	0.000	1.000	1.000
Received polio vaccination (3 doses)	1.000	0.000	136	108	na	0.000	1.000	1.000
Received measles vaccination	0.962	0.016	136	108	0.991	0.017	0.930	0.995
Received all vaccinations (BCG)	0.896	0.028	136	108	1.067	0.031	0.840	0.951
Total fertility rate (last 3 years)	3.665	0.148	na	3217	0.996	0.040	3.370	3.960
Neonatal mortality (0-9 years)	13.595	3.173	1559	1219	0.913	0.233	7.248	19.942
Post-neonatal mortality (0-9 years)	4.898	1.883	1558	1220	1.095	0.384	1.132	8.664
Infant mortality (0-9 years)	18.493	3.728	1560	1220	0.981	0.202	11.036	25.950
Child mortality (0-9 years)	5.605	2.054	1531	1200	0.996	0.366	1.498	9.712
Under-five mortality (0-9 years)	23.994	4.288	1562	1221	1.019	0.179	15.418	32.571

na = Not applicable

Table B.10 Sampling errors for Zarqa sample, Jordan 2007

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
Urban residence	0.964	0.004	1076	1645	0.744	0.004	0.956	0.973
No education	0.020	0.004	1076	1645	1.029	0.221	0.011	0.028
Secondary education or higher	0.909	0.011	1076	1645	1.224	0.012	0.887	0.930
Currently married	0.941	0.009	1076	1645	1.288	0.010	0.923	0.960
Married before age 20	0.361	0.014	1068	1641	0.996	0.039	0.333	0.389
Currently pregnant	0.076	0.008	1847	2655	0.979	0.111	0.059	0.093
Children ever born	2.362	0.163	1847	2655	0.803	0.069	2.036	2.689
Children surviving	2.324	0.160	1847	2655	0.802	0.069	2.003	2.645
Children ever born to women age 40-49	5.292	0.147	332	521	1.076	0.028	4.998	5.586
Knowing any contraceptive method	0.999	0.001	1015	1548	1.058	0.001	0.997	1.001
Ever used any contraceptive method	0.786	0.015	1015	1548	1.200	0.020	0.755	0.817
Currently using any method	0.592	0.017	1015	1548	1.113	0.029	0.558	0.626
Currently using pill	0.097	0.009	1015	1548	0.943	0.090	0.080	0.115
Currently using IUD	0.256	0.016	1015	1548	1.168	0.062	0.224	0.288
Currently using female sterilization	0.023	0.004	1015	1548	0.952	0.196	0.014	0.032
Currently using periodic abstinence	0.022	0.004	1015	1548	0.968	0.202	0.013	0.031
Using public sector source	0.455	0.031	442	696	1.300	0.068	0.393	0.517
Want no more children	0.540	0.016	1015	1548	1.014	0.029	0.508	0.572
Want to delay birth at least 2 years	0.267	0.013	1015	1548	0.965	0.050	0.240	0.294
Ideal family size	4.148	0.063	809	1249	1.101	0.015	4.021	4.274
Mother completely protected against tetanus	0.260	0.020	633	966	1.164	0.078	0.219	0.300
Mother received medical care at birth	0.990	0.004	974	1486	1.010	0.004	0.983	0.997
Had diarrhea in the 2 weeks before survey	0.089	0.010	965	1469	0.962	0.108	0.070	0.108
Treated with oral rehydration salts (ORS)	0.169	0.044	86	131	1.026	0.261	0.081	0.257
Taken to a health provider	0.605	0.070	86	131	1.206	0.116	0.464	0.745
Vaccination card seen	0.969	0.017	175	260	1.309	0.018	0.934	1.004
Received BCG vaccination	0.906	0.025	175	260	1.052	0.028	0.856	0.956
Received DPT vaccination (3 doses)	0.987	0.009	175	260	1.065	0.009	0.968	1.006
Received polio vaccination (3 doses)	0.987	0.009	175	260	1.065	0.009	0.968	1.006
Received measles vaccination	0.958	0.016	175	260	1.025	0.016	0.926	0.990
Received all vaccinations (BCG)	0.873	0.027	175	260	1.026	0.031	0.819	0.928
Total fertility rate (last 3 years)	3.778	0.174	na	7388	1.032	0.046	3.431	4.125
Neonatal mortality (0-9 years)	7.434	2.308	1923	2942	1.180	0.310	2.818	12.050
Post-neonatal mortality (0-9 years)	2.717	1.213	1923	2943	1.057	0.447	0.290	5.143
Infant mortality (0-9 years)	10.150	2.636	1923	2942	1.194	0.260	4.878	15.422
Child mortality (0-9 years)	0.000	0.000	1912	2930	na	na	0.000	0.000
Under-five mortality (0-9 years)	10.150	2.636	1923	2942	1.194	0.260	4.878	15.422

na = Not applicable

Table B.11 Sampling errors for Madaba sample, Jordan 2007

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
Urban residence	0.713	0.013	893	262	0.835	0.018	0.688	0.739
No education	0.068	0.011	893	262	1.329	0.164	0.046	0.091
Secondary education or higher	0.842	0.017	893	262	1.354	0.020	0.808	0.875
Currently married	0.948	0.009	893	262	1.174	0.009	0.931	0.966
Married before age 20	0.317	0.013	952	279	0.920	0.042	0.290	0.344
Currently pregnant	0.064	0.007	1628	476	0.938	0.115	0.049	0.079
Children ever born	2.083	0.172	1628	476	0.868	0.082	1.740	2.427
Children surviving	2.029	0.168	1628	476	0.872	0.083	1.693	2.365
Children ever born to women age 40-49	5.084	0.174	267	78	1.069	0.034	4.736	5.431
Knowing any contraceptive method	0.987	0.005	848	248	1.204	0.005	0.977	0.996
Ever used any contraceptive method	0.728	0.018	848	248	1.165	0.024	0.693	0.764
Currently using any method	0.530	0.019	848	248	1.101	0.036	0.493	0.568
Currently using pill	0.090	0.010	848	248	1.045	0.114	0.069	0.110
Currently using IUD	0.204	0.015	848	248	1.057	0.072	0.175	0.233
Currently using female sterilization	0.033	0.006	848	248	1.020	0.191	0.020	0.045
Currently using periodic abstinence	0.047	0.007	848	248	0.987	0.152	0.033	0.062
Using public sector source	0.374	0.033	320	94	1.217	0.088	0.308	0.440
Want no more children	0.501	0.018	848	248	1.021	0.035	0.466	0.536
Want to delay birth at least 2 years	0.306	0.016	848	248	1.031	0.053	0.273	0.339
Ideal family size	3.702	0.103	692	204	1.407	0.028	3.496	3.907
Mother completely protected against tetanus	0.306	0.024	536	157	1.224	0.080	0.258	0.355
Mother received medical care at birth	0.996	0.002	827	242	1.067	0.002	0.991	1.001
Had diarrhea in the 2 weeks before survey	0.086	0.012	809	237	1.091	0.139	0.062	0.109
Treated with oral rehydration salts (ORS)	0.221	0.057	68	20	1.069	0.256	0.108	0.335
Taken to a health provider	0.552	0.070	68	20	1.065	0.128	0.411	0.692
Vaccination card seen	0.968	0.014	146	43	0.961	0.015	0.940	0.996
Received BCG vaccination	0.881	0.026	146	43	0.962	0.029	0.829	0.932
Received DPT vaccination (3 doses)	0.987	0.009	146	43	0.980	0.009	0.968	1.005
Received polio vaccination (3 doses)	0.987	0.009	146	43	0.980	0.009	0.968	1.005
Received measles vaccination	0.954	0.019	146	43	1.072	0.020	0.917	0.991
Received all vaccinations (BCG)	0.862	0.030	146	43	1.051	0.035	0.801	0.922
Total fertility rate (last 3 years)	3.571	0.157	na	1404	0.989	0.044	3.257	3.885
Neonatal mortality (0-9 years)	11.821	3.135	1651	483	0.943	0.265	5.550	18.091
Post-neonatal mortality (0-9 years)	10.462	2.759	1653	484	1.101	0.264	4.944	15.979
Infant mortality (0-9 years)	22.282	4.248	1651	483	1.049	0.191	13.786	30.778
Child mortality (0-9 years)	3.084	1.369	1606	469	0.972	0.444	0.346	5.822
Under-five mortality (0-9 years)	25.298	4.607	1653	484	1.055	0.182	16.084	34.512

na = Not applicable

Table B.12 Sampling errors for Irbid sample, Jordan 2007

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
Urban residence	0.853	0.008	896	1993	0.692	0.010	0.837	0.870
No education	0.031	0.008	896	1993	1.334	0.248	0.016	0.047
Secondary education or higher	0.899	0.013	896	1993	1.264	0.014	0.873	0.924
Currently married	0.949	0.008	896	1993	1.154	0.009	0.932	0.966
Married before age 20	0.346	0.019	952	2118	1.284	0.054	0.309	0.384
Currently pregnant	0.070	0.009	1616	3598	1.100	0.130	0.052	0.088
Children ever born	2.165	0.198	1616	3598	1.033	0.091	1.769	2.560
Children surviving	2.096	0.192	1616	3598	1.035	0.091	1.713	2.479
Children ever born to women age 40-49	5.514	0.185	276	619	1.116	0.033	5.145	5.884
Knowing any contraceptive method	1.000	0.000	851	1892	0.000	0.000	1.000	1.000
Ever used any contraceptive method	0.826	0.013	851	1892	0.978	0.015	0.801	0.851
Currently using any method	0.562	0.017	851	1892	1.010	0.031	0.527	0.596
Currently using pill	0.064	0.009	851	1892	1.121	0.147	0.045	0.082
Currently using IUD	0.215	0.014	851	1892	0.970	0.064	0.188	0.242
Currently using female sterilization	0.035	0.006	851	1892	0.976	0.177	0.022	0.047
Currently using periodic abstinence	0.047	0.007	851	1892	1.013	0.157	0.032	0.061
Using public sector source	0.511	0.034	318	710	1.193	0.066	0.444	0.578
Want no more children	0.482	0.017	851	1892	1.000	0.036	0.448	0.517
Want to delay birth at least 2 years	0.285	0.017	851	1892	1.110	0.060	0.250	0.319
Ideal family size	4.068	0.080	713	1579	1.183	0.020	3.907	4.229
Mother completely protected against tetanus	0.339	0.022	564	1261	1.110	0.065	0.295	0.384
Mother received medical care at birth	0.990	0.006	832	1861	1.225	0.006	0.979	1.001
Had diarrhea in the 2 weeks before survey	0.216	0.018	817	1826	1.150	0.082	0.181	0.251
Treated with oral rehydration salts (ORS)	0.138	0.023	177	395	0.860	0.168	0.092	0.184
Taken to a health provider	0.521	0.037	177	395	0.954	0.072	0.446	0.595
Vaccination card seen	0.877	0.025	156	348	0.951	0.029	0.827	0.927
Received BCG vaccination	0.953	0.019	156	348	1.116	0.020	0.915	0.991
Received DPT vaccination (3 doses)	0.987	0.010	156	348	1.059	0.010	0.967	1.006
Received polio vaccination (3 doses)	0.987	0.010	156	348	1.059	0.010	0.967	1.006
Received measles vaccination	0.968	0.014	156	348	1.015	0.015	0.939	0.997
Received all vaccinations (BCG)	0.924	0.022	156	348	1.038	0.024	0.880	0.968
Total fertility rate (last 3 years)	3.779	0.148	na	9933	1.021	0.039	3.482	4.076
Neonatal mortality (0-9 years)	14.485	3.487	1599	3565	1.075	0.241	7.511	21.459
Post-neonatal mortality (0-9 years)	4.381	1.812	1599	3568	1.096	0.414	0.758	8.005
Infant mortality (0-9 years)	18.866	3.903	1599	3565	1.058	0.207	11.060	26.672
Child mortality (0-9 years)	1.779	1.016	1575	3514	0.942	0.571	0.000	3.810
Under-five mortality (0-9 years)	20.611	4.092	1601	3569	1.069	0.199	12.426	28.796

na = Not applicable

Table B.13 Sampling errors for Mafraq sample, Jordan 2007

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
Urban residence	0.418	0.012	886	460	0.744	0.030	0.393	0.442
No education	0.109	0.018	886	460	1.729	0.167	0.072	0.145
Secondary education or higher	0.746	0.021	886	460	1.460	0.029	0.703	0.788
Currently married	0.958	0.006	886	460	0.869	0.006	0.946	0.969
Married before age 20	0.397	0.018	904	469	1.160	0.045	0.361	0.432
Currently pregnant	0.072	0.008	1556	818	1.037	0.110	0.056	0.088
Children ever born	2.309	0.156	1556	818	0.951	0.068	1.997	2.620
Children surviving	2.223	0.151	1556	818	0.955	0.068	1.922	2.525
Children ever born to women age 40-49	6.246	0.208	239	123	1.100	0.033	5.830	6.662
Knowing any contraceptive method	0.999	0.001	849	441	0.953	0.001	0.997	1.001
Ever used any contraceptive method	0.768	0.016	849	441	1.078	0.020	0.736	0.799
Currently using any method	0.495	0.020	849	441	1.152	0.040	0.455	0.534
Currently using pill	0.074	0.008	849	441	0.858	0.104	0.059	0.090
Currently using IUD	0.172	0.014	849	441	1.105	0.083	0.143	0.200
Currently using female sterilization	0.020	0.005	849	441	1.031	0.249	0.010	0.030
Currently using periodic abstinence	0.024	0.005	849	441	1.037	0.227	0.013	0.035
Using public sector source	0.492	0.040	274	142	1.316	0.081	0.412	0.572
Want no more children	0.435	0.017	849	441	0.993	0.039	0.401	0.469
Want to delay birth at least 2 years	0.316	0.016	849	441	1.028	0.052	0.283	0.348
Ideal family size	4.245	0.074	668	347	1.092	0.017	4.098	4.392
Mother completely protected against tetanus	0.195	0.019	575	298	1.152	0.098	0.157	0.233
Mother received medical care at birth	0.982	0.006	924	479	1.268	0.006	0.970	0.993
Had diarrhea in the 2 weeks before survey	0.199	0.016	902	468	1.087	0.082	0.167	0.232
Treated with oral rehydration salts (ORS)	0.154	0.036	180	93	1.127	0.234	0.082	0.226
Taken to a health provider	0.644	0.040	180	93	1.045	0.063	0.563	0.725
Vaccination card seen	0.861	0.029	166	85	1.062	0.033	0.803	0.918
Received BCG vaccination	0.902	0.026	166	85	1.128	0.029	0.849	0.954
Received DPT vaccination (3 doses)	0.966	0.015	166	85	1.036	0.015	0.936	0.995
Received polio vaccination (3 doses)	0.966	0.015	166	85	1.036	0.015	0.936	0.995
Received measles vaccination	0.905	0.025	166	85	1.067	0.027	0.856	0.954
Received all vaccinations (BCG)	0.823	0.031	166	85	1.034	0.038	0.761	0.885
Total fertility rate (last 3 years)	3.970	0.182	na	2327	1.055	0.046	3.605	4.335
Neonatal mortality (0-9 years)	15.314	2.765	1809	938	0.937	0.181	9.785	20.844
Post-neonatal mortality (0-9 years)	14.352	2.518	1803	935	0.903	0.175	9.317	19.388
Infant mortality (0-9 years)	29.667	3.315	1809	938	0.831	0.112	23.036	36.298
Child mortality (0-9 years)	2.331	1.069	1774	918	0.980	0.459	0.192	4.469
Under-five mortality (0-9 years)	31.928	3.379	1811	939	0.829	0.106	25.170	38.687

na = Not applicable

Table B.14 Sampling errors for Jarash sample, Jordan 2007

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
Urban residence	0.631	0.012	860	293	0.735	0.019	0.607	0.655
No education	0.041	0.008	860	293	1.144	0.188	0.026	0.057
Secondary education or higher	0.876	0.011	860	293	1.017	0.013	0.853	0.899
Currently married	0.950	0.009	860	293	1.157	0.009	0.932	0.967
Married before age 20	0.380	0.018	903	308	1.169	0.046	0.345	0.415
Currently pregnant	0.066	0.006	1598	542	0.879	0.093	0.054	0.078
Children ever born	2.248	0.167	1598	542	1.104	0.074	1.915	2.581
Children surviving	2.181	0.160	1598	542	1.096	0.073	1.861	2.501
Children ever born to women age 40-49	6.119	0.235	231	79	1.151	0.038	5.649	6.589
Knowing any contraceptive method	1.000	0.000	817	278	na	0.000	1.000	1.000
Ever used any contraceptive method	0.796	0.015	817	278	1.092	0.019	0.765	0.827
Currently using any method	0.557	0.017	817	278	0.995	0.031	0.522	0.592
Currently using pill	0.073	0.009	817	278	0.995	0.124	0.055	0.091
Currently using IUD	0.197	0.016	817	278	1.171	0.083	0.165	0.230
Currently using female sterilization	0.051	0.007	817	278	0.960	0.145	0.036	0.066
Currently using periodic abstinence	0.019	0.005	817	278	0.972	0.247	0.009	0.028
Using public sector source	0.428	0.033	315	107	1.165	0.076	0.363	0.493
Want no more children	0.468	0.019	817	278	1.072	0.040	0.431	0.506
Want to delay birth at least 2 years	0.318	0.017	817	278	1.038	0.053	0.284	0.351
Ideal family size	4.252	0.065	654	223	1.068	0.015	4.121	4.383
Mother completely protected against tetanus	0.367	0.021	543	185	1.004	0.057	0.326	0.409
Mother received medical care at birth	0.993	0.004	851	290	1.118	0.004	0.985	1.000
Had diarrhea in the 2 weeks before survey	0.178	0.017	841	287	1.189	0.095	0.144	0.211
Treated with oral rehydration salts (ORS)	0.211	0.041	150	51	1.160	0.192	0.130	0.292
Taken to a health provider	0.674	0.044	150	51	1.079	0.065	0.586	0.762
Vaccination card seen	0.915	0.023	171	59	1.087	0.025	0.869	0.962
Received BCG vaccination	0.891	0.024	171	59	0.993	0.027	0.844	0.938
Received DPT vaccination (3 doses)	0.983	0.010	171	59	1.010	0.010	0.963	1.003
Received polio vaccination (3 doses)	0.983	0.010	171	59	1.010	0.010	0.963	1.003
Received measles vaccination	0.941	0.017	171	59	0.943	0.018	0.906	0.975
Received all vaccinations (BCG)	0.850	0.030	171	59	1.089	0.035	0.790	0.909
Total fertility rate (last 3 years)	3.771	0.136	na	1549	0.989	0.036	3.499	4.044
Neonatal mortality (0-9 years)	11.618	2.711	1669	570	0.955	0.233	6.197	17.040
Post-neonatal mortality (0-9 years)	4.700	1.594	1663	568	0.960	0.339	1.512	7.889
Infant mortality (0-9 years)	16.319	3.243	1669	570	1.000	0.199	9.833	22.805
Child mortality (0-9 years)	3.773	1.495	1618	552	0.969	0.396	0.783	6.764
Under-five mortality (0-9 years)	20.031	3.622	1671	571	1.017	0.181	12.786	27.276

na = Not applicable

Table B.15 Sampling errors for Ajloun sample, Jordan 2007

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
Urban residence	0.752	0.010	848	228	0.650	0.013	0.733	0.771
No education	0.028	0.005	848	228	0.939	0.188	0.018	0.039
Secondary education or higher	0.915	0.010	848	228	1.097	0.011	0.894	0.936
Currently married	0.958	0.007	848	228	1.046	0.008	0.943	0.972
Married before age 20	0.345	0.016	903	243	1.076	0.047	0.312	0.377
Currently pregnant	0.077	0.008	1561	418	0.891	0.110	0.060	0.094
Children ever born	2.285	0.214	1561	418	0.908	0.094	1.857	2.713
Children surviving	2.206	0.206	1561	418	0.908	0.094	1.793	2.619
Children ever born to women age 40-49	6.095	0.178	242	65	0.989	0.029	5.739	6.452
Knowing any contraceptive method	0.999	0.001	813	218	0.999	0.001	0.996	1.001
Ever used any contraceptive method	0.823	0.014	813	218	1.054	0.017	0.794	0.851
Currently using any method	0.584	0.015	813	218	0.883	0.026	0.553	0.614
Currently using pill	0.041	0.007	813	218	1.027	0.175	0.027	0.055
Currently using IUD	0.285	0.015	813	218	0.958	0.053	0.254	0.315
Currently using female sterilization	0.040	0.007	813	218	0.985	0.169	0.026	0.054
Currently using periodic abstinence	0.029	0.007	813	218	1.174	0.238	0.015	0.043
Using public sector source	0.422	0.028	332	89	1.016	0.065	0.367	0.477
Want no more children	0.463	0.016	813	218	0.938	0.035	0.430	0.496
Want to delay birth at least 2 years	0.329	0.016	813	218	0.978	0.049	0.297	0.361
Ideal family size	4.344	0.074	628	169	1.138	0.017	4.197	4.492
Mother completely protected against tetanus	0.454	0.023	559	150	1.099	0.051	0.407	0.500
Mother received medical care at birth	0.997	0.002	869	233	1.235	0.002	0.992	1.002
Had diarrhea in the 2 weeks before survey	0.162	0.015	855	230	1.115	0.096	0.131	0.193
Treated with oral rehydration salts (ORS)	0.180	0.037	139	37	0.996	0.206	0.106	0.254
Taken to a health provider	0.480	0.044	139	37	0.941	0.092	0.392	0.568
Vaccination card seen	0.888	0.028	162	43	1.129	0.032	0.832	0.945
Received BCG vaccination	0.963	0.015	162	43	0.999	0.015	0.933	0.993
Received DPT vaccination (3 doses)	0.943	0.018	162	43	0.980	0.019	0.907	0.979
Received polio vaccination (3 doses)	0.943	0.018	162	43	0.980	0.019	0.907	0.979
Received measles vaccination	0.898	0.023	162	43	0.976	0.026	0.852	0.944
Received all vaccinations (BCG)	0.879	0.026	162	43	1.026	0.030	0.827	0.932
Total fertility rate (last 3 years)	3.739	0.160	na	1229	0.860	0.043	3.420	4.058
Neonatal mortality (0-9 years)	11.510	2.823	1679	451	0.922	0.245	5.864	17.155
Post-neonatal mortality (0-9 years)	8.710	2.409	1672	450	1.093	0.277	3.891	13.528
Infant mortality (0-9 years)	20.219	3.692	1681	452	0.975	0.183	12.836	27.602
Child mortality (0-9 years)	5.679	1.794	1673	450	0.921	0.316	2.091	9.268
Under-five mortality (0-9 years)	25.784	4.398	1682	452	1.012	0.171	16.988	34.580

na = Not applicable

Table B.16 Sampling errors for Karak sample, Jordan 2007

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
Urban residence	0.327	0.018	775	378	1.057	0.055	0.291	0.362
No education	0.084	0.017	775	378	1.749	0.208	0.049	0.119
Secondary education or higher	0.833	0.028	775	378	2.071	0.033	0.777	0.888
Currently married	0.960	0.007	775	378	0.935	0.007	0.947	0.973
Married before age 20	0.256	0.020	950	462	1.421	0.076	0.217	0.295
Currently pregnant	0.070	0.007	1550	761	0.956	0.097	0.056	0.083
Children ever born	1.975	0.151	1550	761	1.062	0.077	1.673	2.278
Children surviving	1.898	0.145	1550	761	1.061	0.076	1.608	2.188
Children ever born to women age 40-49	5.221	0.219	290	141	1.333	0.042	4.783	5.660
Knowing any contraceptive method	0.999	0.001	744	363	0.921	0.001	0.997	1.001
Ever used any contraceptive method	0.791	0.015	744	363	0.999	0.019	0.761	0.820
Currently using any method	0.511	0.024	744	363	1.303	0.047	0.463	0.559
Currently using pill	0.097	0.012	744	363	1.121	0.126	0.072	0.121
Currently using IUD	0.166	0.018	744	363	1.286	0.106	0.131	0.201
Currently using female sterilization	0.046	0.007	744	363	0.887	0.149	0.032	0.059
Currently using periodic abstinence	0.043	0.008	744	363	1.047	0.181	0.028	0.059
Using public sector source	0.759	0.033	287	140	1.294	0.043	0.694	0.825
Want no more children	0.522	0.018	744	363	0.980	0.034	0.486	0.558
Want to delay birth at least 2 years	0.257	0.018	744	363	1.109	0.069	0.222	0.293
Ideal family size	3.870	0.062	691	336	1.099	0.016	3.745	3.995
Mother completely protected against tetanus	0.262	0.026	469	229	1.289	0.100	0.210	0.315
Mother received medical care at birth	0.990	0.005	712	348	1.168	0.005	0.981	1.000
Had diarrhea in the 2 weeks before survey	0.223	0.018	692	338	1.084	0.082	0.186	0.259
Treated with oral rehydration salts (ORS)	0.163	0.033	153	75	1.024	0.201	0.097	0.228
Taken to a health provider	0.628	0.037	153	75	0.864	0.058	0.555	0.702
Vaccination card seen	0.870	0.033	125	62	1.090	0.037	0.805	0.935
Received BCG vaccination	0.470	0.052	125	62	1.175	0.112	0.365	0.575
Received DPT vaccination (3 doses)	0.983	0.012	125	62	1.016	0.012	0.959	1.006
Received polio vaccination (3 doses)	0.983	0.012	125	62	1.016	0.012	0.959	1.006
Received measles vaccination	0.921	0.022	125	62	0.909	0.024	0.877	0.964
Received all vaccinations (BCG)	0.455	0.051	125	62	1.136	0.111	0.353	0.556
Total fertility rate (last 3 years)	3.206	0.162	na	2191	1.051	0.050	2.883	3.529
Neonatal mortality (0-9 years)	22.289	4.957	1412	690	1.111	0.222	12.375	32.204
Post-neonatal mortality (0-9 years)	10.020	2.361	1406	686	0.896	0.236	5.298	14.742
Infant mortality (0-9 years)	32.310	5.020	1412	690	0.969	0.155	22.269	42.350
Child mortality (0-9 years)	6.591	2.412	1400	683	1.047	0.366	1.767	11.414
Under-five mortality (0-9 years)	38.687	5.312	1413	690	0.956	0.137	28.063	49.311

na = Not applicable

Table B.17 Sampling errors for Tafiela sample, Jordan 2007

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
Urban residence	0.713	0.015	842	146	0.966	0.021	0.683	0.744
No education	0.101	0.015	842	146	1.461	0.151	0.070	0.131
Secondary education or higher	0.782	0.021	842	146	1.508	0.027	0.740	0.825
Currently married	0.952	0.007	842	146	0.893	0.007	0.939	0.965
Married before age 20	0.402	0.021	887	154	1.330	0.053	0.359	0.445
Currently pregnant	0.051	0.007	1653	285	0.966	0.145	0.037	0.066
Children ever born	2.297	0.283	1653	285	0.946	0.123	1.732	2.863
Children surviving	2.206	0.274	1653	285	0.953	0.124	1.659	2.754
Children ever born to women age 40-49	6.827	0.195	267	46	1.094	0.029	6.437	7.216
Knowing any contraceptive method	0.996	0.002	802	139	0.973	0.002	0.992	1.001
Ever used any contraceptive method	0.815	0.014	802	139	1.053	0.018	0.786	0.844
Currently using any method	0.600	0.015	802	139	0.885	0.026	0.569	0.630
Currently using pill	0.085	0.010	802	139	0.988	0.114	0.066	0.105
Currently using IUD	0.193	0.014	802	139	0.993	0.072	0.166	0.221
Currently using female sterilization	0.064	0.009	802	139	1.023	0.138	0.046	0.082
Currently using periodic abstinence	0.049	0.007	802	139	0.899	0.139	0.036	0.063
Using public sector source	0.747	0.033	322	55	1.349	0.044	0.681	0.812
Want no more children	0.557	0.017	802	139	0.990	0.031	0.522	0.592
Want to delay birth at least 2 years	0.248	0.014	802	139	0.944	0.058	0.220	0.277
Ideal family size	4.054	0.080	678	117	1.188	0.020	3.893	4.214
Mother completely protected against tetanus	0.330	0.025	511	88	1.182	0.075	0.281	0.380
Mother received medical care at birth	0.987	0.004	807	140	1.013	0.004	0.978	0.996
Had diarrhea in the 2 weeks before survey	0.168	0.013	790	137	0.872	0.079	0.142	0.195
Treated with oral rehydration salts (ORS)	0.110	0.030	131	23	1.033	0.273	0.050	0.170
Taken to a health provider	0.566	0.045	131	23	0.956	0.079	0.476	0.655
Vaccination card seen	0.913	0.023	148	26	1.008	0.026	0.867	0.960
Received BCG vaccination	0.788	0.040	148	26	1.152	0.050	0.709	0.868
Received DPT vaccination (3 doses)	0.974	0.013	148	26	0.957	0.013	0.949	0.999
Received polio vaccination (3 doses)	0.974	0.013	148	26	0.957	0.013	0.949	0.999
Received measles vaccination	0.898	0.029	148	26	1.146	0.032	0.841	0.955
Received all vaccinations (BCG)	0.726	0.043	148	26	1.158	0.060	0.639	0.812
Total fertility rate (last 3 years)	3.708	0.164	na	817	1.042	0.044	3.379	4.037
Neonatal mortality (0-9 years)	18.817	4.693	1615	281	1.118	0.249	9.431	28.203
Post-neonatal mortality (0-9 years)	8.063	2.214	1607	279	0.984	0.275	3.634	12.491
Infant mortality (0-9 years)	26.880	5.073	1618	281	1.085	0.189	16.734	37.025
Child mortality (0-9 years)	2.730	1.379	1609	279	1.055	0.505	0.000	5.489
Under-five mortality (0-9 years)	29.537	5.409	1619	281	1.114	0.183	18.719	40.354

na = Not applicable

Table B.18 Sampling errors for Ma'an sample, Jordan 2007

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
Urban residence	0.607	0.017	793	164	1.006	0.029	0.572	0.642
No education	0.146	0.019	793	164	1.546	0.133	0.107	0.185
Secondary education or higher	0.695	0.025	793	164	1.549	0.036	0.644	0.746
Currently married	0.943	0.008	793	164	0.966	0.008	0.927	0.959
Married before age 20	0.379	0.019	855	176	1.207	0.050	0.341	0.417
Currently pregnant	0.071	0.011	1549	322	1.077	0.149	0.049	0.092
Children ever born	2.144	0.242	1549	322	0.983	0.113	1.660	2.627
Children surviving	2.059	0.231	1549	322	0.979	0.112	1.596	2.522
Children ever born to women age 40-49	5.978	0.234	232	48	1.131	0.039	5.509	6.446
Knowing any contraceptive method	0.992	0.003	749	154	0.984	0.003	0.985	0.998
Ever used any contraceptive method	0.765	0.018	749	154	1.131	0.023	0.730	0.800
Currently using any method	0.500	0.022	749	154	1.181	0.043	0.457	0.544
Currently using pill	0.068	0.010	749	154	1.045	0.141	0.049	0.088
Currently using IUD	0.132	0.014	749	154	1.121	0.105	0.104	0.159
Currently using female sterilization	0.065	0.010	749	154	1.164	0.161	0.044	0.086
Currently using periodic abstinence	0.052	0.009	749	154	1.120	0.174	0.034	0.071
Using public sector source	0.625	0.035	242	50	1.113	0.055	0.556	0.695
Want no more children	0.526	0.018	749	154	1.007	0.035	0.490	0.563
Want to delay birth at least 2 years	0.298	0.017	749	154	1.028	0.058	0.263	0.332
Ideal family size	4.133	0.087	636	132	1.287	0.021	3.959	4.307
Mother completely protected against tetanus	0.380	0.027	522	107	1.287	0.072	0.325	0.435
Mother received medical care at birth	0.984	0.005	818	167	0.883	0.005	0.975	0.993
Had diarrhea in the 2 weeks before survey	0.214	0.018	801	164	1.183	0.086	0.177	0.251
Treated with oral rehydration salts (ORS)	0.205	0.040	168	35	1.245	0.196	0.125	0.286
Taken to a health provider	0.582	0.047	168	35	1.171	0.082	0.487	0.677
Vaccination card seen	0.929	0.021	180	38	1.075	0.022	0.888	0.970
Received BCG vaccination	0.876	0.033	180	38	1.326	0.037	0.811	0.941
Received DPT vaccination (3 doses)	0.889	0.034	180	38	1.470	0.039	0.820	0.957
Received polio vaccination (3 doses)	0.894	0.035	180	38	1.509	0.039	0.825	0.963
Received measles vaccination	0.864	0.037	180	38	1.451	0.043	0.790	0.938
Received all vaccinations (BCG)	0.772	0.044	180	38	1.411	0.057	0.684	0.861
Total fertility rate (last 3 years)	3.966	0.150	na	917	0.913	0.038	3.666	4.267
Neonatal mortality (0-9 years)	12.911	2.932	1593	327	0.934	0.227	7.047	18.775
Post-neonatal mortality (0-9 years)	10.792	2.587	1588	326	0.952	0.240	5.619	15.966
Infant mortality (0-9 years)	23.703	3.887	1595	327	0.959	0.164	15.929	31.478
Child mortality (0-9 years)	7.332	2.177	1567	321	1.032	0.297	2.979	11.686
Under-five mortality (0-9 years)	30.862	4.422	1595	327	0.951	0.143	22.019	39.705

na = Not applicable

Table B.19 Sampling errors for Aqaba sample, Jordan 2007

Variable	Value (R)	Stand-ard error (SE)	Number of cases		Design effect (DEFT)	Rela-tive error (SE/R)	Confidence limits	
			Un-weighted (N)	Weight-ed (WN)			R-2SE	R+2SE
Urban residence	0.871	0.009	844	221	0.813	0.011	0.852	0.889
No education	0.091	0.016	844	221	1.591	0.173	0.060	0.123
Secondary education or higher	0.811	0.021	844	221	1.551	0.026	0.769	0.853
Currently married	0.956	0.009	844	221	1.221	0.009	0.939	0.973
Married before age 20	0.396	0.019	837	220	1.150	0.048	0.358	0.433
Currently pregnant	0.078	0.010	1391	374	1.109	0.123	0.059	0.098
Children ever born	2.332	0.226	1391	374	1.261	0.097	1.881	2.783
Children surviving	2.265	0.219	1391	374	1.263	0.097	1.827	2.704
Children ever born to women age 40-49	6.001	0.169	223	58	1.045	0.028	5.663	6.339
Knowing any contraceptive method	0.998	0.002	806	212	1.169	0.002	0.995	1.002
Ever used any contraceptive method	0.808	0.017	806	212	1.258	0.022	0.773	0.843
Currently using any method	0.537	0.023	806	212	1.313	0.043	0.491	0.584
Currently using pill	0.084	0.013	806	212	1.310	0.152	0.059	0.110
Currently using IUD	0.220	0.020	806	212	1.344	0.089	0.180	0.259
Currently using female sterilization	0.022	0.006	806	212	1.170	0.276	0.010	0.034
Currently using periodic abstinence	0.063	0.012	806	212	1.387	0.189	0.039	0.087
Using public sector source	0.464	0.040	300	79	1.382	0.086	0.384	0.544
Want no more children	0.525	0.022	806	212	1.239	0.042	0.481	0.569
Want to delay birth at least 2 years	0.258	0.019	806	212	1.255	0.075	0.219	0.297
Ideal family size	3.989	0.072	648	171	1.134	0.018	3.844	4.134
Mother completely protected against tetanus	0.184	0.018	532	140	1.065	0.097	0.148	0.220
Mother received medical care at birth	0.981	0.007	827	217	1.204	0.007	0.968	0.994
Had diarrhea in the 2 weeks before survey	0.162	0.015	819	215	1.045	0.090	0.132	0.191
Treated with oral rehydration salts (ORS)	0.177	0.030	131	35	0.904	0.170	0.117	0.238
Taken to a health provider	0.653	0.045	131	35	0.996	0.069	0.563	0.744
Vaccination card seen	0.902	0.024	172	46	1.019	0.027	0.854	0.950
Received BCG vaccination	0.773	0.039	172	46	1.206	0.051	0.695	0.852
Received DPT vaccination (3 doses)	0.963	0.015	172	46	0.957	0.016	0.932	0.993
Received polio vaccination (3 doses)	0.967	0.015	172	46	0.987	0.016	0.936	0.997
Received measles vaccination	0.866	0.025	172	46	0.951	0.029	0.815	0.917
Received all vaccinations (BCG)	0.718	0.039	172	46	1.111	0.054	0.640	0.795
Total fertility rate (last 3 years)	4.116	0.141	na	1027	0.965	0.034	3.834	4.398
Neonatal mortality (0-9 years)	16.624	3.176	1583	414	0.975	0.191	10.272	22.977
Post-neonatal mortality (0-9 years)	4.054	1.702	1583	414	0.959	0.420	0.651	7.458
Infant mortality (0-9 years)	20.679	3.711	1583	414	0.967	0.179	13.257	28.100
Child mortality (0-9 years)	4.525	2.061	1563	408	1.185	0.456	0.402	8.647
Under-five mortality (0-9 years)	25.110	4.058	1584	414	0.985	0.162	16.994	33.226

na = Not applicable



**Table C.1 Household age distribution**  
 Single-year age distribution of the de facto household population by sex (weighted), Jordan 2007

Age	Female		Male	
	Number	Percent	Number	Percent
0	993	2.6	1,086	2.8
1	989	2.6	909	2.3
2	925	2.4	1,032	2.7
3	998	2.6	1,046	2.7
4	961	2.5	977	2.5
5	905	2.4	1,051	2.7
6	921	2.4	1,010	2.6
7	938	2.5	903	2.3
8	770	2.0	903	2.3
9	923	2.4	926	2.4
10	967	2.5	934	2.4
11	997	2.6	1,040	2.7
12	983	2.6	1,066	2.8
13	881	2.3	1,016	2.6
14	1,022	2.7	995	2.6
15	861	2.3	901	2.3
16	951	2.5	837	2.2
17	823	2.2	893	2.3
18	794	2.1	799	2.1
19	783	2.1	803	2.1
20	772	2.0	853	2.2
21	739	1.9	840	2.2
22	762	2.0	766	2.0
23	729	1.9	710	1.8
24	676	1.8	713	1.8
25	658	1.7	673	1.7
26	512	1.3	665	1.7
27	630	1.7	629	1.6
28	635	1.7	522	1.3
29	546	1.4	593	1.5
30	636	1.7	598	1.5
31	513	1.3	484	1.2
32	559	1.5	459	1.2
33	594	1.6	496	1.3
34	572	1.5	468	1.2
35	591	1.6	547	1.4
36	404	1.1	556	1.4
37	543	1.4	505	1.3
38	501	1.3	455	1.2
39	466	1.2	392	1.0
40	496	1.3	504	1.3
41	412	1.1	414	1.1
42	425	1.1	397	1.0
43	397	1.0	374	1.0
44	366	1.0	422	1.1
45	254	0.7	379	1.0
46	266	0.7	323	0.8
47	271	0.7	240	0.6
48	285	0.7	221	0.6
49	246	0.6	264	0.7
50	207	0.5	266	0.7
51	212	0.6	210	0.5
52	217	0.6	247	0.6
53	246	0.6	226	0.6
54	213	0.6	152	0.4
55	215	0.6	202	0.5
56	189	0.5	169	0.4
57	155	0.4	140	0.4
58	124	0.3	120	0.3
59	181	0.5	161	0.4
60	223	0.6	209	0.5
61	142	0.4	132	0.3
62	170	0.4	167	0.4
63	141	0.4	145	0.4
64	112	0.3	138	0.4
65	211	0.6	181	0.5
66	107	0.3	116	0.3
67	103	0.3	122	0.3
68	94	0.2	88	0.2
69	106	0.3	90	0.2
70+	869	2.3	903	2.3
Don't know/missing	5	0.0	1	0.0
<b>Total</b>	<b>38,084</b>	<b>100.0</b>	<b>38,774</b>	<b>100.0</b>

Table C.2 Age distribution of eligible and interviewed women

De facto household population of women age 10-54, interviewed women age 15-49, and percentage of eligible women who were interviewed (weighted), by five-year age groups, Jordan 2007

Age group	Household population of women age 10-54	Ever-married women age 10-54	Interviewed women age 15-49		Percent of women
			Number	Percent	
10-14	4,851	0	na	na	na
15-19	4,212	244	237	2.2	96.9
20-24	3,678	1,351	1,281	11.8	94.8
25-29	2,981	2,067	1,978	18.2	95.7
30-34	2,875	2,284	2,218	20.4	97.1
35-39	2,505	2,139	2,055	18.9	96.1
40-44	2,096	1,917	1,881	17.3	98.1
45-49	1,322	1,267	1,240	11.4	97.8
50-54	1,095	1,034	na	na	na
15-49	19,668	11,270	10,889	100.0	96.6

Note: The de facto population includes all residents and nonresidents who stayed in the household the night before the interview. Weights for both household population of women and interviewed women are household weights. Age is based on the household schedule.

na = Not applicable

Table C.3 Completeness of reporting

Percentage of observations missing information for selected demographic and health questions (weighted), Jordan 2007

Subject	Reference group	Percentage with information missing	Number of cases
<b>Birth date</b>	Births in past 15 years		
Month Only)		0.24	28,081
Month and Year		0.03	28,081
<b>Age at death</b>	Deceased children born in the past 15 years	0.00	659
<b>Age/date at first union</b> <sup>1</sup>	Ever married women	0.00	10,876
<b>Respondent's education</b>	Ever married women	0.07	10,876
<b>Diarrhea in past 2 weeks</b>	Living children 0-59 months	0.15	9,669

<sup>1</sup> 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 2007

Calendar year	Number of births			Percentage with complete birth date <sup>1</sup>			Sex ratio at birth <sup>2</sup>			Calendar year ratio <sup>3</sup>		
	L	D	T	L	D	T	L	D	T	L	D	T
2007	1,272	7	1,280	100.0	100.0	100.0	113.4	330.4	114.1	na	na	na
2006	1,829	37	1,866	100.0	100.0	100.0	94.7	70.8	94.2	na	na	na
2005	1,954	48	2,002	100.0	100.0	100.0	106.7	63.9	105.4	103.4	121.4	103.8
2004	1,948	42	1,990	100.0	100.0	100.0	100.4	76.9	99.8	99.7	103.9	99.8
2003	1,954	33	1,987	100.0	100.0	100.0	101.6	70.4	101.0	103.2	75.0	102.5
2002	1,840	46	1,886	100.0	100.0	100.0	124.6	50.1	121.9	95.4	133.6	96.0
2001	1,906	36	1,941	99.6	94.6	99.5	110.9	162.4	111.6	103.9	79.0	103.3
2000	1,828	44	1,873	99.9	95.2	99.8	95.8	130.0	96.5	100.8	128.2	101.3
1999	1,722	34	1,756	99.7	96.6	99.7	112.4	110.3	112.4	98.6	74.8	98.0
1998	1,664	45	1,709	99.3	99.6	99.4	102.1	111.0	102.3	97.7	90.0	97.5
2003-2007	8,957	168	9,124	100.0	100.0	100.0	102.6	74.8	102.0	na	na	na
1998-2002	8,960	205	9,165	99.7	97.4	99.7	108.8	103.0	108.7	na	na	na
1993-1997	8,788	275	9,063	99.7	92.7	99.5	104.1	194.0	106.0	na	na	na
1988-1992	6,769	224	6,993	99.7	96.1	99.6	100.7	167.4	102.3	na	na	na
< 1988	6,304	294	6,598	99.3	94.6	99.1	109.0	154.0	110.7	na	na	na
All	39,778	1,166	40,944	99.7	95.7	99.6	105.0	137.9	105.8	na	na	na

na = Not applicable

<sup>1</sup> Both year and month of birth given

<sup>2</sup>  $(B_m/B_f) \times 100$ , where  $B_m$  and  $B_f$  are the numbers of male and female births, respectively

<sup>3</sup>  $[2B_x / (B_{x-1} + B_{x+1})] \times 100$ , 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 one month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0-6 days, for five-year periods of birth preceding the survey (weighted), Jordan 2007

Age at death (days)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1	31	23	31	21	106
1	15	24	15	21	75
2	10	9	10	4	32
3	12	16	14	4	46
4	14	8	1	2	26
5	2	8	2	1	12
6	6	5	1	4	16
7	4	17	15	15	51
8	13	5	0	0	18
9	0	0	5	2	8
10	8	1	2	4	15
11	6	14	8	1	28
12	0	5	4	5	14
13	2	1	1	0	4
14	3	1	5	1	10
15	0	0	1	2	4
16	0	0	0	0	0
17	0	0	5	0	5
18	0	1	0	0	1
19	0	0	0	1	1
20	1	0	5	1	8
21	0	0	0	0	0
22	7	0	4	0	11
23	0	0	0	0	0
25	0	0	0	0	1
26	0	0	0	0	0
28	0	0	2	0	3
29	0	2	0	0	2
30	0	0	0	0	1
31+	0	0	1	0	1
Total 0-30	134	143	130	89	496
Percent early neonatal <sup>1</sup>	66.8	65.1	56.6	63.2	63.0

<sup>1</sup> = 6 days/= 30 days

Table C.6 Reporting of age at death in months

Distribution of reported deaths under two years of age by age at death in months and the percentage of infant deaths reported to occur at age under one month, for five-year periods of birth preceding the survey, Jordan 2007

Age at death (months)	Number of years preceding the survey				Total 0-19
	0-4	5-9	10-14	15-19	
<1 <sup>a</sup>	134	143	130	89	496
1	6	8	20	12	46
2	13	9	9	8	39
3	2	4	7	9	22
4	4	3	5	9	21
5	0	1	10	3	14
6	5	3	9	9	26
7	5	1	2	2	10
8	7	1	1	1	10
9	6	5	1	1	14
10	6	2	2	7	18
11	0	2	3	7	11
12	1	7	2	3	13
13	0	0	0	0	0
14	1	0	1	0	2
15	1	0	0	0	1
16	0	0	6	1	7
18	1	1	1	0	3
19	0	0	1	0	1
20	0	0	1	0	1
21	0	0	0	0	1
1 Year	0	1	0	0	1
Total 0-11	188	183	198	158	728
Percent neonatal <sup>1</sup>	71.3	78.1	65.4	56.4	68.2

<sup>1</sup> Under one month/under one year

<sup>a</sup> Includes deaths under one month reported in days







Department of Statistics  
Household Survey Directorate

The Hashemite Kingdom of Jordan  
JORDAN POPULATION AND  
FAMILY HEALTH SURVEY 2007

HOUSEHOLD QUESTIONNAIRE

Survey Contents Confidential by Statistical Law

IDENTIFICATION																				
		QUESTIONNAIRE No.: ..... <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>																		
GOVERNORATE: _____	<table border="1" style="width: 100%; height: 100%; border-collapse: collapse;"> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> </table>																	BLOCK No.: .....		<input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>
DISTRICT: _____	BUILDING No.: _____																			
SUB-DISTRICT: _____	HOUSING UNIT No.: _____																			
LOCALITY: _____	CLUSTER No.: .....	<table border="1" style="width: 100%; height: 100%; border-collapse: collapse;"> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> </table>																		
AREA: _____	HOUSEHOLD No.: .....	<table border="1" style="width: 100%; height: 100%; border-collapse: collapse;"> <tr><td style="width: 20px; height: 20px;"></td><td style="width: 20px; height: 20px;"></td></tr> </table>																		
SUB-AREA: _____	TELEPHONE/ MOBILE No. (if available) <input style="width: 20px;" type="text"/>																			
STRATUM: _____																				
URBAN/RURAL (Urban=1; Rural=2)																				
HOUSEHOLD SELECTED FOR ANTHROPOMETRY AND ANEMIA TESTING (YES = 1; NO = 2)				<input type="checkbox"/>																
HOUSEHOLD SELECTED FOR DOMESTIC VIOLENCE MODULE (YES = 1; NO = 2) .....				<input type="checkbox"/>																
INTERVIEWER VISITS																				
	1	2	3	FINAL VISIT																
DATE	_____	_____	_____	DAY <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> MONTH <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> YEAR <input style="width: 20px;" type="text"/> 2 <input style="width: 20px;" type="text"/> 0 <input style="width: 20px;" type="text"/> 0 <input style="width: 20px;" type="text"/> 7																
INTERVIEWER'S NAME	_____	_____	_____	INT. NUMBER <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>																
RESULT*	_____	_____	_____	RESULT <input style="width: 20px;" type="text"/>																
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS <input style="width: 20px;" type="text"/>																
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 <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>  TOTAL ELIGIBLE WOMEN <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>  LINE NO. OF RESPONDENT HOUSEHOLD QUESTIONNAIRE <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>																
SUPERVISOR		FIELD EDITOR		OFFICE EDITOR																
NAME _____ <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>		NAME _____ <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>		<input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>																
DATE _____ <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>		DATE _____ <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>		<input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>																
				KEYED BY <input style="width: 20px;" type="text"/> <input style="width: 20px;" type="text"/>																

## Introduction and Consent

Hello. My name is \_\_\_\_\_ and I am working with the Department of Statistics. We are conducting a national survey about various health issues. We would very much appreciate your participation in this survey. The interview usually takes between 10 and 15 minutes to complete.

As part of the survey we would first like to ask some questions about your household. All of the answers you give will be confidential. Participation in the survey is completely voluntary. 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 you will participate in the survey since your views are important.

At this time, do you want to ask me anything about the survey?  
May I begin the interview now?

Signature of interviewer: \_\_\_\_\_ Date: \_\_\_\_\_

RESPONDENT AGREES TO BE INTERVIEWED ... 1    RESPONDENT DOES NOT AGREE TO BE INTERVIEWED ... 2 → END

**HOUSEHOLD SCHEDULE**

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		DATE OF BIRTH		AGE	NATIONALITY	IF AGE 15 OR OLDER	ELIGIBILITY	
				Does (NAME) usually live here?	Did (NAME) stay here last night?	MONTH	YEAR				IN YEARS	INDIVIDUAL INTERVIEW
(1)	(2)	(3)	(4)	(5)	(5A)	(6)	(6A)	(7)	(8)	(9)	(10)	(11)
01			M F 1 2	Y N 1 2	Y N 1 2	MONTH [ ][ ]	YEAR [ ][ ][ ][ ]			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

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		DATE OF BIRTH		AGE	NATIONALITY	IF AGE 15 OR OLDER	ELIGIBILITY	
				Does (NAME) usually live here?	Did (NAME) stay here last night?	MONTH	YEAR				INDIVIDUAL INTERVIEW	CHECK COVER PAGE IF THIS HOUSEHOLD IS SELECTED FOR ANTHROPOMETRY AND ANEMIA MEASUREMENTS
(1)	(2)	(3)	(4)	(5)	(5A)	(6)	(6A)	(7)	(8)	(9)	(10)	(11)
08		<input type="checkbox"/>	M 1	Y 1	N 2	<input type="checkbox"/>	08	08				
09		<input type="checkbox"/>	F 2	Y 1	N 2	<input type="checkbox"/>	09	09				
10		<input type="checkbox"/>	M 1	Y 1	N 2	<input type="checkbox"/>	10	10				
11		<input type="checkbox"/>	F 2	Y 1	N 2	<input type="checkbox"/>	11	11				
12		<input type="checkbox"/>	M 1	Y 1	N 2	<input type="checkbox"/>	12	12				
13		<input type="checkbox"/>	F 2	Y 1	N 2	<input type="checkbox"/>	13	13				
14		<input type="checkbox"/>	M 1	Y 1	N 2	<input type="checkbox"/>	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  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  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  NO

ADD TO TABLE YES  NO

ADD TO TABLE YES  NO

ADD TO TABLE YES  NO

CODES FOR Q. 3: RELATIONSHIP TO HEAD OF HOUSEHOLD

01 = HEAD  
 02 = WIFE OR HUSBAND  
 03 = SON OR DAUGHTER  
 04 = STEPSON OR STEPPAUGHTER  
 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

LINE NO.	IF AGE 0-17 YEARS				IF AGE 5 YEARS OR OLDER				IF AGE 5-24 YEARS
	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL				
	(12)	(13)	(14)	(15)	(16)	(16A)	(17)	(17A)	(18)
	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 16	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is her 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 (2006 - 2007) school year?
01	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 16	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is her name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Y N DK 1 2 8 GO TO 17	Y N DK 1 2 8 NEXT LINE	LEVEL GRADE	GRADE	Y N 1 2
02	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 16	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is her name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Y N DK 1 2 8 GO TO 17	Y N DK 1 2 8 NEXT LINE	LEVEL GRADE	GRADE	Y N 1 2
03	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 16	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is her name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Y N DK 1 2 8 GO TO 17	Y N DK 1 2 8 NEXT LINE	LEVEL GRADE	GRADE	Y N 1 2
04	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 16	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is her name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Y N DK 1 2 8 GO TO 17	Y N DK 1 2 8 NEXT LINE	LEVEL GRADE	GRADE	Y N 1 2
05	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 16	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is her name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Y N DK 1 2 8 GO TO 17	Y N DK 1 2 8 NEXT LINE	LEVEL GRADE	GRADE	Y N 1 2
06	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 16	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is her name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Y N DK 1 2 8 GO TO 17	Y N DK 1 2 8 NEXT LINE	LEVEL GRADE	GRADE	Y N 1 2
07	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 16	Does (NAME)'s natural father usually live in this household or was he a guest last night? IF YES: What is her name? RECORD FATHER'S LINE NUMBER. IF NO, RECORD '00'.	Y N DK 1 2 8 GO TO 17	Y N DK 1 2 8 NEXT LINE	LEVEL GRADE	GRADE	Y N 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.	IF AGE 0-17 YEARS				IF AGE 5 YEARS OR OLDER				IF AGE 5-24 YEARS	
	SURVIVORSHIP AND RESIDENCE OF BIOLOGICAL PARENTS				EVER ATTENDED SCHOOL					
	(12)	(13)	(14)	(15)	(16)	(16A)	(17)	(17A)	(18)	
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 (2006 - 2007) school year?		
08	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 16	Y N 1 2 GO TO 17	Y N 1 2 NEXT LINE	LEVEL [ ] [ ]	GRADE [ ] [ ]	Y N 1 2		
09	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 16	Y N 1 2 GO TO 17	Y N 1 2 NEXT LINE	LEVEL [ ] [ ]	GRADE [ ] [ ]	Y N 1 2		
10	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 16	Y N 1 2 GO TO 17	Y N 1 2 NEXT LINE	LEVEL [ ] [ ]	GRADE [ ] [ ]	Y N 1 2		
11	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 16	Y N 1 2 GO TO 17	Y N 1 2 NEXT LINE	LEVEL [ ] [ ]	GRADE [ ] [ ]	Y N 1 2		
12	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 16	Y N 1 2 GO TO 17	Y N 1 2 NEXT LINE	LEVEL [ ] [ ]	GRADE [ ] [ ]	Y N 1 2		
13	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 16	Y N 1 2 GO TO 17	Y N 1 2 NEXT LINE	LEVEL [ ] [ ]	GRADE [ ] [ ]	Y N 1 2		
14	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 14	Y N DK 1 2 8 GO TO 16	Y N 1 2 GO TO 17	Y N 1 2 NEXT LINE	LEVEL [ ] [ ]	GRADE [ ] [ ]	Y N 1 2		

**CODES FOR EDUCATION LEVEL (08-17)**

**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 (08-17A)**

- 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	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)	
101A	Is water normally available all day from this source?	YES ..... 1 NO ..... 2	
101B	In the last two weeks, was water unavailable for an entire day or longer?	YES ..... 1 NO ..... 2	
106	Do you do anything to the water to make it safer to drink?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	<input type="checkbox"/> → 108
107	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	
108	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)	<input type="checkbox"/> → 110A
109	Do you share this toilet facility with other households?	YES ..... 1 NO ..... 2	
110A	Is your house connected with electricity?	YES ..... 1 NO ..... 2	
110B	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 ..... <input type="text"/>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																							
111	Does your household have: A radio/tape recorder? A television? Satellite? A land telephone? A refrigerator? A washing machine? Solar heater? Air conditioner? Fan? Water cooler? Microwave? Digital camera?	<table border="0"> <tr> <td></td> <td>YES</td> <td>NO</td> </tr> <tr> <td>RADIO/TAPE RECORDER</td> <td>1</td> <td>2</td> </tr> <tr> <td>TELEVISION</td> <td>1</td> <td>2</td> </tr> <tr> <td>SATELLITE</td> <td>1</td> <td>2</td> </tr> <tr> <td>LAND TELEPHONE</td> <td>1</td> <td>2</td> </tr> <tr> <td>REFRIGERATOR</td> <td>1</td> <td>2</td> </tr> <tr> <td>WASHING MACHINE</td> <td>1</td> <td>2</td> </tr> <tr> <td>SOLAR HEATER</td> <td>1</td> <td>2</td> </tr> <tr> <td>AIR CONDITIONNER</td> <td>1</td> <td>2</td> </tr> <tr> <td>FAN</td> <td>1</td> <td>2</td> </tr> <tr> <td>WATER COOLER</td> <td>1</td> <td>2</td> </tr> <tr> <td>MICROWAVE</td> <td>1</td> <td>2</td> </tr> <tr> <td>DIGITAL CAMERA</td> <td>1</td> <td>2</td> </tr> </table>		YES	NO	RADIO/TAPE RECORDER	1	2	TELEVISION	1	2	SATELLITE	1	2	LAND TELEPHONE	1	2	REFRIGERATOR	1	2	WASHING MACHINE	1	2	SOLAR HEATER	1	2	AIR CONDITIONNER	1	2	FAN	1	2	WATER COOLER	1	2	MICROWAVE	1	2	DIGITAL CAMERA	1	2	
	YES	NO																																								
RADIO/TAPE RECORDER	1	2																																								
TELEVISION	1	2																																								
SATELLITE	1	2																																								
LAND TELEPHONE	1	2																																								
REFRIGERATOR	1	2																																								
WASHING MACHINE	1	2																																								
SOLAR HEATER	1	2																																								
AIR CONDITIONNER	1	2																																								
FAN	1	2																																								
WATER COOLER	1	2																																								
MICROWAVE	1	2																																								
DIGITAL CAMERA	1	2																																								
111A	Does your household have a computer? IF YES: How many? IF NONE, RECORD '0'. IF 7 OR MORE, RECORD 7.	NUMBER OF COMPUTERS	<input type="text"/>																																							
111B	Does your household have a mobile? IF YES: How many? IF NONE, RECORD '0'. IF 7 OR MORE, RECORD 7.	NUMBER OF MOBILES	<input type="text"/>																																							
111C	CHECK 111A and 111B: 111A OR 111B = 1 OR MORE <input type="checkbox"/> 111A AND 111B = 0 <input type="checkbox"/>		<input type="checkbox"/> → 111C																																							
111D	Do you have internet access at home?	YES ..... 1 NO ..... 2																																								
112	What type of fuel does your household mainly use for cooking?	ELECTRICITY ..... 1 NATURAL GAS ..... 2 KEROSENE ..... 3 COAL/WOOD ..... 4 OTHER _____ 6 (SPECIFY)																																								
116	Do you have a separate room which is used as a kitchen?	YES ..... 1 NO ..... 2																																								
116A	Do you have an independent bathroom?	YES ..... 1 NO ..... 2																																								
117	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)																																								
119	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 STONE ..... 32 CUT STONE AND CONCRETE ..... 33 CONCRETE ..... 34 HAIR/WOOL/CLOTH ..... 41 OTHER _____ 96 (SPECIFY)																																								
119A	How many rooms do you have in your house?	NUMBER OF ROOMS	<input type="text"/> <input type="text"/>																																							
120	How many rooms in this household are used for sleeping?	ROOMS FOR SLEEPING	<input type="text"/> <input type="text"/>																																							
120A	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	<input type="text"/>																																							
126A	Does any member of this household have a credit card?	YES ..... 1 NO ..... 2																																								

**USE THIS TABLE WHEN:**

- 1) The household is selected for the domestic violence module
- AND**
- 2) There is more than one eligible women in the household

**RANDOM NUMBER TABLE FOR  
SELECTION OF WOMAN AS RESPONDENT TO DOMESTIC VIOLENCE MODULE**

CHECK THE HOUSEHOLD NUMBER ON THE COVER PAGE OF THE HOUSEHOLD QUESTIONNAIRE.

*THIS IS THE NUMBER OF THE ROW TO SELECT.*

CHECK THE TOTAL NUMBER OF ELIGIBLE WOMEN IN COLUMN 9 OF THE HOUSEHOLD SCHEDULE.

*THIS IS THE NUMBER OF THE COLUMN TO SELECT.*

FIND THE BOX WHERE THE ROW AND THE COLUMN MEET AND CIRCLE THAT NUMBER.

*THIS IS THE POSITION NUMBER OF THE WOMAN WHO WILL BE ASKED THE DOMESTIC VIOLENCE MODULE.*

IN COLUMN 9 OF THE HOUSEHOLD SCHEDULE, DRAW A BOX AROUND THE LINE NUMBER OF THE ELIGIBLE WOMAN IN THAT POSITION.

**EXAMPLE:**

IF THE LAST DIGIT OF THE HOUSEHOLD NUMBER IS 6, AND THERE ARE 3 ELIGIBLE WOMEN, THE NUMBER IN THE BOX WHERE ROW 6 AND COLUMN 3 MEET IS 2, THAT MEANS THAT THE 2ND ELIGIBLE WOMAN WILL BE SELECTED FOR THE MODULE.

NOW SUPPOSE THE THREE ELIGIBLE WOMEN'S LINE NUMBERS ARE '02', '03', AND '07', THEN THE 2ND ELIGIBLE WOMAN (LINE NUMBER '03') IS SELECTED FOR THE MODULE.

HOUSEHOLD NUMBER	Total number of eligible women in the household					
	1	2	3	4	5	6
0	1	2	2	3	5	5
1	1	1	3	4	1	6
2	1	2	1	1	2	1
3	1	1	2	2	3	2
4	1	2	3	3	4	3
5	1	1	1	4	5	4
6	1	2	2	1	1	5
7	1	1	3	2	2	6
8	1	2	1	3	3	1
9	1	1	2	4	4	2
10	1	2	3	1	5	3
11	1	1	1	2	1	4
12	1	2	2	3	2	5
13	1	1	3	4	3	6
14	1	2	1	1	4	1
15	1	1	2	2	5	2

WEIGHT, HEIGHT AND HEMOGLOBIN MEASUREMENT FOR CHILDREN AGE 0-5

201	CHECK COLUMN 11. RECORD THE LINE NUMBER AND AGE FOR ALL ELIGIBLE CHILDREN 0-5 YEARS IN QUESTION 202. IF MORE THAN SIX CHILDREN, USE ADDITIONAL QUESTIONNAIRE(S). A FINAL OUTCOME MUST BE RECORDED FOR THE WEIGHT AND HEIGHT MEASUREMENT IN 208 AND FOR THE ANEMIA PROCEDURE IN 213			
		CHILD 1	CHILD 2	CHILD 3
202	LINE NUMBER FROM COLUMN 11  NAME FROM COLUMN 2	LINE NUMBER ... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ... <input type="text"/> <input type="text"/> NAME _____
203	IF MOTHER INTERVIEWED, COPY MONTH AND YEAR FROM BIRTH HISTORY AND ASK DAY; IF MOTHER NOT INTERVIEWED, ASK: What is (NAME'S) birth date?	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR <b>2</b> <b>0</b> <input type="text"/> <input type="text"/>	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR <b>2</b> <b>0</b> <input type="text"/> <input type="text"/>	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR <b>2</b> <b>0</b> <input type="text"/> <input type="text"/>
204	CHECK 203: CHILD BORN IN JANUARY 2002 OR LATER?	YES ..... 1 NO ..... 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE, GO TO 215)	YES ..... 1 NO ..... 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE, GO TO 215)	YES ..... 1 NO ..... 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE, GO TO 215)
205	WEIGHT IN KILOGRAMS	KG. ... <input type="text"/> <input type="text"/> . <input type="text"/>	KG. ... <input type="text"/> <input type="text"/> . <input type="text"/>	KG. ... <input type="text"/> <input type="text"/> . <input type="text"/>
206	HEIGHT IN CENTIMETERS	CM. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	CM. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>	CM. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/>
207	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN ..... 1 STANDING UP ..... 2	LYING DOWN ..... 1 STANDING UP ..... 2	LYING DOWN ..... 1 STANDING UP ..... 2
208	RESULT OF WEIGHT AND HEIGHT MEASUREMENT	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6
209	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, GO TO 215) OLDER ..... 2	0-5 MONTHS ..... 1 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE, GO TO 215) OLDER ..... 2	0-5 MONTHS ..... 1 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE, GO TO 215) OLDER ..... 2
210	LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR THE CHILD (COLUMN 1) RECORD '00' IF NOT LISTED.	LINE NUMBER ... <input type="text"/> <input type="text"/>	LINE NUMBER ... <input type="text"/> <input type="text"/>	LINE NUMBER ... <input type="text"/> <input type="text"/>
211	READ CONSENT STATEMENT TO PARENT/OTHER ADULT RESPONSIBLE FOR CHILD. CIRCLE CODE AND SIGN.	GRANTED ..... 1 _____ (SIGN) ←   REFUSED ..... 2 (IF REFUSED, GO TO 213)	GRANTED ..... 1 _____ (SIGN) ←   REFUSED ..... 2 (IF REFUSED, GO TO 213)	GRANTED ..... 1 _____ (SIGN) ←   REFUSED ..... 2 (IF REFUSED, GO TO 213)
212	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA PAMPHLET	G/DL . <input type="text"/> <input type="text"/> . <input type="text"/>	G/DL . <input type="text"/> <input type="text"/> . <input type="text"/>	G/DL . <input type="text"/> <input type="text"/> . <input type="text"/>
213	RECORD RESULT CODE OF HEMOGLOBIN MEASUREMENT	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6
214		GO BACK TO 203 IN NEXT COLUMN IN THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE ADDITIONAL QUESTIONNAIRE(S); IF NO MORE CHILDREN, GO TO 215.		

**CONSENT STATEMENT FOR ANEMIA FOR CHILDREN**

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 request that all children born in 2002 or later participate in the anemia testing part of this survey and give a few drops of blood from a finger. The equipment used in taking 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 confidential.

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(S) OF CHILD(REN)) to participate in the anemia test?

WEIGHT, HEIGHT AND HEMOGLOBIN MEASUREMENT FOR CHILDREN AGE 0-5

		CHILD 4	CHILD 5	CHILD 6
202	LINE NUMBER FROM COLUMN 11 NAME FROM COLUMN 2	LINE NUMBER ... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ... <input type="text"/> <input type="text"/> NAME _____
203	IF MOTHER INTERVIEWED, COPY MONTH AND YEAR FROM BIRTH HISTORY AND ASK DAY; IF MOTHER NOT INTERVIEWED, ASK: What is (NAME'S) birth date?	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR <b>2</b> <b>0</b> <input type="text"/> <input type="text"/>	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR <b>2</b> <b>0</b> <input type="text"/> <input type="text"/>	DAY ..... <input type="text"/> <input type="text"/> MONTH ..... <input type="text"/> <input type="text"/> YEAR <b>2</b> <b>0</b> <input type="text"/> <input type="text"/>
204	CHECK 203: CHILD BORN IN JANUARY 2002 OR LATER?	YES ..... 1 NO ..... 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE, GO TO 215)	YES ..... 1 NO ..... 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE, GO TO 215)	YES ..... 1 NO ..... 2 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE, GO TO 215)
205	WEIGHT IN KILOGRAMS	KG. ... <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	KG. ... <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	KG. ... <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>
206	HEIGHT IN CENTIMETERS	CM. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	CM. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	CM. <input type="text"/> <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>
207	MEASURED LYING DOWN OR STANDING UP?	LYING DOWN ..... 1 STANDING UP ..... 2	LYING DOWN ..... 1 STANDING UP ..... 2	LYING DOWN ..... 1 STANDING UP ..... 2
208	RESULT OF WEIGHT AND HEIGHT MEASUREMENT	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6
209	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, GO TO 215) OLDER ..... 2	0-5 MONTHS ..... 1 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE, GO TO 215) OLDER ..... 2	0-5 MONTHS ..... 1 (GO TO 203 FOR NEXT CHILD OR, IF NO MORE, GO TO 215) OLDER ..... 2
210	LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR THE CHILD (COLUMN 1) RECORD '00' IF NOT LISTED.	LINE NUMBER ... <input type="text"/> <input type="text"/>	LINE NUMBER ... <input type="text"/> <input type="text"/>	LINE NUMBER ... <input type="text"/> <input type="text"/>
211	READ CONSENT STATEMENT TO PARENT/OTHER ADULT RESPONSIBLE FOR CHILD. CIRCLE CODE AND SIGN.	GRANTED ..... 1 ----- (SIGN) ----- REFUSED ..... 2 (IF REFUSED, GO TO 213)	GRANTED ..... 1 ----- (SIGN) ----- REFUSED ..... 2 (IF REFUSED, GO TO 213)	GRANTED ..... 1 ----- (SIGN) ----- REFUSED ..... 2 (IF REFUSED, GO TO 213)
212	RECORD HEMOGLOBIN LEVEL HERE AND IN THE ANEMIA PAMPHLET	G/DL . <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	G/DL . <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>	G/DL . <input type="text"/> <input type="text"/> . <input type="text"/> <input type="text"/>
213	RECORD RESULT CODE OF HEMOGLOBIN MEASUREMENT	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6
214		GO BACK TO 203 IN NEXT COLUMN IN THIS QUESTIONNAIRE OR IN THE FIRST COLUMN OF THE ADDITIONAL QUESTIONNAIRE(S); IF NO MORE CHILDREN, GO TO 215.		

**WEIGHT, HEIGHT AND HEMOGLOBIN MEASUREMENT TESTING FOR WOMEN AGE 15-49**

215	CHECK COLUMN 10. RECORD THE LINE NUMBER AND NAME FOR ALL ELIGIBLE WOMEN IN 216. IF THERE ARE MORE THAN THREE WOMEN, USE ADDITIONAL QUESTIONNAIRE(S).  A FINAL OUTCOME MUST BE RECORDER FOR THE WEIGHT AND HEIGHT MEASUREMENT IN 219 AND FOR THE ANEMIA TEST PROCEDURE IN 227			
		WOMAN 1	WOMAN 2	WOMAN 3
216	LINE NUMBER (COLUMN 10)  NAME (COLUMN 2)	LINE NUMBER ..... <input type="text"/> <input type="text"/>  NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/>  NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/>  NAME _____
217	WEIGHT IN KILOGRAMS	KG. .... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	KG. .... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	KG. .... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
218	HEIGHT IN CENTIMETERS	CM. .... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	CM. .... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	CM. .... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
219	RESULT OF WEIGHT AND HEIGHT MEASUREMENT	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6
220	AGE: CHECK COLUMN 7.	15-17 YEARS ..... 1 18-49 YEARS ..... 2 (GO TO 223) ←	15-17 YEARS ..... 1 18-49 YEARS ..... 2 (GO TO 223) ←	15-17 YEARS ..... 1 18-49 YEARS ..... 2 (GO TO 223) ←
221	MARITAL STATUS: CHECK COLUMN 8.	CODE 1 (NEVER MARRIED) ..... 1 CODES 2-5 (EVER MARRIED) ... 2 (GO TO 223) ←	CODE 1 (NEVER MARRIED) ..... 1 CODES 2-5 (EVER MARRIED) ... 2 (GO TO 223) ←	CODE 1 (NEVER MARRIED) ..... 1 CODES 2-5 (EVER MARRIED) ... 2 (GO TO 223) ←
222	FROM COLUMN 1 RECORD LINE NUMBER OF PARENT/OTHER ADULT RESPONSIBLE FOR ADOLESCENT. RECORD '00' IF NOT LISTED.	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT . <input type="text"/> <input type="text"/>	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT . <input type="text"/> <input type="text"/>	LINE NUMBER OF PARENT OR OTHER RESPONSIBLE ADULT . <input type="text"/> <input type="text"/>
223	READ ANEMIA TEST CONSENT STATEMENT. FOR NEVER-IN-UNION WOMEN AGE 15-17, ASK CONSENT FROM PARENT/OTHER ADULT IDENTIFIED IN 222 BEFORE ASKING RESPONDENT'S CONSENT.	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ..... 2 RESPONDENT REFUSED ..... 3  _____ (SIGN)  (IF REFUSED, GO TO 227).	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ..... 2 RESPONDENT REFUSED ..... 3  _____ (SIGN)  (IF REFUSED, GO TO 227).	GRANTED ..... 1 PARENT/OTHER RESPONSIBLE ADULT REFUSED ..... 2 RESPONDENT REFUSED ..... 3  _____ (SIGN)  (IF REFUSED, GO TO 227).
<b>CONSENT STATEMENT FOR ANEMIA TEST</b>				
<p>READ CONSENT STATEMENT TO EACH RESPONDENT. CIRCLE CODE '1' IN 223 IF RESPONDENT CONSENTS TO THE ANEMIA TEST AND CODE '3' IF SHE REFUSES.</p> <p>FOR NEVER-IN-UNION WOMEN AGE 15-17, ASK CONSENT FROM THE PARENT OR OTHER ADULT IDENTIFIED AS RESPONSIBLE FOR THE ADOLESCENT (SEE QUESTION 222) BEFORE ASKING THE ADOLESCENT FOR HER CONSENT. CIRCLE CODE '2' IN 223 IF THE PARENT (OTHER ADULT) REFUSES. CONDUCT THE TEST ONLY IF BOTH THE PARENT (OTHER ADULT) AND THE ADOLESCENT CONSENT.</p> <p>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.</p> <p>For the anemia testing, we will need a few drops of blood from a finger. The equipment used in taking the blood is clean and completely safe. It has never been used before and will be thrown away after each test.</p> <p>The blood will be tested for anemia immediately, and the result told to you right away. The result will be kept confidential.</p> <p>Do you have any questions?</p> <p>You can say yes to the test, or you can say no. It is up to you to decide.</p> <p>Will you (allow NAME OF ADOLESCENT to) take the anemia test?</p>				

		WOMAN 1	WOMAN 2	WOMAN 3
	LINE NUMBER (COLUMN 10) NAME (COLUMN 2)	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____	LINE NUMBER ..... <input type="text"/> <input type="text"/> NAME _____
224	PREGNANCY STATUS: 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
225	CHECK 223 AND PREPARE EQUIPMENT AND SUPPLIES FOR THE TEST FOR WHICH CONSENT HAS BEEN OBTAINED AND PROCEED WITH THE TEST.  A FINAL OUTCOME FOR THE THE ANEMIA TEST PROCEDURE MUST BE RECORDED IN 227 FOR EACH ELIGIBLE WOMAN EVEN IF SHE WAS NOT PRESENT, REFUSED, OR COULD NOT BE TESTED FOR SOME OTHER REASON.			
226	RECORD HEMO- GLOBIN LEVEL HERE AND IN ANEMIA PAMPHLET	G/DL ..... <input type="text"/> <input type="text"/> . <input type="text"/>	G/DL ..... <input type="text"/> <input type="text"/> . <input type="text"/>	G/DL ..... <input type="text"/> <input type="text"/> . <input type="text"/>
227	RECORD RESULT CODE OF HEMO- GLOBIN MEASURE- MENT.	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6	MEASURED ..... 1 NOT PRESENT ..... 2 REFUSED ..... 3 OTHER ..... 6



Department of Statistics  
Household Survey Directorate

The Hashemite Kingdom of Jordan  
JORDAN POPULATION AND  
FAMILY HEALTH SURVEY 2007

**WOMAN'S QUESTIONNAIRE**

Survey Contents Confidential by Statistical Law

IDENTIFICATION				
		QUESTIONNAIRE No.: <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>		
GOVERNORATE: _____	<input type="text"/>	BLOCK No.: _____	<input type="text"/> <input type="text"/> <input type="text"/>	
DISTRICT: _____	<input type="text"/>	BUILDING No.: _____		
SUB-DISTRICT: _____	<input type="text"/>	HOUSING UNIT No.: _____		
LOCALITY: _____	<input type="text"/>	CLUSTER No.: _____	<input type="text"/> <input type="text"/> <input type="text"/>	
AREA: _____	<input type="text"/>	HOUSEHOLD No.: _____	<input type="text"/> <input type="text"/>	
SUB-AREA: _____	<input type="text"/>	TELEPHONE/ MOBILE No. (if available)	<input type="text"/>	
STRATUM: _____	<input type="text"/>			
URBAN/RURAL (Urban=1; Rural=2)	<input type="text"/>			
NAME AND LINE NUMBER OF WOMAN: _____				<input type="text"/> <input type="text"/>
WOMAN SELECTED FOR DOMESTIC VIOLENCE SECTION (YES = 1; NO = 2) .....				<input type="checkbox"/>
INTERVIEWER VISITS				
	1	2	3	FINAL VISIT
DATE	_____	_____	_____	DAY <input type="text"/> <input type="text"/> MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> 2 <input type="text"/> 0 <input type="text"/> 0 <input type="text"/> 7
INTERVIEWER'S NAME	_____	_____	_____	INT. NUMBER <input type="text"/> <input type="text"/> <input type="text"/>
RESULT*	_____	_____	_____	RESULT <input type="text"/>
NEXT VISIT: DATE	_____	_____		TOTAL NUMBER OF VISITS <input type="text"/>
TIME	_____	_____		
*RESULT CODES: 1 COMPLETED                      4 REFUSED                                      7 OTHER _____ 2 NOT AT HOME                      5 PARTLY COMPLETED                      (SPECIFY) 3 POSTPONED                          6 INCAPCITATED				
SUPERVISOR		FIELD EDITOR		OFFICE EDITOR
NAME _____	<input type="text"/>	NAME _____	<input type="text"/>	<input type="text"/>
DATE _____	<input type="text"/>	DATE _____	<input type="text"/>	<input type="text"/>
				KEYED BY
				<input type="text"/>

SECTION 1. RESPONDENT'S BACKGROUND

INTRODUCTION AND CONSENT

<p><b>INFORMED CONSENT</b></p> <p>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.</p> <p>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.</p> <p>At this time, do you want to ask me anything about the survey? May I begin the interview now?</p> <p>Signature of interviewer: _____ Date: _____</p> <p>RESPONDENT AGREES TO BE INTERVIEWED . . . . . 1      RESPONDENT DOES NOT AGREE TO BE INTERVIEWED . . . . . 2 → END</p>
--

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
101	RECORD THE TIME.	HOUR ..... <input type="text"/> <input type="text"/> MINUTE ..... <input type="text"/> <input type="text"/>	
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 QUESTIONNAIRE	MARRIED ..... 1 DIVORCED ..... 2 WIDOWED ..... 3 SEPARATED ..... 4 NEVER MARRIED ..... 5	→ END
102	How long have you been living continuously in (NAME OF CURRENT PLACE OF RESIDENCE)?  IF LESS THAN ONE YEAR, RECORD '00' YEARS.	YEARS ..... <input type="text"/> <input type="text"/> ALWAYS ..... 95 VISITOR ..... 96	
104	In what month and year were you born?	MONTH ..... <input type="text"/> <input type="text"/>  DON'T KNOW MONTH ..... 98 YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW YEAR ..... 9998	
105	How old were you at your last birthday?  COMPARE AND CORRECT 104 AND/OR 105 IF INCONSISTENT.	AGE IN COMPLETED YEARS <input type="text"/> <input type="text"/>	
106	Have you ever attended school?	YES ..... 1 NO ..... 2	→ 113
107	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
108	What is the highest grade you completed at that level?	GRADE ..... <input type="text"/> <input type="text"/>	
113	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	
114	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	
115	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 ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAUGHTERS AT HOME ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
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 ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> DAUGHTERS ELSEWHERE ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
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 ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table> GIRLS DEAD ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr><tr><td> </td><td> </td></tr></table>									
208	SUM ANSWERS TO 203, 205, AND 207, AND ENTER TOTAL. IF NONE, RECORD '00'.	TOTAL ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td></tr></table>									
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 <input type="checkbox"/> NO <input type="checkbox"/> PROBE AND CORRECT 201-208 AS NECESSARY.										
210	CHECK 208:  ONE OR MORE BIRTHS <input type="checkbox"/> NO BIRTHS <input type="checkbox"/>	→ 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	213	214	215	216	217 IF ALIVE:	218 IF ALIVE:	219 IF ALIVE:	220 IF DEAD:	221
What name was given to your (first/next) baby?  (NAME)	Were any of these births twins?	Is (NAME) a boy or a girl?	In what month and year was (NAME) born?  PROBE: What is his/her birthday?	Is (NAME) still alive?	How old was (NAME) at his/her last birthday?  RECORD AGE IN COMPLETED YEARS. IF LESS THAN 1 YEAR, RECORD '00'	Is (NAME) living with you?	RECORD HOUSEHOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD).	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.	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 <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (NEXT BIRTH)	DAYS... 1 MONTHS 2 YEARS... 3	
02	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (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 <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (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 <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (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 <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (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 <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (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 <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS... 1 MONTHS 2 YEARS... 3	YES... 1 ADD ↓ BIRTH NO... 2 NEXT ↓ BIRTH

212	213	214	215	216	217 IF ALIVE:	218 IF ALIVE:	219 IF ALIVE:	220 IF DEAD:	221		
What name was given to your next baby?  (NAME)	Were any of these births twins?	Is (NAME) a boy or a girl?	In what month and year was (NAME) born?  PROBE: What is his/her birthday?	Is (NAME) still alive?	How old was (NAME) at his/her last birthday?  RECORD AGE IN COMPLETED YEARS. IF LESS THAN 1 YEAR, RECORD '00'	Is (NAME) living with you?	RECORD HOUSE-HOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSE-HOLD).	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.	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 <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS... 1 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS... 3 <input type="text"/> <input type="text"/>	YES... 1 ADD ↓ BIRTH NO... 2 NEXT ↓ BIRTH		
09	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS... 1 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS... 3 <input type="text"/> <input type="text"/>	YES... 1 ADD ↓ BIRTH NO... 2 NEXT ↓ BIRTH		
10	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS... 1 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS... 3 <input type="text"/> <input type="text"/>	YES... 1 ADD ↓ BIRTH NO... 2 NEXT ↓ BIRTH		
11	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS... 1 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS... 3 <input type="text"/> <input type="text"/>	YES... 1 ADD ↓ BIRTH NO... 2 NEXT ↓ BIRTH		
12	SING 1 MULT 2	BOY 1 GIRL 2	MONTH <input type="text"/> <input type="text"/> YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	YES... 1 NO... 2 ↓ 220	AGE IN YEARS <input type="text"/> <input type="text"/>	YES... 1 NO... 2	LINE NUMBER <input type="text"/> <input type="text"/> ↓ (GO TO 221)	DAYS... 1 <input type="text"/> <input type="text"/> MONTHS 2 <input type="text"/> <input type="text"/> YEARS... 3 <input type="text"/> <input type="text"/>	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	<p>COMPARE 208 WITH NUMBER OF BIRTHS IN HISTORY ABOVE AND MARK:</p> <p>NUMBERS ARE SAME <input type="checkbox"/> NUMBERS ARE DIFFERENT <input type="checkbox"/> → (PROBE AND RECONCILE)</p> <p>CHECK: FOR EACH BIRTH: YEAR OF BIRTH IS RECORDED.</p> <p>FOR EACH BIRTH SINCE JANUARY 2002: MONTH AND YEAR OF BIRTH ARE RECORDED.</p> <p>FOR EACH LIVING CHILD: CURRENT AGE IS RECORDED.</p> <p>FOR EACH DEAD CHILD: AGE AT DEATH IS RECORDED.</p> <p>FOR AGE AT DEATH 12 MONTHS OR 1 YEAR: PROBE TO DETERMINE EXACT NUMBER OF MONTHS.</p>										
224	CHECK 215 AND ENTER THE NUMBER OF BIRTHS IN 2002 OR LATER. IF NONE, RECORD '0' AND SKIP TO 226.									<input type="text"/>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
225	FOR EACH BIRTH SINCE JANUARY 2002, ENTER 'B' IN THE MONTH OF BIRTH IN COLUMN 1 OF 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	→ 229
227	How many months pregnant are you?  RECORD NUMBER OF COMPLETED MONTHS. ENTER 'P's IN COULMN 1 OF THE CALENDAR, BEGINNING WITH THE MONTH OF INTERVIEW AND FOR THE TOTAL NUMBER OF COMPLETED MONTHS.	MONTHS ..... <input type="text"/>	
228	At the time you became pregnant, did you want to become pregnant <u>then</u> , did you want to wait until <u>later</u> , or did you <u>not want</u> to have any (more) children at all?	THEN ..... 1 LATER ..... 2 NOT AT ALL ..... 3	
229	Have you ever had a pregnancy that miscarried, was aborted, or ended in a stillbirth?	YES ..... 1 NO ..... 2	→ 237
229A	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	
230	When did the last such pregnancy end?	MONTH ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>	
231	CHECK 230:  LAST PREGNANCY ENDED IN <input type="checkbox"/> JAN. 2002 OR LATER LAST PREGNANCY ENDED BEFORE <input type="checkbox"/> JAN. 2002		→ 237
231A	Did this (MISCARRIAGE/ABORTION/STILLBIRTH - FROM Q.229A) 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)	→ 231D
231B	Did you seek care for this (MISCARRIAGE/ABORTION/STILLBIRTH - FROM Q.229A)?	YES ..... 1 NO ..... 2	→ 232
231C	Where did you go for this (MISCARRIAGE/ABORTION/STILLBIRTH - FROM Q.229A)?  231D In which type of health facility did you go?  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)	<b>PUBLIC MEDICAL SECTOR</b> GOVT. HOSPITAL ..... 11 GOVT. HEALTH CENTER ..... 12 UNIVERSITY HOSPITAL ..... 13 ROYAL MEDICAL HOSPITAL ..... 14  OTHER PUBLIC ..... 16 (SPECIFY)  <b>PRIVATE MEDICAL SECTOR</b> PRIVATE HOSPITAL/CLINIC ..... 21 OTHER PRIVATE MEDICAL ..... 26 (SPECIFY)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
232	<p>How many months pregnant were you when the last such pregnancy ended?</p> <p>RECORD NUMBER OF COMPLETED MONTHS. ENTER 'T' IN COL. 1 OF THE CALENDAR IN THE MONTH THAT THE PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS.</p>	NUMBER OF MONTHS ..... <input type="text"/> <input type="text"/>	
233	<p>Since January 2002, have you had any other pregnancies that did not result in a live birth?</p>	YES ..... 1 NO ..... 2	→ 235
233A	<p>Since January 2002, how many other pregnancies that did not result in a live birth have you had?</p>	NUMBER OF PREGNANCIES . <input type="text"/> <input type="text"/>	
234	<p>ASK THE DATE AND THE DURATION OF PREGNANCY FOR EACH EARLIER NON-LIVE BIRTH PREGNANCY BACK TO JANUARY 2002.</p> <p>ENTER 'T' IN COLUMN 1 OF THE CALENDAR IN THE MONTH THAT EACH PREGNANCY TERMINATED AND 'P' FOR THE REMAINING NUMBER OF COMPLETED MONTHS.</p>		
235	<p>Did you have any miscarriages, abortions or stillbirths that ended before 2002?</p>	YES ..... 1 NO ..... 2	→ 237
236	<p>When did the last such pregnancy that terminated before 2002 end?</p>	MONTH ..... <input type="text"/> <input type="text"/> YEAR ..... <input type="text"/> <input type="text"/>	
237	<p>When did your last menstrual period start?</p> <p>_____</p> <p>(DATE, IF GIVEN)</p>	DAYS AGO ..... 1 <input type="text"/> <input type="text"/> WEEKS AGO ..... 2 <input type="text"/> <input type="text"/> MONTHS AGO ..... 3 <input type="text"/> <input type="text"/> YEARS AGO ..... 4 <input type="text"/> <input type="text"/> IN MENOPAUSE/ HAS HAD HYSTERECTOMY ... 994 BEFORE LAST BIRTH ..... 995 NEVER MENSTRUATED ..... 996	
238	<p>From one menstrual period to the next, are there certain days when a woman is more likely to become pregnant if she has sexual intercourse?</p>	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 301
239	<p>Is this time just before her period begins, during her period, right after her period has ended, or halfway between two periods?</p>	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	<p>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.</p> <p>Which ways or methods have you heard about? FOR METHODS NOT MENTIONED SPONTANEOUSLY, ASK: Have you ever heard of (METHOD)?</p> <p>CIRCLE CODE 1 IN 301 FOR EACH METHOD MENTIONED SPONTANEOUSLY. THEN PROCEED DOWN COLUMN 301, READING THE NAME AND DESCRIPTION OF EACH METHOD NOT MENTIONED SPONTANEOUSLY. CIRCLE CODE 1 IF METHOD IS RECOGNIZED, AND CODE 2 IF NOT RECOGNIZED. THEN, FOR EACH METHOD WITH CODE 1 CIRCLED IN 301, ASK 302.</p>	302 Have you ever used (METHOD)?	
01	<p>FEMALE STERILIZATION Women can have an operation to avoid having any more children.</p>	<p>YES ..... 1 NO ..... 2 ↘</p>	<p>Have you ever had an operation to avoid having any more children? YES ..... 1 NO ..... 2</p>
02	<p>MALE STERILIZATION Men can have an operation to avoid having any more children.</p>	<p>YES ..... 1 NO ..... 2 ↘</p>	<p>Have you ever had a husband who had an operation to avoid having any more children? YES ..... 1 NO ..... 2</p>
03	<p>PILL Women can take a pill every day to avoid becoming pregnant.</p>	<p>YES ..... 1 NO ..... 2 ↘</p>	<p>YES ..... 1 NO ..... 2</p>
04	<p>IUD Women can have a loop or coil placed inside them by a doctor or a midwife.</p>	<p>YES ..... 1 NO ..... 2 ↘</p>	<p>YES ..... 1 NO ..... 2</p>
05	<p>INJECTABLES Women can have an injection by a health provider that stops them from becoming pregnant usually for 3 months.</p>	<p>YES ..... 1 NO ..... 2 ↘</p>	<p>YES ..... 1 NO ..... 2</p>
06	<p>IMPLANTS Women can have several small rods placed in their upper arm by a doctor or nurse which can prevent pregnancy usually for 3 years.</p>	<p>YES ..... 1 NO ..... 2 ↘</p>	<p>YES ..... 1 NO ..... 2</p>
07	<p>CONDOM Men can put a rubber sheath on their penis before sexual intercourse.</p>	<p>YES ..... 1 NO ..... 2 ↘</p>	<p>YES ..... 1 NO ..... 2</p>
08	<p>FEMALE CONDOM Women can place a sheath in their vagina before sexual intercourse.</p>	<p>YES ..... 1 NO ..... 2 ↘</p>	<p>YES ..... 1 NO ..... 2</p>
09	<p>LACTATIONAL AMENORRHEA METHOD (LAM)</p>	<p>YES ..... 1 NO ..... 2 ↘</p>	<p>YES ..... 1 NO ..... 2</p>
10	<p>PERIODIC ABSTINENCE Every month that a woman is sexually active she can avoid pregnancy by not having sexual intercourse on the days of the month she is most likely to get pregnant.</p>	<p>YES ..... 1 NO ..... 2 ↘</p>	<p>YES ..... 1 NO ..... 2</p>
11	<p>WITHDRAWAL Men can be careful and pull out before climax.</p>	<p>YES ..... 1 NO ..... 2 ↘</p>	<p>YES ..... 1 NO ..... 2</p>
12	<p>EMERGENCY CONTRACEPTION As an emergency measure after unprotected sexual intercourse, women can take special pills at any time within five days to prevent pregnancy.</p>	<p>YES ..... 1 NO ..... 2 ↘</p>	<p>YES ..... 1 NO ..... 2</p>
13	<p>Have you heard of any other ways or methods that women or men can use to avoid pregnancy?</p>	<p>YES ..... 1  _____ (SPECIFY)  _____ (SPECIFY) NO ..... 2</p>	<p>YES ..... 1 NO ..... 2  YES ..... 1 NO ..... 2</p>
303	<p>CHECK 302:</p> <p>NOT A SINGLE "YES" (NEVER USED) <input type="checkbox"/> AT LEAST ONE "YES" (EVER USED) <input type="checkbox"/></p>		<p>→ 307</p>

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
304	Have you ever used anything or tried in any way to delay or avoid getting pregnant?	YES ..... 1 NO ..... 2	→ 306
305	ENTER '0' IN COLUMN 1 OF THE CALENDAR IN EACH BLANK MONTH.		→ 333
306	What have you used or done? CORRECT 302 AND 303 (AND 301 IF NECESSARY).		
307	Now I would like to ask you about the first time that you did something or used a method to avoid getting pregnant. How many living children did you have at that time, if any? IF NONE, RECORD '00'.	NUMBER OF CHILDREN ..... <input type="text"/> <input type="text"/>	
308	CHECK 302 (01):  WOMAN NOT STERILIZED <input type="checkbox"/> WOMAN STERILIZED <input type="checkbox"/>		→ 311A
309	CHECK 226:  NOT PREGNANT OR UNSURE <input type="checkbox"/> PREGNANT <input type="checkbox"/>		→ 322
310	Are you currently doing something or using any method to delay or avoid getting pregnant?	YES ..... 1 NO ..... 2	→ 322
311	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 PILL ..... C IUD ..... D INJECTABLES ..... E IMPLANTS ..... F CONDOM ..... G FEMALE CONDOM ..... H DIAPHRAGM ..... I FOAM/JELLY ..... J LACTATIONAL AMEN. METHOD ... K PERIODIC ABSTINENCE ..... L WITHDRAWAL ..... M OTHER ..... X (SPECIFY)	
311A	CIRCLE 'A' FOR FEMALE STERILIZATION.		
311B	Who advised you to use this method?  IF MORE THAN ONE METHOD CIRCLED IN 311/311A, 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 OTHER ..... 96 (SPECIFY)	
311C	CHECK 311/311A:  CIRCLE METHOD(S) CODE	FEMALE STERILIZATION ..... A MALE STERILIZATION ..... B PILL ..... C IUD ..... D INJECTABLES ..... E IMPLANTS ..... F CONDOM ..... G FEMALE CONDOM ..... H DIAPHRAGM ..... I FOAM/JELLY ..... J LACTATIONAL AMEN. METHOD ... K PERIODIC ABSTINENCE ..... L WITHDRAWAL ..... M OTHER METHOD . specify X	→ 316 → 315 → 314 → 315 → 319A

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
312	<p>May I see the package of pills you are using?</p> <p>IF PACKAGE SEEN RECORD CODE OF BRAND USING THE FIRST LIST OF CODES</p> <p>IF PACKAGE NOT SEEN, ASK: Do you know the brand name of the pills you are using?</p> <p>RECORD CODE OF BRAND USING THE SECOND LIST OF CODES.</p>	<p><b>PACKAGE SEEN</b></p> <p>CERAZETTE ..... 11</p> <p>OVRETTE ..... 12</p> <p>LOFEMENAL ..... 13</p> <p>MICROGYNON ..... 14</p> <p>YASMIN ..... 15</p> <p>OTHER ..... 16</p> <p><b>PACKAGE NOT SEEN</b></p> <p>CERAZETTE ..... 21</p> <p>OVRETTE ..... 22</p> <p>LOFEMENAL ..... 23</p> <p>MICROGYNON ..... 24</p> <p>YASMIN ..... 25</p> <p>OTHER ..... 26</p> <p>DON'T KNOW ..... 98</p>	
314	<p>RECORD IF CODE 'C' FOR PILL IS CIRCLED IN 311.</p> <p>YES (USING PILL) <input type="checkbox"/></p> <p>NO (USING CONDOM BUT NOT PILL) <input type="checkbox"/></p> <p>The last time you obtained the pills, how many pill cycles did you get?</p> <p>The last time you obtained the condoms, how many condoms did you get?</p>	<p>NUMBER OF PILL CYCLES/CONDOMS .. <input type="text"/></p> <p>DON'T KNOW ..... 998</p>	
315	<p>The last time you obtained (HIGHEST METHOD ON LIST IN 311), how much did you pay in total, including the cost of the method and any consultation you may have had?</p> <p>IF MORE THAN 990 JD, RECORD 990</p>	<p>COST IN JD ..... <input type="text"/></p> <p>FREE ..... 995</p> <p>DON'T KNOW ..... 998</p>	
315A	<p>CHECK 311:</p> <p>USING IUD CODE 'D' CIRCLED <input type="checkbox"/></p> <p>NOT USING IUD CODE 'D' NOT CIRCLED <input type="checkbox"/></p>		→ 319A
315B	<p>Who inserted your IUD?</p>	<p>MALE DOCTOR ..... 1</p> <p>FEMALE DOCTOR ..... 2</p> <p>MIDWIFE ..... 3</p> <p>OTHER ..... 6</p> <p>(SPECIFY)</p>	→ 319A
316	<p>In what facility did the sterilization take place?</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE)</p>	<p><b>PUBLIC MEDICAL SECTOR</b></p> <p>GOVT. HOSPITAL ..... 11</p> <p>UNIVERSITY HOSPITAL ..... 12</p> <p>ROYAL MEDICAL SERVICES ..... 13</p> <p>OTHER PUBLIC ..... 16</p> <p>(SPECIFY)</p> <p><b>PRIVATE MEDICAL SECTOR</b></p> <p>PRIVATE HOSPITAL/CLINIC ... 21</p> <p>OTHER PRIVATE MEDICAL ..... 26</p> <p>(SPECIFY)</p> <p>DON'T KNOW ..... 98</p>	
317	<p>CHECK 311/311A:</p> <p>CODE 'A' CIRCLED <input type="checkbox"/></p> <p>CODE 'B' CIRCLED <input type="checkbox"/></p> <p>Before your sterilization operation, were you told that you would not be able to have any (more) children because of the operation?</p> <p>Before the sterilization operation, was your husband told that he would not be able to have any (more) children because of the operation?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	
318	<p>How much was paid in total for the sterilization, including any consultation you (he) may have had?</p> <p>IF MORE THAN 990 JD, RECORD 990</p>	<p>COST IN JD ..... <input type="text"/></p> <p>FREE ..... 995</p> <p>DON'T KNOW ..... 998</p>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																
318A	Do you regret that you had the operation not to have any (more) children?	YES ..... 1 NO ..... 2																	
319	In what month and year was the sterilization performed?																		
319A	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 ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></table> YEAR ..... <table border="1" style="display: inline-table; vertical-align: middle;"><tr><td> </td><td> </td><td> </td><td> </td></tr><tr><td> </td><td> </td><td> </td><td> </td></tr></table>																	
320	CHECK 319/319A, 215 AND 230: ANY BIRTH OR PREGNANCY TERMINATION AFTER MONTH AND YEAR OF START OF USE OF CONTRACEPTION IN 319/319A GO BACK TO 319/319A, PROBE AND RECORD MONTH AND YEAR AT START OF CONTINUOUS USE OF CURRENT METHOD (MUST BE AFTER LAST BIRTH OR PREGNANCY TERMINATION).	YES <input type="checkbox"/> NO <input type="checkbox"/>																	
321	CHECK 319/319A: YEAR IS 2002 OR LATER <input type="checkbox"/> ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN COLUMN 1 OF THE CALENDAR AND IN EACH MONTH BACK TO THE DATE STARTED USING.	YEAR IS 2001 OR EARLIER <input type="checkbox"/> ENTER CODE FOR METHOD USED IN MONTH OF INTERVIEW IN COL. 1 OF THE CALENDAR AND EACH MONTH BACK TO JANUARY 2002 THEN SKIP TO → 331																	
322	I would like to ask you some questions about the times you or your husband 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 2002. USE NAMES OF CHILDREN, DATES OF BIRTH, AND PERIODS OF PREGNANCY AS REFERENCE POINTS. <b>IN COLUMN 1:</b> ENTER METHOD USE CODE OR '0' FOR NONUSE IN EACH BLANK MONTH.  ILLUSTRATIVE QUESTIONS: COLUMN 1:      *    When was the last time you used a method? Which method was that? *    When did you start using that method? How long after the birth of (NAME)? *    How long did you use the method then?  <b>IN COLUMN 2:</b> ENTER CODES FOR DISCONTINUATION NEXT TO LAST MONTH OF USE. NUMBER OF CODES IN COL.2 MUST BE SAME AS NUMBER OF INTERRUPTIONS OF METHOD USE IN COL.1  ASK WHY SHE STOPPED USING THE METHOD. IF A PREGNANCY FOLLOWED, ASK WHETHER SHE BECAME PREGNANT UNINTENTIONALLY WHILE USING THE METHOD OR DELIBERATELY STOPPED TO GET PREGNANT.  ILLUSTRATIVE QUESTIONS: COLUMN 2:      *    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																		
323	CHECK 311/311A:  CIRCLE METHOD CODE:  IF MORE THAN ONE METHOD CODE CIRCLED IN 311/311A, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	NO CODE CIRCLED ..... 00 FEMALE STERILIZATION ..... 01 MALE STERILIZATION ..... 02 PILL ..... 03 IUD ..... 04 INJECTABLES ..... 05 IMPLANTS ..... 06 CONDOM ..... 07 FEMALE CONDOM ..... 08 DIAPHRAGM ..... 09 FOAM/JELLY ..... 10 LACTATIONAL AMEN. METHOD ... 11 PERIODIC ABSTINENCE ..... 12 WITHDRAWAL ..... 13 OTHER METHOD ..... 96	→ 333 → 326 → 335           → 324A → 324A → 335 → 335																

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
324	Where did you obtain (CURRENT METHOD) when you started using it?	<b>PUBLIC MEDICAL SECTOR</b> GOVT. HOSPITAL ..... 11 GOVT. HEALTH CENTER ..... 12 GOVT. MCH ..... 13 UNIVERSITY HOSPITAL ..... 14 ROYAL MEDICAL SERVICES ... 15 OTHER PUBLIC _____ 16 (SPECIFY)	
324A	Where did you learn how to use prionic abstinence/the lactational amenorhea method?  IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.  _____ (NAME OF PLACE)	<b>PRIVATE MEDICAL SECTOR</b> 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)  <b>OTHER SOURCE</b> FRIEND/RELATIVE ..... 33 OTHER _____ 96 (SPECIFY)	
325	CHECK 311/311A:  CIRCLE METHOD CODE:  IF MORE THAN ONE METHOD CODE CIRCLED IN 311/311A, CIRCLE CODE FOR HIGHEST METHOD IN LIST.	PILL ..... 03 IUD ..... 04 INJECTABLES ..... 05 IMPLANTS ..... 06 CONDOM ..... 07 FEMALE CONDOM ..... 08 DIAPHRAGM ..... 09 FOAM/JELLY ..... 10 LACTATIONAL AMEN. METHOD ... 11 PERIODIC ABSTINENCE ..... 12	→ 332 → 329 → 329 → 329 → 335 → 335
326	You obtained (CURRENT METHOD FROM 323) from (SOURCE OF METHOD FROM 316 OR 324) in (DATE FROM 319/319A). At that time, were you told about side effects or problems you might have with the method?	YES ..... 1 NO ..... 2	→ 328
327	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	→ 329
328	Were you told what to do if you experienced side effects or problems?	YES ..... 1 NO ..... 2	
329	CHECK 326:  CODE '1' CIRCLED <input type="checkbox"/> CODE '1' NOT CIRCLED <input type="checkbox"/>  At that time, were you told about other methods of family planning that you could use?      When you obtained (CURRENT METHOD FROM 323) from (SOURCE OF METHOD FROM 316 OR 324) were you told about other methods of family planning that you could use?	YES ..... 1 NO ..... 2	→ 331
330	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	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
331	<p>CHECK 311/311A:</p> <p>CIRCLE METHOD CODE:</p> <p>IF MORE THAN ONE METHOD CODE CIRCLED IN 311/311A, CIRCLE CODE FOR HIGHEST METHOD IN LIST.</p>	<p>FEMALE STERILIZATION ..... 01</p> <p>MALE STERILIZATION ..... 02</p> <p>PILL ..... 03</p> <p>IUD ..... 04</p> <p>INJECTABLES ..... 05</p> <p>IMPLANTS ..... 06</p> <p>CONDOM ..... 07</p> <p>FEMALE CONDOM ..... 08</p> <p>DIAPHRAGM ..... 09</p> <p>FOAM/JELLY ..... 10</p> <p>LACTATIONAL AMEN. METHOD ... 11</p> <p>PERIODIC ABSTINENCE ..... 12</p> <p>WITHDRAWAL ..... 13</p> <p>OTHER METHOD ..... 96</p>	<p>→ 335</p> <p>→ 335</p>
332	<p>Where did you obtain (CURRENT METHOD) the last time?</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE)</p>	<p><b>PUBLIC MEDICAL SECTOR</b></p> <p>GOVT. HOSPITAL ..... 11</p> <p>GOVT. HEALTH CENTER ..... 12</p> <p>GOVT. MCH ..... 13</p> <p>UNIVERSITY HOSPITAL/CLINIC ..... 14</p> <p>ROYAL MEDICAL SERVICES ..... 15</p> <p>OTHER PUBLIC ..... 16</p> <p>(SPECIFY)</p> <p><b>PRIVATE MEDICAL SECTOR</b></p> <p>PRIVATE HOSPITAL/CLINIC ... 21</p> <p>PRIVATE DOCTOR ..... 22</p> <p>PHARMACY ..... 23</p> <p>JORDANIAN AS. OF FP AND PROTECTION (JAFPP) ..... 24</p> <p>UNRWA CLINIC ..... 25</p> <p>OTHER NON-GOV ORGANIZATION ..... 26</p> <p>OTHER PRIVATE MEDICAL ..... 27</p> <p>(SPECIFY)</p> <p><b>OTHER SOURCE</b></p> <p>FRIEND/RELATIVE ..... 33</p> <p>OTHER ..... 96</p> <p>(SPECIFY)</p>	<p>→ 335</p>
333	<p>Do you know of a place where you can obtain a method of family planning?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	<p>→ 335</p>
334	<p>Where is that?</p> <p>Any other place?</p> <p>PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S).</p> <p>IF UNABLE TO DETERMINE IF HOSPITAL, HEALTH CENTER OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE(S))</p>	<p><b>PUBLIC MEDICAL SECTOR</b></p> <p>GOVT. HOSPITAL ..... A</p> <p>GOVT. HEALTH CENTER ..... B</p> <p>GOVT. MCH ..... C</p> <p>UNIVERSITY HOSPITAL/CLINIC ... D</p> <p>ROYAL MEDICAL SERVICES ..... E</p> <p>OTHER PUBLIC ..... F</p> <p>(SPECIFY)</p> <p><b>PRIVATE MEDICAL SECTOR</b></p> <p>PRIVATE HOSPITAL/CLINIC ..... G</p> <p>PRIVATE DOCTOR ..... H</p> <p>PHARMACY ..... I</p> <p>JORDANIAN AS. OF FP AND PROTECTION (JAFPP) ..... J</p> <p>UNRWA CLINIC ..... K</p> <p>OTHER NON-GOV ORGANIZATION ..... L</p> <p>OTHER PRIVATE MEDICAL ..... M</p> <p>(SPECIFY)</p> <p><b>OTHER SOURCE</b></p> <p>FRIEND/RELATIVE ..... N</p> <p>OTHER ..... X</p> <p>(SPECIFY)</p>	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
335	In the last 12 months, were you visited by a health worker who talked to you about family planning?	YES ..... 1 NO ..... 2	
336	In the last 12 months, have you visited a health facility for care for yourself (or your children)?	YES ..... 1 NO ..... 2	→ 401
337	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 2002 OR LATER <input type="checkbox"/> NO BIRTHS IN 2002 OR LATER <input type="checkbox"/> → 548			
402	CHECK 215: ENTER IN THE TABLE THE LINE NUMBER, NAME, AND SURVIVAL STATUS OF EACH BIRTH IN 2002 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	LINE NUMBER FROM 212	LAST BIRTH LINE NO. <input type="text"/> <input type="text"/>	NEXT-TO-LAST BIRTH LINE NO. <input type="text"/> <input type="text"/>	SECOND-FROM-LAST BIRTH LINE NO. <input type="text"/> <input type="text"/>
404	FROM 212 AND 216	NAME _____ LIVING <input type="checkbox"/> DEAD <input type="checkbox"/>	NAME _____ LIVING <input type="checkbox"/> DEAD <input type="checkbox"/>	NAME _____ LIVING <input type="checkbox"/> DEAD <input type="checkbox"/>
405	At the time you became pregnant with (NAME), did you want to become pregnant <u>then</u> , did you want to wait until <u>later</u> , or did you <u>not want</u> to have any (more) children at all?	THEN ..... 1 (SKIP TO 407) ← LATER ..... 2 NOT AT ALL ..... 3 (SKIP TO 407) ←	THEN ..... 1 (SKIP TO 426) ← LATER ..... 2 NOT AT ALL ..... 3 (SKIP TO 426) ←	THEN ..... 1 (SKIP TO 426) ← LATER ..... 2 NOT AT ALL ..... 3 (SKIP TO 426) ←
406	How much longer would you have liked to wait?	MONTHS ..1 <input type="text"/> <input type="text"/> YEARS ..2 <input type="text"/> <input type="text"/> DON'T KNOW ... 998	MONTHS ..1 <input type="text"/> <input type="text"/> YEARS ..2 <input type="text"/> <input type="text"/> DON'T KNOW ... 998	MONTHS ..1 <input type="text"/> <input type="text"/> YEARS ..2 <input type="text"/> <input type="text"/> DON'T KNOW ... 998
407	Did you see anyone for antenatal care for this pregnancy?  IF YES: 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) NO ONE ..... Y (SKIP TO 414) ←		
408	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 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	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH															
		NAME _____	NAME _____	NAME _____															
409	How many months pregnant were you when you first received antenatal care for this pregnancy?	NUMBER OF MONTHS ... <input type="text"/> <input type="text"/> DON'T KNOW ..... 98																	
410	How many times did you receive antenatal care during this pregnancy?	NUMBER OF TIMES . . <input type="text"/> <input type="text"/> DON'T KNOW ..... 98																	
411	As part of your antenatal care during this pregnancy, were any of the following done at least once?  Were you weighed? Was your blood pressure measured? Did you give a urine sample? Did you give a blood sample?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td></td> <td style="text-align: center;">YES</td> <td style="text-align: center;">NO</td> </tr> <tr> <td>WEIGHT ...</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>BP .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>URINE .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>BLOOD ...</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </table>				YES	NO	WEIGHT ...	1	2	BP .....	1	2	URINE .....	1	2	BLOOD ...	1	2
	YES	NO																	
WEIGHT ...	1	2																	
BP .....	1	2																	
URINE .....	1	2																	
BLOOD ...	1	2																	
412	During (any of) your antenatal care visit(s), were you told about the signs of pregnancy complications?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td>YES .....</td> <td style="text-align: center;">1</td> </tr> <tr> <td>NO .....</td> <td style="text-align: center;">2</td> </tr> <tr> <td colspan="2" style="text-align: center;">(SKIP TO 413A) ←</td> </tr> <tr> <td>DON'T KNOW .....</td> <td style="text-align: center;">8</td> </tr> </table>			YES .....	1	NO .....	2	(SKIP TO 413A) ←		DON'T KNOW .....	8							
YES .....	1																		
NO .....	2																		
(SKIP TO 413A) ←																			
DON'T KNOW .....	8																		
413	Were you told where to go if you had any of these complications?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td>YES .....</td> <td style="text-align: center;">1</td> </tr> <tr> <td>NO .....</td> <td style="text-align: center;">2</td> </tr> <tr> <td>DON'T KNOW .....</td> <td style="text-align: center;">8</td> </tr> </table>			YES .....	1	NO .....	2	DON'T KNOW .....	8									
YES .....	1																		
NO .....	2																		
DON'T KNOW .....	8																		
413A	During (any of) your antenatal care visit(s), were you told about the signs of complications during the postnatal period?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td>YES .....</td> <td style="text-align: center;">1</td> </tr> <tr> <td>NO .....</td> <td style="text-align: center;">2</td> </tr> <tr> <td>DON'T KNOW .....</td> <td style="text-align: center;">8</td> </tr> </table>	YES .....	1	NO .....	2	DON'T KNOW .....	8											
YES .....	1																		
NO .....	2																		
DON'T KNOW .....	8																		
413B	During (any of) your antenatal care visit(s), were you told about having postnatal care visits one week and 30 days after delivery?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td>YES .....</td> <td style="text-align: center;">1</td> </tr> <tr> <td>NO .....</td> <td style="text-align: center;">2</td> </tr> <tr> <td>DON'T KNOW .....</td> <td style="text-align: center;">8</td> </tr> </table>	YES .....	1	NO .....	2	DON'T KNOW .....	8											
YES .....	1																		
NO .....	2																		
DON'T KNOW .....	8																		
414	During this pregnancy, were you given an injection in the arm to prevent the baby from getting tetanus, that is, convulsions after birth?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td>YES .....</td> <td style="text-align: center;">1</td> </tr> <tr> <td>NO .....</td> <td style="text-align: center;">2</td> </tr> <tr> <td colspan="2" style="text-align: center;">(SKIP TO 417) ←</td> </tr> <tr> <td>DON'T KNOW .....</td> <td style="text-align: center;">8</td> </tr> </table>	YES .....	1	NO .....	2	(SKIP TO 417) ←		DON'T KNOW .....	8									
YES .....	1																		
NO .....	2																		
(SKIP TO 417) ←																			
DON'T KNOW .....	8																		
415	During this pregnancy, how many times did you get this tetanus injection?	TIMES ..... <input type="text"/> DON'T KNOW ... 8																	
416	CHECK 415:	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">2 OR MORE TIMES <input type="checkbox"/></td> <td style="width: 50%;">1 OR DK <input type="checkbox"/></td> </tr> <tr> <td style="text-align: center;">↓</td> <td style="text-align: center;">↓</td> </tr> <tr> <td colspan="2" style="text-align: center;">(SKIP TO 421)</td> </tr> </table>	2 OR MORE TIMES <input type="checkbox"/>	1 OR DK <input type="checkbox"/>	↓	↓	(SKIP TO 421)												
2 OR MORE TIMES <input type="checkbox"/>	1 OR DK <input type="checkbox"/>																		
↓	↓																		
(SKIP TO 421)																			
417	At any time before this pregnancy, did you receive any tetanus injections, either to protect yourself or another baby?	<table style="width: 100%; border-collapse: collapse;"> <tr> <td>YES .....</td> <td style="text-align: center;">1</td> </tr> <tr> <td>NO .....</td> <td style="text-align: center;">2</td> </tr> <tr> <td colspan="2" style="text-align: center;">(SKIP TO 421) ←</td> </tr> <tr> <td>DON'T KNOW .....</td> <td style="text-align: center;">8</td> </tr> </table>	YES .....	1	NO .....	2	(SKIP TO 421) ←		DON'T KNOW .....	8									
YES .....	1																		
NO .....	2																		
(SKIP TO 421) ←																			
DON'T KNOW .....	8																		
418	Before this pregnancy, how many other times did you receive a tetanus injection?  IF 7 OR MORE TIMES, RECORD '7'.	TIMES ..... <input type="text"/> DON'T KNOW ... 8																	

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
419	In what month and year did you receive the last tetanus injection before this pregnancy?	MONTH ... <input type="text"/> <input type="text"/> DK MONTH ..... 98 YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> (SKIP TO 421) ← DK YEAR ..... 9998		
420	How many years ago did you receive that tetanus injection?	YEARS AGO ..... <input type="text"/> <input type="text"/>		
421	During this pregnancy, were you given or did you buy any iron tablets or iron syrup?	YES ..... 1 NO ..... 2 (SKIP TO 426) ← 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 . <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW ... 998		
426	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
427	Was (NAME) weighed at birth?	YES ..... 1 NO ..... 2 (SKIP TO 429) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 429) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 429) ← DON'T KNOW ..... 8
428	How much did (NAME) weigh?  RECORD WEIGHT IN KILOGRAMS FROM HEALTH CARD, IF AVAILABLE.	KG FROM CARD 1 <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/> KG FROM RECALL 2 <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW . 99998	KG FROM CARD 1 <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/> KG FROM RECALL 2 <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW . 99998	KG FROM CARD 1 <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/> KG FROM RECALL 2 <input type="text"/> . <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW . 99998
429	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 430) ← NO ONE ..... Y	HEALTH PERSONNEL DOCTOR ..... A NURSE/MIDWIFE . B  OTHER PERSON X  _____ (SPECIFY) (SKIP TO 430) ← NO ONE ..... Y	HEALTH PERSONNEL DOCTOR ..... A NURSE/MIDWIFE . B  OTHER PERSON X  _____ (SPECIFY) (SKIP TO 430) ← NO ONE ..... Y

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
429A	How much did you pay the service provider for this delivery?  RECORD THE TOTAL COST IN DINARS	COST IN JD <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> FREE ..... 9995 DON' T KNOW . 9998	COST IN JD <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> FREE ..... 9995 DON' T KNOW . 9998	COST IN JD <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> FREE ..... 9995 DON' T KNOW . 9998
430	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 NAME OF THE PLACE.  _____ (NAME OF PLACE)	<b>HOME</b> YOUR HOME ... 11 (SKIP TO 437) ← OTHER HOME ... 12  <b>PUBLIC MED. SECTOR</b> GOVT. HOSPITAL 21 GOVT. HEALTH CENTER ..... 22 UNIVERSITY HOSPITAL ... 23 ROYAL MEDICAL SERVICES ... 24 OTHER PUBLIC 26  _____ (SPECIFY)  <b>PRIVATE MED. SECTOR</b> PVT. HOSPITAL/CLINIC ..... 31 OTHER PRIVATE MED. _____ 36 (SPECIFY)  <b>OTHER</b> _____ 96 (SPECIFY)   (SKIP TO 437) ←	<b>HOME</b> YOUR HOME ... 11 (SKIP TO 438) ← OTHER HOME ... 12  <b>PUBLIC MED. SECTOR</b> GOVT. HOSPITAL 21 GOVT. HEALTH CENTER ..... 22 UNIVERSITY HOSPITAL ... 23 ROYAL MEDICAL SERVICES ... 24 OTHER PUBLIC 26  _____ (SPECIFY)  <b>PRIVATE MED. SECTOR</b> PVT. HOSPITAL/CLINIC ..... 31 OTHER PRIVATE MED. _____ 36 (SPECIFY)  <b>OTHER</b> _____ 96 (SPECIFY)   (SKIP TO 438) ←	<b>HOME</b> YOUR HOME ... 11 (SKIP TO 438) ← OTHER HOME ... 12  <b>PUBLIC MED. SECTOR</b> GOVT. HOSPITAL 21 GOVT. HEALTH CENTER ..... 22 UNIVERSITY HOSPITAL ... 23 ROYAL MEDICAL SERVICES ... 24 OTHER PUBLIC 26  _____ (SPECIFY)  <b>PRIVATE MED. SECTOR</b> PVT. HOSPITAL/CLINIC ..... 31 OTHER PRIVATE MED. _____ 36 (SPECIFY)  <b>OTHER</b> _____ 96 (SPECIFY)   (SKIP TO 438) ←
431	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 <input type="text"/> <input type="text"/> DAYS 2 <input type="text"/> <input type="text"/> WEEKS 3 <input type="text"/> <input type="text"/> DON'T KNOW . 998	HOURS 1 <input type="text"/> <input type="text"/> DAYS 2 <input type="text"/> <input type="text"/> WEEKS 3 <input type="text"/> <input type="text"/> DON'T KNOW ... 998	HOURS 1 <input type="text"/> <input type="text"/> DAYS 2 <input type="text"/> <input type="text"/> WEEKS 3 <input type="text"/> <input type="text"/> DON'T KNOW ... 998
432	Was (NAME) delivered by caesarean section?	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2
432A	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	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8
432B	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	YES ..... 1 NO ..... 2	YES ..... 1 NO ..... 2
433	Before you were discharged after (NAME) was born, did any health care provider check on your health?	YES ..... 1 NO ..... 2 (SKIP TO 436) ←	YES ..... 1 (SKIP TO 449) ← NO ..... 2	YES ..... 1 (SKIP TO 449) ← NO ..... 2

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____													
434	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 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DAYS 2 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> WEEKS 3 <table border="1"><tr><td></td><td></td></tr><tr><td></td><td></td></tr></table> DON'T KNOW ... 998															
435	Who checked on your health at that time?  PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR ..... 1 NURSE/MIDWIFE 2 OTHER PERSON 6  _____ (SPECIFY)															
436	After you were discharged, did any health care provider check on your health?	YES ..... 1 (SKIP TO 439A) ← NO ..... 2			YES ..... 1 (SKIP TO 449) ← NO ..... 2	YES ..... 1 (SKIP TO 449) ← NO ..... 2											
436A	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 AVAILABILITY 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 448) ←															
437	Why didn't you deliver in a health facility?  PROBE: Any other reason?  RECORD ALL MENTIONED.	COST TOO MUCH . . A FACILITY NOT OPEN . B TOO FAR/ NO TRANSPORTATION C DON'T TRUST FACILITY/POOR QUALITY SERVICE D NO FEMALE PROVIDER AT FACILITY . . E HUSBAND/FAMILY DID NOT ALLOW . . F NOT NECESSARY . . G NOT CUSTOMARY . . H OTHER _____ X (SPECIFY)															
438	After (NAME) was born, did any health care provider check on your health?	YES ..... 1 (SKIP TO 439) ← NO ..... 2					YES ..... 1 (SKIP TO 449) ← NO ..... 2	YES ..... 1 (SKIP TO 449) ← NO ..... 2									

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____				
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 AVAILABILITY 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 443) ←						
439	How long after delivery did the first check take place?	HOURS 1 <table border="1"><tr><td></td><td></td></tr></table>						
439A	How long after delivery, did this check take place?  IF LESS THAN ONE DAY, RECORD HOURS. IF LESS THAN ONE WEEK, RECORD DAYS.	DAYS 2 <table border="1"><tr><td></td><td></td></tr></table> WEEKS 3 <table border="1"><tr><td></td><td></td></tr></table> DON'T KNOW ... 998						
440	Who checked on your health at that time?  PROBE FOR MOST QUALIFIED PERSON.	HEALTH PERSONNEL DOCTOR ..... 1 NURSE/MIDWIFE 2 OTHER PERSON _____ 6 (SPECIFY)						
441	Where did this (first) check 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 NAME OF THE PLACE.  _____ (NAME OF PLACE)	<b>HOME</b> YOUR HOME ... 11 OTHER HOME ... 12  <b>PUBLIC MED. SECTOR</b> GOVT. HOSPITAL 21 GOVT. HEALTH CENTER ..... 22 GOVT. MCH ... 23 UNIVERSITY HOSPITAL ... 24 ROYAL MEDICAL SERVICES ... 25 OTHER PUBLIC 26 _____ (SPECIFY)  <b>PRIVATE MED. SECTOR</b> PVT. HOSPITAL/CLINIC ..... 31 UNRWA HEALTH CENTER ..... 32 OTHER PRIVATE MED. _____ 36 (SPECIFY)  <b>OTHER</b> _____ 96 (SPECIFY)						

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
441A	How much did you pay for this (first) postnatal visit?  RECORD THE TOTAL COST IN DINARS	COST IN JD <input type="text"/> <input type="text"/> <input type="text"/> FREE . . . . . 995 DON' T KNOW . . . 998		
441B	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 441D) ←		
441C	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 <input type="text"/> <input type="text"/> DAYS 2 <input type="text"/> <input type="text"/> WEEKS 3 <input type="text"/> <input type="text"/> DON'T KNOW . . . 998		
441D	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	CHECK 436:	YES NOT ASKED <input type="checkbox"/> <input type="checkbox"/> (SKIP TO 448)		
443	In the two months after (NAME) was born, did any health care provider check on his/her health?	YES . . . . . 1 NO . . . . . 2 (SKIP TO 448) ← DON'T KNOW . . . . 8		
444	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 <input type="text"/> <input type="text"/> DAYS AFTER BIRTH .. 2 <input type="text"/> <input type="text"/> WKS AFTER BIRTH .. 3 <input type="text"/> <input type="text"/> DON'T KNOW . . . 998		
445	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 _____
446	<p>Where did this first check of (NAME) take place?</p> <p>PROBE TO IDENTIFY THE TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE.</p> <p>IF UNABLE TO DETERMINE IF A HOSPITAL, HEALTH CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.</p> <p>_____ (NAME OF PLACE)</p>	<p><b>HOME</b> YOUR HOME ... 11 OTHER HOME ... 12</p> <p><b>PUBLIC MED. SECTOR</b> GOVT. HOSPITAL 21 GOVT. HEALTH CENTER ..... 22 GOVT. MCH ... 23 UNIVERSITY HOSPITAL ... 24 ROYAL MEDICAL SERVICES ... 25 OTHER PUBLIC 26</p> <p>_____ (SPECIFY)</p> <p><b>PRIVATE MED. SECTOR</b> PVT. HOSPITAL/CLINIC ..... 31 UNRWA HEALTH CENTER ..... 32 OTHER PRIVATE MED. _____ 36 (SPECIFY)</p> <p><b>OTHER</b> _____ 96 (SPECIFY)</p>		
448	Has your menstrual period returned since the birth of (NAME)?	<p>YES ..... 1 (SKIP TO 450) ←</p> <p>NO ..... 2 (SKIP TO 451) ←</p>		
449	Did your period return between the birth of (NAME) and your next pregnancy?		<p>YES ..... 1 NO ..... 2 (SKIP TO 453) ←</p>	<p>YES ..... 1 NO ..... 2 (SKIP TO 453) ←</p>
450	For how many months after the birth of (NAME) did you <u>not</u> have a period?	<p>MONTHS ... <input type="text"/> <input type="text"/></p> <p>DON'T KNOW ..... 98</p>	<p>MONTHS ... <input type="text"/> <input type="text"/></p> <p>DON'T KNOW ..... 98</p>	<p>MONTHS ... <input type="text"/> <input type="text"/></p> <p>DON'T KNOW ..... 98</p>
451	CHECK 226: IS RESPONDENT PREGNANT?	<p>NOT PREG- <input type="checkbox"/> PREGNANT OR <input type="checkbox"/> NANT UNSURE (SKIP TO 453) ←</p>		
452	Have you begun to have sexual intercourse again since the birth of (NAME)?	<p>YES ..... 1 NO ..... 2 (SKIP TO 454) ←</p>		
453	For how many months after the birth of (NAME) did you <u>not</u> have sexual intercourse? IF LESS THAN 1 MONTH, RECORD '00'	<p>MONTHS ... <input type="text"/> <input type="text"/></p> <p>DON'T KNOW ..... 98</p>	<p>MONTHS ... <input type="text"/> <input type="text"/></p> <p>DON'T KNOW ..... 98</p>	<p>MONTHS ... <input type="text"/> <input type="text"/></p> <p>DON'T KNOW ..... 98</p>
454	Did you ever breastfeed (NAME)?	<p>YES ..... 1 NO ..... 2 (SKIP TO 461) ←</p>	<p>YES ..... 1 (SKIP TO 460) ← NO ..... 2 (SKIP TO 461) ←</p>	<p>YES ..... 1 (SKIP TO 460) ← NO ..... 2 (SKIP TO 461) ←</p>

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
455	<p>How long after birth did you first put (NAME) to the breast?</p> <p>IF LESS THAN 1 HOUR, RECORD '00' HOURS. IF LESS THAN 24 HOURS, RECORD HOURS. OTHERWISE, RECORD DAYS.</p>	<p>IMMEDIATELY ... 000</p> <p>HOURS 1 <input type="text"/><input type="text"/></p> <p>DAYS 2 <input type="text"/><input type="text"/></p>		
456	<p>In the first three days after delivery, was (NAME) given anything to drink other than breast milk?</p>	<p>YES ..... 1 NO ..... 2 (SKIP TO 458) ←</p>		
457	<p>What was (NAME) given to drink?</p> <p>Anything else?</p> <p>RECORD ALL LIQUIDS MENTIONED.</p>	<p>MILK (OTHER THAN BREAST MILK) . A PLAIN WATER ... B SUGAR OR GLUCOSE WATER ... C GRUPE WATER ... D SUGAR-SALT-WATER SOLUTION ..... E FRUIT JUICE ..... F INFANT FORMULA . G TEA/INFUSIONS ... H HONEY ..... I OTHER _____ X (SPECIFY)</p>		
458	<p>CHECK 404: IS CHILD LIVING?</p>	<p>LIVING      DEAD <input type="checkbox"/></p> <p><input type="checkbox"/> (SKIP TO 460) ←</p>		
459	<p>Are you still breastfeeding (NAME)?</p>	<p>YES ..... 1 (SKIP TO 462) ← NO ..... 2</p>		
460	<p>For how many months did you breastfeed (NAME)?</p>	<p>MONTHS ... <input type="text"/><input type="text"/></p> <p>DON'T KNOW ... 98</p>	<p>MONTHS ... <input type="text"/><input type="text"/></p> <p>STILL BF ..... 95 DON'T KNOW ... 98</p>	<p>MONTHS ... <input type="text"/><input type="text"/></p> <p>STILL BF ..... 95 DON'T KNOW ... 98</p>
461	<p>CHECK 404: IS CHILD LIVING?</p>	<p>LIVING      DEAD <input type="checkbox"/></p> <p><input type="checkbox"/> (SKIP TO 464) (GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501)</p>	<p>LIVING      DEAD <input type="checkbox"/></p> <p><input type="checkbox"/> (SKIP TO 464) (GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501)</p>	<p>LIVING      DEAD <input type="checkbox"/></p> <p><input type="checkbox"/> (SKIP TO 464) (GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501)</p>
462	<p>How many times did you breastfeed last night between sunset and sunrise?</p> <p>IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER.</p>	<p>NUMBER OF NIGHTTIME FEEDINGS . <input type="text"/><input type="text"/></p>		

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
463	<p>How many times did you breastfeed yesterday during the daylight hours?</p> <p>IF ANSWER IS NOT NUMERIC, PROBE FOR APPROXIMATE NUMBER.</p>	<p>NUMBER OF DAYLIGHT FEEDINGS . <input type="text"/> <input type="text"/></p>		
464	<p>Did (NAME) drink anything from a bottle with a nipple yesterday or last night?</p>	<p>YES ..... 1 NO ..... 2 DON'T KNOW ..... 8</p>	<p>YES ..... 1 NO ..... 2 DON'T KNOW ..... 8</p>	<p>YES ..... 1 NO ..... 2 DON'T KNOW ..... 8</p>
465		<p>GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501.</p>	<p>GO BACK TO 405 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 501.</p>	<p>GO BACK TO 405 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 501.</p>



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 an 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 510A) ←  NO ..... 2 (SKIP TO 510A) ← DON'T KNOW ..... 8	YES ..... 1 (PROBE FOR ← VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506)  (SKIP TO 514) ←  NO ..... 2 (SKIP TO 514) ← DON'T KNOW ..... 8	YES ..... 1 (PROBE FOR ← VACCINATIONS AND WRITE '66' IN THE CORRESPONDING DAY COLUMN IN 506)  (SKIP TO 514) ←  NO ..... 2 (SKIP TO 514) ← 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 514) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 514) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 514) ← 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 ..... <input type="text"/>	NUMBER OF TIMES ..... <input type="text"/>	NUMBER OF TIMES ..... <input type="text"/>
509D	A DPT vaccination, that is, an injection given in the thigh, sometimes at the same times as polio to prevent diphtheria, pertusis, 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 ..... <input type="text"/>	NUMBER OF TIMES ..... <input type="text"/>	NUMBER OF TIMES ..... <input type="text"/>
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 ..... <input type="text"/>	NUMBER OF TIMES ..... <input type="text"/>	NUMBER OF TIMES ..... <input type="text"/>
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 ..... <input type="text"/>	NUMBER OF TIMES ..... <input type="text"/>	NUMBER OF TIMES ..... <input type="text"/>
509J	An 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

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
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
510A	CHECK 506 AND 509E:  DPT INJECTION	AT LEAST ONE <input type="checkbox"/> NONE OR DK <input type="checkbox"/> (SKIP TO 510G)		
510B	Where did (NAME) receive the first vaccination to prevent DPT?	PUBLIC FACILITY . 1 PRIVATE FACILITY 2 UNRWA ..... 3 OTHER ..... 6 DON'T KNOW ..... 8		
510C	CHECK 506 AND 509E:  DPT INJECTION	AT LEAST TWO <input type="checkbox"/> ONLY ONE <input type="checkbox"/> (SKIP TO 510G)		
510D	Where did (NAME) receive the second vaccination to prevent DPT?	PUBLIC FACILITY . 1 PRIVATE FACILITY 2 UNRWA ..... 3 OTHER ..... 6 DON'T KNOW ..... 8		
510E	CHECK 506 AND 509E:  DPT INJECTION	AT LEAST THREE <input type="checkbox"/> TWO <input type="checkbox"/> (SKIP TO 510G)		
510F	Where did (NAME) receive the third vaccination to prevent DPT?	PUBLIC FACILITY . 1 PRIVATE FACILITY 2 UNRWA ..... 3 OTHER ..... 6 DON'T KNOW ..... 8		
510G	CHECK 506 AND 509J:  MEASLES INJECTION	YES <input type="checkbox"/> NO OR DK <input type="checkbox"/> (SKIP TO 510I)		
510H	Where did (NAME) receive the vaccination to prevent measles?	PUBLIC FACILITY . 1 PRIVATE FACILITY 2 UNRWA ..... 3 OTHER ..... 6 DON'T KNOW ..... 8		
510I	CHECK 506 AND 509K:  MMR INJECTION	YES <input type="checkbox"/> NO OR DK <input type="checkbox"/> (SKIP TO 514)		
510J	Where did (NAME) receive the vaccination to prevent measles, mumps, and rubella.	PUBLIC FACILITY . 1 PRIVATE FACILITY 2 UNRWA ..... 3 OTHER ..... 6 DON'T KNOW ..... 8		
514	HAS (NAME) ever received a vitamin A dose (like this/ any of these)? SHOW COMMON TYPES OF CAPSULES.	YES ..... 1 NO ..... 2 (SKIP TO 518) ← <input type="checkbox"/> DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 518) ← <input type="checkbox"/> DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 518) ← <input type="checkbox"/> DON'T KNOW ..... 8
515	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

NO.	QUESTIONS AND FILTERS	LAST BIRTH	NEXT-TO-LAST BIRTH	SECOND-FROM-LAST BIRTH
		NAME _____	NAME _____	NAME _____
518	Has (NAME) had diarrhea in the last 2 weeks?	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
519	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
520	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
521	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
522	Did you seek advice or treatment for the diarrhea from any source?	YES ..... 1 NO ..... 2 (SKIP TO 527) ←	YES ..... 1 NO ..... 2 (SKIP TO 527) ←	YES ..... 1 NO ..... 2 (SKIP TO 527) ←
523	Where did you seek advice or treatment?  Anywhere else?  PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S).  IF UNABLE TO DETERMINE IF A HOSPITAL, HEALTH CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.  _____ (NAME OF PLACE(S))	<b>PUBLIC MED. SECTOR</b> GOVT. HOSP. . . . A GOVT. HEALTH CENTER ..... B GOVT. MCH . . . . C UNIVERSITY HOSPITAL ... D ROYAL MEDICAL SERVICES ... E OTHER PUBLIC F <u>                    </u> (SPECIFY)  <b>PRIVATE MED. SECTOR</b> PVT. HOSPITAL/ CLINIC ..... G PHARMACY ... H PVT DOCTOR ... I UNRWA HEALTH CENTER ..... J OTHER PRIVATE MED. _____ K (SPECIFY)  <b>OTHER</b> _____ X (SPECIFY)	<b>PUBLIC MED. SECTOR</b> GOVT. HOSP. . . . A GOVT. HEALTH CENTER ..... B GOVT. MCH . . . . C UNIVERSITY HOSPITAL ... D ROYAL MEDICAL SERVICES ... E OTHER PUBLIC F <u>                    </u> (SPECIFY)  <b>PRIVATE MED. SECTOR</b> PVT. HOSPITAL/ CLINIC ..... G PHARMACY ... H PVT DOCTOR ... I UNRWA HEALTH CENTER ..... J OTHER PRIVATE MED. _____ K (SPECIFY)  <b>OTHER</b> _____ X (SPECIFY)	<b>PUBLIC MED. SECTOR</b> GOVT. HOSP. . . . A GOVT. HEALTH CENTER ..... B GOVT. MCH . . . . C UNIVERSITY HOSPITAL ... D ROYAL MEDICAL SERVICES ... E OTHER PUBLIC F <u>                    </u> (SPECIFY)  <b>PRIVATE MED. SECTOR</b> PVT. HOSPITAL/ CLINIC ..... G PHARMACY ... H PVT DOCTOR ... I UNRWA HEALTH CENTER ..... J OTHER PRIVATE MED. _____ K (SPECIFY)  <b>OTHER</b> _____ X (SPECIFY)

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
524	CHECK 523:	TWO OR ONLY <input type="checkbox"/> MORE ONE CODES CODE CIRCLED CIRCLED  (SKIP TO 526) ←	TWO OR ONLY <input type="checkbox"/> MORE ONE CODES CODE CIRCLED CIRCLED  (SKIP TO 526) ←	TWO OR ONLY <input type="checkbox"/> MORE ONE CODES CODE CIRCLED CIRCLED  (SKIP TO 526) ←
525	Where did you first seek advice or treatment?  USE LETTER CODE FROM 523.	FIRST PLACE ... <input type="checkbox"/>	FIRST PLACE ... <input type="checkbox"/>	FIRST PLACE ... <input type="checkbox"/>
526	How many days after the diarrhea began did you first seek advice or treatment for (NAME)? IF THE SAME DAY, RECORD '00'.	DAYS ..... <input type="text"/> <input type="text"/>	DAYS ..... <input type="text"/> <input type="text"/>	DAYS ..... <input type="text"/> <input type="text"/>
527	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
528	Was he/she given any of the following to drink at any time since he/she started having the diarrhea:	YES NO DK a) AQUA-CELL/ PARALAIT 1 2 8 b) Thin watery gruel made from rice, carrots, wheat, etc? GRUEL . . 1 2 8 c) Soup? SOUP ... 1 2 8 d) Home made sugar-salt-water solution? SU-SALT . 1 2 8 e) Milk or infant formula? MILK/FOR. 1 2 8 f) Yoghurt-based drink? YOGHURT 1 2 8 g) Water WATER . 1 2 8 h) Any other liquid? OTH. LIQ. 1 2 8	YES NO DK AQUA-CELL/ PARALAIT 1 2 8 GRUEL . . 1 2 8 SOUP ... 1 2 8 SU-SALT . 1 2 8 MILK/FOR. 1 2 8 YOGHURT 1 2 8 WATER . 1 2 8 OTH. LIQ. 1 2 8	YES NO DK AQUA-CELL/ PARALAIT 1 2 8 GRUEL . . 1 2 8 SOUP ... 1 2 8 SU-SALT . 1 2 8 MILK/FOR. 1 2 8 YOGHURT 1 2 8 WATER . 1 2 8 OTH. LIQ. 1 2 8
529	Was anything (else) given to treat the diarrhea?	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
530	What (else) was given to treat the diarrhea?  Anything else?  RECORD ALL TREATMENTS GIVEN.	<b>PILL OR SYRUP</b> ANTIBIOTIC ..... A NON-ANTIBIO. . . B UNKNOWN PILL OR SYRUP ... C <b>INJECTION</b> ANTIBIOTIC ..... D NON-ANTIBIO. . . E UNKNOWN INJECTION ... F <b>(IV) INTRAVENOUS</b> G <b>HOME REMEDY/ HERBAL MED- ICINE</b> ..... H OTHER _____ X (SPECIFY) DON'T KNOW ..... Z	<b>PILL OR SYRUP</b> ANTIBIOTIC ..... A NON-ANTIBIO. . . B UNKNOWN PILL OR SYRUP ... C <b>INJECTION</b> ANTIBIOTIC ..... D NON-ANTIBIO. . . E UNKNOWN INJECTION ... F <b>(IV) INTRAVENOUS</b> G <b>HOME REMEDY/ HERBAL MED- ICINE</b> ..... H OTHER _____ X (SPECIFY) DON'T KNOW ..... Z	<b>PILL OR SYRUP</b> ANTIBIOTIC ..... A NON-ANTIBIO. . . B UNKNOWN PILL OR SYRUP ... C <b>INJECTION</b> ANTIBIOTIC ..... D NON-ANTIBIO. . . E UNKNOWN INJECTION ... F <b>(IV) INTRAVENOUS</b> G <b>HOME REMEDY/ HERBAL MED- ICINE</b> ..... H OTHER _____ X (SPECIFY) DON'T KNOW ..... Z

NO.	QUESTIONS AND FILTERS	LAST BIRTH		NEXT-TO-LAST BIRTH		SECOND-FROM-LAST BIRTH	
		NAME _____	NAME _____				
531	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	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8
532	Has (NAME) had an illness with a cough at any time in the last 2 weeks?	YES ..... 1 NO ..... 2 (SKIP TO 535) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 535) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 535) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 535) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 535) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 535) ← DON'T KNOW ..... 8
533	When (NAME) had 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 536) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 536) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 536) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 536) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 536) ← DON'T KNOW ..... 8	YES ..... 1 NO ..... 2 (SKIP TO 536) ← DON'T KNOW ..... 8
534	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 536) ←	CHEST ONLY ... 1 NOSE ONLY .... 2 BOTH ..... 3 OTHER ..... 6 (SPECIFY) DON'T KNOW ..... 8 (SKIP TO 536) ←	CHEST ONLY ... 1 NOSE ONLY .... 2 BOTH ..... 3 OTHER ..... 6 (SPECIFY) DON'T KNOW ..... 8 (SKIP TO 536) ←	CHEST ONLY ... 1 NOSE ONLY .... 2 BOTH ..... 3 OTHER ..... 6 (SPECIFY) DON'T KNOW ..... 8 (SKIP TO 536) ←	CHEST ONLY ... 1 NOSE ONLY .... 2 BOTH ..... 3 OTHER ..... 6 (SPECIFY) DON'T KNOW ..... 8 (SKIP TO 536) ←	CHEST ONLY ... 1 NOSE ONLY .... 2 BOTH ..... 3 OTHER ..... 6 (SPECIFY) DON'T KNOW ..... 8 (SKIP TO 536) ←
535	CHECK 531:  HAD FEVER?	YES <input type="checkbox"/> NO OR DK <input type="checkbox"/>  (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 547)	YES <input type="checkbox"/> NO OR DK <input type="checkbox"/>  (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 547)	YES <input type="checkbox"/> NO OR DK <input type="checkbox"/>  (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 547)	YES <input type="checkbox"/> NO OR DK <input type="checkbox"/>  (GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 547)	YES <input type="checkbox"/> NO OR DK <input type="checkbox"/>  (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 547)	YES <input type="checkbox"/> NO OR DK <input type="checkbox"/>  (GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 547)
536	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	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
537	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	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
538	Did you seek advice or treatment from any source for the illness with a (fever/cough)?	YES ..... 1 NO ..... 2 (SKIP TO 543) ←	YES ..... 1 NO ..... 2 (SKIP TO 543) ←	YES ..... 1 NO ..... 2 (SKIP TO 543) ←	YES ..... 1 NO ..... 2 (SKIP TO 543) ←	YES ..... 1 NO ..... 2 (SKIP TO 543) ←	YES ..... 1 NO ..... 2 (SKIP TO 543) ←

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
539	<p>Where did you seek advice or treatment?</p> <p>Anywhere else?</p> <p>PROBE TO IDENTIFY EACH TYPE OF SOURCE AND CIRCLE THE APPROPRIATE CODE(S).</p> <p>IF UNABLE TO DETERMINE IF A HOSPITAL, HEALTH CENTER, OR CLINIC IS PUBLIC OR PRIVATE MEDICAL, WRITE THE NAME OF THE PLACE.</p> <p>_____</p> <p>(NAME OF PLACE(S))</p>	<p><b>PUBLIC MED. SECTOR</b></p> <p>GOVT. HOSP. . . . . A</p> <p>GOVT. HEALTH CENTER . . . . . B</p> <p>GOVT. MCH . . . . . C</p> <p>UNIVERSITY HOSPITAL . . . . . D</p> <p>ROYAL MEDICAL SERVICES . . . . . E</p> <p>OTHER PUBLIC . . . . . F</p> <p>_____</p> <p>(SPECIFY)</p> <p><b>PRIVATE MED. SECTOR</b></p> <p>PVT. HOSPITAL/CLINIC . . . . . G</p> <p>PHARMACY . . . . . H</p> <p>PVT DOCTOR . . . . . I</p> <p>UNRWA HEALTH CENTER . . . . . J</p> <p>OTHER PRIVATE MED. _____ K</p> <p>(SPECIFY)</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>	<p><b>PUBLIC MED. SECTOR</b></p> <p>GOVT. HOSP. . . . . A</p> <p>GOVT. HEALTH CENTER . . . . . B</p> <p>GOVT. MCH . . . . . C</p> <p>UNIVERSITY HOSPITAL . . . . . D</p> <p>ROYAL MEDICAL SERVICES . . . . . E</p> <p>OTHER PUBLIC . . . . . F</p> <p>_____</p> <p>(SPECIFY)</p> <p><b>PRIVATE MED. SECTOR</b></p> <p>PVT. HOSPITAL/CLINIC . . . . . G</p> <p>PHARMACY . . . . . H</p> <p>PVT DOCTOR . . . . . I</p> <p>UNRWA HEALTH CENTER . . . . . J</p> <p>OTHER PRIVATE MED. _____ K</p> <p>(SPECIFY)</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>	<p><b>PUBLIC MED. SECTOR</b></p> <p>GOVT. HOSP. . . . . A</p> <p>GOVT. HEALTH CENTER . . . . . B</p> <p>GOVT. MCH . . . . . C</p> <p>UNIVERSITY HOSPITAL . . . . . D</p> <p>ROYAL MEDICAL SERVICES . . . . . E</p> <p>OTHER PUBLIC . . . . . F</p> <p>_____</p> <p>(SPECIFY)</p> <p><b>PRIVATE MED. SECTOR</b></p> <p>PVT. HOSPITAL/CLINIC . . . . . G</p> <p>PHARMACY . . . . . H</p> <p>PVT DOCTOR . . . . . I</p> <p>UNRWA HEALTH CENTER . . . . . J</p> <p>OTHER PRIVATE MED. _____ K</p> <p>(SPECIFY)</p> <p>OTHER _____ X</p> <p>(SPECIFY)</p>
540	CHECK 539:	<p>TWO OR ONLY MORE ONE CODES CODE CIRCLED CIRCLED</p> <p>↓ (SKIP TO 542) ←</p>	<p>TWO OR ONLY MORE ONE CODES CODE CIRCLED CIRCLED</p> <p>↓ (SKIP TO 542) ←</p>	<p>TWO OR ONLY MORE ONE CODES CODE CIRCLED CIRCLED</p> <p>↓ (SKIP TO 542) ←</p>
541	<p>Where did you first seek advice or treatment?</p> <p>USE LETTER CODE FROM 539</p>	FIRST PLACE . . . <input type="checkbox"/>	FIRST PLACE . . . <input type="checkbox"/>	FIRST PLACE . . . <input type="checkbox"/>
542	<p>How many days after the illness began did you first seek advice or treatment for (NAME)?</p> <p>IF THE SAME DAY, RECORD '00'.</p>	DAYS . . . . . <input type="text"/>	DAYS . . . . . <input type="text"/>	DAYS . . . . . <input type="text"/>
543	Is (NAME) still sick with a (fever/cough)?	<p>FEVER ONLY . . . . . 1</p> <p>COUGH ONLY . . . . . 2</p> <p>BOTH FEVER AND COUGH . . . . . 3</p> <p>NO, NEITHER . . . . . 4</p> <p>DON'T KNOW . . . . . 8</p>	<p>FEVER ONLY . . . . . 1</p> <p>COUGH ONLY . . . . . 2</p> <p>BOTH FEVER AND COUGH . . . . . 3</p> <p>NO, NEITHER . . . . . 4</p> <p>DON'T KNOW . . . . . 8</p>	<p>FEVER ONLY . . . . . 1</p> <p>COUGH ONLY . . . . . 2</p> <p>BOTH FEVER AND COUGH . . . . . 3</p> <p>NO, NEITHER . . . . . 4</p> <p>DON'T KNOW . . . . . 8</p>
544	At any time during the illness, did (NAME) take any drugs for the illness?	<p>YES . . . . . 1</p> <p>NO . . . . . 2</p> <p>(GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 547)</p> <p>DON'T KNOW . . . . . 8</p>	<p>YES . . . . . 1</p> <p>NO . . . . . 2</p> <p>(GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 547)</p> <p>DON'T KNOW . . . . . 8</p>	<p>YES . . . . . 1</p> <p>NO . . . . . 2</p> <p>(GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 547)</p> <p>DON'T KNOW . . . . . 8</p>

NO.	QUESTIONS AND FILTERS	LAST BIRTH NAME _____	NEXT-TO-LAST BIRTH NAME _____	SECOND-FROM-LAST BIRTH NAME _____
545	What drugs did (NAME) take?  Any other drugs?  RECORD ALL MENTIONED.	<b>PILL OR SYRUP</b> ANTIBIOTIC . . . . . A NON-ANTIBIO. . . . . B UNKNOWN PILL OR SYRUP . . . . . C  <b>INJECTION</b> ANTIBIOTIC . . . . . D NON-ANTIBIO. . . . . E UNKNOWN INJECTION . . . . . F  <b>(IV) INTRAVENOUS</b> G  <b>HOME REMEDY/</b> HERBAL MED- ICINE . . . . . H  OTHER _____ X (SPECIFY)  DON'T KNOW . . . . . Z	<b>PILL OR SYRUP</b> ANTIBIOTIC . . . . . A NON-ANTIBIO. . . . . B UNKNOWN PILL OR SYRUP . . . . . C  <b>INJECTION</b> ANTIBIOTIC . . . . . D NON-ANTIBIO. . . . . E UNKNOWN INJECTION . . . . . F  <b>(IV) INTRAVENOUS</b> G  <b>HOME REMEDY/</b> HERBAL MED- ICINE . . . . . H  OTHER _____ X (SPECIFY)  DON'T KNOW . . . . . Z	<b>PILL OR SYRUP</b> ANTIBIOTIC . . . . . A NON-ANTIBIO. . . . . B UNKNOWN PILL OR SYRUP . . . . . C  <b>INJECTION</b> ANTIBIOTIC . . . . . D NON-ANTIBIO. . . . . E UNKNOWN INJECTION . . . . . F  <b>(IV) INTRAVENOUS</b> G  <b>HOME REMEDY/</b> HERBAL MED- ICINE . . . . . H  OTHER _____ X (SPECIFY)  DON'T KNOW . . . . . Z
546		GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 547.	GO BACK TO 503 IN NEXT COLUMN; OR, IF NO MORE BIRTHS, GO TO 547.	GO TO 503 IN NEXT-TO-LAST COLUMN OF NEW QUESTIONNAIRE; OR, IF NO MORE BIRTHS, GO TO 547.

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																
547	CHECK 528(a), ALL COLUMNS:  <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">           NO CHILD RECEIVED AQUACELL OR PARALAIT <input type="checkbox"/> </div> <div style="text-align: center;">           ANY CHILD RECEIVED AQUACELL OR PARALAIT <input type="checkbox"/> </div> </div>		549																
548	Have you ever heard of a special product called Aquacell or Paralait you can get for the treatment of diarrhea?	YES ..... 1 NO ..... 2																	
549	Have you had fever at any time in the last 6 months?  IF YES: When was the last time you had fever?  IF NO FEVER, RECORD '4'	WITHIN PAST TWO WEEKS ..... 1 MORE THAN 2 WEEKS BUT LESS THAN ONE MONTH ..... 2 ONE MONTH OR MORE ..... 3 NO ..... 4	550A																
550	The last time you had a fever, did you get medicine to treat the fever?  IF YES: How much did you spend to obtain the medicine?  RECORD THE TOTAL COST IN DINARS  IF NO MEDICINE OBTAINED, RECORD '995'	COST ..... <input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/> <input style="width: 30px; height: 20px;" type="text"/> FREE ..... 994 NO MEDICINE ..... 995 DON'T KNOW ..... 998																	
550A	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																	
550B	Have you had a breast cancer clinical exam to detect breast cancer in the last 12 months?	YES ..... 1 NO ..... 2 NOT SURE ..... 8																	
550C	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	550E																
550D	Have you ever had such an exam in your life time?	YES ..... 1 NO ..... 2																	
550E	Do you smoke: Cigarettes? Nargila?	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">YES</th> <th style="text-align: center;">NO</th> </tr> </thead> <tbody> <tr> <td>CIGARETTES .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>NARGILA .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </tbody> </table>		YES	NO	CIGARETTES .....	1	2	NARGILA .....	1	2								
	YES	NO																	
CIGARETTES .....	1	2																	
NARGILA .....	1	2																	
551	CHECK 215 AND 218, ALL ROWS:  NUMBER OF CHILDREN BORN IN 2004 OR LATER LIVING WITH THE RESPONDENT  <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;">           ONE OR MORE <input type="checkbox"/> </div> <div style="text-align: center;">           NONE <input type="checkbox"/> </div> </div> RECORD NAME OF YOUNGEST CHILD LIVING WITH HER (AND CONTINUE WITH 552)  _____ (NAME)		601																
552	Now I would like to ask you about liquids or foods (NAME FROM 551) had yesterday during the day or at night.  Did (NAME FROM 551) (drink/eat):  Plain water? Commercially produced infant formula? Any (other) porridge or gruel?	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">YES</th> <th style="text-align: center;">NO</th> <th style="text-align: center;">DK</th> </tr> </thead> <tbody> <tr> <td>PLAIN WATER .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> <tr> <td>FORMULA .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> <tr> <td>OTHER PORRIDGE/GRUEL ..</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> </tbody> </table>		YES	NO	DK	PLAIN WATER .....	1	2	8	FORMULA .....	1	2	8	OTHER PORRIDGE/GRUEL ..	1	2	8	
	YES	NO	DK																
PLAIN WATER .....	1	2	8																
FORMULA .....	1	2	8																
OTHER PORRIDGE/GRUEL ..	1	2	8																

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																																																																																																																												
553	<p>Now I would like to ask you about (other) liquids or foods that (NAME FROM 551)/you may have had yesterday during the day or at night. I am interested in whether your child/you had the item even if it was combined with other foods.</p> <p>Did (NAME FROM 551)/you drink (eat):</p> <p>a) Milk such as tinned, powdered, or fresh animal milk?</p> <p>b) Fruit juice?</p> <p>c) Soup broth?</p> <p>d) Tea?</p> <p>e) Any other liquids such as sugar water or carbonated drinks?</p> <p>f) Bread, pasta, rice, maize, or any other food made from grains?</p> <p>g) Carrots, red sweet potatoes, or pumpkin?</p> <p>h) Any other food made from roots or tubers, such as white potatoes, or other roots/tubers?</p> <p>i) Any green leafy vegetables, such as spinach, or mouloukia?</p> <p>j) Apricot, palm nuts, or yellow melon?</p> <p>k) Any other fruits or vegetables?</p> <p>l) Meat, poultry, fish, or eggs?</p> <p>m) Any food made from legumes, such as lentils, beans, or chickpeas?</p> <p>n) Any type of nuts or seeds, such as pistachio, almonds, cashew, peanuts, or sesame seeds?</p> <p>o) Cheese or yoghurt?</p> <p>p) Any oil, fats, or butter, or foods made with any of these?</p> <p>q) Any sugary foods such as chocolates, sweets, candies, pastries, cakes, or biscuits?</p> <p>r) Any other solid or semi-solid food?</p>	<table border="1"> <thead> <tr> <th></th> <th colspan="3">CHILD</th> <th colspan="3">MOTHER</th> </tr> <tr> <th></th> <th>YES</th> <th>NO</th> <th>DK</th> <th>YES</th> <th>NO</th> <th>DK</th> </tr> </thead> <tbody> <tr> <td><b>a</b></td> <td>1</td> <td>2</td> <td>8</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td><b>b</b></td> <td>1</td> <td>2</td> <td>8</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td><b>c</b></td> <td>1</td> <td>2</td> <td>8</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td><b>d</b></td> <td>1</td> <td>2</td> <td>8</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td><b>e</b></td> <td>1</td> <td>2</td> <td>8</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td><b>f</b></td> <td>1</td> <td>2</td> <td>8</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td><b>g</b></td> <td>1</td> <td>2</td> <td>8</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td><b>h</b></td> <td>1</td> <td>2</td> <td>8</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td><b>i</b></td> <td>1</td> <td>2</td> <td>8</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td><b>j</b></td> <td>1</td> <td>2</td> <td>8</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td><b>k</b></td> <td>1</td> <td>2</td> <td>8</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td><b>l</b></td> <td>1</td> <td>2</td> <td>8</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td><b>m</b></td> <td>1</td> <td>2</td> <td>8</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td><b>n</b></td> <td>1</td> <td>2</td> <td>8</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td><b>o</b></td> <td>1</td> <td>2</td> <td>8</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td><b>p</b></td> <td>1</td> <td>2</td> <td>8</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td><b>q</b></td> <td>1</td> <td>2</td> <td>8</td> <td>1</td> <td>2</td> <td>8</td> </tr> <tr> <td><b>r</b></td> <td>1</td> <td>2</td> <td>8</td> <td>1</td> <td>2</td> <td>8</td> </tr> </tbody> </table>		CHILD			MOTHER				YES	NO	DK	YES	NO	DK	<b>a</b>	1	2	8	1	2	8	<b>b</b>	1	2	8	1	2	8	<b>c</b>	1	2	8	1	2	8	<b>d</b>	1	2	8	1	2	8	<b>e</b>	1	2	8	1	2	8	<b>f</b>	1	2	8	1	2	8	<b>g</b>	1	2	8	1	2	8	<b>h</b>	1	2	8	1	2	8	<b>i</b>	1	2	8	1	2	8	<b>j</b>	1	2	8	1	2	8	<b>k</b>	1	2	8	1	2	8	<b>l</b>	1	2	8	1	2	8	<b>m</b>	1	2	8	1	2	8	<b>n</b>	1	2	8	1	2	8	<b>o</b>	1	2	8	1	2	8	<b>p</b>	1	2	8	1	2	8	<b>q</b>	1	2	8	1	2	8	<b>r</b>	1	2	8	1	2	8	
	CHILD			MOTHER																																																																																																																																											
	YES	NO	DK	YES	NO	DK																																																																																																																																									
<b>a</b>	1	2	8	1	2	8																																																																																																																																									
<b>b</b>	1	2	8	1	2	8																																																																																																																																									
<b>c</b>	1	2	8	1	2	8																																																																																																																																									
<b>d</b>	1	2	8	1	2	8																																																																																																																																									
<b>e</b>	1	2	8	1	2	8																																																																																																																																									
<b>f</b>	1	2	8	1	2	8																																																																																																																																									
<b>g</b>	1	2	8	1	2	8																																																																																																																																									
<b>h</b>	1	2	8	1	2	8																																																																																																																																									
<b>i</b>	1	2	8	1	2	8																																																																																																																																									
<b>j</b>	1	2	8	1	2	8																																																																																																																																									
<b>k</b>	1	2	8	1	2	8																																																																																																																																									
<b>l</b>	1	2	8	1	2	8																																																																																																																																									
<b>m</b>	1	2	8	1	2	8																																																																																																																																									
<b>n</b>	1	2	8	1	2	8																																																																																																																																									
<b>o</b>	1	2	8	1	2	8																																																																																																																																									
<b>p</b>	1	2	8	1	2	8																																																																																																																																									
<b>q</b>	1	2	8	1	2	8																																																																																																																																									
<b>r</b>	1	2	8	1	2	8																																																																																																																																									
554	<p>CHECK 552 (LAST CATEGORY: PORRIDGE/GRUEL) AND 553 (CATEGORIES f THROUGH r FOR CHILD):</p> <p>AT LEAST ONE "YES" <input type="checkbox"/></p>	<p>NOT A SINGLE "YES" <input type="checkbox"/></p>	<p>601</p>																																																																																																																																												
555	<p>How many times did (NAME FROM 551) eat solid, semisolid, or soft foods yesterday during the day or at night?</p> <p>IF 7 OR MORE TIMES, RECORD '7'.</p>	<p>NUMBER OF TIMES ..... <input type="checkbox"/></p> <p>DON'T KNOW ..... 8</p>																																																																																																																																													

SECTION 6. MARRIAGE AND SEXUAL ACTIVITY

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
601	<p>CHECK 101A:</p> <p>CURRENTLY MARRIED/ <input type="checkbox"/></p> <p>WIDOWED/ SEPARATED/ DIVORCED <input type="checkbox"/></p>		→ 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. .... <input type="text"/> <input type="text"/>	
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 . . . <input type="text"/> DON'T KNOW ..... 8	
606	Have you been married only once or more than once?	ONLY ONCE ..... 1 MORE THAN ONCE ..... 2	
607	<p>CHECK 606:</p> <p>MARRIED ONLY ONCE <input type="checkbox"/></p> <p>MARRIED MORE THAN ONCE <input type="checkbox"/></p> <p>In what month and year did you start living with your husband (consummate marriage)?</p> <p>Now I would like to ask about your first husband. In what month and year did you start living with him (consummate marriage)?</p>	MONTH ..... <input type="text"/> <input type="text"/> DON'T KNOW MONTH ..... 98 YEAR ..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> DON'T KNOW YEAR ..... 9998	→ 609
608	How old were you when you first started living with him?	AGE ..... <input type="text"/> <input type="text"/>	
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	
611	<p>CHECK 609:</p> <p>MARRIED ONLY ONCE <input type="checkbox"/></p> <p>MARRIED MORE THAN ONCE <input type="checkbox"/></p> <p>Did your husband have a premarital medical exam?</p> <p>Now I would like to ask about your last marriage. Did your husband have a premarital medical exam?</p>	YES ..... 1 NO ..... 2 DON'T KNOW 8	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP								
611A	Did you have a premarital medical exam?	YES ..... 1 NO ..... 2	→ 612								
611B	Where did you go for the premarital medical exam?	<b>PUBLIC MEDICAL SECTOR</b> GOVT. HOSPITAL ..... 11 GOVT. HEALTH CENTER ..... 12 GOVT. MCH ..... 13 UNIVERSITY HOSPITAL ..... 14 ROYAL MEDICAL SERVICES ..... 15 OTHER PUBLIC ..... 16 (SPECIFY) <b>PRIVATE MEDICAL SECTOR</b> 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) <b>OTHER</b> ..... 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 <table border="1" style="display: inline-table; vertical-align: middle;"> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> <tr><td> </td><td> </td></tr> </table>									→ 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	→ 700								
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))	<b>PUBLIC MEDICAL SECTOR</b> GOVT. HOSPITAL ..... A GOVT. HEALTH CENTER ..... B GOVT. MCH ..... C UNIVERSITY HOSPITAL/CLINIC ..... D ROYAL MEDICAL SERVICES ..... E OTHER PUBLIC ..... F (SPECIFY) <b>PRIVATE MEDICAL SECTOR</b> 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) <b>OTHER SOURCE</b> FRIEND/RELATIVE ..... N OTHER ..... X (SPECIFY)									



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
707	<p>CHECK 702 AND 703:</p> <p>WANTS TO HAVE A/ANOTHER CHILD BUT NOT BEFORE 2 YEARS <input type="checkbox"/></p> <p>WANTS NO MORE/ NONE <input type="checkbox"/></p> <p>You have said that you do not want (a/another) child soon, but you are not using any method to avoid pregnancy.</p> <p>You have said that you do not want any (more) children, but you are not using any method to avoid pregnancy.</p> <p>Can you tell me why you are not using a method?</p> <p>Can you tell me why you are not using a method?</p> <p>Any other reason?</p> <p>Any other reason?</p> <p>RECORD ALL REASONS MENTIONED.</p>	<p>FERTILITY-RELATED REASONS</p> <p>NOT HAVING SEX ..... A</p> <p>INFREQUENT SEX ..... B</p> <p>MENOPAUSAL/HYSTERECTOMY . . . C</p> <p>SUBFECUND/INFECUND ..... D</p> <p>POSTPARTUM AMENORRHEIC . . . E</p> <p>BREASTFEEDING ..... F</p> <p>DIFFICULT TO GET PREGNANT . . . G</p> <p>OPPOSITION TO USE</p> <p>RESPONDENT OPPOSED ..... H</p> <p>HUSBAND OPPOSED ..... I</p> <p>OTHERS OPPOSED ..... J</p> <p>RELIGIOUS PROHIBITION ..... K</p> <p>RUMORS ..... L</p> <p>LACK OF KNOWLEDGE</p> <p>KNOWS NO METHOD ..... M</p> <p>KNOWS NO SOURCE ..... N</p> <p>METHOD-RELATED REASONS</p> <p>HEALTH CONCERNS ..... O</p> <p>FEAR OF SIDE EFFECTS ..... P</p> <p>LACK OF ACCESS/TOO FAR ..... Q</p> <p>COSTS TOO MUCH ..... R</p> <p>INCONVENIENT TO USE ..... S</p> <p>INTERFERES WITH BODY'S NORMAL PROCESSES ..... T</p> <p>OTHER ..... X (SPECIFY)</p> <p>DON'T KNOW ..... Z</p>	
708	<p>CHECK 310: USING A CONTRACEPTIVE METHOD?</p> <p>NOT ASKED <input type="checkbox"/> NO, NOT CURRENTLY USING <input type="checkbox"/> YES, CURRENTLY USING <input type="checkbox"/></p>		→ 713
709	Do you think you will use a contraceptive method to delay or avoid pregnancy at any time in the future?	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	→ 711 → 713
710	Which contraceptive method would you prefer to use?	<p>FEMALE STERILIZATION ..... 01</p> <p>MALE STERILIZATION ..... 02</p> <p>PILL ..... 03</p> <p>IUD ..... 04</p> <p>INJECTABLES ..... 05</p> <p>IMPLANTS ..... 06</p> <p>CONDOM ..... 07</p> <p>FEMALE CONDOM ..... 08</p> <p>DIAPHRAGM ..... 09</p> <p>FOAM/JELLY ..... 10</p> <p>LACTATIONAL AMEN. METHOD ..... 11</p> <p>RHYTHM METHOD/PERIOD. ABSTIN. . . 12</p> <p>WITHDRAWAL ..... 13</p> <p>OTHER ..... 96 (SPECIFY)</p> <p>DK/UNSURE ..... 98</p>	→ 713



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																																			
715	In the last 6 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?	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 10%; text-align: center;">YES</th> <th style="width: 10%; text-align: center;">NO</th> </tr> </thead> <tbody> <tr> <td>RADIO .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>TELEVISION .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>NEWSPAPER OR MAGAZINE ...</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>POSTER .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>BULLETIN/BOOKLET .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>LECTURE .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>WOMEN .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>OTHER PEOPLE .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </tbody> </table>		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																									
	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																																																				
716	Where and from whom would you prefer to get information about family planning?  CIRCLE ONLY ONE ANSWER.	<table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td colspan="3">INTERPERSONAL</td> </tr> <tr> <td>GOVERN. HEALTH WORKER .....</td> <td style="text-align: center;">11</td> <td></td> </tr> <tr> <td>PRIVATE DOCTOR/NURSE .....</td> <td style="text-align: center;">12</td> <td></td> </tr> <tr> <td>JAFPP STAFF .....</td> <td style="text-align: center;">13</td> <td></td> </tr> <tr> <td>HUSBAND .....</td> <td style="text-align: center;">14</td> <td></td> </tr> <tr> <td>OTHER RELATIVES .....</td> <td style="text-align: center;">15</td> <td></td> </tr> <tr> <td>FRIENDS .....</td> <td style="text-align: center;">16</td> <td></td> </tr> <tr> <td colspan="3">MEDIA</td> </tr> <tr> <td>RADIO .....</td> <td style="text-align: center;">21</td> <td></td> </tr> <tr> <td>TV .....</td> <td style="text-align: center;">22</td> <td></td> </tr> <tr> <td>PRINT MATERIALS .....</td> <td style="text-align: center;">23</td> <td></td> </tr> <tr> <td>SCHOOL, LIBRARY/ACADEMIC ...</td> <td style="text-align: center;">24</td> <td></td> </tr> <tr> <td>COMMUNITY/PUBLIC MEETING ...</td> <td style="text-align: center;">25</td> <td></td> </tr> <tr> <td>LECTURES .....</td> <td style="text-align: center;">26</td> <td></td> </tr> <tr> <td>OTHER _____</td> <td style="text-align: center;">96</td> <td></td> </tr> <tr> <td style="text-align: center;">(SPECIFY)</td> <td></td> <td></td> </tr> <tr> <td>DON'T KNOW .....</td> <td style="text-align: center;">98</td> <td></td> </tr> </tbody> </table>	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		
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																																																					
717	CHECK 101A:  CURRENTLY MARRIED <input type="checkbox"/>	CURRENTLY WIDOWED, DIVORCED, OR SEPARATED <input type="checkbox"/>	→ 801																																																			
718	CHECK 311/311A:  OTHER CODES CIRCLED <input type="checkbox"/>	CODE B, G, OR M CIRCLED <input type="checkbox"/>  NO CODE CIRCLED <input type="checkbox"/>	→ 720 → 720A																																																			
719	Does your husband know that you are using a method of family planning?	<table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>YES .....</td> <td style="text-align: center;">1</td> </tr> <tr> <td>NO .....</td> <td style="text-align: center;">2</td> </tr> <tr> <td>DON'T KNOW .....</td> <td style="text-align: center;">8</td> </tr> </tbody> </table>	YES .....	1	NO .....	2	DON'T KNOW .....	8																																														
YES .....	1																																																					
NO .....	2																																																					
DON'T KNOW .....	8																																																					
720	Would you say that using contraception is mainly your decision, mainly your husband's decision, or did you both decide together?	<table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>MAINLY RESPONDENT .....</td> <td style="text-align: center;">1</td> </tr> <tr> <td>MAINLY HUSBAND .....</td> <td style="text-align: center;">2</td> </tr> <tr> <td>JOINT DECISION .....</td> <td style="text-align: center;">3</td> </tr> <tr> <td>OTHER _____</td> <td style="text-align: center;">6</td> </tr> <tr> <td style="text-align: center;">(SPECIFY)</td> <td></td> </tr> </tbody> </table>	MAINLY RESPONDENT .....	1	MAINLY HUSBAND .....	2	JOINT DECISION .....	3	OTHER _____	6	(SPECIFY)																																											
MAINLY RESPONDENT .....	1																																																					
MAINLY HUSBAND .....	2																																																					
JOINT DECISION .....	3																																																					
OTHER _____	6																																																					
(SPECIFY)																																																						
720A	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?	<table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>APPROVES .....</td> <td style="text-align: center;">1</td> </tr> <tr> <td>DISAPPROVES .....</td> <td style="text-align: center;">2</td> </tr> <tr> <td>DON'T KNOW .....</td> <td style="text-align: center;">8</td> </tr> </tbody> </table>	APPROVES .....	1	DISAPPROVES .....	2	DON'T KNOW .....	8																																														
APPROVES .....	1																																																					
DISAPPROVES .....	2																																																					
DON'T KNOW .....	8																																																					
721	CHECK 311/311A:  NEITHER STERILIZED <input type="checkbox"/>	HE OR SHE STERILIZED <input type="checkbox"/>	→ 801																																																			
722	Does your husband want the same number of children that you want, or does he want more or fewer than you want?	<table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>SAME NUMBER .....</td> <td style="text-align: center;">1</td> </tr> <tr> <td>MORE CHILDREN .....</td> <td style="text-align: center;">2</td> </tr> <tr> <td>FEWER CHILDREN .....</td> <td style="text-align: center;">3</td> </tr> <tr> <td>DON'T KNOW .....</td> <td style="text-align: center;">8</td> </tr> </tbody> </table>	SAME NUMBER .....	1	MORE CHILDREN .....	2	FEWER CHILDREN .....	3	DON'T KNOW .....	8																																												
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 <input type="checkbox"/> CURRENTLY WIDOWED, DIVORCED, OR SEPARATED <input type="checkbox"/>		→ 803
802	How old was your husband on his last birthday?	AGE IN COMPLETED YEARS <input type="text"/> <input type="text"/>	
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 ..... <input type="text"/> <input type="text"/> DON'T KNOW ..... 98	
806	CHECK 101A:  CURRENTLY MARRIED <input type="checkbox"/> CURRENTLY WIDOWED, DIVORCED, OR SEPARATED <input type="checkbox"/>		→ 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?	_____ <input type="text"/> <input type="text"/> <input type="text"/> _____ _____	
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
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	→ 818

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
813	What is your current occupation, that is, what kind of work do you mainly do?	<div style="display: flex; align-items: center;"> <div style="flex: 1;">_____</div> <div style="border: 1px solid black; width: 30px; height: 20px; margin-left: 10px;"></div> </div> <div style="margin-top: 5px;">_____</div> <div style="margin-top: 5px;">_____</div>	
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 <input type="checkbox"/> CURRENTLY WIDOWED, DIVORCED, OR SEPARATED <input type="checkbox"/>		→ 827
819	CHECK 814:  CODE 1, 2, OR 3 CIRCLED <input type="checkbox"/> CODE 4, OR 5 CIRCLED OR 814 NOT ASKED <input type="checkbox"/>		→ 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)	
822A	CHECK 814: CODES 1, 2, OR 3 CIRCLED <input type="checkbox"/> CODE 4, OR 5 CIRCLED OR 814 NOT ASKED <input type="checkbox"/>  In addition to your employment income, do you have income from any other source, such as real estate, retirement, allowances, etc. ? 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)	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
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)	
825	Who usually makes decisions about making purchases for daily household needs?	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)	
827	PRESENCE OF OTHERS AT THIS POINT (PRESENT AND LISTENING, PRESENT BUT NOT LISTENING, OR NOT PRESENT)	PRES./ PRES./ NOT LISTEN. NOT PRES. LISTEN. 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:  If she goes out without telling him? If she neglects the children? If she burns the food? If she insults him? If she disobeys him? If she argues with him? If she has relation with another man?	YES NO DK GOES OUT ..... 1 2 8 NEGL. CHILDREN ... 1 2 8 BURNS FOOD ..... 1 2 8 INSULTS ..... 1 2 8 DISOBEYS ..... 1 2 8 ARGUES ..... 1 2 8 ANOTHER MAN ..... 1 2 8	
828A	In your opinion, what do you consider to be violence against women?  CIRCLE CODE '1' FOR EACH SPONTANEOUS ANSWER, THEN FOR EACH CASE NOT MENTIONED SPONTANEOUSLY, ASK: "In your opinion, do you consider (ITEM NOT MENTIONED SPONTANEOUSLY) to be violence against women"?  IF 'YES' CIRCLE 2 (YES PROBE), IF NO, CIRCLE '3'(NO).  Beating? Physical threats? Insults? Rape? Sexual harassment? Early marriage? Compulsory marriage? Unwanted sexual intercourse?	YES YES SPONTA- PRO- NEOUSLY BE NO BEATING ..... 1 2 3 PHYSICAL THREATS . 1 2 3 INSULTS ..... 1 2 3 RAPE ..... 1 2 3 SEXUAL HARASS. ... 1 2 3 EARLY MARRIAGE ... 1 2 3 COMPULSORY MAR. . 1 2 3 UNWANTED SEX. ... 1 2 3  OTHER ..... 1 (SPECIFY)	

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
901A	Is there anything a person can do to avoid getting the AIDS virus?	YES ..... 1 NO ..... 2 DON'T KNOW ..... 8	→ 902
901B	What can a person do?  Anything else?  RECORD ALL WAYS MENTIONED.	ABSTAIN FROM SEXUAL INTERCOURSE ..... A USE CONDOMS ..... B LIMIT SEX TO SPOUSE/STAY FAITHFUL TO SPOUSE ... C LIMIT NUMBER OF SEX. PARTNERS . . . D AVOID SEX WITH PROSTITUTES . . . E AVOID SEX WITH PERSONS WHO HAVE MANY PARTNERS. . . . . F AVOID SEX WITH HOMOSEXUALS . . . G AVOID SEX WITH PERSONS WHO INJECT DRUGS INTRAVENOUSLY . H AVOID BLOOD TRANSFUSION ..... I AVOID INJECTIONS ..... J AVOID SHARING RAZORS/BLADES K AVOID KISSING ..... L AVOID MOSQUITO BITES ..... M SEEK PROTECTION FROM TRADITIONAL PRACTITIONER ... N OTHER _____ W (SPECIFY) OTHER _____ X (SPECIFY) DON'T KNOW Z	
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	

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP
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
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))	<b>PUBLIC MEDICAL SECTOR</b> GOVT. HOSPITAL ..... A GOVT. HEALTH CENTER ..... B GOVT. MCH ..... C UNIVERSITY HOSPITAL ..... D ROYAL MEDICAL SERVICES ..... E TESTING & COUNSELING CENTER F OTHER PUBLIC _____ G (SPECIFY) <b>PRIVATE MEDICAL SECTOR</b> 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) <b>OTHER</b> _____ 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 <input type="checkbox"/> WIDOWED/ DIVORCED/SEPARATED <input type="checkbox"/>		→ 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	<p>CHECK 901:</p> <p>HEARD ABOUT AIDS <input type="checkbox"/></p> <p>NOT HEARD ABOUT AIDS <input type="checkbox"/></p> <p>Apart from AIDS, have you heard about other infections that can be transmitted through sexual contact?</p> <p>Have you heard about infections that can be transmitted through sexual contact?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	→ 917
916A	<p>If a man has a sexually transmitted disease, what symptoms might he have?</p> <p>Any other symptoms?</p> <p>RECORD ALL MENTIONED</p>	<p>ABDOMINAL PAIN ..... A</p> <p>GENITAL DISCHARGE/DRIPPING ... B</p> <p>FOUL SMELLING DISCHARGE ..... C</p> <p>BURNING PAIN ON URINATION ..... D</p> <p>REDNESS/INFLAMMATION IN GENITAL AREA ..... E</p> <p>SWELLING IN GENITAL AREA ..... F</p> <p>GENITAL SORES/ULCERS ..... G</p> <p>GENITAL WARTS ..... H</p> <p>GENITAL ITCHING ..... I</p> <p>BLOOD IN URINE ..... J</p> <p>LOSS OF WEIGHT ..... K</p> <p>IMPOTENCE ..... L</p> <p>FEVER ..... M</p> <p>OTHER _____ X (SPECIFY)</p> <p>NO SYMPTOMS ..... Y</p> <p>DON'T KNOW ..... Z</p>	
916B	<p>If a woman has a sexually transmitted disease, what symptoms might she have?</p> <p>Any other symptoms?</p> <p>RECORD ALL MENTIONED</p>	<p>ABDOMINAL PAIN ..... A</p> <p>GENITAL DISCHARGE ..... B</p> <p>FOUL SMELLING DISCHARGE ..... C</p> <p>BURNING PAIN ON URINATION ..... D</p> <p>REDNESS/INFLAMMATION IN GENITAL AREA ..... E</p> <p>SWELLING IN GENITAL AREA ..... F</p> <p>GENITAL SORES/ULCERS ..... G</p> <p>GENITAL WARTS ..... H</p> <p>GENITAL ITCHING ..... I</p> <p>BLOOD IN URINE ..... J</p> <p>LOSS OF WEIGHT ..... K</p> <p>HARD TO GET PREGNANT/HAVE A CHILD ..... L</p> <p>FEVER ..... M</p> <p>OTHER _____ X (SPECIFY)</p> <p>NO SYMPTOMS ..... Y</p> <p>DON'T KNOW ..... Z</p>	
917	<p>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?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	
918	<p>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?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	
919	<p>Is a wife justified in refusing to have sex with her husband when she is tired or not in the mood?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	
920	<p>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?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>DON'T KNOW ..... 8</p>	

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	→ 1013
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	
1013	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 NOT A BIG PROB- PROB- LEM 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



NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																																																
1106	CHECK 1105A: AT LEAST ONE <input type="checkbox"/> "YES" ↓ NOT A SINGLE <input type="checkbox"/> "YES"		→ 1108																																																
1107	Did the following ever happen as a result of what your (last) husband did to you: a) You had cuts, bruises or aches? b) You had an injury or a broken bone? c) You went for treatment?	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 10%; text-align: center;">YES</th> <th style="width: 10%; text-align: center;">NO</th> </tr> </thead> <tbody> <tr> <td>BRUISES/ACHES .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>INJURY/BROKEN BONE .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>WENT FOR TREATMENT .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </tbody> </table>		YES	NO	BRUISES/ACHES .....	1	2	INJURY/BROKEN BONE .....	1	2	WENT FOR TREATMENT .....	1	2																																					
	YES	NO																																																	
BRUISES/ACHES .....	1	2																																																	
INJURY/BROKEN BONE .....	1	2																																																	
WENT FOR TREATMENT .....	1	2																																																	
1108	From the time you were 15 years old has anyone other than your (last) husband hit, slapped, kicked, or done anything else to hurt you physically?	<table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>YES .....</td> <td style="text-align: center;">1</td> </tr> <tr> <td>NO .....</td> <td style="text-align: center;">2</td> </tr> <tr> <td>REFUSED TO ANSWER/ NO ANSWER .....</td> <td style="text-align: center;">3</td> </tr> </tbody> </table>	YES .....	1	NO .....	2	REFUSED TO ANSWER/ NO ANSWER .....	3	→ 1111																																										
YES .....	1																																																		
NO .....	2																																																		
REFUSED TO ANSWER/ NO ANSWER .....	3																																																		
1109	Who has hurt you in this way?  Anyone else?  RECORD ALL MENTIONED.	<table style="width: 100%; border-collapse: collapse;"> <tbody> <tr><td>MOTHER .....</td><td style="text-align: center;">A</td></tr> <tr><td>FATHER .....</td><td style="text-align: center;">B</td></tr> <tr><td>STEP-MOTHER .....</td><td style="text-align: center;">C</td></tr> <tr><td>STEP-FATHER .....</td><td style="text-align: center;">D</td></tr> <tr><td>BROTHER .....</td><td style="text-align: center;">E</td></tr> <tr><td>SISTER .....</td><td style="text-align: center;">F</td></tr> <tr><td>SON .....</td><td style="text-align: center;">G</td></tr> <tr><td>DAUGHTER .....</td><td style="text-align: center;">H</td></tr> <tr><td>EX-HUSBAND .....</td><td style="text-align: center;">I</td></tr> <tr><td>MOTHER-IN-LAW .....</td><td style="text-align: center;">J</td></tr> <tr><td>FATHER-IN-LAW .....</td><td style="text-align: center;">K</td></tr> <tr><td>OTHER FEMALE RELATIVE/IN-LAW ..</td><td style="text-align: center;">L</td></tr> <tr><td>OTHER MALE RELATIVE/IN-LAW ..</td><td style="text-align: center;">M</td></tr> <tr><td>FEMALE FRIEND/ACQUAINTANCE ..</td><td style="text-align: center;">N</td></tr> <tr><td>MALE FRIEND/ACQUAINTANCE .....</td><td style="text-align: center;">O</td></tr> <tr><td>FEMALE TEACHER .....</td><td style="text-align: center;">P</td></tr> <tr><td>MALE TEACHER .....</td><td style="text-align: center;">Q</td></tr> <tr><td>FEMALE EMPLOYER .....</td><td style="text-align: center;">R</td></tr> <tr><td>MALE EMPLOYER .....</td><td style="text-align: center;">S</td></tr> <tr><td>FEMALE STRANGER .....</td><td style="text-align: center;">T</td></tr> <tr><td>MALE STRANGER .....</td><td style="text-align: center;">U</td></tr> <tr><td>POLICE/SOLDIER .....</td><td style="text-align: center;">V</td></tr> <tr><td>OTHER _____</td><td style="text-align: center;">X</td></tr> <tr><td style="text-align: center;">(SPECIFY)</td><td></td></tr> </tbody> </table>	MOTHER .....	A	FATHER .....	B	STEP-MOTHER .....	C	STEP-FATHER .....	D	BROTHER .....	E	SISTER .....	F	SON .....	G	DAUGHTER .....	H	EX-HUSBAND .....	I	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)		
MOTHER .....	A																																																		
FATHER .....	B																																																		
STEP-MOTHER .....	C																																																		
STEP-FATHER .....	D																																																		
BROTHER .....	E																																																		
SISTER .....	F																																																		
SON .....	G																																																		
DAUGHTER .....	H																																																		
EX-HUSBAND .....	I																																																		
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)																																																			
1110	In the last 12 months, how often have you been hit, slapped, kicked, or physically hurt by this/these person(s): often, only sometimes, or not at all?	<table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>OFTEN .....</td> <td style="text-align: center;">1</td> </tr> <tr> <td>SOMETIMES .....</td> <td style="text-align: center;">2</td> </tr> <tr> <td>NOT AT ALL .....</td> <td style="text-align: center;">3</td> </tr> </tbody> </table>	OFTEN .....	1	SOMETIMES .....	2	NOT AT ALL .....	3																																											
OFTEN .....	1																																																		
SOMETIMES .....	2																																																		
NOT AT ALL .....	3																																																		
1111	CHECK 201, 226, AND 229: EVER BEEN PREGNANT <input type="checkbox"/> (YES ON 201 OR 226 OR 229) ↓ NEVER BEEN <input type="checkbox"/> PREGNANT		→ 1114																																																
1112	Has any one ever hit, slapped, kicked, or done anything else to hurt you physically while you were pregnant?	<table style="width: 100%; border-collapse: collapse;"> <tbody> <tr> <td>YES .....</td> <td style="text-align: center;">1</td> </tr> <tr> <td>NO .....</td> <td style="text-align: center;">2</td> </tr> </tbody> </table>	YES .....	1	NO .....	2	→ 1114																																												
YES .....	1																																																		
NO .....	2																																																		

NO.	QUESTIONS AND FILTERS	CODING CATEGORIES	SKIP																
1113	<p>Who has done any of these things to physically hurt you while you were pregnant?</p> <p>Anyone else?</p> <p>RECORD ALL MENTIONED.</p>	<p>CURRENT HUSBAND ..... A</p> <p>MOTHER ..... B</p> <p>FATHER ..... C</p> <p>STEP-MOTHER ..... D</p> <p>STEP-FATHER ..... E</p> <p>BROTHER ..... F</p> <p>SISTER ..... G</p> <p>SON ..... H</p> <p>DAUGHTER ..... I</p> <p>EX-HUSBAND ..... J</p> <p>MOTHER-IN-LAW ..... K</p> <p>FATHER-IN-LAW ..... L</p> <p>OTHER FEMALE RELATIVE/IN-LAW .. M</p> <p>OTHER MALE RELATIVE/IN-LAW .. N</p> <p>FEMALE FRIEND/ACQUAINTANCE .. O</p> <p>MALE FRIEND/ACQUAINTANCE ..... P</p> <p>FEMALE TEACHER ..... Q</p> <p>MALE TEACHER ..... R</p> <p>FEMALE EMPLOYER ..... S</p> <p>MALE EMPLOYER ..... T</p> <p>FEMALE STRANGER ..... U</p> <p>MALE STRANGER ..... V</p> <p>POLICE/SOLDIER ..... W</p> <p>OTHER ..... X</p> <p>(SPECIFY)</p>																	
1114	<p>CHECK 1105B:</p> <p>CODE '1' (OFTEN) OR CODE '2' (SOMETIMES) <input type="checkbox"/> NOT A SINGLE CIRCLED FOR AT LEAST ONE ITEM <input type="checkbox"/> CODE '1' OR '2' CIRCLED</p>		1117																
1115	<p>At any time during the last 12 months when your (last) husband did something to phisically hurt you, did you try to get help to prevent or stop him for hurting you?</p>	<p>YES ..... 1</p> <p>NO ..... 2</p>	1117																
1116	<p>From whom have you sought help?</p> <p>Anyone else?</p> <p>RECORD ALL MENTIONED.</p>	<p>MOTHER ..... A</p> <p>FATHER ..... B</p> <p>SISTER ..... C</p> <p>BROTHER ..... D</p> <p>MOTHER-IN-LAW ..... E</p> <p>FATHER-IN-LAW ..... F</p> <p>OTHER FEMALE RELATIVE/IN-LAW .. G</p> <p>OTHER MALE RELATIVE/IN-LAW .... H</p> <p>FRIEND ..... I</p> <p>NEIGHBOR ..... J</p> <p>TEACHER ..... K</p> <p>EMPLOYER ..... L</p> <p>RELIGIOUS FIGURE ..... M</p> <p>DOCTOR/MEDICAL PERSONNEL .... N</p> <p>POLICE ..... O</p> <p>LAWYER ..... P</p> <p>SOCIAL SERVICE ORGANIZATION .... Q</p> <p>OTHER ..... X</p> <p>(SPECIFY)</p>																	
1117	<p>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?</p>	<table border="1"> <thead> <tr> <th></th> <th>YES ONCE</th> <th>YES, MORE THAN ONCE</th> <th>NO</th> </tr> </thead> <tbody> <tr> <td>HUSBAND .....</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>OTHER MALE ADULT .....</td> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>FEMALE ADULT .....</td> <td>1</td> <td>2</td> <td>3</td> </tr> </tbody> </table>		YES ONCE	YES, MORE THAN ONCE	NO	HUSBAND .....	1	2	3	OTHER MALE ADULT .....	1	2	3	FEMALE ADULT .....	1	2	3	
	YES ONCE	YES, MORE THAN ONCE	NO																
HUSBAND .....	1	2	3																
OTHER MALE ADULT .....	1	2	3																
FEMALE ADULT .....	1	2	3																
1118	<p>INTERVIEWER'S COMMENTS / EXPLANATION FOR NOT COMPLETING THE DOMESTIC VIOLENCE MODULE</p> <hr/> <hr/> <hr/>																		



INTERVIEWER'S OBSERVATIONS

TO BE FILLED IN AFTER COMPLETING INTERVIEW

COMMENTS ABOUT RESPONDENT:

---

---

---

---

---

---

COMMENTS ON SPECIFIC QUESTIONS:

---

---

---

---

---

ANY OTHER COMMENTS:

---

---

---

---

---

SUPERVISOR'S OBSERVATIONS

---

---

---

---

---

---

---

---

NAME OF SUPERVISOR: \_\_\_\_\_ DATE: \_\_\_\_\_

EDITOR'S OBSERVATIONS

---

---

---

---

---

NAME OF EDITOR: \_\_\_\_\_ DATE: \_\_\_\_\_

INSTRUCTIONS:  
 ONLY ONE CODE SHOULD APPEAR IN ANY BOX.  
 IN COLUMN 1, ALL MONTHS SHOULD BE FILLED IN.

INFORMATION TO BE CODED FOR EACH COLUMN

COL.1 BIRTHS, PREGNANCIES, CONTRACEPTIVE USE \*\*

- B BIRTHS
- P PREGNANCIES
- T TERMINATIONS
  
- 0 NO METHOD
- 1 FEMALE STERILIZATION
- 2 MALE STERILIZATION
- 3 PILL
- 4 IUD
- 5 INJECTABLES
- 6 IMPLANTS
- 7 CONDOM
- 8 FEMALE CONDOM
- 9 DIAPHRAGM
- J FOAM OR JELLY
- K LACTATIONAL AMENORRHEA METHOD
- L PERIODIC ABSTINENCE
- M WITHDRAWAL
- X OTHER \_\_\_\_\_

(SPECIFY)

NOTE: In case of a multiple birth which ended  
 with live and non-live birth outcomes  
 record BIRTH to the calendar

COL. 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 HEALTH CONCERNS
- 6 SIDE EFFECTS
- 7 LACK OF ACCESS/TOO FAR
- 8 COSTS TOO MUCH
- 9 INCONVENIENT TO USE
- F FATALISTIC
- A DIFFICULT TO GET PREGNANT/MENOPAUSAL
- D WIDOW/DIVORCE/SEPARATION
- R RAMADAN
- X OTHER \_\_\_\_\_

(SPECIFY)

- Z DON'T KNOW

			COL. 1	COL. 2					
	12	DEC	01			01	DEC	12	
	11	NOV	02			02	NOV	11	
	10	OCT	03			03	OCT	10	
	09	SEP	04			04	SEP	09	
2	08	AUG	05			05	AUG	08	2
0	07	JUL	06			06	JUL	07	0
0	06	JUN	07			07	JUN	06	0
7	05	MAY	08			08	MAY	05	7
	04	APR	09			09	APR	04	
	03	MAR	10			10	MAR	03	
	02	FEB	11			11	FEB	02	
	01	JAN	12			12	JAN	01	
-----									
	12	DEC	13			13	DEC	12	
	11	NOV	14			14	NOV	11	
	10	OCT	15			15	OCT	10	
	09	SEP	16			16	SEP	09	
2	08	AUG	17			17	AUG	08	2
0	07	JUL	18			18	JUL	07	0
0	06	JUN	19			19	JUN	06	0
6	05	MAY	20			20	MAY	05	6
	04	APR	21			21	APR	04	
	03	MAR	22			22	MAR	03	
	02	FEB	23			23	FEB	02	
	01	JAN	24			24	JAN	01	
-----									
	12	DEC	25			25	DEC	12	
	11	NOV	26			26	NOV	11	
	10	OCT	27			27	OCT	10	
	09	SEP	28			28	SEP	09	
2	08	AUG	29			29	AUG	08	2
0	07	JUL	30			30	JUL	07	0
0	06	JUN	31			31	JUN	06	0
5	05	MAY	32			32	MAY	05	5
	04	APR	33			33	APR	04	
	03	MAR	34			34	MAR	03	
	02	FEB	35			35	FEB	02	
	01	JAN	36			36	JAN	01	
-----									
	12	DEC	37			37	DEC	12	
	11	NOV	38			38	NOV	11	
	10	OCT	39			39	OCT	10	
	09	SEP	40			40	SEP	09	
2	08	AUG	41			41	AUG	08	2
0	07	JUL	42			42	JUL	07	0
0	06	JUN	43			43	JUN	06	0
4	05	MAY	44			44	MAY	05	4
	04	APR	45			45	APR	04	
	03	MAR	46			46	MAR	03	
	02	FEB	47			47	FEB	02	
	01	JAN	48			48	JAN	01	
-----									
	12	DEC	49			49	DEC	12	
	11	NOV	50			50	NOV	11	
	10	OCT	51			51	OCT	10	
	09	SEP	52			52	SEP	09	
2	08	AUG	53			53	AUG	08	2
0	07	JUL	54			54	JUL	07	0
0	06	JUN	55			55	JUN	06	0
3	05	MAY	56			56	MAY	05	3
	04	APR	57			57	APR	04	
	03	MAR	58			58	MAR	03	
	02	FEB	59			59	FEB	02	
	01	JAN	60			60	JAN	01	
-----									
	12	DEC	61			61	DEC	12	
	11	NOV	62			62	NOV	11	
	10	OCT	63			63	OCT	10	
	09	SEP	64			64	SEP	09	
2	08	AUG	65			65	AUG	08	2
0	07	JUL	66			66	JUL	07	0
0	06	JUN	67			67	JUN	06	0
2	05	MAY	68			68	MAY	05	2
	04	APR	69			69	APR	04	
	03	MAR	70			70	MAR	03	
	02	FEB	71			71	FEB	02	
	01	JAN	72			72	JAN	01	