YEMEN

Monitoring the situation of children and women

Multiple Indicator Cluster Survey 2006

Ministry of
Public Health
& Population

Pan-Arab
Project for
Family Health
(PAPFAM)

MICS

unicef

United Nations
Children's Fund

The Yemen Multiple Indicator Cluster Survey (MICS) was carried by the Ministry of Health. Financial and technical support was provided by the United Nations Children's Fund (UNICEF) and The Pan Arab Project for Family Health (PAPFAM), League of Arab States.

The survey has been conducted as part of the third round of MICS surveys (MICS3), carried out around the world in more than 50 countries, in 2005-2007, following the first two rounds of MICS surveys that were conducted in 1995 and the year 2000. Survey tools are based on the models and standards developed by the global MICS project, designed to collect information on the situation of children and women in countries around the world. Additional information on the global MICS project may be obtained from www.childinfo.org.

Ministry of Health and Population and UNICEF 2008. *Yemen Multiple Indicator Cluster Survey 2006, Final Report.*

Summary Table of Findings

Multiple Indicator Cluster Surveys (MICS) and Millennium Development Goals (MDG) Indicators, Yemen, 2006

Topic	MICS Indicator Number	MDG Indicator Number	Indicator	Value	
CHILD MORTALITY					
Child mortality	1		Under-five mortality rate	78	per thousand
	2		Infant mortality rate	69	per thousand
NUTRITION					
Breastfeeding	45		Timely initiation of breastfeeding	30	percent
Vitamin A	43		Vitamin A supplementation (post-partum mothers)	16	percent
Low birth weight	10		Infants weighed at birth	8	percent
CHILD HEALTH					
Immunization	25		Tuberculosis immunization coverage	67	percent
	26		Polio immunization coverage	60	percent
	27		DPT immunization coverage	60	percent
	28	15	Measles immunization coverage	59	percent
	31		Fully immunized children	18	percent
	29		Hepatitis B immunization coverage	19	percent
Tetanus toxoid	32		Neonatal tetanus protection	31	percent
Care of illness	33		Use of oral rehydration therapy (ORT)	87	percent
	34		Home management of diarrhoea	31	percent
	22		Antibiotic treatment of suspected pneumonia	38	percent
Solid fuel use	24	29	Solid fuels	36	percent
ENVIRONMENT					
Water and Sanitation	11	30	Use of improved drinking water sources	59	percent
	13		Water treatment	5	percent
	12	31	Use of improved sanitation facilities	52	percent
REPRODUCTIVE HEALTH					
Contraception and unmet need	21	19c	Contraceptive prevalence	28	percent
	98		Unmet need for family planning	24	percent
	99		Demand satisfied for family planning	54	percent
Maternal and newborn health	20		Antenatal care	47	percent
	44		Content of antenatal care		
			Blood test taken	37	percent
			Blood pressure measured	40	percent
			Urine specimen taken	34	percent
			Weight measured	27	percent
	4	17	Skilled attendant at delivery	36	percent
	5		Institutional deliveries	24	percent
Fertility			Total Fertility Rate	5.2	rate
CHILD DEVELOPMENT					
Child development	46		Support for learning	26	percent
	47		Father's support for learning	32	percent
	48		Support for learning: children's books	10	percent
	49		Support for learning: non-children's books	59	percent
	50		Support for learning: materials for play	18	percent
	51		Non-adult care	31	percent

Topic	MICS Indicator Number	MDG Indicator Number	Indicator		Value
EDUCATION					
Education	52		Pre-school attendance	3	percent
	54		Net intake rate in basic education	40	percent
	55	6	Net primary school attendance rate	68	percent
	56		Net secondary school attendance rate	24	percent
	57	7	Children reaching grade five	79	percent
	58		Transition rate to secondary school	66	percent
	59	7b	Primary completion rate	18	percent
	61	9	Gender parity index		
			basic education	0.80	ratio
			secondary school	0.60	ratio
Literacy			Adult literacy rate (Ever married women only)	35	percent
CHILD PROTECTION					
Birth registration	62		Birth registration	22	percent
Child labour	71		Child labour	23	percent
	72		Labourer students	60	percent
	73		Student labourers	23	percent
Child discipline	74		Child discipline		
			Any psychological/physical punishment	94	percent
Early marriage	67		Marriage before age 15	14	percent
			Marriage before age 18	52	percent
	68		Young women age 15-19 currently married	19	percent
	69		Spousal age difference		
			Women age 15-19	16	percent
			Women age 20-24	18	percent
Disability	101		Child disability	25	percent
Orphans	75		Prevalence of orphans	5	percent
	78		Children's living arrangements	2	percent

Topic	MICS Indicator Number	MDG Indicator Number	Indicator	Value	
HIV and AIDS					
HIV and AIDS knowledge and attitudes	89		Knowledge of mother- to-child transmission of HIV*	32	percent
	86		Attitude towards people with HIV/AIDS*	5	percent
	87		Women who know where to be tested for HIV*	12	percent
	88		Women who have been tested for HIV*	2	percent
	90		Counselling coverage for the prevention of mother-to-child transmission of HIV	2	percent
	91		Testing coverage for the prevention of mother-to-child transmission of HIV	1	percent

* Ever-married women only

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List of Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
BCG	Bacillis-Cereus-Geuerin (Tuberculosis)
CSPro	Census and Survey Processing System
DPT	Diphteria Pertussis Tetanus
EPI	Expanded Programme on Immunization
FGM/C	Female genital mutilation/cutting
GPI	Gender Parity Index
HIV	Human Immunodeficiency Virus
IDD	Iodine Deficiency Disorders
ISCED	International Standard Classification of Education
ITN	Insecticide Treated Net
IUD	Intrauterine Device
LAM	Lactational Amenorrhea Method
MDG	Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
MoPH & P	Ministry of Public Health & Population
NAR	Net Attendance Rate
ORT	Oral rehydration treatment
PAPFAM	Pan Arab Project for Family Health
ppm	Parts Per Million
SPSS	Statistical Package for Social Sciences
UNAIDS	United Nations Programme on HIV and AIDS
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNGASS	United Nations General Assembly Special Session on HIV and AIDS
UNICEF	United Nations Children's Fund
WFFC	World Fit For Children
WHO	World Health Organization

Preface

The betterment of health is the main causal factor behind the establishment of any health system. It is also the goal and aim of our health system represented by the Ministry of Public Health and Population. The realization of this goal is guided by the political leadership headed by the President of the Republic (may God preserve him) and by seeking to implement the goals of our right-guided government.

While the betterment of health is the prime need, still, great strides have been made in primary health care and the resulting improvement in health indicators, particularly those related to combating infectious diseases such as malaria, bilharzias, tuberculosis, and diarrheal diseases. Further progress has been made through routine immunization coverage by way of linkage activities, reducing maternal, under-five child, and infant mortality rates, increasing the rate of usage of family planning methods, and raising the health awareness of families with a focus on pregnant mothers to promote safe deliveries.

Within this framework, the Ministry of Public Health and Population has striven earnestly in cooperation with UNICEF and the Arab Family Health Project of the Arab League to implement the Multiple Indicator Cluster Survey aimed at monitoring the situation of mothers and children in our beloved Yemen. The objective of this MICS is to update its data and establish a health information database that would contribute to the planning process to revive the health standards of this segment of the population.

The significance of this survey lies in the importance of the results which will facilitate the establishment of a database of updated health indicators. This database will help in analyzing the health, social, and educational situation of children and in comparing the results with data from the Family Health Survey of 2003. There is no doubt that the results of the MICS will greatly contribute to identifying the current situation of mother and child health (MCH). It will also help in the development of future remedies and plans based on a clear vision towards achieving the Millennium Development Goals and preparing the environment for national action and necessary programs that will revitalize MCH.

On the occasion of the publication of the final MICS report covering the health situation of women and children in Yemen, the Ministry of Public Health and Population is pleased to offer its sincere appreciation and esteem for the United Nations Children's Fund (UNICEF) and the Arab Family Health Project of the Arab League for their support and contribution in implementing this vital survey. Many thanks also go to all local agencies, contributing researchers, administrators, and staff who participated in the success of this survey.

We have great hopes that the results of this survey will be a strong backdrop for the data and information necessary to enable us to make the appropriate decisions, formulate policies, prepare plans, and design health development programs that will have a resounding impact on improving the standard of mother and child health.

Minister of Public Health and Population

Dr. Abdul Karim Yahya Rasi'

Foreword

In 2006, Yemen conducted its first Multiple Indicator Cluster Survey (MICS) piloted by the Ministry of Public Health and Population. The survey received technical assistance from the Pan-Arab Project for Family Health (PAPFAM), with UNICEF providing technical and financial support.

The genesis of the global MICS effort dates to 1995 when UNICEF supported governments around the world to assess progress in meeting the World Summit Goals for children at mid-decade. Data made available from these surveys provided fresh understanding of the situation of children and women in the countries that undertook them. The data served as baselines in the development of new programmes and interventions whilst also facilitating the monitoring of trends on the health, education and protection status of children. Since then, these surveys are becoming institutionalized by governments on a wide-scale. The second round of the multiple indicator cluster surveys were conducted in 2000 and the third round undertaken by countries during 2005 and 2006.

The Republic of Yemen joined the effort with the third round of MICS in 2006 making good the opportunity to update key indicators presented in the Family Health Survey realized in 2003 by the Yemen Ministry of Public Health and Population, the Central Statistics Organisation and with support from the Pan-Arab Project for Family Health. This survey until recently constituted the single most important reference for a combination of indicators on maternal and child health. The 2006 Yemen MICS is an important contribution to this same strategy of addressing data gaps pertaining to the well-being of children using a standard methodology and producing internationally comparable estimates.

The Yemen MICS is a commendable endeavour in data collection, analysis and presentation. From its findings, new disaggregated data is provided on mortality, birth registration, child health and development, reproductive health, primary school attendance, child discipline, child labour, early marriage, water and sanitation and other very important information. The results are thus helping to fill data gaps and facilitating measurement of progress in child-related goals as well as relevant Millennium Development Goals (MDGs). The available data sets will equally be useful in further disparity analysis based on urban/rural differentials, education, gender as well as socio-economic considerations.

The MICS exercise has emerged as a credible tool in strengthening national capacity and systems for data production and utilization. Its worth is seen in the evidence produced on how the country is progressing in fulfilling and protecting the rights of children. This sets the premise for improving policy, programming and reporting on child survival, meeting education targets and on actions addressing vulnerable children. Now expected to be pursued every three years, the MICS will continue to support the Government of Yemen's efforts and those of contributing national and international partners to fully utilize the data and knowledge created to ensure improved outcomes for children. UNICEF stands ready to support this process that will reinforce evidence gathering and its use for Yemeni children.

We congratulate the Ministry of Public Health and Population and the internal and external partners who played such an important role in bringing Yemen MICS 2006 into fruition.

Aboudou Karimou Adjibade

Representative
UNICEF Yemen

Executive Summary

The Yemen Multiple Indicator Cluster Survey was conducted in 2006 with cooperation between the Ministry of Public Health and Population and UNICEF and the support of the Pan-Arab Project for Family Health in the League of Arab States. The MICS is a nationally representative survey of 3,586 households, 3,742 ever-married women age 15-49 and 3,783 mothers' and caretakers of children age less than five. The primary objective of the MICS is to provide policy makers and planners with reliable and detailed information needed to monitor the situation of women and children in Yemen. Information on child mortality, nutrition, child health, child protection, water and sanitation, education, fertility, reproductive health, and knowledge of HIV and AIDS is included.

Child Mortality

- In the five years preceding the survey infant mortality was estimated to be 69 deaths per 1,000 live births translating to approximately one in every 15 Yemeni children dying before they reach their first birthday.
- The under-five mortality rate was estimated to be 78 deaths per 1,000 live births.
- Both infant and under-5 mortality rates are higher for children coming from rural areas compared to their urban counterparts; the figures for under-five mortality in rural areas is about 51 percent higher than in urban areas.
- The probability of dying among children living in the poorest households is considerably higher than the national average.

Immunisation

- Thirty-eight percent of children age 12 -23 months had been fully vaccinated at the time of the survey; 18 percent of these children had received all their vaccinations before the age of one.
- More than half of Yemeni children age 12-23 months had received each of the major vaccines by the age of one: 67 percent had received BCG, 60 percent had received all three doses of polio, a further 60 percent had received the third dose of DPT and 59 percent had received the measles vaccine.
- A low proportion of children, just 19 percent, had received the hepatitis B vaccine before their first birthday.
- Around one in ten Yemeni children age 12-23 months had not received a single vaccine.

Diarrhea

- Nationally 34 percent of children under the age of five had diarrhea at some time in the two weeks before the survey.
- Almost nine out of ten of the children who had diarrhea were treated with some kind of oral rehydration therapy (ORT): 33 percent were treated with ORS (solution prepared from ORS packets) and the remainder of children were given home fluids recommended by the Ministry of Health.
- Thirteen percent of children with diarrhea did not receive any type of treatment at all.
- Home management of children with diarrhea was low with only 31 percent of mother's or caretakers reporting that their child received more fluids AND continued eating somewhat less, the same or more food.

Acute respiratory Infection (ARI)

- Thirteen percent of children under age five showed symptoms of ARI in the two weeks before the survey.
- Of the children who showed such symptoms of ARI only 38 percent received antibiotics.
- Only a fifth of mothers and caretakers of under 5 children reported that fast and difficult breathing would be cause for taking their children immediately to a health facility.
- The risk of acute respiratory illness is increased by the use of solid fuels used for cooking in Yemeni households; more than one third of households use solid fuels for cooking. Almost all of these households are in rural areas; 52 percent of rural households use solid fuels for cooking.

Breastfeeding

- Three out of 10 children are breastfed within one hour of being born and 65 percent of children are breastfed within one day.
- Women's educational level appears to have a positive correlation with the early initiation of breastfeeding.

Water and Sanitation

- In Yemen, 59 percent of the population is using an improved source of drinking water – 74 percent in urban areas and 52 percent in rural areas.
- Slightly less than three out of every ten households has water piped directly into their dwelling.
- Only 5 percent of the household population uses an appropriate method to treat their water.
- People living in households in urban settings or where the household head has received secondary or higher education or those living in the richest households, are significantly more likely to use an appropriate water treatment method than others.
- On average for households where water is not on the premises, it takes just over one hour to go to the source of drinking water, collect the water, and then return to home. The time it takes to collect water is longer for households in rural areas but still takes 45 minutes in urban areas.
- The burden of this job in over two thirds of households falls to a female adult.
- A little over half of the Yemeni population uses a sanitary means of excreta disposal.
- The difference between households in urban and rural areas is significant; 92 percent of the population in urban areas is using a sanitary form of excreta disposal compared to just 34 percent of the population living in rural areas.
- Thirty-seven percent of the Yemeni population is using both an improved source of drinking water and a sanitary means of excreta disposal.
- The gap between the rich and poor is striking when it comes to having use of both types of improved sources; the gap ranges from 2 percent for those living in the poorest households to 77 percent for those living in the richest.

Fertility

- The total fertility rate for Yemen is estimated at 5.2 births per woman.
- Fertility rates are higher in rural areas than urban areas; the TFR in rural areas is 6 births per woman, while the TFR in urban areas is 4. The age specific fertility rates for women age 15-19 in rural areas is 56 percent higher than for women of the same age in urban areas.

Contraception

- Current use of contraception was reported by 28 percent of currently married Yemeni women.
- Nineteen percent of currently married women were using modern methods of contraception.
- The most popular method is the pill which is used by 9 percent of married women in Yemen.
- Contraceptive prevalence in urban areas was double the prevalence found in rural areas.
- The percentage of women using any method of contraception rises from 23 percent among those with no education to 34 percent among women with basic education, and to 42 percent among women with secondary or higher education.
- Just under a quarter of currently married women in Yemen report an unmet need for contraception.

Antenatal care

- Forty-seven percent of mothers who had a live birth in the two years preceding the survey received antenatal care from a doctor, nurse or trained midwife.
- Women living in urban areas are considerably more likely to receive antenatal care from skilled health personnel than their rural counterparts (68 percent versus 39 percent).
- Women are most likely to see a medical doctor for their antenatal care.

Assistance at delivery of births

- Only 36 percent of births occurring in the year prior to the MICS survey were delivered by skilled health personnel; ranging from 26 percent in rural areas to 62 percent in urban areas.
- Just under a quarter of births (24 percent) are delivered in a health facility.

- Socioeconomic status is positively correlated with the likelihood of giving birth in a health facility; only 9 percent of pregnant women from the poorest households delivered in a health facility compared to 51 percent of pregnant women from the richest households.
- Half of all ever-married women who gave birth in the two years preceding the survey were assisted at delivery by a relative or friend.

Child Development

- In the 3 days prior to the survey, an adult engage in more than four activities that promote learning and school readiness for one quarter of under-5 children.
- The average number of activities was 2.5.
- Just under a third of fathers engage in such activities with their children.
- In Yemen 59 percent of children live in households that own more than 3 non-adult books and 10 percent live in households with 3 or more children's books.
- A little under a fifth of under-5 children live in households where there are no play things.
- Thirty-one percent of children age 0-59 months were left in the care of other children under the age of 10 in the week prior to the survey.
- A tenth of children were left alone in the week prior to the survey.

Education

- Early childhood education is rare in Yemen and is attended by just 3 percent of Yemeni children age 3-5 years old.
- Forty percent of children age 6 are currently attending the first grade of school with little differences between male and female children. In urban areas 51 percent of 6 year olds are attending school compared to 38 percent in rural areas.
- Of all children of basic education age (6-14 years old), approximately 68 percent are attending primary school; 76 percent of boys are attending school compared to 60 percent of girls
- Around eight out of ten children in urban areas are attending schools providing basic education compared to 6 out of ten children in rural areas.
- Only 24 percent of secondary school age children (15-17 years old) are attending secondary education; 32 percent of boys are attending secondary school compared to 15 percent of girls.
- A further 24 percent of secondary school age children are still attending basic education.
- Over three quarters of students (79 percent) will eventually reach grade five; in urban areas 91 percent of children will reach grade 5 compared to 73 percent of children attending school in rural areas. The difference between male and female children reaching grade 5 is negligible.
- Approximately two thirds of children who completed the last grade of basic education were found at the moment the survey to be attending the first grade of secondary school.
- For every 10 boys who attend basic education, there are 8 girls. The gender parity index falls even more for secondary school education, with 6 girls attending for every 10 boys.

Literacy

- A little over a third (35 percent) of Yemeni ever-married women age 15-24 are literate.
- The percentage of literate women in living in urban households is more than double the percentage for women living in rural households (59 percent versus 26 percent)

Birth Registration

- The births of just 22 percent of children under five years of age in Yemen have been registered
- The most common reason for not registering the birth of a child was because the mother or caretaker did not know that the birth of their child had to be registered.

Child Labour

- It was reported that just over one fifth of children age 5 to 14 were involved in a form child labour (23 percent)
- Of the 59 percent of children 5-14 years of age attending school, 23 percent are also involved in child labour activities. Out of the 23 percent of the children classified as child labourers, 60 percent of them are also attending school.

Child Discipline

- In Yemen, 94 percent of children age 2-14 years were subjected to at least one form of psychological or physical punishment by their mothers/caretakers or other household members.

Child Disability

- Mother's or caretakers reported that a quarter of Yemeni children age 2-9 years had at least one disability. The disability most commonly reported was delay in sitting, standing or walking followed by being unable to understand instructions and unable to be understood.

Early Marriage

- 14 percent of women age 15-49 years were married by the time they were 15, the proportion increases to 52 percent by the time women are 18.
- 19 percent of Yemeni women age 15-19 are currently married. In 16 percent of these marriages the husband is ten years older than the woman.

HIV and AIDS[1]

- In Yemen, 61 percent of the interviewed women have heard of AIDS ranging from 50 percent in rural areas to 85 percent in urban areas.
- Knowledge of the role condoms can play in preventing the transmission of HIV is low at 21 percent.
- Twenty-two percent of ever-married women know that a healthy-looking person can have the AIDS virus.
- Many ever-married women erroneously believe that AIDS can be transmitted by mosquito bites and by sharing food.
- Just under half of the women know that HIV can be transmitted by sharing needles.
- More than half of ever-married women know that HIV can be transmitted from mother to child; 32 percent knew all three ways of mother-to-child transmission.
- An overwhelming 95 percent of ever-married women agreed with at least one discriminatory statement towards people living with HIV. The most widely held attitude was to not purchase food from a person with HIV and AIDS followed by the belief that a female teacher with HIV should not be allowed to work.
- Just under one fifth of the women surveyed said that they would care for a family member who was sick with AIDS.
- Only 12 percent of ever-married women know a place to be tested for HIV; ranging from 7 percent of women living in rural areas to 23 percent of women living in urban areas.
- Only 1.9 percent of ever-married women have actually been tested and these women reside mainly in urban areas
- Two percent of ever-married women who gave birth in the 2 years preceding the survey were provided information about HIV prevention during an antenatal care visit.

[1] All HIV data is based on a sample of ever-married women only.

I. Introduction

Background

This report is based on the Yemen Multiple Indicator Cluster Survey, conducted in 2006 with cooperation between the Ministry of Public Health and Population and UNICEF and the support of the Pan-Arab Project for Family Health in the League of Arab States. The survey provides valuable information on the situation of children and women in Yemen, and was based, in large part, on the needs to monitor progress towards goals and targets emanating from recent international agreements: the Millennium Declaration, adopted by all 191 United Nations Member States in September 2000, and the Plan of Action of A World Fit For Children, adopted by 189 Member States at the United Nations Special Session on Children in May 2002. Both of these commitments build upon promises made by the international community at the 1990 World Summit for Children as well as declarations issued by the League of Arab States and related institutions and organizations concerned about child rights in Arab countries, and the Cairo Declaration "Towards an Arab World Fit for Children", and the Second Arab Work Plan for Children (2004-2015) that was adopted at the Arab Summits.

In signing these international agreements, governments committed themselves to improving conditions for their children and to monitoring progress towards that end. UNICEF was assigned a supporting role in this task (see table below).

A Commitment to Action: National and International Reporting Responsibilities

The governments that signed the Millennium Declaration and the World Fit for Children Declaration and Plan of Action also committed themselves to monitoring progress towards the goals and objectives they contained:

"We will monitor regularly at the national level and, where appropriate, at the regional level and assess progress towards the goals and targets of the present Plan of Action at the national, regional and global levels. Accordingly, we will strengthen our national statistical capacity to collect, analyse and disaggregate data, including by sex, age and other relevant factors that may lead to disparities, and support a wide range of child-focused research. We will enhance international cooperation to support statistical capacity-building efforts and build community capacity for monitoring, assessment and planning." (A World Fit for Children, paragraph 60)

"…We will conduct periodic reviews at the national and subnational levels of progress in order to address obstacles more effectively and accelerate actions.…" (A World Fit for Children, paragraph 61)

The Plan of Action (paragraph 61) also calls for the specific involvement of UNICEF in the preparation of periodic progress reports:

"… As the world's lead agency for children, the United Nations Children's Fund is requested to continue to prepare and disseminate, in close collaboration with Governments, relevant funds, programmes and the specialized agencies of the United Nations system, and all other relevant actors, as appropriate, information on the progress made in the implementation of the Declaration and the Plan of Action."

Similarly, the Millennium Declaration (paragraph 31) calls for periodic reporting on progress:

"…We request the General Assembly to review on a regular basis the progress made in implementing the provisions of this Declaration, and ask the Secretary-General to issue periodic reports for consideration by the General Assembly and as a basis for further action."

The eight main goals that the Millennium Declaration focused on provided the basis for socio-economic planning priorities in Yemen. The five-year plans that followed aimed at raising citizens' standard of living, improving income, and ensuring the best methods for making education available for boys and girls in both rural and urban areas. Special concern was given for health, environment, and women's empowerment, among other issues. MICS will be an important resource to ensure that appropriate data are available for use in monitoring progress made towards achieving the Millennium Development Goals (MDGs).

This final report presents the results of the indicators and topics covered in the survey.

Survey Objectives

The 2006 Yemen Multiple Indicator Cluster Survey has as its primary objectives:

- To provide up-to-date information for assessing the situation of children and women in Yemen;

- To furnish data needed for monitoring progress toward goals established in the Millennium Declaration, the goals of A World Fit For Children (WFFC), and other internationally agreed upon goals, as a basis for future action;

- To contribute to the improvement of data and monitoring systems in Yemen and to strengthen technical expertise in the design, implementation, and analysis of such systems.

II. Sample and Survey Methodology

Sample Design

The Yemen MICS3 sample was designed to provide estimates of a large number of indicators on the situation of women and children at the national level and for urban and rural areas. The 2004 General Population Census was used as the basic frame for selecting the survey sample[2]. The selection process was prepared in two stages in each region; the first stage entailed the selection of 200 clusters as enumeration areas using the probability proportion to size (pps) sampling technique. In the second stage, a systematic sample of the primary sampling units (households) were selected. The Yemen MICS3 sample is a stratified weighted sample. A more detailed description of the sample design can be found in Appendix A.

Questionnaires

Three sets of questionnaires were used in the survey: 1) a household questionnaire which was used to collect information on all *de jure* household members, the household, and the dwelling; 2) a women's questionnaire administered in each household to all ever-married women age 15-49 years; and 3) an under-5 questionnaire, administered to mothers or caretakers of all children under 5 living in the household. The questionnaires included the following modules:

Household Questionnaire:

- Household listing
- Education
- Water and Sanitation
- Housing characteristics
- Child labor
- Child discipline
- Disability

Women's Questionnaire:

- Information panel
- Marriage
- Child mortality
- Birth history
- Tetanus Toxid
- Maternal and newborn health
- Contraception and unmet need
- HIV and AIDS

Under-Five Questionnaire:

- Birth registration and early education
- Child development
- Care for illness
- Immunization

[2] The residents of the Yemeni islands and the nomadic population are excluded from the survey coverage.

The questionnaires are based on the MICS3 model questionnaire[3]. From the MICS3 model Arabic version, the questionnaires were pre-tested and based on the results of the pre-test, modifications were made to the wording and translation of the questionnaires. A copy of the Yemen MICS questionnaires is provided in Appendix F.

Training and Fieldwork

Training for the fieldwork was conducted for 2 weeks in August 2006. Training included lectures on interviewing techniques and the contents of the questionnaires, and mock interviews between trainees to gain practice in asking questions.

The data were collected by 16 teams; each team was comprised of 4 female interviewers, one driver, one male editor and a male supervisor. Fieldwork took place over one month in September 2006.

Data Processing

Data were entered using the CSPro software. The data was carried out by 11 data entry operators and 1 data entry supervisor. In order to ensure quality control, and internal consistency checks were performed. Procedures and standard programs developed under the global MICS3 project and adapted to the Yemen questionnaire were used throughout. Data processing began after data collection had been conducted in Octave 2006 and was completed in December 2006. Data were analysed using the Statistical Package for Social Sciences (SPSS) software program, Version 14, and the model syntax and tabulation plans developed by UNICEF this purpose.

[3] The model MICS3 questionnaire can be found at www.childinfo.org, or in UNICEF, 2006.

III. Sample Coverage and the Characteristics of Households and Respondents

Sample Coverage

Of the 3979 households selected for the sample, 3972 were found to be occupied. Of these, 3586 were successfully interviewed for a household response rate of 90.3 percent. In the interviewed households, 3912 ever-married women (age 15-49) were identified. Of these, 3742 were successfully interviewed, yielding a response rate of 95.7 percent. In addition, 3918 children under age five were listed in the household questionnaire. Questionnaires were completed for 3783 of these children, which corresponds to a response rate of 96.6 percent. Overall response rates of 86.4 and 87.2 are calculated for the women's and under-5's interviews respectively (Table HH.1). Response rates were similar across urban and rural areas.

Characteristics of Households

The age and sex distribution of the survey population is provided in Table HH.2. The distribution is also used to produce the population pyramid in Figure HH.1. In the 3586 households successfully interviewed in the survey, 26,088 household members were listed. Of these, 12,951 (49.6 percent) were males, and 13,137 (50.4 percent) were females. These figures indicate that the average household size is 7.3.

Table HH.2 indicates that Yemen is characterised by a young population with high fertility; 15 percent of the population is under 5 years of age, 44.4 percent is under 15 years of age and over half of the population is under 18 (52.2 percent). The potentially economically active population age 15-64 makes up 52.3 percent of the population and just 3.1 percent of the population is 65 years or older. Due to the large under-15 population, the dependency ratio is extremely high with 9 dependents for every 10 persons age 15-64.

Figure HH.1: Age and Sex Distribution of Household Population, Yemen, 2006

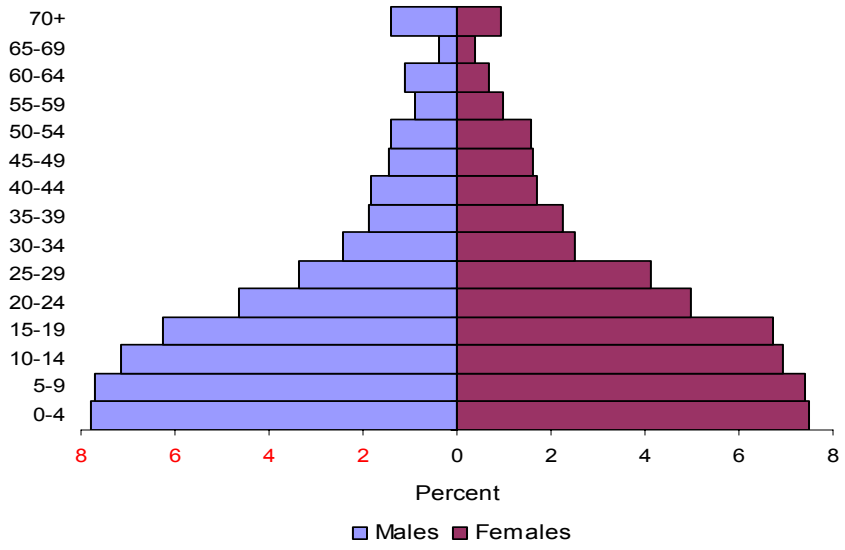


Table HH.3 provides basic background information on the households. Within households, the sex of the household head, urban/rural status and number of household members. These

background characteristics are also used in subsequent tables in this report; the figures in the table are also intended to show the numbers of observations by major categories of analysis in the report.

The weighted and unweighted numbers of households are equal, since sample weights were normalized (See Appendix A). The table also shows the proportions of households where at least one child under 18, at least one child under 5, and at least one eligible woman age 15-49 were found.

The figures in table HH.3 indicate that just over nine out of every ten Yemen households are headed by a male household member; female headed households accounted for just 8.7 of all households in the survey. The table also shows that slightly more than two thirds of households in Yemen can be found in rural areas (68.4 percent). Yemen households are typically large with almost a quarter of all households containing 6-7 members (24.4 percent) and over a fifth of households containing 10 or more members (22.8). Just one third of households in Yemen (33.3. percent) contain 5 member or less.

In almost nine out of every ten households (87.9 percent) there is at least one child age less than 18 years old and in 62.4 percent of households there is at least one child age less than 5. Also in almost nine out of every ten households (87.3 percent) there lives at least one woman of reproductive age (15-49).

Characteristics of Respondents

Tables HH.4 and HH.5 provide information on the background characteristics of ever-married female respondents 15-49 years of age and of children under age 5. In both tables, the total numbers of weighted and unweighted observations are equal, since sample weights have been normalized (standardized). In addition to providing useful information on the background characteristics of women and children, the tables are also intended to show the numbers of observations in each background category. These categories are used in the subsequent tabulations of this report.

Table HH.4 provides background characteristics of ever-married female respondents 15-49 years of age. The table includes information on the distribution of women according to urban-rural residence, age, marital status, motherhood status, education[4] and wealth index quintiles[5]. Approximately one third of ever-married women in Yemen reside in urban areas and two thirds reside in the rural areas (31.3 and 68.7 percent respectively). One in ten in ever-married women were found in the oldest age group 45-49 (10.8 percent); due to population growth the proportion of women found in each successive younger age group increases and peaks at 25-29 (21.8 percent) before falling to 18.6 percent for women age 20-24 and 8.5 percent for women age 15-19.

[4] Unless otherwise stated, "education" refers to educational level attended by the respondent throughout this report when it is used as a background variable.

[5] Principal components analysis was performed by using information on the ownership of household goods and amenities (assets) to assign weights to each household asset, and obtain wealth scores for each household in the sample (The assets used in these calculations were as follows: Electricity, A radio, A television, A mobile telephone, A non-mobile telephone, A refrigerator, a satellite dish, A bicycle, A motorcycle or scooter, An animal-drawn cart, A car or truck, A boat with a motor, agricultural land, a workshop/factory, real estate/land, and a shop orcompany. Each household was then weighted by the number of household members, and the household population was divided into five groups of equal size, from the poorest quintile to the richest quintile, based on the wealth scores of households they were living in. The wealth index is assumed to capture the underlying long-term wealth through information on the household assets, and is intended to produce a ranking of households by wealth, from poorest to richest. The wealth index does not provide information on absolute poverty, current income or expenditure levels, and the wealth scores calculated are applicable for only the particular data set they are based on. Further information on the construction of the wealth index can be found in Rutstein and Johnson, 2004, and Filmer and Pritchett, 2001.

The reason for the small proportion of women in the youngest age group may be due to the number of women age 15-19 who are not married.

The majority of the ever-married sample was currently married; just 6.1 percent of women reported that they were formerly married but are not married now. Nine out of every ten women had given birth.

Two thirds of the women had never received any form of formal or non standard education (66 percent). Of the remaining women who had attended school at some point in their lives, a quarter had attended just basic (primary) education and just nine percent had received secondary or higher education.

Some background characteristics of children under 5 are presented in Table HH.5. These include distribution of children by several attributes: sex, area of residence, age in months, mother's or caretaker's education and wealth. As to be expected, the proportion of male and female children under the age of five is approximately equal (50.9 percent female and 49.1 percent male). Just less than three quarters of these children reside in rural areas (73 percent) and one quarter reside in households in urban areas (27 percent). When disaggregated by single year age, the largest proportion of children were age 0-11 months (22.5 percent) however the proportion of children in each yearly age group is approximately equal at around 20 percent in each year. Slightly fewer children were observed in the age group 48-59 months (18.3) percent.

Almost two thirds of children less than five years of age have mothers or primary caretakers who have received no formal or non standard education[6] (65.6 percent). One quarter of children have mothers or primary caretakers who have received only basic education and just 8.4 percent of mothers or caretakers are educated to secondary level or higher. Children less than 5 years of age are more likely to be living in poorer households. As the wealth of the households increase the proportion of children living in these households decreased; 23.2 percent of children were living in the poorest households and 15.8 percent were living in the richest.

[6] Non standard curriculum includes courses primarily run by non governmental organisations such as literacy classes and may include education that has been received overseas.

IV. Child Mortality

One of the overarching goals of the Millennium Development Goals (MDGs) and the World Fit for Children (WFFC) is to reduce infant and under-five mortality. Specifically, the MDGs call for the reduction of under-five mortality by two-thirds between 1990 and 2015. Monitoring progress towards this goal is an important but difficult objective.

The mortality rates presented in this chapter are computed from information gathered from the birth history of the Women's Questionnaire. Women in the age-group 15-49 were asked whether they had ever given birth, and if they had, they were asked to report the number of sons and daughters who live with them, the number who live elsewhere, and the number who have died. In addition, they were asked to provide a detailed birth history of their children in chronological order starting with the first child. Woman were asked whether a birth was single or multiple; the sex of the child; the date of birth (month and year); survival status; age of the child on the date of the interview if alive; and if not alive; the age at death of each live birth. Since the primary causes of childhood mortality change as children age, mostly biological factors to environmental factors, childhood mortality rates are expressed by age categories and are customarily defined as follows;

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

The rates of childhood mortality are expressed as deaths per 1,000 live births, except in the case of child mortality, which is expressed as deaths per 1,000 children surviving to age one.

Levels and Trends in Infant and Child Mortality

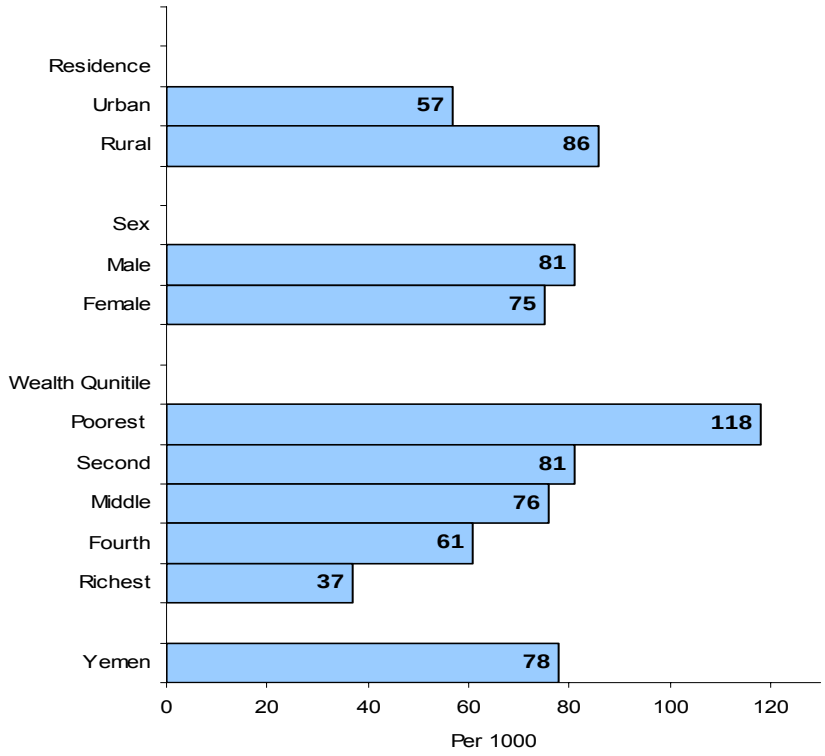
Table CM.1 presents neonatal, post neonatal, infant, child and under-five mortality rates for the three recent five year periods before the survey while CM.2 provides estimates of child mortality by various background characteristics. Neonatal mortality in the most recent period is 37 per 1000 live births. This rate is slightly higher than post neonatal deaths (31 per 1000 live births) during the same period; that is, the risk of dying for a child in the first month of life is slightly greater but approximately similar as in the remaining 11 months of the first year of life. Thus just over 50 percent of infant deaths in Yemen occur during the first month of life.

The infant mortality rate in the five years preceding the survey is 69 per 1,000 live births and under-five mortality is 78 deaths per 1,000 live births for the same period. This means that one in every 15 Yemeni children dies before reaching age one, while one in every 13 does not survive to the fifth birthday.

Male children experience slightly higher probabilities of dying than females. Both infant and under-5 mortality rates are higher for children coming from rural areas compared to their urban counterparts; the figures for under-five mortality in rural areas is about 51 percent higher than in urban areas. There are also significant differences in mortality in terms of the women's socioeconomic status. In particular, the probabilities of dying among children living

in the richest households are considerably lower than the national average. Differentials in under-5 mortality rates by background characteristics are shown in Figure CM.1.

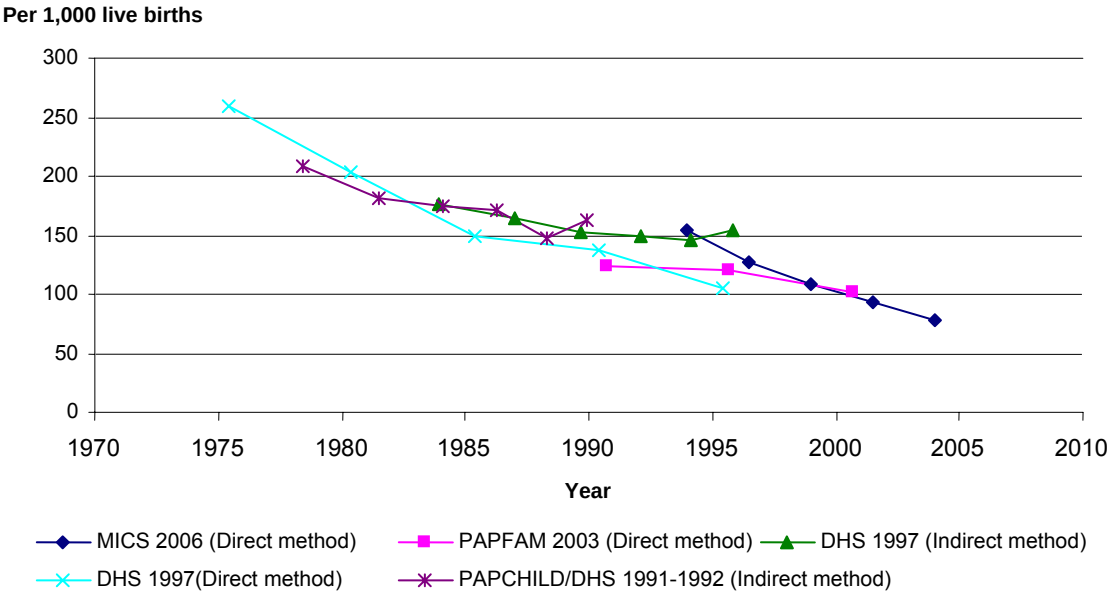
Figure CM.1: Under 5 Mortality rates by background characteristics, Yemen 2006



Mortality trends can be examined in two ways: by comparing mortality rates for five year periods preceding a single survey and by comparing mortality estimates obtained from various surveys. However, these comparisons should be interpreted with caution because quality of data, time references and sample coverage varies. In particular, sampling errors associated with mortality estimates are large and should be taken into account when examining trends between surveys.

Figure CM.2 compares the trends in under five mortality rates from previous household surveys in Yemen. All surveys indicate a downward trend in mortality. The most recent MICS under five mortality estimate is about 23 percent lower than the PAPFAM 2003 survey estimate (102 per 1000).

Figure CM.2: Trends in under-5 mortality rates, Yemen 2006



V. Nutrition

Breastfeeding

Breastfeeding for the first few years of life protects children from infection, provides an ideal source of nutrients, and is economical and safe. However, many mothers stop breastfeeding too soon and there are often pressures to switch to infant formula, which can contribute to growth faltering and micronutrient malnutrition and is unsafe if clean water is not readily available. The World Fit for Children goal states that children should be exclusively breastfed for 6 months and continue to be breastfed with safe, appropriate and adequate complementary feeding for up to 2 years of age and beyond.

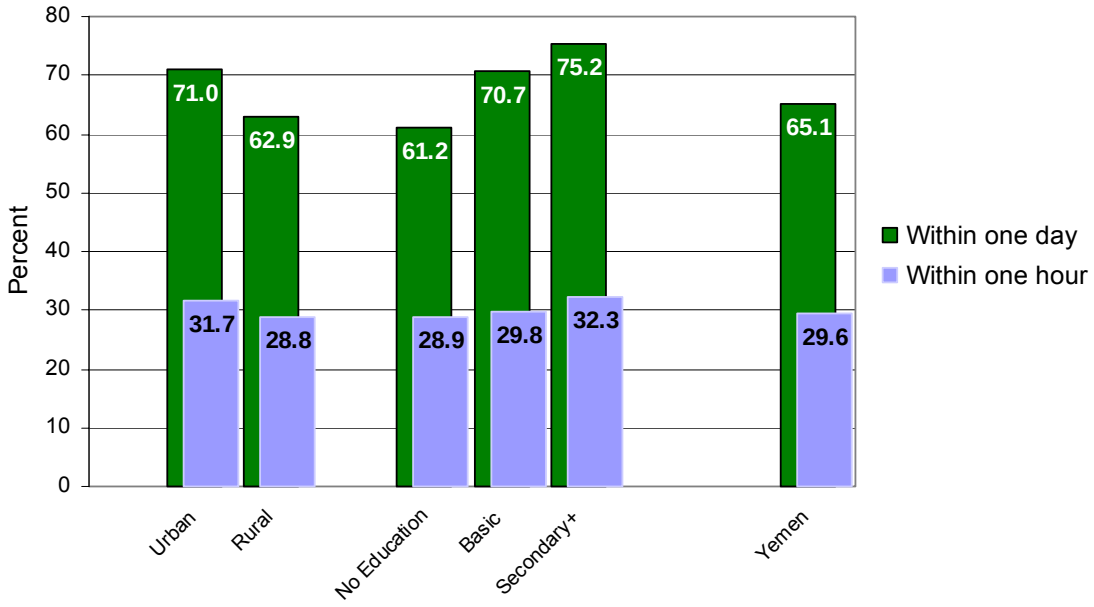
WHO/UNICEF have the following feeding recommendations:

- Exclusive breastfeeding for first six months
- Continued breastfeeding for two years or more
- Safe, appropriate and adequate complementary foods beginning at 6 months
- Frequency of complementary feeding: 2 times per day for 6-8 month olds; 3 times per day for 9-11 month olds

It is also recommended that breastfeeding be initiated within one hour of birth. Table NU.1 provides the proportion of ever-married women with a birth in the two years preceding the survey who started breastfeeding their infants within one hour of birth, and women who started breastfeeding within one day of birth (which includes those who started within one hour).

Almost thirty percent (29.6 percent) of ever-married women who had given birth in the 2 years preceding the survey started breastfeeding within one hour of birth and 65.1 percent began to breastfeed within one day. Women living in urban households were slightly more likely to start breastfeeding within an hour of birth compared to their rural counterparts (31.7 percent versus 28.8 percent) and were also more likely than women in rural households to start breastfeeding within one day of birth (71 percent versus 62.9 percent). Women's educational level appears to have a positive correlation with the early initiation of breastfeeding as shown in figure NU.2.

Figure NU.2 Percentage of mothers who started breastfeeding within one hour and within one day of birth, Yemen, 2006



Vitamin A Supplements

Vitamin A is essential for eye health and proper functioning of the immune system. It is found in foods such as milk, liver, eggs, red and orange fruits, red palm oil and green leafy vegetables, although the amount of vitamin A readily available to the body from these sources varies widely. In developing areas of the world, where vitamin A is largely consumed in the form of fruits and vegetables, daily per capita intake is often insufficient to meet dietary requirements. Inadequate intakes are further compromised by increased requirements for the vitamin as children grow or during periods of illness, as well as increased losses during common childhood infections. As a result, vitamin A deficiency is quite prevalent in the developing world and particularly in countries with the highest burden of under-five deaths.

The 1990 World Summit for Children set the goal of virtual elimination of vitamin A deficiency and its consequences, including blindness, by the year 2000. This goal was also endorsed at the Policy Conference on Ending Hidden Hunger in 1991, the 1992 International Conference on Nutrition, and the UN General Assembly's Special Session on Children in 2002. The critical role of vitamin A for child health and immune function also makes control of deficiency a primary component of child survival efforts, and therefore critical to the achievement of the fourth Millennium Development Goal: a two-thirds reduction in under-five mortality by the year 2015.

For countries with vitamin A deficiency problems, current international recommendations call for high-dose vitamin A supplementation every four to six months, targeted to all children between the ages of six to 59 months living in affected areas. Giving vitamin A to new mothers who are breastfeeding helps protect their children during the first months of life and helps to replenish the mother's stores of vitamin A, which are depleted during pregnancy and lactation. It is recommended that mothers take a Vitamin A supplement within eight weeks of giving birth due to increased Vitamin A requirements during pregnancy and lactation.

The percentage of ever-married women who had a birth in the two years preceding the survey and received a high dose vitamin A supplement before the infant was 8 weeks old was 15.9 percent (Table NU.2). This percentage was higher for women living in urban households compared to their rural counterparts (19.4 percent versus 14.7 percent). Women from wealthier households are also more likely to have received vitamin A; just 12.9 percent of women from the poorest household had taken the supplement increasing to 15.9 percent for women in the middle income households and 21.9 percent for women residing in the richest households.

Low Birth Weight

Weight at birth is a good indicator not only of a mother's health and nutritional status but also the newborn's chances for survival, growth, long-term health and psychosocial development. Low birth weight (less than 2,500 grams) carries a range of grave health risks for children. Babies who were undernourished in the womb face a greatly increased risk of dying during their early months and years. Those who survive have impaired immune function and increased risk of disease; they are likely to remain undernourished, with reduced muscle strength, throughout their lives, and suffer a higher incidence of diabetes and heart disease in later life. Children born underweight also tend to have a lower IQ and cognitive disabilities, affecting their performance in school and their job opportunities as adults.

In the developing world, low birth weight stems primarily from the mother's poor health and nutrition. Three factors have most impact: the mother's poor nutritional status before conception, short stature (due mostly to under nutrition and infections during her childhood), and poor nutrition during the pregnancy. Inadequate weight gain during pregnancy is particularly important since it accounts for a large proportion of foetal growth retardation. Moreover,

diseases such as diarrhoea and malaria, which are common in many developing countries, can significantly impair foetal growth if the mother becomes infected while pregnant.

In the industrialized world, cigarette smoking during pregnancy is the leading cause of low birth weight. In developed and developing countries alike, teenagers who give birth when their own bodies have yet to finish growing run the risk of bearing underweight babies.

One of the major challenges in measuring the incidence of low birth weight is the fact that more than half of infants in the developing world are not weighed. In the past, most estimates of low birth weight for developing countries were based on data compiled from health facilities. However, these estimates are biased for most developing countries because the majority of newborns are not delivered in facilities, and those who are represent only a selected sample of all births (for example in Yemen and as will be discussed in chapter IX only 23.5 percent of births are delivered in a health facility).

Because many infants are not weighed at birth and those who are weighed may be a biased sample of all births, the reported birth weights usually cannot be used to estimate the prevalence of low birth weight among all children. Therefore, the percentage of births weighing below 2500 grams is estimated from two items in the questionnaire: the mother's assessment of the child's **size** at birth (i.e., very small, smaller than average, average, larger than average, very large) and the mother's recall of the child's **weight** or the weight as recorded on a health card if the child was weighed at birth[7] . However, this adjustment and calculation method has to be used with caution in settings where the proportion of infants weighed at birth is very small. As mentioned earlier, infants weighed at birth are a biased sample of all births and this bias becomes stronger the smaller the percentage weighed at birth. Therefore, this procedure should be used with caution for countries with very few infants weighed at birth. Unfortunately Yemen is an example of this and it is not possible from the data to calculate low birth weight prevalence.

As Table NU.3 shows, only 7.8 percent of infants born in the two years before the survey were weighed at bir3th. Infants born to women living in urban areas were considerably more likely to be weighed than those in rural areas (19.5 versus 3.6 percent respectively) as were infants born to mothers with higher socioeconomic status. It is interesting to note that even among those few infants that were weighed at birth approximately 27 percent weighed less than 2.5Kg (it should be emphasized once again however that this cannot be taken as a national estimate for low birth weight, but does provide some indication of the extent of the problem).

Table NU.3 also indicates that under half of all women who gave birth in the two years preceding the survey estimated that their child was of average size (43.5 percent). Of the remaining infants women were more likely to report that their child was 'smaller than average' or 'very small' compared to above average. Almost a quarter of women reported that their child was 'very small' at birth, in particular women from the poorest households were likely to report that their baby was very small (32.8 percent) compared to women living in the richest households (16 percent).

[7] For a detailed description of the methodology, see Boerma, Weinstein, Rutstein and Sommerfelt, 1996.

VI. Child Health

Immunization

The Millennium Development Goal (MDG) 4 is to reduce child mortality by two thirds between 1990 and 2015. Immunization plays a key part in this goal. Immunizations have saved the lives of millions of children in the three decades since the launch of the Expanded Programme on Immunization (EPI) in 1974. Worldwide there are still 27 million children overlooked by routine immunization and as a result, vaccine-preventable diseases cause more than 2 million deaths every year.

A World Fit for Children goal is to ensure full immunization of children under one year of age at 90 percent nationally, with at least 80 percent coverage in every district or equivalent administrative unit.

According to UNICEF and WHO guidelines, a child should receive a BCG vaccination to protect against tuberculosis, three doses of DPT to protect against diphtheria, pertussis, and tetanus, three doses of polio vaccine, and a measles vaccination by the age of 12 months. In Yemen, prior to March 2005, DPT was administered as a separate vaccination; since March 2005 the Pentavalent[8] vaccination was introduced. The table on the right provides the current vaccination schedule in Yemen. The survey however was conducted just 6 months after the Pentavalent vaccine was introduced and therefore some children would still have received the single doses of DPT. The coverage for each vaccination is shown separately in the tables. The Mothers/caretakers were asked to provide vaccination cards for children under the age of five. Interviewers copied vaccination information from the cards onto the MICS questionnaire.

Vaccination schedule for children less than 24 month in Yemen	
Vaccination	Required age given to child
BCG	At birth
Polio 0	At birth
Polio 1	1.5 months
Polio 2	2.5 months
Polio 3	3.5 months
Pentavalent 1	1.5 months
Pentavalent 2	2.5 months
Pentavalent 3	3.5 months
Measles 1	9 months
Measles 2	18 months

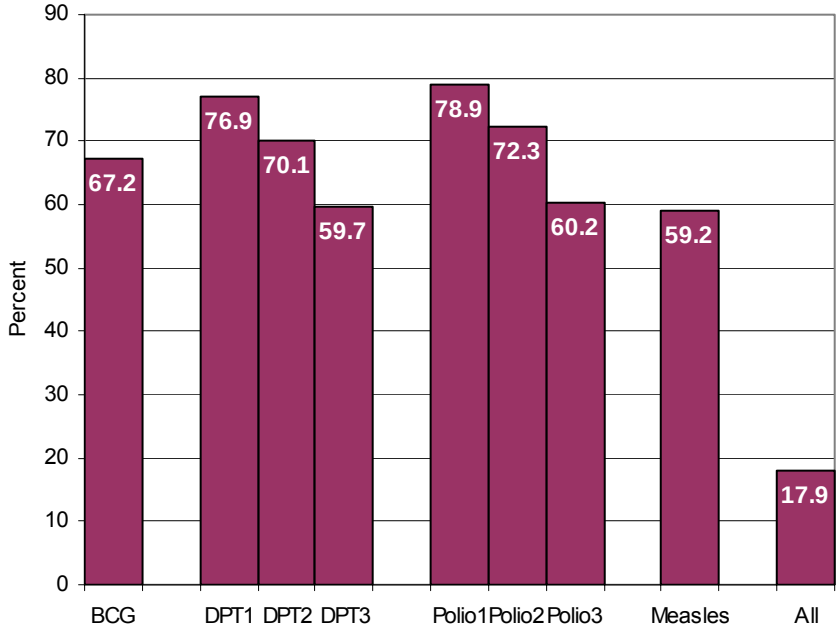
Overall, 48.3 percent of children had health cards (Table CH.2). If the child did not have a card, the mother was asked to recall whether or not the child had received each of the vaccinations and, for DPT and Polio, how many times. The percentage of children age 12 to 23 months who received each of the vaccinations is shown in Table CH.1. The denominator for the table is comprised of children age 12-23 months so that only children who are old enough to be fully vaccinated are counted. In the top panel, the numerator includes all children who were vaccinated at any time before the survey according to the vaccination card or the mother's report. In the bottom panel, only those who were vaccinated before their first birthday, as recommended, are included. For children without vaccination cards, the proportion of vaccinations given before the first birthday is assumed to be the same as for children with vaccination cards.

Approximately 67.2 percent of children age 12-23 months received a BCG vaccination by the age of 12 months and the first dose of DPT was given to 76.9 percent. The percentage declines for subsequent doses of DPT to 59.7 percent for the second dose, and 28.5 percent for the third dose

[8] The Pentavalent vaccine is a combined vaccine which protects against diphtheria, tetanus, pertussis, Hepatitis B and Haemophilus Influenzae Type b (Hib).

(Figure CH.1). Similarly, 78.9 percent of children received Polio 1 by age 12 months and this declines to 60.2 percent by the third dose. The coverage for measles vaccine by 12 months is lower than for the other vaccines at 59.2 percent; although 65.1 percent of children received the vaccine, only 59.2 percent received it by their first birthday. The percentage of children who had all the recommended vaccinations by their first birthday is low at only 17.9 percent. Just over one in every ten children had not received any of the vaccinations by 23 months (11.6 percent).

Figure CH.1 Percentage of children age 12-23 months who received the recommended vaccinations by 12 months, Yemen, 2006



In Yemen, Hepatitis B and Haemophilus Influenzae Type b (Hib) are also recommended as part of the immunization schedule and are 2 of the antigens included in the Pentavalent vaccine. Prior to March 2005 the Hepatitis B vaccine was administered as a single vaccine. Table CH.1c reveals that one quarter of children (25.5 percent) had received the first Hepatitis B vaccine by 12 months of age, this proportion fell slightly for subsequent vaccines to 23.4 percent for HepB2 and 18.6 percent for HepB3.

Tables CH.2 and CH.2c show vaccination coverage rates among children 12-23 months by background characteristics. The figures reflect children that have received the vaccinations at any time up to the date of the survey, and are based on information from both the vaccination cards and mothers'/caretakers' reports. From the table it is evident that there are no notable differences between the percentages of male and female with respect to receiving any of the vaccinations. However where the child lives, the education of the mother or caretaker and the wealth of the household appears to have a strong association with the risk of being vaccinated.

Children living in urban households were more likely to have received each of the vaccinations compared to children living in rural households; for example 89.6 percent of children in urban areas received the BCG vaccination compared to 60.5 percent of their rural counterparts.

Children born to mothers or caretakers who had received even just basic education were still more likely to receive each of the vaccinations compared to children with mothers who had never received any education. The differentials among the wealth quintiles however are the most

striking; just over half of the children living in the poorest households had received the measles vaccination (52.4) compared to 85.5 percent of children living in the richest households. Almost three quarters of children living in the richest households had received all of the vaccinations (72.5 percent) compared to under one fifth (17.8 percent) of children living in the poorest households.

Tetanus Toxoid

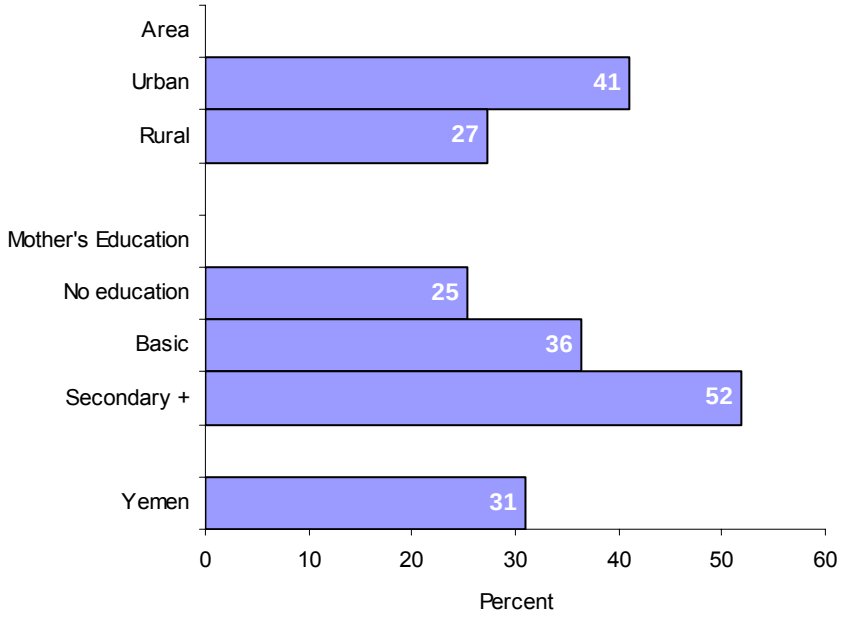
One of the MDGs is to reduce by three quarters the maternal mortality ratio, with one strategy to eliminate maternal tetanus. In addition, another goal is to reduce the incidence of neonatal tetanus to less than 1 case of neonatal tetanus per 1000 live births in every district. A World Fit for Children goal is to eliminate maternal and neonatal tetanus by 2005.

Prevention of maternal and neonatal tetanus is to assure all pregnant women receive at least two doses of tetanus toxoid vaccine. However, if women have not received two doses of the vaccine during the pregnancy, they (and their newborn) are also considered to be protected if the following conditions are met:

- Received at least two doses of tetanus toxoid vaccine, the last within the prior 3 years;
- Received at least 3 doses, the last within the prior 5 years;
- Received at least 4 doses, the last within 10 years;
- Received at least 5 doses during lifetime.

Table CH.3 shows the protection status from tetanus of women who have had a live birth within the last 24 months. Figure CH.2 shows the protection of women against neonatal tetanus by major background characteristics. Thirty-one percent (30.8 percent) of all mothers who had give birth in the last 24 months were protected against tetanus; however protection varied considerably depending on whether the mother lived in an urban or rural household, her age and wealth of her household. Women residing in urban households were more likely to be protected against tetanus compared to their rural counterparts (40.5 percent versus 27.3 percent). Of women coming from the richest households 46.2 percent were protected against tetanus compared to just 22.1 percent of women living in the poorest households. Over half of women with secondary or higher education were protected against tetanus (51.8 percent) compared to just a quarter of women with no education and 36.3 percent of women with basic education.

Figure CH.2 Percentage of women with a live birth in the last 12 months who are protected against neonatal tetanus Yemen, 2006



Oral Rehydration Treatment

Diarrhoea is the second leading cause of death among children under five worldwide. Most diarrhoea-related deaths in children are due to dehydration from loss of large quantities of water and electrolytes from the body in liquid stools. Management of diarrhoea – either through oral rehydration salts (ORS) or a recommended home fluid (RHF) - can prevent many of these deaths. Preventing dehydration and malnutrition by increasing fluid intake and continuing to feed the child are also important strategies for managing diarrhoea.

The goals are to: 1) reduce by one half death due to diarrhoea among children under five by 2010 compared to 2000 (A World Fit for Children); and 2) reduce by two thirds the mortality rate among children under five by 2015 compared to 1990 (Millennium Development Goals). In addition, the World Fit for Children calls for a reduction in the incidence of diarrhoea by 25 percent.

The indicators are:

- Prevalence of diarrhoea
- Oral rehydration therapy (ORT)
- Home management of diarrhoea
- (ORT or increased fluids) ***AND*** continued feeding

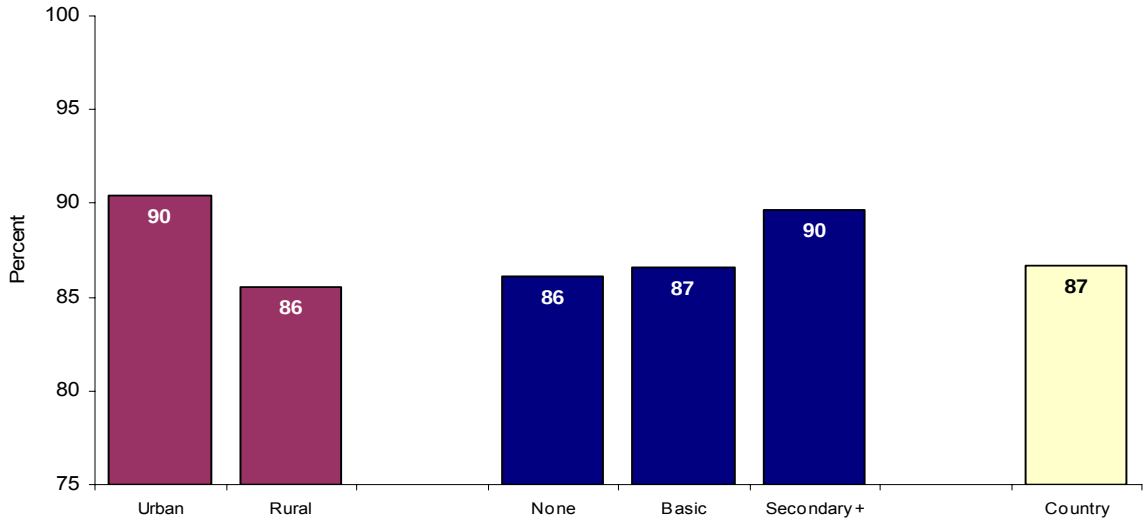
In the MICS questionnaire, mothers (or caretakers) were asked to report whether their child had had diarrhoea in the two weeks prior to the survey. If so, the mother was asked a series of questions about what the child had to drink and eat during the episode and whether this was more or less than the child usually ate and drank.

Overall, 33.5 percent of under five children had diarrhoea in the two weeks preceding the survey (Table CH.4). Diarrhoea prevalence was higher in rural areas compared to urban areas (35.2 percent and 29.2 percent respectively). The peak of diarrhoea prevalence occurs in the first year of life (46.6 percent).

The Ministry of Health and Population in Yemen recommends that children with diarrhoea be given one or more of the following liquids: good drinking water, rice water, vegetable soup or fruit juice. Table CH.4 shows the percentage of children receiving these various types of recommended liquids during the episode of diarrhoea. Since mothers were able to name more than one type of liquid, the percentages do not necessarily add to 100.

Just under one third of children (32.7 percent) received fluids from ORS packets; the highest proportion of children with diarrhoea received good drinking water (73.9 percent) , 31.1 percent received fruit juice, one fifth of children received rice water (21.1 percent) and 10.8 percent received vegetable soup. Almost nine in ten children (86.7 percent) with diarrhoea received one or more of the recommended home treatments, while 13.3 percent received no treatment. As can be seen in figure CH.3, the differentials between the background variables are minimal.

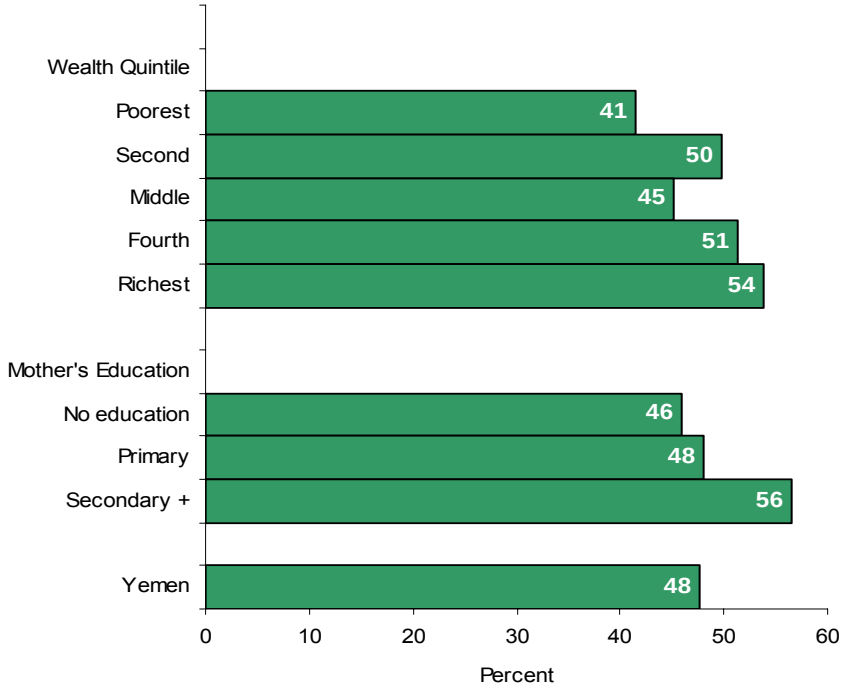
Figure CH.3 Percentage of children age 0-59 months with diarrhoea who received oral rehydration treatment, Yemen, 2006



Of the under five children who had diarrhoea in the 2 weeks previous to the survey 59.9 percent drank more than usual while 38.8 percent drank the same or less (Table CH.5). Just over half (50.6 percent) ate somewhat less, same or more (continued feeding), but 47.8 percent ate much less or ate almost none. Given these figures, 30.7 percent children received increased fluids and at the same time continued feeding. Combining the information in Table CH.5 with those in Table CH.4 on oral rehydration therapy, it is observed that 47.6 percent of children either received ORT or fluid intake was increased, and at the same time, feeding was continued, as is the recommendation.

There are little differences in the home management of diarrhoea by background characteristics sex and urban-rural residence. However mother's education and socioeconomic wealth display a positive correlation with home management of diarrhoea as presented in figure CH.4.

Figure CH.4 Percentage of children age 0-59 with diarrhoea who received ORT or increased fluids, AND continued feeding Yemen, 2006



Care Seeking and Antibiotic Treatment of Pneumonia

Pneumonia is the leading cause of death in children and the use of antibiotics in under-5s with suspected pneumonia is a key intervention. A World Fit for Children goal is to reduce by one-third the deaths due to acute respiratory infections.

Children with suspected pneumonia are those who had an illness with a cough accompanied by rapid or difficult breathing and whose symptoms were NOT due to a problem in the chest and a blocked nose. The indicators are:

- Prevalence of suspected pneumonia
- Care seeking for suspected pneumonia
- Antibiotic treatment for suspected pneumonia
- Knowledge of the danger signs of pneumonia

Table CH.6 presents the prevalence of suspected pneumonia and the use of antibiotics for the treatment of suspected pneumonia in under-5s by sex, age, residence, and socioeconomic factors. Over one in ten under-5 children in Yemen had suspected pneumonia in the two weeks prior to the survey; of these children 37.9 percent had received an antibiotic during the two weeks prior to the survey (12.9 percent). The percentage was considerably higher for children living in urban households compared to their rural counterparts (48.6 percent versus 34.4 percent). The table also shows that antibiotic treatment of suspected pneumonia is lower among the poorest households and among children whose mothers/caretakers who have not received any education.

Issues related to knowledge of danger signs of pneumonia are presented in Table CH.7A. Obviously, mothers' knowledge of the danger signs is an important determinant of care-seeking behaviour. Overall, 19.6 percent of women reported that they would immediately take their

children to a health facility if they were suffering from the two danger signs of pneumonia – fast and difficult breathing. The most commonly identified symptom for taking a child to a health facility is when the child develops fever (72.5 percent). One quarter of mothers or caretakers (24.7 percent) identified fast breathing and 29.2 percent of mothers identified difficult breathing as symptoms for taking children immediately to a health care provider. Mother's and caretakers living in urban households were almost twice as likely to recognise the two danger signs of pneumonia. Increased household wealth was also positively related to mothers or caretakers being able to recognise the two danger signs of pneumonia.

Solid Fuel Use

More than 3 billion people around the world rely on solid fuels (biomass and coal) for their basic energy needs, including cooking and heating. Cooking and heating with solid fuels leads to high levels of indoor smoke, a complex mix of health-damaging pollutants. The main problem with the use of solid fuels is products of incomplete combustion, including CO, polyaromatic hydrocarbons, SO_2, and other toxic elements. Use of solid fuels increases the risks of acute respiratory illness, pneumonia, chronic obstructive lung disease, cancer, and possibly tuberculosis, low birth weight, cataracts, and asthma. The primary indicator is the proportion of the population using solid fuels as the primary source of domestic energy for cooking.

Overall, more than a third (36.2 percent) of all households in Yemen are using solid fuels for cooking. Almost all of these households are in rural areas (52.4 percent); use of solid fuels is very low in urban areas (1 percent), but over half of all households in rural areas (52.4 percent) are using solid fuels. Differentials with respect to household wealth and the educational level of the household head are also significant. The findings show that use of solid fuels is very uncommon among households in the two richest wealth quintiles but almost universal in the poorest households (93.7 percent).

Solid fuel use alone however is a poor proxy for indoor air pollution, since the concentration of the pollutants is different when the same fuel is burnt in different stoves or fires. Use of closed stoves with chimneys minimizes indoor pollution, while open stove or fire with no chimney or hood means that there is no protection from the harmful effects of solid fuels. Unfortunately questions on stoves and fires were excluded from this survey; however the high use of solid fuels particularly in poor households warrants the need for further investigation into the practices of burning solid fuels within the home.

VII. Environment

Water and Sanitation

Safe drinking water is a basic necessity for good health. Unsafe drinking water can be a significant carrier of diseases such as trachoma, cholera, typhoid, and schistosomiasis. Drinking water can also be tainted with chemical, physical and radiological contaminants with harmful effects on human health. In addition to its association with disease, access to drinking water may be particularly important for women and children, especially in rural areas, who bear the primary responsibility for carrying water, often for long distances.

The MDG goal is to reduce by half, between 1990 and 2015, the proportion of people without sustainable access to safe drinking water and basic sanitation. The World Fit for Children goal calls for a reduction in the proportion of households without access to hygienic sanitation facilities and affordable and safe drinking water by at least one-third.

The list of indicators used in MICS are as follows :

Water

- Use of improved drinking water sources
- Use of adequate water treatment method
- Time to source of drinking water
- Person collecting drinking water

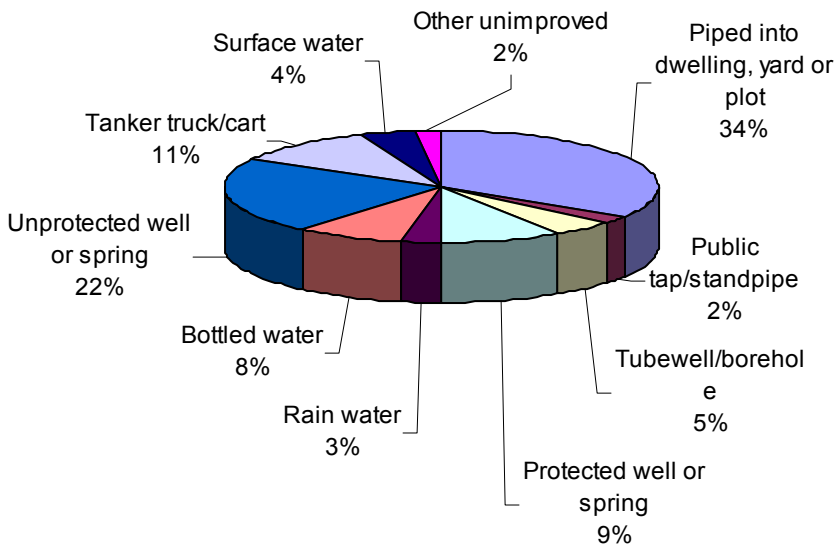
Sanitation

- Use of improved sanitation facilities
- Sanitary disposal of child's faeces

The distribution of the population by source of drinking water is shown in Table EN.1 and Figure EN.1. The population using *improved sources* of drinking water are those using any of the following types of supply: piped water (into dwelling, yard or plot), public tap/standpipe, tubewell/borehole, protected well, protected spring, rainwater collection. Bottled water is considered as an improved water source only if the household is using an improved water source for other purposes, such as hand-washing and cooking.

In Yemen, 58.9 percent of the population is using an improved source of drinking water – 73.8 percent in urban areas and 52.2 percent in rural areas. Use of improved drinking sources varies considerably by the socioeconomic status of the household ranging from 28.2 in the poorest households and rising to 81.7 percent in the richest.

Figure EN.1 Percentage distribution of household members by source of drinking water, Yemen, 2006



The source of drinking water for the population varies considerable depending if the household is in an urban or rural area (Table EN.1). In urban households, 49 percent of members use drinking water that is piped into their dwelling or into their yard or plot. By contrast, 19.1 percent of household members living in rural areas use piped water; a further 20.1 percent use water from an unprotected well. Over a quarter of the household population living in the two lowest wealth quintiles obtain their water from unprotected wells and 22 percent obtain water from unprotected springs.

Use of in-house water treatment is presented in Table EN.2. Households were asked of ways they may be treating water at home to make it safer to drink – boiling, adding bleach or chlorine, using a water filter, and using solar disinfection were considered as proper treatment of drinking water. The table shows the percentages of household members using appropriate water treatment methods, separately for all households, for households using improved and unimproved drinking water sources.

The majority of the household population does not use any method to treat drinking water (92.4 percent) and just 4.6 percent of the household population uses an appropriate water treatment method[9]. The most common methods are boiling the water (3 percent) and straining water through a cloth (2.7 percent). Household members with access to improved water sources are slightly more likely to use an appropriate water treatment method compared to household members obtaining drinking water from unimproved sources (5.2 percent versus 3.8 percent). The urban household population are more likely to treat their drinking water compared to the rural population (7.8 percent versus 3.6 percent); 3.5 percent of the urban population uses a water filter. Household members living in households where the head has received secondary school education are more than twice as likely to use an appropriate water treatment method compared to households where the head has no education (9.6 percent versus 4 percent).

[9] Appropriate water treatment method includes boiling water, adding bleach or chlorine, or using a water filter.

The amount of time it takes to obtain water is presented in Table EN.3 and the person who usually collected the water in Table EN.4. Note that these results refer to one roundtrip from home to drinking water source. Information on the number of trips made in one day was not collected.

Table EN.3 shows that for 49.3 percent of households, the drinking water source is on the premises. For over a quarter of all households, it takes more than one hour to get to the water source and bring water (26.8 percent), and one in ten households spend 30 minutes to 1 hour for this purpose. Excluding those households with water on the premises, the average time to the source of drinking water is just over one hour at 64 minutes. As to be expected the time spent in rural areas in collecting water is higher than in urban areas (65 minutes versus 45 minutes). The higher the education level of the household head the closer the water source is to the household. Similarly the wealthier the household the less time is spent on water collection; one striking finding however is the high average time spent by those in the richest households in collecting water when water is not available on the premises (66 minutes), however this result should be interpreted with caution due to the small number of rich households in this category without water on premises.

Table EN.4 shows that for the majority of households, an adult female is the person collecting the water, when the source of drinking water is not on the premises (68.2 percent). Adult men collect water in only 11.4 percent of cases. For the rest of the households however, female or male children under age 15 collect water (15.9 percent), female children are more likely than male children to perform this task (10.9 percent versus 5 percent).

Inadequate disposal of human excreta and personal hygiene is associated with a range of diseases including diarrhoeal diseases and polio. Improved sanitation facilities for excreta disposal include: flush or pour flush to a piped sewer system, septic tank, or latrine; ventilated improved pit latrine, pit latrine with slab, and composting toilet.

As shown in Table EN.5 more than half of the population of Yemen is living in households using improved sanitation facilities (51.7 percent). The population using *improved* sanitation facilities are those using any of the following: flush/pour flush to a piped sewer system or to somewhere else, a septic tank or a ventilated or unventilated pit latrine with or without a slab.

The difference by residence is striking; in urban areas 92.3 of the population is using an improved sanitary means of excreta disposal compared to 33.6 percent in rural areas. In rural areas, the population is mostly using pit latrines without slabs, or people simply have no facilities, whereas the most common facilities in urban areas are pit latrines and a flush/pour flush to a piped sewer system.

Residents living in households in which the household head has not received any education are less likely than others to use improved facilities. The table also indicates that use of improved sanitation facilities is strongly correlated with socioeconomic status. Only 3.2 of residents living in the poorest households are using improved sanitation facilities, a staggering three quarters of these residents do not use any facilities at all.

An overview of the percentage of household members using improved sources of drinking water and sanitary means of excreta disposal is presented in Table EN.6. Combining these two indicators the table reveals that 36.9 percent of the household population are using both improved sources of drinking water and sanitary means of excreta disposal. The strong correlation between use of improved facilities and the background variables follow the same patterns as described elsewhere in this chapter. For example those living in urban areas are three times as likely to use both improved sources of drinking water and sanitary means of excreta disposal, compared to the household population living in rural areas. Most striking is the gap

between the rich and poor when it comes to having access to both types of improved sources; the gap ranges from 1.7 percent for those living in the poorest households to 77.1 percent for those living in the richest.

VIII. Fertility

Population size may play a critical role in achieving the MDGs. At both the household and national levels, larger families and rapidly growing populations obstruct development and prolong poverty. Children born into large, poor families face increased competition for limited resources, including food, clothing, health and education. At the national level, rapid population growth in poor countries stretches the demand for services, including health care and education, faster than the capacity to satisfy it. Monitoring levels of fertility is one of the three components of population dynamics needed to determine the future size and structure of the population.

This chapter presents the Yemen 2006 MICS results on the levels and trends in fertility. The analysis is based on birth history information collected from ever-married women age 15-49 interviewed during the survey. Each eligible woman was asked a series of questions on the number of sons and daughters who were living with her, the number living elsewhere, and the number who had died, in order to obtain the total number of live births she had had in her lifetime. For each live birth, information was also collected on the name sex, age and survival status of the child. For dead children, age at death was recorded. Information from the birth history is then used to assess current levels and trends in fertility.

Current Fertility

Measures of current fertility are presented in Table FE.1 for the three year period preceding the survey, corresponding to the calendar period 2003-2006. A three-year period was chosen because it reflects the most current information, while also allowing the rates to be calculated on a sufficient number of cases so as not to compromise the statistical precision of the estimates.

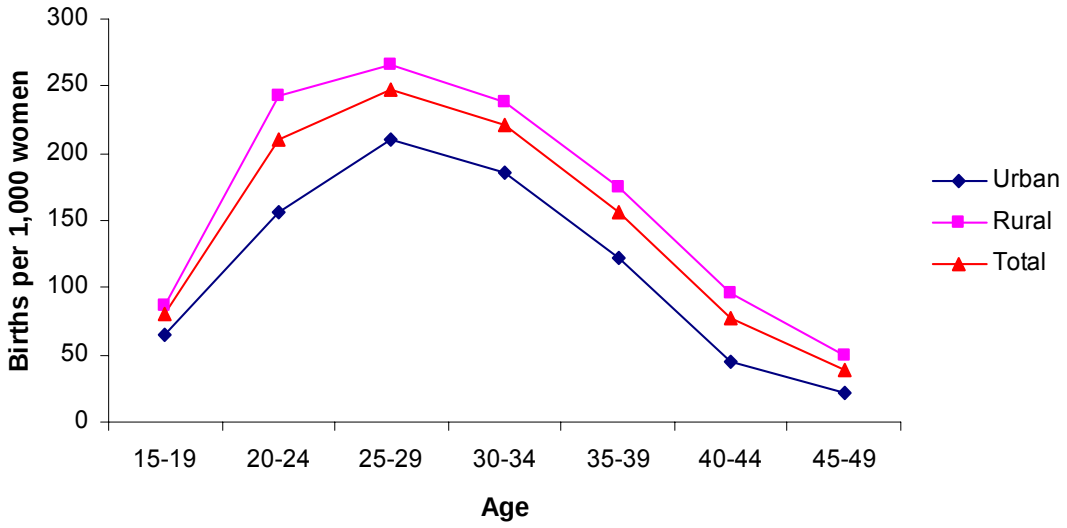
Two measures of current fertility are shown. Age-specific fertility rates (ASFRs), expressed as the number of births per thousand women in a specified age group, are calculated by dividing the number of live births to women in a specific age group by the number of woman-years lived in that age-group. Although information on fertility was obtained only for ever-married women, the age-specific rates are presented for all women regardless of marital status. Data obtained from the household questionnaire on the age structure of the population of never-married women were used to calculate the all women-rates. This procedure assumes that women who have never been married have had no children.

The total fertility rate (TFR) is a useful measure for examining the overall level of fertility. It can be defined as the average number of babies born to a woman during her reproductive years if she were to pass through those years bearing children at the currently observed age-specific fertility rates.

Table FE.1 shows the current fertility rates for Yemen as a whole and for urban and rural areas. The total fertility rate for Yemen is estimated at 5.2 births per woman. Such high fertility is a strong indication of the huge population growth that Yemen will experience. Childbearing begins early in Yemen as reflected by the overall age pattern of fertility shown in the ASFRs. Fertility is low among adolescents and increases to a peak of 247 births per 1,000 among woman age 25-29 and declines thereafter (Table FE.1).

Fertility rates are higher in rural areas than urban areas; the TFR in rural areas is 6 births per woman, while the TFR in urban areas is 4. The ASFR for women age 15-19 in rural areas is 56 percent higher than for women of the same age in urban areas (Figure FE.1).

Figure FE.1: Age-specific Fertility Rates by Urban-Rural Residence, Yemen, 2006



Fertility Differentials

Table FE.2 present differentials in the total fertility rates over the 3 years preceding the survey by urban-rural residence, education and wealth quintiles. Education has been dichotomised into women with no education and women with any education due to the small number of women with secondary or higher education which cannot be presented separately.

The total fertility rate for women who have not received any education is slightly higher than the national average at 5.8 births per woman in the most recent 3 year period. Women who have received some level of formal or son standard education experience slightly lower fertility at 4.7 births per woman. In the 3 year period before the survey women in the poorest households were, on average, likely to have twice the number of births than women from the richest households (6.6 births versus 3.4 births per woman).

Fertility Trends

In addition to estimating levels and patterns of current fertility, retrospective data from birth histories can also be used to assess trends in fertility over time. Table FE.3 compares age-specific fertility for successive three-year periods preceding the survey. The numerators of the rates are classified by three-year segments of time preceding the survey and the mother's age at the time of survey. Women 50 years and over were not interviewed in the survey, therefore rates for older age groups of women become progressively more truncated for periods more distant from the survey date.

Table FE.3 shows an interesting pattern of fertility in Yemen over the last fifteen years. Fertility seems to have peaked during the 6-8 year period preceding the survey. Rates prior to this period appear to be lower in all age groups. Although the results indicate that fertility has declined in the last 6 years, the fertility rates for the most recent period (0-2 years) are higher in every age group compared to rates from 3-5 years ago (other than for women age 15-19).

IX. Reproductive Health

Contraception

Appropriate family planning is important to the health of women and children by: 1) preventing pregnancies that are too early or too late; 2) extending the period between births; and 3) limiting the number of children. A World Fit for Children goal is access by all couples to information and services to prevent pregnancies that are too early, too closely spaced, too late or too many.

Current use of contraception was reported by 27.7 percent of currently married women (Table RH.1); this includes both modern and traditional methods. The use of modern methods, which includes female sterilisation, the pill, IUD, injections and condoms were reported by 19.2 percent of women. Use of traditional methods, which include the lactational amenorrhea method (LAM), periodic abstinence and withdrawal was reported by 8.4 percent of women.

The most popular method is the pill which is used by 9 percent of married women in Yemen. The next most popular method is LAM, which accounts for 5.8 percent of married women. Between 2-4 percent of women reported use of the IUD, injectables and female sterilisation. One percent or less reported use of periodic abstinence, withdrawal and the condom.

Current use of contraception in urban areas was double the prevalence found in rural areas (42.3 percent versus 21.1 percent). Adolescents are far less likely to use contraception than older women. Only one in ten married women age 15-19 currently use a method of contraception compared to a quarter of 20-24 year olds and 35 percent of married women age 35-39 years. Women's education level is strongly associated with contraceptive use; the percentage of currently married women using any method of contraception rises from 23.1 percent among those with no education to 34.2 percent among women with primary education, and to 42.1 percent among women with secondary or higher education.

Wealth quintiles show a strong association with contraceptive prevalence; the percentage of women using any method of contraception is 14.7 percent in the poorest households increasing to 27.1 percent in the middle income households and 43.7 percent in the richest households.

Unmet Need

Unmet need[10] for contraception refers to fecund women who are not using any method of contraception, but who wish to postpone the next birth or who wish to stop childbearing altogether. Unmet need is identified in MICS by using a set of questions eliciting current behaviours and preferences pertaining to contraceptive use, fecundity, and fertility preferences.

Women in unmet need for spacing includes women who are currently married, fecund (are currently pregnant or think that they are physically able to become pregnant), currently not using contraception, and want to space their births. Pregnant women are considered to want to space their births when they did not want the child at the time they got pregnant. Women who are not pregnant are classified in this category if they want to have another child, but want to have the child at least two years later.

[10] Unmet need measurement in MICS is somewhat different than that used in other household surveys, such as the Demographic and Health Surveys (DHS). In DHS, more detailed information is collected on additional variables, such as postpartum amenorrhoea, and sexual activity. Results from the two types of surveys are strictly not comparable.

Women in unmet need for limiting are those women who are currently married, fecund (are currently pregnant or think that they are physically able to become pregnant), currently not using contraception, and want to limit their births. The latter group includes women who are currently pregnant but had not wanted the pregnancy at all, and women who are not currently pregnant but do not want to have another child.

Total unmet need for contraception is simply the sum of unmet need for spacing and unmet need for limiting.

Using information on contraception and unmet need, the percentage of demand for contraception satisfied is also estimated from the MICS data. Percentage of demand for contraception satisfied is defined as the proportion of currently married women who are currently using contraception, of the total demand for contraception. The total demand for contraception includes women who currently have an unmet need (for spacing or limiting), plus those who are currently using contraception.

Table RH.2 shows the results of the survey on contraception, unmet need, and the demand for contraception satisfied. Thirteen percent of currently married women age 15-49 years old have an unmet need for spacing and 10.6 percent have an unmet need for limiting. These two indicators combined reveal that just under a quarter (23.6 percent) of currently married women in Yemen report an unmet need for contraception. Unmet need is higher for women living in rural areas compared to urban areas (28 percent versus 13.8 percent) and for women living in poorer households compared to their richer counterparts. The table also shows that as education of the women increases their need for contraception is more likely to be satisfied. Over 54 percent of currently married women reported that their demand for contraception was is satisfied.

Antenatal Care

The antenatal period presents important opportunities for reaching pregnant women with a number of interventions that may be vital to their health and well-being and that of their infants. Better understanding of foetal growth and development and its relationship to the mother's health has resulted in increased attention to the potential of antenatal care as an intervention to improve both maternal and newborn health. For example, if the antenatal period is used to inform women and families about the danger signs and symptoms and about the risks of labour and delivery, it may provide the route for ensuring that pregnant women do, in practice, deliver with the assistance of a skilled health care provider. The antenatal period also provides an opportunity to supply information on birth spacing, which is recognized as an important factor in improving infant survival. Tetanus immunization during pregnancy can be life-saving for both the mother and infant. The prevention and treatment of malaria among pregnant women, management of anaemia during pregnancy and treatment of STIs can significantly improve foetal outcomes and improve maternal health. Adverse outcomes such as low birth weight can be reduced through a combination of interventions to improve women's nutritional status and prevent infections (e.g., malaria and STIs) during pregnancy. More recently, the potential of the antenatal period as an entry point for HIV prevention and care, in particular for the prevention of HIV transmission from mother to child, has led to renewed interest in access to and use of antenatal services.

WHO recommends a minimum of four antenatal visits based on a review of the effectiveness of different models of antenatal care. WHO guidelines are specific on the content on antenatal care visits, which include:

- Blood pressure measurement
- Urine testing for bateriuria and proteinuria
- Blood testing to detect syphilis and severe anemia
- Weight/height measurement (optional)

Coverage of antenatal care (by a doctor, nurse or midwife) is relatively low in Yemen with 47 percent of women receiving antenatal care at least once during the pregnancy. Women living in urban areas are considerably more likely to receive antenatal care than their rural counterparts (68.2 percent versus 39.3 percent). The lowest level of antenatal care is found among older women age 45-49 (24.9 percent) but is relatively equal among women in all other age groups (ranging from 41.9 to 50 percent). Antenatal care coverage is some 47 percent more in the richest households compared to the poorest ones.

The type of personnel providing antenatal care to women age 15-49 years who gave birth in the two years preceding is presented in Table RH.3. While over half of the women who gave birth in the previous 2 years did not receive any antenatal care, those that did were most likely to see a medical doctor for their antenatal care (39.5 percent); just 4.6 percent of women saw a nurse and 2.8 percent were seen by midwife. This pattern does not vary among the background variables.

The types of services pregnant women received as part of their antenatal care are shown in table RH.4. Thirty-seven percent of women reported that they were given a blood test, 40.4 percent reported that their blood pressure was measured, 34 percent had a urine specimen taken and 26.8 percent were weighed. Women living in urban areas were more likely to receive all of the aforementioned services compared to women living in rural areas indicating the differences in the quality of antenatal care services between urban and rural settings. The table also reveals a positive relationship between women's educational level and the chance of receiving the recommended antenatal care services. Also, perhaps to be expected, the higher the socioeconomic status of the household from which the women lives in the more likely she will receive all of the specific antenatal care services.

Assistance at Delivery

Three quarters of all maternal deaths occur during delivery and the immediate post-partum period. The single most critical intervention for safe motherhood is to ensure a competent health worker with midwifery skills is present at every birth, and transport is available to a referral facility for obstetric care in case of emergency. A World Fit for Children goal is to ensure that women have ready and affordable access to skilled attendance at delivery. The indicators are the proportion of births with a skilled attendant and proportion of institutional deliveries. The skilled attendant at delivery indicator is also used to track progress toward the Millennium Development target of reducing the maternal mortality ratio by three quarters between 1990 and 2015.

The MICS included a number of questions to assess the proportion of births attended by a skilled attendant. *A skilled attendant* includes a doctor, nurse or midwife.

Only 35.7 percent of births occurring in the 2 years prior to the MICS survey were delivered by skilled health personnel (Table RH.5). The percentage ranges from 26.3 percent in rural areas to 61.7 percent in urban areas. The more educated a woman is, the more likely she is to have delivered with the assistance of a skilled attendant. Births delivered by skilled attendants occurred mainly among women in urban areas and to women living in households in the two richest wealth quintiles.

One fifth of the births (20.9 percent) in the 2 years prior to the MICS survey were delivered with assistance by a medical doctor. Midwifes assisted with the delivery of 8.8 percent of births and nurses assisted with 6 percent. A traditional birth attendant delivered 8 percent of all births. Alarmingly half of all women who gave birth in the two years preceding the survey were assisted at delivery by a relative or friend.

A little under a quarter of births (23.5 percent) were delivered in a health facility. Household wealth is positively associated with the likelihood of giving birth in a health facility; only 8.7 percent of pregnant women from the poorest households delivered in a health facility compared to 51 percent of pregnant women from the richest households.

X. Child Development

It is well recognized that a period of rapid brain development occurs in the first 3-4 years of life, and the quality of home care is the major determinant of the child's development during this period. In this context, adult activities with children, presence of books in the home, for the child, and the conditions of care are important indicators of quality of home care. A World Fit for Children goal is that "children should be physically healthy, mentally alert, emotionally secure, socially competent and ready to learn."

Information on a number of activities that support early learning was collected in the survey. These included the involvement of adults with children in the following activities: reading books or looking at picture books, telling stories, singing songs, taking children outside the home, compound or yard, playing with children, and spending time with children naming, counting, or drawing things.

For just one quarter of under-five children (25.5 percent), an adult engage in more than four activities that promote learning and school readiness during the 3 days preceding the survey (Table CD.1). The average number of activities that adults engage with children was 2.5. The table also indicates that the father's involvement in such activities was somewhat limited. Father's involvement with one or more activities was only 32.2 percent. Only 7.8 percent of children were living in a household without their fathers.

There are no gender differentials in terms of adult activities with children; however, a larger proportion of fathers engage in activities with male children (34.1 percent) than with female children (30.2 percent). Larger proportions of adults engage in learning and school readiness activities with children in urban areas (38.5 percent) than in rural areas (20.7 percent). Strong differentials by mother's and father's education and socio-economic status are also observed: Just under half of mothers with secondary or higher education engage in activities with children (46 percent) compared to 19.3 percent of mother's with no education at all. Adult engagement in activities with children was greatest in the richest households (44.6 percent), as opposed to those living in the poorest households (13.5 percent). Father's involvement showed a similar pattern in terms of adults' engagement in such activities.

Exposure to books in early years not only provides the child with greater understanding of the nature of print, but may also give the child opportunities to see others reading, such as older siblings doing school work. Presence of books is important for later school performance and IQ scores.

In Yemen, 58.6 percent of children are living in households where at least 3 non-children's books are present (Table CD.2). However, only one in ten children age 0-59 months are living in households that have children's books (10.3 percent). While no gender or age differentials are observed, urban children appear to have considerably more access to both types of books than those living in rural households. The proportion of under-5 children who have 3 or more non-children's books is 73.1 percent in urban areas, compared to 57.7 percent in rural areas. A fifth of under-5 children living in urban areas live in households with more than 3 children's books (21.3 percent), while the figure is 6.3 percent in rural households. The presence of both non-children's and children's books is positively correlated with the education of the mother and household wealth.

Table CD.2 also shows that 18 percent of children age 0-59 months had 3 or more playthings to play with in their homes, while just under one fifth of children (19.2 percent) had none of the playthings asked to the mothers/caretakers (Table CD.2). The playthings in MICS included household objects, homemade toys, toys that came from a store, and objects and materials found outside the home. It is interesting to note that 49.2 percent of children play with objects and materials found outside the home and 44.3 percent play with toys that came from a store and 43.1 percent play with household objects. The proportion of children who have 3 or more playthings to play with is 19.4 percent among male children and 16.5 percent among female children. Small urban-rural differentials are also observed in this respect. Larger differences are observed in terms of mother's education – 28 percent of children whose mother's are educated to secondary or higher level have 3 or more playthings, while the proportion is 16.4 percent for children whose mother's have only basic education. Differentials also exist by socioeconomic status of the household; just one in ten children living in the poorest households have 3 or more playthings but this is more than double for children living in the richest households (23.5 percent). The age of the child also has a strong correlation with the number of playthings children have available to them, a somewhat expected result.

Leaving children alone or in the presence of other young children is known to increase the risk of accidents. In MICS, two questions were asked to find out whether children age 0-59 months were left alone during the week preceding the interview, and whether children were left in the care of other children under 10 years of age.

Table CD.3 shows that 30.7 percent of children age 0-59 months were left in the care of other children, while a tenth of children were left alone during the week preceding the interview (9.8 percent). Combining the two care indicators, it is calculated that 34.1 percent of children were left with inadequate care during the week preceding the survey. Only small differences were observed by the sex of the child, however if a child resides in an urban or rural household strongly affects the risk of he or she being left with inadequate care. In rural areas 35.2 percent of children were left in the care of other children and 11.8 percent were left alone, this compares to 18.6 percent and 4.6 percent in urban areas respectively.

Inadequate care was more prevalent among children whose mothers have not received any education (37.6 percent), as opposed to children whose mothers had received secondary or higher education (21.9 percent). Children aged 24-59 months were more likely to be left in inadequate care than those children age 0-23 months (37.5 percent versus 29.4 percent). There is a negative association between inadequate care and wealth of the household; in the two poorest wealth quintiles at least 40 percent of children were left with inadequate care compared to less than 30 percent in the middle, fourth and richest households.

XI. Education

Pre-School Attendance and School Readiness

Attendance to pre-school education in an organized learning or child education program is important for the readiness of children to school. One of the World Fit for Children goals is the promotion of early childhood education.

Only 2.6 percent of children age 36-59 months are attending pre-school (Table ED.1). The figure rises to 5.3 percent in urban areas, compared to 1.6 percent in rural areas. No gender differential exists, but differentials by socioeconomic status are evident. Of children living in the richest households 8.4 percent attend pre-school, while no children living in the poorest households were reported to be attending pre-school.

School Participation

Universal access to basic education and the achievement of primary education by the world's children is one of the most important goals of the Millennium Development Goals and A World Fit for Children. Education is a vital prerequisite for combating poverty, empowering women, protecting children from hazardous and exploitative labour and sexual exploitation, promoting human rights and democracy, protecting the environment, and influencing population growth.

The indicators for school attendance included in this report include:

- Net intake rate in primary education (basic education)
- Net primary school attendance rate (basic education)
- Net secondary school attendance rate
- Net basic education school attendance rate of children of secondary school age
- Female to male education ratio (or gender parity index - GPI)

The indicators of school progression include:

- Survival rate to grade five
- Transition rate to secondary school
- Net basic education completion rate

Yemen Education System		**UNESCO ISCED System**	
Grades	Age (yrs)	Grades	Age(yrs)
Basic Education		**Primary Education**	
1 - 9	6 – 14	1 -6	6 – 11
Secondary Education		**Secondary Education**	
10 - 12	15 – 17	7 – 12	12-17

The education indicators presented in this chapter are based on the basic education system in Yemen; under this school system children are required to attend level one and two of basic education from 6 to 14 years old which covers grades 1 to 9. Secondary education is from 15 to 17 years and covers grades 10-12. The ages at which children attend school under the basic education system is different from the primary and secondary school age ranges which follow the UNESCO International Standard Classification of Education (ISCED). Tables presenting indicators based on primary and secondary school age ranges following the ISCED classification can be found after the basic education tables in the table section of this report.

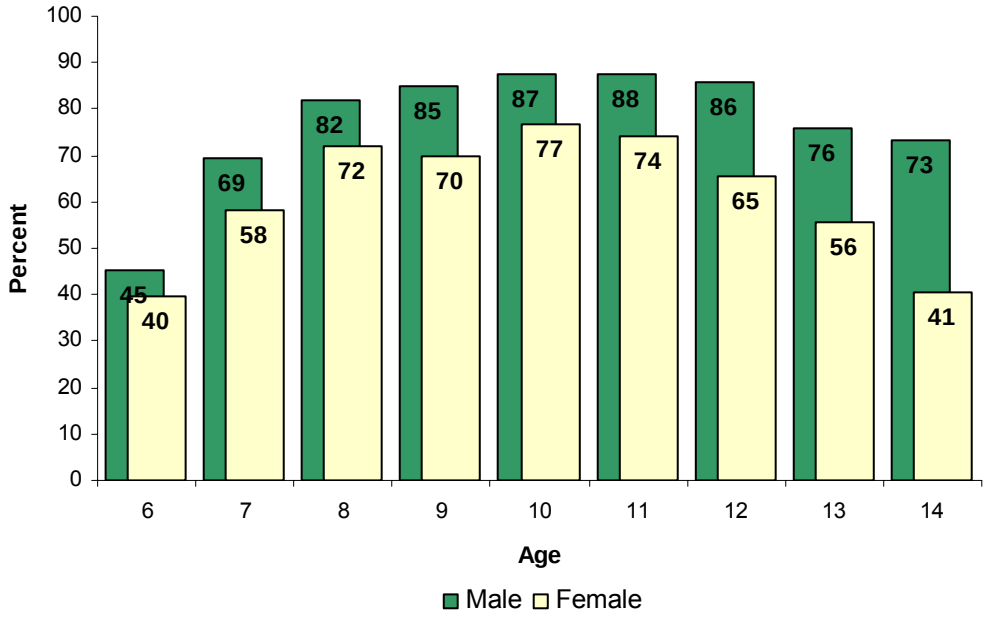
The Yemen MICS was conducted at the end of the academic school year in which many children would have turned one year older than at the start of the school year. During the data analyses

children were rejuvenated by one year so that children whose ages at the time of survey would no longer fall in the age range for the different educational levels would still be included in the respective net attendance ratios.

Of Yemeni children who are of school entry age (age 6), 39.7 percent are attending the first grade (ED.2). Sex differentials are small; 41.7 percent of 6 year old boys are attending the first grade of school compared to 37.5 percent of 6 year old girls. Larger differentials are evident by urban-rural residence; in urban areas the value of the indicator reaches 50.8 percent, while it is 35.7 percent in rural areas. A positive correlation with mother's education and socioeconomic status is observed; for children age 6 whose mothers have at least basic school education, 54.1 percent were attending the first grade compared to 33.9 percent of children whose mothers have received no education. In rich households, the proportion is 51.7 percent, while it is 25.5 percent among children living in the poorest households.

Table ED.3 provides the percentage of children of school age (6 to 14 years) that are attending school. Over two thirds of children are attending school (68.4 percent) which means that 31.6 percent of the children are out of school when they are expected to be participating in school. Male children of basic education age are more likely to be attending school than their female counterparts (76.1 percent versus 60.6 percent). Wider differentials exist between urban-rural residence, levels of mother's education and socioeconomic status; the indicator is as high as 90.5 percent for children whose mothers who have attended secondary school compared to 64.7 percent for children whose mother's do not have any education. Figure ED.1 presents the proportion of children in school by age; from the ages of 6 to 10 the percentage of children attending school increases however after the age of 10 the proportion of children in school begins to fall.

Figure ED.2 Percent distribution of children attending school by age, Yemen, 2006



The secondary net attendance ratio is presented in Table ED.4. More dramatic than for children in the age range for basic education, where 32 percent of the children are not attending school at all, is the fact that only 23.9 percent of children age 15 to 17 years are attending secondary school. Girls in particular are less likely to attend secondary school compared to boys (18.1 percent verses 29.9 percent). Urban-rural residence also appears to be a significant factor in whether 15 to

17 year olds attend secondary school; in rural areas only 17.1 percent of children are attending falling to 8.4 percent for females living in rural areas. However it is interesting to note that in urban areas a slightly higher proportion of girls were found to be attending secondary school compared to boys (38.9 percent versus 36.3) indicating no comparative advantage for boys in urban areas. The differentials among mother's education and socioeconomic wealth reveal a strong positive correlation with secondary school attendance.

The net attendance ratio of children age 15-17 attending basic education is presented in Table ED.4w. Just under a quarter (23.5 percent) of 15-17 year olds are attending basic education when they should be attending secondary school. The remaining 52.6 percent of 15-17 year olds are not attending school at all, they are children out of school since we already indicated that 23.9 percent of them were attending upper secondary education. The differentials between urban-rural residence, mother's education and socioeconomic status when it comes to older children attending basic education are not large. However the majority of 15 to 17 years old attending basic education are 15 (34.1 percent); the proportion of 16 and 17 year olds attending basic education are 23.8 percent and 14 percent respectively.

The percentage of children entering first grade of basic education who eventually reach grade 5 is presented in Table ED.5. This MDG indicator is calculated using data by grade for two consecutive years in a procedure called the reconstructed cohort method. The method makes 3 assumptions: drop outs never return to school; promotion, repetition and dropout rates remain constant over the entire period in which the cohort is enrolled in school; and the same rates apply to all pupils enrolled in a given grade, regardless of whether they previously repeated a grade. As the table shows of all children starting grade one, over three quarters of them (78.9 percent) will eventually reach grade five. The ability to retain students is higher in urban areas than rural areas: in urban areas 91.1 percent of children will reach grade 5 compared to 73.1 percent of children attending school in rural areas. Children from richer households are also more likely to reach grade 5 compared to children from poorer households.

The net school completion rate (grade 9) and transition rate to upper secondary education is presented in Table ED.6. At the moment of the survey, only 18.4 percent of the children of basic education school completion age (14 years) were attending the last grade (grade 9). This value should be distinguished from the gross completion ratio which includes children of any age attending the last grade of basic education. Over a third of 14 year olds from the richest households (37.3 percent) were attending the last grade of basic education compared to just 7.4 percent of 14 year olds living in the poorest households.

A little under two thirds of the children (65.8 percent) that successfully completed the last grade of the second stage of the basic education system were found at the moment the survey to be attending the first grade of secondary school. A positive correlation between socioeconomic status and transition to secondary school is observed; however due to the overall small number of children transitioning to upper secondary school these figures should be used with caution.

The ratio of girls to boys attending basic education or secondary school is provided in Table ED.7. These ratios are better known as the Gender Parity Index (GPI). Notice that the ratios included here are obtained from net attendance ratios rather than gross attendance ratios; the latter ratios provide an erroneous description of the GPI mainly because in most of the cases the majority of over-age children attending early basic education tend to be boys. The table shows that gender parity for basic education is 0.80, indicating that for every 10 boys attending, there are 8 girls. The gender parity drops to 0.60 for secondary school. The disadvantage of girls is particularly pronounced in rural areas, as well as among children living in the poorest households; in rural areas there are 7 girls for every 10 boys in basic education and this falls to 5 girls for every 10 boys among those children living in the poorest households. The only instance

when girls appear to be at a slight advantage over boys is for secondary school attendance in urban areas (GPI 1.07).

Adult Literacy

One of the World Fit for Children goals is to assure adult literacy. Adult literacy is also an MDG indicator, relating to both men and women. In MICS, since only a women's questionnaire was administered, the results are based only on ever-married females age 15-24[11]. Literacy was assessed on the ability of women to read a short simple statement or was based on school attendance at secondary or higher levels. The percent literate is presented in Table ED.8. Slightly over one third of ever-married women (35.2 percent) in Yemen are literate. The percentage of literate women in living in urban households is more than double the percentage for women living in rural households (59 percent versus 26.3 percent). A strong correlation can also be observed between socioeconomic wealth and literacy.

The literacy rates for ever-married women age 15-19 and for ever-married women age 20-24 were the same. An interesting finding was that for women who had received basic education only 59.4 percent could actually read, perhaps reflecting the quality and length of the basic education they had received.

[11] The MDG indicator measures 'all' women age 15-24 therefore this indicator cannot be calculated from the Yemen ever-married women sample.

XII. Child Protection

Birth Registration

The Convention on the Rights of the Child states that every child has the right to a name and a nationality and the right to protection from being deprived of his or her identity. Birth registration is a fundamental means of securing these rights for children. The World Fit for Children states the goal to develop systems to ensure the registration of every child at or shortly after birth, and fulfil his or her right to acquire a name and a nationality, in accordance with national laws and relevant international instruments. The indicator is the percentage of children under 5 years of age whose birth is registered.

The births of just 22.3 percent of children under five years of age in Yemen have been registered (Table CP.1). There is no variation in birth registration between male and female children. Children living in the rural households however are less likely to have their births registered than children living in rural areas (16.4 percent versus 38.2 percent). There is a positive correlation between the education of the mother/caretaker and birth registration, only 15.8 percent of mothers or caretakers with no education, registered the birth or their child compared to 41.4 of mothers or caretakers with secondary or higher education. Children born into wealthier households are also more likely to have their births registered; birth registration took place in only 5 percent of the poorest households compared to 50.4 percent in the richest households.

Mothers and caretakers were asked to provide the reasons why the births of their children were not registered (Table CP.1). Just under half of the mothers or caretakers reported that they didn't know the birth had to be registered (47.9 percent). The second most common reason cited was that they didn't want to have to travel so far (17.6 percent); this reason was more common in the rural areas (20.8 percent) than urban areas (6 percent).

Child Labour

Article 32 of the Convention on the Rights of the Child states: "States Parties recognize the right of the child to be protected from economic exploitation and from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development..." The World Fit for Children mentions nine strategies to combat child labour and the MDGs call for the protection of children against exploitation. In the MICS questionnaire, a number of questions were asked to measure the level and type of child labour, that is, children 5-14 years of age involved in labour activities. A child is considered to be involved in child labour activities at the moment of the survey if during the week preceding the survey:

- Ages 5-11: at least one hour of economic work or 28 hours of domestic work per week.
- Ages 12-14: at least 14 hours of economic work or 28 hours of domestic work per week.

This definition allows differentiation between child labour and child work to identify the type of work that should be eliminated. As such, the estimate provided here is a minimum of the prevalence of child labour since some children may be involved in hazardous labour activities for a number of hours that could be less than the numbers specified in the criteria explained

above. Table CP.2 presents the results of child labour by the type of work. Percentages do not add up to the total child labour as children may be involved in more than one type of work.

It was reported that just over one fifth of children age 5 to 14 were involved in a form child labour (22.7 percent). There was no large variation between male and female children; female children however were much more likely to be engage in conducting household chores for more than 28 hours a week compared to their male counterparts (14.1 percent versus 7.5 percent). A third of children age 12-14 were involved in a form of child labour (33.1 percent) compared to 18.6 percent of children age 5-11 years. Children living in rural households are considerably more likely to be involved in child labour compared to children living in urban households (28.6 percent verses 8.1 percent). The proportion of children living in poorer households and who were engage in child labour was also significantly higher than children living in wealthier households.

Table CP.3 presents the percentage of children classified as student labourers or as labourer students. Student labourers are the children attending school that were involved in child labour activities at the moment of the survey; of the 58.5 percent of children 5-14 years of age attending school, 23.4 percent are also involved in child labour activities. While there is no difference between male and female children, children attending school from urban areas are less likely to be participating in child labour compared to their rural counterpart (8.5 percent versus 31.2 percent).

Labourer students are the children who are involved in child labour activities but were also attending school at the time of the survey; out of the 22.7 percent of the children classified as child labourers, 60.2 percent of them are also attending school. Male children that are involved in child labour activities are more likely than female children, also involved in labour activities, to be attending school (69.8 percent versus 51.6 percent). Children from urban areas that participate in child labour also appear to have a greater chance to be attending school compared to children working in rural areas (74.2 percent versus 58.6 percent). For children that participate in child labour the opportunity to also be attending school is positively correlated with mother's education and socioeconomic status.

Child Discipline

As stated in A World Fit for Children, "children must be protected against any acts of violence …" and the Millennium Declaration calls for the protection of children against abuse, exploitation and violence. In the Yemen MICS survey, mothers/caretakers of children age 2-14 years were asked a series of questions on the ways parents tend to use to discipline their children when they misbehave. Note that for the child discipline module, one child age 2-14 per household was selected randomly during fieldwork. Out of these questions, the two indicators used to describe aspects of child discipline are: 1) the number of children 2-14 years that experience psychological aggression as punishment ***or*** minor physical punishment ***or*** severe physical punishment; and 2) the number of parents/caretakers of children 2-14 years of age that believe that in order to raise their children properly, they need to physically punish them.

In Yemen, proportion of children age 2-14 subjected to at least one form of psychological or physical punishment by their mothers/caretakers or other household member is extremely high at 94 percent. Alarmingly, 4 out of every 10 children age 2-14 years (41.2 percent) were subjected to severe physical punishment and 8 out of 10 (82.8 percent) were subjected to minor physical punishment. The proportion of children experiencing minor physical punishment was higher than the proportion of mothers/caretakers that believe that children should be physically punished (43.9 percent), which perhaps suggests that other household members are inflicting such punishment on children.

Male children were subjected more to both minor and severe physical discipline than female children (84 and 44.2 percent for boys versus 81.6 and 38.2 percent for girls). It is interesting to note that only small differences exist among the other background variables such as the age of child, mother's education and household wealth. A staggering 91.7 percent of children were subjected to psychological punishment; this did not vary across the background variables.

Early Marriage

According to UNICEF's worldwide estimates, over 60 million women age 20-24 were married/in union before the age of 18. Factors that influence child marriage rates include: the state of the country's civil registration system, which provides proof of age for children; the existence of an adequate legislative framework with an accompanying enforcement mechanism to address cases of child marriage; and the existence of customary or religious laws that condone the practice. The right to 'free and full' consent to a marriage is recognized in the Universal Declaration of Human Rights - with the recognition that consent cannot be 'free and full' when one of the parties involved is not sufficiently mature to make an informed decision about a life partner. The Convention on the Elimination of all Forms of Discrimination against Women mentions the right to protection from child marriage in article 16, which states: "The betrothal and the marriage of a child shall have no legal effect, and all necessary action, including legislation, shall be taken to specify a minimum age for marriage..."

In many parts of the world parents encourage the marriage of their daughters while they are still children in hopes that the marriage will benefit them both financially and socially, while also relieving financial burdens on the family. In actual fact, child marriage is a violation of human rights, compromising the development of girls and often resulting in early pregnancy and social isolation, with little education and poor vocational training reinforcing the gendered nature of poverty. While marriage is not considered directly in the Convention on the Rights of the Child, child marriage is linked to other rights - such as the right to express their views freely, the right to protection from all forms of abuse, and the right to be protected from harmful traditional practices - and is frequently addressed by the Committee on the Rights of the Child.

Currently in Yemen, there is no legal minimum age for marriage; the law only stipulates that girls should not marry unless they have reached sexual maturity, yet even then there is no punishment for those families who allow their daughters to marry before this time. Research suggests that many factors interact to place a child at risk of marriage. Poverty and financial burden are factors which push families to get rid of their daughters' burden at early ages. Traditional values add to the belief that early marriage will protect girls from deviation and consequently will protect the family honour. Very often in Yemen it is the fathers, elder brothers and other male patrons who make the marriage decisions without the girl's consent. Evidence shows that women who are married at younger ages are more likely to believe that it is sometimes acceptable for a husband to beat his wife and are more likely to experience domestic violence themselves. The age gap between partners is thought to contribute to these abusive power dynamics and to increase the risk of untimely widowhood. Recently in Yemen the phenomenon of 'tourist marriage' has also emerged whereby gulf tourists come to Yemen, usually for the summer months and marry much younger girls for large dowries. After the summer the tourists return to their countries in many cases leaving children behind without fathers.

Closely related to the issue of child marriage is the age at which girls become sexually active. Women who are married before the age of 18 tend to have more children than those who marry later in life. Pregnancy related deaths are known to be a leading cause of mortality for both married and unmarried girls between the ages of 15 and 19, particularly among the youngest of this cohort. There is evidence to suggest that girls who marry at young ages are more likely to

marry older men which puts them at increased risk of HIV infection. Men often seek younger women as wives as a means to avoid choosing a wife who might already be infected. The demand for this young wife to reproduce and the power imbalance resulting from the age differential leads to very low condom use among such couples.

The percentage of women married at various ages is provided in Table CP.5. The table shows that 14 percent of women aged 15-49 married before age 15, 32 percent of women aged 20-24 married before age 18. These proportions seem to be declining rapidly during the last 3-4 decades. Nineteen (19) percent of women aged 15-19 are currently married. Differentials seem meaningful, particularly by wealth and education and slightly less so by urban-rural, although still significant for marriage before age 18.

Another component is the spousal age difference with an indicator being the percentage of married women with a difference of 10 or more years younger than their current spouse. Table CP.6 presents the results of the age difference between husbands and wives. Among currently married women age 15-19 years, 15.8 percent are married to men who are at least 10 years older than them. Among currently married women age 20-24 years, 17.9 percent have husbands who are 10 or more years older. Women living in urban households are more likely to be in marriages with a large spousal age difference; 23.1 percent of currently married women age 20-24 from urban areas are married to spouses who are at least ten years older compared to 15.9 percent of women living in rural areas. The correlation between large spousal age gaps and the women's educational level is unclear, however from the data is would appear that women with basic education are more likely to have husbands who are at least ten years older compared to women who either have no education at all or have secondary or higher education.

Child Disability

One of the World Fit for Children goals is to protect children against abuse, exploitation, and violence, including the elimination of discrimination against children with disabilities. For children age 2 through 9 years, a series of questions were asked to assess a number of disabilities/impairments, such as sight impairment, deafness, and difficulties with speech. This approach rests in the concept of functional disability developed by WHO and aims to identify the implications of any impairment or disability for the development of the child (e.g. health, nutrition, education, etc.). It should be noted that the mothers/caretakers reports of disability are not verified by a clinical diagnosis therefore the percentages presented here can only be taken as a proxy of disability within the country.

It was reported that a quarter (24.5 percent) of children age 2-9 years had at least one disability (Table CP.7). The disability most commonly reported was delay in sitting, standing or walking (9.3 percent) followed by being unable to understand instructions (6 percent) and unable to be understood (6 percent). There were no major differences found between children living in urban or rural households. Mother's or caretakers in poorer households reported higher levels of child disability. In the poorest households it was estimated that 29.4 percent of children had at least one disability compared to less than 20 percent in the two richest wealth quintiles.

Among children age 3-9 it was reported that 7.4 percent did not have normal speech with little variation among the background variables. A quarter of mother or caretakers with a 2 year old reported that their child cannot name at least one object.

Children's Living Arrangements

Children who are orphaned may be at increased risk of neglect or exploitation if the parents are not available to assist them. The frequency of children (0 to 17 years) living with neither parent,

mother only or father only is presented in Table CP.8. The table reveals that the majority of children in Yemen are living with both biological parents (85.8 percent); a very small number of children are living in households with neither of their biological parents (1.7 percent). Five percent of Yemeni children have lost either one or both of their biological parents. The definition of orphans in Yemen however, only takes into account children that have lost their biological father which was the case for 2.9 percent of children. Children living in households that had lost both biological parents (double orphans) was reported for 0.2 percent of children, however according to the 2006 National Report on Children in Yemen, it is believed that a great many more double orphans are living in government and private institutions.

XIII. HIV and AIDS

Knowledge of HIV Transmission

One of the most important prerequisites for reducing the rate of HIV infection is accurate knowledge of how HIV is transmitted and strategies for preventing transmission. Correct information is the first step toward raising awareness and giving young people the tools to protect themselves from infection. Misconceptions about HIV are common and can confuse young people and hinder prevention efforts. Different regions are likely to have variations in misconceptions although some appear to be universal (for example that sharing food can transmit HIV or mosquito bites can transmit HIV). The UN General Assembly Special Session on HIV and AIDS (UNGASS) called on governments to improve the knowledge and skills of young people to protect themselves from HIV. The indicators to measure this goal as well as the MDG of reducing HIV infections by half include improving the level of knowledge of HIV and its prevention, and changing behaviours to prevent further transmission of the disease. The HIV module was administered to ever married women 15-49 years of age[12].

Ever-married women were asked whether they knew of two[13] of the main ways of HIV prevention– using a condom and abstaining from sex. The results are presented in Table HA.1. In Yemen, 60.6 percent of the interviewed women have heard of AIDS ranging from 49.8 percent in rural areas to 84.5 percent in urban areas. However, the percentage of women who know both ways of preventing HIV transmission is only 13.7 percent. One fifth of women know of using a condom every time (20.8 percent), and 29 percent know of abstaining from sex as main ways of preventing HIV transmission. While 36.1 percent of women know at least one way, a high proportion of women (63.9 percent) do not know either of the two ways.

Table HA.2 presents the percent of ever-married women who can correctly identify misconceptions concerning HIV. The indicator is based on the two most common and relevant misconceptions in Yemen, that HIV can be transmitted by sharing food and mosquito bites. The table also provides information on whether women know that HIV cannot be transmitted by supernatural means and that HIV can be transmitted by sharing needles. Of the interviewed women, 6.9 percent reject the two most common misconceptions and know that a healthy-looking person can be infected. Twenty four percent of women know that HIV cannot be transmitted by sharing food and 27.8 percent of women know that HIV cannot be transmitted by mosquito bites, while 22 percent of women know that a healthy-looking person can be infected.

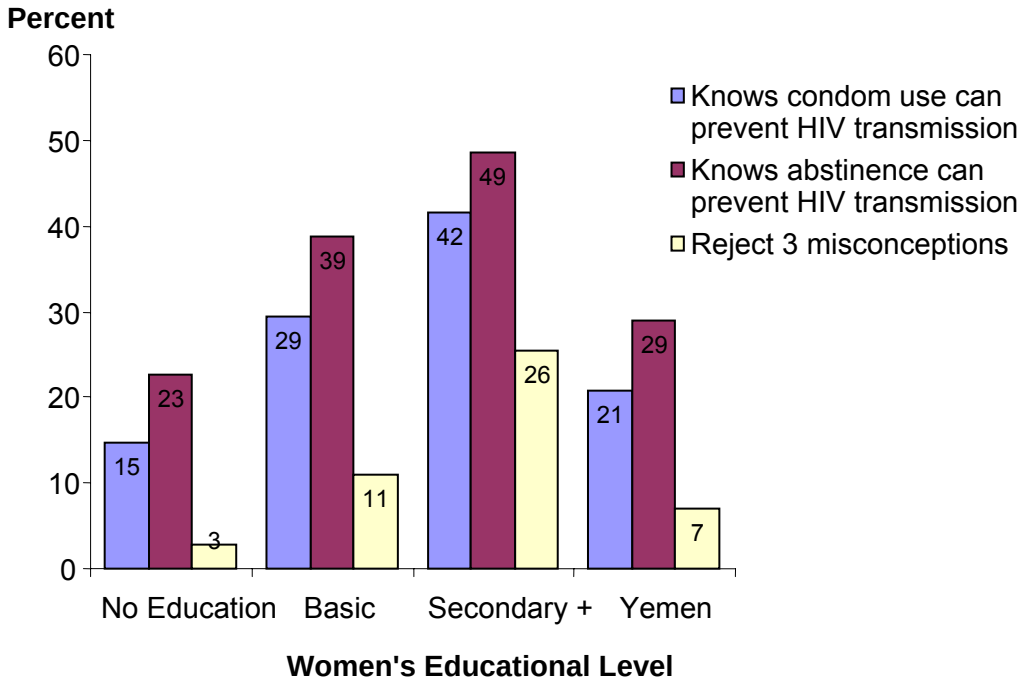
Ever-married women in urban areas are more than 4 times as likely to reject the two most common misconceptions and know that a healthy-looking person can be infected compared to their rural counterparts (14.7 percent versus 3.3 percent). Three quarters of women in urban areas are aware that HIV can be transmitted by sharing needles (75.4 percent) compared to 41.7 percent of women living in rural areas. There is also a positive relationship between household wealth and the ability to reject the two most common misconceptions and know that a healthy-looking person can be infected ranging from 0.7 percent in the poorest households to 4.7 percent in the middle income households to 16.9 percent in the richest households.

[12] The MDG indicators on HIV are based on all women which cannot be calculated from the Yemen MICS which was an ever-married sample.

[13] The third main way of preventing HIV transmission 'having only one faithful uninfected partner' was deemed culturally inappropriate to be asked to women in Yemen. Therefore the MDG indicator 19B and MICS indicator 82 and also comprehensive knowledge indicators cannot be constructed from the survey data.

Table HA.3 summarizes information from Tables HA.1 and HA.2 and presents the percentage of ever-married women who know the 2 ways of preventing HIV transmission that were asked in the survey and reject three common misconceptions. Overall, 1.3 percent of women were found to know both modes of HIV transmission, this was higher in urban areas (2.6 percent) compared to rural (0.7 percent). As expected, there is a positive correlation between HIV knowledge and woman's education level (Figure HA.1).

Figure HA.1 Percent of ever-married women who know 2 ways of transmission and women who reject misconceptions of HIV and AIDS transmission, Yemen, 2006



Knowledge of mother-to-child transmission of HIV is also an important first step for women to seek HIV testing when they are pregnant to avoid infection in the baby. Women should know that HIV can be transmitted during pregnancy, delivery, and through breastfeeding. The level of knowledge among ever-married women age 15-49 years concerning mother-to-child transmission is presented in Table HA.4. Overall, more than half (51.2 percent) of ever-married women know that HIV can be transmitted from mother to child. The percentage of ever-married women who know all three ways of mother-to-child transmission is 32.4 percent, while 9.4 percent of women did not know of any specific way. There appeared to be little difference in knowledge among women of different age groups, however residence, education and socioeconomic status indicate strong associations with knowledge of mother to child HIV transmission. Of ever-married women living in urban areas, 45.4 percent knew of all three ways of transmission compared to 26.5 percent of women in rural areas. Women living in the richest households were almost 3 times as likely to know of all three ways compared to women living in the poorest households (44.3 percent versus 15.3 percent).

The indicators on attitudes toward people living with HIV measure stigma and discrimination in the community. Stigma and discrimination are low if respondents report an accepting attitude on the following four questions: 1) would care for family member sick with AIDS; 2) would buy fresh vegetables from a vendor who was HIV positive; 3) thinks that a female teacher who is HIV positive should be allowed to teach in school; and 4) would ***not*** want to keep HIV status of a family member a secret. Table HA.5 presents the attitudes of women towards people living with HIV and AIDS.

An overwhelming 94.8 percent of women agreed with at least one of the discriminatory statements listed above. The most widely held attitude was to not purchase food from a person with HIV and AIDS (82.6 percent) followed by the belief that a female teacher with HIV should not be allowed to work (71.9 percent). Over half of the ever-married women reported that if a family member had HIV they would want to keep it a secret (52.2 percent) and just under a fifth of women reported that they would not care for a family member who was sick with AIDS (19 percent). There is little variation in attitudes toward people living with HIV among any of the background variables.

Another important indicator is the knowledge of where to be tested for HIV and use of such services. Questions related to knowledge among women of a facility for HIV testing and whether they have ever been tested is presented in Table HA.6. Only 12.4 percent of women know where to be tested, this ranged from 7.4 percent of women living in rural areas to 23.3 percent of women living in urban areas. Women with any education were much more likely to know of a place to be tested compared to women with no education. Over 16 percent of women living in households in the two richest wealth quintiles knew of a place to be tested compared to less than 10 percent of women living in household in the poorest, second and middle wealth index quintiles.

Table HA.6 also shows that only 1.9 percent of ever-married women have actually been tested and these women reside mainly in urban areas. Of this small number of women who have been tested 51.6 percent has been told the result (88 percent)[14].

Among women who had given birth within the two years preceding the survey, the percent who received counselling and HIV testing during antenatal care is presented in Table HA.7. As discussed in chapter IX less than half of the women received antenatal care from a health care professional (47 percent) thus presenting a particular challenge for the roll out of the prevention of mother to child transmission (PMTCT) services. Of women who received antenatal care just 2.1 percent of women were provided information about HIV prevention during their visit with very little variation among any of the background variables. Less than 1 percent of women recalled that they had been tested for HIV at an antenatal care visit (0.7 percent) and of these women only half a percent received the results. However these figures are extremely limited and should be used with caution due to the small number of women that the percentages are based upon.

[14] The disaggregation by background characteristics is not shown in table HA.6 due to the national figure being based on a small number of unweighted cases.

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Tables

Table HH.1: Results of household and individual interviews
Number of households, women, and children under 5 by results of the household, women's and under-five's interviews, and household, women's and under-five's response rates, Yemen, 2006

	Residence		
	Urban	Rural	Total
Number of households			
Sampled	1159	2820	3979
Occupied	1157	2815	3972
Interviewed	1055	2531	3586
Response rate	91.2	89.9	90.3
Number of women			
Eligible	1136	2776	3912
Interviewed	1095	2647	3742
Response rate	96.4	95.4	95.7
Overall response rate	87.9	85.7	86.4
Number of children under 5			
Eligible	986	2932	3918
Mother/Caretaker interviewed	956	2827	3783
Response rate	97.0	96.4	96.6
Overall response rate	88.4	86.7	87.2

Table HH.2: Household age distribution by sex
Percent distribution of the household population by five-year age groups and dependency age groups, and number of children age 0-17 years, by sex, Yemen, 2006

	Males		Females		Total	
	Number	Percent	Number	Percent	Number	Percent
Age						
0-4	2024	15.6	1951	14.8	3975	15.2
5-9	2006	15.5	1934	14.7	3940	15.1
10-14	1868	14.4	1810	13.8	3678	14.1
15-19	1631	12.6	1749	13.3	3381	13.0
20-24	1207	9.3	1299	9.9	2506	9.6
25-29	881	6.8	1081	8.2	1962	7.5
30-34	637	4.9	653	5.0	1290	4.9
35-39	492	3.8	583	4.4	1075	4.1
40-44	473	3.7	444	3.4	917	3.5
45-49	377	2.9	425	3.2	803	3.1
50-54	364	2.8	409	3.1	773	3.0
55-59	231	1.8	253	1.9	484	1.9
60-64	284	2.2	182	1.4	466	1.8
65-69	104	0.8	101	0.8	205	0.8
70+	363	2.8	248	1.9	611	2.3
Missing/DK	10	0.1	14	0.1	23	0.1
Dependency age groups						
< 15	5899	45.5	5695	43.3	11593	44.4
15-64	6576	50.8	7080	53.9	13656	52.3
65 +	467	3.6	349	2.7	816	3.1
Missing/DK	10	0.1	14	0.1	23	0.1
Children age 0-17	6869	53.0	6758	51.4	13627	52.2
Adults 18+/Missing/ DK	6082	47.0	6379	48.6	12461	47.8
Total	12951	100	13137	100	26088	100

Table HH.3: Household composition
Percent distribution of households by selected characteristics, Yemen, 2006

		Number of households	
	Weighted percent	Weighted	Unweighted
Sex of household head			
Male	91.3	3276	3274
Female	8.7	311	312
Residence			
Urban	31.6	1132	1055
Rural	68.4	2454	2531
Number of household members			
1	2.1	74	77
2-3	12.7	457	467
4-5	18.5	665	661
6-7	24.4	873	861
8-9	19.5	699	681
10+	22.8	818	839
Total	100.0	3586	3586
At least one child age < 18 years	87.9	3586	3586
At least one child age < 5 years	62.4	3586	3586
At least one woman age 15-49 years	87.3	3586	3586

Table HH.4: Women's background characteristics

Percent distribution of ever-married women age 15-49 years by background characteristics, Yemen, 2006

		Number of women	
	Weighted percent	Weighted	Unweighted
Residence			
Urban	31.3	1170	1095
Rural	68.7	2572	2647
Age			
15-19	8.5	318	307
20-24	18.6	697	691
25-29	21.8	815	802
30-34	14.8	553	571
35-39	14.3	536	535
40-44	11.3	421	433
45-49	10.8	402	403
Marital status			
Currently married	93.9	3514	3519
Formerly married	6.1	228	223
Motherhood status			
Ever gave birth	88.6	3315	3308
Never gave birth	11.4	427	434
Education			
None	66.0	2469	2452
Basic	24.6	922	950
Secondary +	9.2	344	334
Missing	(*)	7	6
Wealth index quintiles			
Poorest	19.9	745	686
Second	19.6	735	724
Middle	19.5	731	791
Fourth	19.8	740	773
Richest	21.1	791	768
Total	100.0	3742	3742

(*) Percentage based on less than 25 unweighted cases

Table HH.5: Children's background characteristics

Percent distribution of children under five years of age by background characteristics, Yemen, 2006

		Number of under-5 children	
	Weighted percent	Weighted	Unweighted
Sex			
Male	50.9	1925	1930
Female	49.1	1858	1853
Residence			
Urban	27.0	1021	956
Rural	73.0	2762	2827
Age			
< 6 months	11.1	421	408
6-11 months	11.4	432	443
12-23 months	19.1	721	715
24-35 months	19.6	741	750
36-47 months	20.5	774	781
48-59 months	18.3	691	682
Mother's education			
None	65.6	2483	2453
Basic	24.9	941	971
Secondary +	8.4	316	310
Non Standard Curriculum	(1.1)	41	48
Missing	(*)	1	1
Wealth index quintiles			
Poorest	23.2	878	810
Second	21.4	810	798
Middle	20.1	759	831
Fourth	19.5	738	768
Richest	15.8	598	576
Total	100.0	3783	3783

(*) Percentage based on less than 25 unweighted cases

Percentages in parenthesis based on less than 50 unweighted cases

Table CM.1: Childhood mortality rates

Neonatal, postneonatal, infant, child, and under-five mortality rates for five-year periods precedining the survey, Yemen 2006

Years precedining the survey	Neonatal mortality (NN)	Postneonatal mortality (PNN)	Infant mortality (1q0) *	Child mortality (4q1)	Under five mortality (5q0)**
0-4	**37.3**	**31.1**	**68.5**	**10.5**	**78.2**
5-9	38.8	37.0	75.8	19.5	93.8
10-14	38.7	48.2	86.9	23.4	108.3
15-19	46.2	57.1	103.2	25.9	126.5
20-24	52.2	68.5	120.7	38.8	154.8

*** MICS indicator 2; MDG indicator 14**

**** MICS indicator 1; MDG indicator 13**

Table CM.2: Child mortality by sex and residence characteristics

Neonatal, postneonatal, infant, child, and under-five mortality rates for the five-year periods preceding the survey, by background characteristics Yemen, 2006

	Neonatal mortality (NN)	Postneonatal mortality (PNN)	Infant mortality (1q0)	Child mortality (4q1)	Under five mortality (5q0)
Sex					
Male	40.3	31.6	71.9	9.9	81.1
Female	34.2	30.5	64.7	11.2	75.2
Residence					
Urban	29.1	26.2	55.3	1.6	56.7
Rural	40.3	32.9	73.3	13.8	86.1
Wealth index quintiles					
Poorest	43.9	50.0	93.9	26.6	118.0
Second	42.5	26.7	69.2	12.6	80.9
Middle	42.8	28.6	71.4	4.5	75.5
Fourth	28.6	29.7	58.4	3.0	61.2
Richest	23.5	12.6	36.0	1.4	37.4
Total	37.3	31.1	68.5	10.5	78.2

Table NU.1: Initial breastfeeding

Percentage of women age 15-49 years with a birth in the two years preceding the survey who breastfed their baby within one hour of birth and within one day of birth, Yemen, 2006

	Percentage who started breastfeeding within one hour of birth*	Percentage who started breastfeeding within one day of birth	Number of women with a live birth in the two years preceding the survey
Residence			
Urban	31.7	71.0	429
Rural	28.8	62.9	1181
Mother's education			
None	28.9	61.2	1035
Basic	29.8	70.7	412
Secondary +	32.3	75.2	162
Wealth index quintiles			
Poorest	35.7	61.8	378
Second	25.7	59.2	352
Middle	30.3	63.1	322
Fourth	26.0	69.2	307
Richest	29.2	75.8	251
Total	29.6	65.1	1610

*** MICS indicator 45**

Total includes 1 child missing information on mother's education who is not shown separately.

Table NU.2: Post-partum mothers' vitamin A supplementation

Percentage of women age 15-49 years with a live birth in the 2 years preceding the survey by whether they received a high dose vitamin A supplement before the infant was 8 weeks old, Yemen, 2006

	Received vitamin A supplement*	Not sure if received vitamin A	Number of women age 15-49 years
Residence			
Urban	19.4	4.8	429
Rural	14.7	3.4	1181
Education			
None	14.2	2.9	1035
Basic	18.4	5.5	412
Secondary +	21.2	4.8	162
Wealth index quintiles			
Poorest	12.9	3.1	378
Second	15.7	3.4	352
Middle	15.9	4.0	322
Fourth	15.0	2.9	307
Richest	21.9	6.0	251
Total	15.9	3.8	1610

***MICS indicator 43**

Total includes 1 child missing information on mother's education who is not shown separately.

Table NU.3: Child size at birth

Percentage of live births in the 2 years preceding the survey by mother's estimate of baby size at birth, Yemen, 2006

		Size of child at birth as estimated by the mother							
	Weighed at birth*	Very large	Larger than average	Average	Smaller than average	Very small	Don't know/ missing	Total	Number of births
Residence									
Urban	19.5	2.3	11.5	47.7	16.3	22.1	0.0	100.0	429
Rural	3.6	2.5	10.5	42.0	19.2	25.2	0.5	100.0	1181
Education									
None	3.6	1.9	9.9	41.8	18.8	27.3	0.3	100.0	1035
Basic	11.9	3.9	12.4	45.3	17.8	19.9	0.7	100.0	412
Secondary +	23.9	2.9	12.2	49.9	17.8	17.1	0.0	100.0	162
Wealth index quintiles									
Poorest	1.2	2.8	3.4	37.6	22.4	32.8	1.0	100.0	378
Second	3.0	1.2	12.9	45.7	16.9	22.9	0.3	100.0	352
Middle	5.3	3.6	12.6	42.7	18.4	22.8	0.0	100.0	322
Fourth	12.1	2.2	13.0	44.1	16.3	24.3	0.1	100.0	307
Richest	22.3	2.7	13.9	49.9	17.1	16.0	0.4	100.0	251
Total	7.8	2.5	10.8	43.5	18.4	24.4	0.4	100.0	1610

**** MICS indicator 10**

Total includes 2 births missing information on mother's education that are not shown separately.

Table CH.1: Vaccinations in first year of life

Percentage of children age 12-23 months immunized against childhood diseases at any time before the survey and before the first birthday, Yemen, 2006

	Percentage of children who received:											Number of children age 12-23 months
	BCG*	DPT1	DPT2	DPT3**	Polio0	Polio1	Polio2	Polio3***	Measles****	All*****	None	
Vaccinated at any time before the survey												
According to:												
Vaccination card	37.9	46.8	43.4	39.2	20.0	45.2	40.7	36.5	30.8	25.1	0.0	721
Mother's report	31.1	31.6	27.5	21.7	10.0	36.1	32.8	26.6	34.3	12.4	11.6	721
Either	69.0	78.4	70.9	61.0	30.0	81.2	73.5	63.0	65.1	37.5	11.6	721
Vaccinated by 12 months of age	67.2	76.9	70.1	59.7	28.5	78.9	72.3	60.2	59.2	17.9	11.6	721

*** MICS indicator 25**

**** MICS indicator 27**

***** MICS indicator 26**

****** MICS indicator 28; MDG indicator 15**

Since March 2005 DPT is typically administered as part of the Pentavalent vaccination

Table CH.1c: Vaccinations in first year of life (continued)

Percentage of children age 12-23 months immunized against childhood diseases at any time before the survey and before the first birthday, Yemen, 2006

	Percentage of children who received:						Number of children age 12-23 months
	HepB1	HepB2	HepB3*	Hib1	Hib2	Hib3	
Vaccinated at any time before the survey							
According to:							
Vaccination card	11.8	11.0	8.7	32.8	30.2	26.7	721
Mother's report	16.3	13.0	10.7	25.8	20.9	15.9	721
Either	28.1	24.0	19.4	58.6	51.1	42.6	721
Vaccinated by 12 months of age	25.5	23.4	18.6	56.9	49.8	40.0	721

*** MICS indicator 29**

Hib typically received as part of the Pentavalent vaccine

Table CH.2: Vaccinations by background characteristics

Percentage of children age 12-23 months currently vaccinated against childhood diseases, Yemen, 2006

	Percentage of children who received:											Percent with health card	Number of children age 12-23 months
	BCG	DPT1	DPT2	DPT3	Polio0	Polio1	Polio2	Polio3	Measles	All	None		
Sex													
Male	68.8	76.2	70.2	61.7	31.8	81.2	73.2	63.2	65.7	36.4	11.8	49.7	360
Female	69.1	80.5	71.7	60.2	28.1	81.2	73.8	62.9	64.5	38.6	11.5	47.0	361
Residence													
Urban	89.6	91.9	85.5	79.5	43.4	87.4	80.6	72.9	80.3	57.7	6.4	51.2	210
Rural	60.5	72.7	64.8	53.2	24.5	78.7	70.6	59.1	58.8	29.3	13.8	47.2	511
Mother's education													
None	61.0	71.2	63.0	51.9	24.5	77.1	68.9	58.8	59.5	29.0	14.4	44.4	454
Basic	81.4	89.4	82.0	71.3	39.0	87.6	78.5	67.4	72.2	47.4	7.8	55.9	175
Secondary +	86.4	92.0	87.3	83.9	39.5	88.4	85.6	73.6	80.7	60.1	5.5	53.8	82
Non Standard Curriculum	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	11
Wealth index quintiles													
Poorest	53.3	63.7	52.6	40.3	21.4	76.5	64.0	51.8	52.4	17.8	14.3	43.9	153
Second	53.8	70.8	60.2	50.0	24.0	76.4	65.9	56.1	57.2	26.4	14.0	39.2	161
Middle	70.7	79.2	72.1	60.5	24.7	80.4	72.5	62.5	60.2	38.1	15.5	44.0	139
Fourth	76.0	83.7	77.6	65.5	39.3	79.8	76.0	63.9	74.5	40.2	12.0	55.3	141
Richest	97.9	98.4	97.2	94.6	43.6	95.9	93.2	85.6	85.5	72.5	0.8	62.3	127
Total	69.0	78.4	70.9	61.0	30.0	81.2	73.5	63.0	65.1	37.5	11.6	48.3	721

(*) Percentage based on less than 25 unweighted cases

Table CH.2c: Vaccinations by background characteristics (continued)

Percentage of children age 12-23 months currently vaccinated against childhood diseases, Yemen, 2006

	Percentage of children who received:							
	HepB1	HepB2	HepB3	Hib1	Hib2	Hib3	Percent with health card	Number of children age 12-23 months
Sex								
Male	30.0	26.4	21.5	55.8	49.1	42.3	49.7	360
Female	31.3	26.0	20.9	64.8	56.1	45.4	47.0	361
Residence								
Urban	40.3	36.0	30.9	68.5	61.4	56.6	51.2	210
Rural	26.8	22.3	17.3	57.0	49.0	38.7	47.2	511
Mother's education								
None	24.9	21.1	17.0	57.7	49.0	39.4	44.4	454
Basic	39.7	33.5	27.5	63.6	54.7	46.4	55.9	175
Secondary +	38.9	34.7	29.1	68.1	67.2	61.4	53.8	82
Non Standard Curriculum	(*)	(*)	(*)	(*)	(*)	(*)	(*)	11
Wealth index quintiles								
Poorest	17.1	11.9	8.5	52.6	42.6	30.6	43.9	153
Second	27.6	22.1	17.6	56.8	43.8	36.2	39.2	161
Middle	37.8	32.1	27.7	60.9	53.7	43.7	44.0	139
Fourth	34.0	29.0	24.3	61.4	54.5	45.4	55.3	141
Richest	38.5	38.5	29.8	72.3	72.6	68.1	62.3	127
Total	30.6	26.2	21.2	60.3	52.6	43.9	48.3	721

(*) Percentage based on less than 25 unweighted cases

Table CH.3: Neonatal tetanus protection

Percentage of mothers with a birth in the last 24 months protected against neonatal tetanus, Yemen, 2006

	Percent of mothers with a birth in the last 24 months who:						
	Received at least 2 doses during last pregnancy	Received at least 2 doses, the last within prior 3 years	Received at least 3 doses, last within prior 5 years	Received at least 4 doses, last within prior 10 years	Received at least 5 doses during lifetime	Protected against tetanus*	Number of mothers
Residence							
Urban	24.6	11.3	1.6	1.8	1.1	40.5	429
Rural	17.6	7.8	1.0	0.7	0.1	27.3	1181
Age of mother							
15-19	20.7	8.3	0.0	0.0	0.0	29.0	137
20-24	20.1	8.8	1.8	0.8	0.3	31.9	431
25-29	21.3	11.5	0.8	1.2	0.3	35.1	464
30-34	16.2	10.3	0.7	1.1	0.8	29.1	266
35-39	22.1	2.0	1.8	0.8	0.9	27.5	190
40-44	13.0	6.9	2.3	2.9	0.0	25.1	92
45-49	(7.7)	(3.5)	(0.0)	(0.0)	(0.0)	(11.2)	30
Mother's education							
None	17.3	7.1	0.5	0.4	0.0	25.3	1035
Basic	20.8	10.4	3.0	1.6	0.7	36.3	412
Secondary +	30.0	15.5	1.0	3.0	2.3	51.8	162
Wealth index quintiles							
Poorest	16.0	5.2	0.3	0.6	0.0	22.1	378
Second	17.5	11.3	0.9	0.4	0.0	30.1	352
Middle	17.2	9.2	1.6	0.9	0.5	29.3	322
Fourth	20.2	7.6	1.8	0.8	0.7	31.2	307
Richest	29.4	11.4	1.6	2.8	1.1	46.2	251
Total	19.5	8.8	1.2	1.0	0.4	30.8	1610

*** MICS indicator 32**

Total includes 2 children with missing information on mother's education who are not shown separately

Percentages shown in parenthesis are based on less than 50 unweighted cases

Table CH.4: Oral rehydration treatment

Percentage of children age 0-59 months with diarrhoea in the last two weeks and treatment with oral rehydration solution (ORS) or other oral rehydration treatment (ORT), Yemen, 2006

	Had diarrhoea in last two weeks	Number of children age 0-59 months	Children with diarrhoea who received: Fluid from ORS packet	Good Drinking Water	Rice Water	Vegetable Soup	Fruit Juice	No treatment	ORT Use Rate *	Number of children age 0-59 months with diarrhoea
Sex										
Male	34.6	1925	31.4	73.3	18.5	9.9	32.2	14.2	85.8	667
Female	32.4	1858	34.2	74.6	24.0	11.8	29.9	12.3	87.7	602
Residence										
Urban	29.2	1021	29.5	78.2	15.8	15.3	38.7	9.6	90.4	298
Rural	35.2	2762	33.7	72.6	22.8	9.4	28.7	14.5	85.5	971
Age										
> 6 months	25.3	421	28.9	64.1	12.4	2.1	12.3	28.6	71.4	107
0-11 months	46.6	432	40.2	74.3	21.7	8.1	21.6	8.3	91.7	201
12-23 months	43.4	721	38.9	75.7	25.3	15.6	37.6	10.8	89.2	313
24-35 months	36.6	741	28.5	78.0	21.1	10.9	35.4	10.8	89.2	271
36-47 months	28.0	774	22.4	66.2	19.9	10.5	28.3	18.9	81.1	217
48-59 months	23.1	691	34.9	80.0	19.9	10.7	39.1	11.1	88.9	160
Mother's education										
None	33.5	2483	32.5	73.2	21.9	9.6	28.2	13.9	86.1	831
Basic	33.2	941	34.7	74.3	18.2	10.5	34.1	13.4	86.6	312
Secondary +	33.6	316	30.0	76.9	22.8	22.1	45.2	10.4	89.6	106
Non Standard	(42.9)	41	(*)	(*)	(*)	(*)	(*)	(*)	(*)	18
Wealth index quintiles										
Poorest	35.0	878	30.5	70.2	18.9	8.9	25.1	18.0	82.0	307
Second	36.3	810	31.4	74.0	22.0	6.9	26.0	14.7	85.3	294
Middle	35.2	759	33.9	77.5	24.2	12.3	32.8	10.0	90.0	267
Fourth	32.7	738	33.2	73.4	20.1	11.5	37.9	13.0	87.0	241
Richest	26.5	598	36.5	75.9	20.1	18.1	38.8	7.9	92.1	159
Total	33.5	3783	32.7	73.9	21.1	10.8	31.1	13.3	86.7	1269

*** MICS indicator 33**

Total includes 1 child missing information on mother's education who is not shown separately

(*) Percentage based on less than 25 unweighted cases

Percentages shown in parenthesis based on less than 50 unweighted cases

Table CH.5: Home management of diarrhoea

Percentage of children age 0-59 months with diarrhoea in the last two weeks who took increased fluids and continued to feed during the episode, Yemen, 2006

			Children with diarrhoea who:						
	Had diarrhoea in last two weeks	Number of children age 0-59 months	Drank more	Drank the same or less	Ate somewhat less, same or more	Ate much less or none	Home manage-ment of diarrhoea*	Received ORT or increased fluids AND continued feeding**	Number of children age 0-59 months with diarrhoea
Sex									
Male	34.6	1925	60.2	38.2	49.4	48.1	29.7	46.6	667
Female	32.4	1858	59.5	39.5	52.1	47.4	31.8	48.7	602
Residence									
Urban	29.2	1021	61.6	37.5	51.9	46.9	32.6	49.9	298
Rural	35.2	2762	59.4	39.2	50.3	48.0	30.1	46.9	971
Age									
0-11 months	36.1	853	51.1	48.2	40.8	56.2	19.7	37.1	308
12-23 months	43.4	721	62.2	35.9	46.1	52.8	29.1	44.4	313
24-35 months	36.6	741	66.1	33.5	58.5	41.2	37.5	56.1	271
36-47 months	28.0	774	59.1	37.8	58.1	39.6	35.1	53.3	217
48-59 months	23.1	691	62.8	36.7	54.9	43.8	37.3	51.9	160
Mother's education									
None	33.5	2483	59.2	39.3	49.4	48.8	29.3	45.9	831
Basic	33.2	941	62.2	37.0	50.1	48.6	31.7	48.0	312
Secondary +	33.6	316	60.1	38.6	59.6	39.1	38.7	56.5	106
Non Standard	(42.9)	41	(*)	(*)	(*)	(*)	(*)	(*)	18
Wealth index quintiles									
Poorest	35.0	878	58.7	39.0	44.1	53.1	27.8	41.4	307
Second	36.3	810	56.6	42.0	54.0	43.8	31.3	49.8	294
Middle	35.2	759	62.7	36.3	46.9	52.5	28.3	45.2	267
Fourth	32.7	738	61.9	38.1	56.1	43.5	33.9	51.3	241
Richest	26.5	598	60.7	37.6	55.0	43.3	34.0	53.8	159
Total	33.5	3783	59.9	38.8	50.6	47.8	30.7	47.6	1269

*** MICS indicator 34**

**** MICS indicator 35**

Total includes 1 child missing information on mother's education who is not shown separately

(*) Percentage based on less than 25 unweighted cases

Percentages shown in parenthesis based on less than 50 unweighted cases

Table CH.6: Antibiotic treatment of pneumonia

Percentage of children age 0-59 months with suspected pneumonia who received antibiotic treatment, Yemen, 2006

	Had acute respiratory infection/suspected pneumonia	Number of children age 0-59 months	Percentage of children age 0-59 months with suspected pneumonia who received antibiotics in the last two weeks *	Number of children age 0-59 months with suspected pneumonia in the two weeks prior to the survey
Sex				
Male	13.4	1925	37.2	257
Female	12.5	1858	38.6	231
Residence				
Urban	11.6	1021	48.6	118
Rural	13.4	2762	34.4	370
Age				
0-11 months	12.1	853	38.3	103
12-23 months	14.3	721	42.6	103
24-35 months	10.7	741	41.2	79
36-47 months	13.0	774	35.8	101
48-59 months	14.8	691	32.1	102
Mother's education				
None	14.0	2483	36.6	348
Basic	11.0	941	42.7	104
Secondary +	8.8	316	(34.6)	28
Non Standard	(18.5)	41	(*)	8
Wealth index quintiles				
Poorest	15.4	878	29.7	135
Second	15.9	810	39.2	129
Middle	11.8	759	44.5	90
Fourth	11.2	738	42.0	83
Richest	8.7	598	38.1	52
Total	12.9	3783	37.9	488

*** MICS indicator 22**

Total includes 1 child missing information on mother's education who is not shown separately

(*) Percentage based on less than 25 unweighted cases

Percentages shown in parenthesis are based on less than 50 unweighted cases

Table CH.7A: Knowledge of the two danger signs of pneumonia

Percentage of mothers/caretakers of children age 0-59 months by knowledge of types of symptoms for taking a child immediately to a health facility, and percentage of mothers/caretakers who recognize fast and difficult breathing as signs for seeking care immediately, Yemen, 2006

	Percentage of mothers/caretakers of children age 0-59 months who think that a child should be taken immediately to a health facility if the child:								
	Is not able to drink or breastfeed	Becomes sicker	Develops a fever	Has fast breathing	Has difficult breathing	Has blood in stool	Is drinking poorly	Mothers/caretakers who recognize the two danger signs of pneumonia	Number of mothers/caretakers of children age 0-59 months
Residence									
Urban	17.2	51.1	80.3	33.4	42.5	32.7	9.5	27.5	1021
Rural	16.0	56.4	69.6	21.5	24.2	21.5	8.7	16.7	2762
Mother's education									
None	15.3	54.2	72.0	21.7	25.8	21.2	7.9	16.4	2483
Basic	16.8	52.8	74.7	27.5	33.0	28.2	10.5	23.7	941
Secondary +	21.7	65.8	69.3	40.4	44.4	40.4	13.1	33.4	316
Non Standard	(21.6)	(21.6)	(21.6)	(21.6)	(21.6)	(21.6)	(21.6)	(21.6)	41
Wealth index quintiles									
Poorest	13.1	53.2	66.0	19.0	20.7	16.8	8.3	14.5	878
Second	16.5	55.7	68.0	16.3	21.7	16.4	6.3	12.2	810
Middle	18.4	57.0	70.7	27.0	29.3	26.9	10.9	19.5	759
Fourth	19.5	56.2	80.9	32.8	40.3	34.5	9.8	28.8	738
Richest	14.3	52.5	80.0	31.5	37.8	31.4	9.9	26.0	598
Total	16.3	55.0	72.5	24.7	29.2	24.5	8.9	19.6	3783

Total includes 1 child missing information on mother's education who is not shown separately

Percentages shown in parenthesis are based on less than 50 unweighted cases

Table CH.8: Solid fuel use

Percent distribution of households according to type of cooking fuel, and percentage of households using solid fuels for cooking, Yemen, 2006

	Percentage of households using:							
	Electricity	Liquified Petroleum Gas (LPG)	Kerosene	Charcoal/Wood /Coal/Animal Dung/Crop residue	Other source	Total	Solid fuels for cooking*	Number of households
Residence								
Urban	1.0	93.5	3.3	1.0	1.2	100.0	1.0	1132
Rural	0.4	42.9	3.5	52.4	0.7	100.0	52.4	2454
Education of household head								
None	0.3	45.5	4.4	48.8	1.0	100.0	48.8	1532
Basic	0.9	63.9	4.1	30.6	0.5	100.0	30.6	930
Secondary +	0.8	81.0	1.1	16.1	1.0	100.0	16.1	812
Non Standard	0.7	52.6	2.9	43.1	0.8	100.0	43.1	303
Wealth index quintiles								
Poorest	0.0	0.8	5.0	93.7	0.6	100.0	93.7	815
Second	0.8	36.3	7.8	54.0	1.1	100.0	54.0	743
Middle	0.7	78.9	2.8	15.7	1.8	100.0	15.7	695
Fourth	0.6	93.9	0.8	3.6	1.1	100.0	3.6	653
Richest	0.8	99.1	0.0	0.1	0.0	100.0	0.1	680
Total	0.6	58.9	3.4	36.2	0.9	100.0	36.2	3586

*** MICS indicator 24; MDG Indicator 29**

Total includes 9 households missing information on education of household head who are not shown separately

Table EN.1: Use of improved water sources

Percent distribution of household population according to main source of drinking water and percentage of household population using improved drinking water sources, Yemen, 2006

	Main source of drinking water																	
	Improved sources								Unimproved sources									
	Piped into dwelling	Piped into yard/ plot	Public tap/ stand-pipe	Tube-well/ bore-hole	Pro-tected well	Pro-tected spring	Rain-water	Bottled water[1]	Unpro-tected well	Unpro-tected spring	Tanker truck	Cart with tank/ drum	Surface water	Bottled water[1]	Other	Total	Improved source of drinking water*	Number of household members
Residence																		
Urban	49.0	5.1	1.0	0.4	0.8	0.0	0.3	17.2	0.0	0.0	14.7	3.4	0.0	5.7	2.4	100.0	73.8	8022
Rural	19.1	6.0	2.7	6.9	9.6	3.4	4.1	0.5	20.1	11.4	4.8	3.6	6.3	0.5	1.0	100.0	52.2	18066
Education of household head																		
None	24.2	7.4	1.8	5.3	7.3	2.5	3.2	2.2	16.8	9.9	7.6	3.6	5.0	1.5	1.6	100.0	54.0	11506
Basic	32.5	4.7	2.7	4.0	7.4	2.7	2.3	6.8	12.1	6.9	7.9	3.7	3.3	2.0	0.8	100.0	63.3	6628
Secondary +	36.1	4.7	0.9	2.7	5.2	0.7	2.5	13.1	8.4	3.7	8.6	3.3	4.0	3.8	2.5	100.0	65.8	5312
Non Standard	19.8	2.8	5.1	10.0	7.0	4.2	3.9	3.0	16.3	10.0	7.2	3.2	5.6	1.5	0.6	100.0	55.7	2592
Missing	31.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.1	0.0	14.6	20.6	0.0	0.0	0.0	100.0	31.7	50
Wealth index quintiles																		
Poorest	0.4	3.8	0.4	1.0	15.2	5.2	2.1	0.2	34.7	22.0	1.8	3.3	8.9	0.0	1.0	100.0	28.2	5219
Second	11.2	6.9	4.0	4.9	12.5	3.6	3.8	0.0	26.5	10.1	3.4	3.8	7.5	0.1	1.7	100.0	46.9	5218
Middle	29.1	11.8	3.9	10.9	4.0	2.4	4.2	0.7	6.5	6.1	8.6	3.7	4.8	0.9	2.3	100.0	67.0	5215
Fourth	46.2	5.6	2.0	5.0	1.7	0.5	2.9	6.8	1.7	1.3	16.2	4.6	0.6	3.4	1.7	100.0	70.6	5215
Richest	54.7	0.5	0.7	2.9	1.0	0.0	1.4	20.6	0.0	0.0	9.2	2.3	0.2	6.0	0.6	100.0	81.7	5221
Total	28.3	5.7	2.2	4.9	6.9	2.3	2.9	5.7	13.9	7.9	7.9	3.5	4.4	2.1	1.5	100.0	58.9	26088

*** MICS indicator 11; MDG indicator 30**

Improved sources includes: piped water (into dwelling, yard or plot), public tap/standpipe, tubewell/borehole, protected well, protected spring, rainwater collection

[1] For households using bottled water as the main source of drinking water, the source used for other purposes such as cooking and handwashing is used to determine whether to classify the source as improved.

Table EN.2: Household water treatment

Percent distribution of household population according to drinking water treatment method used in the household, and percentage of household population that applied an appropriate water treatment method, Yemen, 2006

	Water treatment method used in the household							All drinking water sources		Improved drinking water sources		Unimproved drinking water sources	
	None	Boil	Add bleach/ chlorine	Strain through a cloth	Use water filter	Let it stand and settle	Other	Appropriate water treatment method*	Number of household members	Appropriate water treatment method	Number of household members	Appropriate water treatment method	Number of household members
Residence													
Urban	91.4	4.7	0.0	0.6	3.5	0.0	0.4	7.9	8022	7.8	5922	8.3	2100
Rural	92.9	2.2	0.6	3.6	0.4	0.5	0.2	3.2	18066	3.6	9433	2.7	8633
Education of household head													
None	93.8	2.0	0.3	3.0	0.6	0.1	0.2	2.9	11506	4.0	6208	1.7	5298
Basic	93.6	3.1	0.4	1.4	1.3	0.6	0.3	4.8	6628	4.2	4195	5.8	2433
Secondary +	88.2	5.3	0.6	2.6	3.1	0.3	0.5	8.9	5312	9.6	3493	7.5	1819
Non Standard	91.6	2.0	0.1	5.1	1.2	0.3	0.0	3.3	2592	3.1	1443	3.5	1149
W3ealth index quintiles													
Poorest	92.4	2.5	0.0	4.7	0.0	0.9	0.0	2.5	5219	1.5	1469	2.9	3750
Second	93.3	2.2	0.3	3.6	0.2	0.5	0.2	2.7	5218	2.2	2448	3.2	2769
Middle	93.4	1.8	1.2	3.2	0.2	0.1	0.3	3.2	5215	3.6	3493	2.3	1722
Fourth	93.9	2.8	0.5	1.6	1.0	0.2	0.3	4.3	5215	3.9	3681	5.2	1534
Richest	89.2	5.5	0.0	0.4	5.4	0.0	0.4	10.4	5221	10.6	4264	9.4	957
Total	92.4	3.0	0.4	2.7	1.4	0.3	0.2	4.6	26088	5.2	15355	3.8	10733

*** MICS indicator 13**

Includes 34 household members with missing information on the education of the household head who are not shown separately.

Table EN.3: Time to source of water

Percent distribution of households according to time to go to source of drinking water, get water and return, and mean time to source of drinking water, Yemen, 2006

	Time to source of drinking water									
	Water on premises	Less than 15 minutes	15 minutes to less than 30 minutes	30 minutes to less than 1 hour	1 hour or more	Don't know	Missing	Total	Mean time to source of drinking water*	Number of households
Residence										
Urban	89.4	2.1	2.4	2.5	3.0	0.3	0.3	100.0	45.0	1132
Rural	34.0	8.5	7.6	12.9	35.8	0.9	0.2	100.0	64.8	2454
Education of household head										
None	43.3	7.5	6.6	10.6	30.8	0.9	0.3	100.0	65.2	1532
Basic	50.1	6.8	5.5	10.7	25.9	0.9	0.2	100.0	58.9	930
Secondary +	64.2	5.3	4.7	8.4	16.6	0.5	0.3	100.0	53.3	812
Non Standard	41.5	6.6	8.8	8.9	33.8	0.4	0.0	100.0	83.8	303
Wealth index quintiles										
Poorest	10.2	6.7	6.7	15.0	60.4	0.6	0.4	100.0	76.6	815
Second	26.6	10.0	11.4	14.5	36.6	0.8	0.2	100.0	61.4	743
Middle	60.0	10.2	6.1	9.4	13.7	0.4	0.1	100.0	42.7	695
Fourth	82.0	3.5	2.9	5.7	4.9	1.1	0.0	100.0	39.9	653
Richest	90.8	1.3	1.9	1.5	3.0	1.0	0.5	100.0	66.2	680
Total	49.3	6.8	6.2	10.0	26.8	0.8	0.2	100.0	63.7	3586

* The mean time to source of drinking water is calculated based on those households that do not have water on the premises.

Includes 3 households with missing information on the education of the household head that are not shown separately.

Table EN.4: Person collecting water

Percent distribution of households according to the person collecting drinking water used in the household, Yemen, 2006

	Person collecting drinking water							
	Adult woman	Adult man	Female child under age 15	Male child under age 15	Don't know	Missing	Total	Number of households
Residence								
Urban	19.7	45.1	2.7	4.7	1.1	26.6	100.0	98
Rural	71.1	9.4	11.4	5.0	0.5	2.6	100.0	1611
Education of household head								
None	66.9	9.6	13.3	5.6	0.9	3.7	100.0	849
Basic	68.0	14.9	8.7	4.6	0.3	3.4	100.0	434
Secondary +	68.2	12.4	7.9	5.2	0.0	6.3	100.0	250
Non Standard	75.2	10.3	8.0	3.1	0.0	3.4	100.0	173
Wealth index quintiles								
Poorest	73.6	6.4	12.3	6.5	0.3	0.9	100.0	732
Second	71.6	9.7	12.2	4.2	0.6	1.8	100.0	545
Middle	69.5	11.9	7.5	3.0	0.7	7.4	100.0	276
Fourth	32.3	33.8	6.1	6.6	0.7	20.5	100.0	108
Richest	(19.9)	(55.2)	(4.5)	(0.0)	(1.7)	(18.7)	100.0	48
Total	68.2	11.4	10.9	5.0	0.5	4.0	100.0	1709

Includes 3 households with missing information on the education of the household head that are not shown separately.

Figures shown in parentheses are based on less than 50 unweighted cases

Table EN.5: Use of sanitary means of excreta disposal

Percent distribution of household population according to type of toilet facility used by the household, and the percentage of household population using sanitary means of excreta disposal, Yemen, 2006

	Type of toilet facility used by household													
	Improved sanitation facility						Unimproved sanitation facility							
	Flush/pour flush to:													
	Piped sewer system	Septic tank	Pit latrine	Ventilated improved pit latrine	Pit latrine with slab	Flush/ pour flush to some-where else	Flush/pour flush to unknown place/not sure/don't know	Pit latrine without slab/ open pit	Bucket	No facilities / bush / field	Other	Total	Percentage of population using sanitary means of excreta disposal*	Number of household members
Residence														
Urban	41.8	2.3	46.8	0.7	0.7	4.9	0.3	1.6	0.0	0.7	0.2	100.0	92.3	8022
Rural	0.4	0.9	27.3	3.3	1.7	24.1	0.6	6.3	0.6	30.6	4.1	100.0	33.6	18066
Education of household head														
None	6.5	1.5	30.7	2.4	1.4	20.6	0.4	5.7	0.5	26.3	4.0	100.0	42.4	11506
Basic	16.3	1.8	34.3	2.8	1.2	17.2	0.6	3.6	0.5	19.8	1.9	100.0	56.3	6628
Secondary +	26.6	0.7	38.6	3.0	1.1	12.8	0.6	4.2	0.1	10.6	1.7	100.0	70.1	5312
Non Standard	6.9	0.8	31.4	1.5	2.4	21.7	0.3	6.3	0.0	26.1	2.6	100.0	43.1	2592
Wealth index quintiles														
Poorest	0.0	0.0	2.2	0.2	0.8	9.8	0.2	5.5	0.4	75.0	5.9	100.0	3.2	5219
Second	0.0	0.4	20.2	2.3	2.6	30.4	1.0	11.5	0.6	27.4	3.8	100.0	25.4	5218
Middle	3.3	1.2	40.6	5.3	2.3	32.2	1.0	5.7	0.7	3.9	3.6	100.0	52.7	5215
Fourth	17.6	2.2	57.9	3.3	1.1	14.0	0.3	1.6	0.2	0.8	0.9	100.0	82.1	5215
Richest	44.5	2.8	45.7	1.6	0.2	4.8	0.0	0.1	0.0	0.0	0.2	100.0	94.9	5221
Total	13.1	1.3	33.3	2.5	1.4	18.2	0.5	4.9	0.4	21.4	2.9	100.0	51.7	26088

*** MICS indicator 12; MDG indicator 31**

Includes 50 household members with missing information on the education of the household head who are not shown separately.

Table EN.6: Use of improved water sources and improved sanitation

Percentage of household population using both improved drinking water sources and sanitary means of excreta disposal, Yemen, 2006

	Percentage of household population:			
	Using improved sources of drinking water*	Using sanitary means of excreta disposal**	Using improved sources of drinking water and using sanitary means of excreta disposal***	Number of household members
Residence				
Urban	73.8	92.3	68.4	8022
Rural	52.2	33.6	22.9	18066
Education of household head				
None	54.0	42.4	28.9	11506
Basic	63.3	56.3	41.8	6628
Secondary +	65.8	70.1	51.4	5312
Non standard	55.7	43.1	30.6	2592
Missing	31.7	56.3	22.5	50
Wealth index quintiles				
Poorest	28.2	3.2	1.7	5219
Second	46.9	25.4	14.0	5218
Middle	67.0	52.7	35.8	5215
Fourth	70.6	82.1	56.0	5215
Richest	81.7	94.9	77.1	5221
Total	58.9	51.7	36.9	26088

*** MICS indicator 11; MDG indicator 30**

Table FE.1: Current Fertility

Age specific and total fertility rate for the three years preceding the survey, Yemen, 2006

	Residence		
Age group	Urban	Rural	Total
15-19	66	86	80
20-24	156	243	211
25-29	210	266	247
30-34	185	239	221
35-39	122	175	156
40-44	45	96	78
45-49	21	50	39
TFR	4.0	5.8	5.2

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

TFR: Total fertility rate for ages 15-49, expressed per woman.

Table FE.2: Fertility by background characteristics

Total fertility rate 0-14 years preceding the survey by background characteristics, Yemen, 2006

	Number of years preceding the survey				
	0-2	3-5	6-8	9-11	12-14
Residence					
Urban	4.0	4.5	5.3	5.3	6.8
Rural	5.8	6.6	7.9	7.1	7.9
Education of woman					
None	5.8	6.5	7.7	6.8	7.6
Any education	4.7	5.9	6.4	6.6	8.8
Wealth index quintiles					
Poorest	6.6	7.7	8.3	7.2	7.7
Second	6.2	6.4	8.1	8.1	7.8
Middle	5.2	6.6	7.6	6.7	8.1
Fourth	4.9	6.8	7.5	6.5	8.7
Richest	3.4	3.3	4.4	4.6	5.9
Total	5.2	5.9	7.0	6.5	7.5

Table FE.3: Fertility Trends

Age specific fertility rates for three-year periods preceding the survey, by mother's age at the time of the birth, Yemen 2006

	Number of years preceding the survey				
Mother's age at birth	0-2	3-5	6-8	9-11	12-14
15-19	80	102	141	166	198
20-24	211	232	308	312	351
25-29	247	265	326	304	359
30-34	221	226	295	264	300
35-39	156	169	200	221	299
40-44	78	98	130	31	.
45-49	39	88	.	.	.

Table RH.1: Use of contraception

Percentage of currently married women age 15-49 years who are using (or whose partner is using) a contraceptive method, Yemen, 2006

	Percent of women (currently married) who are using:														Number of currently married women
	Not using any method	Female sterili-zation	Pill	IUD	Injections	Condom	LAM	Periodic abstin-ence	With-drawal	Other	Total	Any modern method	Any tradi-tional method	Any method*	
Residence															
Urban	57.7	4.2	15.9	8.8	3.7	1.1	4.0	2.2	0.7	1.7	100.0	33.7	8.6	42.3	1088
Rural	78.9	1.4	5.9	1.9	3.4	0.1	6.6	0.6	0.5	0.7	100.0	12.7	8.3	21.1	2426
Age															
15-19	89.6	0.0	4.6	1.2	0.2	0.0	3.5	0.0	0.0	0.8	100.0	6.1	4.3	10.4	312
20-24	74.8	0.0	10.5	1.7	3.6	0.6	7.4	0.4	0.6	0.3	100.0	16.4	8.7	25.2	675
25-29	70.6	0.8	9.0	5.3	3.7	0.4	7.7	1.1	0.8	0.6	100.0	19.2	10.2	29.4	774
30-34	66.2	1.7	9.9	7.5	3.8	1.0	7.4	1.6	0.6	0.3	100.0	23.9	9.9	33.8	522
35-39	65.0	3.5	10.9	6.1	5.1	0.4	4.8	2.0	0.7	1.6	100.0	26.0	9.0	35.0	498
40-44	71.1	5.5	9.1	2.9	4.6	0.0	3.1	1.3	0.5	1.8	100.0	22.2	6.7	28.9	390
45-49	77.2	7.3	5.8	1.1	2.2	0.0	2.3	1.0	0.5	2.7	100.0	16.4	6.4	22.8	342
Number of living children**															
0	98.5	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.3	0.9	100.0	0.3	1.2	1.5	421
1	75.1	0.5	7.9	3.1	2.6	0.5	8.6	0.8	0.8	0.0	100.0	14.7	10.2	24.9	416
2	69.6	0.5	12.1	4.2	3.3	0.5	7.4	1.1	0.2	1.0	100.0	20.6	9.7	30.4	398
3	71.5	1.1	8.3	5.1	4.1	1.2	5.6	0.9	1.1	0.9	100.0	19.9	8.6	28.5	432
4+	66.5	3.8	10.7	4.8	4.5	0.3	6.2	1.4	0.5	1.3	100.0	24.1	9.4	33.5	1848
Education															
None	76.9	2.9	6.1	2.3	3.6	0.2	6.0	0.6	0.3	1.0	100.0	15.2	8.0	23.1	2305
Basic	65.8	1.4	13.2	6.9	3.6	0.8	5.6	1.4	0.7	0.7	100.0	25.9	8.4	34.2	870
Secondary +	57.9	0.0	17.8	8.2	3.2	1.0	5.3	3.4	1.6	1.8	100.0	30.1	12.0	42.1	334
Wealth index quintiles															
Poorest	85.3	0.5	2.3	0.1	1.9	0.0	9.5	0.0	0.3	0.0	100.0	4.9	9.8	14.7	697
Second	83.6	1.0	3.9	1.2	2.9	0.0	6.1	0.6	0.3	0.4	100.0	9.0	7.4	16.4	693
Middle	72.9	2.1	8.6	2.4	5.4	0.1	5.5	0.8	0.8	1.3	100.0	18.6	8.4	27.1	687
Fourth	64.6	4.0	13.1	5.0	5.6	0.6	4.7	0.9	0.2	1.2	100.0	28.4	7.0	35.4	697
Richest	56.3	3.5	16.7	10.8	1.9	1.2	3.3	3.0	1.1	2.0	100.0	34.2	9.5	43.7	740
Total	72.3	2.3	9.0	4.0	3.5	0.4	5.8	1.1	0.5	1.0	100.0	19.2	8.4	27.7	3514

*** MICS indicator 21; MDG indicator 19C**

Includes 6 women missing information on education who are not shown separately

Table RH.2: Unmet need for contraception

Percentage of currently married women age 15-49 years with an unmet need for family planning and percentage of demand for contraception satisfied, Yemen, 2006

	Current use of contraception*	Unmet need for contraception			Number of women currently married	Percentage of demand for contraception satisfied*****	Number of women currently married with need for contraception
		For spacing**	For limiting***	Total****			
Residence							
Urban	42.3	8.2	5.6	13.8	1088	75.4	611
Rural	21.1	15.1	12.8	28.0	2426	43.0	1189
Age							
15-19	10.4	27.4	2.9	30.4	312	25.5	127
20-24	25.2	20.8	4.7	25.6	675	49.6	343
25-29	29.4	17.6	9.6	27.2	774	52.0	438
30-34	33.8	9.5	13.7	23.2	522	59.3	298
35-39	35.0	6.5	18.1	24.7	498	58.7	297
40-44	28.9	2.4	14.4	16.8	390	63.2	179
45-49	22.8	0.5	11.5	12.0	342	65.5	119
Education							
None	23.1	12.1	13.1	25.2	2305.2	47.9	1113
Basic	34.2	15.2	6.9	22.1	869.7	60.8	490
Secondary +	42.1	13.4	3.1	16.5	333.9	71.9	196
Wealth index quintiles							
Poorest							
Second	14.7	17.5	14.2	31.7	697	31.7	323
Middle	16.4	15.4	14.1	29.5	693	35.7	318
Fourth	27.1	11.6	11.7	23.3	687	53.7	346
Richest	35.4	11.9	8.4	20.2	697	63.6	388
	43.7	8.8	5.0	13.8	740	76.0	425
Total	27.7	13.0	10.6	23.6	3514	54.0	1800

*** MICS indicator 21; MDG indicator 19C**

****** MICS indicator 98**

******* MICS indicator 99**

Includes 2 women missing information on education who are not shown separately

Table RH.3: Antenatal care provider

Percent distribution of ever-married women age 15-49 who gave birth in the two years preceding the survey by type of personnel providing antenatal care, Yemen, 2006

	Person providing antenatal care										
	Medical doctor	Nurse	Midwife	Traditional birth attendant	Community Health Worker	Relative/ Friend	Other	No antenatal care received	Total	Any skilled personnel*	Number of women who gave birth in the preceding two years
Residence											
Urban	60.3	4.1	3.8	0.3	0.3	0.8	2.4	27.9	100.0	68.2	429
Rural	32.0	4.8	2.5	0.4	0.0	0.9	0.0	59.3	100.0	39.3	1181
Age											
15-19	46.4	1.9	0.9	0.0	0.0	0.6	1.0	49.3	100.0	49.1	137
20-24	41.3	4.5	4.2	0.5	0.3	0.0	0.5	48.6	100.0	50.0	431
25-29	41.3	4.9	3.4	0.4	0.0	1.5	1.0	47.4	100.0	49.7	464
30-34	38.5	5.0	1.8	0.0	0.0	1.1	0.7	53.0	100.0	45.2	266
35-39	31.9	6.7	2.0	0.7	0.0	1.4	0.0	57.3	100.0	40.6	190
40-44	36.9	4.3	0.7	1.4	0.0	0.9	0.0	55.8	100.0	41.9	92
45-49	(21.7)	(0.0)	(3.2)	(0.0)	(0.0)	(0.0)	(0.0)	(75.1)	(100.0)	(24.9)	30
Education											
None	31.3	4.5	2.2	0.5	0.0	0.9	0.2	60.4	100.0	38.0	1035
Basic	51.5	3.9	3.9	0.4	0.4	0.7	1.4	38.1	100.0	59.2	412
Secondary +	61.4	8.0	3.9	0.0	0.0	1.4	1.5	23.8	100.0	73.3	162
Wealth index quintiles											
Poorest	24.6	5.1	2.3	0.2	0.0	1.2	0.0	66.6	100.0	32.0	378
Second	30.1	3.7	1.4	0.4	0.0	0.4	0.0	64.2	100.0	35.1	352
Middle	34.4	4.9	4.1	0.4	0.0	0.8	0.0	55.4	100.0	43.4	322
Fourth	48.9	4.9	2.8	0.9	0.5	1.2	3.0	37.9	100.0	56.6	307
Richest	70.6	4.8	4.0	0.2	0.0	0.8	0.5	19.2	100.0	79.3	251
Total	39.5	4.6	2.8	0.4	0.1	0.9	0.7	51.0	100.0	47.0	1610

*** MICS indicator 20**

Skilled health personnel includes doctors, nurses and midwives.

Includes 2 women missing information on education who are not shown separately
Percentages shown in parenthesis are based on less than 50 unweighted cases

Table RH.4: Antenatal care

Percentage of pregnant women receiving antenatal care among women age 15-49 years who gave birth in two years preceding the survey and percentage of pregnant women receiving specific care as part of the antenatal care received, Yemen, 2006

	Percent of pregnant women receiving ANC one or more times during pregnancy	Percent of pregnant women who had:				Number of women who gave birth in two years preceding survey
		Blood test taken*	Blood pressure measured*	Urine specimen taken*	Weight measured*	
Residence						
Urban	72.1	57.6	64.0	54.9	49.1	429
Rural	40.7	29.5	31.8	26.4	18.6	1181
Age						
15-19	50.7	39.3	41.5	37.1	31.2	137
20-24	51.4	39.7	42.2	39.7	27.6	431
25-29	52.6	40.7	43.0	34.9	29.0	464
30-34	47.0	34.5	38.3	31.6	24.1	266
35-39	42.7	27.9	36.2	24.4	23.8	190
40-44	44.2	35.0	37.6	32.3	25.5	92
45-49	24.9	18.1	22.2	9.3	7.2	30
Education						
None	39.6	29.4	31.0	26.7	19.9	1035
Basic	61.9	47.6	54.1	45.4	34.7	412
Secondary +	76.2	57.8	65.0	50.8	50.5	162
Wealth index quintiles						
Poorest	33.4	23.0	25.3	20.5	16.2	378
Second	35.8	26.2	28.8	22.1	13.9	352
Middle	44.6	31.9	35.6	29.5	22.9	322
Fourth	62.1	45.9	51.8	45.3	35.2	307
Richest	80.8	68.8	71.6	62.7	55.5	251
Total	49.0	37.0	40.4	34.0	26.8	1610

*** MICS indicator 44**

Includes 2 women missing information on education who are not shown separately

Percentages shown in parenthesis are based on less than 50 unweighted cases

Table RH.5: Assistance during delivery

Percent distribution of women age 15-49 with a birth in two years preceding the survey by type of personnel assisting at delivery, Yemen, 2006

	Person assisting at delivery											
	Medical doctor	Nurse	Midwife	Traditional birth attendant	Community Health Worker	Relative/ Friend	Other	No attendant	Total	Any skilled personnel*	Delivered in health facility **	Number of women who gave birth in preceding two years
Residence												
Urban	38.3	11.6	11.8	6.7	0.2	27.4	2.3	1.7	100.0	61.7	40.3	429
Rural	14.6	4.0	7.8	8.7	0.0	58.2	2.3	4.5	100.0	26.3	17.4	1181
Age												
15-19	23.6	5.3	8.1	3.8	0.0	53.2	0.8	5.2	100.0	37.0	23.4	137
20-24	20.6	6.3	9.5	9.5	0.0	51.1	1.6	1.5	100.0	36.3	22.4	431
25-29	21.9	4.0	8.2	9.7	0.2	49.6	2.4	4.1	100.0	34.1	23.4	464
30-34	18.1	9.5	10.3	6.3	0.0	47.4	4.4	4.0	100.0	37.9	22.8	266
35-39	20.3	6.3	9.3	7.6	0.0	50.7	1.1	4.7	100.0	35.9	23.8	190
40-44	25.7	7.2	4.3	7.4	0.0	45.6	2.8	7.1	100.0	37.2	31.5	92
45-49	(11.1)	(1.4)	(10.5)	(7.0)	(0.0)	(59.0)	(6.8)	(4.3)	(100.0)	(23.0)	(21.4)	30
Education												
None	16.6	3.6	7.0	7.8	0.0	57.2	3.1	4.5	100.0	27.2	19.3	1035
Basic	26.8	9.3	11.1	7.9	0.2	40.7	1.2	2.8	100.0	47.2	28.1	412
Secondary +	33.3	13.5	14.7	10.9	0.0	26.8	0.0	0.9	100.0	61.4	39.2	162
Wealth index quintiles												
Poorest	8.3	1.4	7.3	10.8	0.0	66.5	2.3	3.3	100.0	17.1	8.7	378
Second	10.3	4.9	4.7	9.4	0.0	62.6	3.0	5.3	100.0	19.8	14.4	352
Middle	15.3	6.1	10.6	7.9	0.0	52.2	2.9	5.1	100.0	32.0	18.9	322
Fourth	29.4	7.5	13.2	7.7	0.3	35.6	2.6	3.7	100.0	50.1	34.6	307
Richest	51.5	12.7	9.4	3.3	0.0	22.2	0.5	0.5	100.0	73.6	51.0	251
Total	20.9	6.0	8.8	8.1	0.1	50.0	2.3	3.7	100.0	35.7	23.5	1610

*** MICS indicator 4; MDG indicator 17**

**** MICS indicator 5**

Skilled health personnel includes doctors, nurses and midwives.
Includes 2 women missing information on education who are not shown separately

Percentages shown in parenthesis are based on less than 50 unweighted cases

Table CD.1: Family support for learning

Percentage of children age 0-59 months for whom household members are engage in activities that promote learning and school readiness, Yemen, 2006

	Percentage of children age 0-59 months					
	For whom household members engage in four or more activities that promote learning and school readiness*	Mean number of activities household members engage in with the child	For whom the father engage in one or more activities that promote learning and school readiness**	Mean number of activities the father engage in with the child	Living in a household without their natural father	Number of children age 0-59 months
Sex						
Male	25.1	2.5	34.1	0.6	7.9	1925
Female	26.0	2.5	30.2	0.6	7.7	1858
Residence						
Urban	38.5	3.0	46.1	0.9	5.9	1021
Rural	20.7	2.3	27.1	0.5	8.5	2762
Age						
0-23 months	14.2	2.0	26.6	0.5	7.3	1574
24-59 months	33.6	2.9	36.2	0.7	8.2	2209
Mother's education						
None	19.3	2.2	27.8	0.5	7.7	2483
Basic	34.5	2.8	36.3	0.7	8.6	941
Secondary+	46.0	3.3	51.4	1.1	5.9	316
Non-standard curriculum	(37.8)	(3.1)	(54.3)	(1.1)	(8.6)	41
Father's education						
None	15.0	2.1	25.7	0.4	0.0	737
Basic	24.7	2.4	30.8	0.6	0.0	1365
Secondary+	34.2	2.8	45.0	0.9	0.0	1217
Non-standard curriculum	17.0	2.1	27.5	0.5	0.0	164
Father not in household	24.5	2.4	4.4	0.1	100.0	295
Wealth index quintiles						
Poorest	13.5	1.9	21.3	0.4	8.5	878
Second	20.0	2.3	28.5	0.6	8.3	810
Middle	24.2	2.4	32.9	0.6	6.8	759
Fourth	31.7	2.9	36.6	0.7	7.5	738
Richest	44.6	3.2	47.0	0.9	7.8	598
Total	25.5	2.5	32.2	0.6	7.8	3783

*** MICS indicator 46**

**** MICS Indicator 47**

Includes 1 child with missing information on mother's education and 6 children with missing information on mother's education who are not shown separately.

Figures in parenthesis are based on less than 50 unweighted cases

Table CD.2: Learning materials

Percentage of children age 0-59 months living in households containing learning materials, Yemen, 2006

	Children living in households with:		Child plays with:						
	3 or more non-children's books*	3 or more children's books**	Household objects	Objects and materials found outside the home	Home-made toys	Toys that came from a store	No playthings mentioned	3 or more types of playthings ***	Number of children age 0-59 months
Sex									
Male	59.5	10.8	42.2	51.5	14.2	46.5	18.7	19.4	1925
Female	57.7	9.8	44.0	46.9	15.2	42.1	19.6	16.5	1858
Residence									
Urban	73.1	21.3	43.1	31.9	15.5	68.0	16.4	20.4	1021
Rural	53.3	6.3	43.1	55.6	14.4	35.6	20.2	17.1	2762
Age									
0-23 months	59.1	10.2	33.2	27.8	10.1	35.2	40.0	10.9	1574
24-59 months	58.3	10.4	50.1	64.5	18.0	50.8	4.3	23.0	2209
Mother's education									
None	50.3	5.9	44.5	55.1	14.4	34.6	20.8	17.1	2483
Basic	71.2	16.4	37.4	36.3	14.1	60.1	16.8	16.4	941
Secondary+	84.2	25.0	47.5	40.9	19.1	71.3	14.5	28.0	316
Non-standard curriculum	(77.0)	(24.1)	(51.9)	(49.3)	(14.8)	(64.2)	(10.6)	(28.5)	41
Wealth index quintiles									
Poorest	33.4	3.5	45.4	63.9	8.4	15.0	24.2	10.3	878
Second	48.3	3.7	44.0	56.6	13.4	31.8	20.5	15.7	810
Middle	63.7	8.2	42.9	49.4	17.6	47.0	19.0	20.4	759
Fourth	72.5	10.9	40.8	38.7	19.9	65.6	15.2	22.5	738
Richest	86.1	31.3	41.5	30.5	15.6	74.7	15.1	23.5	598
Total	58.6	10.3	43.1	49.2	14.7	44.3	19.2	18.0	3783

*** MICS indicator 49**

**** MICS indicator 48**

***** MICS indicator 50**

Includes 1 child with missing information on mother's education who are not shown separately.
Figures in parenthesis are based on less than 50 unweighted cases

Table CD.3: Children left alone or with other children

Percentage of children age 0-59 months left in the care of other children under the age of 10 years or left alone in the past week, Yemen, 2006

	Percentage of children age 0-59 months			
	Left in the care of children under the age of 10 years in past week*	Left alone in the past week	Left with inadequate care in past week	Number of children age 0-59 months
Sex				
Male	32.2	9.9	35.6	1925
Female	29.2	9.8	32.5	1858
Residence				
Urban	18.6	4.6	20.8	1021
Rural	35.2	11.8	39.0	2762
Age				
0-23 months	25.0	10.7	29.4	1574
24-59 months	34.8	9.2	37.5	2209
Mother's education				
None	34.1	11.3	37.6	2483
Basic	26.1	7.2	29.3	941
Secondary+	18.6	6.2	21.9	316
Non-standard curriculum	(20.0)	(9.1)	(27.4)	41
Wealth index quintiles				
Poorest	40.8	18.5	46.4	878
Second	35.6	10.6	40.0	810
Middle	28.4	7.5	29.9	759
Fourth	25.1	4.7	27.1	738
Richest	19.3	5.5	22.0	598
Total	30.7	9.8	34.1	3783

*** MICS indicator 51**
Includes 1 child with missing information on mother's education who are not shown separately.
Figures in parenthesis are based on less than 50 unweighted cases

Table ED.1: Early childhood education

Percentage of children age 36-59 months who are attending some form of organized early childhood education programme, Yemen, 2006

	Percentage of children age 36-59 months currently attending early childhood education*	Number of children age 36-59 months
Sex		
Male	2.5	771
Female	2.6	694
Residence		
Urban	5.3	384
Rural	1.6	1081
Age of child		
36-47 months	2.1	774
48-59 months	3.1	691
6 years	.	na
Mother's education		
None	1.6	1007
Basic	3.3	335
Secondary+	8.4	104
Non-standard curriculum	(*)	18
Wealth index quintiles		
Poorest	0.0	346
Second	0.5	309
Middle	1.9	302
Fourth	4.2	288
Richest	8.4	219
Total	2.6	1465

*** MICS indicator 52**

Total includes 1 child missing information on mother's education who is not shown separately.

(*) Figures based on less than 25 unweighted cases

Figures shown in parenthesis are based on less than 50 unweighted cases

Table ED.2: Primary school entry (Basic Education)

Percentage of children of primary school entry age attending grade 1, Yemen, 2006

	Percentage of children of primary school entry age currently attending grade 1*	Number of children of primary school entry age
Sex		
Male	41.7	438
Female	37.5	411
Residence		
Urban	50.8	226
Rural	35.7	624
Age of child		
6	39.7	850
Mother's education		
None	33.9	622
Basic	54.1	157
Secondary+	66.3	55
Non-standard curriculum	(*)	13
Wealth index quintiles		
Poorest	25.5	217
Second	39.3	158
Middle	42.1	167
Fourth	46.2	171
Richest	51.7	136
Total	39.7	850

Table based on estimated age as of the beginning of the school year

*** MICS indicator 54**

Total includes 2 children missing information on mother's education who are not shown separately.

(*) Figures based on less than 25 unweighted cases

Table ED.3: Primary school net attendance ratio (Basic Education)

Percentage of children of primary school age attending primary or secondary school (NAR), Yemen, 2006

	Male		Female		Total	
	Net attendance ratio	Number of children	Net attendance ratio	Number of children	Net attendance ratio*	Number of children
Residence						
Urban	84.9	1008	80.4	939	82.7	1947
Rural	72.4	2419	53.1	2450	62.7	4869
Age						
6	45.4	438	39.7	411	42.6	850
7	69.3	432	58.3	440	63.7	872
8	81.8	328	72.2	324	77.0	652
9	84.7	416	69.9	476	76.8	892
10	87.5	328	76.8	285	82.5	612
11	87.6	409	74.0	385	81.0	795
12	85.9	379	65.3	329	76.3	708
13	75.7	336	55.5	335	65.6	671
14	73.2	360	40.5	404	55.9	763
Mother's education						
None	73.1	2594	56.2	2579	64.7	5173
Basic	85.4	570	78.2	506	82.0	1077
Secondary+	91.8	130	89.5	160	90.5	290
Non-standard curriculum	87.5	77	63.3	70	76.0	147
Mother not in household	67.3	51	28.2	70	44.7	121
Wealth index quintiles						
Poorest	56.5	727	30.8	711	43.8	1438
Second	74.6	670	53.7	684	64.0	1354
Middle	77.6	694	65.7	714	71.5	1408
Fourth	85.1	719	73.3	689	79.3	1408
Richest	88.6	617	83.7	591	86.2	1208
Total	76.1	3427	60.6	3389	68.4	6816

Table based on estimated age as of the beginning of the school year

*** MICS indicator 55; MDG indicator 6**

Total includes 5 children missing information on mother's education who are not shown separately.

Table ED.4: Secondary school net attendance ratio (Basic Education)

Percentage of children of secondary school age attending secondary school or higher (NAR), Yemen, 2006

	Male		Female		Total	
	Net attendance ratio	Number of children	Net attendance ratio	Number of children	Net attendance ratio*	Number of children
Residence						
Urban	36.3	347	38.9	341	37.6	688
Rural	26.7	672	8.4	732	17.1	1405
Age						
15	20.1	334	14.5	380	17.1	714
16	28.6	276	16.3	280	22.4	556
17	38.9	409	22.7	413	30.7	822
Mother's education**						
None	21.5	466	13.0	434	17.4	900
Basic	42.2	63	37.1	54	39.8	117
Secondary+	(*)	8	(*)	14	(*)	22
Non-standard curriculum	(*)	6	(*)	13	(*)	19
Mother not in household	17.3	67	7.1	145	10.3	212
Wealth index quintiles						
Poorest	9.9	170	0.9	186	5.2	357
Second	25.2	194	5.1	219	14.5	413
Middle	32.8	224	10.6	212	22.0	436
Fourth	31.4	210	26.1	209	28.8	419
Richest	45.2	221	42.1	247	43.6	469
Total	29.9	1019	18.1	1073	23.9	2092

Table based on estimated age as of the beginning of the school year

*** MICS indicator 56**

(*) Figures based on less than 25 unweighted cases

Table ED.4w: Secondary school age children attending primary school (Basic Education)

Percentage of children of secondary school age attending primary school, Yemen, 2006

	Male		Female		Total	
	Net attendance ratio	Number of children	Net attendance ratio	Number of children	Net attendance ratio	Number of children
Residence						
Urban	35.2	347	22.1	341	28.7	688
Rural	30.8	672	11.8	732	20.9	1405
Age						
15	47.8	334	22.0	380	34.1	714
16	31.3	276	16.3	280	23.8	556
17	20.3	409	7.8	413	14.0	822
Mother's education						
None	40.7	466	20.2	434	30.8	900
Basic	45.8	63	29.1	54	38.1	117
Secondary+	(*)	8	(*)	14	(*)	22
Non-standard curriculum	(*)	6	(*)	13	(*)	19
Mother not in household	35.4	67	13.4	145	20.3	212
Wealth index quintiles						
Poorest	25.2	170	4.2	186	14.2	357
Second	32.4	194	13.6	219	22.4	413
Middle	26.7	224	17.9	212	22.4	436
Fourth	37.3	210	19.1	209	28.2	419
Richest	38.6	221	18.8	247	28.1	469
Total	32.3	1019	15.1	1073	23.5	2092

Table based on estimated age as of the beginning of the school year

(*) Figures based on less than 25 unweighted cases

Table ED.5: Children reaching grade 5 (Basic Education)

Percentage of children entering first grade of primary school who eventually reach grade 5, Yemen, 2006

	Percent attending 2nd grade who were in 1st grade last year	Percent attending 3rd grade who were in 2nd grade last year	Percent attending 4th grade who were in 3rd grade last year	Percent attending 5th grade who were in 4th grade last year	Percent who reach grade 5 of those who enter 1st grade*
Sex					
Male	96.3	92.4	96.0	93.8	80.2
Female	95.5	91.7	95.1	92.9	77.3
Residence					
Urban	98.7	96.7	98.8	96.6	91.1
Rural	94.7	89.8	94.1	91.5	73.2
Mother's education					
None	96.1	91.6	95.5	92.1	77.5
Basic	97.6	95.9	95.9	96.2	86.3
Secondary+	95.7	93.3	100.0	100.0	89.2
Non-standard curriculum	92.3	94.9	96.3	94.8	80.0
Mother not in household	100.0	55.1	62.9	94.9	32.9
Wealth index quintiles					
Poorest	93.4	92.6	91.1	94.1	74.1
Second	97.6	89.6	92.4	91.2	73.7
Middle	93.8	87.8	95.2	87.6	68.7
Fourth	97.5	95.4	99.3	94.1	86.9
Richest	97.2	96.1	98.3	99.2	91.0
Total	95.9	92.1	95.6	93.4	78.9

*** MICS indicator 57; MDG indicator 7**

Table ED.6: Primary school completion and transition to secondary education (Basic Education)

Primary school completion rate and transition rate to secondary education, Yemen, 2006

	Net primary school completion rate*	Number of children of primary school completion age	Transition rate to secondary education**	Number of children who were in the last grade of primary school the previous year
Sex				
Male	23.8	360	61.9	197
Female	13.6	404	72.8	109
Residence				
Urban	31.6	214	67.6	145
Rural	13.3	550	64.3	161
Mother's education				
None	16.4	531	70.7	130
Basic	21.7	76	(68.6)	37
Secondary+	(*)	18	(*)	12
Non-standard curriculum	(*)	17	(*)	3
Mother not in household	16.6	121	(47.7)	21
Wealth index quintiles				
Poorest	7.4	162	(*)	13
Second	10.2	167	51.5	57
Middle	19.4	152	72.8	53
Fourth	21.1	144	69.9	74
Richest	37.3	138	69.5	108
Total	18.4	763	65.8	306

Table based on estimated age as of the beginning of the school year

*** MICS indicator 59; MDG indicator 7b**

**** MICS indicator 58**

(*) Figures based on less than 25 unweighted cases
Figures shown in parenthesis are based on less than 50 unweighted cases

Table ED.7: Education gender parity (Basic Education)

Ratio of girls to boys attending primary education and ratio of girls to boys attending secondary education, Yemen, 2006

	Primary school net attendance ratio (NAR), girls	Primary school net attendance ratio (NAR), boys	Gender parity index (GPI) for primary school NAR*	Secondary school net attendance ratio (NAR), girls	Secondary school net attendance ratio (NAR), boys	Gender parity index (GPI) for secondary school NAR*
Residence						
Urban	80.4	84.9	0.95	38.9	36.3	1.07
Rural	53.1	72.4	0.73	8.4	26.7	0.32
Mother's education						
None	56.2	73.1	0.77	13.0	21.5	0.60
Basic	78.2	85.4	0.92	37.1	42.2	0.88
Secondary+	89.5	91.8	0.97	(*)	(*)	(*)
Non-standard curriculum	63.3	87.5	0.72	(*)	(*)	(*)
Mother not in household	28.2	67.3	0.42	7.1	17.3	0.41
Wealth index quintiles						
Poorest	30.8	56.5	0.54	0.9	9.9	0.09
Second	53.7	74.6	0.72	5.1	25.2	0.20
Middle	65.7	77.6	0.85	10.6	32.8	0.32
Fourth	73.3	85.1	0.86	26.1	31.4	0.83
Richest	83.7	88.6	0.95	42.1	45.2	0.93
Total	60.6	76.1	0.80	18.1	29.9	0.60

Table based on estimated age as of the beginning of the school year

*** MICS indicator 61; MDG indicator 9**

(*) Percentages and ratios based on less than 25 unweighted cases

Table ED.8: Adult literacy

Percentage of ever-married women age 15-24 years that are literate[15], Yemen, 2006

	Percentage literate*	Percentage not known**	Number of women age 15-24 years
Residence			
Urban	59.0	0.4	275
Rural	26.3	0.5	739
Education			
None	2.4	0.4	516
Basic	59.4	0.6	370
Secondary+	100.0	0.0	123
Age			
15-19	35.0	0.4	315
20-24	35.2	0.5	699
Wealth index quintiles			
Poorest	7.8	1.1	197
Second	18.2	0.0	220
Middle	33.7	1.1	202
Fourth	48.9	0.0	205
Richest	70.1	0.0	189
Total	35.2	0.4	1014

*** MICS indicator 60; MDG indicator 8**

Total includes 5 women missing information on education who are not shown separately.

[15] The MDG Indicator measures all women all 15-24 therefore this indicator cannot be calculated from the Yemen ever-married women sample.

Yemen MICS Education Tables Following the ISCED School Age Classification (Primary school 6 to 11 years: Secondary school 12 to 17 years)

Table ED.1A: Early childhood education (ISCED)

Percentage of children age 36-59 months who are attending some form of organized early childhood education programme and percentage of first graders who attended pre-school, Yemen, 2006

	Percentage of children age 36-59 months currently attending early childhood education*	Number of children age 36-59 months	Percentage of children attending first grade who attended preschool program in previous year**	Number of children attending first grade
Sex				
Male	2.5	771	0.0	77
Female	2.6	694	(0.0)	42
Residence				
Urban	5.3	384	(0.0)	43
Rural	1.6	1081	0.0	76
Age of child				
36-47 months	2.1	774	.	0
48-59 months	3.1	691	.	0
6 years	.	na	0.0	119
Mother's education				
None	1.6	1007	(0.0)	73
Basic	3.3	335	(0.0)	38
Secondary+	8.4	104	(*)	6
Non-standard curriculum	(*)	18	(*)	1
Wealth index quintiles				
Poorest	0.0	346	(*)	12
Second	0.5	309	(0.0)	30
Middle	1.9	302	(*)	20
Fourth	4.2	288	(0.0)	29
Richest	8.4	219	(0.0)	28
Total	2.6	1465	0.0	119

*** MICS indicator 52**

**** MICS indicator 53**

Total includes 1 child missing information on mother's education who is not shown separately.

(*) Figures based on less than 25 unweighted cases

Figures shown in paranthesis are based on less than 50 unweighted cases

Table ED.2A: Primary school entry (ISCED)

Percentage of children of primary school entry age attending grade 1, Yemen, 2006

	Percentage of children of primary school entry age currently attending grade 1*	Number of children of primary school entry age**
Sex		
Male	41.7	438
Female	37.5	411
Residence		
Urban	50.8	226
Rural3	35.7	624
Age of child**		
6	39.7	850
Mother's education		
None	33.9	622
Basic	54.1	157
Secondary+	66.3	55
Non-standard curriculum	(*)	13
Wealth index quintiles		
Poorest	25.5	217
Second	39.3	158
Middle	42.1	167
Fourth	46.2	171
Richest	51.7	136
Total	39.7	850

Table based on estimated age as of the beginning of the school year

*** MICS indicator 54**

Total includes 2 children missing information on mother's education who are not shown separately.

(*) Figures based on less than 25 unweighted cases

Table ED.3: Primary school net attendance ratio (ISCED)

Percentage of children of primary school age attending primary or secondary school (NAR), Yemen, 2006

	Male		Female		Total	
	Net attendance ratio	Number of children	Net attendance ratio	Number of children	Net attendance ratio*	Number of children
Residence						
Urban	83.5	685	83.0	631	83.3	1316
Rural	71.5	1667	57.2	1690	64.3	3357
Age						
6	45.4	438	39.7	411	42.6	850
7	69.3	432	58.3	440	63.7	872
8	81.8	328	72.2	324	77.0	652
9	84.7	416	69.9	476	76.8	892
10	87.5	328	76.8	285	82.5	612
11	87.6	409	74.0	385	81.0	795
Mother's education						
None	71.7	1761	59.5	1766	65.6	3527
Basic	84.0	451	78.6	373	81.5	824
Secondary+	90.7	91	87.3	132	88.6	222
Non-standard curriculum	(86.0)	48	60.6	(48.5)	73.2	97
Wealth index quintiles						
Poorest	55.0	512	33.2	506	44.2	1019
Second	76.0	463	59.1	454	67.7	917
Middle	77.1	460	69.1	498	72.9	957
Fourth	83.4	508	78.3	464	81.0	972
Richest	86.2	409	86.9	399	86.5	808
Total	75.0	2352	64.2	2321	69.7	4673

Table based on estimated age as of the beginning of the school year

*** MICS indicator 55; MDG indicator 6**

Total includes 3 children missing information on mother's education who are not shown separately.

Figures shown in parenthesis are based on less than 50 unweighted cases

Table ED.4A: Secondary school net attendance ratio (ISCED)

Percentage of children of secondary school age attending secondary school or higher (NAR), Yemen, 2006

	Male		Female		Total	
	Net attendance ratio	Number of children	Net attendance ratio	Number of children	Net attendance ratio*	Number of children
Residence						
Urban	60.4	670	50.8	649	55.7	1318
Rural	43.4	1424	16.9	1493	29.8	2917
Age						
12	36.9	379	21.8	329	29.9	708
13	43.5	336	29.6	335	36.6	671
14	51.3	360	27.0	404	38.4	763
15	58.1	334	31.0	380	43.7	714
16	50.2	276	27.4	280	38.7	556
17	53.5	409	25.9	413	39.6	822
Mother's education						
None	44.7	1300	22.7	1247	34.0	2547
Basic	64.3	182	53.7	187	58.9	369
Secondary+	(75.9)	47	(78.5)	42	77.1	89
Non-standard curriculum	(49.0)	36	(58.3)	34	53.6	70
Mother not in household	43.4	118	17.4	215	26.6	333
Wealth index quintiles						
Poorest	25.2	385	4.9	391	15.0	776
Second	39.3	400	15.5	449	26.7	849
Middle	47.5	457	21.4	428	34.9	886
Fourth	57.2	421	38.1	434	47.5	855
Richest	72.2	430	53.7	439	62.8	869
Total	48.8	2094	27.2	2141	37.9	4235

Table based on estimated age as of the beginning of the school year

*** MICS indicator 56**

Total includes 2 children missing information on mother's education who are not shown separately.

Figures shown in parantheses are based on less than 50 unweighted cases

Table ED.4Aw: Secondary school age children attending primary school (ISCED)

Percentage of children of secondary school age attending primary school, Yemen, 2006

	Male		Female		Total	
	Net attendance ratio	Number of children	Net attendance ratio	Number of children	Net attendance ratio*	Number of children
Residence						
Urban	18.8	670	16.8	649	17.8	1318
Rural	23.0	1424	15.4	1493	19.1	2917
Age						
12	48.6	379	43.5	329	46.2	708
13	32.1	336	25.9	335	29.0	671
14	21.8	360	13.3	404	17.3	763
15	9.8	334	5.5	380	7.5	714
16	9.7	276	5.2	280	7.4	556
17	5.7	409	4.5	413	5.1	822
Mother's education						
None	26.4	1300	20.8	1247	23.6	2547
Basic	25.5	182	20.3	187	22.9	369
Secondary+	19.5	47	15.0	42	17.4	89
Non-standard curriculum	(36.0)	36	10.7	(34.3)	23.6	70
Mother not in household	15.6	118	5.6	215	9.2	333
Wealth index quintiles						
Poorest	23.9	385	10.6	391	17.2	776
Second	25.4	400	15.6	449	20.2	849
Middle	21.8	457	21.9	428	21.8	886
Fourth	21.7	421	16.3	434	19.0	855
Richest	15.9	430	14.1	439	15.0	869
Total	21.6	2094	15.8	2141	18.7	4235

Table based on estimated age as of the beginning of the school year

*** MICS indicator 55; MDG indicator 6**

Total includes 2 children missing information on mother's education who are not shown separately.

Figures shown in parentheses are based on less than 50 unweighted cases

Table ED.5A: Children reaching grade 5 (ISCED)

Percentage of children entering first grade of primary school who eventually reach grade 5, Yemen, 2006

	Percent attending 2nd grade who were in 1st grade last year	Percent attending 3rd grade who were in 2nd grade last year	Percent attending 4th grade who were in 3rd grade last year	Percent attending 5th grade who were in 4th grade last year	Percent who reach grade 5 of those who enter 1st grade*
Sex					
Male	96.3	92.4	96.0	93.8	80.2
Female	95.5	91.7	95.1	92.9	77.3
Residence					
Urban	98.7	96.7	98.8	96.6	91.1
Rural	94.7	89.8	94.1	91.5	73.2
Mother's education					
None	96.1	91.6	95.5	92.1	77.5
Basic	97.6	95.9	95.9	96.2	86.3
Secondary+	95.7	93.3	100.0	100.0	89.2
Non-standard curriculum	92.3	94.9	96.3	94.8	80.0
Mother not in household	100.0	55.1	62.9	94.9	32.9
Wealth index quintiles					
Poorest	93.4	92.6	91.1	94.1	74.1
Second	97.6	89.6	92.4	91.2	73.7
Middle	93.8	87.8	95.2	87.6	68.7
Fourth	97.5	95.4	99.3	94.1	86.9
Richest	97.2	96.1	98.3	99.2	91.0
Total	95.9	92.1	95.6	93.4	78.9

*** MICS indicator 57; MDG indicator 7**

Table ED.6A: Primary school completion and transition to secondary education (ISCED)

Primary school completion rate and transition rate to secondary education, Yemen, 2006

	Net primary school completion rate*	Number of children of primary school completion age	Transition rate to secondary education**	Number of children who were in the last grade of primary school the previous year
Sex				
Male	32.8	409	85.1	284
Female	27.5	385	83.9	179
Residence				
Urban	42.5	224	86.6	163
Rural	25.4	571	83.6	300
Mother's education				
None	26.1	628	86.2	321
Basic	46.8	122	92.4	78
Secondary+	(59.8)	27	(*)	19
Non-standard curriculum	(*)	17	(*)	11
Mother not in household	.	0	(*)	8
Wealth index quintiles				
Poorest	13.2	158	(90.0)	47
Second	26.7	155	79.4	82
Middle	27.7	176	81.1	99
Fourth	33.8	166	85.2	120
Richest	52.6	139	88.7	114
Total	30.2	795	84.7	462

Table based on estimated age as of the beginning of the school year

*** MICS indicator 59; MDG indicator 7b**

**** MICS indicator 58**

(*) Figures based on less than 25 unweighted cases

Figures shown in parentheses are based on less than 50 unweighted cases

Table ED.7A: Education gender parity (ISCED)

Ratio of girls to boys attending primary education and ratio of girls to boys attending secondary education, Yemen, 2006

	Primary school net attendance ratio (NAR), girls	Primary school net attendance ratio (NAR), boys	Gender parity index (GPI) for primary school NAR*	Secondary school net attendance ratio (NAR), girls	Secondary school net attendance ratio (NAR), boys	Gender parity index (GPI) for secondary school NAR*
Residence						
Urban	83.0	83.5	0.99	50.8	60.4	0.84
Rural	57.2	71.5	0.80	16.9	43.4	0.39
Mother's education						
None	59.5	71.7	0.83	22.7	44.7	0.51
Basic	78.6	84.0	0.94	53.7	64.3	0.83
Secondary+	87.3	90.7	0.96	78.5	75.9	1.04
Non-standard curriculum	60.6	86.0	0.70	58.3	49.0	1.19
Mother not in household	.	.	.	17.4	43.4	0.40
Wealth index quintiles						
Poorest	33.2	55.0	0.60	4.9	25.2	0.20
Second	59.1	76.0	0.78	15.5	39.3	0.40
Middle	69.1	77.1	0.90	21.4	47.5	0.45
Fourth	78.3	83.4	0.94	38.1	57.2	0.67
Richest	86.9	86.2	1.01	53.7	72.2	0.74
Total	64.2	75.0	0.86	27.2	48.8	0.56

*** MICS indicator 61; MDG indicator 9**

Table CP.1: Birth registration

Percent distribution of children age 0-59 months by whether birth is registered and reasons for non-registration, Yemen, 2006

				Birth is not registered because:								
	Birth is registered*	Don't know if birth is registered	Number of children age 0-59 months	Costs too much	Must travel too far	Didn't know child should be registered	Late, did not want to pay fine	Doesn't know where to register	Other	Don't know	Total	Number of children age 0-59 months without birth registration
Sex												
Male	22.4	8.0	1925	6.0	17.9	46.6	10.4	3.3	15.3	0.5	100.0	1339
Female	22.2	7.3	1858	5.1	17.3	49.3	10.3	2.4	14.9	0.7	100.0	1310
Residence												
Urban	38.2	6.3	1021	8.0	6.0	50.8	9.4	5.4	19.2	1.1	100.0	567
Rural	16.4	8.2	2762	4.9	20.8	47.1	10.6	2.1	14.0	0.4	100.0	2083
Age												
0-11 months	18.1	7.4	853	4.0	17.6	48.5	11.0	3.9	14.4	0.6	100.0	635
12-23 months	23.5	8.9	721	6.7	18.8	47.7	10.3	2.1	13.7	0.8	100.0	487
24-35 months	22.5	8.7	741	6.5	16.3	48.9	10.8	2.9	14.3	0.5	100.0	510
36-47 months	22.9	7.5	774	5.0	19.9	45.9	9.8	1.6	17.5	0.4	100.0	538
48-59 months	25.1	5.9	691	6.2	15.3	48.6	9.9	3.5	15.7	0.7	100.0	477
Mother's education												
None	15.8	8.7	2483	6.0	18.5	46.8	11.1	2.4	14.7	0.5	100.0	1875
Basic	33.1	5.6	941	4.7	14.6	52.1	9.0	2.9	16.6	0.0	100.0	577
Secondary +	41.4	6.2	316	4.3	18.5	46.4	5.2	6.8	15.5	3.3	100.0	166
Non Standard Curriculum	(18.3)	(18.3)	41	(3.2)	(13.8)	(45.7)	(18.8)	(8.6)	(9.8)	(0.0)	100.0	31
Wealth index quintiles												
Poorest	5.4	8.8	878	7.1	22.9	43.4	12.4	1.7	11.9	0.6	100.0	753
Second	10.9	7.8	810	3.6	18.1	52.6	10.9	1.1	13.4	0.3	100.0	658
Middle	19.6	8.9	759	6.4	18.1	47.1	10.3	3.6	14.2	0.3	100.0	542
Fourth	34.8	6.2	738	6.0	12.5	46.2	9.8	4.7	20.7	0.2	100.0	435
Richest	50.4	6.0	598	3.8	8.3	53.6	4.4	5.7	21.4	2.7	100.0	261
Total	22.3	7.7	3783	5.6	17.6	47.9	10.4	2.8	15.1	0.6	100.0	2649

*** MICS indicator 62**

Figures shown in paranthesis are based on less than 50 unweighted cases

Table CP.2: Child labour

Percentage of children age 5-14 years who are involved in child labour activities by type of work, Yemen, 2006

	Working outside household		Household chores for 28+ hours/ week	Working for family business	Total child labour*	Number of children age 5-14 years
	Paid work	Unpaid work				
Sex						
Male	1.5	1.0	7.5	12.8	21.1	3874
Female	0.5	1.1	14.1	11.1	24.4	3744
Residence						
Urban	0.6	0.7	3.7	3.8	8.1	2169
Rural	1.2	1.3	13.6	15.2	28.6	5449
Age						
5-11 years	0.7	1.3	7.9	10.5	18.6	5444
12-14 years	1.7	0.6	18.0	15.6	33.1	2174
School participation						
Yes	1.0	1.3	9.8	13.2	23.4	4454
No	1.0	0.8	12.0	10.1	21.8	3164
Mother's education						
None	1.2	0.7	12.5	13.1	25.3	5750
Basic	0.6	2.1	5.8	8.1	15.0	1362
Secondary +	0.3	2.7	2.4	5.1	8.4	348
Non Standard Curriculum	0.4	2.7	9.7	20.5	29.1	147
Wealth index quintiles						
Poorest	1.7	0.5	20.0	17.6	36.8	1613
Second	1.1	0.7	12.7	16.1	28.5	1512
Middle	1.3	1.1	10.6	12.0	22.7	1572
Fourth	0.7	1.7	5.5	7.6	13.6	1597
Richest	0.1	1.5	3.8	5.4	10.2	1324
Total	1.0	1.1	10.7	12.0	22.7	7618

*** MICS indicator 71**

Includes 7 children with missing information on mother's education who are not shown separately.

Table CP.3: Labourer students and student labourers

Percentage of children age 5-14 years who are labourer students and student labourers, Yemen, 2006

	Percentage of children in child labour*	Percentage of children attending school	Number of children 5-14 years of age	Percentage of child labourers who are also attending school**	Number of child labourers age 5-14	Percentage of students who are also involved in child labour****	Number of students age 5-14
Sex							
Male	21.1	63.8	3874	69.8	818	23.1	2473
Female	24.4	52.9	3744	51.6	915	23.8	1981
Residence							
Urban	8.1	70.5	2169	74.2	175	8.5	1528
Rural	28.6	53.7	5449	58.6	1557	31.2	2925
Age							
5-11 years	18.6	51.7	5444	56.3	1013	20.3	2816
12-14 years	33.1	75.3	2174	65.6	720	28.8	1638
Mother's education							
None	25.3	55.6	5750	57.4	1455	26.1	3197
Basic	15.0	65.1	1362	77.0	205	17.8	887
Secondary +	8.4	75.9	348	72.1	29	8.0	264
Non Standard Curriculum	29.1	69.3	147	65.2	43	27.3	102
Wealth index quintiles							
Poorest	36.8	38.1	1613	43.3	594	41.9	614
Second	28.5	55.2	1512	67.0	431	34.6	835
Middle	22.7	60.2	1572	66.3	357	25.0	947
Fourth	13.6	67.2	1597	68.3	217	13.8	1073
Richest	10.2	74.4	1324	83.5	135	11.4	986
Total	22.7	58.5	7618	60.2	1733	23.4	4454

*** MICS indicator 71**
**** MICS indicator 72**

****** MICS indicator 73**

Includes 7 children with missing information on mother's education who are not shown separately.

Table CP.4: Child discipline

Percentage of children age 2-14 years according to method of disciplining the child, Yemen, 2006

	Percentage of children 2-14 years of age who experience:								
	Only non-violent discipline	Psychological punishment	Minor physical punishment	Severe physical punishment	Any psychological or physical punishment*	No discipline or punishment	Missing	Mother/caretaker believes that the child needs to be physically punished	Number of children age 2-14 years
Sex									
Male	3.7	92.2	84.0	44.2	94.4	1.2	0.8	44.2	1443
Female	4.2	91.2	81.6	38.2	93.7	1.5	0.6	43.6	1432
Residence									
Urban	3.6	93.4	80.5	33.4	95.1	0.7	0.6	26.0	892
Rural	4.1	90.9	83.9	44.7	93.5	1.6	0.7	51.9	1983
Age									
2-4 years	4.7	87.6	81.4	38.7	91.4	2.7	1.2	41.8	765
5-9 years	2.6	94.3	86.7	44.3	96.0	1.0	0.3	45.4	1058
10-14 years	4.7	92.1	80.0	39.9	94.0	0.7	0.6	43.9	1051
Mother's education									
None	4.1	91.1	83.1	44.3	93.5	1.7	0.7	49.9	2049
Basic	2.2	94.9	86.5	36.8	96.8	0.6	0.4	31.8	565
Secondary +	6.4	89.5	70.3	21.8	92.5	0.0	1.1	18.2	200
Non Standard Curriculum	5.4	90.0	81.5	41.6	93.2	0.0	1.3	41.3	58
Wealth index quintiles									
Poorest	5.3	87.3	81.2	45.2	90.8	3.0	0.9	59.3	633
Second	4.6	91.6	86.9	48.6	93.8	1.1	0.5	57.0	578
Middle	3.1	93.3	86.3	44.6	95.4	1.0	0.5	46.7	575
Fourth	3.5	93.6	83.6	36.9	94.9	0.9	0.7	30.5	545
Richest	3.1	93.3	76.1	29.5	95.9	0.4	0.6	22.6	545
Total	4.0	91.7	82.8	41.2	94.0	1.3	0.7	43.9	2875

*** MICS indicator 74**

Includes 2 children with missing information on mother's education who are not shown separately.

Table CP.5: Early marriage

Percentage of women age 15-49 years in marriage or union before their 15th birthday, percentage of women age 20-49 years in marriage or union before their 18th birthday and percentage of women age 15-19 years currently married or in union Yemen, 2006

	Percentage married before age 15*	Number of women age 15-49 years	Percentage married before age 18*	Number of women age 20-49 years	Percentage of women 15-19 married/in union**	Number of women age 15-19 years
Residence						
Urban	13.2	1,987	44.1	1,485	15.5	502
Rural	14.5	3,891	55.7	2,758	20.7	1,133
Age						
15-19	3.6	1,631			19.2	1,631
20-24	10.5	1,217	32.3	1,217		
25-29	15.6	1,026	47.6	1,026		
30-34	20.0	608	55.1	608		
35-39	25.4	554	70.7	554		
40-44	26.0	431	71.0	431		
45-49	26.0	408	67.8	408		
Education						
None	21.0	3,016	64.4	2,511	29.4	505
Basic	7.0	2,726	34.7	1,652	15.2	1,074
Wealth index quintiles						
Poorest	17.8	1,056	60.8	773	21.7	283
Second	16.1	1,123	56.5	788	22.3	335
Middle	12.8	1,149	52.5	820	18.4	329
Fourth	12.8	1,179	51.5	843	14.1	336
Richest	11.7	1,388	40.5	1,019	18.5	369
Total	14.1	5,877	51.6	4,245	19.2	1,631

*** MICS indicator 67**

**** MICS indicator 68**

***** MICS indicator 70**

Table CP.6: Spousal age difference

Percent distribution of currently married women age 15-19 and 20-24 years according to the age difference with their husband or partner, Yemen, 2006

	Percentage of currently married women age 15-19 years whose husband or partner is:						Number of women age 15-19 years currently married	Percentage of currently married women age 20-24 years whose husband or partner is:						Number of women age 20-24 years currently married
	Younger	0-4 years older	5-9 years older	10+ years older*	Husband/partner's age unknown	Total		Younger	0-4 years older	5-9 years older	10+ years older*	Husband/partner's age unknown	Total	
Residence														
Urban	0.0	32.4	46.0	21.6	0.0	100.0	78	0.1	37.2	39.7	23.1	0.0	100.0	189
Rural	1.1	43.4	40.6	13.8	1.1	100.0	234	3.5	45.2	34.7	15.9	0.6	100.0	485
Education														
None	0.9	49.9	32.5	15.6	1.2	100.0	136	3.8	45.4	31.6	18.4	0.8	100.0	340
Basic	(*)	(*)	(*)	(*)	(*)	(*)	11	(*)	(*)	(*)	(*)	(*)	(*)	13
Secondary +	1.0	36.3	50.5	12.2	0.0	100.0	129	1.5	42.1	40.1	16.0	0.2	100.0	231
Non Standard Curriculum	(0.0)	(31.3)	(43.0)	(25.6)	(0.0)	(100.0)	34	0.8	36.0	44.8	18.4	0.0	100.0	85
Missing	(*)	(*)	(*)	(*)	(*)	(*)	2	(*)	(*)	(*)	(*)	(*)	(*)	3
Wealth index quintiles														
Poorest	2.1	47.0	25.2	21.4	4.2	100.0	62	2.8	42.4	36.0	18.8	0.0	100.0	125
Second	1.6	56.8	36.4	5.2	0.0	100.0	75	2.6	44.1	32.6	19.9	0.7	100.0	143
Middle	0.0	30.7	45.8	23.5	0.0	100.0	60	4.8	45.9	33.7	15.6	0.0	100.0	134
Fourth	(0.0)	(38.4)	(51.9)	(9.7)	(0.0)	(100.0)	47	1.0	40.7	38.9	18.3	1.1	100.0	151
Richest	0.0	27.5	52.8	19.6	0.0	100.0	68	1.6	41.7	39.7	16.7	0.3	100.0	119
Total	0.8	40.6	42.0	15.8	0.8	100.0	312	2.5	42.9	36.1	17.9	0.5	100.0	673

*** MICS indicator 69**

Table CP.7: Child disability

Percentage of children age 2-9 years with disability reported by their mother or caretaker according to the type of disability, Yemen, 2006

	Percentage of children age 2-9 years with reported disability by type of disability											3-9 years		2 years	
	Delay in sitting, standing or walking	Difficulty seeing, either in the daytime or at night	Appears to have difficulty hearing	No under-standing of instr-uctions	Difficulty in walking, moving arms, weakness or stiffness	Have fits, become rigid, lose conciousness	Not learning to do things like other children his/her age	No speak-ing / cannot be under-stood in words	Appears mentally backward, dull, or slow	Percentage of children age 2-9 years with at least one reported disability*	Number of children age 2-9 years	Speech is not normal	Number of children age 3-9 years	Cannot name at least one object	Number of children age 2 years
Residence															
Urban	6.4	3.2	2.0	4.8	2.5	2.2	4.2	5.6	3.3	21.1	1722	9.3	1500	29.6	222
Rural	10.4	2.0	4.7	6.5	3.1	4.6	4.3	6.1	3.7	25.8	4578	6.8	4014	23.1	564
Age of child															
2-4	9.4	2.0	2.9	7.2	3.3	4.3	5.3	8.1	4.1	26.6	2360	8.8	1575	25.0	786
5-6	7.8	1.9	4.0	5.5	2.6	3.3	3.7	4.8	3.2	21.1	1566	7.7	1566	.	0
7-9	10.1	2.9	5.0	5.2	2.8	4.1	3.6	4.6	3.3	24.7	2374	6.4	2374	.	0
Mother's education															
None	10.2	2.6	4.7	6.5	3.2	4.4	4.3	6.0	3.8	25.9	4468	7.1	3937	23.5	531
Basic	6.8	0.9	2.2	4.8	2.3	2.8	3.9	5.1	2.4	19.0	1369	7.2	1174	27.9	195
Secondary +	6.8	2.9	2.1	4.6	2.6	3.0	3.5	8.3	4.3	25.4	371	9.7	315	29.3	56
Non Standard Curriculum	14.8	7.0	2.8	6.0	3.6	2.3	12.9	5.3	3.6	33.2	84	12.3	80	(*)	4
Wealth index quintiles															
Poorest	12.0	2.9	6.4	7.6	3.9	6.8	5.2	6.6	3.9	29.4	1454	6.6	1268	23.3	185
Second	11.4	2.5	4.9	7.8	3.4	4.2	3.7	5.5	3.7	27.3	1263	6.3	1104	21.2	159
Middle	10.2	1.6	3.5	7.1	2.6	3.9	4.9	8.4	4.2	27.3	1267	9.0	1121	29.4	146
Fourth	6.8	1.6	2.0	3.2	2.5	2.4	4.6	4.0	3.1	17.4	1297	7.1	1132	26.5	165
Richest	4.8	3.1	2.5	3.9	2.0	1.6	2.4	5.2	2.6	19.7	1019	8.5	889	24.9	130
Total	9.3	2.3	4.0	6.0	2.9	4.0	4.3	6.0	3.6	24.5	6300	7.4	5514	25.0	786

*** MICS indicator 101**

(*) Figure based on less than 25 unweighted cases

Table CP.8: Children's living arrangements and orphanhood

Percent distribution of children age 0-17 years according to living arrangements, percentage of children age 0-17 years in households not living with a biological parent and percentage of children who are orphans, Yemen, 2006

		Living with neither parent				Living with mother only		Living with father only						
	Living with both parents	Only father alive	Only mother alive	Both are alive	Both are dead	Father alive	Father dead	Mother alive	Mother dead	Impossible to determine	Total	Not living with a biological parent*	One or both parents dead**	Number of children
Sex														
Male	86.4	0.2	0.1	0.6	0.1	6.6	2.9	0.9	1.6	0.5	100	1.0	5.0	6869
Female	85.2	0.2	0.2	1.7	0.3	6.1	2.9	0.7	1.7	1.1	100	2.4	5.3	6758
Residence														
Urban	86.3	0.3	0.1	1.2	0.3	5.6	2.9	1.1	1.6	0.7	100	1.8	5.1	3863
Rural	85.6	0.2	0.2	1.1	0.2	6.6	2.9	0.7	1.6	0.8	100	1.7	5.2	9764
Age														
0-4 years	91.2	0.0	0.0	0.2	0.0	6.1	1.1	0.5	0.5	0.2	100	0.3	1.7	3975
5-9 years	88.2	0.1	0.1	0.8	0.2	6.8	2.0	0.7	1.0	0.2	100	1.1	3.3	3940
10-14 years	84.6	0.2	0.1	0.9	0.2	6.5	4.8	0.7	1.6	0.3	100	1.5	7.0	3678
15-17 years	72.9	0.8	0.5	4.0	0.7	5.6	5.0	1.7	5.1	3.9	100	5.9	12.1	2033
Wealth index quintiles														
Poorest	84.6	0.3	0.3	1.5	0.2	5.6	4.2	0.6	2.1	0.6	100	2.3	7.2	2913
Second	86.6	0.2	0.2	1.4	0.2	5.6	2.8	1.0	1.1	1.0	100	2.0	4.4	2783
Middle	86.7	0.2	0.1	0.7	0.2	5.7	3.0	0.9	1.8	0.8	100	1.2	5.2	2781
Fourth	85.4	0.2	0.0	0.5	0.1	8.3	2.2	0.4	1.8	0.9	100	0.8	4.4	2767
Richest	85.8	0.2	0.1	1.5	0.5	6.5	2.3	1.2	1.3	0.5	100	2.3	4.4	2382
Total	85.8	0.2	0.1	1.1	0.2	6.3	2.9	0.8	1.6	0.8	100	1.7	5.2	13627

*** MICS indicator 78**

**** MICS indicator 75**

Table HA.1: Knowledge of preventing HIV transmission

Percentage of ever-married women age 15-49 years who know two of the main ways of preventing HIV transmission, Yemen, 2006

		Percentage who know transmission can be prevented by:					
	Heard of AIDS	Using a condom every time	Abstaining from sex	Knows both ways	Knows at least one way	Doesn't know any way	Number of ever-married women
Residence							
Urban	84.5	33.3	43.0	21.5	54.7	45.3	1170
Rural	49.8	15.1	22.7	10.1	27.7	72.3	2572
Age							
15-19	55.0	18.9	30.6	15.8	33.6	66.4	318
20-24	61.7	21.0	28.8	14.7	35.1	64.9	697
25-29	62.4	22.3	32.7	14.4	40.6	59.4	815
30-34	63.3	24.3	28.9	13.8	39.4	60.6	553
35-39	59.7	18.9	27.9	11.9	34.8	65.2	536
40-44	58.9	16.3	25.3	10.6	31.0	69.0	421
45-49	58.9	21.1	26.4	14.1	33.3	66.7	402
Education							
None	49.5	14.7	22.6	10.1	27.2	72.8	2469
Basic	77.7	29.3	38.8	19.8	48.3	51.7	922
Secondary +	94.6	41.6	48.6	22.9	67.3	32.7	344
Wealth index quintiles							
Poorest	31.8	9.2	15.7	6.3	18.7	81.3	745
Second	47.7	12.0	20.9	8.0	24.8	75.2	735
Middle	63.7	20.2	26.3	13.0	33.5	66.5	731
Fourth	73.7	27.2	36.4	17.6	46.0	54.0	740
Richest	84.7	34.4	44.7	22.8	56.3	43.7	791
Total	60.6	20.8	29.0	13.7	36.1	63.9	3742

Total includes 7 women missing information on education who are not shown separately

Table HA.2: Identifying misconceptions about HIV and AIDS

Percentage of ever-married women age 15-49 years who correctly identify misconceptions about HIV and AIDS, Yemen, 2006

	Percent who know that:				Percent who know that:		
	HIV cannot be transmitted by:						
	Option 1: sharing food	Option 2: Mosquito bites	A healthy looking person can be infected	Reject two most common misconceptions and know a healthy-looking person can be infected	Option 3: HIV cannot be transmitted by supernatural means	Option 4: HIV can be transmitted by sharing needles	Number of ever-married women
Residence							
Urban	51.1	42.1	34.2	14.7	67.4	75.4	1170
Rural	17.2	16.0	16.4	3.3	30.8	41.3	2572
Age							
15-19	23.2	20.5	18.6	5.8	42.4	50.5	318
20-24	28.2	26.6	23.8	7.3	44.5	53.0	697
25-29	27.8	24.4	22.3	5.4	43.6	53.6	815
30-34	30.1	25.4	23.5	9.1	45.3	55.6	553
35-39	30.0	25.1	23.6	8.1	41.5	50.4	536
40-44	25.3	22.0	21.5	6.6	36.4	48.6	421
45-49	27.6	21.6	16.8	5.7	38.3	48.9	402
Education							
None	35.7	39.6	30.4	34.2	26.7	9.8	2469
Basic	64.6	69.8	53.4	53.2	42.6	7.9	922
Secondary +	78.5	84.5	67.0	58.0	46.9	10.1	344
Wealth index quintiles							
Poorest	5.0	7.2	9.7	0.7	14.6	24.1	745
Second	13.5	11.9	14.7	1.8	26.7	37.9	735
Middle	22.3	22.2	20.9	4.7	40.1	55.9	731
Fourth	38.9	33.2	28.8	9.6	56.8	64.5	740
Richest	57.5	45.0	34.9	16.9	71.1	76.0	791
Total	27.8	24.2	22.0	6.9	42.2	52.0	3742

Total includes 7 women missing information on education who are not shown separately

Table HA.3: Comprehensive knowledge of HIV and AIDS transmission

Percentage of ever-married women age 15-49 years who have comprehensive knowledge of HIV and AIDS transmission, Yemen, 2006

	Knows condom use and abstinence can prevent HIV transmission	Correctly identify 3 misconceptions about HIV transmission	Have comprehensive knowledge (identify 2 prevention methods and 3 misconceptions)	Number of ever-married women
Residence				
Urban	21.5	14.7	2.6	1170
Rural	10.1	3.3	0.7	2572
Age				
15-19	15.8	5.8	2.0	318
20-24	14.7	7.3	1.3	697
15-24	15.0	6.8	1.5	1015
25-29	14.4	5.4	1.1	815
30-34	13.8	9.1	1.0	553
35-39	11.9	8.1	1.1	536
40-44	10.6	6.6	1.5	421
45-49	14.1	5.7	1.4	402
Education				
None	10.1	2.8	0.7	2469.2
Basic	19.8	10.9	2.1	921.7
Secondary +	22.9	25.5	3.1	344.4
Wealth index quintiles				
Poorest	6.3	0.7	0.2	745
Second	8.0	1.8	0.3	735
Middle	13.0	4.7	1.0	731
Fourth	17.6	9.6	1.6	740
Richest	22.8	16.9	3.1	791
Total	13.7	6.9	1.3	3742

* Women were not asked if HIV transmission could be prevented by 'having only one faithful uninfected partner'. Therefore the MDG indicator 19B and MICS indicator 82 cannot be constructed from the survey data.

Total includes 7 women missing information on education who are not shown separately

Table HA.4: Knowledge of mother-to-child HIV transmission

Percentage of ever-married women age 15-49 years who correctly identify means of HIV transmission from mother to child, Yemen, 2006

	Know AIDS can be transmitted from mother to child	Percent who know AIDS can be transmitted:				Did not know any specific way	Number of ever-married women
		During pregnancy	At delivery	Through breastmilk	All three ways*		
Residence							
Urban	73.9	69.1	59.3	54.1	45.4	10.6	1170
Rural	40.9	36.5	30.4	35.2	26.5	8.9	2572
Age							
15-19	48.8	46.1	39.4	43.8	35.9	6.2	318
20-24	52.5	45.4	40.0	42.7	32.9	9.2	697
25-29	52.1	47.3	40.3	41.3	31.7	10.3	815
30-34	54.9	50.2	40.4	41.2	32.3	8.4	553
35-39	49.8	47.1	38.4	38.1	30.4	9.9	536
40-44	49.1	44.5	38.2	40.4	32.4	9.8	421
45-49	48.2	44.9	38.1	40.5	33.0	10.7	402
Education							
None	39.6	35.7	30.4	34.2	26.7	9.8	2469
Basic	69.8	64.6	53.4	53.2	42.6	7.9	922
Secondary +	84.5	78.5	67.0	58.0	46.9	10.1	344
Wealth index quintiles							
Poorest	22.2	18.5	16.5	20.5	15.3	9.6	745
Second	39.8	35.3	30.1	34.6	26.6	7.9	735
Middle	53.2	48.2	40.8	46.8	36.2	10.5	731
Fourth	63.0	58.7	48.4	49.3	39.0	10.8	740
Richest	76.4	71.2	60.1	53.6	44.3	8.3	791
Total	51.2	46.7	39.4	41.1	32.4	9.4	3742

*** MICS indicator 89**

Total includes 7 women missing information on education who are not shown separately

Table HA.5: Attitudes toward people living with HIV and AIDS

Percentage of ever-married women age 15-49 years who have heard of AIDS who express a discriminatory attitude towards people living with HIV and AIDS, Yemen, 2006

	Percent of ever-married women who:						
	Would not care for a family member who was sick with AIDS	If a family member had HIV would want to keep it a secret	Believe that a female teacher with HIV should not be allowed to work	Would not buy food from a person with HIV and AIDS	Agree with at least one discriminatory statement	Agree with none of the discriminatory statements*	Number of ever-married women who have heard of AIDS
Residence							
Urban	18.4	55.5	68.8	80.0	94.3	5.7	989
Rural	19.4	49.6	74.4	84.6	95.1	4.9	1279
Age							
15-19	20.9	54.8	72.7	85.9	97.2	2.8	175
20-24	20.5	51.3	70.7	82.3	93.8	6.2	430
25-29	19.8	50.8	73.0	82.9	96.1	3.9	509
30-34	17.7	58.8	72.3	84.2	95.9	4.1	350
35-39	21.1	50.8	70.5	76.8	92.0	8.0	320
40-44	13.3	47.1	71.3	83.8	93.6	6.4	248
45-49	18.0	52.0	73.5	84.2	95.2	4.8	237
Education							
None	19.1	49.8	73.0	83.4	94.3	5.7	1222
Basic	18.2	53.4	73.1	82.7	94.9	5.1	716
Secondary +	20.4	58.5	65.2	79.1	96.0	4.0	326
Wealth index quintiles							
Poorest	19.4	44.3	67.2	79.5	92.0	8.0	237
Second	20.8	53.3	75.2	86.3	95.6	4.4	350
Middle	23.5	45.3	78.0	86.1	96.1	3.9	466
Fourth	19.8	53.3	72.0	82.5	94.2	5.8	545
Richest	14.0	58.2	67.7	79.3	94.9	5.1	669
Total	19.0	52.2	71.9	82.6	94.8	5.2	2268

*** MICS indicator 86**

Total includes 4 women missing information on education who are not shown separately

Table HA.6: Knowledge of a facility for HIV testing
Percentage of ever-married women age 15-49 years who know where to get an HIV test, percentage of ever-married women who have been tested and, of those tested the percentage who have been told the result, Yemen, 2006

	Know a place to get tested*	Have been tested**	Number of ever-married women
Residence			
Urban	23.3	3.4	1170
Rural	7.4	1.3	2572
Age			
15-19	10.7	1.4	318
20-24	11.9	1.4	697
25-29	15.2	2.3	815
30-34	12.8	2.3	553
35-39	12.5	2.5	536
40-44	10.2	2.3	421
45-49	10.3	0.7	402
Education			
None	7.0	1.4	2469
Basic	20.1	2.9	922
Secondary +	30.6	2.9	344
Wealth index quintiles			
Poorest	4.3	0.6	745
Second	6.2	1.0	735
Middle	8.3	2.0	731
Fourth	16.8	2.7	740
Richest	25.3	3.3	791
Total	12.4	1.9	3742

*** MICS indicator 87**

*** MICS indicator 88**

Total includes 7 women missing information on education who are not shown separately

Table HA.7: HIV testing and counselling coverage during antenatal care

Percentage of ever-married women age 15-49 years who gave birth in the two years preceding the survey who were offered HIV testing and counseling with their antenatal care, Yemen, 2006

	Percent of ever-married women who:				
	Received antenatal care from a health care professional for last pregnancy	Were provided information about HIV prevention during ANC visit*	Were tested for HIV at ANC visit	Received results of HIV test at ANC visit**	Number of ever-married women who gave birth in the 2 years preceding the survey
Residence					
Urban	68.2	2.9	1.9	1.6	429
Rural	39.3	1.8	0.3	0.2	1181
Age					
15-19	49.1	2.3	0.7	0.0	137
20-24	50.0	1.4	0.3	0.0	431
25-29	49.7	1.7	0.7	0.5	464
30-34	45.2	3.1	1.3	1.3	266
35-39	40.6	2.7	0.5	0.5	190
40-44	41.9	3.4	2.0	2.0	92
45-49	(24.9)	(0.0)	(0.0)	(0.0)	30
Education					
None	38.0	1.7	0.2	0.1	1035
Basic	59.2	3.5	2.1	1.6	412
Secondary +	73.3	0.7	0.7	0.7	162
Wealth index quintiles					
Poorest	32.0	3.2	0.0	0.0	378
Second	35.1	1.2	0.0	0.0	352
Middle	43.4	1.6	1.4	0.8	322
Fourth	56.6	2.1	1.4	1.1	307
Richest	79.3	2.3	1.2	1.2	251
Total	47.0	2.1	0.7	0.5	1610

*** MICS indicator 90**

**** MICS indicator 91**

Total includes 2 women missing information on education who are not shown separately

Percentages shown in parenthesis are based on less than 50 unweighted cases

Appendix A. Sample Design

Parameters of Sample Design

The Yemen MICS sample design was a two-stage stratified cluster sample. The following parameters were accounted for in designing the sample:

1- The sample is to provide estimates with reasonable precision at national and urban/rural levels.
2- The residents of the Yemeni islands and the nomadic population are excluded from survey coverage.
3- The size of ultimate cluster is 20 households
4- It is approximately self-weighted design.

Determination of Sample Size

The sample size has been figured out on the basis of the recommendations given in the MICS Manual of "Designing and Selection the Sample". The size of the Sample has been estimated using the following formula:

$$n = \frac{4r(1-r)f(1.1)}{(0.12r)^2 p n_h}$$

where:

n: is the required sample size
4: is a factor to achieve the 95% confidence level
r: is the predicted or anticipated prevalence (coverage rate) for the indicator being estimated
1.1: is a factor necessary to raise the sample size by 10% for non-response
f: is a shortened symbol for design effect (*deff)*
0.12r: is the margin of error to be tolerated at the 95% level of confidence, defined as 12 percent of r (12 percent thus represents the relative sampling error of r)
p: is the proportion of the total population upon which the indicator, r, is based, and
n_h : is average household size.

As the percentage of immunized children aged between 1-2 years is one of the most important indicators that the survey aims to estimate, it will be relied upon to determine the sample size. The Family Health Survey (PAPFAM) conducted in Yemen in 2003 revealed that the percentage of fully immunized children in the age group 12-23 months is 37.2%. Based on the same survey, the proportion of children in this age group (p) is 0.031 approximately. The 2004 Population Census indicates that the average household size (n_h) is 7.1 persons. Assuming that the design effect (f) is about 1.5, the sample size has been estimated as 3516 households. It was deemed useful to increase the sample size to 4000 households so as to provide estimates for urban and rural strata with no much less precision. Increasing the sample will also be useful in case of measuring phenomena with less prevalence at the national level. In other words if a prevalence of another phenomenon measured in the survey is higher than 37.2%, the sample will provide more precise estimates (less sampling errors) for the prevalence rates of such phenomena.

Conversely, if a phenomenon is less prevalent than the 37.2% level, the sample will provide an estimate of the prevalence rate with lower precision than that of the immunization rate.

Sample allocation

The sample is allocated proportionally between urban and rural strata; the percentage of households that should be allocated to urban and rural areas was obtained from the 2004 Census. As the ultimate cluster is determined to be 20 households, the number of sample clusters is therefore 200. The proportional allocation of the sample is such that 142 for rural stratum and 58 for urban stratum.

Sample Selection

The sample is to be selected in two stages. The Primary Sampling Unit (PSU) is a village (or a group of villages) in rural areas and a lane (hara) in urban. The micro data of the 2004 Census at these administrative levels has been relied upon to create frames for the first stage sample. The following provides a description of the sample selection in both stages:

First Stage Sample

The 2004 Census data (numbers of households and population) for all urban and rural agglomerations have been utilized to create appropriate frames for the first stage sample of urban and rural strata. It was taken into account that the PSU size would be in the range 150-300 households approximately. The creation of a rural frame has entailed grouping neighboring small villages so as to create PSUs in the range of 150-300 households each. Hence, a rural PSU is in most cases a group of small villages. The whole village is considered a PSU as long as its size is in the range 150-300 households.

The situation in urban areas is quite different from rural areas since most lanes (Haras) are much larger than the indicated range of the desired PSU size. For this reason, a second (dummy) sampling stage is necessary to reduce the burden of field listing whenever the lane size is above 300 households. The first urban stage sample included 41 PSU's that required division into equally sized parts. Whereas only 4 PSU's in the rural sample needed to be divided into equal parts.

An implicit stratification has been introduced in both rural and urban frames of the PSUs. Governorates were ordered geographically in a serpentine fashion starting from the northwest corner moving to the northeast corner and back to the west, then to the east and so on till the last governorate. Moreover, as governorate are further divided into a number of directorates (modyriate), another process of implicit stratification within each governorate was implemented by geographically ordering directorates following the same way as for governorates. Undoubtedly, implicit stratification will contribute to more precise sample estimates at both national and urban/rural levels.

The selection of rural and urban first stage samples was made following the Probability Proportionate to Size (PPS) selection method. The employed measure of size (MOS) is the number of Households in each PSU as measured in the 2004 Census.

Accordingly, the probability of selection of the first stage sample can be represented as follows:

$$p(\alpha) = \frac{\lambda M_\alpha}{\sum_\alpha M_\alpha}$$

Where:

$p(\alpha)$ is the probability of selecting the α^{th} PSU in the sample

λ is size of first stage sample : λ = 58 in Urban, and λ = 142 in Rural

M_α is the number of households of the α^{th} PSU

As indicated above, a second (dummy) sampling stage is implemented in larger urban PSU's. The large urban PSU selected in the sample is divided into equal parts of about 150-300 households each. The cartographic facilities of the MOPHP as will as its Geographic Information System (GIS) have been utilized in dividing such PSU's into parts of equal population size. One part was then selected with equal probability method. If the α^{th} large urban PSU was selected in the sample, it was then divided into "k" parts of equal size, the selection probability of a certain part in the sample is defined as: (1/k)* $P(\alpha)$.

The distribution of the first stage urban and rural samples according to governorates is shown in table 1, while the lists of first stage urban and rural samples are given in the appendix.

Table1
Distribution of Urban/Rural first stage sample by governorates

Governorate	Urban Sample	Rural Sample	Total
Sa'da	1	5	6
Algouf	1	3	4
Hadarmout	4	5	9
Ma'reb	-	2	2
Sana'a	2	7	9
El Amana	17	1	18
Omran	1	6	7
Heggah	2	12	14
Al Hodayedah	8	19	27
Al Mahweet	-	5	5
Remah	-	3	3
Damar	2	12	14
Al BAydaa'	1	4	5
Shabowa	-	3	3
Abyan	1	3	4

Al Dhalee'	1	4	5
Ibb	4	21	25
Taez	6	20	26
Aden	7	-	7
Laheg	-	7	7
Total	**58**	**142**	**200**

Evidently, the above table shows that the distribution of first stage sample among different governorates is well balanced. Few governorates were not represented in the urban sample because of the extremely lower weight of their urban populations relative to the total urban population of the country.

Second stage sample

The selected PSU from the first sample stage, whether it was the whole PSU or a part of one, was updated in the field. A field operation was carried out in each PSU (or a part of it), which has been selected in the first stage sample so as to create an updated list of households for each sample PSU. These lists were used as sample frames for selecting the second stage sample.

The proposed selection method was determined in such a way so as to create compact ultimate clusters of 20 households in the rural sample, and non-compact ultimate cluster of the same size in the urban sample. The reason for selecting compact clusters for rural sample is that most of the rural sample PSU's are composed of several small villages which are, in most cases, located at the tops of adjacent mountains. The spread of the household sample over several small villages, within the same PSU, that would result from the systematic selection, would impose much difficulty in the main survey fieldwork. Hence it has been deemed operationally efficient to deal with the household list for each rural sample PSU as forming a circle. The selection of a single random number in the range of 1 - the total number of households in the list, will determine the entire household sample to be selected from the sample PSU. The household indicated by the selected random number and the subsequent 19 households in the list constitute the household sample to be selected from rural sample PSU's (keeping in mind the circular nature of the list).

As an example, assume that the list of a certain rural sample PSU includes 220 households. The selected random number (in the range of 1-220) is 206. Therefore, the household sample constitutes the households with the serial numbers:

206-207-208-209-210-211-212-213-214-215-216-217-218-219-220-1-2-3-4-5.

In the case of the urban sample, however, an ordinary random systematic selection is suggested, so as to produce a non-compact cluster of 20 households. The households forming urban PSU (or a part of it) are not dispersed over a large area; hence the compact cluster is not justifiable.

The conditional selection probability of a certain household given the selection of the PSU in the first stage sample is given as follows:

$$P(\beta \mid \alpha) = \frac{20}{M^*_\alpha}$$

Where $P(\beta \mid \alpha)$ is the selection probability of the β^{th} household given that the α^{th} PSU was selected in the first stage sample, M^*_α is the updated number of households of the α^{th} PSU(or a part of it).

Sampling Rate

The overall sampling rate is the non-conditional probability of selecting a given household in the sample. It is given by the following formula:

$P(\alpha\beta) = P(\alpha)P(\beta \mid \alpha)$, where :

$p(\alpha)$ is the probability of the first stage sample, i.e, $p(\alpha) = \frac{\lambda M_\alpha}{K\sum_\alpha M_\alpha}$, and k = number of parts of equal size into which the PSU is divided (urban sample), $K = 1$ if the PSU is not divided. $P(\beta \mid \alpha) = \frac{20}{M^*_\alpha}$. Thus :

$$P(\alpha\beta) = \frac{\lambda M_\alpha}{K\sum_\alpha M_\alpha}\frac{20}{M^*_\alpha}$$

Evidently the sample is strictly self-weighted if $M_\alpha = M^*_\alpha$ for all sample PSU's. Since the updating process will most probably result in a different PSU size, the sample is approximately self-weighted as long as the updated PSU size does not deviate very much from the non-updated (census) size.

Sample Weights

Weights were used in deriving survey estimates to account for the expected differences between the updated household lists of the sample PSU and the Measure of Size (the 2004 number of households) as well as non-response which is inevitable in surveys of this nature. If non-response varies substantially over the sample PSU's weights are needed for data tuning. The final weight (W) is the product of design weight (W_1) and non-response weight (W_2), where the design weight is the inverse of the overall selection probability and the non-response weight is the inverse of response rate. Thus:

$$W = \frac{1}{W_1}\frac{1}{W_2}$$

$$= \frac{1}{P(\alpha\beta)}\frac{1}{\text{response rate}}$$

Where: $P(\alpha\beta)$ is as defined above and the respnse rate $= \frac{\text{number of surveyed households}}{\text{number of sample households}}$

Appendix B. List of Personnel Involved in the Survey

List of Interviews:	
Abdulsalm Naser Al-Mansouri	Huda Abdou Allah Al-ba'adany
Afaf Ali Mohammed	Jamal Mojahed Zaid
Afrah Ahmed Bagah	Jamal Rashed Moqubel
Ahlam Abdou Al-hameed Al-Asbahi	Jamila Joma'an Harf
Ahmed Mansour	Joubran Abdullah Ahmed
Amal Mansour Ali	Kaireah Abdullah Al-Shamy
Amal Yaseen kaid Al-Masah	Lamya Abdullah Al-Akw'a
Amani Ahmed Kaderie	Lobna Al-Shar'abi
Amatt Alkhaleg Abdullah Jobareh	Lobna Al-Shara'bee
Amatt Alkhleg AbdulRahman Al-shaharee	Maha Mostafa Aobaliy
Amel Abdullah Al-Absi	Malkah Al-Amary
Amel Ahmed Ghaderi	Manal Yousef Zeed
Amel Yaseen Kaid Al-Masah	Merfat Ameen Theban
Ashwaq Mohammed Al-Iryani	Mohammed Hoseen Abdullah Al-Jilani
Asmahan Al-Yousefi	Mona Abdullah Moulhi
Atefa Abdulkareem Al-Agbary	Mona' Ahmed Al-kabzary
Belqis saeed Haza'a	Najla Mahmmed Ali Muawada
Bilqies Saeed Haza'a	Naseem Abdoul Azize Haiyel
Budour AbdulAllah Mohammed	Naser Mohmmed Saleh
Busaam Mohsen Mothana Eied	Nora Ahmed Sed Al-Kabzary
Bushra Al-Hamdany	Nowal Abdouh Ali Al-Jadabee
Bushra Mohammed Al-Mahbashi	Rana AbdoulWahed Yousef
Bushra Mohmmed Al-Faqih	Rasha Abdoul Wahab Saleh
Dr. Tareq Al-Serowry	Redha Ahmed Nassar
Eftekar Mohammed Abdullah	Rena Emam Ahmed
Ejlal Mohmmed Al-Shar'abi	Rodha AbdulAllah Shamsan
Ejlal Mohmmed Al-Shara'bee	Rodha Al-Hajj Mohammed
Eman Al-Shameree	Salwa Salemen Khwider
Eshraq Abdou Al-raqeeb Mohssen	Samerah Hossen Al-Hababi
Eshraq Ahmed Al-kedinee	Samerah Saleh Al-Jouzee
Fahed Ali Jouriba Sare'a	Samia Mohammed Al-Iryani
Fathia Abdou Allah Obaeed	Samia Mohammed Al-Kadasi
Feroz AbdulAllah Al-Karoth	Samira Ali Al-Jaily
Gamila Ali Kaid Mo'asar	Sarah Ahmed Moqbel
Gamila Kaid Al-Harazy	Sarah Hasen Al-Douminee
Ghaza AbdulRahaman Al-Doubae'e	Sawsan Abdullah Shamsan
Hakeem Mohammed Besher	Sawsan Mohammed Ali Kaied
Hamoodah Mahmood Basheer	Shokria Abduo Saleh
Hana Fowad Abdulallh Al-Areqee	Sowsan AbdulAllah Shamsan
Hasen Ahmed Al-Ja'fari	Ta'a Mohammed Bagah
Hayat Abdullah Al-Agbari	Welayah Ahmed Al-Homatee
Hend Ali Saleh Masshaka	Youmen AbdulRahamn Fatah

Team Leaders	**Governates**
Abdulhkeem Al-Doubai	Aden+ Abyan
Abdulwahab Saleh Al-Wasabi	Hadhramote +Al- Bedha
Ahmed Mohammed Muqble	Capital city + Almahweet
Ali Mohammed Kaid Al-Salami	Hodeaiedah
Bakeel Mohammed Hezam	Ibb
Fdhle Salah Al-Salami	Ibb
Fowad Moqubel Awon	Reviewer Lahj
Idris Al-Huraibi	Taiz
Kaid Ahmed Hasen Haider	Lahj
Kaid Ahmed Hasen haiedr	Lahj + Dhale
Khaled Juma'an	Hadhramote
Mahmood Al-Jaifi	Hajja
Mofadhel Al-Harazi	Amran + Sa'ada
Mohammed Sef Al-Barakani	Capital city + Mareb
Rajab Saeed Awadh	Mahra
Saeed Al-Hamadi	Hodeaiedah
Salah Ahmed Al-Hobishi	Reviewer Ibb
Saleh Nasr Mansour	Taiz
Tariq Al-Serowri	Sana'a + Al-Jouf
Waleed Mohammed Al-Sharjabi	Dhamar+ Reemah
Field Reviewers	**Governates**
Abdulkareem Al-Nahari	Capital city + Mareb
Abdullah Dahan Al-Nonee	Taiz
Abdulwasee Mohmmed Mahyoub	Amran + Sa'ada
Fares Abdullatef Al-Shibani	Taiz
Foad Moqble Aown	Lahj + Dhale
Hadhrami Hady Hadhrami	Hajja
Hani Al-Dowsari	Aden + Abyan
Jaml Mojahed Zaid	Sana'a + Aljouf
Mahmood Abdulwali Al-Dhobhani	Al-hodeadah
Mahmood Ahmed Salem	Hadhramote + Shabwa
Mahmood Mohammed Mahyoub	Dhamar + Al-Bidha
Mohammed Khalil	Dhamar + Reemah
Nadhmy Mohmmed Saeed	Al-hodeadah
Omer Mohammed Al-kowrhazy	Ibb
Rajab Saeed Awadh	Al-Maharh
Salah Ahmed Al-Hobishi	Ibb
Waheeb Al-Awadh	Capital city + Al-Mahweet
Census data updating team:	**Technical and supervising team:**
Fawzi Al-Mekhlafi	Dr. abdulkareem Rase'a (The Minister)
Zynab hasen Abdou	Dr. AbdoulMajeed Alkholidy The Deputy)
Khaled Jaedal	Dr. Abdullah Ali Al-Ashwal
Ebrahim Al-Showkani	Mr.Aboubaker Saleh Wahshan
Mohammed Abdoul Ghani	Dr. Adel Alsamei
Questionnaires collectors Team:	Mr.Fawzia Mohammed Othman
Saleh Ahmed Homeed	Abdullateef Hasen Al-shibani
Mohammed Al-Ashwal	Mahdi Al-Abassi
Bander Al-Faieq	Ameenah Alghorbani
Hylmi al-Maktari	

Appendix C. Estimates of Sampling Errors

The sample of respondents selected in the Yemen Multiple Indicator Cluster Survey is only one of the samples that could have been selected from the same population, using the same design and 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. The extent of variability is not known exactly, but can be estimated statistically from the survey results.

The following sampling error measures are presented in this appendix for each of the selected indicators:

- Standard error (*se*): Sampling errors are usually measured in terms of standard errors for particular indicators (means, proportions etc). Standard error is the square root of the variance. The Taylor linearization method is used for the estimation of standard errors.
- Coefficient of variation (*se*/*r*) is the ratio of the standard error to the value of the indicator
- Design effect (*deff*) is the ratio of the actual variance of an indicator, under the sampling method used in the survey, to the variance calculated under the assumption of simple random sampling. The square root of the design effect (*deft*) is used to show the efficiency of the sample design. A *deft* value of 1.0 indicates that the sample design is as efficient as a simple random sample, while a *deft* value above 1.0 indicates the increase in the standard error due to the use of a more complex sample design.
- Confidence limits are calculated to show the interval within which the true value for the population can be reasonably assumed to fall. For any given statistic calculated from the survey, the value of that statistics will fall within a range of plus or minus two times the standard error ($p + 2.se$ or $p - 2.se$) of the statistic in 95 percent of all possible samples of identical size and design.

For the calculation of sampling errors from MICS data, SPSS Version 14 Complex Samples module has been used. The results are shown in the tables that follow. In addition to the sampling error measures described above, the tables also include weighted and unweighted counts of denominators for each indicator.

Sampling errors are calculated for indicators of primary interest, for the national total, for the regions, and for urban and rural areas. Three of the selected indicators are based on households, 8 are based on household members, 13 are based on women, and 15 are based on children under 5. All indicators presented here are in the form of proportions. Table SE.1 shows the list of indicators for which sampling errors are calculated, including the base population (denominator) for each indicator. Tables SE.2 to SE.9 show the calculated sampling errors.

Table SE.1: Indicators selected for sampling error calculations

List of indicators selected for sampling error calculations, and base populations (denominators) for each indicator, Country, Year

MICS Indicator		Base Population
	HOUSEHOLDS	
74	Child discipline	Children aged 2-14 years selected
	HOUSEHOLD MEMBERS	
11	Use of improved drinking water sources	All household members
12	Use of improved sanitation facilities	All household members
55	Net primary school attendance rate	Children of primary school age
56	Net secondary school attendance rate	Children of secondary school age
59	Primary completion rate	Children of primary school completion age
71	Child labour	Children aged 5-14 years
75	Prevalence of orphans	Children aged under 18
	WOMEN	
4	Skilled attendant at delivery	Ever-married women aged 15-49 years with a live birth in the last 2 years
20	Antenatal care	Ever-married women aged 15-49 years with a live birth in the last 2 years
21	Contraceptive prevalence	Women aged 15-49 currently married/in union
60	Adult literacy	Ever-married Women aged 15-24 years
67	Marriage before age 18	Women aged 20-49 years
86	Attitude towards people with HIV/AIDS	Women aged 15-49 years
88	Women who have been tested for HIV	Women aged 15-49 years
89	Knowledge of mother- to-child transmission of HIV	Women aged 15-49 years
	UNDER-5s	
25	Tuberculosis immunization coverage	Children aged 12-23 months
26	Polio immunization coverage	Children aged 12-23 months
27	Immunization coverage for DPT	Children aged 12-23 months
28	Measles immunization coverage	Children aged 12-23 months
31	Fully immunized children	Children aged 12-23 months
-	Acute respiratory infection in last two weeks	Children under age 5
22	Antibiotic treatment of suspected pneumonia	Children under age 5 with suspected pneumonia in the last 2 weeks
-	Diarrhoea in last two weeks	Children under age 5
35	Received ORT or increased fluids and continued feeding	Children under age 5 with diarrhoea in the last 2 weeks
-	Fever in last two weeks	Children under age 5
46	Support for learning	Children under age 5
62	Birth registration	Children under age 5

Table SE.2: Sampling errors: Total sample

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Yemen, 2006

	Table	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deft*)	Weighted count	Unweighted count	Confidence limits *r - 2se*	Confidence limits *r + 2se*
HOUSEHOLDS										
Child discipline	CP.4	0.940	0.005	0.005	1.217	1.103	2878	2872	0.931	0.950
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.589	0.026	0.045	10.296	3.209	26088	3586	0.536	0.641
Use of improved sanitation facilities	EN.5	0.517	0.022	0.042	6.711	2.591	26088	3586	0.474	0.560
Net primary school attendance rate (ISCED)	ED.3	0.697	0.015	0.021	4.776	2.185	4673	4693	0.667	0.726
Net secondary school attendance rate (ISCED)	ED.4	0.379	0.014	0.037	3.651	1.911	4235	4271	0.350	0.407
Primary completion rate (ISCED)	ED.6	0.302	0.022	0.074	1.924	1.387	795	814	0.258	0.347
Net primary school attendance rate (Basic Ed.)	ED.3A	0.685	0.013	0.020	5.775	2.403	6816	6845	0.658	0.712
Net secondary school attendance rate (Basic Ed.)	ED.4A	0.239	0.012	0.051	1.757	1.326	2092	2119	0.214	0.263
Primary completion rate (Basic Ed.)	ED.6A	0.184	0.019	0.101	1.751	1.323	763	766	0.147	0.221
Child labour	CP.2	0.227	0.010	0.046	4.698	2.168	7618	7656	0.207	0.248
Prevalence of orphans	HA.10	0.052	0.004	0.069	3.567	1.889	13627	13637	0.044	0.059
WOMEN										
Skilled attendant at delivery	RH.5	0.357	0.017	0.048	1.989	1.410	1610	1585	0.323	0.391
Antenatal care	RH.3	0.470	0.018	0.038	2.033	1.426	1610	1585	0.434	0.506
Contraceptive prevalence	RH.1	0.277	0.011	0.040	2.119	1.456	3514	3519	0.255	0.298
Adult literacy	ED.8	0.352	0.020	0.057	1.782	1.335	1014	997	0.311	0.392
Marriage before age 18	CP.5	0.641	0.011	0.017	1.865	1.366	3427	3439	0.618	0.663
Attitude towards people with HIV/AIDS	HA.5	0.052	0.005	0.098	1.196	1.094	2268	2265	0.042	0.063
Women who have been tested for HIV	HA.6	0.019	0.003	0.140	1.430	1.196	3742	3742	0.014	0.025
Knowledge of mother- to-child transmission of HIV	HA.4	0.324	0.013	0.039	2.710	1.646	3742	3742	0.299	0.349
UNDER-5s										
Tuberculosis immunization coverage	CH.2	0.690	0.023	0.033	1.710	1.308	715	709	0.644	0.735
Polio immunization coverage	CH.2	0.630	0.022	0.035	1.497	1.223	714	707	0.586	0.675
Immunization coverage for DPT	CH.2	0.610	0.027	0.045	2.155	1.468	698	691	0.555	0.664
Measles immunization coverage	CH.2	0.651	0.023	0.035	1.656	1.287	712	706	0.605	0.697
Fully immunized children	CH.2	0.375	0.024	0.065	1.768	1.330	708	702	0.326	0.424
Acute respiratory infection in last two weeks	CH.6	0.129	0.007	0.055	1.694	1.302	3783	3783	0.115	0.143
Antibiotic treatment of suspected pneumonia	CH.6	0.379	0.026	0.068	1.382	1.176	488	497	0.327	0.430
Diarrhoea in last two weeks	CH.4	0.335	0.010	0.029	1.607	1.268	3783	3783	0.316	0.355
Received ORT or increased fluids and continued feeding	CH.5	0.476	0.015	0.032	1.239	1.113	1269	1301	0.445	0.507
Support for learning	CD.1	0.255	0.013	0.053	3.570	1.890	3783	3783	0.228	0.282
Birth registration	CP.1	0.223	0.017	0.074	5.993	2.448	3783	3783	0.190	0.256

Table SE.2: Sampling errors: Urban sample

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Yemen, 2006

	Table	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deft*)	Weighted count	Unweighted count	Confidence limits	
									r - 2se	*r + 2se*
HOUSEHOLDS										
Child discipline	CP.4	0.951	0.007	0.007	0.872	0.934	893	828	0.938	0.965
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.738	0.033	0.044	5.789	2.406	8022	1055	0.673	0.803
Use of improved sanitation facilities	EN.5	0.923	0.026	0.028	9.917	3.149	8022	1055	0.871	0.975
Net primary school attendance rate (ISCED)	ED.3	0.833	0.017	0.021	2.614	1.617	1316	1209	0.798	0.867
Net secondary school attendance rate (ISCED)	ED.4	0.557	0.024	0.044	2.921	1.709	1318	1215	0.508	0.605
Primary completion rate (ISCED)	ED.6	0.425	0.037	0.086	1.123	1.060	224	205	0.351	0.498
Net primary school attendance rate (Basic Ed.)	ED.3A	0.828	0.016	0.020	3.303	1.817	1947	1792	0.796	0.860
Net secondary school attendance rate (Basic Ed.)	ED.4A	0.376	0.025	0.068	1.736	1.318	688	632	0.325	0.427
Primary completion rate (Basic Ed.)	ED.6A	0.316	0.037	0.118	1.269	1.127	214	200	0.241	0.390
Child labour	CP.2	0.081	0.008	0.098	1.677	1.295	2169	1995	0.065	0.097
Prevalence of orphans	HA.10	0.051	0.007	0.137	3.563	1.888	3863	3560	0.037	0.065
WOMEN										
Skilled attendant at delivery	RH.5	0.617	0.021	0.034	0.742	0.862	429	397	0.575	0.659
Antenatal care	RH.3	0.682	0.025	0.037	1.169	1.081	429	397	0.631	0.732
Contraceptive prevalence	RH.1	0.423	0.019	0.044	1.430	1.196	1088	1019	0.386	0.460
Adult literacy	ED.8	0.590	0.036	0.060	1.363	1.167	275	260	0.519	0.662
Marriage before age 18	CP.5	0.602	0.017	0.028	1.189	1.091	1090	1021	0.568	0.635
Attitude towards people with HIV/AIDS	HA.5	0.057	0.008	0.134	1.011	1.006	989	927	0.042	0.073
Women who have been tested for HIV	HA.6	0.034	0.006	0.163	1.026	1.013	1170	1095	0.023	0.045
Knowledge of mother- to-child transmission of HIV	HA.4	0.454	0.018	0.039	1.377	1.173	1170	1095	0.419	0.489
UNDER-5s										
Tuberculosis immunization coverage	CH.2	0.896	0.016	0.018	0.546	0.739	208	191	0.864	0.929
Polio immunization coverage	CH.2	0.729	0.031	0.042	0.893	0.945	206	190	0.667	0.790
Immunization coverage for DPT	CH.2	0.795	0.032	0.041	1.199	1.095	206	189	0.731	0.860
Measles immunization coverage	CH.2	0.803	0.026	0.033	0.845	0.919	209	192	0.751	0.856
Fully immunized children	CH.2	0.577	0.038	0.065	1.087	1.043	205	188	0.502	0.652
Acute respiratory infection in last two weeks	CH.6	0.116	0.014	0.123	1.881	1.372	1021	956	0.087	0.144
Antibiotic treatment of suspected pneumonia	CH.6	0.486	0.050	0.103	1.109	1.053	118	111	0.386	0.587
Diarrhoea in last two weeks	CH.4	0.292	0.016	0.056	1.215	1.102	1021	956	0.259	0.324
Received ORT or increased fluids and continued feeding	CH.5	0.499	0.029	0.058	0.924	0.961	298	280	0.441	0.556
Support for learning	CD.1	0.385	0.029	0.077	3.498	1.870	1021	956	0.326	0.444
Birth registration	CP.1	0.382	0.023	0.061	2.213	1.488	1021	956	0.335	0.429

Table SE.2: Sampling errors:
Rural sample

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft) and confidence intervals for selected indicators, Yemen, 2006

	Table	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deft*)	Weighted count	Unweighted count	Confidence limits *r - 2se*	Confidence limits *r + 2se*
HOUSEHOLDS										
Child discipline	CP.4	0.936	0.006	0.007	1.344	1.159	1984	2044	0.923	0.948
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	EN.1	0.522	0.035	0.067	12.335	3.512	18066	2531	0.452	0.592
Use of improved sanitation facilities	EN.5	0.336	0.026	0.077	7.522	2.743	18066	2531	0.285	0.388
Net primary school attendance rate (ISCED)	ED.3	0.643	0.019	0.029	5.448	2.334	3357	3484	0.605	0.681
Net secondary school attendance rate (ISCED)	ED.4	0.298	0.016	0.055	3.969	1.992	2917	3056	0.265	0.331
Primary completion rate (ISCED)	ED.6	0.254	0.027	0.107	2.395	1.548	571	609	0.200	0.309
Net primary school attendance rate (Basic Ed.)	ED.3A	0.628	0.017	0.027	6.413	2.532	4869	5053	0.594	0.662
Net secondary school attendance rate (Basic Ed.)	ED.4A	0.171	0.013	0.077	1.805	1.344	1405	1487	0.145	0.198
Primary completion rate (Basic Ed.)	ED.6A	0.133	0.021	0.155	2.091	1.446	550	566	0.092	0.174
Child labour	CP.2	0.286	0.013	0.047	4.957	2.227	5449	5661	0.259	0.313
Prevalence of orphans	HA.10	0.052	0.004	0.080	3.543	1.882	9764	10077	0.043	0.060
WOMEN										
Skilled attendant at delivery	RH.5	0.263	0.020	0.077	2.538	1.593	1181	1188	0.222	0.304
Antenatal care	RH.3	0.393	0.022	0.056	2.446	1.564	1181	1188	0.349	0.438
Adult literacy	ED.8	0.211	0.013	0.060	2.391	1.546	2426	2500	0.186	0.236
Marriage before age 18	CP.5	0.263	0.023	0.088	2.025	1.423	739	737	0.217	0.309
Comprehensive knowledge about HIV prevention among young people	HA.3	0.659	0.014	0.021	2.112	1.453	2337	2418	0.631	0.687
Attitude towards people with HIV/AIDS	HA.5	0.049	0.007	0.139	1.324	1.151	1279	1338	0.035	0.062
Women who have been tested for HIV	HA.6	0.013	0.003	0.226	1.714	1.309	2572	2647	0.007	0.018
Knowledge of mother- to-child transmission of HIV	HA.4	0.265	0.016	0.059	3.337	1.827	2572	2647	0.234	0.296
UNDER-5s										
Tuberculosis immunization coverage	CH.2	0.605	0.032	0.052	2.169	1.473	508	518	0.542	0.669
Polio immunization coverage	CH.2	0.591	0.029	0.049	1.758	1.326	507	517	0.533	0.648
Immunization coverage for DPT	CH.2	0.532	0.037	0.069	2.733	1.653	492	502	0.458	0.606
Measles immunization coverage	CH.2	0.588	0.031	0.052	1.982	1.408	503	514	0.527	0.649
Fully immunized children	CH.2	0.293	0.030	0.102	2.216	1.489	503	514	0.233	0.353
Acute respiratory infection in last two weeks	CH.6	0.134	0.008	0.061	1.653	1.286	2762	2827	0.118	0.151
Antibiotic treatment of suspected pneumonia	CH.6	0.344	0.029	0.084	1.412	1.188	370	386	0.287	0.402
Diarrhoea in last two weeks	CH.4	0.352	0.012	0.034	1.767	1.329	2762	2827	0.328	0.375
Received ORT or increased fluids and continued feeding	CH.5	0.469	0.018	0.039	1.340	1.158	971	1021	0.433	0.505
Support for learning	CD.1	0.207	0.015	0.074	4.021	2.005	2762	2827	0.177	0.238
Birth registration	CP.1	0.164	0.022	0.133	9.767	3.125	2762	2827	0.120	0.208

Appendix D. Data Quality Tables

Table DQ.1: Age distribution of household population

Single-year age distribution of household population by sex (weighted), Yemen, 2006

	Males		Females			Males		Females	
	Number	Percent	Number	Percent		Number	Percent	Number	Percent
0	439	3.4	436	3.3	43	59	0.5	88	0.7
1	371	2.9	369	2.8	44	44	0.3	61	0.5
2	380	2.9	406	3.1	45	159	1.2	170	1.3
3	421	3.2	378	2.9	46	49	0.4	73	0.6
4	414	3.2	362	2.8	47	64	0.5	60	0.5
5	369	2.9	357	2.7	48	65	0.5	66	0.5
6	438	3.4	402	3.1	49	41	0.3	56	0.4
7	438	3.4	411	3.1	50	153	1.2	128	1.0
8	432	3.3	440	3.4	51	40	0.3	55	0.4
9	328	2.5	324	2.5	52	57	0.4	89	0.7
10	416	3.2	476	3.6	53	65	0.5	73	0.6
11	328	2.5	285	2.2	54	49	0.4	63	0.5
12	409	3.2	385	2.9	55	107	0.8	129	1.0
13	379	2.9	329	2.5	56	45	0.4	47	0.4
14	336	2.6	335	2.6	57	27	0.2	27	0.2
15	360	2.8	404	3.1	58	27	0.2	33	0.3
16	334	2.6	380	2.9	59	25	0.2	17	0.1
17	276	2.1	280	2.1	60	165	1.3	110	0.8
18	409	3.2	413	3.1	61	23	0.2	18	0.1
19	252	1.9	273	2.1	62	43	0.3	29	0.2
20	381	2.9	378	2.9	63	35	0.3	14	0.1
21	174	1.3	220	1.7	64	19	0.1	11	0.1
22	229	1.8	248	1.9	65	66	0.5	55	0.4
23	230	1.8	226	1.7	66	18	0.1	22	0.2
24	195	1.5	227	1.7	67	8	0.1	6	0.0
25	265	2.0	329	2.5	68	10	0.1	11	0.1
26	175	1.4	208	1.6	69	2	0.0	7	0.1
27	166	1.3	190	1.4	70	101	0.8	59	0.5
28	173	1.3	191	1.5	71	14	0.1	10	0.1
29	101	0.8	163	1.2	72	26	0.2	7	0.1
30	248	1.9	228	1.7	73	21	0.2	10	0.1
31	96	0.7	109	0.8	74	6	0.0	1	0.0
32	129	1.0	131	1.0	75	41	0.3	35	0.3
33	98	0.8	107	0.8	76	5	0.0	5	0.0
34	66	0.5	79	0.6	77	3	0.0	3	0.0
35	192	1.5	212	1.6	78	8	0.1	6	0.0
36	97	0.8	95	0.7	79	4	0.0	3	0.0
37	64	0.5	76	0.6	80+	134	1.0	109	0.8
38	92	0.7	128	1.0	DK/Missing	10	0.1	14	0.1
39	47	0.4	72	0.5					
40	207	1.6	132	1.0	Total	12951	100	13137	100
41	65	0.5	79	0.6					
42	98	0.8	85	0.6					

Table DQ.2: Age distribution of eligible and interviewed women

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 group, Yemen, 2006

	Household population of women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed
	Number	Number	Percent	
Age				
15-19	339	317	8.4	93.7
20-24	742	704	18.7	95.0
25-29	859	820	21.7	95.5
30-34	589	559	14.8	94.8
35-39	563	541	14.3	96.1
40-44	434	424	11.2	97.7
45-49	419	409	10.8	97.7
50-54	398	.	.	.
15-49	3944	3775	100.0	95.7

Table DQ.3: Age distribution of eligible and interviewed under-5s

Household population of children age 0-4, children whose mothers/caretakers were interviewed, and percentage of under-5 children whose mothers/caretakers were interviewed (weighted), by five-year age group, Yemen, 2006

	Household population of children age 0-7	Interviewed children age 0-4		Percentage of eligible children interviewed
	Number	Number	Percent	
Age				
0	876	852	22.2	97.4
1	739	710	18.5	96.0
2	786	751	19.6	95.6
3	799	774	20.2	96.9
4	775	743	19.4	95.8
5	726	na	na	na
6	840	na	na	na
7	850	na	na	na
0-4	3975	3831	100	96.4

Table DQ.4: Age distribution of under-5 children

Age distribution of under-5 children by 3-month groups (weighted), Yemen, 2006

	Males		Females		Total	
	Number	Percent	Number	Percent	Number	Percent
Age in months						
0-2	123	6.4	96	5.2	219	5.8
3-5	103	5.4	99	5.3	202	5.3
6-8	97	5.0	129	7.0	226	6.0
9-11	104	5.4	102	5.5	205	5.4
12-14	105	5.4	136	7.3	241	6.4
15-17	99	5.2	84	4.5	183	4.8
18-20	96	5.0	88	4.8	184	4.9
21-23	61	3.2	52	2.8	113	3.0
24-26	124	6.4	150	8.1	274	7.2
27-29	83	4.3	82	4.4	164	4.3
30-32	89	4.6	76	4.1	165	4.4
33-35	69	3.6	68	3.7	137	3.6
36-38	127	6.6	116	6.2	243	6.4
39-41	102	5.3	115	6.2	217	5.7
42-44	112	5.8	82	4.4	194	5.1
45-47	56	2.9	64	3.4	120	3.2
48-50	125	6.5	112	6.0	236	6.2
51-53	105	5.4	88	4.7	193	5.1
54-56	92	4.8	65	3.5	157	4.1
57-59	53	2.7	53	2.9	106	2.8
Total	1925	100	1858	100	3783	100

Table DQ.5: Heaping on ages and periods

Age and period ratios at boundaries of eligibility by type of information collected (weighted), Yemen, 2006

	Age and period ratios*			Eligibility boundary	
	Males	Females	Total	(lower-upper)	Module or questionnaire
Age in household questionnaire					
1	0.93	0.91	0.92		
2	0.97	1.06	1.01	Lower	Child discipline and child disability
3	1.04	0.99	1.02		
4	1.03	0.99	1.01	Upper	Under-5 questionnaire
5	0.91	0.95	0.93	Lower	Child labour and education
6	1.05	1.03	1.04		
.	.	.	.		
8	1.08	1.12	1.10		
9	0.84	0.78	0.81	Upper	Child disability
10	1.17	1.32	1.24		
.	.	.	.		
13	1.01	0.94	0.98		
14	0.94	0.94	0.94	Upper	Child labour and child discipline
15	1.05	1.08	1.07	Lower	Women's questionnaire
16	1.03	1.07	1.05		
17	0.81	0.78	0.80	Upper	Orphaned and vulnerable children
18	0.88	0.87	0.88		
.	.	.	.		
23	1.06	0.97	1.01		
24	0.85	0.87	0.86	Upper	Education
25	1.25	1.29	1.27		
.	.	.	.		
48	1.15	1.09	1.12		
49	0.47	0.68	0.57	Upper	Women's questionnaire
50	1.96	1.60	1.78		

Table DQ.6: Presence of mother in the household and the person interviewed for the under-5 questionnaire

Distribution of children under five by whether the mother lives in the same household, and the person interviewed for the under-5 questionnaire (weighted), Yemen, 2006

	Mother in the household				Mother not in the household					
	Mother interviewed	Father interviewed	Other adult female interviewed	Other adult male interviewed	Child (<15) interviewed	Father interviewed	Other adult female interviewed	Other adult male interviewed	Total	Number of children aged 0-4 years
Age										
0	97.8	0.0	0.8	0.0	0.2	0.0	1.1	0.0	100	876
1	98.2	0.3	0.6	0.0	0.0	0.0	0.9	0.0	100	739
2	97.1	0.0	0.9	0.0	0.0	0.1	1.8	0.1	100	786
3	97.4	0.1	0.6	0.1	0.1	0.1	1.5	0.0	100	799
4	97.9	0.1	0.2	0.0	0.2	0.1	1.5	0.1	100	775
Total	97.7	0.1	0.6	0.0	0.1	0.1	1.4	0.0	100	3975

Table DQ.7: School attendance by single age

Distribution of household population age 5-24 by educational level and grade attended in the current year (weighted), Yemen, 2006

		Basic Education									Diploma before secondary school									
	Pre-school	Grade 1	Grade 2	Grade 3	Grade 4	Grade 5	Grade 6	Grade 7	Grade 8	Grade 9	Grade1	Grade 2	Secondary school	Diploma after secondary school	Bachelor	Higher	Non Standard Curriculum	Not attending	Total	Number
Age																				
5	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	95	100	726
6	1	14	2	1	0	0	0	0	0	0	0	0	0	0	0	0	0	82	100	840
7	1	24	16	2	1	0	0	0	0	0	0	0	0	0	0	0	0	56	100	850
8	0	22	26	12	4	0	0	0	0	0	0	0	0	0	0	0	0	35	100	872
9	0	12	26	24	12	1	1	0	0	0	0	0	0	0	0	0	0	23	100	652
10	0	7	15	21	21	10	3	0	0	0	0	0	0	0	0	0	0	22	100	892
11	0	4	10	16	22	20	8	2	0	0	0	0	0	0	0	0	0	17	100	612
12	0	2	4	10	17	17	21	7	1	1	0	0	0	0	0	0	0	19	100	795
13	0	1	2	3	10	12	19	17	10	3	0	0	0	0	0	0	1	23	100	708
14	0	1	1	3	4	6	13	15	14	6	0	0	1	0	0	0	0	34	100	671
15	0	1	1	1	2	5	6	9	11	14	0	0	5	0	0	0	0	43	100	763
16	0	1	1	0	1	1	3	6	7	14	0	0	16	0	1	0	0	48	100	714
17	0	1	0	1	1	1	3	1	6	9	0	0	22	0	0	0	0	53	100	556
18	0	1	1	1	0	1	1	1	2	6	0	0	25	0	0	0	0	59	100	822
19	0	0	1	0	0	0	0	1	3	5	0	0	17	0	2	0	0	70	100	525
20	0	0	0	0	0	0	0	0	1	2	0	0	12	1	4	0	1	79	100	759
21	0	0	0	1	0	0	0	0	0	0	0	0	9	2	6	0	0	80	100	393
22	0	0	0	0	0	0	0	0	1	1	0	0	8	2	6	0	0	81	100	477
23	0	0	0	0	0	0	0	0	0	0	0	0	5	1	7	0	0	84	100	456
24	0	0	0	0	1	0	0	0	0	1	0	0	2	1	5	0	1	89	100	422

Table DQ.8: Sex ratio at birth among children ever born and living

Sex ratio at birth among children ever born, children living, and deceased children, by age of women (weighted), Yemen, 2006

	Children Ever Born			Children Living			Children deceased			
	Number of sons ever born	Number of daughters ever born	Sex ratio	Number of sons living	Number of daughters living	Sex ratio	Number of deceased sons	Number of deceased daughters	Sex ratio	Number of women
Age										
15-19	88	118	0.75	83	112	0.74	5	6	0.89	318
20-24	686	624	1.10	613	578	1.06	74	45	1.63	697
25-29	1466	1315	1.11	1333	1207	1.10	133	108	1.24	815
30-34	1405	1404	1.00	1252	1259	0.99	153	145	1.05	553
35-39	1775	1710	1.04	1568	1537	1.02	207	173	1.19	536
40-44	1624	1644	0.99	1403	1422	0.99	221	222	0.99	421
45-49	1735	1563	1.11	1482	1356	1.09	253	208	1.22	402
Total	8780	8379	1.05	7734	7472	1.04	1046	907	1.15	3742

Appendix E. MICS Indicators: Numerators and Denominators

INDICATOR		NUMERATOR	DENOMINATOR
1	Under-five mortality rate	Probability of dying by exact age 5 years	
2	Infant mortality rate	Probability of dying by exact age 1 year	
4	Skilled attendant at delivery	Number of women aged 15-49 years with a birth in the 2 years preceding the survey that were attended during childbirth by skilled health personnel	Total number of women surveyed aged 15-49 years with a birth in the 2 years preceding the survey
5	Institutional deliveries	Number of women aged 15-49 years with a birth in the 2 years preceding the survey that delivered in a health facility	Total number of women surveyed aged 15-49 years with a birth in 2 years preceding the survey
10	Infants weighed at birth	Number of last live births in the 2 years preceding the survey that were weighed at birth	Total number of last live births in the 2 years preceding the survey
11	Use of improved drinking water sources	Number of household members living in households using improved sources of drinking water	Total number of household members in households surveyed
12	Use of improved sanitation facilities	Number of household members using improved sanitation facilities	Total number of household members in households surveyed
13	Water treatment	Number of household members using water that has been treated	Total number of household members in households surveyed
20	Antenatal care	Number of women aged 15-49 years that were attended at least once during pregnancy in the 2 years preceding the survey by skilled health personnel	Total number of women surveyed aged 15-49 years with a birth in the 2 years preceding the survey
21	Contraceptive prevalence	Number of women currently married or in union aged 15-49 years that are using (or whose partner is using) a contraceptive method (either modern or traditional)	Total number of women aged 15-49 years that are currently married or in union
22	Antibiotic treatment of suspected pneumonia	Number of children aged 0-59 months with suspected pneumonia in the previous 2 weeks receiving antibiotics	Total number of children aged 0-59 months with suspected pneumonia in the previous 2 weeks
24	Solid fuels	Number of residents in households that use solid fuels (wood, charcoal, crop residues and dung) as the primary source of domestic energy to cook	Total number of residents in households surveyed
25	Tuberculosis immunization coverage	Number of children aged 12-23 months receiving BCG vaccine before their first birthday	Total number of children aged 12-23 months surveyed
26	Polio immunization coverage	Number of children aged 12-23 months receiving OPV3 vaccine before their first birthday	Total number of children aged 12-23 months surveyed
27	Immunization coverage for diphtheria, pertussis and tetanus (DPT)	Number of children aged 12-23 months receiving DPT3 vaccine before their first birthday	Total number of children aged 12-23 months surveyed

INDICATOR		NUMERATOR	DENOMINATOR
28	Measles immunization coverage	Number of children aged 12-23 months receiving measles vaccine before their first birthday	Total number of children aged 12-23 months surveyed
29	Hepatitis B immunization coverage	Number of children aged 12-23 months immunized against hepatitis before their first birthday	Total number of children aged 12-23 months surveyed
30	Yellow fever immunization coverage	Number of children aged 12-23 months immunized against yellow fever before their first birthday	Total number of children aged 12-23 months surveyed
31	Fully immunized children	Number of children aged 12-23 months receiving DPT1-3, OPV-1-3, BCG and measles vaccines before their first birthday	Total number of children aged 12-23 months surveyed
32	Neonatal tetanus protection	Number of mothers with live births in the previous year that were given at least two doses of tetanus toxoid (TT) vaccine within the appropriate interval prior to giving birth	Total number of women surveyed aged 15-49 years with a birth in the year preceding the survey
33	Use of oral rehydration therapy (ORT)	Number of children aged 0-59 months with diarrhoea in the previous 2 weeks that received oral rehydration salts and/or an appropriate household solution	Total number of children aged 0-59 months with diarrhoea in the previous 2 weeks
34	Home management of diarrhoea	Number of children aged 0-59 months with diarrhoea in the previous 2 weeks that received more fluids AND continued eating somewhat less, the same or more food	Total number of children aged 0-59 months with diarrhoea in the previous 2 weeks
35	Received ORT or increased fluids and continued feeding	Number of children aged 0-59 months with diarrhoea that received ORT (oral rehydration salts or an appropriate household solution) or received more fluids AND continued eating somewhat less, the same or more food	Total number of children aged 0-59 months with diarrhoea in the previous 2 weeks
43	Vitamin A supplementation (post-partum mothers)	Number of women with a live birth in the 2 years preceding the survey that received a high-dose vitamin A supplement within 8 weeks after birth	Total number of women that had a live birth in the 2 years preceding the survey
44	Content of antenatal care	Number of women with a live birth in the 2 years preceding the survey that received antenatal care during the last pregnancy	Total number of women with a live birth in the 2 years preceding the survey
45	Timely initiation of breastfeeding	Number of women with a live birth in the 2 years preceding the survey that put the newborn infant to the breast within 1 hour of birth	Total number of women with a live birth in the 2 years preceding the survey
46	Support for learning	Number of children aged 0-59 months living in households in which an adult has engaged in four or more activities to promote learning and school readiness in the past 3 days	Total number of children aged 0-59 months surveyed
47	Father's support for learning	Number of children aged 0-59 months whose father has engaged in one or more activities to promote learning and school readiness in the past 3 days	Total number of children aged 0-59 months
48	Support for learning: children's books	Number of households with three or more children's books	Total number of households surveyed
49	Support for learning: non-children's books	Number of households with three or more non-children's books	Total number of households surveyed
50	Support for learning: materials for play	Number of households with three or more materials intended for play	Total number of households surveyed
51	Non-adult care	Number of children aged 0-59 months left alone or in the care of another child younger than 10 years of age in the past week	Total number of children aged 0-59 months surveyed
52	Pre-school attendance	Number of children aged 36-59 months that attend some form of early childhood education programme	Total number of children aged 36-59 months surveyed

INDICATOR		NUMERATOR	DENOMINATOR
54	Net intake rate in primary education	Number of children of school-entry age that are currently attending first grade	Total number of children of primary- school entry age surveyed
55	Net primary school attendance rate	Number of children of primary-school age currently attending primary or secondary school	Total number of children of primary- school age surveyed
56	Net secondary school attendance rate	Number of children of secondary-school age currently attending secondary school or higher	Total number of children of secondary-school age surveyed
57	Children reaching grade five	Proportion of children entering the first grade of primary school that eventually reach grade five	
58	Transition rate to secondary school	Number of children that were in the last grade of primary school during the previous school year that attend secondary school	Total number of children that were in the last grade of primary school during the previous school year surveyed
59	Primary completion rate	Number of children (of any age) attending the last grade of primary school (excluding repeaters)	Total number of children of primary school completion age (age appropriate to final grade of primary school) surveyed
60*	Adult literacy rate	Number of women aged 15-24 years that are able to read a short simple statement about everyday life	Total number of women aged 15-24 years surveyed
61	Gender parity index	Proportion of girls in primary and secondary education	Proportion of boys in primary and secondary education
62	Birth registration	Number of children aged 0-59 months whose births are reported registered	Total number of children aged 0-59 months surveyed
67	Marriage before age 15 and age 18	Number of women that were first married or in union by the exact age of 15 and the exact age of 18, by age groups	Total number of women aged 15-49 years and 20-49 years surveyed, by age groups
68	Young women aged 15-19 years currently married or in union	Number of women aged 15-19 years currently married or in union	Total number of women aged 15-19 years surveyed
69	Spousal age difference	Number of women married/in union aged 15-19 years and 20-24 years with a difference in age of 10 or more years between them and their current spouse	Total number of women aged 15-19 and 20-24 years surveyed that are currently married or in union
71	Child labour	Number of children aged 5-14 years that are involved in child labour	Total number of children aged 5-14 years surveyed
72	Labourer students	Number of children aged 5-14 years involved in child labour activities that attend school	Total number of children aged 5-14 years involved in child labour activities
73	Student labourers	Number of children aged 5-14 years attending school that are involved in child labour activities	Total number of children aged 5-14 years attending school
74	Child discipline	Number of children aged 2-14 years that (1) experience only non-violent aggression, (2) experience psychological aggression as punishment, (3) experience minor physical punishment, (4) experience severe physical punishment	Total number of children aged 2-14 years selected and surveyed
75	Prevalence of orphans	Number of children under age 18 with at least one dead parent	Total number of children under age 18 surveyed

INDICATOR		NUMERATOR	DENOMINATOR
78	Children's living arrangements	Number of children aged 0-17 years not living with a biological parent	Total number of children aged 0-17 years surveyed
86	Attitude towards people with HIV/AIDS	Number of women expressing acceptance on all four questions about people with HIV or AIDS	Total number of women surveyed
87*	Women who know where to be tested for HIV	Number of women that state knowledge of a place to be tested	Total number of women surveyed
88*	Women who have been tested for HIV	Number of women that report being tested for HIV	Total number of women surveyed
89*	Knowledge of mother-to-child transmission of HIV	Number of women that correctly identify all three means of vertical transmission	Total number of women surveyed
90*	Counselling coverage for the prevention of mother-to-child transmission of HIV	Number of women that gave birth in the previous 24 months and received antenatal care reporting that they received counselling on HIV/AIDS during this care	Total number of women that gave birth in the previous 24 months surveyed
91*	Testing coverage for the prevention of mother-to-child transmission of HIV	Number of women that gave birth in the previous 24 months and received antenatal care reporting that they received the results of an HIV test during this care	Total number of women that gave birth in the previous 24 months surveyed
98	Unmet need for family planning	Number of women that are currently married or in union that are fecund and want to space their births or limit the number of children they have and that are not currently using contraception	Total number of women interviewed that are currently married or in union
99	Demand satisfied for family planning	Number of women currently married or in union that are currently using contraception	Number of women currently married or in union that have an unmet need for contraception or that are currently using contraception
101	Child disability	Number of children aged 2-9 years with at least one of nine reported disabilities: (1) delay in sitting, standing or walking, (2) difficulty seeing, either in the daytime or at night, (3) appears to have difficulty hearing, (4) difficulty in understanding instructions, (5) difficulty walking or moving arms or has weakness or stiffness of limbs, (6) has fits, becomes rigid, loses consciousness, (7) does not learn to do things like other children his/her age, (8) cannot speak or cannot be understood in words, (9) appears mentally backward, dull or slow	Total number of children aged 2-9 surveyed

* Applies to ever-married women only.

Appendix F. Questionnaires

HOUSEHOLD QUESTIONNAIRE

WE ARE FROM MINISTRY OF PUBLIC HEALTH AND POPULATION. WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION. I WOULD LIKE TO TALK TO YOU ABOUT THIS. THE INTERVIEW WILL TAKE ABOUT 20 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE IDENTIFIED. DURING THIS TIME I WOULD LIKE TO SPEAK WITH THE HOUSEHOLD HEAD AND ALL MOTHERS OR OTHERS WHO TAKE CARE OF CHILDREN IN THE HOUSEHOLD.

MAY I START NOW? *If permission is given, begin the interview.*

HOUSEHOLD INFORMATION PANEL	**HH**
HH1. Cluster number: ___ ___ ___	HH2. Household number: ___ ___
HH3. Interviewer name and number: Name_____ ___ ___	HH4. Supervisor name and number: Name_____ ___ ___
HH5. Day/Month/Year of interview: ___ ___ / ___ ___ / ___ ___ ___ ___	
HH6. Area: Urban.....1 Rural.....2	HH7. Region: *Region 1 Governorate* .....--- --- *Region 2* District ..... *Region 3* Auzla ..... *Region 4* Village / city ..... Census Building No .....
HH8. Name of head of household: _____	
After all questionnaires for the household have been completed, fill in the following information:	
HH9. Result of HH interview: Completed.....1 Not at home.....2 Refused.....3 HH not found/destroyed.....4 Other (*specify*) _____ 6	HH10. Respondent to HH questionnaire: Name:_____ Line No: ___ ___ HH11. Total number of household members: ___ ___
HH12. No.of women eligible for interview: ___ ___	HH13. No.of women questionnaires completed: ___ ___
HH14. No.of children under age 5: ___ ___	HH15. No.of under-5 questionnaires completed: ___ ___
Interviewer/supervisor notes: *Use this space to record notes about the interview with this household, such as call-back times, incomplete individual interview forms, number of attempts to re-visit, etc.*	
HH16. Data entry clerk: ___ ___	

HOUSEHOLD LISTING FORM **HL**

FIRST, PLEASE TELL ME THE NAME OF EACH PERSON WHO USUALLY LIVES HERE, STARTING WITH THE HEAD OF THE HOUSEHOLD.
List the head of the household in line 01. List all household members (HL2), their relationship to the household head (HL3), and their sex (HL4).
Then ask: ARE THERE ANY OTHERS WHO LIVE HERE, EVEN IF THEY ARE NOT AT HOME NOW? (THESE MAY INCLUDE CHILDREN IN SCHOOL OR AT WORK). *If yes, complete listing.*
Then, ask questions starting with HL5 for each person at a time. Add a continuation sheet if there are more than 16 household members. Tick here if continuation sheet used ☐

For all household members						*Eligible for:*			*For children **age 0-17 years** ask HL9-HL12*			
						WOMEN'S INTERVIEW	CHILD LABOUR MODULE	UNDER-5 INTERVIEW				
HL1. *Line no.*	HL2. *Name*	HL3. WHAT IS THE RELATION-SHIP OF (*name*) TO THE HEAD OF THE HOUSE-HOLD?	HL4. IS (*name*) MALE OR FEMALE? 1 MALE 2 FEM.	HL5. HOW OLD IS (*name*)? HOW OLD WAS (*name*) ON HIS/HER LAST BIRTHDAY? *Record in completed years* 00=under 1 year 98=DK*	HL5.A FOR HOUSEHOLD MEMBERS 15+ YEARS WHAT IS (NAME'S) MARITAL STATUS? 1 SINGLE 2 MARRIED 3 DIVORCED 4 WIDOWED	HL6. *Circle Line no. if woman is age 15-49 and ever-married*	HL7. *For each child **age 5-14**:* WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD? *Record Line no. of mother/ caretaker*	HL8. *For each child **under 5**:* WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD? *Record Line no. of mother/ caretaker*	HL9. IS (*name's*) NATURAL MOTHER ALIVE? 1 YES 2 NO⇨ HL11 8 DK⇨ HL11	HL10. *If alive*: DOES (*name's*) NATURAL MOTHER LIVE IN THIS HOUSEHOLD? *Record Line no. of mother or 00 for 'no'*	HL11. IS (*name's*) FATHER ALIVE? 1 YES 2 NO↘ NEXT LINE 8 DK↘ NEXT LINE	HL12. *If alive*: DOES (*name's*) FATHER LIVE IN THIS HOUSEHOLD? *Record Line no. of father or 00 for 'no'*
LINE	NAME	REL.	M F	AGE	15+	15-49	MOTHER	MOTHER	Y N DK	MOTHER	Y N DK	FATHER
01		0 1	1 2	___ ___	—	01	___ ___	___ ___	1 2 8	___ ___	1 2 8	___ ___
02		___ ___	1 2	___ ___	—	02	___ ___	___ ___	1 2 8	___ ___	1 2 8	___ ___
03		___ ___	1 2	___ ___	—	03	___ ___	___ ___	1 2 8	___ ___	1 2 8	___ ___
04		___ ___	1 2	___ ___	—	04	___ ___	___ ___	1 2 8	___ ___	1 2 8	___ ___
05		___ ___	1 2	___ ___	—	05	___ ___	___ ___	1 2 8	___ ___	1 2 8	___ ___
06		___ ___	1 2	___ ___	—	06	___ ___	___ ___	1 2 8	___ ___	1 2 8	___ ___
07		___ ___	1 2	___ ___	—	07	___ ___	___ ___	1 2 8	___ ___	1 2 8	___ ___
08		___ ___	1 2	___ ___	—	08	___ ___	___ ___	1 2 8	___ ___	1 2 8	___ ___
09		___ ___	1 2	___ ___	—	09	___ ___	___ ___	1 2 8	___ ___	1 2 8	___ ___

HL1. *Line no.*	HL2. *Name*	HL3. WHAT IS THE RELATION-SHIP OF (*name*) TO THE HEAD OF THE HOUSE-HOLD?	HL4. IS (*name*) MALE OR FEMALE? 1 MALE 2 FEM.	HL5. HOW OLD IS (*name*)? HOW OLD WAS (*name*) ON HIS/HER LAST BIRTHDAY? *Record in completed years* 00=under 1 year 98=DK*	HL5.A FOR HOUSEHOLD MEMBERS 15+ YEARS WHAT IS (NAME'S) MARITAL STATUS? 1 SINGLE 2 MARRIED 3 DIVORCED 4 WIDOWED	HL6. *Circle Line no. if woman is age 15-49 and ever-married*	HL7. *For each child* ***age 5-14:*** WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD? *Record Line no. of mother/ caretaker*	HL8. *For each child* ***under 5:*** WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD? *Record Line no. of mother/ caretaker*	HL9. IS (*name's*) NATURAL MOTHER ALIVE? 1 YES 2 NO⇨ HL11 8 DK⇨ HL11	HL10. *If alive*: DOES (*name's*) NATURAL MOTHER LIVE IN THIS HOUSEHOLD? *Record Line no. of mother or 00 for 'no'*	HL11. IS (*name's*) FATHER ALIVE? 1 YES 2 NO⇘ NEXT LINE 8 DK⇘ NEXT LINE	HL12. *If alive*: DOES (*name's*) FATHER LIVE IN THIS HOUSEHOLD? *Record Line no. of father or 00 for 'no'*
LINE	NAME	REL.	M F	AGE	15+	15-49	MOTHER	MOTHER	Y N DK	MOTHER	Y N DK	FATHER
10		___ ___	1 2	___ ___	—	10	___ ___	___ ___	1 2 8	___ ___	1 2 8	___ ___
11		___ ___	1 2	___ ___	—	11	___ ___	___ ___	1 2 8	___ ___	1 2 8	___ ___
12		___ ___	1 2	___ ___	—	12	___ ___	___ ___	1 2 8	___ ___	1 2 8	___ ___
13		___ ___	1 2	___ ___	—	13	___ ___	___ ___	1 2 8	___ ___	1 2 8	___ ___
14		___ ___	1 2	___ ___	—	14	___ ___	___ ___	1 2 8	___ ___	1 2 8	___ ___
15		___ ___	1 2	___ ___	—	15	___ ___	___ ___	1 2 8	___ ___	1 2 8	___ ___
16		___ ___	1 2	___ ___	—	15	___ ___	___ ___	1 2 8	___ ___	1 2 8	___ ___

ARE THERE ANY OTHER PERSONS LIVING HERE – EVEN IF THEY ARE NOT MEMBERS OF YOUR FAMILY OR DO NOT HAVE PARENTS LIVING IN THIS HOUSEHOLD? INCLUDING CHILDREN AT WORK OR AT SCHOOL? *If yes, insert child's name and complete form.*
Then, complete the totals below.

	Ever-Married Women 15-49	Children 5-14	Under-5s
Totals	___ ___	___ ___	___ ___

** See instructions: to be used only for elderly household members (code meaning "do not know/over age 50").*

Now for each woman age 15-49 years, write her name and line number and other identifying information in the information panel of the Women's Questionnaire.
For each child under age 5, write his/her name and line number AND the line number of his/her mother or caretaker in the information panel of the Questionnaire for Children UnderFive.
You should now have a separate questionnaire for each eligible woman and each child under five in the household.

** Codes for HL3: Relationship to head of household:*

01 = Head
02 = Wife or Husband
03 = Son or Daughter
04 = Son or Daughter In-Law
05 = Grandchild
06 = Parent
07 = Brother or Sister
08 = Other Relative
09 = Not Related
98 = Don't Know

EDUCATION MODULE											**ED**
For household members age 5 and above					*For household members age 5-24 years*						
ED1. *Line no.*	ED1A. *Name*	ED2. HAS (*name*) EVER ATTENDED SCHOOL OR PRESCHOOL? 1 YES ⇨ ED3 2 NO ⇘ NEXT LINE	ED3. WHAT IS THE HIGHEST LEVEL OF SCHOOL (*name*) ATTENDED? WHAT IS THE HIGHEST GRADE (*name*) COMPLETED AT THIS LEVEL? LEVEL: 0 PRE-SCHOOL 1 BASIC 2 DIPLOMA BEFORE SECONDARY 3 SECONDARY 4 DIPLOMA AFTER SECONDARY 5 BSC 6 POSTGRADUATE 7 NON-STANDARD CURRICULUM 8 DK GRADE: 98 DK *If less than 1 grade, enter 00.*		ED4. DURING THE (*2005-2006*) SCHOOL YEAR, DID (*name*) ATTEND SCHOOL OR PRESCHOOL AT ANY TIME? 1 YES 2 NO ⇨ ED7	ED5. SINCE LAST *(day of the week)*, HOW MANY DAYS DID (*name*) ATTEND SCHOOL? *Insert number of days in space below.*	ED6. DURING THIS/THAT SCHOOL YEAR, WHICH LEVEL AND GRADE IS/WAS (*name*) ATTENDING? LEVEL: 0 PRE-SCHOOL 1 BASIC 2 DIPLOMA BEFORE SECONDARY 3 SECONDARY 4 DIPLOMA AFTER SECONDARY 5 BSC 6 POSTGRADUATE 7 NON-STANDARD CURRICULUM 8 DK GRADE: 98 DK *If less than 1 grade, enter 00.*		ED7. DID (*name*) ATTEND SCHOOL OR PRESCHOOL AT ANY TIME DURING THE PREVIOUS SCHOOL YEAR, THAT IS (*2004-2005*)? 1 YES 2 NO ⇘ NEXT LINE 8 DK ⇘ NEXT LINE	ED8. DURING THAT PREVIOUS SCHOOL YEAR, WHICH LEVEL AND GRADE DID (*name*) ATTEND? LEVEL: 0 PRE-SCHOOL 1 BASIC 2 DIPLOMA BEFORE SECONDARY 3 SECONDARY 4 DIPLOMA AFTER SECONDARY 5 BSC 6 POSTGRADUATE 7 NON-STANDARD CURRICULUM 8 DK GRADE: 98 DK *IF LESS THAN 1 GRADE, ENTER 00.*	
LINE		YES NO	LEVEL	GRADE	YES NO	DAYS	LEVEL	GRADE	Y N DK	LEVEL	GRADE
01		1 2⇨NEXT LINE	0 1 2 3 4 5 6 7 8	___ ___	1 2	___	0 1 2 3 4 5 6 7 8	___ ___	1 2 8	0 1 2 3 4 5 6 7 8	___ ___
02		1 2⇨NEXT LINE	0 1 2 3 4 5 6 7 8	___ ___	1 2	___	0 1 2 3 4 5 6 7 8	___ ___	1 2 8	0 1 2 3 4 5 6 7 8	___ ___
03		1 2⇨NEXT LINE	0 1 2 3 4 5 6 7 8	___ ___	1 2	___	0 1 2 3 4 5 6 7 8	___ ___	1 2 8	0 1 2 3 4 5 6 7 8	___ ___
04		1 2⇨NEXT LINE	0 1 2 3 4 5 6 7 8	___ ___	1 2	___	0 1 2 3 4 5 6 7 8	___ ___	1 2 8	0 1 2 3 4 5 6 7 8	___ ___
05		1 2⇨NEXT LINE	0 1 2 3 4 5 6 7 8	___ ___	1 2	___	0 1 2 3 4 5 6 7 8	___ ___	1 2 8	0 1 2 3 4 5 6 7 8	___ ___
06		1 2⇨NEXT LINE	0 1 2 3 4 5 6 7 8	___ ___	1 2	___	0 1 2 3 4 5 6 7 8	___ ___	1 2 8	0 1 2 3 4 5 6 7 8	___ ___
07		1 2⇨NEXT LINE	0 1 2 3 4 5 6 7 8	___ ___	1 2	___	0 1 2 3 4 5 6 7 8	___ ___	1 2 8	0 1 2 3 4 5 6 7 8	___ ___
08		1 2⇨NEXT LINE	0 1 2 3 4 5 6 7 8	___ ___	1 2	___	0 1 2 3 4 5 6 7 8	___ ___	1 2 8	0 1 2 3 4 5 6 7 8	___ ___
09		1 2⇨NEXT LINE	0 1 2 3 4 5 6 7 8	___ ___	1 2	___	0 1 2 3 4 5 6 7 8	___ ___	1 2 8	0 1 2 3 4 5 6 7 8	___ ___
10		1 2⇨NEXT LINE	0 1 2 3 4 5 6 7 8	___ ___	1 2	___	0 1 2 3 4 5 6 7 8	___ ___	1 2 8	0 1 2 3 4 5 6 7 8	___ ___
11		1 2⇨NEXT LINE	0 1 2 3 4 5 6 7 8	___ ___	1 2	___	0 1 2 3 4 5 6 7 8	___ ___	1 2 8	0 1 2 3 4 5 6 7 8	___ ___
12		1 2⇨NEXT LINE	0 1 2 3 4 5 6 7 8	___ ___	1 2	___	0 1 2 3 4 5 6 7 8	___ ___	1 2 8	0 1 2 3 4 5 6 7 8	___ ___
13		1 2⇨NEXT LINE	0 1 2 3 4 5 6 7 8	___ ___	1 2	___	0 1 2 3 4 5 6 7 8	___ ___	1 2 8	0 1 2 3 4 5 6 7 8	___ ___
14		1 2⇨NEXT LINE	0 1 2 3 4 5 6 7 8	___ ___	1 2	___	0 1 2 3 4 5 6 7 8	___ ___	1 2 8	0 1 2 3 4 5 6 7 8	___ ___
15		1 2⇨NEXT LINE	0 1 2 3 4 5 6 7 8	___ ___	1 2	___	0 1 2 3 4 5 6 7 8	___ ___	1 2 8	0 1 2 3 4 5 6 7 8	___ ___
16		1 2⇨NEXT LINE	0 1 2 3 4 5 6 7 8	___ ___	1 2	___	0 1 2 3 4 5 6 7 8	___ ___	1 2 8	0 1 2 3 4 5 6 7 8	

WATER AND SANITATION MODULE		WS
WS1. WHAT IS THE MAIN SOURCE OF DRINKING WATER FOR MEMBERS OF YOUR HOUSEHOLD?	Piped water Piped into dwelling ..... 11 Piped into yard or plot ..... 12 Public tap/standpipe ..... 13 Tubewell/borehole ..... 21 Dug well Protected well ..... 31 Unprotected well ..... 32 Water from spring Protected spring ..... 41 Unprotected spring ..... 42 Rainwater collection ..... 51 Tanker-truck ..... 61 Cart with small tank/drum ..... 71 Surface water (river, stream, dam, lake, pond, canal, irrigation channel) ..... 81 **Bottled water ..... 91** Other (*specify*) _____ 96	11⇨WS5 12⇨WS5 ⇨WS3 96⇨WS3
WS2. WHAT IS THE MAIN SOURCE OF WATER USED BY YOUR HOUSEHOLD FOR OTHER PURPOSES SUCH AS COOKING AND HANDWASHING?	Piped water Piped into dwelling ..... 11 Piped into yard or plot ..... 12 Public tap/standpipe ..... 13 Tubewell/borehole ..... 21 Dug well Protected well ..... 31 Unprotected well ..... 32 Water from spring Protected spring ..... 41 Unprotected spring ..... 42 Rainwater collection ..... 51 Tanker-truck ..... 61 Cart with small tank/drum ..... 71 Surface water (river, stream, dam, lake, pond, canal, irrigation channel) ..... 81 Other (*specify*) _____ 96	11⇨WS5 12⇨WS5
WS3. HOW LONG DOES IT TAKE TO GO THERE, GET WATER, AND COME BACK?	No. of minutes ..... __ __ __ Water on premises ..... 995 DK 998	995⇨WS5
WS4. WHO USUALLY GOES TO THIS SOURCE TO FETCH THE WATER FOR YOUR HOUSEHOLD? *Probe:* IS THIS PERSON UNDER AGE 15? WHAT SEX? *Circle code that best describes this person.*	Adult woman ..... 1 Adult man ..... 2 Female child (under 15) ..... 3 Male child (under 15) ..... 4 DK 8	
WS5. DO YOU TREAT YOUR WATER IN ANY WAY TO MAKE IT SAFER TO DRINK?	Yes ..... 1 No ..... 2 DK 8	2⇨WS7 8⇨WS7

WS6. WHAT DO YOU USUALLY DO TO THE WATER TO MAKE IT SAFER TO DRINK? ANYTHING ELSE? *Record all items mentioned.*	Boil ..... A Add bleach/chlorine ..... B Strain it through a cloth ..... C Use water filter (ceramic, sand, composite, etc.) ..... D Let it stand and settle ..... F Other (*specify*) _____ X DK ..... Z	
WS7. WHAT KIND OF TOILET FACILITY DO MEMBERS OF YOUR HOUSEHOLD USUALLY USE? *If "flush" or "pour flush", probe:* WHERE DOES IT FLUSH TO? *If necessary, ask permission to observe the facility.*	Flush / pour flush Flush to piped sewer system ..... 11 Flush to septic tank ..... 12 Flush to pit (latrine) ..... 13 Flush to somewhere else ..... 14 Flush to unknown place/not sure/DK where ..... 15 Ventilated Improved Pit latrine (VIP) ..... 21 Pit latrine with slab ..... 22 Pit latrine without slab / open pit ..... 23 Bucket ..... 41 No facilities or bush or field ..... 95 Other (*specify*) _____ 96	95⇨ NEXT MODULE
WS8. DO YOU SHARE THIS FACILITY WITH OTHER HOUSEHOLDS?	Yes ..... 1 No 2	2⇨ NEXT MODULE
WS9. HOW MANY HOUSEHOLDS IN TOTAL USE THIS TOILET FACILITY?	No. of households (if less than 10) ___ ___ Ten or more households ..... 10 DK 98	

HOUSEHOLD CHARACTERISTICS MODULE		HC
HC2. HOW MANY ROOMS IN THIS HOUSEHOLD ARE USED FOR SLEEPING?	No. of rooms ..... __ __	
HC3. Main material of the dwelling floor: *Record observation.*	Natural floor Earth/sand ..... 11 Mud earth/rock/mud soil ..... 12 Rudimentary floor Wood planks ..... 21 Palm/bamboo ..... 22 Finished floor Vinyl or asphalt strips ..... 32 Ceramic tiles ..... 33 Cement ..... 34 Carpet ..... 35 Other (*specify*) _____ 96	
HC6. WHAT TYPE OF FUEL DOES YOUR HOUSEHOLD MAINLY USE FOR COOKING?	Electricity ..... 01 Liquid Propane Gas (LPG) ..... 02 Kerosene ..... 05 Charcoal ..... 07 Wood ..... 08 Animal dung ..... 10 Agricultural crop residue ..... 11 Other (*specify*) _____ 96	
HC8. IS THE COOKING USUALLY DONE IN THE HOUSE, IN A SEPARATE BUILDING, OR OUTDOORS?	In the house ..... 1 In a separate building ..... 2 Outdoors ..... 3 Other (*specify*) _____ 6	
HC9. DOES YOUR HOUSEHOLD HAVE:	Yes No	
ELECTRICITY?	Electricity 1 2	
A RADIO?	Radio 1 2	
A TELEVISION?	Television 1 2	
A MOBILE TELEPHONE?	Mobile Telephone 1 2	
A NON-MOBILE TELEPHONE?	Non-Mobile Telephone 1 2	
A REFRIGERATOR?	Refrigerator 1 2	
A SATELLITE?	Satellite 1 2	
AN ELECTRIC GENERATOR?	Electric Generator 1 2	
HC10. DOES ANY MEMBER OF YOUR HOUSEHOLD OWN:	Yes No	
A BICYCLE?	Bicycle 1 2	
A MOTORCYCLE OR SCOOTER?	Motorcycle/Scooter 1 2	
AN ANIMAL-DRAWN CART?	Animal drawn-cart 1 2	
A CAR OR TRUCK?	Car/Truck 1 2	
A BOAT WITH A MOTOR?	Boat with motor 1 2	
AGRICULTURAL LAND?	Agricultural land 1 2	
A WORKSHOP/FACTORY?	Workshop/Factory 1 2	
REAL ESTATE/LAND?	Real Estate/Land 1 2	
SHOP/COMPANY?	Shop/Company 1 2	

CHILD LABOUR MODULE **CL**

To be administered to mother/caretaker of each child in the household age 5 through 14 years. For household members below age 5 or above age 14, leave rows blank.

NOW I WOULD LIKE TO ASK ABOUT ANY WORK CHILDREN IN THIS HOUSEHOLD MAY DO.

CL1. *Line no.*	CL2. *Name*	CL3. DURING THE PAST WEEK, DID (*name*) DO ANY KIND OF WORK FOR SOMEONE WHO IS NOT A MEMBER OF THIS HOUSEHOLD? *If yes*: FOR PAY IN CASH OR KIND? 1 YES, FOR PAY (CASH OR KIND) 2 YES, UNPAID 3 NO ⇨TO CL5			CL4. *If yes:* SINCE LAST (*day of the week*), ABOUT HOW MANY HOURS DID HE/SHE DO THIS WORK FOR SOMEONE WHO IS NOT A MEMBER OF THIS HOUSEHOLD? *If more than one job, include all hours at all jobs.* *Record response then ⇨ CL.6*	CL5. AT ANY TIME DURING THE PAST YEAR, DID (*name*) DO ANY KIND OF WORK FOR SOMEONE WHO IS NOT A MEMBER OF THIS HOUSEHOLD? *If yes*: FOR PAY IN CASH OR KIND? 1 YES, FOR PAY (CASH OR KIND) 2 YES, UNPAID 3 NO			CL6. DURING THE PAST WEEK, DID (*name*) HELP WITH HOUSEHOLD CHORES SUCH AS SHOPPING, COLLECTING FIREWOOD, CLEANING, FETCHING WATER, OR CARING FOR CHILDREN? 1 YES 2 NO ⇨ TO CL8		CL7. *If yes*: SINCE LAST (*day of the week*), ABOUT HOW MANY HOURS DID HE/SHE SPEND DOING THESE CHORES?	CL8. DURING THE PAST WEEK, DID (*name*) DO ANY OTHER FAMILY WORK (ON THE FARM OR IN A BUSINESS OR SELLING GOODS IN THE STREET?) 1 YES 2 NO ⇘ NEXT LINE		CL9. *If yes*: SINCE LAST (*day of the week*), ABOUT HOW MANY HOURS DID HE/SHE DO THIS WORK?
LINE NO.	NAME	YES PAID	UNPAID	NO	NO. HOURS	YES PAID	UNPAID	NO	YES	NO	NO. HOURS	YES	NO	NO. HOURS
01		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___
02		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___
03		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___
04		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___
05		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___
06		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___
07		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___
08		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___
09		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___
10		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___
11		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___
12		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___
13		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___
14		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___
15		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___
16		1	2	3	___ ___	1	2	3	1	2	___ ___	1	2	___ ___

CHILD DISCIPLINE MODULE

table 1: childREN AgED 2-14 YEARS ELIGIBLE for child Discipline questions

Review the household listing and list each of the children aged 2-14 years below in order according to their line number (HL1). Do not include other household members outside of the age range 2-14 years. Record the line number, name, sex, age, and the line number of the mother or caretaker for each child. Then record the total number of children aged 2-14 in the box provided (CD7).

CD1. *Rank no.*	CD2. *Line no. from HL1.*	CD3. *Name from HL2.*	CD4. *Sex from HL4.*	CD5. *Age from HL5.*	CD6. *Line no. of mother/ caretaker from HL7 or HL8.*
LINE	LINE	NAME	M F	AGE	MOTHER
01	__ __		1 2	___ ___	___ ___
02	__ __		1 2	___ ___	___ ___
03	__ __		1 2	___ ___	___ ___
04	__ __		1 2	___ ___	___ ___
05	__ __		1 2	___ ___	___ ___
06	__ __		1 2	___ ___	___ ___
07	__ __		1 2	___ ___	___ ___
08	__ __		1 2	___ ___	___ ___
CD7.	TOTAL CHILDREN AGED 2-14 YEARS				___ ___

If there is only one child age 2-14 years in the household, then skip table 2 and go to CD11 to administer child discipline questions for that child.

table 2: selection of random child for child Discipline questions

Use this table to select one child between the ages of 2 and 14 years, if there is more than one child in that age range in the household. Look for the last digit of the household number from the cover page. This is the number of the row you should go to in the table below. Check the total number of eligible children (2-14) in CD7 above. This is the number of the column you should go to. Find the box where the row and the column meet and circle the number that appears in the box. This is the rank number of the child about whom the questions will be asked. Record the rank number in CD9 below. Finally, record the line number and name of the selected child in CD11 on the next page. Then, find the mother or primary caretaker of that child, and ask the questions, beginning with CD12.

CD8.	**TOTAL NUMBER OF ELIGIBLE CHILDREN IN THE HOUSEHOLD**							
Last digit of the questionnaire number	1	2	3	4	5	6	7	8+
0	1	2	2	4	3	6	5	4
1	1	1	3	1	4	1	6	5
2	1	2	1	2	5	2	7	6
3	1	1	2	3	1	3	1	7
4	1	2	3	4	2	4	2	8
5	1	1	1	1	3	5	3	1
6	1	2	2	2	4	6	4	2
7	1	1	3	3	5	1	5	3
8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5

CD9. *Record the rank number of the selected child from table 2 above*	Rank number of child ..... __ __

CHILD DISCIPLINE MODULE		**CD**
Identify eligible child aged 2 to 14 in the household using the tables on the preceding page, according to your instructions. Ask to interview the mother or primary caretaker of the selected child (identified by the line number in CD6).		
CD11. *Write name and line no. of the child selected for the module from CD3 and CD2, based on the rank number in CD9.*	Name _____ Line number ..... __ __	
CD12. ALL ADULTS USE CERTAIN WAYS TO TEACH CHILDREN THE RIGHT BEHAVIOUR OR TO ADDRESS A BEHAVIOUR PROBLEM. I WILL READ VARIOUS METHODS THAT ARE USED AND I WANT YOU TO TELL ME IF *YOU OR ANYONE ELSE IN YOUR HOUSEHOLD* HAS USED THIS WITH *(name)* IN THE PAST MONTH.		
CD12A. TOOK AWAY PRIVILEGES, FORBADE SOMETHING *(name)* LIKED OR DID NOT ALLOW HIM/HER TO LEAVE HOUSE).	Yes ..... 1 No 2	
CD12B. EXPLAINED WHY SOMETHING (THE BEHAVIOR) WAS WRONG.	Yes ..... 1 No 2	
CD12C. SHOOK HIM/HER.	Yes ..... 1 No 2	
CD12D. SHOUTED, YELLED AT OR SCREAMED AT HIM/HER.	Yes ..... 1 No 2	
CD12E. GAVE HIM/HER SOMETHING ELSE TO DO.	Yes ..... 1 No 2	
CD12F. SPANKED, HIT OR SLAPPED HIM/HER ON THE BOTTOM WITH BARE HAND.	Yes ..... 1 No 2	
CD12G. HIT HIM/HER ON THE BOTTOM OR ELSEWHERE ON THE BODY WITH SOMETHING LIKE A BELT, HAIRBRUSH, STICK OR OTHER HARD OBJECT.	Yes ..... 1 No 2	
CD12H. CALLED HIM/HER DUMB, LAZY, OR ANOTHER NAME LIKE THAT.	Yes ..... 1 No 2	
CD12I. HIT OR SLAPPED HIM/HER ON THE FACE, HEAD OR EARS.	Yes ..... 1 No 2	
CD12J. HIT OR SLAPPED HIM/HER ON THE HAND, ARM, OR LEG.	Yes ..... 1 No 2	
CD12K. BEAT HIM/HER UP WITH AN IMPLEMENT (HIT OVER AND OVER AS HARD AS ONE COULD).	Yes ..... 1 No 2	
CD13. DO YOU BELIEVE THAT IN ORDER TO BRING UP (RAISE, EDUCATE) (*name*) PROPERLY, YOU NEED TO PHYSICALLY PUNISH HIM/HER?	Yes ..... 1 No ..... 2 Don't know/no opinion 8	

Disability

To be administered to caretakers of all children 2 through 9 years old living in the household. For household members
eligible line numbers of the child from the household listing form (HL1, HL2, HL5).

I would like to ask you if any children in this household aged 2 through 9 has any of the health conditions I am G

DA1. *Line no.*	DA2. *Child's name*	DA3. Compared with other children, does or did (*name*) have any serious delay in sitting, standing, or walking?	DA4. Compared with other children, does (*name*) have difficulty seeing, either in the daytime or at night?	DA5. Does (*name*) appear to have difficulty hearing? (Uses hearing aid, hears with difficulty, completely deaf?)	DA6. When you tell (*name*) to do something, does he/she seem to understand what you are saying?	DA7. Does (*name*) have difficulty in walking or moving his/her arms or does he/she have weakness and/or stiffness in the arms or legs?	DA8. Does (*name*) sometimes have fits, become rigid, or lose consc-iousness?	DA9. Does (*name*) learn to do things like other children his/her age?	DA Does (*n* speak a (can he make hi herself unders in word can say recogn words)
Line	Name	Y N	Y N	Y N	Y N	Y N	Y N	Y N	Y
		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1
		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1
		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1
		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1
		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1
		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1
		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1
		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1
		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1
		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1
		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1
		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1
		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1
		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1
		1 2	1 2	1 2	1 2	1 2	1 2	1 2	1

SI2. *Does any eligible woman age 15-49 reside in the household?*
Check household listing, column HL6.You should have a questionnaire with the Information Panel filled in for each eligible woman.

☐ *Yes.* ⇨ *Go to QUESTIONNAIRE FOR INDIVIDUAL WOMEN*
to administer the questionnaire to the first eligible woman.

☐ *No.* ⇨ *Continue.*

SI3. *Does any child under the age of 5 reside in the household?*
Check household listing, column HL8. You should have a questionnaire with the Information Panel filled in for each eligible child.

☐ *Yes.* ⇨ *Go to QUESTIONNAIRE FOR CHILDREN UNDER FIVE*
to administer the questionnaire to mother or caretaker of the first eligible child.

☐ *No.* ⇨ *End the interview by thanking the respondent for his/her cooperation.*
Gather together all questionnaires for this household and tally the number of interviews completed on the cover page.

QUESTIONNAIRE FOR CHILDREN UNDER FIVE

UNDER-FIVE CHILD INFORMATION PANEL	UF
This questionnaire is to be administered to all mothers or caretakers (see household listing, column HL8) who care for a child that lives with them and is under the age of 5 years (see household listing, column HL5). A separate questionnaire should be used for each eligible child. Fill in the cluster and household number, and names and line numbers of the child and the mother/caretaker in the space below. Insert your own name and number, and the date.	
UF1. Cluster number: ___ ___ ___	UF2. Household number: ___ ___
UF3. Child's Name: _____	UF4. Child's Line Number: ___ ___
UF5. Mother's/Caretaker's Name: _____	UF6. Mother's/Caretaker's Line Number: ___ ___
UF7. Interviewer name and number: _____ ___ ___	UF8. Day/Month/Year of interview: ___ ___ / ___ ___ / ___ ___ ___ ___
UF9. Result of interview for children under 5 (Codes refer to mother/caretaker.)	Completed ..... 1 Not at home ..... 2 Refused ..... 3 Partly completed ..... 4 Incapacitated ..... 5 Other (specify) _____ 6

Repeat greeting if not already read to this respondent:

WE ARE FROM MINISTRY OF HEALTH AND POPULATION. WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION. I WOULD LIKE TO TALK TO YOU ABOUT THIS. THE INTERVIEW WILL TAKE ABOUT 20-30 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE IDENTIFIED. ALSO, YOU ARE NOT OBLIGED TO ANSWER ANY QUESTION YOU DON'T WANT TO, AND YOU MAY WITHDRAW FROM THE INTERVIEW AT ANY TIME. MAY I START NOW?

If permission is given, begin the interview. If the respondent does not agree to continue, thank him/her and go to the next interview. Discuss this result with your supervisor for a future revisit.

UF10. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE HEALTH OF EACH CHILD UNDER THE AGE OF 5 IN YOUR CARE, WHO LIVES WITH YOU NOW. NOW I WANT TO ASK YOU ABOUT (*name*). IN WHAT MONTH AND YEAR WAS (*name*) BORN? *Probe:* WHAT IS HIS/HER BIRTHDAY? If the mother/caretaker knows the exact birth date, also enter the day; otherwise, circle 98 for day.	Date of birth: Day ..... __ __ Month ..... __ __ Year ..... __ __ __ __	
UF11. HOW OLD WAS (*name*) AT HIS/HER LAST BIRTHDAY? Record age in completed years.	Age in completed years ..... __	

BIRTH REGISTRATION AND EARLY LEARNING MODULE		BR
BR1. DOES (*name*) HAVE A BIRTH CERTIFICATE? MAY I SEE IT?	Yes, seen ..... 1 Yes, not seen ..... 2 No ..... 3 DK 8	1⇨BR5
BR2. HAS (*name's*) BIRTH BEEN REGISTERED WITH THE CIVIL AUTHORITIES?	Yes ..... 1 No ..... 2 DK 8	1⇨BR5 8⇨BR4
BR3. WHY IS (*name's*) BIRTH NOT REGISTERED?	Costs too much ..... 1 Must travel too far ..... 2 Did not know it should be registered ..... 3 Does not know where to register ..... 5 Other (*specify*) _____ 6 DK 8	
BR4. DO YOU KNOW HOW TO REGISTER YOUR CHILD'S BIRTH?	Yes ..... 1 No 2	
BR5. *Check age of child in UF11: Child is 3 or 4 years old?* ☐ *Yes.* ⇨ *Continue with BR6* ☐ *No.* ⇨ *Go to BR8*		
BR6. DOES (*name*) ATTEND ANY ORGANIZED LEARNING OR EARLY CHILDHOOD EDUCATION PROGRAMME, SUCH AS A PRIVATE OR GOVERNMENT FACILITY, INCLUDING KINDERGARTEN OR COMMUNITY CHILD CARE?	Yes ..... 1 No ..... 2 DK 8	 2⇨BR8 8⇨BR8
BR7. WITHIN THE LAST SEVEN DAYS, ABOUT HOW MANY HOURS DID (*name*) ATTEND?	No. of hours ..... __ __	
BR8. IN THE PAST 3 DAYS, DID YOU OR ANY HOUSEHOLD MEMBER OVER 15 YEARS OF AGE ENGAGE IN ANY OF THE FOLLOWING ACTIVITIES WITH (*name*): *If yes, ask:* WHO ENGAGED IN THIS ACTIVITY WITH THE CHILD - THE MOTHER, THE CHILD'S FATHER OR ANOTHER ADULT MEMBER OF THE HOUSEHOLD (INCLUDING THE CARETAKER/RESPONDENT)? *Circle all that apply.*		

		Mother	Father	Other	No one
BR8A. READ BOOKS OR LOOK AT PICTURE BOOKS WITH (*name*)?	Books	A	B	X	Y
BR8B. TELL STORIES TO (*name*)?	Stories	A	B	X	Y
BR8C. SING SONGS WITH (*name*)?	Songs	A	B	X	Y
BR8D. TAKE (*name*) OUTSIDE THE HOME, COMPOUND, YARD OR ENCLOSURE?	Take outside	A	B	X	Y
BR8E. PLAY WITH (*name*)?	Play with	A	B	X	Y
BR8F. SPEND TIME WITH (*name*) NAMING, COUNTING, AND/OR DRAWING THINGS?	Spend time with	A	B	X	Y

CHILD DEVELOPMENT		**CE**
Some questions in this module are to be administered only once for each household visited. Others require responses for each child in the household under the age of 5 years. *Record only one response for each question, unless otherwise indicated.*		
CE1. HOW MANY CHILDREN'S BOOKS OR PICTURE BOOKS DO YOU HAVE FOR (NAME)? *If 'none' enter 00*	Number of children's books ..... __ __ Ten or more books 10	
CE2. HOW MANY OTHER BOOKS ARE THERE IN THE HOUSEHOLD? (INCLUDING SCHOOLBOOKS, BUT NOT OTHER BOOKS MEANT FOR CHILDREN, SUCH AS PICTURE BOOKS) *If 'none' enter 00*	Number of non-children's books ..... __ __ Ten or more non-children's books 10	
CE3. I AM INTERESTED IN LEARNING ABOUT THE THINGS THAT (*name*) PLAYS WITH WHEN HE/SHE IS AT HOME. WHAT DOES (*name*) PLAY WITH? DOES HE/SHE PLAY WITH HOUSEHOLD OBJECTS, SUCH AS BOWLS, PLATES, CUPS OR POTS? OBJECTS AND MATERIALS FOUND OUTSIDE THE LIVING QUARTERS, SUCH AS STICKS, ROCKS, ANIMALS, SHELLS, OR LEAVES? HOMEMADE TOYS, SUCH AS DOLLS, CARS AND OTHER TOYS MADE AT HOME? TOYS THAT CAME FROM A STORE? *Code Y if child does not play with any of the items mentioned.*	Household objects (bowls, plates, cups, pots) .....A Objects and materials found outside the living quarters (sticks, rocks, animals, shells, leaves) .....B Homemade toys (dolls, cars and other toys made at home) C Toys that came from a store .....D No playthings mentioned .....Y	
CE4. IN THE PAST WEEK, SINCE LAST (*day of the week*) HOW MANY TIMES WAS (*name*) LEFT IN THE CARE OF ANOTHER CHILD (THAT IS, SOMEONE LESS THAN 10 YEARS OLD)? *If 'none' enter 00*	Number of times..... __ __	
CE5. IN THE PAST WEEK, HOW MANY TIMES WAS (*name*) LEFT ALONE? *If 'none' enter 00*	Number of times..... __ __	

CARE OF ILLNESS MODULE		CA
CA1. HAS (*name*) HAD DIARRHOEA IN THE LAST TWO WEEKS, THAT IS, SINCE (*day of the week*) OF THE WEEK BEFORE LAST? Diarrhoea is determined as perceived by mother or caretaker, or as three or more loose or watery stools per day, or blood in stool.	Yes with blood ..... 1 Yes without blood ..... 2 No ..... 3 DK 8	 3⇨CA5 8⇨CA5
CA2. DURING THIS LAST EPISODE OF DIARRHOEA, DID (*name*) DRINK ANY OF THE FOLLOWING: Read each item aloud and record response before proceeding to the next item.	Yes No DK	
CA2A. A FLUID MADE FROM A SPECIAL PACKET CALLED ORS?	A. Fluid from ORS packet 1 2 8	
CA2D. DRINKING WATER?	D. Drinking water 1 2 8	
CA2E. RICE WATER?	E. Rice water 1 2 8	
CA2F. VEGETABLE SOUP?	F. Vegetable soup 1 2 8	
CA2H. FRUIT JUICE?	H. Fruit juice 1 2 8	
CA3. DURING (*name's*) ILLNESS, DID HE/SHE DRINK MUCH LESS, ABOUT THE SAME, OR MORE THAN USUAL?	Much less or none ..... 1 About the same (or somewhat less) ..... 2 More ..... 3 DK 8	
CA4. DURING (*name's*) ILLNESS, DID HE/SHE EAT LESS, ABOUT THE SAME, OR MORE FOOD THAN USUAL? If "less", probe: MUCH LESS OR A LITTLE LESS?	None ..... 1 Much less ..... 2 Somewhat less ..... 3 About the same ..... 4 More ..... 5 DK 8	
CA5. HAS (*name*) HAD AN ILLNESS WITH A COUGH AT ANY TIME IN THE LAST TWO WEEKS, THAT IS, SINCE (*day of the week*) OF THE WEEK BEFORE LAST?	Yes ..... 1 No ..... 2 DK 8	 2⇨CA12 8⇨CA12
CA6. WHEN (*name*) HAD AN ILLNESS WITH A COUGH, DID HE/SHE BREATHE FASTER THAN USUAL WITH SHORT, QUICK BREATHS OR HAVE DIFFICULTY BREATHING?	Yes ..... 1 No ..... 2 DK 8	 2⇨CA12 8⇨CA12
CA7. WERE THE SYMPTOMS DUE TO A PROBLEM IN THE CHEST OR A BLOCKED NOSE?	Problem in chest ..... 1 Blocked nose ..... 2 Both ..... 3 Other (*specify*) _____ 6 DK 8	 2⇨CA12 6⇨CA12
CA8. DID YOU SEEK ADVICE OR TREATMENT FOR THE ILLNESS OUTSIDE THE HOME?	Yes ..... 1 No ..... 2 DK 8	 2⇨CA10 8⇨CA10

CA9. FROM WHERE DID YOU SEEK CARE? ANYWHERE ELSE? Circle all providers mentioned, but do NOT prompt with any suggestions. If source is hospital, health center, or clinic, write the name of the place below. Probe to identify the type of source and circle the appropriate code. _____ (Name of place)	Public sector Govt. hospital .....A Govt. health centre.....B Maternal and child care unit.....C Govt. health unit.....D Other public (*specify*)_____ H Private medical sector Private hospital/clinic ..... I Private physician ..... J Private pharmacy .....K Other private medical (*specify*)_____ O Other source Relative or friend.....P Traditional Practitioner.....R Other (*specify*)_____ X	
CA10. WAS (*name*) GIVEN MEDICINE TO TREAT THIS ILLNESS?	Yes ..... 1 No..... 2 DK 8	 2⇨CA12 8⇨CA12
CA11. WHAT MEDICINE WAS (*name*) GIVEN? Circle all medicines given.	Antibiotic.....A Antipyretics .....S Deconqestant.....T Antitusive .....U Other (*specify*)_____ X DK .....Z	
Ask the following question (CA14) only once for each mother/caretaker. CA14. SOMETIMES CHILDREN HAVE SEVERE ILLNESSES AND SHOULD BE TAKEN IMMEDIATELY TO A HEALTH FACILITY. WHAT TYPES OF SYMPTOMS WOULD CAUSE YOU TO TAKE YOUR CHILD TO A HEALTH FACILITY RIGHT AWAY? Keep asking for more signs or symptoms until the mother/caretaker cannot recall any additional symptoms. Circle all symptoms mentioned, But do NOT prompt with any suggestions.	Child not able to drink or breastfeed.....A Child becomes sicker.....B Child develops a fever .....C Child has fast breathing .....D Child has difficult breathing.....E Child has blood in stool.....F Child is drinking poorly..... G Child is Vomiting ……..I Other (*specify*)_____ X Other (*specify*)_____ Y Other (*specify*)_____ Z	

IMMUNIZATION MODULE												**IM**
If an immunization card is available, copy the dates in IM2-IM8 for each type of immunization or vitamin A dose recorded on the card. IM10-IM18 are for recording vaccinations that are not recorded on the card. IM10-IM18 will only be asked when a card is not available.												
IM1. IS THERE A VACCINATION CARD FOR (*name*)?		Yes, seen ..... 1 Yes, not seen ..... 2 No..... 3										2⇨IM10 3⇨IM10
(a) Copy dates for each vaccination from the card. (b) Write '44' in day column if card shows that vaccination was given but no date recorded.		Date of Immunization										
		DAY		MONTH		YEAR						
IM2. BCG	BCG											
IM3A. POLIO AT BIRTH	OPV0											
IM3B. POLIO 1	OPV1											
IM3C. POLIO 2	OPV2											
IM3D. POLIO 3	OPV3											
IM4A. DPT1	DPT1											
IM4B. DPT2	DPT2											
IM4C. DPT3	DPT3											
IM5A. HEPB1	H1											
IM5B. HEPB2	H2											
IM5C. HEPB3	H3											
IM6. MEASLES	MEASLES											
IM6A. MEASLES BOOSTER DOSE	MEASLES BOOSTER DOSE											
IM6B. PENTHAVALENT 1ST DOSE	APPLICABLE FOR CHILREN <2 YEARS DO NOT WRITE IF THE CHILD RECEIVED TRIVALENT											
IM6C. PENTHAVALENT 2ND DOSE												
IM6E. PENTHAVALENT 3RD DOSE												
IM9. IN ADDITION TO THE VACCINATIONS AND VITAMIN A CAPSULES SHOWN ON THIS CARD, DID (*name*) RECEIVE ANY OTHER VACCINATIONS – INCLUDING VACCINATIONS RECEIVED IN CAMPAIGNS OR IMMUNIZATION DAYS?		Yes ..... 1 (Probe for vaccinations and write '66' in the corresponding day column on IM2 to IM7.) No..... 2 DK 8										1⇨IM19 2⇨IM19 8⇨IM19
IM10. HAS (*name*) EVER RECEIVED ANY VACCINATIONS TO PREVENT HIM/HER FROM GETTING DISEASES, INCLUDING VACCINATIONS RECEIVED IN A CAMPAIGN OR IMMUNIZATION DAY?		Yes ..... 1 No..... 2 DK 8										 2⇨IM19 8⇨IM19

IM11. HAS (*name*) EVER BEEN GIVEN A BCG VACCINATION AGAINST TUBERCULOSIS – THAT IS, AN INJECTION IN THE ARM OR SHOULDER THAT CAUSED A SCAR?	Yes ..... 1 No ..... 2 DK 8	
IM12. HAS (*name*) EVER BEEN GIVEN ANY "VACCINATION DROPS IN THE MOUTH" TO PROTECT HIM/HER FROM GETTING DISEASES – THAT IS, POLIO?	Yes ..... 1 No ..... 2 DK 8	 2⇨IM15 8⇨IM15
IM13. HOW OLD WAS HE/SHE WHEN THE FIRST DOSE WAS GIVEN – JUST AFTER BIRTH (WITHIN TWO WEEKS) OR LATER?	Just after birth (within two weeks) ..... 1 Later 2	
IM14. HOW MANY TIMES HAS HE/SHE BEEN GIVEN THESE DROPS?	No. of times ..... __ __	
IM15. HAS (*name*) EVER BEEN GIVEN "DPT VACCINATION INJECTIONS" – THAT IS, AN INJECTION IN THE THIGH OR BUTTOCKS – TO PREVENT HIM/HER FROM GETTING TETANUS, WHOOPING COUGH, DIPHTHERIA? (SOMETIMES GIVEN AT THE SAME TIME AS POLIO)	Yes ..... 1 No ..... 2 DK 8	 2⇨IM17 8⇨IM17
IM16. HOW MANY TIMES?	No. of times ..... __ __	
IM16A. HAS (*name*) EVEN BEEN GIVEN "HEPB1 VACCINATION INJECTIONS"?	Yes ..... 1 No ..... 2 DK 8	 2⇨IM17 8⇨IM17
IM16B. HOW MANY TIMES?	No. of times ..... __ __	
IM17. HAS (*name*) EVER BEEN GIVEN "MEASLES VACCINATION INJECTIONS" OR MMR – THAT IS, A SHOT IN THE ARM AT THE AGE OF **9** MONTHS OR OLDER - TO PREVENT HIM/HER FROM GETTING MEASLES?	Yes ..... 1 No ..... 2 DK 8	
IM19. PLEASE TELL ME IF (*name*) HAS PARTICIPATED IN ANY OF THE FOLLOWING CAMPAIGNS, NATIONAL IMMUNIZATION DAYS AND/OR VITAMIN A OR CHILD HEALTH DAYS: (CATEGORY NEEDS TO BE RECHECKED) IM19A. *POLIO* *IM19B. POLIO FOR CHILDREN* *IM19C. MEASLES*	Y N DK *Polio* ..... 1 2 8 *Polio for children* ..... 1 2 8 *Measles* 1 2 8	

IM20. *Does another eligible child reside in the household for whom this respondent is mother/caretaker? Check household listing, column HL8.*

☐ *Yes. ⇨ End the current questionnaire and then*
Go to QUESTIONNAIRE FOR CHILDREN UNDER FIVE to administer the questionnaire for the next eligible child.

☐ *No. ⇨ End the interview with this respondent by thanking him/her for his/her cooperation.*

If this is the last eligible child in the household, go on to ANTHROPOMETRY MODULE.

QUESTIONNAIRE FOR INDIVIDUAL WOMEN

WOMEN'S INFORMATION PANEL	**WM**
This module is to be administered to all women age 15 through 49 (see column HL6 of HH listing). *Fill in one form for each eligible woman* *Fill in the cluster and household number, and the name and line number of the woman in the space below. Fill in your name, number and the date.*	
WM1. Cluster number: ___ ___ ___	WM2. Household number: ___ ___
WM3. Woman's Name: _____	WM4. Woman's Line Number: ___ ___
WM5.Interviewer name and number: _____ ___ ___	WM6. Day/Month/Year of interview: ___ ___ / ___ ___ / ___ ___ ___ ___
WM7. Result of women's interview	Completed ..... 1 Not at home ..... 2 Refused ..... 3 Partly completed ..... 4 Incapacitated ..... 5 Other (*specify*) _____ 6

Repeat greeting if not already read to this woman:

WE ARE FROM MINISTRY OF HEALTH AND POPULATION. WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION. I WOULD LIKE TO TALK TO YOU ABOUT THIS. THE INTERVIEW WILL TAKE ABOUT 20-30 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE IDENTIFIED. ALSO, YOU ARE NOT OBLIGED TO ANSWER ANY QUESTION YOU DON'T WANT TO, AND YOU MAY WITHDRAW FROM THE INTERVIEW AT ANY TIME. MAY I START NOW?

If permission is given, begin the interview. If the woman does not agree to continue, thank her, complete WM7, and go to the next interview. Discuss this result with your supervisor for a future revisit.

WM8. IN WHAT MONTH AND YEAR WERE YOU BORN?	Date of birth: Month ..... __ __ DK month ..... 98 Year ..... __ __ __ __ DK year 9998	
WM9. HOW OLD WERE YOU AT YOUR LAST BIRTHDAY?	Age (in completed years) ..... __ __	

WM10. HAVE YOU EVER ATTENDED SCHOOL?	Yes ..... 1 No 2	 2⇨WM14
WM11. WHAT IS THE HIGHEST LEVEL OF SCHOOL YOU ATTENDED: BASIC, SECONDARY, OR HIGHER?	 Basic ..... 1 Secondary ..... 2 Higher 3	
WM12. WHAT IS THE HIGHEST GRADE YOU COMPLETED AT THAT LEVEL?	 Grade ..... __ __	
WM13. *Check WM11:* ☐ *Secondary or higher. ⇨ Go to MA Next Module* ☐ *Basic . ⇨ Continue with WM14*		
WM14. NOW I WOULD LIKE YOU TO READ THIS SENTENCE TO ME. *Show sentences to respondent.* *If respondent cannot read whole sentence, probe:* CAN YOU READ PART OF THE SENTENCE TO ME? *Example sentences for literacy test:* *1. The child is reading a book.* *2. The rains came late this year.* *3. Parents must care for their children.* *4. Farming is hard work.*	Cannot read at all ..... 1 Able to read only parts of sentence ..... 2 Able to read whole sentence ..... 3 No sentence in specific language _____ 4 *(specify language other than Arabic)* Blind/mute, visually/speech impaired 5	

MARRIAGE MODULE		MA
MA1. WHAT IS YOUR MARITAL STATUS NOW: ARE YOU WIDOWED, DIVORCED OR SEPARATED?	MARRIED / SEPARATED .....1 DIVORCED.....2 WIDOWED 3	} MA5
MA2. HOW OLD IS YOUR HUSBAND?	AGE IN YEARS ..... ☐☐ DON'T KNOW 98	
MA5. HAVE YOU BEEN MARRIED ONCE OR MORE THAN ONCE?	ONCE .....1 MORE THAN ONCE 2	
MA6. IN WHAT MONTH AND YEAR DID YOU FIRST MARRY ?	MONTH ..... ☐☐ DON'T KNOW MONTH .....98 YEAR ..... ☐☐☐☐ DON'T KNOW YEAR 9998	
MA7. HOW OLD WERE YOU AT YOUR FIRST MARRIAGE?	AGE IN YEARS ..... ☐☐	
MA7A. YOUR FIRST HUSBAND WAS A RELATIVE?	YES .....1 NO 2	 2⇨ CM
MA7B. WHAT IS YOUR RELATIONSHIP TO YOUR FIRST HUSBAND?	COUSIN 1ST DEGREE (FATHER SIDE).. 1 COUSIN 1ST DEGREE (MOTHER SIDE) . 2 COUSIN SECOND DEGREE ……3 OTHER RELATIVE ……4 RELATIVES BECAUSE OF MARRIAGE.. ……5	

REPRODUCTION AND CHILD SURVIVAL MODULE		CM
NOW I WOULD LIKE TO ASK YOU ABOUT ALL THE BIRTHS YOU HAVE HAD DURING YOUR LIFE.		
CM1. HAVE YOU EVER GIVEN BIRTH? *If "No" probe by asking:* I MEAN, TO A CHILD WHO EVER BREATHED OR CRIED OR SHOWED OTHER SIGNS OF LIFE – EVEN IF HE OR SHE LIVED ONLY A FEW MINUTES OR HOURS?	Yes ..... 1 No..... 2	2⇨ CP1
CM3. DO YOU HAVE ANY SONS OR DAUGHTERS TO WHOM YOU HAVE GIVEN BIRTH WHO ARE NOW LIVING WITH YOU?	Yes ..... 1 No..... 2	2⇨CM5
CM4. HOW MANY SONS LIVE WITH YOU? AND HOW MANY DAUGHTERS LIVE WITH YOU? *If none record '00'*	CM4A. Number of Sons at home: ☐☐ CM4B. Number of Daughters at home: ☐☐	
CM5. DO YOU HAVE ANY SONS OR DAUGHTERS TO WHOM YOU HAVE GIVEN BIRTH AND WHO ARE ALIVE BUT DO NOT LIVE WITH YOU?	Yes ..... 1 No..... 2	2⇨CM7
CM6. 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'*	CM6A. Number of Sons elsewhere: ☐☐ CM6B. Number of Daughters elsewhere: ☐☐	
CM7. HAVE YOU EVER GIVEN BIRTH TO A BOY OR A GIRL WHO WAS BORN ALIVE BUT LATER DIED? *If "No" probe by asking:* ANY BABY WHO CRIED OR SHOWED ANY SIGN OF LIFE BUT ONLY SURVIVED A FEW HOURS OR DAYS?	Yes ..... 1 No…… 2	2⇨ CM9
CM8. IN ALL, HOW MANY BOYS HAVE DIED? AND HOW MANY GIRLS HAVE DIED? *If none record '00'*	CM8A. Number of Boys dead: ☐☐ CM8B. Number of Girls dead: ☐☐	
CM9. SUM ANSWERS TO CM4, CM6, AND CM8.	SUM __ __	

CM10. Check CM4, CM6, CM8 *Sum and check*
TO CHECK THE NUMBERS THAT YOU HAVE EVER GIVEN BIRTH, YOU HAVE GIVEN BIRTH TO _ _ CHILDREN? IF YES; CONTINUE IF NO: PROBE
CM4: YOU HAVE _ _ BOYS AND _ _ GIRLS LIVING WITH YOU, IS THIS CORRECT? CM6: YOU HAVE _ _ BOYS AND _ _ GIRLS WHO ARE NOT LIVING WITH YOU, IS THIS CORRECT? CM8: YOU HAVE _ _ BOYS AND _ _ GIRLS WHO DIED AFTER THEY WERE BORN ALIVE, IS THIS CORRECT? ☐ IF YES TO ALL: CONTINUE TO NEXT MODULE (BH) ☐ IF NO: CHECK THAT THE TOTALS ARE CORRECT THEN CONTINUE TO NEXT MODULE (BH)

LIVE BIRTH HISTORY TABLE — BH

NOW I WOULD LIKE TO RECORD THE NAMES OF ALL YOUR BIRTHS, WHETHER THE CHILD IS STILL ALIVE OR NOT. I WOULD LIKE TO START WITH THE FIRST ONE YOU HAD.

RECORD NAMES OF ALL BIRTHS; IF NAME NOT GIVEN, RECORD 'X'. RECORD TWINS AND TRIPLETS ON SEPARATE LINES.

BH1		**BH2**	**BH3**	**BH4**	**BH5**	**BH6**	**BH7**	**BH8**	**BH9**
Live birth Line No.	*Name* All children, whether alive or dead:	**WERE ANY OF THESE BIRTHS TWINS?** **1 SINGLE** **2 MULTIPLE**	**IS *(name)* MALE OR FEMALE?** **1 MALE** **2 FEMALE**	**IN WHAT MONTH AND YEAR WAS *(name)* BORN?** ***Probe:* WHAT IS HIS/HER BIRTHDAY?** ***If they don't know write "98" for months and "9998" for year***	**IS *(name)* STILL ALIVE?** **1 YES** **2 NO → BH9**	***If alive:* HOW OLD WAS *(name)* ON HIS/HER LAST BIRTHDAY?** *Record age in completed years.*	***If alive:* IS *(name)* LIVING WITH YOU?** **1 YES** **2 NO**	***If alive:*** *Record household line number of child (from HL1).* Write "00" if child is not listed on household listing form (HL	**HOW OLD WAS *(name)* WHEN HE/SHE DIED?** *Record age at death.* *If less than 1 month, record days.* *If less than 2 years, record months.*
LINE	NAME	S M	M F	MONTH & YEAR	Y N	AGE	Y N	HH LINE NO.	AGE AT DEATH
01	1ST CHILD ___	1 2	1 2	M ☐☐ Y ☐☐☐☐	1 2	☐☐	1 2	☐☐	1.DAYS: ☐☐ DK DAYS……98 2.MONTHS: ☐☐ DK MONTHS……98 3.YEARS: ☐☐ DK YEARS……98
02	2ND CHILD ___	1 2	1 2	M ☐☐ Y ☐☐☐☐	1 2	☐☐	1 2	☐☐	1.DAYS: ☐☐ DK DAYS……98 2.MONTHS: ☐☐ DK MONTHS……98 3.YEARS: ☐☐ DK YEARS……98
03	3RD CHILD ___	1 2	1 2	M ☐☐ Y ☐☐☐☐	1 2	☐☐	1 2	☐☐	1.DAYS: ☐☐ DK DAYS……98 2.MONTHS: ☐☐ DK MONTHS……98 3.YEARS: ☐☐ DK YEARS……98
04	4TH CHILD ___	1 2	1 2	M ☐☐ Y ☐☐☐☐	1 2	☐☐	1 2	☐☐	1.DAYS: ☐☐ DK DAYS……98 2.MONTHS: ☐☐ DK MONTHS……98 3.YEARS: ☐☐ DK YEARS……98
05	5TH CHILD ___	1 2	1 2	M ☐☐ Y ☐☐☐☐	1 2	☐☐	1 2	☐☐	1.DAYS: ☐☐ DK DAYS……98 2.MONTHS: ☐☐ DK MONTHS……98 3.YEARS: ☐☐ DK YEARS……98

LIVE BIRTH HISTORY TABLE — BH

NOW I WOULD LIKE TO RECORD THE NAMES OF ALL YOUR BIRTHS, WHETHER THE CHILD IS STILL ALIVE OR NOT. I WOULD LIKE TO START WITH THE FIRST ONE YOU HAD.

RECORD NAMES OF ALL BIRTHS; IF NAME NOT GIVEN, RECORD 'X'. RECORD TWINS AND TRIPLETS ON SEPARATE LINES.

BH1		**BH2**	**BH3**	**BH4**	**BH5**	**BH6**	**BH7**	**BH8**	**BH9**
Live birth Line No.	*Name* All children, whether alive or dead:	**WERE ANY OF THESE BIRTHS TWINS?** **1 SINGLE** **2 MULTIPLE**	**IS *(name)* MALE OR FEMALE?** **1 MALE** **2 FEMALE**	**IN WHAT MONTH AND YEAR WAS *(name)* BORN?** ***Probe:* WHAT IS HIS/HER BIRTHDAY?** ***If they don't know write "98" for months and "9998" for year***	**IS *(name)* STILL ALIVE?** **1 YES** **2 NO → BH9**	***If alive:* HOW OLD WAS *(name)* ON HIS/HER LAST BIRTHDAY?** *Record age in completed years.*	***If alive:* IS *(name)* LIVING WITH YOU?** **1 YES** **2 NO**	***If alive:*** *Record household line number of child (from HL1).* Write "00" if child is not listed on household listing form (HL	**HOW OLD WAS *(name)* WHEN HE/SHE DIED?** *Record age at death.* *If less than 1 month, record days.* *If less than 2 years, record months.*
LINE	NAME	S M	M F	MONTH & YEAR	Y N	AGE	Y N	HH LINE NO.	AGE AT DEATH
06	6TH CHILD ___	1 2	1 2	M ☐☐ Y ☐☐☐☐	1 2	☐☐	1 2	☐☐	1.DAYS: ☐☐ DK DAYS……98 2.MONTHS: ☐☐ DK MONTHS……98 3.YEARS: ☐☐ DK YEARS……98
07	7TH CHILD ___	1 2	1 2	M ☐☐ Y ☐☐☐☐	1 2	☐☐	1 2	☐☐	1.DAYS: ☐☐ DK DAYS……98 2.MONTHS: ☐☐ DK MONTHS……98 3.YEARS: ☐☐ DK YEARS……98
08	8TH CHILD ___	1 2	1 2	M ☐☐ Y ☐☐☐☐	1 2	☐☐	1 2	☐☐	1.DAYS: ☐☐ DK DAYS……98 2.MONTHS: ☐☐ DK MONTHS……98 3.YEARS: ☐☐ DK YEARS……98
09	9TH CHILD ___	1 2	1 2	M ☐☐ Y ☐☐☐☐	1 2	☐☐	1 2	☐☐	1.DAYS: ☐☐ DK DAYS……98 2.MONTHS: ☐☐ DK MONTHS……98 3.YEARS: ☐☐ DK YEARS……98
10	10TH CHILD ___	1 2	1 2	M ☐☐ Y ☐☐☐☐	1 2	☐☐	1 2	☐☐	1.DAYS: ☐☐ DK DAYS……98 2.MONTHS: ☐☐ DK MONTHS……98 3.YEARS: ☐☐ DK YEARS……98

LIVE BIRTH HISTORY TABLE — BH

NOW I WOULD LIKE TO RECORD THE NAMES OF ALL YOUR BIRTHS, WHETHER THE CHILD IS STILL ALIVE OR NOT. I WOULD LIKE TO START WITH THE FIRST ONE YOU HAD.

RECORD NAMES OF ALL BIRTHS; IF NAME NOT GIVEN, RECORD 'X'. RECORD TWINS AND TRIPLETS ON SEPARATE LINES.

BH1		**BH2**	**BH3**	**BH4**	**BH5**	**BH6**	**BH7**	**BH8**	**BH9**
Live birth Line No.	*Name* All children, whether alive or dead:	**WERE ANY OF THESE BIRTHS TWINS?** **1 SINGLE** **2 MULTIPLE**	**IS *(name)* MALE OR FEMALE?** **1 MALE** **2 FEMALE**	**IN WHAT MONTH AND YEAR WAS *(name)* BORN?** ***Probe:* WHAT IS HIS/HER BIRTHDAY?** ***If they don't know write "98" for months and "9998" for year***	**IS *(name)* STILL ALIVE?** **1 YES** **2 NO** → **BH9**	***If alive:* HOW OLD WAS *(name)* ON HIS/HER LAST BIRTHDAY?** *Record age in completed years.*	***If alive:* IS *(name)* LIVING WITH YOU?** **1 YES** **2 NO**	***If alive:*** *Record household line number of child (from HL1).* Write "00" if child is not listed on household listing form (HL	**HOW OLD WAS *(name)* WHEN HE/SHE DIED?** *Record age at death.* *If less than 1 month, record days.* *If less than 2 years, record months.*
LINE	NAME	S M	M F	MONTH & YEAR	Y N	AGE	Y N	HH LINE NO.	AGE AT DEATH
11	11TH CHILD ____	1 2	1 2	M ☐☐ Y ☐☐☐☐	1 2	☐☐	1 2	☐☐	1.DAYS: ☐☐ DK DAYS……98 2.MONTHS: ☐☐ DK MONTHS……98 3.YEARS: ☐☐ DK YEARS……98
12	12TH CHILD ____	1 2	1 2	M ☐☐ Y ☐☐☐☐	1 2	☐☐	1 2	☐☐	1.DAYS: ☐☐ DK DAYS……98 2.MONTHS: ☐☐ DK MONTHS……98 3.YEARS: ☐☐ DK YEARS……98
13	13TH CHILD ____	1 2	1 2	M ☐☐ Y ☐☐☐☐	1 2	☐☐	1 2	☐☐	1.DAYS: ☐☐ DK DAYS……98 2.MONTHS: ☐☐ DK MONTHS……98 3.YEARS: ☐☐ DK YEARS……98
14	14TH CHILD ____	1 2	1 2	M ☐☐ Y ☐☐☐☐	1 2	☐☐	1 2	☐☐	1.DAYS: ☐☐ DK DAYS……98 2.MONTHS: ☐☐ DK MONTHS……98 3.YEARS: ☐☐ DK YEARS……98
15	15TH CHILD ____	1 2	1 2	M ☐☐ Y ☐☐☐☐	1 2	☐☐	1 2	☐☐	1.DAYS: ☐☐ DK DAYS……98 2.MONTHS: ☐☐ DK MONTHS……98 3.YEARS: ☐☐ DK YEARS……98
16	16TH CHILD ____	1 2	1 2	M ☐☐ Y ☐☐☐☐	1 2	☐☐	1 2	☐☐	1.DAYS: ☐☐ DK DAYS……98 2.MONTHS: ☐☐ DK MONTHS……98 3.YEARS: ☐☐ DK YEARS……98

BH10. *Interviewers:* *Record date of birth of the last child in the BH table.*	Date/ Month /Year of birth of the last child __ __/__ __/__ __ __ __	
BH11. *Interviewers:* *Check BH10: Since the last 2 years from the interview (day/month/year), has she given any births?* *If she had still birth, mention the name of the child when you administer the following questions.* ☐ No, there was no live birth in the last 2 years ☐ Yes, there was live birth in the last 2 years		No⇨Go to CP module
BH12. WHEN YOU WERE PREGNANT, DID YOU WISH TO BE PREGNANT THEN, OR WANTED TO WAIT FOR SOME TIME, OR YOU DID NOT WANT TO HAVE ANY MORE CHILDREN?	Wanted then .....1 Later on .....2 Did not want at all.....3	

TETANUS TOXOID (TT) MODULE		**TT**
This module is to be administered to all women with a live birth in the 2 years preceding date of interview.		
TT1. DO YOU HAVE A CARD OR OTHER DOCUMENT WITH YOUR OWN IMMUNIZATIONS LISTED? *If a card is presented, use it to assist with answers to the following questions.*	Yes (card seen) .....1 Yes (card not seen) .....2 No .....3 DK.....8	
TT2. WHEN YOU WERE PREGNANT WITH YOUR LAST CHILD, DID YOU RECEIVE ANY INJECTION TO PREVENT HIM OR HER FROM GETTING TETANUS, THAT IS CONVULSIONS AFTER BIRTH (AN ANTI-TETANUS SHOT, AN INJECTION AT THE TOP OF THE ARM OR SHOULDER)?	Yes .....1 No .....2 DK.....8	 2⇨TT5 8⇨TT5
TT3. *If yes:* HOW MANY TIMES DID YOU RECEIVE THIS ANTI-TETANUS INJECTION DURING YOUR LAST PREGNANCY?	No. of times .....__ __ DK.....98	 98⇨TT5
TT4. *How many TT doses during last pregnancy were reported in TT3?* ☐ *At least two TT injections during last pregnancy. ⇨ Go to Next Module(MN)* ☐ *Fewer than two TT injections during last pregnancy. ⇨ Continue with TT5*		
TT5. DID YOU RECEIVE ANY TETANUS TOXOID INJECTION AT ANY TIME BEFORE YOUR LAST PREGNANCY?	Yes .....1 No .....2 DK.....8	 2⇨NEXT MODULE 8⇨NEXT MODULE
TT6. HOW MANY TIMES DID YOU RECEIVE IT?	No. of times .....__ __	
TT7. IN WHAT MONTH AND YEAR DID YOU RECEIVE THE LAST ANTI-TETANUS INJECTION BEFORE THAT LAST PREGNANCY? *Skip to next module only if year of injection is given. Otherwise, continue with TT8.*	Month.....__ __ DK month.....98 Year .....__ __ __ __ DK year.....9998	 ⇨NEXT MODULE
TT8. HOW MANY YEARS AGO DID YOU RECEIVE THE LAST ANTI-TETANUS INJECTION BEFORE THAT LAST PREGNANCY?	Years ago .....__ __	

MATERNAL AND NEWBORN HEALTH MODULE		**MN**
This module is to be administered to all women with a live birth in the 2 years preceding date of interview. Check child mortality module CM12 and record name of last-born child here _____. Use this child's name in the following questions, where indicated.		
MN1. IN THE FIRST TWO MONTHS AFTER YOUR LAST BIRTH [THE BIRTH OF *name*], DID YOU RECEIVE A VITAMIN A DOSE LIKE THIS? *Show 200,000 IU capsule or dispenser.*	Yes .....1 No .....2 DK.....8	
MN2. DID YOU SEE ANYONE FOR ANTENATAL CARE FOR THIS PREGNANCY? *If yes*: WHOM DID YOU SEE? ANYONE ELSE? *Probe for the type of person seen and circle all answers given.*	Health professional: Doctor ..... A Nurse ..... B Midwife ..... C Other person Traditional birth attendant.....F Community health worker.....G Relative/friend.....H Other (*specify*) _____ X No one ..... Y	Y⇨MN7
MN3. AS PART OF YOUR ANTENATAL CARE, WERE ANY OF THE FOLLOWING DONE AT LEAST ONCE?	Yes No	
MN3A. WERE YOU WEIGHED?	Weight 1 2	
MN3B. WAS YOUR BLOOD PRESSURE MEASURED?	Blood pressure 1 2	
MN3C. DID YOU GIVE A URINE SAMPLE?	Urine sample 1 2	
MN3D. DID YOU GIVE A BLOOD SAMPLE?	Blood sample..... 1 2	
MN4. DURING ANY OF THE ANTENATAL VISITS FOR THE PREGNANCY, WERE YOU GIVEN ANY INFORMATION OR COUNSELED ABOUT AIDS OR THE AIDS VIRUS?	Yes .....1 No .....2 DK.....8	
MN5. I DON'T WANT TO KNOW THE RESULTS, BUT WERE YOU TESTED FOR HIV/AIDS AS PART OF YOUR ANTENATAL CARE?	Yes .....1 No .....2 DK.....8	2⇨MN7 8⇨MN7
MN6. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?	Yes .....1 No .....2 DK.....8	
MN7. WHO ASSISTED WITH THE DELIVERY OF YOUR LAST CHILD (*name*)? ANYONE ELSE? *Probe for the type of person assisting and circle all answers given.*	Health professional: Doctor ..... A Nurse ..... B Midwife ..... C Other person Traditional birth attendant.....F Community health worker.....G Relative/friend.....H Other (*specify*) _____ X No one ..... Y	

MN8. WHERE DID YOU GIVE BIRTH TO (*name*)? *If source is hospital, health center, or clinic, write the name of the place below. Probe to identify the type of source and circle the appropriate code.* _____ *(Name of place)*	Home Your home .....11 Other home.....12 Public sector Govt. hospital.....21 Govt. clinic/health center .....22 Other public (*specify*) _____ 26 Private Medical Sector Private hospital .....31 Private clinic .....32 Other private medical (*specify*) _____ 36 Other (*specify*) _____ 96	
MN9. WHEN YOUR LAST CHILD (*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 DK.....8	
MN10. WAS (*name*) WEIGHED AT BIRTH?	Yes .....1 No .....2 DK.....8	 2⇨MN12 8⇨MN12
MN11. HOW MUCH DID (*name*) WEIGH? *Record weight from health card, if available.*	From card .....1 (kilograms) __ . __ __ __ From recall.....2 (kilograms) __ . __ __ __ DK.....99998	
MN12. DID YOU EVER BREASTFEED (*name*)?	Yes .....1 No 2	 2⇨ NEXT MODULE
MN13. HOW LONG AFTER BIRTH DID YOU FIRST PUT (*name*) TO THE BREAST? *If less than 1 hour, record '00' hours.* *If less than 24 hours, record hours.* *Otherwise, record days.*	Immediately .....000 Hours..... 1 __ __ *or* Days ..... 2 __ __ Don't know/remember 998	

CONTRACEPTION AND UNMET NEED		**CP**
To be administered to all eligible women who are currently married age 15-49		
CP1. I WOULD LIKE TO TALK WITH YOU ABOUT ANOTHER SUBJECT – FAMILY PLANNING – AND YOUR REPRODUCTIVE HEALTH. ARE YOU PREGNANT NOW?	Yes, currently pregnant ..... 1 No ..... 2 Unsure or DK 8	 2⇨CP2 8⇨CP2
CP1A. AT THE TIME YOU BECAME PREGNANT DID YOU WANT TO BECOME PREGNANT THEN, DID YOU WANT TO WAIT UNTIL LATER, OR DID YOU NOT WANT TO HAVE ANY MORE CHILDREN?	Then ..... 1 Later ..... 2 Not want more children 3	1⇨CP4B 2⇨CP4B 3⇨CP4B
CP2. SOME PEOPLE USE VARIOUS WAYS OR METHODS TO DELAY OR AVOID A PREGNANCY. ARE YOU CURRENTLY DOING SOMETHING OR USING ANY METHOD TO DELAY OR AVOID GETTING PREGNANT?	Yes ..... 1 No 2	 2⇨CP4A
CP3. WHICH METHOD ARE YOU USING? *Do not prompt.* *If more than one method is mentioned, circle each one.*	Female sterilization ..... A Male sterilization ..... B Pill ..... C IUD ..... D Injections ..... E Implants ..... F Condom ..... G Female condom ..... H Diaphragm ..... I Foam/jelly ..... J Lactational amenorrhoea method (LAM) ..... K Periodic abstinence ..... L Withdrawal ..... M Other (*specify*) _____ X	
CP3A. FROM WHERE DID YOU GET THE CURRENT FAMILY PLANNING METHOD LAST TIME? *If the currently used method is continued breastfeeding, withdrawal, abstinence or others, ask as follows;* WHO INSTRUCTED THE METHOD FIRST TIME?	Public sector Govt. hospital ..... 11 Govt. health centre ..... 12 Maternal and child care unit/health unit. 13 Other public (*specify*) _____ 16 Private medical sector Private hospital/clinic ..... 21 Private physician ..... 22 Private pharmacy ..... 23 Health worker ..... 24 Other private medical (*specify*) _____ 26 Other source Husband ..... 31 Relative/friend ..... 32 Shop ..... 33 Traditional shop ..... 34 Other (*specify*) ..... 96 Don't know 98	

CP4A. NOW I WOULD LIKE TO ASK SOME QUESTIONS ABOUT THE FUTURE. WOULD YOU LIKE TO HAVE (A/ANOTHER) CHILD, OR WOULD YOU PREFER NOT TO HAVE ANY (MORE) CHILDREN? CP4B. *If currently pregnant:* APART FROM THE CHILD YOU ARE NOW EXPECTING, WOULD YOU LIKE TO HAVE ANOTHER CHILD, OR WOULD YOU PREFER NOT TO HAVE ANY (MORE) CHILDREN?	Have (a/another) child .....1 No more/none.....2 Says she cannot get pregnant.....3 Undecided/don't know 8	2⇨CP4D 3⇨NEXT MODULE 8⇨CP4D
CP4C. HOW LONG WOULD YOU LIKE TO WAIT BEFORE THE BIRTH OF (A/ANOTHER) CHILD?	Months.....1 __ __ Years .....2 __ __ Soon/now.....9 93 Says she cannot get pregnant.....9 94 Other.....9 96 Don't know.....9 98	
CP4D. Check CP1: ☐ Currently pregnant? ⇨ Go to Next Module ☐ Not currently pregnant or unsure? ⇨ Continue with CP4E		
CP4E. DO YOU THINK YOU ARE PHYSICALLY ABLE TO GET PREGNANT AT THIS TIME?	Yes 1 No 2 DK 8	

HIV/AIDS MODULE		HA
HA1. NOW I WOULD LIKE TO TALK WITH YOU ABOUT SOMETHING ELSE. HAVE YOU EVER HEARD OF THE VIRUS HIV OR AN ILLNESS CALLED AIDS?	Yes .....1 No 2	 2⇨ NEXT MODULE
HA3. CAN PEOPLE GET INFECTED WITH THE AIDS VIRUS BECAUSE OF WITCHCRAFT OR OTHER SUPERNATURAL MEANS?	Yes .....1 No .....2 DK.....8	
HA4. CAN PEOPLE REDUCE THEIR CHANCE OF GETTING THE AIDS VIRUS BY USING A CONDOM EVERY TIME THEY HAVE SEX?	Yes .....1 No .....2 DK.....8	
HA5. CAN PEOPLE GET THE AIDS VIRUS FROM MOSQUITO BITES?	Yes .....1 No .....2 DK.....8	
HA6. CAN PEOPLE REDUCE THEIR CHANCE OF GETTING INFECTED WITH THE AIDS VIRUS BY NOT HAVING SEX AT ALL?	Yes .....1 No .....2 DK.....8	
HA7. CAN PEOPLE GET THE AIDS VIRUS BY SHARING FOOD WITH A PERSON WHO HAS AIDS?	Yes .....1 No .....2 DK.....8	
HA7A. CAN PEOPLE GET THE AIDS VIRUS BY GETTING INJECTIONS WITH A NEEDLE THAT WAS ALREADY USED BY SOMEONE ELSE?	Yes .....1 No .....2 DK.....8	
HA8. IS IT POSSIBLE FOR A HEALTHY-LOOKING PERSON TO HAVE THE AIDS VIRUS?	Yes .....1 No .....2 DK.....8	
HA9. CAN THE AIDS VIRUS BE TRANSMITTED FROM A MOTHER TO A BABY? HA9A. DURING PREGNANCY? HA9B. DURING DELIVERY? HA9C. BY BREASTFEEDING?	Yes No DK During pregnancy .....1 2 8 During delivery.....1 2 8 By breastfeeding 1 2 8	
HA10. IF A FEMALE TEACHER HAS THE AIDS VIRUS BUT IS NOT SICK, SHOULD SHE BE ALLOWED TO CONTINUE TEACHING IN SCHOOL?	Yes .....1 No .....2 DK/not sure/depends.....8	
HA11. WOULD YOU BUY FRESH VEGETABLES FROM A SHOPKEEPER OR VENDOR IF YOU KNEW THAT THIS PERSON HAD THE AIDS VIRUS?	Yes .....1 No .....2 DK/not sure/depends.....8	
HA12. IF A MEMBER OF YOUR FAMILY BECAME INFECTED WITH THE AIDS VIRUS, WOULD YOU WANT IT TO REMAIN A SECRET?	Yes .....1 No .....2 DK/not sure/depends.....8	
HA13. IF A MEMBER OF YOUR FAMILY BECAME SICK WITH THE AIDS VIRUS, WOULD YOU BE WILLING TO CARE FOR HIM OR HER IN YOUR HOUSEHOLD?	Yes .....1 No .....2 DK/not sure/depends.....8	
HA14. *Check MN5: Tested for HIV during antenatal care?* ☐ *Yes. ⇨ Go to HA18A* ☐ *No. ⇨ Continue with HA15*		
HA15. I DO NOT WANT TO KNOW THE RESULTS, BUT HAVE YOU EVER BEEN TESTED TO SEE IF YOU HAVE HIV, THE VIRUS THAT CAUSES AIDS?	Yes .....1 No 2	 2⇨HA18
HA16. I DO NOT WANT YOU TO TELL ME THE RESULTS OF THE TEST, BUT HAVE YOU BEEN TOLD THE RESULTS?	Yes .....1 No 2	
HA17. DID YOU, YOURSELF, ASK FOR THE TEST,	Asked for the test 1	

WAS IT OFFERED TO YOU AND YOU ACCEPTED, OR WAS IT REQUIRED?	Offered and accepted.....2 Required.....3	
HA18. AT THIS TIME, DO YOU KNOW OF A PLACE WHERE YOU CAN GO TO GET SUCH A TEST TO SEE IF YOU HAVE THE AIDS VIRUS?	Yes .....1 No.....2	
HA18A. IF YOU HAVE BEEN TESTED FOR HIV DURING PREGNANCY, DO YOU KNOW A PLACE OTHER THAN MATERNAL CARE CLINIC WHERE YOU CAN GO TO GET A TEST FOR HIV?	Yes .....1 No.....2 DK.....8	
HA19. *Check column (HL8) in Household Questionnaire* ☐*Women either a mother or a caretaker for a child/children under 5 (living with her) ⇨ Go to questionnaire for children under 5* ☐*Women not mother nor caretaker for child/children under 5 ⇨ Continue with HA19A*		
HA19A. *Check column (HL6) in Household Questionnaire* ☐*There are other eligible women in the household ⇨ Complete questionnaire for individual women* ☐*There is no eligible women in the household ⇨ Finish interview*		

Follow instructions in your Interviewer's Manual.