



# KAZAKHSTAN

## Multiple Indicator Cluster Survey 2015

### Final Report

*December, 2016*



Министерство национальной экономики  
Республики Казахстан  
Комитет по статистике



United Nations Population Fund



## **Multiple Indicator Cluster Survey (MICS) in the Republic of Kazakhstan 2015**

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The Kazakhstan Multiple Indicator Cluster Survey (MICS) was carried out in 2015 by the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan (herein MNE RK) in collaboration with the Republican State Enterprise "Information and Computing Centre under the Statistics Committee MNE RK" (herein RSE "ICC under the Statistics Committee of the MNE RK"), as part of the global MICS programme.

The United Nations Children's Fund (UNICEF) provided technical and methodological assistance to the survey. The Statistics Committee financed a significant part of the survey activities, as well as made an in-kind contribution in the form of kept salary of staff members of the Statistics Committee and territorial statistical departments during the survey implementation period.

Significant financial support was provided by UNICEF and partially by the United Nations Population Fund (UNFPA) in Kazakhstan.

The global MICS programme was developed by UNICEF in the 1990s as an international household survey programme to support countries in the collection of internationally comparable data on a wide range of indicators on the situation of children and women.

MICS helped countries to capture rapid changes in key indicators as the Millennium Development Goals (MDGs) target year 2015 approached. MICS played a major role in generating information for over 21 MDG indicators that will be further demanded for monitoring of the Sustainable Development Goals (SDGs) as well as for expanding the evidence base for public policies and programmes.

The objective of this report is to facilitate the timely dissemination and use of detailed results from the 2015 Kazakhstan MICS by various demographic, social, economic and cultural characteristics.

For more information on indicators and the analysis conducted in the Final report please go to [mics.unicef.org](http://mics.unicef.org) and [data.unicef.org](http://data.unicef.org).

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The reference to this Report is obligatory when copying, quoting or otherwise using information contained in the Report.

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## Summary Table of Survey Implementation and the Survey Population, Kazakhstan, 2015

Survey implementation			
<b>Sample frame</b>	2009	<b>Questionnaires</b>	
	The second National Census of the Republic of Kazakhstan		Household Questionnaire Questionnaire for Individual Women (15-49 years) Questionnaire for Children Under Five
- Updated	July, 2015		Appendix for Data Collection at Health Facility about Immunization
<b>Interviewer training</b>	August, 2015	<b>Fieldwork</b>	September – November, 2015
<b>Survey sample</b>			
Households		Children under five	
- Sampled	16,791	- Eligible	5,561
- Occupied	16,605	- Mothers/caretakers interviewed	5,510
- Interviewed	16,500	- Response rate (Percent)	99.1
- Response rate (Percent)	99.4		
Women			
- Eligible for interviews	12,910		
- Interviewed	12,670		
- Response rate (Percent)	98.1		

Survey population			
Average household size	3.4	<b>Percentage of population living in</b>	
<b>Percentage of population under:</b>		- Urban areas	53.2
- Age 5	10.3	- Rural areas	46.8
- Age 18	30.8	- Akmola	4.9
Percentage of women aged 15-49 years with at least one live birth in the last 2 years	17.0	- Aktobe	6.3
		- Almaty oblast	8.2
		- Atyrau	3.3
		- West Kazakhstan	4.6
		- Zhambyl	6.4
		- Karaganda	8.2
		- Kostanai	5.1
		- Kyzylorda	3.3
		- Mangistau	3.2
		- South Kazakhstan	17.5
		- Pavlodar	4.0
		- North Kazakhstan	3.0
		- East Kazakhstan	7.2
		- Astana City	7.1
		- Almaty City	7.5

**Housing characteristics****Percentage of households with**

- Electricity	100.0
- Finished floor	66.2
- Finished roofing	99.4
- Finished walls	92.8

Mean number of persons per room used for sleeping	1.8
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**Household or personal assets****Percentage of households that own**

- A television	99.3
- A refrigerator	98.2
- A microwave	63.9
- A washing machine	88.2
- A vacuum cleaner	79.2

- Agricultural land	32.7
- Farm animals/livestock	25.1

**Percentage of households where at least a member has or owns a**

- A mobile telephone or smartphone	96.6
- A car or truck	50.0
- A bank account	79.0

## Summary Table of Findings<sup>1</sup>

### Multiple Indicator Cluster Surveys (MICS), Kazakhstan, 2015

<b>NUTRITION</b>			
<b>Nutritional status</b>			
<b>MICS Indicator</b>	<b>Indicator</b>	<b>Description</b>	<b>Value</b>
2.1a	<b>MDG 1.8</b> Underweight prevalence (a) Moderate and severe (b) Severe	Percentage of children under age 5 who fall below	
2.1b		(a) minus two standard deviations (moderate and severe) (b) minus three standard deviations (severe) of the median weight for age of the WHO standard	2.0 0.3
2.2a	Stunting prevalence (a) Moderate and severe (b) Severe	Percentage of children under age 5 who fall below	
2.2b		(a) minus two standard deviations (moderate and severe) (b) minus three standard deviations (severe) of the median height for age of the WHO standard	8.0 2.4
2.3a	Wasting prevalence (a) Moderate and severe (b) Severe	Percentage of children under age 5 who fall below	
2.3b		(a) minus two standard deviations (moderate and severe) (b) minus three standard deviations (severe) of the median weight for height of the WHO standard	3.1 1.1
2.4	Overweight prevalence	Percentage of children under age 5 who are above two standard deviations of the median weight for height of the WHO standard	9.3
<b>Breastfeeding and infant feeding</b>			
2.5	Children ever breastfed	Percentage of women with a live birth in the last 2 years who breastfed their last live-born child at any time	97.1
2.6	Early initiation of breastfeeding	Percentage of women with a live birth in the last 2 years who put their last newborn to the breast within one hour of birth	83.3
2.7	Exclusive breastfeeding under 6 months	Percentage of infants under 6 months of age who are exclusively breastfed	37.8
2.8	Predominant breastfeeding under 6 months	Percentage of infants under 6 months of age who received breast milk as the predominant source of nourishment during the previous day	73.2
2.9	Continued breastfeeding at 1 year	Percentage of children aged 12-15 months who received breast milk during the previous day	59.8
2.10	Continued breastfeeding at 2 years	Percentage of children aged 20-23 months who received breast milk during the previous day	21.1
2.11	Median duration of breastfeeding	The age in months when 50 percent of children aged 0-35 months did not receive breast milk during the previous day	15.6
2.12	Age-appropriate breastfeeding	Percentage of children aged 0-23 months appropriately fed during the previous day	46.3
2.13	Introduction of solid, semi-solid or soft foods	Percentage of infants aged 6-8 months who received solid, semi-solid or soft foods during the previous day	66.5
2.14	Milk feeding frequency for non-breastfed children	Percentage of non-breastfed children aged 6-23 months who received at least 2 milk feedings during the previous day	79.9
2.15	Minimum meal frequency	Percentage of children aged 6-23 months who received solid, semi-solid and soft foods (plus milk feeds for non-breastfed children) the minimum number of times or more during the previous day	74.0
2.16	Minimum dietary diversity	Percentage of children aged 6-23 months who received foods from 4 or more food groups during the previous day	68.7

<sup>1</sup> See Appendix E for a detailed description of MICS indicators.

2.17a	Minimum acceptable diet	(a) Percentage of breastfed children aged 6–23 months who had at least the minimum dietary diversity and the minimum meal frequency during the previous day	42.6
2.17b		(b) Percentage of non-breastfed children aged 6–23 months who received at least 2 milk feedings and had at least the minimum dietary diversity not including milk feeds and the minimum meal frequency during the previous day	48.3
2.18	Bottle feeding	Percentage of children aged 0-23 months who were fed with a bottle during the previous day	51.2
<b>Salt iodization</b>			
2.19	Iodized salt consumption	Percentage of households with salt testing 15 parts per million or more of iodate	90.7
<b>Low-birthweight</b>			
2.20	Low-birthweight infants	Percentage of most recent live births in the last 2 years weighing below 2,500 grams at birth	4.5
2.21	Infants weighed at birth	Percentage of most recent live births in the last 2 years who were weighed at birth	98.7

## CHILD HEALTH

### Vaccinations

MICS Indicator	Indicator	Description	Value
3.1	Tuberculosis immunization coverage	Percentage of children aged 12-23 months who received BCG vaccine by their first birthday	98.5
3.2	Polio immunization coverage	Percentage of children aged 12-23 months who received the third dose of Polio vaccine (Polio-3) by their first birthday	89.7
3.3	Diphtheria, pertussis and tetanus (DPT) immunization coverage	Percentage of children aged 12-23 months who received the third dose of DPT vaccine (DPT-3) by their first birthday	90.4
3.4	<b>MDG 4.3</b> Measles immunization coverage	Percentage of children aged 24-35 months who received measles vaccine by their second birthday	95.1
3.5	Hepatitis B immunization coverage	Percentage of children aged 12-23 months who received the third dose of Hepatitis B vaccine (HepB-3) by their first birthday	88.4
3.6	Haemophilus influenzae type B (Hib) immunization coverage	Percentage of children aged 12-23 months who received the third dose of Hib vaccine (Hib-3) by their first birthday	89.3
3.8	Full immunization coverage	Percentage of children aged 24-35 months who received all vaccinations recommended in the national immunization schedule by their first birthday (for measles – by their second birthday)	84.1
<b>Solid fuel use</b>			
3.15	Use of solid fuels for cooking	Percentage of household members in households that use solid fuels as the primary source of domestic energy to cook	1.5

## WATER AND SANITATION

MICS Indicator	Indicator	Description	Value
4.1	<b>MDG 7.8</b> Use of improved drinking water sources	Percentage of household members using improved sources of drinking water	97.3
4.2	Water treatment	Percentage of household members in households using unimproved drinking water who use an appropriate treatment method	46.4

## WATER AND SANITATION

MICS Indicator	Indicator	Description	Value	
4.3	<b>MDG 7.9</b>	Use of improved sanitation	Percentage of household members using improved sanitation facilities which are not shared	98.0
4.5		Place for handwashing	Percentage of households with a specific place for handwashing where water and soap are present	99.0
4.6		Availability of soap <sup>2</sup>	Percentage of households with soap	97.9

## REPRODUCTIVE HEALTH

### Contraception and unmet need

MICS Indicator	Indicator	Description	Value	
-		Total fertility rate	Total fertility rate for women aged 15-49 years	3.0
5.1	<b>MDG 5.4</b>	Adolescent birth rate	Age-specific fertility rate for women aged 15-19 years	36
5.2		Early childbearing	Percentage of women aged 20-24 years who had at least one live birth before age 18	2.2
5.3	<b>MDG 5.3</b>	Contraceptive prevalence rate	Percentage of women aged 15-49 years currently married or in union who are using (or whose partner is using) a (modern or traditional) contraceptive method	55.7
5.4	<b>MDG 5.6</b>	Unmet need	Percentage of women aged 15-49 years who are currently married or in union who are fecund and want to space their births or limit the number of children they have and who are not currently using contraception	9.8
5.S1 <sup>3</sup>		Lifetime experience with abortion	Percentage of women aged 15–49 years who had at least one induced abortion	20.1
5.S2		Total abortion rate	Total abortion rate for women aged 15-49 years	0.3
5.S3		General abortion rate	General abortion rate for women aged 15-49 years	10

### Maternal and newborn health

5.5a	<b>MDG 5.5</b>	Antenatal care coverage	Percentage of women aged 15-49 years with a live birth in the last 2 years who were attended during their last pregnancy that led to a live birth (a) at least once by skilled health personnel (b) at least four times by any provider	99.3
5.5b	<b>MDG 5.5</b>			95.3
5.6		Content of antenatal care	Percentage of women aged 15-49 years with a live birth in the last 2 years who had their blood pressure measured and gave urine and blood samples during the last pregnancy that led to a live birth	99.3
5.7	<b>MDG 5.2</b>	Skilled attendant at delivery	Percentage of women aged 15-49 years with a live birth in the last 2 years who were attended by skilled health personnel during their most recent live birth	99.4
5.8		Institutional deliveries	Percentage of women aged 15-49 years with a live birth in the last 2 years whose most recent live birth was delivered in a health facility	99.3
5.9		Caesarean section	Percentage of women aged 15-49 years whose most recent live birth in the last 2 years was delivered by caesarean section	14.8

<sup>2</sup>The indicator name has been changed from the standard “MICS indicator 4.6 – Availability of soap or other cleansing agent” since other cleansing agents such as ash, mud or sand are not applicable for Kazakhstan.

<sup>3</sup>The indicator numbering system #.S# denotes a survey-specific indicator calculated by the introduction of a non-standard module or question(s) to this survey that is not part of the global MICS5 Questionnaires or by applying a non-standard calculation method that is not included in the global MICS5 Tabulation Plan.



Post-natal health checks			
5.10	Post-partum stay in health facility	Percentage of women aged 15-49 years who stayed in the health facility for 12 hours or more after the delivery of their most recent live birth in the last 2 years	99.9
5.11	Post-natal health check for the newborn	Percentage of last live births in the last 2 years who received a health check while in facility or at home following delivery, or a post-natal care visit within 2 days after delivery	99.4
5.12	Post-natal health check for the mother	Percentage of women aged 15-49 years who received a health check while in facility or at home following delivery, or a post-natal care visit within 2 days after delivery of their most recent live birth in the last 2 years	97.5

CHILD DEVELOPMENT			
MICS Indicator	Indicator	Description	Value
6.1	Attendance to early childhood education	Percentage of children aged 36-59 months who are attending an early childhood education programme	55.3
6.2	Support for learning	Percentage of children aged 36-59 months with whom an adult has engaged in four or more activities to promote learning and school readiness in the last 3 days	85.6
6.3	Father's support for learning	Percentage of children aged 36-59 months whose biological father has engaged in four or more activities to promote learning and school readiness in the last 3 days	6.6
6.4	Mother's support for learning	Percentage of children aged 36-59 months whose biological mother has engaged in four or more activities to promote learning and school readiness in the last 3 days	50.7
6.5	Availability of children's books	Percentage of children under age 5 who have three or more children's books	50.9
6.6	Availability of playthings	Percentage of children under age 5 who play with two or more types of playthings	59.5
6.7	Inadequate care	Percentage of children under age 5 left alone or in the care of another child younger than 10 years of age for more than one hour at least once in the last week	5.0
6.8	Early child development index	Percentage of children aged 36-59 months who are developmentally on track in at least three of the following four domains: literacy-numeracy, physical, social-emotional, and learning	85.5

LITERACY AND EDUCATION			
MICS Indicator	Indicator	Description	Value
7.1	<b>MDG 2.3</b> Literacy rate among young women	Percentage of young women aged 15-24 years who are able to read a short simple statement about everyday life or who attended secondary or higher education	100.0
7.2	School readiness	Percentage of children in first grade of primary school who attended pre-school during the previous school year	90.8
7.3	Net intake rate in primary education	Percentage of children of school-entry age who enter the first grade of primary school	99.2
7.4	<b>MDG 2.1</b> Primary school net attendance ratio (adjusted)	Percentage of children of primary school age currently attending primary or secondary school (age 7-10 years)	99.5
7.5	Secondary school net attendance ratio (adjusted)	Percentage of children of secondary school age currently attending secondary school or higher (age 11-17 years)	98.9

7.S1		Lower secondary school <sup>4</sup> net attendance ratio (adjusted)	Percentage of children of lower secondary school age currently attending lower secondary school (age 11-15 years)	99.4
7.S2		Upper secondary school <sup>5</sup> net attendance ratio (adjusted)	Percentage of children of upper secondary school age currently attending upper secondary school or higher (age 16-17 years)	95.7
7.6	<b>MDG 2.2</b>	Children reaching last grade of primary	Percentage of children entering the first grade of primary school who eventually reach last grade	100.0
7.7		Primary completion rate	Number of children attending the last grade of primary school (excluding repeaters) divided by the number of children of primary school completion age (age appropriate to final grade of primary school)	102.1
7.8		Transition rate to lower secondary school <sup>6</sup>	Number of children attending the last grade of primary school during the previous school year who are in the first grade of lower secondary school during the current school year divided by the number of children attending the last grade of primary school during the previous school year	99.9
7.S3		Lower secondary school completion rate	Number of children attending the last grade of lower secondary school (excluding repeaters) divided by the number of children of lower secondary school completion age (age appropriate to final grade of lower secondary school)	110.8
7.S4		Transition rate to upper secondary school	Number of children attending the last grade of lower secondary school during the previous school year who are in the first grade of upper secondary school or in the first grade of technical and professional education during the current school year divided by the number of children attending the last grade of lower secondary school during the previous school year	97.9
7.9	<b>MDG 3.1</b>	Gender parity index (primary school)	Primary school net attendance ratio (adjusted) for girls divided by primary school net attendance ratio (adjusted) for boys	1.00
7.10	<b>MDG 3.1</b>	Gender parity index (secondary school)	Secondary school net attendance ratio (adjusted) for girls divided by secondary school net attendance ratio (adjusted) for boys	1.00
7.S5		Gender parity index (lower secondary school)	Lower secondary school net attendance ratio (adjusted) for girls divided by lower secondary school net attendance ratio (adjusted) for boys	1.00
7.S6		Gender parity index (upper secondary school)	Upper secondary school net attendance ratio (adjusted) for girls divided by upper secondary school net attendance ratio (adjusted) for boys	1.01

## CHILD PROTECTION

### Birth registration

MICS Indicator	Indicator	Description	Value
8.1	Birth registration	Percentage of children under age 5 whose births are reported registered	99.7

### Child discipline

8.3	Violent discipline	Percentage of children aged 1-14 years who experienced psychological aggression or physical punishment during the last one month	52.7
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<sup>4</sup> Lower secondary school consists of grades 5-9 of secondary school.

<sup>5</sup> Upper secondary school consists of grades 10-11 of secondary school.

<sup>6</sup> Transition rate to lower secondary school corresponds to transition rate to secondary school as defined in MICS global indicator 7.8.

<b>Early marriage</b>			
8.4	Marriage before age 15	Percentage of women aged 15-49 years who were first married or in union before age 15	0.1
8.5	Marriage before age 18	Percentage of women aged 20-49 years who were first married or in union before age 18	7.8
8.6	Young women age 15-19 years currently married or in union	Percentage of young women aged 15-19 years who are married or in union	6.0
8.8a	Spousal age difference	Percentage of young women who are married or in union and whose spouse is 10 or more years older, (a) among women aged 15-19 years, (b) among women aged 20-24 years	5.8
8.8b			4.5
<b>Attitudes towards domestic violence</b>			
8.12	Attitudes towards domestic violence	Percentage of women aged 15-49 years who state that a husband is justified in hitting or beating his wife in at least one of the following circumstances: (1) she goes out without telling him, (2) she neglects the children, (3) she argues with him, (4) she refuses sex with him, (5) she burns the food	14.2
8.S1	Attitudes towards domestic violence (including additional circumstance)	Percentage of women aged 15-49 years who state that a husband is justified in hitting or beating his wife in at least one of the following circumstances: (1) she goes out without telling him, (2) she neglects the children, (3) she argues with him, (4) she refuses sex with him, (5) she burns the food, (6) she neglects housework	15.1
<b>Children's living arrangements</b>			
8.13	Children's living arrangements	Percentage of children aged 0-17 years living with neither biological parent	3.2
8.14	Prevalence of children with one or both parents dead	Percentage of children aged 0-17 years with one or both biological parents dead	4.9

<b>HIV/AIDS AND SEXUAL BEHAVIOUR</b>			
<b>HIV/AIDS knowledge and attitudes</b>			
<b>MICS Indicator</b>	<b>Indicator</b>	<b>Description</b>	<b>Value</b>
-	Have heard of AIDS	Percentage of women aged 15-49 years who have heard of AIDS	97.9
9.1	<b>MDG 6.3</b> Knowledge about HIV prevention among young women	Percentage of young women aged 15-24 years who correctly identify ways of preventing the sexual transmission of HIV, and who reject major misconceptions about HIV transmission	26.7
9.2	Knowledge of mother-to-child transmission of HIV	Percentage of women aged 15-49 years who correctly identify all three means of mother-to-child transmission of HIV	58.0
9.3	Accepting attitudes towards people living with HIV	Percentage of women aged 15-49 years expressing accepting attitudes on all four questions toward people living with HIV	2.5
<b>HIV testing</b>			
9.4	Women who know where to be tested for HIV	Percentage of women aged 15-49 years who state knowledge of a place to be tested for HIV	86.9
9.5	Women who have been tested for HIV and know the results	Percentage of women aged 15-49 years who have been tested for HIV in the last 12 months and who know their results	23.3

9.6		Sexually active young women who have been tested for HIV and know the results	Percentage of young women aged 15-24 years who have had sex in the last 12 months, who have been tested for HIV in the last 12 months and who know their results	39.0
9.7		HIV counselling during antenatal care	Percentage of women aged 15-49 years who had a live birth in the last 2 years and received antenatal care during the pregnancy of their most recent birth, reporting that they received counselling on HIV during antenatal care	67.2
9.8		HIV testing during antenatal care	Percentage of women aged 15-49 years who had a live birth in the last 2 years and received antenatal care during the pregnancy of their most recent birth, reporting that they were offered and accepted an HIV test during antenatal care and received their results	79.0
<b>Sexual behaviour</b>				
9.9		Young women who have never had sex	Percentage of never married young women aged 15-24 years who have never had sex	91.3
9.10		Sex before age 15 among young women	Percentage of young women aged 15-24 years who had sexual intercourse before age 15	0.2
9.11		Age-mixing among sexual partners	Percentage of women aged 15-24 years who had sex in the last 12 months with a partner who was 10 or more years older	5.5
9.12		Multiple sexual partnerships	Percentage of women aged 15-49 years who had sexual intercourse with more than one partner in the last 12 months	0.8
9.13		Condom use at last sex among women with multiple sexual partnerships	Percentage of women aged 15-49 years who report having had more than one sexual partner in the last 12 months who also reported that a condom was used the last time they had sex	40.6
9.14		Sex with non-regular partners	Percentage of sexually active young women aged 15-24 years who had sex with a non-marital, non-cohabitating partner in the last 12 months	16.6
9.15	<b>MDG 6.2</b>	Condom use with non-regular partners	Percentage of young women aged 15-24 years reporting the use of a condom during the last sexual intercourse with a non-marital, non-cohabiting sex partner in the last 12 months	63.7
<b>Orphans</b>				
9.16	<b>MDG 6.4</b>	Ratio of school attendance of orphans to school attendance of non-orphans	Proportion attending school among children age 10-14 years who have lost both parents divided by proportion attending school among children age 10-14 years whose parents are alive and who are living with one or both parents	(*)
(*) Figures that are based on fewer than 25 unweighted cases.				

## ACCESS TO MASS MEDIA AND ICT

### Access to mass media

MICS Indicator	Indicator	Description	Value
10.1	Exposure to mass media	Percentage of women aged 15-49 years who, at least once a week, read a newspaper or magazine, listen to the radio, and watch television	16.1
<b>Use of information/communication technology</b>			
10.2	Use of computers	Percentage of young women aged 15-24 years who used a computer during the last 12 months	88.2
10.3	Use of internet	Percentage of young women aged 15-24 years who used the internet during the last 12 months	94.6

**SUBJECTIVE WELL-BEING**

<b>MICS Indicator</b>	<b>Indicator</b>	<b>Description</b>	<b>Value</b>
11.1	Life satisfaction	Percentage of young women aged 15-24 years who are very or somewhat satisfied with their life, overall	96.8
11.2	Happiness	Percentage of young women aged 15-24 years who are very or somewhat happy	98.5
11.3	Perception of a better life	Percentage of young women aged 15-24 years whose life improved during the last one year, and who expect that their life will be better after one year	64.9

**TOBACCO AND ALCOHOL USE****Tobacco use**

<b>MICS Indicator</b>	<b>Indicator</b>	<b>Description</b>	<b>Value</b>
12.1	Tobacco use	Percentage of women aged 15-49 years who smoked cigarettes, or used smoked or smokeless tobacco products at any time during the last one month	8.4
12.2	Smoking before age 15	Percentage of women aged 15-49 years who smoked for the first time a whole cigarette before age 15	0.9

**Alcohol use**

12.3	Use of alcohol	Percentage of women aged 15-49 years who had at least one alcoholic drink at any time during the last one month	25.1
12.4	Use of alcohol before age 15	Percentage of women aged 15-49 years who had for the first time at least one alcoholic drink before age 15	0.5

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## List of Abbreviations

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AIDS	Acquired Immune Deficiency Syndrome
BCG	Bacillus Calmette-Guérin (Tuberculosis)
CBR	Crude Birth Rate
CRC	Convention on the Rights of the Child
C-section	Caesarian Section
CSPRO	Census and Survey Processing System
DPT/DTaP	Diphtheria, Pertussis and Tetanus
DTaP/DPT	Diphtheria, Pertussis and Tetanus
EAs	Enumeration Areas
ECDI	Early Child Development Index
EPI	Expanded Programme on Immunization
GAR	General Abortion Rate
GARPR	Global AIDS Response Progress Reporting
GFR	General Fertility Rate
GPI	Gender Parity Index
GVAP	Global Vaccine Action Plan
HBV/HepB	Hepatitis B
HepB/HBV	Hepatitis B
Hib	Haemophilus Influenzae Type B
HIV	Human Immunodeficiency Virus
ICT	Information and Communication Technologies
IDD	Iodine Deficiency Disorders
IGME	Inter-agency Group for Child Mortality Estimation
IPV	Inactivated Polio Vaccine
IS CSR	Information System "Civil Status Registration"
IUD	Intrauterine Device
IYCF practices	Infant and Young Child Feeding practices
JMP	Joint Monitoring Programme
LAM	Lactational Amenorrhea Method
LRK	Law of the Republic of Kazakhstan
MDGs	Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
MICS5	The 5 <sup>th</sup> round of the Multiple Indicator Cluster Survey
MMR	Measles
MNE RK	Ministry of National Economy of the Republic of Kazakhstan
NAR	Net Attendance Ratio
OPV	Oral Polio Vaccine
PCV/PNEUMO	Pneumococcal Vaccine
PNC	Post-natal Care
PNEUMO/PCV	Pneumococcal Vaccine
PNHC	Post-natal Health Checks
Polio (OPV/IPV)	Poliomyelitis
post-WWII	Post-World War II
ppm	Parts Per Million
PPS	Probability proportional to size
PSUs	Primary Sampling Units

RSE “ICC under the Statistics Committee of the MNE RK”	Republican State Enterprise “Information and Computing Centre under the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan”
SDGs	Sustainable Development Goals
SPSS	Statistical Package for Social Science
STIs	Sexually Transmitted Infections
TAR	Total Abortion Rate
TFR	Total Fertility Rate
UN	United Nations
UNFPA	United Nations Population Fund
UNGASS	UN General Assembly Special Session on HIV/AIDS
UNICEF	United Nations Children’s Fund
WFFC	World Fit for Children
WHO	World Health Organisation

**Foreword and Acknowledgements**  
**Chair of the Statistics Committee**  
**The Ministry of National Economy of the Republic of Kazakhstan**  
**Mr. Nurbolat Aidapkelov**

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Since gaining of Independence in December 1991, Kazakhstan witnessed significant changes in all areas of the society' life; in particular, these changes greatly affect the situation of children and women in the country. The state needs relevant and reliable statistical information in order to keep track of those changes and to take necessary steps to adapt to a new situation. From this point of view, the findings of the 2015 Kazakhstan Multiple Indicator Cluster Survey (2015 Kazakhstan MICS) conducted in a framework of the fifth round of the Global MICS present a great interest. I believe that the survey findings will be useful for the Government and civil society institutions in Kazakhstan in planning and monitoring of social programmes that meet the needs of women and children both at the national level and at the level of every region.

The successful completion of the 2015 Kazakhstan MICS and publication of the Final Report is a result of joint efforts of experts at different levels, their well-coordinated and professional work. I would like to mention a noble and vital role of the UN agencies in our country. In particular, I would like to express our gratitude to the United Nations Children's Fund (UNICEF) and the United Nations Population Fund (UNFPA) for their technical and financial support in preparation and implementation of the 2015 Kazakhstan MICS.

I would like to thank the staff of the UNICEF Office in Kazakhstan – Mr. **Yuri Oksamitniy**, UNICEF Representative in Kazakhstan, and Ms. **Zhanar Sagimbayeva**, UNICEF Child Rights Monitoring Specialist – for their significant technical and financial support in training and capacity building of the staff of the Statistics Committee and for continuous support in preparation and implementation of this survey.

I would like to thank Global MICS Coordinator Mr. **Attila Hancioglu** (USA, New York) and, in his person, the whole UNICEF team that conducted a series of training workshops, developed questionnaires and data entry and data processing programmes, provided overall management as well as advice at all stages of the survey. Special appreciation goes to the MICS Project Coordinator from CEECIS Regional Office Mr. **Siraj Mahmudlu** (Switzerland, Geneva), who provided the best possible assistance to the Statistics Committee in preparation and actual undertake of the survey in Kazakhstan. I would especially like to note the help of experts from the UNICEF Regional team, in particular, Mr. **Sinan Turkyilmaz**, Ms. **Ana Abdelbasit**, Mr. **Ikhtier Kholmatov** and Ms. **Teuta Halimi**, as well as Mr. **Larisa Praslova** – UNICEF National Consultant in the Kyrgyz Republic, as they all facilitated successful implementation of the Survey. In addition, I would like to express our gratitude to national consultants, Ms. **Gyulnar Kukanova** and Ms. **Dilyara Beisenova**, for their great contribution to the MICS implementation and writing of the Final Report.

My special thanks to the UNFPA staff in Kazakhstan – Mr. **Raimbek Sissemaliyev**, UNFPA Assistant Representative in Kazakhstan and Ms. **Gaziza Moldakulova**, National Programme Officer, for co-financing and methodological help in training the staff of the Statistics Committee, and in other activities during the MICS fieldwork.

Overall, I believe that our fruitful cooperation with UNICEF and UNFPA will continue in the implementation of other joint projects.



I would like to thank heads of statistics departments of Almaty and Astana cities and of all oblasts, supervisors, editors and interviewers as well as the management of the “Information and Computing Centre under the Statistics Committee” for their significant contribution to successful completion of the 2015 Kazakhstan MICS.

On this occasion, I would like to express my appreciation to representatives of ministries, state agencies and non-governmental sector, which also contributed to the success of this project.

Yours faithfully,

**Foreword and Acknowledgements**  
**Representative of the UN Children’s Fund (UNICEF) in Kazakhstan**  
**Mr. Yuri Oksamitniy**

---

This year is the 25<sup>th</sup> anniversary of the Independence of the Republic of Kazakhstan and also the 70<sup>th</sup> anniversary of UNICEF. Therefore, it is my great pleasure to share the Final Report on the results of the Multi Indicator Cluster Survey (MICS), which was conducted in Kazakhstan over the last year by the Statistics Committee of the Ministry of National Economy and with the technical and financial support of UNICEF and the UN Population Fund (UNFPA).

MICS continues to be critically important to Kazakhstan for generating reliable, comprehensive and up-to-date information on the well-being of women and children. This is the third time that Kazakhstan has taken part in MICS, demonstrating its continued interest in collecting unique sets of data that enrich national statistics and with data quality to a level, that meets international standards.

The Final Report provides disaggregated data on state of women and children in Kazakhstan. The data can be compared with previous MICS conducted in 2005-2006 and in 2010-2011. Comparisons of the current and previous MICS demonstrate notable progress Kazakhstan has made in mother and child health, improvements for families in their living conditions, in access to water and sanitation, literacy and education, increasing use of ICT and significant level of life satisfaction among women. At the same time, MICS reveals emerging challenges in early child development, reproductive and sexual health of women, in women’ perception of domestic violence and in the level of such violence against children, decreasing knowledge about HIV/AIDS among young women.

MICS also stands as an important instrument for monitoring the international obligations of the Republic of Kazakhstan, including its progress towards recently adopted Sustainable Development Goals (2030).

The successful completion of the MICS is the result of collective efforts of numerous specialists from the Statistics Committee of the Ministry of National Economy and its territorial divisions, as well as of its subsidiary body, the Information and Computing Centre. UNICEF would like to express its sincerest appreciation to Mr. **Alikhan Smailov**, Assistant to the President of Kazakhstan, for creating favourable conditions for the successful implementation of MICS; to Mr. **Nurbolat Aidapkelov**, Chair of the Statistics Committee, for his support in the development of the Final Report; to Mrs. **Bakhytbek Imanaliyev** and **Aidyn Ashuyev** for their organizational support during the preparation and data collection stages; and to Mr. **Kairat Orunkhanov**, the deputy Chair of the Statistics Committee.

UNICEF would also like to thank, especially, staff of the Statistics Committee who were engaged in realization of the project: Ms. **Gulmira Karaulova**, Head of the Division for Social and Demographic Statistics, who was responsible for the overall coordination of the project from the side of the government, Ms. **Zhuldyz Aidarbekova** and Ms. **Zhanar Sabirova**. Special acknowledgment goes to Ms. **Gyulnor Kukanova** and Ms. **Dilyara Beisenova** – the national consultants for the MICS- for their valuable contributions.

I would like to acknowledge the role of Mr. **Eldar Kazganbayev**, Director of the Information and Computing Centre namely, and his staff – Mr. **Nurlybek Rakhmetov**, Ms. **Assem Gabdullina**, Mr. **Erbolat Mussabek**, Ms. **Aigul Kapisheva**, Ms. **Saule Dauylbayeva** and all specialists who took part in entry and analysis of the MICS data for their effective and timely implementation of an ambitious workplan.

I believe that this Final Report will be highly useful for Kazakhstan state bodies, non-governmental and international organisations, academia, mass media as well as to the general public and to all those interested in advancement of the well-being of women and children in the Republic of Kazakhstan.

With best regards,

**Foreword and Acknowledgements**  
**Assistant Representative of the UN Population Fund (UNFPA) in Kazakhstan**  
**Mr. Raimbek Sissemaliyev**

---

On behalf of UNFPA Kazakhstan Country Office, I have a great pleasure to present the Final Report on findings of Multiple Indicator Cluster Survey conducted in Kazakhstan in 2015.

This Survey was made possible due to the administrative talent of Special Assistant to the President of the Republic of Kazakhstan on Economic Issues, Mr. Alikhan Askhanovich Smailov who during the implementation period of the project headed the Committee on Statistics of the Ministry of National Economy of the Republic of Kazakhstan.

The successful completion of the MICS is a collective effort of many experts of the Committee on Statistics of Kazakhstan under the leadership of Mr. Nurbolat Sergaliyevitch Aidapkelov, due to his energetic conduct we owe the pleasure of presenting this Report to you today.

It is important to acknowledge the significant contribution of the United Nations Children's Fund (UNICEF) in the Republic of Kazakhstan, namely Mr. Yury Viktorovich Oksamitnyi, the UNICEF Representative and Ms. Zhanar Nurgaliyevna Sagimbayeva, the Monitoring and Evaluation Officer. The funding and methodological support of this Survey were organized by invaluable inputs of the colleagues' efforts.

The independent data on the status of the population's reproductive health, the level of awareness of young people about HIV and gender-based violence presented in the Report are important for strategic decision-making in the field of social policy, including health and education.

The data obtained through MICS will be useful not only in the work of the public authorities, but also for non-governmental organizations, international institutions, teachers and students, as well as for the general public.

Sincerely,



## **Brief overview of the key indicators**

---

*Conducted in 2015 Kazakhstan Multiple Indicator Cluster Survey (2015 Kazakhstan MICS) is a representative sample survey at the national and sub-national levels.*

*The target sample size was 16,800 households.*

### **Sample coverage**

Of the 16,791 households in the sample, 16,605 households were inhabited. Of these, 16,500 households were successfully interviewed: the proportion of interviewed households amounted to 99.4 percent. 12,910 women aged 15-49 years were identified in the interviewed households, of which 12,670 women were successfully interviewed: the proportion of female respondents in interviewed households was 98.1 percent. The list of household members in the household Questionnaire identified 5,561 children under 5. Questionnaires were completed for 5,510 children, which corresponds to 99.1 percent response rate for the interviewed households.

The household response rates in urban and rural areas were more than 99 percent, and by regions – more than 98 percent.

### **Low Birth Weight**

In Kazakhstan, in total, 97.8 percent of newborns were weighed at birth; approximately 4.5 percent of newborns weighed less than 2,500 grams at birth.

### **Nutritional Status of Children**

In Kazakhstan, about 2 percent of children under 5 years are underweight for their age, and 8.0 percent of children are stunted. 3.1 percent of children are wasted for their height. In addition, 9.3 percent of children are overweight.

### **Breastfeeding and Feeding of Infants and Young Children**

The survey interviewed women with children born within two years prior to the date of the survey about how they fed their child during the first few days of life. In Kazakhstan, only 83.3 percent of newborn babies are breastfed within the first hour after birth; and 92.8 percent of newborns are breastfed within one day of birth.

Approximately 38 percent of children under the age of six months are exclusively breastfed, and over 70 percent of children are predominantly breastfed, indicating the prevalence of the practice of giving

non-milk liquids to infants in addition to breastmilk. Almost 60 percent of children aged 12-15 months, and 21.1 percent of children aged 20-23 months are still breastfed.

Median duration of any breastfeeding is 15.6 months; exclusive breastfeeding – 1.8 months and predominant breastfeeding – 4.9 months.

Almost every second child (49.2 percent) aged 6-23 months is appropriately breastfed for their age.

66.5 percent of children aged 6-8 months received solid, semi-solid and soft foods at least once during the previous day, while the main proportion (63.9 percent) comprised infants who are breastfed at the time of the survey.

The percentage of children receiving a minimum dietary diversity, or foods from at least 4 groups of products out of 7 food groups, was 68.7 percent being the highest among the oldest age group of 18-23 months (86.1 percent) and the lowest among the youngest children aged 6-8 months (22.6 percent).

Less than half of children 6-23 months of age were receiving the minimum acceptable diet (45.1 percent). More than half of children aged 0-23 months are fed with a bottle with a nipple (51.2 percent).

## **Salt Iodization**

In the survey, salt used for cooking was tested for iodine content in almost every household (98.0 percent).

It was revealed that more than 90 percent of households consumed salt that contained iodine in the recommended amount of 15 ppm or more (91.0 percent); 3.7 percent of households used salt with low iodine content (less than 15 ppm), while in 5.0 percent of households salt was not iodized (0 ppm). Survey findings show that salt was not available in only 0.6 percent of households. In urban areas, 94.0 percent of households were consuming adequately iodized salt ( $\geq 15$  ppm) while for rural areas the figure was 85.6 percent. In 10.4 percent of the poorest households salt was not iodized.

## **Vaccination**

Data on vaccination coverage was collected for all children under 3 years old.

By the age of 12 months, 98.5 percent of children aged 12-23 months received a dose of BCG; the first dose of Polio, DPT and HepB vaccines were administered respectively to 95.6, 95.6 and 97.6 percent of children, and Hib – 94.7 percent of children. The proportion of vaccinated children reduced with each subsequent dose for each type of vaccines: to 93.5 and 94.2 percent respectively for the second dose of Polio and DPT; to 94.7 and 93.5 percent respectively for the HepB and Hib vaccines; the percentage of vaccinated children declines for the third dose of Polio, DPT, HepB and Hib to 89.7, 90.4, 88.4 and 89.3 percent respectively.

Vaccination coverage of children aged 24-35 months against measles (MMR) by 24 months was 95.1 percent.

The percentage of children aged 24-35 months who received **all** the recommended vaccinations by the age of 12 months (measles vaccines – by 24 months) in Kazakhstan was 84.1 percent. 1.1 percent of children aged 24-35 months received none of the recommended vaccinations.

## **Knowledge of the Two Danger Signs of Pneumonia**

Overall, 36.7 percent of women know at least one of the two danger signs of pneumonia: *fast breathing and/or difficult breathing*. 27.6 percent of mothers recognise *difficult breathing*, and 15.5 percent of mothers recognise *fast breathing* as a symptom that would cause them to take their child immediately to a health facility.

## **Use of Solid Fuels**

In Kazakhstan, the use of solid fuels for cooking is almost at a minimum (1.5 percent). In the country, – coal or lignite is used by only 0.6 percent of the household population, wood – by 0.5 percent, animal dung – by 0.3 percent of the population. Solid fuels are used almost exclusively by the rural population (3.0 percent), by households where the household head has no education or only primary education (5.9 percent), as well as the population of the poorest quintile (5.6 percent).

## **Use of Improved Water Sources**

In Kazakhstan the majority, or 97.3 percent, of the population use improved drinking water sources: 99.7 percent in urban and 94.6 percent in rural areas. The main drinking water source is piped water (including public standpipes), which is used by about 80 percent of the population. Out of this percentage, more than half (58.5 percent) of the population use water piped into their dwellings and 14.6 percent use water piped into the yard or plot; 6.4 percent of the population use public standpipes, and a small proportion of the population (0.5 percent) take water from their neighbours. 6.4 percent of the population use bottled water; 5.9 percent use water from tubewells/boreholes; 5.1 percent use water from protected wells and springs. 2.7 percent of the population use unimproved drinking water sources.

About 10 percent of the population use water sources which are not located on premises. 8.2 percent of household members spend less than 30 minutes to get to the water source (improved or unimproved) and collect water; for 1.8 percent of household population it takes 30 minutes or more to collect water. For 6.8 percent of the residents using improved drinking water sources it takes less than 30 minutes to collect water, and for 1.4 percent population it takes 30 minutes or more.

In the majority of households, more often collecting of drinking water is performed by an adult man (62.6 percent), and in every third household it is an adult woman (33.2 percent). In 3.5 percent of households, the responsibility for collecting water lies with children under the age of 15 years, with the proportion of girls and boys being 0.9 and 2.7 percent, respectively.

In more than 50 percent of households whose household heads have no education or primary education, most often the water collection is performed by adult woman, while in households where the household head has higher education, 22.4 percent of women are engaged in water collection.

Overall, 46.4 percent of the household population using unimproved drinking water sources use the appropriate water treatment methods. More than a third of the population use water *boiling* (37.3 percent); 25.8 percent of the population use *filtering* utilising different filters, more than 8 percent of the population let the water stand and settle.

More than one half of the population using unimproved water sources does not use any water treatment method (53.2 percent).

## **Access to Improved Sanitation**

Overall, 98.0 percent of Kazakhstan's population live in households using improved sanitation facilities which are not shared with no notable differences by background characteristics. In the country, 48.1 percent of the population use flush or pour flush toilet facilities, and 51.8 percent use pit latrines with slabs or ventilated improved pit latrines. In urban areas, more than 68 percent of the population use facilities that flush to a piped sewer system, while in rural areas 85.5 percent of the population use pit latrines with slabs or ventilated improved pit latrines.

## **Handwashing**

In Kazakhstan, almost every household (99.0 percent) had both water and soap at the specific place for handwashing.

## **Fertility and Early Childbearing**

In Kazakhstan, the crude birth rate among women aged 15-49 years is 21 births per 1,000 population, in urban and rural areas this figure is 20 and 23 births per 1,000 population, respectively.

The adolescent birth rate among girls aged 15-19 years is 36 births per 1,000 women.

The total fertility rate for the one year preceding the Kazakhstan MICS is 3.0 births per woman aged 15-49 years, in rural areas this figure is higher than in urban areas (3.7 and 2.6 births respectively).

For women aged 15-49 years there were no cases of births the age of 15 years. 3.9 percent of women of the age 15-49 years have already had a live birth, while 1.4 percent of women in this age group are pregnant with their first child.

The percentage of women aged 20-24 years who have had a live birth before age 18 is 2.2 percent. In addition, women in this age group with lower education levels are more likely to have had a live birth compared to those with higher education (15.7 and 0.5 percent respectively).

## Contraception

In Kazakhstan, almost all women aged 15-49 years (98.8 percent) are informed about a contraceptive method, including modern methods.

More than half of women aged 15-49 years (55.7 percent), who are currently married/in union reported the use of contraception. The most popular method of contraception is the intrauterine device (IUD), which is used by every third women currently married or in union (31.9 percent). The next most commonly used method/means of contraception is the male condom, the use of which is reported by 12.5 percent of women currently married or in union, while more than 6 percent of the women use the pill.

Methods/means of contraception such as an *injection, diaphragm/foam/gels, lactational amenorrhea method (LAM), withdrawal or periodic abstinence, and female sterilization*, are used by 0.1 – 1.7 percent of women.

Adolescents aged 15-19 are much less likely to use methods of contraception than older women (20-49 years).

## Unmet Need

5.6 percent of women have an *unmet* need for contraception for spacing and 4.3 percent of women – for limiting the number of children; therefore, *unmet* need for contraception of women was 9.8 percent across the country.

This indicator is also known as the *unmet need for family planning*.

## Antenatal Care

In Kazakhstan coverage of antenatal care by skilled health personnel, is very high and amounted to 99.3 percent. Antenatal care for pregnant women was predominantly provided by qualified doctors (92.2 percent), for 6.6 percent of pregnant women – by nurses or midwives, and for 0.5 percent – by fieldshers, with these two categories of mid-level medical personnel to be mostly typical for rural areas (10.8 and 1.0 percent respectively).

95.3 percent of pregnant women received antenatal care at least four times. Overall, 90.2 percent of women who had live birth in the past two years, had the first visit to the health care professionals for antenatal care in the first trimester of their last pregnancy, with a median of 2-month pregnancy at the time of the first visit. In the first trimester of pregnancy the first visit to health workers for antenatal care was undertaken by only 82.9 percent of women younger 20 years at time of birth, compared with 91.1 percent of mothers aged 20-34 years at time of birth.

Almost all women (99.3 percent) who had a live birth in the two years preceding the survey, received the specified minimum range of services and procedures within antenatal care (blood pressure measured, urine sample taken, and blood sample taken).



## **Assistance at Delivery**

In Kazakhstan, 99.4 percent of births were attended by qualified personnel and practically all births took place in public health facilities. More than 90 percent of births in Kazakhstan were delivered with assistance of doctors, and 9.1 percent of births – by nurses and midwives.

In general, 14.8 percent of births were conducted by caesarean section. Thus, 9.6 percent pregnant women have consented to the operation before the start of labour, and for 5.3 percent of pregnant women the decision was made during labour.

## **Post-natal Health Checks**

In Kazakhstan, nearly every woman who gave birth in a health care facility stays there for 12 hours or more after delivery (99.9 percent), with virtually no regional differences. Almost nine out of ten women (88.9 percent) stayed in health facilities for 3 or more days after delivery; of which 44.4 percent stayed in health facilities exactly 3 days after birth and 11.0 percent of women were in health facilities at least 3 days after delivery.

Overall, 99.4 percent of newborns receive a health check following birth while in a facility or at home. 97.4 percent of mothers receive a health check following birth while in facility or at home. With regards to PNC visits, these predominantly occur either on the first day following discharge (30.7 percent) or 3-6 days (30.5 percent) following discharge. Approximately every fourth PNC visit for newborns (23.5 percent) was carried out 2 days following discharge, and 10.2 percent after the first week following discharge from a health facility.

In Kazakhstan, only 62.2 percent of mothers were covered with postnatal care following discharge from the health facility. 18.3 percent of PNC visits following discharge from the health facility were conducted in less than 3 days following discharge, 17.3 percent – in the 3-6 days following discharge, and 26.4 percent of PNC visits for mothers following discharge from the health facility, were made after the first week following discharge. At the same time, 36.7 percent of mothers had no PNC visits after being discharged from the health care facility.

In 97.4 of live births, both the mothers and their newborns receive either a health check following birth or a timely PNC visit, within two days of the most recent birth.

For 0.6 percent of cases after childbirth, both the mothers and their newborns neither received health checks or timely visits, and in 1.9 percent of cases – only newborns received this care.

## **Abortions**

In Kazakhstan, the mean number of induced abortions is 0.4. One in five women (20.1 percent) aged 15-49 had at least one induced abortion during their lifetime. Women at the age of 40-44 years and 45-49 years (34.5 and 38.2 percent, respectively) are more likely to have had at least one induced abortion, compared with young women aged 20-24 years (3.7 percent).

55.1 percent of women had one abortion, 38.8 percent – two or three abortions, and 6.1 percent – four or more abortions. The highest percentage of women who have had 2-3 or 4 and more abortions

is observed among women in the age group of 40-44 years and 45-49 years (46.2 and 45.4 percent, respectively, and 7.0 and 8.4 percent respectively).

The total abortion rate is 0.3 per 1 woman aged 15-49 years, while the general abortion rate is 10 abortions per 1,000 women.

## **Early Child Development**

More than half (55.3 percent) of children aged 36-59 months are attending an organised early childhood education programme. Urban-rural and regional differentials are notable – facilities with such programmes are attended by 62.2 percent of children from urban areas compared to 48.9 percent from rural areas.

For more than 85 percent of children aged 36-59 months an adult household member engaged in four (or more) activities that promote learning and school readiness in 3 days preceding the survey.

The Early Child Development Index (ECDI) is calculated as the percentage of children who are developmentally on track in at least three of four domains: learning, physical, socio-emotional development, and literacy and numeracy skills.

The Early Child Development Index (ECDI) for children aged 36-59 months is 85.5 percent. Analysis of the four domains of child development shows that 98.3 percent of children develop in accordance with the age in the domain of physical development, 97.2 percent – in learning, and 82.1 percent – in social-emotional development. However, the percentage of children aged 36-59 months who are developmentally on track in the literacy-numeracy domain is 3 to 3.5 times (27.7 percent) lower than in the other domains.

## **Literacy among Young Women**

In Kazakhstan, the literacy of young women aged 15-24 years reaches absolute 100.0 percent. Since the literacy is universal, there are no differences in literacy rates by background characteristic of women.

## **School Readiness**

In Kazakhstan, in general, 90.8 percent of children who are currently attending the first grade of primary school were attending pre-school the previous year. Socio-economic status of the household seems to play a positive role in preparing children for school: 96.7 percent of children living in the richest households attended pre-school facilities in the previous year, while the corresponding figure among children in the poorest households was only 88.3 percent.

The percentage of 5-6-year-old children who attend pre-school was 47.8 percent and primary school – 36.1 percent. The adjusted net attendance ratio in pre-primary education is 84.0 percent. At the same time, the highest proportion of children aged 5 years attend pre-school (68.1 percent), and only

2.6 percent attend primary school; among children aged 6 years, approximately one third of children attend pre-school facilities (28.9 percent) and 67.4 percent attend primary school.

## **Primary and Secondary School Attendance**

In Kazakhstan, children enroll in Grade 1 at age of six or seven years, and every parent has the right to determine at what age to send their child to school. In Kazakhstan in the 2015-2016 academic year among children of primary school entry age (full 7 years) 99.2 percent of the children attended the first grade of primary school; and of children that started school at age 6 years – 67.4 percent of children attended the first grade.

The primary school (adjusted) net attendance ratio for children aged 7-10 years was 99.5 percent.

The secondary school (adjusted) net attendance ratio (NAR) for children aged 11-17 years was 98.9 percent. The lower secondary school (adjusted) net attendance ratio (NAR) for children aged 11-15 years was 99.4 percent. The upper secondary school (adjusted) NAR for children aged 16-17 years was 95.7 percent, which is slightly less than lower secondary school (adjusted) NAR.

In general, in Kazakhstan, the Gender Parity Index (GPI) for primary, lower secondary education and secondary education is 1.00, indicating no difference in the attendance to these school levels by girls and boys with the exception of the GPI for upper secondary education, which is 1.01. There are no GPI differences by background characteristics. The GPI for upper secondary school (adjusted) NAR indicates that there is a gender gap between upper secondary school attendance of girls and boys in urban areas and also between girls and boys in rural areas (1.03 and 0.98 percent respectively).

## **Birth Registration**

The survey findings indicate that birth registration in Kazakhstan is almost universal (99.7 percent).

## **Child Discipline**

In Kazakhstan, 52.7 percent of children aged 1-14 years were subjected to at least one form of psychological or physical punishment by the adult members of the household during the last one month before the survey. 47.2 percent of children were subjected to psychological aggression. The most severe forms of physical punishment (hitting the child on the head, ears or face, or repetitive hits) are not common in the country: 1.0 percent of children were subjected to severe punishment. 55.2 percent of boys and 49.9 percent of girls have been subjected to any violent discipline method.

Only 4.7 percent of respondents believe that physical punishment is a necessary part of child-rearing, while in practice, about 26 percent of children were subjected to physical punishment.

## Early Marriage

In Kazakhstan, the official marriage age for women and men is 18 years, and only in exceptional cases by the decision of the local executive bodies this age can be reduced by a period not exceeding two years for essential reasons: 1) pregnancy; 2) birth of a child.

Among women aged 15-49 years, 0.1 percent of girls were married before age 15, and among women aged 20-49 years, 7.8 percent were married before age 18.

Among women aged 20-49 years, women living in rural areas are more likely to be married before age 18, compared to women in urban areas (9.5 percent and 6.5, respectively).

The proportion of women who were married/in union before age 18 peaked some 20-25 years ago, after which it declined again. In all the age groups of women, it can be stated that marriage before age 18 is more common among women in rural areas than in urban areas.

Among currently married/in union women aged 20-24 years, 4.5 percent are married/in union with a man who is older by ten years or more. Among married/in union women aged 15-19 years, the proportion of women whose husband is older by ten years or more, is 5.8 percent.

## Attitudes toward Domestic Violence

According to the 2015 Kazakhstan MICS, 14.2 percent of women believe that a husband/partner may hit or beat his wife/partner in at least one of five situations. Women who justify a husband's violence, more frequently justify it in instances when: a woman neglects the children (10.8 percent) or goes out without telling her husband (4.1 percent), or argues with him (5.4 percent). Only a small proportion of women justify wife-beating if she refuses to have a sex with her husband (1.5 percent) or if she burns the food (0.7 percent).

## Children's Living Arrangements and Orphanhood

In Kazakhstan, approximately four out of five children (82.0 percent) aged 0-17 years live in a family with both parents, 13.1 percent – only with their mother, and 1.1 percent – only with their father. 9.2 percent of children live only with their mother, despite the fact that their own father is alive, and 0.8 percent of children live with their father despite the fact that their biological mother is alive. 3.2 percent of children do not live with their biological parents, while 2.6 percent of children have both parents alive.

Nearly 5 percent of children have lost one or both parents.

## Knowledge about HIV Transmission and Misconceptions about HIV

In Kazakhstan, nearly every woman aged 15-49, or 97.9 percent, have heard of AIDS. Despite this, the percentage of women who know both main ways of preventing HIV transmission: firstly, *having only*

*one faithful uninfected sex partner, and, secondly, using a condom every time during intercourse* – was only 65.4 percent. At the same time, women's awareness about each of the ways is quite high: 82.3 percent of women know that the main way of preventing HIV transmission is to have only one faithful uninfected sex partner and 71.7 percent of women know that using a condom every time during intercourse is one of the most reliable ways to prevent HIV transmission. Overall, less than half (44.0 percent) of women reject the two most common misconceptions about HIV transmission and know that a healthy looking person can be HIV-positive. 71.5 percent of women believe that HIV cannot be transmitted by kissing, and 66.7 percent of women know that HIV cannot be transmitted through mosquito bites; three out of four women (74.1 percent) know that a healthy looking person can be HIV-positive. 88.4 percent of women know that HIV is not transmitted by shaking hands or hugging, about the same percentage (89.1 percent) – that HIV is not transmitted by supernatural means, and 80.0 percent of women know that HIV cannot be transmitted by sharing food.

Only one third of women aged 15-49 (33.7 percent) have comprehensive knowledge about HIV prevention and transmission (women who know *two ways of HIV prevention: having only one faithful uninfected sex partner and using a condom every time during intercourse*; who know that *a healthy looking person can be HIV-positive*; and who **reject** the two most common misconceptions in Kazakhstan about HIV transmission). At the same time, in urban areas the figure is slightly higher than in rural areas (38.8 and 27.0 percent, respectively).

Young women and girls aged 15-24 years, and, in particular, aged 15-19 years, are more often less informed about all the ways to prevent HIV transmission and about all the misconceptions related to HIV than older women.

## **Accepting Attitudes toward People Living with HIV**

In Kazakhstan, 90.8 percent of women agree with at least one accepting attitude towards people living with HIV.

The most common accepting attitude is the willingness of a woman to care for a family member with AIDS in her own home (82.2 percent). More than a third of women believe that a female teacher who is HIV-positive, but is not sick should be allowed to continue teaching at school (34.9 percent); every fifth woman is willing to buy fresh vegetables from a shopkeeper or vendor who is HIV-positive (20.1 percent) and would **not** want to keep it a secret if her family member was HIV-positive (20.5 percent).

Despite the fact that there are variations in percentages of women expressing accepting attitudes for the individual indicators (from 20 to 82 percent), overall, 2.5 percent of women who have ever heard of AIDS express accepting attitudes on all four indicators.

39.0 percent of women aged 15-49 years *think that children living with HIV should be allowed to attend school with children who are HIV-negative*, expressing an accepting attitude on this indicator.

76.0 percent of women reported discriminatory attitudes towards people living with HIV on a combination of the following two indicators: 1) would **not** buy fresh vegetables from a shopkeeper or vendor who is HIV-positive, and 2) *think that children living with HIV should not be allowed to attend the school with children who are HIV-negative*.

## **HIV Indicators for Young Women**

Approximately one in four women aged 15-24 have comprehensive knowledge about HIV (26.7 percent); about half of women know all three ways of mother-to-child HIV transmission (48.0 percent); and more than two-thirds of women in this age group are aware of place (facility) to get tested for HIV (71.4 percent).

2.2 percent of women aged 15-24 years express accepting attitudes towards people living with HIV on all four indicators, which is comparable to the similar rate among 15-49 year old women.

78.4 percent of young women aged 15-24 years reported discriminatory attitudes towards people living with HIV on a combination of the following two indicators, giving negative answers to questions: (1) *would buy fresh vegetables from a shopkeeper or vendor who is HIV-positive* and 2) *think that children living with HIV should be allowed to attend school with children who are HIV-negative*).

## **Access to Mass Media**

Almost half of women aged 15-49 years or 49.0 percent read newspapers or magazines at least once a week, while about one in four women, or 26.5 percent, listen to the radio and 96.0 percent watch television at least once a week. Overall, only 2.3 percent of women do not have regular exposure to any of the three media, while 97.7 percent use at least one type of media, and 16.1 percent – all three media types at least once a week.

Newspapers and magazines are read by more than half of women aged 35-49 years (52.7-57 percent), while 39.1 percent of women aged 15-19 years read them at least once a week. Young women aged 18-19 years are more likely to listen to the radio at least once a week than women aged 45-49 years (31.7 and 20.3 percent, respectively).

## **Use of Information/Communication Technology**

In Kazakhstan, 97.9 percent of women aged 15-24 year have ever used a computer; 88.2 percent used a computer during the last 12 months, and 77.0 percent used it at least once a week during the last one month. Overall, 96.8 percent of women aged 15-24 years have ever used the Internet, while 94.6 percent used the Internet during the 12 months preceding the survey. The proportion of young women who used the Internet more frequently, at least once a week during the last one month, was 89.8 percent.

Both computer and Internet use during the last 12 months is slightly more widespread among women aged 15-19 years.

## Subjective well-being

In Kazakhstan, about 97 percent of young women are the most satisfied with family life (97.1 percent), the way they look (97.2 percent), treatment by others (97.1 percent), health (96.6 percent) and friendship (96.7 percent). 92.4 percent of young women are satisfied with living environment.

Only 4.6 percent of young women aged 15-19 and 40.5 percent of women aged 20-24 have an income. Satisfaction with income was expressed by 89.0 percent of women in each of these age groups.

Overall, 96.4 percent of women aged 15-24 years are very or somewhat satisfied with school (with 49.6 percent of women this age attending school). Of which 97.5 percent of women aged 20-24 years are very or somewhat satisfied with school (with the percentage attending being 21.5 percent).

96.8 percent of women aged 15-24 years are satisfied with their life overall; the figure ranges from 96.0 percent of women living in the poorest households to 97.8 percent among those living in the richest households, showing there are no notable differences in overall life-satisfaction across wealth index quintiles.

98.5 percent of women aged 15-24 years are very or somewhat happy.

The percentage of women aged 15-24 years, who believe that life has improved in the last one year and expect that it will get better after one year, is 64.9 percent.

## Tobacco Use

In Kazakhstan, 26.9 percent of women aged 15-49 reported having ever used any tobacco product, with 8.4 percent of women having smoked cigarettes or consumed tobacco or smokeless tobacco products at any time during the last one month prior to the survey.

Ever use of any tobacco products by women in urban areas is twice as high as in rural areas (34.7 and 16.9 percent, respectively); the share of urban women having smoked at any time during the last one month prior to survey is more than twice that of women in rural areas (11.4 and 4.7 percent, respectively).

18.3 percent of women who have ever used tobacco products have smoked only cigarettes, while 5.7 percent have used cigarettes and other tobacco products.

During the last one month 7.1 percent of women smoked only cigarettes of all tobacco products.

The frequency of smoking among women is characterized by the fact that someone limits herself to 1-4 cigarettes a day, and some women smoked 10-20 or more cigarettes in the last 24 hours.

28.2 percent of women smoked in the last 24 hours less than 5 cigarettes, and 29.0 percent – 5.9 cigarettes. Among women aged 15-49 years who smoked cigarettes during the last 24 hours, 10.5 percent smoked 20 cigarettes or more during this time (at least a standard pack of cigarettes), and 32.2 percent of women smoked 10-19 cigarettes in the last 24 hour.

Only 0.9 percent of women smoked their first cigarette before 15 years of age.

## **Alcohol Use**

In Kazakhstan, at least one in four women aged 15-49 (25.1 percent) had at least one drink of alcohol at any time during the last one month prior to survey.

Only 0.5 percent of women in the age group of 15-49 years had at least one drink of alcohol before age of 15, while 33.7 percent of women have never consumed alcohol.

Women aged 30 to 49 years are more likely to have had at least one alcoholic drink at any time during the last one month (ranging from 30 to 35 percent), compared with younger women (ranging from 3.1 percent for women aged 15-19 years to 21.7 percent for those aged 25-29 years).



## I. Introduction

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This report is based on the Kazakhstan Multiple Indicator Cluster Survey (MICS), conducted in 2015 by the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan (herein MNE RK).

This is the third MICS Survey in Kazakhstan; two previous surveys were conducted in 2005 and 2010, the findings from these surveys were used in development and implementation of state programmes in the areas of mother and child health, as well as country programmes of the United Nation Children’s Fund (UNICEF) in Kazakhstan, highlighting the need to improve the statistical data management system with regard to children. Such surveys are crucially important in terms of assessing the state of children and women in Kazakhstan as they provide unique information for development of the national child-centred policy and for international positioning of Kazakhstan. The survey provides statistically sound and internationally comparable data essential for development of evidence base and programmes, and for monitoring country progress towards national goals and global (international) commitments. Among these global commitments are those emanating from international agreements – the World Fit for Children Declaration and its Plan of Action, the goals of the United Nations General Assembly Special Session on HIV/AIDS, the Education for All Declaration and the Millennium Development Goals (MDGs). In addition, the 2015 Kazakhstan MICS results will contribute to establishing a baseline for monitoring the state of women and children in the context of the Sustainable Development Goals (SDGs).

### **A Commitment to Action: National and International Reporting Responsibilities**

The governments that signed the Millennium Declaration, as well as the World Fit for Children Declaration and its Plan of Action also committed themselves to monitor the 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 of the World Fit for Children (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.”

UNICEF has developed a list of indicators and methods to collect statistically sound and internationally comparable data to increase the capacity of Governments to monitor the situation of children in their countries, to execute the Convention on the Rights of the Child and to implement decisions of the 1990 Global High level Meeting for Children. MICS surveys are an accepted tool for monitoring progress in achieving national goals and global commitments to improve the well-being of children.

The Republic of Kazakhstan, as a State party to many international treaties for the protection of mothers and children and human development, attaches great importance to the implementation of its obligations and undertakes specific actions for monitoring of implementation of obligations and statistical capacity building – the main source of information for the development of national strategies for social and economic development.

As expected, the results of the MICS survey will contribute to the evidence base of a number of other important initiatives.

### ***Survey Goals and Objectives***

The 2015 Kazakhstan MICS has the following objectives:

- To provide up-to-date information for assessing the situation of children and women in the Republic of Kazakhstan;
- To collect information that will help to improve national policies in the area of childhood and motherhood protection;
- To generate data for the critical assessment of the progress made in various areas, and to put additional efforts in areas that require more attention;
- To collect disaggregated data for the identification of disparities, to allow for evidence based policy-making aimed at social inclusion of the most vulnerable;
- To validate data from other sources and the results of focused interventions;
- To contribute to the generation of baseline data for the post-2015 agenda;
- To contribute to the improvement of data and monitoring systems in the Republic of Kazakhstan and to strengthen technical expertise in the design and implementation of such systems as well as in a better analysis of available data.

The 2015 Kazakhstan MICS is expected to contribute to the evidence base of several other important initiatives, including the accountability framework proposed by the Commission on Information and Accountability for the Global Strategy for Women's and Children's Health.

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

## **II. Sample and Survey Methodology**

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### ***Sample Design***

The primary objective of the sample design for the 2015 Kazakhstan MICS was to produce statistically reliable estimates of most indicators, at the national level, for urban and rural areas, and for 16 administrative districts (14 regions and 2 cities) of the country: Akmola, Aktobe, Almaty oblast, Atyrau, West Kazakhstan, Zhambyl, Karaganda, Kostanai, Kyzylorda, Mangistau, South Kazakhstan, Pavlodar, North Kazakhstan and East Kazakhstan regions, as well as two large cities of republican significance – Astana and Almaty.

The database and cartographic materials of the 2009 National Population Census (2009 Census) in the Republic of Kazakhstan were used in the process forming the sampling frame. The census enumeration areas (EAs) formed for the Census were used as the primary sampling units (PSUs).

The urban and rural areas within each region were identified as the main sampling strata and the sample was selected in two stages. In total, 30 strata were formed – 16 urban including two large cities and 14 rural. At the first sampling stage within each stratum, 840 census enumeration areas were selected systematically with probability proportional to size. At the second sampling stage, upon conducting a household listing within the selected enumeration areas, a random systematic sample of 20 households was drawn in each sample enumeration area, for a total sample size of 16,800 households.

Out of 840 clusters, which were liable for verification, cluster #338, located in the Karaganda region, was inaccessible due to the fact that this territory is under a long-term lease to the Russian Federation and thus under its jurisdiction.

The sample was stratified by region, urban and rural areas, and is not self-weighted. The sample weights are used for reporting nationally representative results. A more detailed description of the sample design can be found in Appendix A, Sample Design.

### ***Questionnaires***

Three sets of questionnaires were used in the survey: 1) a household questionnaire which was used to collect basic demographic information on all de jure household members (usual residents), the household, and the dwelling; 2) a questionnaire for individual women administered in each household to all women aged 15-49 years; and 3) an under-5 questionnaire, administered to mothers (or primary caretakers) of all children under 5 living in the household that included a form for collecting vaccination records at Health Facilities for children under 3. The questionnaires included the following modules:

The Household Questionnaire included the following modules:

- List of Household Members
- Education
- Child Discipline
- Household Characteristics

- Water and Sanitation
- Handwashing
- Salt Iodization

The Questionnaire for Individual Women was administered to all women aged 15-49 years living in the households, and included the following modules:

- Woman's Background
- Access to Mass Media and Use of Information/Communication Technology
- Fertility<sup>7</sup>
- Desire for Last Birth
- Maternal and Newborn Health
- Post-natal Health Checks
- Illness Symptoms
- Contraception
- Unmet Need
- Attitudes Toward Domestic Violence
- Marriage/Union
- Sexual Behaviour
- HIV/AIDS
- Tobacco and Alcohol Use
- Life Satisfaction

The Fertility module was included in order to be able to calculate indicators concerning total fertility rate and adolescent birth rate. From the onset, it was decided that childhood mortality indicators will not be calculated on the basis of this survey. Following the 2013 UN Inter-agency Group for Child Mortality Estimation (IGME) mission to Kazakhstan, which assessed that the official registration of births and deaths of children aged 0 to 5 years in the country was in line with international standards, the government made a decision to use infant and child mortality data generated by the official statistics, taking into account the adjustments of the IGME.

The Questionnaire for Children Under Five was administered to mothers (or primary caretakers) of children under 5 years of age<sup>8</sup> living in the households. Normally, the questionnaire was administered to mothers of under-5 children; in cases when the mother was not listed in the household roster, a primary caretaker for the child was identified and interviewed. The questionnaire included the following modules:

- Age
- Birth Registration
- Early Childhood Development
- Breastfeeding and Dietary Intake
- Immunization
- Anthropometry

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<sup>7</sup> Additional survey-specific questions about abortion were included in this module (questions CM12B-CM12M).

<sup>8</sup> The terms "children under 5", "children aged 0-4 years", and "children aged 0-59 months" are used interchangeably in this report.

An additional form was used for all children aged 0-2 years with a completed Questionnaire for Children Under Five, the Appendix For Data Collection At Health Facility About Immunization, to record vaccinations from the registries at health facilities.

The questionnaires are based on the MICS5 model questionnaires<sup>9</sup>. From the MICS5 model English and Russian versions, the questionnaires were customised for 2015 Kazakhstan MICS and translated into the Kazakh language. The questionnaires in the Kazakh and Russian languages were pre-tested in Astana city and in the urban and rural settlements of Karaganda region in May 2015. Based on the results of the pre-test, modifications were made to the wording and translation of the questionnaires. A copy of the 2015 Kazakhstan MICS questionnaires is provided in Appendix F.

In addition to the administration of questionnaires, fieldwork teams tested salt used for cooking in the households for iodine content, observed the place for handwashing, and measured the weight and height of children under 5 years of age. Details and findings of these observations and measurements are provided in the respective sections of the report.

### ***Training and Fieldwork***

Training of teams for fieldwork data collection was conducted for 13 days – from 17 to 29 August 2015. Training included lectures and presentations on the rules and interviewing techniques, the contents of the questionnaires, as well as role playing games, pilot interviews and testing the knowledge of participants.

Toward the end of the training period, participants spent 2 days in practice interviewing in the clusters of Almaty city and Almaty oblast (urban and rural).

16 teams performed data collection; each comprised of one supervisor, one editor, one measurer and 4 interviewers. Furthermore, each team had one driver. Fieldwork began in early September and concluded in late November 2015.

### ***Data Processing***

Data entry was done using the CSPro software, Version 5.0. The data entry was done on 10 desktop computers by 10 data entry operators and overseen by 2 office editors (questionnaire administrator and data entry editor), as well as by one data entry supervisor. For quality assurance purposes, all questionnaires were entered twice and internal consistency checks were performed. Procedures and standard programmes developed under the global MICS programme and adapted to the 2015 Kazakhstan MICS questionnaires were used throughout. Data processing began in parallel with data collection on 15 September and was completed in December 2015. Data was analysed using the Statistical Package for Social Sciences (SPSS) software, Version 21. Model syntaxes and tabulation plans developed by UNICEF were customized and used for this purpose.

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<sup>9</sup> The model MICS5 questionnaires can be found at <http://mics.unicef.org/tools>.

## ***How to Read Tables***

The tables of this report present data collected through this survey in a standard way, intuitively easy to understand. However, the reader should be aware of the following remarks:

Values in parentheses ( ) indicate that the percentage or proportion is based *on 25–49 unweighted cases* and such data should be treated with caution. An asterisk (\*) in tables indicates that the percentage or proportion has been suppressed because it is based *on fewer than 25 unweighted cases* while a dash “–” denotes *0 unweighted cases in that cell or in the denominator*.

Age groups presented in this report include those persons that had reached the full age indicated by the upper limit for an age group: for example, respondents aged 15–24 years also include persons who had fully reached 15 and 24 years of age. Similarly, the age group of children aged 23–35 months includes those who had fully reached 23 and 35 months.

Since the education categories “None” and “Primary” are based *on fewer than 25 unweighted cases*, these categories are combined into “None/Primary”.

In the Report, the terms “primary school”, “lower secondary school” or “upper secondary school” are used to refer to training classes (grades 1-4, 5-9 and 10-11, respectively), and the terms “primary education”, “lower secondary education” or “upper secondary education” are used as the basic characteristics of the education level of household members.

In addition, in the tables and throughout the report, mother's education refers to educational attainment of mothers as well as *primary caretakers of children under 5*, who are the respondents to the under-5 questionnaire if the mother is deceased or is living elsewhere.

### III. Sample Coverage and the Characteristics of Households and Respondents

#### Sample Coverage

Of the 16,791 households selected for the sample, 16,605 were found to be occupied. Of these, 16,500 households were successfully interviewed with the household response rate of 99.4 percent.

In the interviewed households, 12,910 women (aged 15-49 years) were identified. Of these, 12,670 were successfully interviewed, yielding a response rate of 98.1 percent within interviewed households.

There were 5,561 children under age five listed in the household questionnaires. Questionnaires were completed for 5,510 of these children, which corresponds to a response rate of 99.1 percent within interviewed households.

Overall response rates of 97.5 and 98.5 are calculated for the individual interviews of women and under-5s, respectively. Household response rates in the urban and rural areas are equally high (over 99 percent), while in all regions, response rates were greater than 98 percent (Table HH.1).

<b>Table HH.1: Results of household, women's and under-5 interviews</b>										
Number of households, women, and children under 5 by interview results, and household, women's and under-5's response rates, Kazakhstan, 2015										
	Total	Area		Region						
		urban	rural	Akmola	Aktobe	Almaty oblast	Atyrau	West Kazakhstan	Zhambyl	Karaganda
<b>Households</b>										
Sampled	16791	10750	6041	1281	880	920	880	961	920	1101
Occupied	16605	10625	5980	1260	864	908	868	953	916	1072
Interviewed	16500	10540	5960	1243	856	902	854	950	911	1062
Household response rate	99.4	99.2	99.7	98.7	99.1	99.3	98.4	99.7	99.5	99.1
<b>Women</b>										
Eligible	12910	7925	4985	853	700	763	773	739	818	716
Interviewed	12670	7810	4860	825	686	756	761	725	806	708
Women's response rate	98.1	98.5	97.5	96.7	98.0	99.1	98.4	98.1	98.5	98.9
Women's overall response rate	97.5	97.8	97.2	95.4	97.1	98.4	96.9	97.8	98.0	98.0
<b>Children under 5</b>										
Eligible	5561	3063	2498	313	324	310	406	303	435	274
Mothers/caretakers interviewed	5510	3041	2469	310	321	309	401	302	425	274
Under-5's response rate	99.1	99.3	98.8	99.0	99.1	99.7	98.8	99.7	97.7	100.0
Under-5's overall response rate	98.5	98.5	98.5	97.7	98.2	99.0	97.2	99.4	97.2	99.1

Continuation of Table HH.1

	Region								
	Kostanai	Kyzylorda	Mangistau	South Kazakhstan	Pavlodar	North Kazakhstan	East Kazakhstan	Astana city	Almaty city
<b>Households</b>									
Sampled	1282	880	880	880	1200	1281	1202	960	1283
Occupied	1275	879	868	873	1200	1268	1184	955	1262
Interviewed	1271	879	862	867	1196	1266	1175	949	1257
Household response rate	99.7	100.0	99.3	99.3	99.7	99.8	99.2	99.4	99.6
<b>Women</b>									
Eligible	914	903	881	878	767	723	712	831	939
Interviewed	907	884	829	874	760	706	697	821	925
Women's response rate	99.2	97.9	94.1	99.5	99.1	97.6	97.9	98.8	98.5
Women's overall response rate	98.9	97.9	93.4	98.9	98.8	97.5	97.1	98.2	98.1
<b>Children under 5</b>									
Eligible	339	496	486	523	255	250	224	317	306
Mothers/caretakers interviewed	339	495	474	520	254	248	221	312	305
Under-5's response rate	100.0	99.8	97.5	99.4	99.6	99.2	98.7	98.4	99.7
Under-5's overall response rate	99.7	99.8	96.9	98.7	99.3	99.0	97.9	97.8	99.3

Response rates to individual questionnaires for women aged 15-49 years and questionnaires about children under 5 were quite high and similar across regions, as well as in urban and rural areas, and were greater than 95 percent (except for the Mangistau region where the proportion of interviewed women was 94.1 percent).

### Characteristics of Households

The weighted 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 16,500 households successfully interviewed in the survey, 56,803 household members were listed. Of these, 27,676 persons or 48.7 percent of the total population were males, and 29,127 persons or 51.3 percent were females. According to official demographic statistics of the Statistics Committee MNE RK, as of 1 January 2015, the proportion of men and women in the total population was 48.3 and 51.7 percent, respectively. This shows that the survey data fully correlates with the national demographic statistics.

<b>Table HH.2: Age distribution of household population by sex</b>						
Percent and frequency distribution of the household population by five-year age groups, dependency age groups (age 0-14 years and 65 years or more), and by child (age 0-17 years) and adult populations (age 18 or more), by sex, Kazakhstan, 2015						
	Total		Males		Females	
	Number	Percent	Number	Percent	Number	Percent
<b>Total</b>	56803	100.0	27676	100.0	29127	100.0
<b>Age</b>						



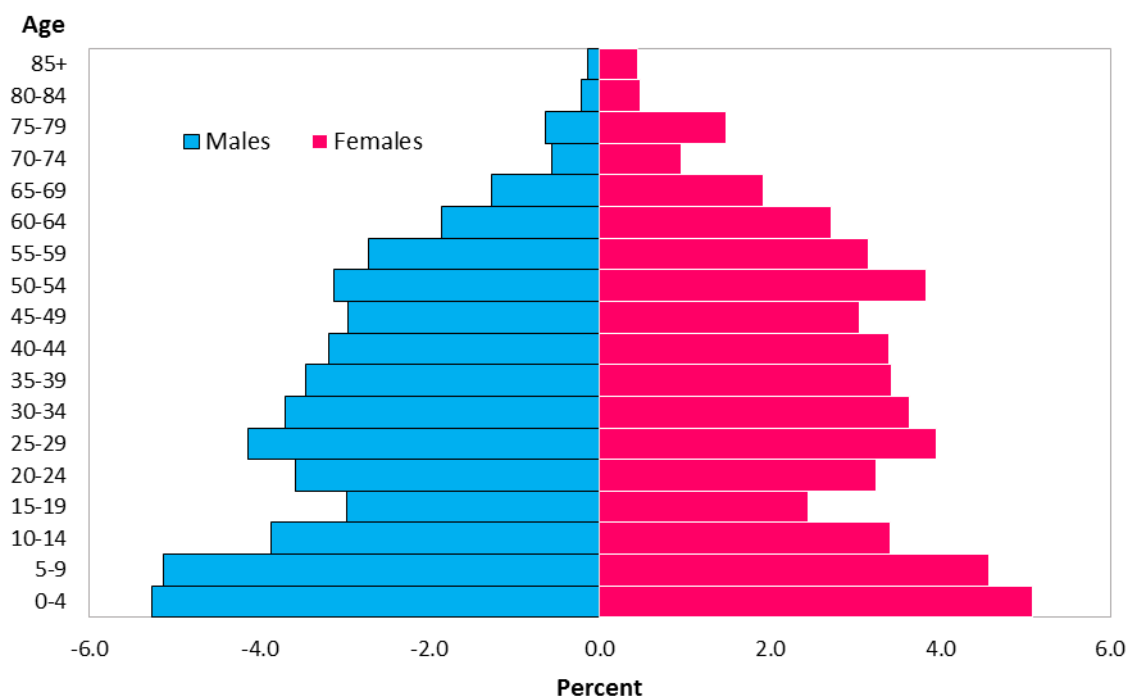
0-4	5877	10.3	2986	10.8	2891	9.9
5-9	5509	9.7	2908	10.5	2601	8.9
10-14	4129	7.3	2191	7.9	1937	6.7
15-19	3075	5.4	1684	6.1	1391	4.8
20-24	3874	6.8	2029	7.3	1845	6.3
25-29	4593	8.1	2344	8.5	2248	7.7
30-34	4166	7.3	2095	7.6	2070	7.1
35-39	3908	6.9	1963	7.1	1945	6.7
40-44	3743	6.6	1809	6.5	1934	6.6
45-49	3415	6.0	1680	6.1	1734	6.0
50-54	3951	7.0	1772	6.4	2178	7.5
55-59	3341	5.9	1546	5.6	1795	6.2
60-64	2602	4.6	1056	3.8	1545	5.3
65-69	1807	3.2	718	2.6	1089	3.7
70-74	868	1.5	322	1.2	546	1.9
75-79	1212	2.1	366	1.3	846	2.9
80-84	399	0.7	126	0.5	273	0.9
85+	336	0.6	80	0.3	255	0.9
<b>Population age groups</b>						
0-14	15515	27.3	8085	29.2	7430	25.5
15-64	36667	64.5	17979	65.0	18688	64.2
65+	4622	8.1	1612	5.8	3010	10.3
<b>Child and adult populations</b>						
Children aged 0-17 years	17469	30.8	9155	33.1	8314	28.5
Adults aged 18+ years	39335	69.2	18521	66.9	20814	71.5

There are 950 males (935 – according to official demographic statistics) per 1,000 females. In the age groups of 0-4 years to 35-39 years there is a higher proportion of males compared to females; in the age group of 40-44 years old men there is a slight reduction in the percentage of males in comparison to females. The most noticeable imbalance in the sex ratio with an excess of the female population begins from the age group 60-64 years and above. According to the official data of the current population count, as of January 1, 2015, the structure of the country population by sex and by five-year age interval groups is almost comparable with the survey data. There is no sense to compare survey data with the results of the 2009 Census due to the limitation period (more than six years); whereas a comparison was conducted against the 2010-2011 MICS which was relevant at the time.

According to the survey, the proportion of dependents (age groups 0-14 and 65 years and older) was 35.4 percent in total; comprising of 27.3 percent of children aged 0-14 years and 8.1 percent of people aged 65 years and older. Almost two-thirds, or 64.6 percent of the population, are in the so-called “able-bodied age group”. According to official demographic statistics, as of January 1, 2015 the proportion of the population in the age group 0-14 years was 26.6 percent, the proportion of people in the age group 15-64 years was 66.6 percent and the proportion of people aged 65 years and older – 6.8 percent. In general, the data on age and sex structure of the population, based on the findings of the 2015 MICS survey, is comparable to the official statistical data of the country (Table HH.2 and Figure HH.1).

Children aged 0-17 years comprise 30.8 percent of the population, compared to the official statistics of 30.4 percent as of January 1, 2015. Children in the age group 0-4 years (10.3 percent) and 5-9 years (9.7 percent) make up the largest proportion in the age group 0-14 year old children, and their proportion in total was 20.0 percent (according to the official statistics – 19.8 percent).

**Figure HH.1: Age and sex distribution of household population, Kazakhstan, 2015**



The noticeable reduction in the proportion of the population of both sexes in the age groups 10-14 years, 15-19 years and 20-24 years is explained by the fact that due to the collapse of the USSR in Kazakhstan, as in all former Soviet Republics, the deterioration of the social and economic situation took place during the 1990s, which had a negative impact on the development of demographic trends, such as out-of-country migration (negative balance of external migration); increase of mortality, as well as significantly falling birth rates, especially in the period of 1995-1999. Thus, the number of children born, especially girls, had decreased in the period of 1992-2000.

The increase of the proportion of the population in the age group 25-29 years caused by echoes of the “baby-boom” in the mid-1980s, when there was a significant increase of birth rates caused by the favourable demographic policy of the country, supported by state incentives for childbirth by providing social support to mothers during antenatal and post-natal periods; and increasing the duration of partially paid maternity leave and other measures.

There was also an increase in the proportion of the population aged 50-54 years, due to a high rate of natural population increase in the 1950s-1960s. However, the decrease in the number of males and conversely, the increase in number of females aged 75-79 years was caused by low life expectancy of men and by high mortality of men due to various reasons.

Tables HH.3, HH.4 and HH.5 provide basic information about the households, female respondents aged 15-49, and children under-5. Both unweighted and weighted numbers are presented. Such information is essential for the interpretation of findings provided later in the report and for

background information on the representativeness of the survey sample. The remaining tables in this report are presented only with weighted numbers.<sup>10</sup>

Table HH.3 provides basic background information on the households, including sex of the household head, region, area, number of household members, education of the household head, and ethnicity<sup>11,12</sup> of the household head. These background characteristics are used in subsequent tables in this report; the figures in the table also intend to show the number of observations by major categories of analysis in the report.

<b>Table HH.3: Household composition</b>			
Percent and frequency distribution of households by selected characteristics, Kazakhstan, 2015			
	Weighted percent	Number of households	
		Weighted	Unweighted
Total	100.0	16500	16500
<b>Sex of household head</b>			
Male	64.0	10563	10561
Female	36.0	5937	5939
<b>Region</b>			
Akmola	5.7	944	1243
Aktobe	6.0	983	856
Almaty oblast	7.6	1260	902
Atyrau	2.8	456	854
West Kazakhstan	4.6	764	950
Zhambyl	5.3	880	911
Karaganda	9.8	1614	1062
Kostanai	5.9	978	1271
Kyzylorda	2.4	402	879
Mangistau	2.5	412	862
South Kazakhstan	12.5	2055	867
Pavlodar	5.0	829	1196
North Kazakhstan	3.9	645	1266
East Kazakhstan	9.2	1523	1175
Astana city	7.9	1310	949
Almaty city	8.8	1445	1257
<b>Area</b>			
Urban	60.4	9967	10540
Rural	39.6	6533	5960
<b>Number of household members</b>			
1	15.5	2562	2665
2	22.5	3713	3857
3	18.9	3116	3117
4	16.8	2775	2779
5	11.3	1858	1808
6	7.8	1291	1182
7	4.0	656	592
8	1.7	280	257

<sup>10</sup> See Appendix A: Sample Design, for more details on sample weights.

<sup>11</sup> This was determined by asking the question "To what ethnicity does the head of this household belong?" in the Household Questionnaire.

<sup>12</sup> "Nationality" and "Ethnicity" are used as interchangeable terms in this report.

9	0.7	119	128
10+	0.8	130	115
<b>Education of household head</b>			
None/Primary	2.0	331	337
Lower secondary	10.1	1659	1694
Upper secondary	27.1	4475	4244
Technical and Professional	33.8	5574	5845
Higher	27.0	4453	4375
Missing/DK	0.0	8	5
<b>Ethnicity of household head</b>			
Kazakh	55.3	9124	9241
Russian	29.2	4811	5141
Other ethnic groups	15.5	2564	2117
Missing/DK	0.0	1	1
<b>Mean household size</b>	3.4	16500	16500

The weighted and unweighted total number of households is equal, since sample weights were normalized. Table HH.3 also shows the weighted mean household size estimated by the survey.

There were 16,500 households interviewed, of which 9,967 households or 60.4 percent of the total number of households are in urban areas and 6,533 households or 39.6 percent of households are in rural areas. More than one third of households (36.0 percent) or every third household was headed by a woman.

55.3 percent of surveyed households are headed by persons of Kazakh ethnicity; about one-third of households are headed by persons of Russian ethnicity, and other ethnicities head 15.5 percent of households.

Almost 98 percent of heads of households have an education level not lower than lower secondary education: 27.0 percent of them have higher education, almost 34 percent – technical and professional education; slightly more than 37.0 percent have lower and upper secondary education.

According to the survey results, the average household size was 3.4 persons. The largest proportion of households have 2 to 4 members – almost 60.0 percent of all households: 2 members – 22.5 percent, 3 members – 18.9 and 4 members – 16.8 percent.

According to the 2009 Census data, in Kazakhstan the average household size was 3.6 members; 3.2 in urban areas and 4.4 members in rural areas.

### ***Characteristics of Female Respondents Aged 15-49 Years and Children Under-5***

Tables HH.4 and HH.5 provide information on the background characteristics of female respondents 15-49 years of age and of children under age 5. In these two 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 under age five, 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 female respondents aged 15-49 years. The table includes information on the distribution of women according to region, area, age, marital/union status, motherhood status, births in last two years, education<sup>13</sup>, wealth index quintiles<sup>14,15</sup>, and ethnicity<sup>11</sup> of the household head.

<b>Table HH.4: Women's background characteristics</b>			
Percent and frequency distribution of women aged 15-49 years by selected background characteristics, Kazakhstan, 2015			
	Weighted percent	Number of women	
		Weighted	Unweighted
Total	100.0	12670	12670
<b>Region</b>			
Akmola	4.9	624	825
Aktobe	6.4	806	686
Almaty oblast	8.2	1042	756
Atyrau	3.2	402	761
West Kazakhstan	4.5	572	725
Zhambyl	6.1	778	806
Karaganda	8.2	1035	708

<sup>13</sup> Throughout this report, unless otherwise stated, "education" refers to highest educational level ever attended by the respondents when it is used as a background variable.

<sup>14</sup> The wealth index is a composite indicator of wealth. To construct the wealth index, principal components analysis is performed by using information on the ownership of consumer goods, dwelling characteristics, water and sanitation, and other characteristics that are related to the household's wealth, to generate weights (factor scores) for each of the items used. First, initial factor scores are calculated for the total sample. Then, separate factor scores are calculated for households in urban and rural areas. Finally, the urban and rural factor scores are regressed on the initial factor scores to obtain the combined, final factor scores for the total sample. This is carried out to minimize the urban bias in the wealth index values.

Each household in the total sample is then assigned a wealth score based on the assets owned by that household and on the final factor scores obtained as described above. The survey household population is then ranked according to the wealth score of the household they are living in, and is finally divided into 5 equal parts (quintiles) from lowest (poorest) to highest (richest).

In the 2015 Kazakhstan MICS, the following assets were used in these calculations: radio, television, non-mobile telephone, refrigerator, microwave, table, sofa, bed, wardrobe, dishwasher, washing machine, air conditioner, vacuum cleaner. In addition, the following assets were used in these calculations: mobile telephone / smartphone, bicycle, motorcycle / scooter, animal-drawn cart, car / truck, tractor, boat with motor, personal computer / laptop, tablet, as well as ownership of housing, land, livestock, herds and other farm animals or poultry, or the existence of a bank account, and electricity.

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. 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 Filmer, D and Pritchett, L. 2001. *Estimating wealth effects without expenditure data – or tears: An application to educational enrolments in states of India*. Demography 38(1): 115-132; Rutstein, SO and Johnson, K. 2004. *The DHS Wealth Index*. DHS Comparative Reports No. 6; and Rutstein, SO. 2008. *The DHS Wealth Index: Approaches for Rural and Urban Areas*. DHS Working Papers No. 60.

<sup>15</sup> When describing survey results by wealth quintiles, appropriate terminology is used when referring to individual household members, such as for instance "women in the richest population quintile", which is used interchangeably with "women in the wealthiest survey population", "women living in households in the richest population wealth quintile", and similar.

Kostanai	5.3	675	907
Kyzylorda	3.2	399	884
Mangistau	3.2	408	829
South Kazakhstan	16.4	2079	874
Pavlodar	4.1	517	760
North Kazakhstan	2.8	351	706
East Kazakhstan	6.9	880	697
Astana city	8.6	1086	821
Almaty city	8.0	1015	925
<b>Area</b>			
Urban	56.4	7140	7810
Rural	43.6	5530	4860
<b>Age</b>			
15-19	10.6	1346	1316
20-24	14.0	1768	1771
25-29	17.1	2161	2165
30-34	15.8	1998	1967
35-39	14.8	1870	1860
40-44	14.7	1862	1885
45-49	13.1	1665	1706
<b>Marital/Union status</b>			
Currently married/in union	65.9	8351	8297
Widowed	3.2	410	380
Divorced	7.4	937	929
Separated	2.2	282	294
Never married/in union	21.2	2690	2770
<b>Motherhood and recent births</b>			
Never gave birth	26.0	3296	3392
Ever gave birth	74.0	9374	9278
Gave birth in last two years	17.0	2157	2106
No birth in last two years	57.0	7218	7172
<b>Education</b>			
None/Primary	0.1	16	16
Lower secondary	6.1	778	778
Upper secondary	24.8	3140	2808
Technical and Professional	31.5	3990	4305
Higher	37.5	4745	4763
<b>Wealth index quintile</b>			
Poorest	18.0	2276	2178
Second	18.4	2334	2053
Middle	19.4	2464	2572
Fourth	21.4	2708	2884
Richest	22.8	2888	2983
<b>Ethnicity of household head</b>			
Kazakh	64.3	8149	8467
Russian	19.8	2506	2727
Other ethnic groups	15.9	2014	1475
Missing/DK	0.0	1	1

As shown in Table HH.4, 12,670 women aged 15-49 years were successfully interviewed. Of the total number of interviewed women, 56.4 percent live in urban areas and 43.6 percent live in rural areas.

The proportion of young women in the age group 15-24 years was 24.6 percent, of which 10.6 percent were aged 15-19 years.

During the survey, 65.9 percent of women were married/in union; 3.2 percent of women were widowed; 9.6 percent were divorced or separated and 21.2 percent of women were never married/in union.

Of all women age 15-49 years, three quarters (74.0 percent) have ever given birth, of which 17.0 percent in the two years preceding the survey.

In general, the educational level of almost all women aged 15-49 years was not lower than lower secondary education: 37.5 percent of women this age have higher education, 31.5 percent have technical and professional education, and almost 31 percent have lower or upper secondary education.

18.0 percent of women age 15-49 years are living in households in the poorest wealth index quintile, while 22.8 percent are living in the richest wealth index quintile.

Of the total number of interviewed women, 64.3 percent live in households whose heads are persons of Kazakh ethnicity, 19.8 percent in households whose heads are persons of Russian ethnicity, and 15.9 percent in those whose heads are of other ethnicities.

Background characteristics of children under 5 are presented in Table HH.5. These include the distribution of children by several attributes: sex, region and area, age in months, respondent type (mother or caretaker), mother's (or caretaker's) education, wealth, and ethnicity of the household head.

According to the Table HH.5, the proportion of male and female children under-5 years was similar (50.7 and 49.3 percent, respectively). The percentages of children under 5 years range from 22.6 percent in South Kazakhstan to 2.1 percent in North Kazakhstan. 50.9 percent of children under-5 years reside in rural areas, while 49.1 percent live in urban areas. About one-fifth of children are age 0-11 months (19.4 percent), with similar proportions of children aged 12-23, 24-35, 36-47 and 48-59.

The distribution of the age structure of children under 5 years correlates with the data of the official demographic statistics of Kazakhstan as of January 1, 2015: 0-11 months – 21.1 percent; 12-23 months – 20.3 percent, 24-35 months – 19.9 percent, 25-47 months – 19.5 percent, and 48-59 months – 19.2 percent.

Generally, the respondents to the questionnaires about children under 5 years were mothers of those children – 97.5 percent and only 2.5 percent were other primary caretakers. Among them, the highest proportion are mothers/caretakers with higher education – 40.8 percent, 28.3 percent have technical and professional education; 30.8 percent have lower or upper secondary education.

36.0 percent of children live in households from the fourth and richest quintiles (17.5 and 18.5 percent, respectively), 20.4 percent live in the poorest households; the remaining 43.6 percent of children live in households of the second and middle wealth quintiles (22.1 and 21.5 percent, respectively).

Almost 70 percent of children under 5 years of age live in households headed by persons of Kazakh ethnicity, 12.5 percent in households headed by persons of Russian ethnicity and 17.9 – by representatives of other ethnicities.

The total numbers of weighted and unweighted observations are equal, since sample weights have been normalized (standardized).

<b>Table HH.5: Under-5's background characteristics</b>			
Percent and frequency distribution of children under five years of age by selected characteristics, Kazakhstan, 2015			
	Weighted percent	Number of under-5 children	
		Weighted	Unweighted
Total	100.0	5510	5510
<b>Sex</b>			
Male	50.7	2796	2833
Female	49.3	2714	2677
<b>Region</b>			
Akmola	4.1	225	310
Aktobe	6.8	376	321
Almaty oblast	7.5	413	309
Atyrau	3.7	202	401
West Kazakhstan	4.1	227	302
Zhambyl	7.5	414	425
Karaganda	6.9	381	274
Kostanai	4.3	239	339
Kyzylorda	3.9	214	495
Mangistau	4.1	224	474
South Kazakhstan	22.6	1246	520
Pavlodar	3.0	166	254
North Kazakhstan	2.1	117	248
East Kazakhstan	5.0	274	221
Astana city	9.1	501	312
Almaty city	5.3	292	305
<b>Area</b>			
Urban	49.1	2704	3041
Rural	50.9	2806	2469
<b>Age</b>			
0-5 months	9.6	531	508
6-11 months	9.8	540	529
12-23 months	19.4	1071	1103
24-35 months	19.0	1045	1093
36-47 months	21.9	1208	1125
48-59 months	20.2	1114	1152
<b>Respondent to the under-5 questionnaire</b>			
Mother	97.5	5371	5387
Other primary caretaker	2.5	139	123
<b>Mother's education<sup>a</sup></b>			
None/Primary	0.1	6	6
Lower secondary	5.6	311	304
Upper secondary	25.2	1386	1161
Technical and Professional	28.3	1559	1716
Higher	40.8	2248	2323



<b>Wealth index quintile</b>			
Poorest	20.4	1124	1077
Second	22.1	1218	1042
Middle	21.5	1183	1232
Fourth	17.5	966	1088
Richest	18.5	1019	1071
<b>Ethnicity of household head</b>			
Kazakh	69.7	3838	4091
Russian	12.5	687	777
Other ethnic groups	17.9	985	642

<sup>a</sup> In this table and throughout the report, mother's education refers to educational attainment of mothers as well as caretakers of children under 5, who are the respondents to the under-5 questionnaire if the mother is deceased or is living elsewhere.

### ***Housing characteristics, asset ownership, and wealth quintiles***

Tables HH.6, HH.7 and HH.8 provide further details on household level characteristics. HH.6 presents characteristics of housing, disaggregated by area and region, distributed by whether the dwelling has electricity, the main materials of the flooring, roof, and exterior walls, as well as the number of rooms used for sleeping.

Throughout the country, all households have electricity in both urban (100 percent) and rural areas (99.9 percent), with the rare exception of individual households in rural areas in 6 regions. According to the 2009 Census in Kazakhstan, 96.9 percent of households had electricity.

Two thirds of households have a finished floor, while 81.8 percent of such households are located in urban areas and 42.4 percent – in rural areas. 33.2 percent of households have a rudimentary floor, with more than 55 percent of such households in rural areas, and less than 20 percent in urban areas.

More than 99 percent of households have finished roofing in both urban and rural areas; significant differences were not observed by regions.

92.8 percent of households in the country have finished exterior walls; the proportion of such households is 95.1 percent in urban areas, compared to 89.3 percent in rural areas.

The mean number of persons per room used for sleeping in households is 1.8 percent, without difference between urban and rural areas (1.7 and 1.8 respectively). The data for households of the Atyrau, Kyzylorda, Mangistau, South Kazakhstan regions and Astana city is slightly higher – the mean number of persons per room is about 2 persons. The mean numbers of persons per room used for sleeping in the other regions range from 1.4 persons in East Kazakhstan to 1.8 in West Kazakhstan and the Almaty oblast.

**Table HH.6: Housing characteristics**

Percent distribution of households by selected housing characteristics, according to area of residence and regions, Kazakhstan, 2015

	Area		Region																
	Total	Urban	Rural	Akmola	Aktobe	Almaty oblast	Atyrau	West Kazakhstan	Zhambyl	Karaganda	Kostanai	Kyzylorda	Mangistau	South Kazakhstan	Pavlodar	North Kazakhstan	East Kazakhstan	Astana city	Almaty city
<b>Electricity</b>																			
Yes	100.0	100.0	99.9	99.9	100.0	100.0	100.0	99.7	99.9	100.0	99.9	100.0	100.0	100.0	100.0	99.9	99.9	100.0	100.0
No	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.3	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
<b>Flooring</b>																			
Rudimentary floor	33.2	18.1	56.4	29.8	23.0	47.6	18.2	44.6	54.8	16.1	27.8	70.0	11.7	63.0	28.4	38.3	45.0	1.5	8.7
Finished floor	66.2	81.8	42.4	69.8	76.2	52.4	81.7	54.7	45.2	83.9	72.2	28.8	88.2	34.0	71.4	60.9	54.5	98.5	91.0
Other	0.6	0.2	1.2	0.4	0.3	0.0	0.1	0.7	0.0	0.0	0.0	1.2	0.0	3.0	0.1	0.8	0.4	0.0	0.2
Missing/DK	0.0	0.0	0.1	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.1
<b>Roof</b>																			
Rudimentary roofing	0.3	0.1	0.5	0.0	0.1	0.5	0.3	0.0	0.0	0.1	0.0	0.3	0.8	1.2	0.3	0.0	0.2	0.0	0.2
Finished roofing	99.4	99.6	99.1	99.6	98.7	99.5	99.1	99.4	100.0	99.7	99.8	99.1	99.0	98.7	99.7	99.5	99.6	98.9	99.8
Other	0.3	0.3	0.4	0.3	1.1	0.0	0.6	0.6	0.0	0.2	0.2	0.6	0.0	0.1	0.0	0.5	0.2	1.1	0.0
Missing/DK	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1
<b>Exterior walls</b>																			
Rudimentary walls	1.0	0.4	2.0	0.3	1.0	3.7	2.2	2.1	1.8	0.5	0.0	0.3	0.2	1.0	1.3	0.8	0.8	0.4	0.3
Finished walls	92.8	95.1	89.3	92.6	94.8	83.5	97.7	96.6	97.7	91.6	98.0	38.5	99.6	98.8	98.4	74.2	98.2	93.1	94.7
Other	6.2	4.5	8.7	7.0	4.2	12.8	0.1	1.3	0.5	7.9	2.0	61.1	0.0	0.2	0.2	25.0	1.0	6.5	5.0
Missing/DK	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0
<b>Rooms used for sleeping</b>																			
1	30.4	39.0	17.3	37.3	17.7	25.6	28.2	28.6	12.1	45.1	38.4	14.3	20.8	11.4	41.7	38.9	28.4	51.4	36.9
2	43.7	42.5	45.4	44.4	48.5	44.6	43.8	48.6	39.3	42.1	45.2	42.9	40.2	41.4	46.7	46.7	48.0	39.3	40.6
3 or more	25.5	18.1	36.9	17.9	33.1	29.3	27.0	22.1	48.4	12.8	16.2	42.2	38.9	47.0	11.4	14.1	23.5	9.2	21.1
Missing/DK	0.4	0.4	0.4	0.4	0.6	0.5	1.1	0.7	0.2	0.0	0.1	0.6	0.1	0.2	0.2	0.2	0.2	0.1	1.4

Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of households	16500	9967	6533	944	983	1260	456	764	880	1614	978	402	412	2055	829	645	1523	1310	1445
Mean number of persons per room used for sleeping	1.77	1.73	1.83	1.66	1.74	1.78	2.00	1.81	1.72	1.72	1.70	2.00	1.98	2.03	1.64	1.55	1.42	2.08	1.64

Table HH.7 shows the distribution of households according to ownership of various household assets, and ownership of personal assets by individual household members. This also includes ownership of a dwelling.

Almost every household in the country, both in urban and in rural areas, has a television (more than 99 percent), there are slight differences by region (98.3-99.7 percent). Some household assets, such as a table and a wardrobe are present in almost 97-98 percent of households; more than 90 percent of households have sofas and beds; a refrigerator is available in almost every household (98.2 percent), a washing machine in 88.2 percent of households, while the proportion of such households is slightly higher in urban areas 91.3 percent, compared to 83.3 percent in rural areas. Almost 80 percent of households have vacuum cleaners (85.0 percent in urban areas and 70.2 percent in rural areas); more than 60 percent of households have a microwave (74.5 percent in urban areas and 47.8 percent in rural areas). Only 15.9 percent of households have air conditioners and 3.6 percent of households have a dish washing machine. More than 70 percent of households have a landline telephone (77.8 percent in urban areas and 59.1 percent in rural areas). Ownership of a radio is not so popular in households – only 7.3 percent of households have a radio.

Throughout the country, one-third (32.7 percent) of households own agricultural land and 25.1 percent of households owns farm animals/livestock or poultry. Ownership of agricultural land or farm animals/livestock is more common among households in rural areas (53.4 percent and 56.5 percent, respectively) compared to those in urban areas (19.1 percent and 4.5 percent, respectively). Among owners of agricultural land, we can see a high proportion of households in the North Kazakhstan region – 69.2 percent, while in Zhambyl, Akmola, Almaty oblast, Kostanai and East Kazakhstan more than half of the households are owners of agricultural land.

Approximately 40-45 percent of households in the Akmola, West Kazakhstan, North Kazakhstan and South Kazakhstan regions are the owners of farm animals/livestock.

In half of the country's households, at least one member of a household, has a car or truck; more than 55 percent of households have personal computer or laptop, one-fourth of households (25 percent) have tablets; while in 79.0 percent of households at least one member has a bank account. In Kazakhstan, ownership of a mobile telephone and smartphone is very popular in the country, with more than 95 percent of households owning it (at least by one of household members), and with practically no difference between urban and rural households.

In almost 90 percent of cases, household members are the owners of the dwelling, while there are notable differences between ownership of dwellings in urban and rural areas (83.7 and 95.9 percent, respectively). In 9.4 percent of cases, the households rent the dwelling. The lowest percentage of households whose members are owners of the dwelling was noticed in the two large metropolitan cities of the country: 61.6 percent in Astana city and 79.5 percent in Almaty city; accordingly, the proportion of households that rent the dwelling is higher in these cities (34.2 and 18.0 percent, respectively).

According to the results of the 2009 Census in Kazakhstan, 91.0 percent of households are the owners of dwelling which shows that the MICS findings correlate with the Census data.

**Table HH.7: Household and personal assets**

Percentage of households by ownership of selected types of property and personal assets, and percent distribution by ownership of dwelling, according to area of residence and regions, Kazakhstan, 2015

	Total	Area		Region						
		Urban	Rural	Akmola	Aktobe	Almaty oblast	Atyrau	West Kazakhstan	Zhambyl	Karaganda
<b>Percentage of households that own a</b>										
Radio	7.3	7.4	7.2	7.9	6.5	3.4	15.8	11.9	7.6	1.2
Television	99.3	99.2	99.3	98.5	99.6	99.7	99.6	98.6	99.0	98.8
Non-mobile telephone	70.4	77.8	59.1	82.2	83.0	60.1	84.2	58.6	44.1	79.9
Refrigerator	98.2	99.1	96.9	96.2	99.0	98.8	98.4	97.0	96.4	98.7
Microwave	63.9	74.5	47.8	56.8	62.4	57.0	61.0	48.9	47.5	70.2
Table	98.4	99.1	97.3	99.7	99.3	99.9	94.3	93.6	99.5	99.8
Sofa	92.1	93.3	90.3	98.3	89.7	97.6	73.0	88.7	94.3	97.7
Bed	91.1	90.0	92.8	95.7	81.2	97.0	59.9	95.1	96.2	96.8
Wardrobe	97.9	98.1	97.5	98.6	97.5	98.8	97.4	97.6	98.0	98.0
Dishwasher	3.6	5.2	1.1	0.9	1.1	2.5	2.2	1.3	2.0	3.1
Washing machine	88.2	91.3	83.3	92.7	83.4	86.6	84.7	79.5	85.0	91.3
Air conditioner	15.9	20.7	8.7	1.0	14.6	5.9	75.3	17.1	9.2	9.7
Vacuum cleaner	79.2	85.0	70.2	77.5	80.8	79.8	81.5	76.7	73.2	84.2
<b>Percentage of households that own</b>										
Agricultural land	32.7	19.1	53.4	54.8	21.5	54.1	5.7	25.5	58.1	35.1
Farm animals/Livestock	25.1	4.5	56.5	38.5	34.3	27.5	18.8	37.3	34.1	14.5
<b>Percentage of households where at least one member owns or has a</b>										
Mobile telephone or smartphone	96.6	96.5	96.7	94.9	97.7	98.7	99.6	95.6	97.3	93.7
Bicycle	18.9	14.6	25.3	32.4	9.7	11.7	13.1	33.7	20.8	19.4
Motorcycle or scooter	2.9	1.4	5.1	5.5	2.8	1.2	2.2	3.0	2.3	3.1
Animal-drawn cart	2.1	0.2	5.0	2.7	0.9	4.0	0.9	3.4	1.5	0.2
Car or truck	50.0	48.0	53.0	44.7	48.6	52.7	46.8	42.0	49.4	43.1
Tractor	2.9	0.3	6.9	4.5	4.6	2.5	2.6	4.7	2.5	3.4
Boat with a motor	0.3	0.3	0.2	0.0	0.1	0.5	0.2	0.1	0.0	0.0
Personal computer or laptop	55.8	62.6	45.5	56.4	50.1	50.7	65.1	47.6	48.1	63.8
Tablet	25.3	30.4	17.5	23.3	22.5	24.9	28.7	23.5	17.4	33.7

Bank account	79.0	84.6	70.4	71.8	89.1	65.9	86.5	62.5	77.4	72.9
<b>Ownership of dwelling</b>										
Owned by a household member	88.6	83.7	95.9	90.2	92.8	94.5	88.8	91.4	90.0	92.4
Not owned	11.4	16.2	4.0	9.8	6.7	5.5	11.1	8.5	10.0	7.5
Rented	9.4	13.6	3.0	5.9	6.7	5.3	8.2	7.4	7.7	5.3
Other	1.9	2.6	0.9	3.9	0.0	0.2	2.9	1.1	2.3	2.2
Missing/DK	0.1	0.0	0.1	0.0	0.5	0.0	0.1	0.1	0.0	0.1
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of households	16500	9967	6533	944	983	1260	456	764	880	1614

Continuation of Table HH.7

	Region (continuation)									
	Kostanai	Kyzylorda	Mangistau	South Kazakhstan	Pavlodar	North Kazakhstan	East Kazakhstan	Astana city	Almaty city	
<b>Percentage of households that own a</b>										
Radio	13.6	4.2	6.8	9.3	12.5	0.1	4.9	7.3	9.0	
Television	99.2	99.3	99.6	99.7	99.1	98.3	99.0	99.6	99.7	
Non-mobile telephone	84.2	57.7	71.8	35.5	84.9	83.7	75.7	72.4	92.0	
Refrigerator	98.0	97.0	99.5	97.3	99.0	97.3	98.9	98.6	99.8	
Microwave	65.1	48.3	79.8	50.0	74.7	54.2	59.8	87.3	87.5	
Table	99.9	85.4	91.7	96.2	99.8	100.0	100.0	100.0	99.9	
Sofa	97.2	71.2	72.4	82.8	98.8	98.4	97.6	87.1	98.8	
Bed	94.5	72.4	81.3	88.7	98.6	95.0	96.7	85.2	90.9	
Wardrobe	99.0	93.9	96.7	95.8	99.3	99.5	98.3	97.0	99.4	
Dishwasher	3.9	0.8	3.3	0.9	1.7	2.0	2.0	11.8	11.7	
Washing machine	95.3	72.7	89.8	78.4	91.4	95.3	89.3	93.7	95.4	
Air conditioner	9.1	26.4	86.9	13.2	14.8	2.6	6.9	18.9	25.9	
Vacuum cleaner	85.3	56.7	82.1	61.9	82.0	81.2	81.9	84.2	93.1	
<b>Percentage of households that own</b>										
Agricultural land	54.1	7.5	1.9	20.6	38.1	69.2	51.2	4.0	6.7	
Farm animals/Livestock	28.5	34.3	16.8	45.5	15.2	44.0	20.5	0.8	2.6	
<b>Percentage of households where at least one member owns or has a</b>										

Mobile telephone or smartphone	94.1	99.0	99.0	99.1	94.0	92.8	93.4	98.8	98.5
Bicycle	32.0	17.4	9.8	17.2	24.1	27.2	16.8	10.3	14.6
Motorcycle or scooter	4.3	4.4	2.2	0.8	2.6	8.2	4.4	0.4	2.8
Animal-drawn cart	1.0	1.9	0.1	4.8	1.6	5.5	3.1	0.1	0.2
Car or truck	48.2	44.2	60.2	60.3	41.0	45.4	44.3	52.8	61.5
Tractor	2.8	1.7	0.8	3.1	3.0	8.1	3.6	0.3	0.1
Boat with a motor	0.8	0.5	0.4	0.0	0.4	0.7	0.9	0.1	0.2
Personal computer or laptop	68.2	47.3	70.5	36.3	60.3	57.6	59.0	60.0	68.2
Tablet	31.1	16.6	35.2	9.7	23.2	19.7	24.3	40.0	33.2
Bank account	76.9	77.3	95.7	86.8	81.3	67.7	68.1	90.7	92.7
<b>Ownership of dwelling</b>									
Owned by a household member	91.1	95.2	92.0	93.4	92.0	91.5	91.2	61.6	79.5
Not owned	8.9	4.8	8.0	6.6	8.0	8.4	8.7	38.4	20.4
Rented	7.7	4.4	6.6	5.8	7.3	5.0	5.3	34.2	18.0
Other	1.2	0.4	1.3	0.8	0.7	3.5	3.3	4.2	2.4
Missing/DK	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Number of households	978	402	412	2055	829	645	1523	1310	1445

Table HH.8 shows how the household populations in urban/rural areas and regions are distributed according to household wealth quintiles.

Analysing the table, we can see a differentiation of households by wealth index quintiles across regions, and by urban and rural areas. More than one third (36.8 percent) of households in rural areas belong to the poorest wealth quintile in comparison with 5.2 percent of households in urban areas, and conversely, 36.2 percent of households in urban areas belong to the richest wealth quintile, compared to 1.6 percent of households in rural areas. The highest proportion of households of the poorest wealth quintile lives in the North Kazakhstan region (41.7 percent), and about 30 percent of households in the South Kazakhstan, Kyzylorda and West Kazakhstan regions. The lowest proportion of households of the poorest wealth quintile lives in the Almaty and Astana cities (1.5 and 1.8 percent, respectively), while more than half of households (51.5 percent) in Astana city belong to the richest wealth quintile.

<b>Table HH.8: Wealth quintiles</b>							
Percent distribution of the household population by wealth index quintile, according to area of residence, regions, sex, education and ethnicity of household head, Kazakhstan, 2015							
	Wealth index quintile					Total	Number of household members
	Poorest	Second	Middle	Fourth	Richest		
Total	20.0	20.0	20.0	20.0	20.0	100.0	56803
<b>Sex of household head</b>							
Male	20.6	21.8	20.2	18.2	19.1	100.0	40279
Female	18.4	15.6	19.5	24.3	22.2	100.0	16525
<b>Area</b>							
Urban	5.2	7.4	19.1	32.1	36.2	100.0	30222
Rural	36.8	34.3	21.0	6.3	1.6	100.0	26582
<b>Region</b>							
Akmola	26.5	21.7	28.7	19.4	3.8	100.0	2796
Aktobe	8.0	19.8	29.4	19.4	23.4	100.0	3580
Almaty oblast	23.8	24.8	26.2	20.9	4.3	100.0	4679
Atyrau	5.7	14.9	32.1	25.2	22.2	100.0	1849
West Kazakhstan	30.0	19.8	20.9	19.3	10.0	100.0	2591
Zhambyl	27.7	28.8	22.6	10.9	10.0	100.0	3647
Karaganda	9.4	11.4	18.1	25.5	35.6	100.0	4630
Kostanai	22.2	11.4	14.2	20.2	32.1	100.0	2903
Kyzylorda	31.8	30.6	24.7	8.0	4.8	100.0	1893
Mangistau	8.1	19.6	28.4	10.2	33.7	100.0	1841
South Kazakhstan	32.8	38.9	17.9	7.4	3.1	100.0	9964
Pavlodar	14.4	13.8	8.9	19.1	43.9	100.0	2274
North Kazakhstan	41.7	18.6	11.9	23.9	3.8	100.0	1721
East Kazakhstan	25.5	13.3	19.6	21.0	20.6	100.0	4117
Astana city	1.8	1.8	5.4	39.4	51.5	100.0	4047
Almaty city	1.5	2.7	20.5	38.2	37.1	100.0	4271
<b>Education of household head</b>							
None/Primary	43.0	23.9	16.2	11.8	5.1	100.0	1135
Lower secondary	33.8	28.1	19.4	11.4	7.3	100.0	5704
Upper secondary	31.5	25.7	21.6	12.1	9.0	100.0	17668
Technical and Professional	15.4	18.4	21.6	22.9	21.6	100.0	18200



Higher	3.8	11.1	16.5	30.4	38.1	100.0	14030
Missing/DK	(41.4)	(42.3)	(16.4)	(0.0)	(0.0)	100.0	66
<b>Ethnicity of household head</b>							
Kazakh	22.3	20.3	19.6	18.6	19.2	100.0	35426
Russian	12.2	10.4	19.6	29.3	28.5	100.0	11904
Other ethnic groups	21.3	31.0	21.8	13.5	12.4	100.0	9472
Missing/DK	(*)	(*)	(*)	(*)	(*)	100.0	1
( ) Figures that are based on 25–49 unweighted cases. (*) Figures that are based on fewer than 25 unweighted cases.							

The information presented on the distribution of households by wealth index quintiles is an indirect assessment and does not provide information on actual income and expenditures of households, as the MICS questionnaires are not intended to collect information on income and expenditures of households from any sources.

## IV. Nutrition

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### ***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 (defined as 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 days, months and years. The children who survive with low birth weight may face problems with immune system function and increased risk of disease; they are likely to remain undernourished, with reduced muscle strength, to the end of their lives, such children suffer a higher incidence of diabetes and heart disease in later life. Children born with low birth weight also risk a lower IQ and cognitive abilities, 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 undernutrition and infections during her childhood), and poor nutrition during 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, children born to teenagers who give birth when their own physical development is not yet completed, run a higher risk of bearing low birth weight babies.

As many infants are not weighed at birth and those who are weighed may present a distorted 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.<sup>16</sup>

Overall, in Kazakhstan, 98.7 percent of newborn children were weighed at birth; 4.5 percent of infants are estimated to weigh less than 2,500 grams at birth (Table NU.1). There is slight regional variation in prevalence of low birth weight: from 2.7 percent in the Mangistau region to 7.2 percent in the Pavlodar region. There are no notable variations by other background characteristics.

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<sup>16</sup> For a detailed description of the methodology, see Boerma, JT et al. 1996. *Data on Birth Weight in Developing Countries: Can Surveys Help?* Bulletin of the World Health Organization 74(2): 209-16.

**Table NU.1: Low birth weight infants**

Percentage of last live-born children in the last two years that are estimated to have weighed below 2,500 grams at birth and percentage of live births weighed at birth, Kazakhstan, 2015

	Percent distribution of births by mother's assessment of size at birth					Total	Percentage of live births:		Number of last live-born children in the last two years
	Very small	Smaller than average	Average	Larger than average or very large	DK		Below 2,500 grams <sup>1</sup>	Weighed at birth <sup>2</sup>	
Total	2.4	8.4	72.0	16.7	0.6	100.0	4.5	98.7	2157
<b>Mother's age at birth</b>									
Less than 20 years	6.1	10.6	66.7	16.0	0.7	100.0	7.7	97.7	98
20-34 years	2.2	8.1	73.1	16.1	0.5	100.0	4.3	98.8	1789
35-49 years	2.2	9.1	66.6	21.1	0.9	100.0	4.5	98.1	270
<b>Birth order</b>									
1	1.8	11.9	71.8	14.0	0.5	100.0	5.0	98.8	686
2-3	2.8	7.3	73.8	15.6	0.5	100.0	4.6	98.6	1112
4-5	2.8	4.7	67.0	24.7	0.8	100.0	3.8	98.9	296
6+	0.0	5.6	65.0	27.2	2.2	100.0	2.1	97.8	62
<b>Region</b>									
Akmola	1.7	8.7	75.3	12.9	1.4	100.0	4.1	99.3	93
Aktobe	5.1	8.7	67.8	18.5	0.0	100.0	6.4	99.3	145
Almaty oblast	1.6	11.0	72.5	14.9	0.0	100.0	4.6	99.5	188
Atyrau	2.9	4.9	63.9	25.9	2.4	100.0	4.0	95.2	85
West Kazakhstan	1.5	10.5	69.6	18.4	0.0	100.0	4.3	100.0	100
Zhambyl	5.0	9.5	66.6	18.3	0.6	100.0	6.6	98.8	165
Karaganda	2.0	6.5	71.7	19.9	0.0	100.0	3.7	99.1	139
Kostanai	0.8	11.7	64.4	23.1	0.0	100.0	4.1	100.0	82
Kyzylorda	3.5	5.8	64.4	24.4	1.8	100.0	4.6	96.5	83
Mangistau	1.0	4.7	74.3	18.7	1.3	100.0	2.7	98.3	101
South Kazakhstan	2.6	6.9	74.9	15.0	0.6	100.0	4.3	98.3	474
Pavlodar	4.3	13.2	65.2	15.2	2.1	100.0	7.2	95.8	67
North Kazakhstan	5.0	3.3	75.3	16.5	0.0	100.0	5.1	100.0	44
East Kazakhstan	1.2	12.4	76.5	8.7	1.2	100.0	4.7	98.8	100
Astana city	0.0	9.2	74.7	16.2	0.0	100.0	3.0	100.0	195

Almaty city	2.0	7.3	82.3	8.4	0.0	100.0	4.0	98.4	97
<b>Area</b>									
Urban	1.3	8.9	72.2	17.1	0.6	100.0	3.8	98.5	1076
Rural	3.5	7.8	71.7	16.3	0.6	100.0	5.2	98.9	1081
<b>Mother's education</b>									
None/Primary	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	2
Lower secondary	4.0	14.1	63.1	17.4	1.4	100.0	7.1	98.6	97
Upper secondary	3.8	7.1	75.1	13.7	0.3	100.0	5.2	99.2	518
Technical and Professional	2.7	8.3	69.2	19.1	0.7	100.0	4.7	98.6	660
Higher	1.2	8.5	73.1	16.6	0.6	100.0	3.7	98.5	879
<b>Wealth index quintile</b>									
Poorest	3.3	9.5	71.9	14.9	0.3	100.0	5.5	99.5	415
Second	5.0	8.6	72.2	13.3	0.9	100.0	6.5	98.2	457
Middle	0.9	8.1	72.2	18.5	0.2	100.0	3.4	98.6	502
Fourth	1.0	8.6	69.6	19.7	1.1	100.0	3.6	98.2	422
Richest	1.7	6.8	74.1	17.0	0.3	100.0	3.6	99.1	360
<b>Ethnicity of household head</b>									
Kazakh	2.4	8.5	70.7	17.7	0.7	100.0	4.5	98.5	1520
Russian	1.1	7.1	72.8	18.7	0.3	100.0	3.2	98.7	261
Other ethnic groups	3.5	8.6	76.3	11.1	0.5	100.0	5.4	99.3	375

<sup>1</sup> MICS indicator 2.20 - Low-birthweight infants

<sup>2</sup> MICS indicator 2.21 - Infants weighed at birth

(\*) Figures that are based on fewer than 25 unweighted cases.

## **Nutritional Status**

Children's nutritional status is a reflection of their overall health. When children have access to food that is adequate in quantity and balanced in composition, they are not exposed to chronic illness, and if they are well cared for, children reach their growth potential and are considered well-nourished and fully developed.

Undernutrition is associated with more than half of all child deaths worldwide. Undernourished children are more likely to die at an early age from common childhood ailments, and for those who survive, it is common to have chronic illness and faltering growth. Three-quarters of the children who die from causes related to malnutrition were only mildly or moderately malnourished – showing no outward sign of their vulnerability.

For a population not suffering from nutrition problems, there are reference rates of weight and height for children under age five. Undernourishment in a population can be gauged by comparing children to a reference population. The reference population used in this report is based on the WHO height and weight growth standards<sup>17</sup>. Each of the three nutritional status indicators – weight-for-age, height-for-age, and weight-for-height – can be expressed in standard deviation units (z-scores) from the median of the reference population.

*Weight-for-age* is a measure of both acute and chronic malnutrition. Children whose weight-for-age is more than two standard deviations below the median of the reference population are considered *moderately or severely underweight* while those whose weight-for-age is more than three standard deviations below the median are classified as *severely underweight*.

*Height-for-age* is a measure of linear growth. Children whose height-for-age is more than two standard deviations below the median of the reference population are considered short for their age and are classified as *moderately or severely stunted*. Those whose height-for-age is more than three standard deviations below the median are classified as *severely stunted*. Stunting is a reflection of chronic malnutrition because of failure to receive adequate nutrition over a long period and recurrent or chronic illness.

*Weight-for-height* can be used to assess wasting and overweight status. Children whose *weight-for-height* is more than two standard deviations below the median of the reference population are classified as *moderately or severely wasted*, while those who fall more than three standard deviations below the median are classified as *severely wasted*. Usually wasting is the result of a recent nutritional deficiency. The indicator of wasting may exhibit significant seasonal shifts associated with changes in the availability of food or disease prevalence.

Children whose weight-for-height is more than two standard deviations above the median reference population are classified as *moderately or severely overweight*.

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<sup>17</sup> [http://www.who.int/childgrowth/standards/technical\\_report](http://www.who.int/childgrowth/standards/technical_report).

In MICS, weights and heights of all children under 5 years of age were measured using the anthropometric equipment recommended<sup>18</sup> by UNICEF. Findings in this section are based on the results of these measurements.

Table NU.2 shows percentages of children classified into each of the above described categories, based on the anthropometric measurements that were taken during fieldwork. Additionally, the table includes mean z-scores for all three anthropometric indicators.

In the 2015 Kazakhstan MICS, there were no cases of children whose birth date (month and year) was not obtained (Table DQ.6), while children whose measurements are outside a plausible range are excluded from Table NU.2. Children are excluded from one or more anthropometric indicators if one of the parameters – their weights and heights – have not been measured, whichever applicable. For example, if a child has been weighed but his/her height/length has not been measured, this child is included in underweight calculations, but is excluded from the calculations for stunting and wasting. Percentages of children (by age and reasons for exclusion by region) are shown in Appendix D in data quality Tables: DQ.10, DQ.11, and DQ.12. The tables show that due to implausible measurement results and/or missing data on weight and/or height, 3.7 percent of children under 5 years were excluded from calculations of the weight-for-age indicator, 4.2 percent of children – from the height-for-age indicator, and 5.3 percent of children – from the weight-for-height indicator.

The measurement results of infants under 6 months were more frequently excluded from the weight-for-age indicator (13.2 percent) and from the height-for-age and weight-for-height (14.3 percent) indicators. The main reason for the lack of anthropometric measurements of infants under 6 months (especially newborns), as well as children aged 6-23 months (under 2 years old) is the parents' refusal of measurements because of fear the child will get cold; while for newborns, the statement that the weight and height of these children at birth were measured in health facilities before the survey. It may be noted that some regions where the anthropometric measurements were lacking in quite a large proportion of children under 5 years, and children are excluded from the analysis of all three indicators of evaluation of nutritional status. In the Mangistau region, the weight and height/length were not measured for 34.5 percent of infants under 6 months, 22.2 percent – 6-11 months, 10.0 percent – 12-23 months, 7.6 percent – 24-35 months, 5.0 percent – 36-47 months and 6.2 percent – at the age of 48-59 months, respectively. Also, it may be noted that the Almaty oblast, as well as the Almaty and Astana cities, demonstrate a quite high percent of exceptions from analysis of the percentage of children in different age groups (in months) due to lack of measurements of weight and height of children under 5 years or unreliable measurement results (Table DQ.10-DQ.12).

In some cases, the measurements were not carried out due to the temporary absence of children under 5 years old in the household or illness at the time of the survey.

Although there is no evidence of heaping on age or out-transference of children under-5 that would to some extent affect the representativeness of the anthropometric results (Tables DQ.3 and DQ.6), Table DQ.13 shows that for every fifth measured child, the values of the weight (13.0 percent) and height (11.3 percent) measurements completed with "0" or "5", indicating potential avoidance of rounding of measurements to these decimal digits.

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<sup>18</sup> See MICS Supply Procurement Instructions: <http://mics.unicef.org/tools>.

**Table NU.2: Nutritional status of children**

Percentage of children under age 5 by nutritional status according to three anthropometric indices: weight for age, height for age, and weight for height, Kazakhstan, 2015

	Weight for age			Number of children under age 5	Height for age			Number of children under age 5	Weight for height			Number of children under age 5	
	Underweight		Mean Z-Score (SD)		Stunted		Mean Z-Score (SD)		Wasted		Overweight		
	Percent below				Percent below				Percent below		Percent below		
	- 2 SD <sup>1</sup>	- 3 SD <sup>2</sup>			- 2 SD <sup>3</sup>	- 3 SD <sup>4</sup>			- 2 SD <sup>5</sup>	- 3 SD <sup>6</sup>	+ 2 SD <sup>7</sup>		
<b>Total</b>	2.0	0.3	0.3	5304	8.0	2.4	0.0	5277	3.1	1.1	9.3	0.5	5218
<b>Sex</b>													
Male	1.9	0.2	0.4	2691	7.7	2.3	0.1	2682	2.9	1.1	8.7	0.5	2645
Female	2.0	0.3	0.3	2613	8.3	2.6	-0.1	2595	3.3	1.0	10.0	0.5	2573
<b>Region</b>													
Akmola	1.1	0.0	0.4	223	2.9	0.1	-0.1	223	1.4	0.2	4.9	0.6	223
Aktobe	3.1	0.6	0.7	368	6.6	4.1	0.7	370	6.3	2.5	10.3	0.4	366
Almaty oblast	2.8	0.0	0.0	368	8.1	2.3	-0.3	370	4.4	1.2	6.3	0.3	365
Atyrau	3.6	0.8	0.3	198	11.8	4.2	-0.2	193	5.9	3.6	14.7	0.5	195
West Kazakhstan	1.4	0.9	0.3	223	7.4	2.5	-0.1	222	1.5	1.2	8.0	0.5	220
Zhambyl	3.0	0.8	0.0	408	6.9	2.5	-0.2	408	3.2	0.9	6.1	0.2	408
Karaganda	1.5	0.0	0.3	351	5.4	0.0	0.1	351	1.6	0.0	6.4	0.4	351
Kostanai	0.9	0.2	0.3	233	11.4	3.3	0.0	233	4.2	1.1	12.5	0.5	228
Kyzylorda	1.0	0.2	0.2	213	10.0	3.3	-0.3	211	2.1	0.7	8.6	0.4	208
Mangistau	1.8	0.4	0.6	195	4.5	2.0	0.6	191	3.4	1.0	4.9	0.3	186
South Kazakhstan	2.2	0.2	0.2	1231	11.4	2.4	-0.3	1220	2.9	0.9	7.6	0.5	1223
Pavlodar	0.8	0.0	0.3	165	5.5	1.6	0.0	165	5.5	2.4	9.7	0.4	162
North Kazakhstan	0.8	0.4	0.2	115	2.3	0.0	0.0	113	1.6	0.0	5.6	0.3	113
East Kazakhstan	1.9	0.0	0.2	271	7.2	2.2	-0.3	271	1.9	0.9	9.2	0.5	269
Astana city	1.1	0.0	0.9	479	7.1	3.5	0.4	473	1.3	0.3	16.2	0.9	452
Almaty city	1.3	0.0	0.9	264	6.3	2.7	0.8	264	3.5	1.4	21.6	0.7	249
<b>Area</b>													

Urban	1.5	0.2	0.5	2573	7.2	2.3	0.2	2561	3.1	1.3	11.2	0.5	2510
Rural	2.4	0.3	0.2	2731	8.9	2.5	-0.1	2716	3.1	0.8	7.6	0.4	2709
<b>Age</b>													
0-5 months	4.9	0.7	0.3	461	5.0	1.9	0.6	456	13.7	4.9	5.8	-0.1	455
6-11 months	1.3	0.1	0.5	516	5.8	1.6	0.3	513	2.8	1.0	12.5	0.5	518
12-17 months	1.5	0.3	0.7	531	6.8	3.2	0.2	524	1.7	0.8	15.1	0.8	529
18-23 months	1.1	0.0	0.4	508	11.0	5.0	0.0	504	3.5	0.9	10.1	0.6	505
24-35 months	1.4	0.2	0.4	1022	11.5	3.0	-0.1	1019	1.8	0.9	10.5	0.6	1012
36-47 months	2.9	0.3	0.3	1186	8.4	2.0	-0.1	1181	1.7	0.2	8.0	0.5	1167
48-59 months	1.2	0.3	0.1	1080	6.0	1.4	-0.2	1081	1.9	0.7	6.5	0.3	1032
<b>Mother's education</b>													
None/Primary	(*)	(*)	(*)	6	(*)	(*)	(*)	6	(*)	(*)	(*)	(*)	6
Lower secondary	4.1	0.5	0.0	306	6.9	2.5	-0.4	299	4.7	3.4	4.0	0.2	301
Upper secondary	2.1	0.1	0.3	1351	9.3	2.8	-0.2	1343	2.9	1.0	8.9	0.5	1331
Technical and Professional	2.4	0.5	0.3	1501	9.2	2.5	0.0	1494	4.0	1.2	9.1	0.4	1483
Higher	1.3	0.2	0.5	2140	6.6	2.2	0.2	2134	2.3	0.7	10.6	0.5	2098
<b>Wealth index quintile</b>													
Poorest	3.2	0.4	0.1	1108	10.3	2.4	-0.4	1101	3.0	0.7	7.7	0.4	1097
Second	1.7	0.3	0.2	1191	8.1	2.9	-0.1	1184	2.9	0.9	7.0	0.4	1177
Middle	1.7	0.2	0.4	1122	8.3	2.3	0.1	1117	3.8	1.7	8.9	0.4	1108
Fourth	2.0	0.3	0.4	918	6.9	1.9	0.2	914	2.9	1.0	11.6	0.5	904
Richest	1.2	0.2	0.6	965	6.2	2.5	0.4	960	2.9	1.0	12.5	0.6	934
<b>Ethnicity of household head</b>													
Kazakh	2.1	0.3	0.4	3684	7.7	2.6	0.0	3670	3.0	1.1	10.2	0.5	3628
Russian	1.4	0.1	0.4	654	6.9	2.2	0.2	649	3.9	0.5	9.0	0.4	634
Other ethnic groups	1.6	0.1	0.2	966	9.9	2.0	-0.1	958	2.8	1.1	6.3	0.4	956

<sup>1</sup> MICS indicator 2.1a and MDG indicator 1.8 - Underweight prevalence (moderate and severe)

<sup>2</sup> MICS indicator 2.1b - Underweight prevalence (severe)

<sup>3</sup> MICS indicator 2.2a - Stunting prevalence (moderate and severe)

<sup>4</sup> MICS indicator 2.2b - Stunting prevalence (severe)

<sup>5</sup> MICS indicator 2.3a - Wasting prevalence (moderate and severe)

<sup>6</sup> MICS indicator 2.3b - Wasting prevalence (severe)

<sup>7</sup> MICS indicator 2.4 - Overweight prevalence

(\*) Figures that are based on fewer than 25 unweighted cases.



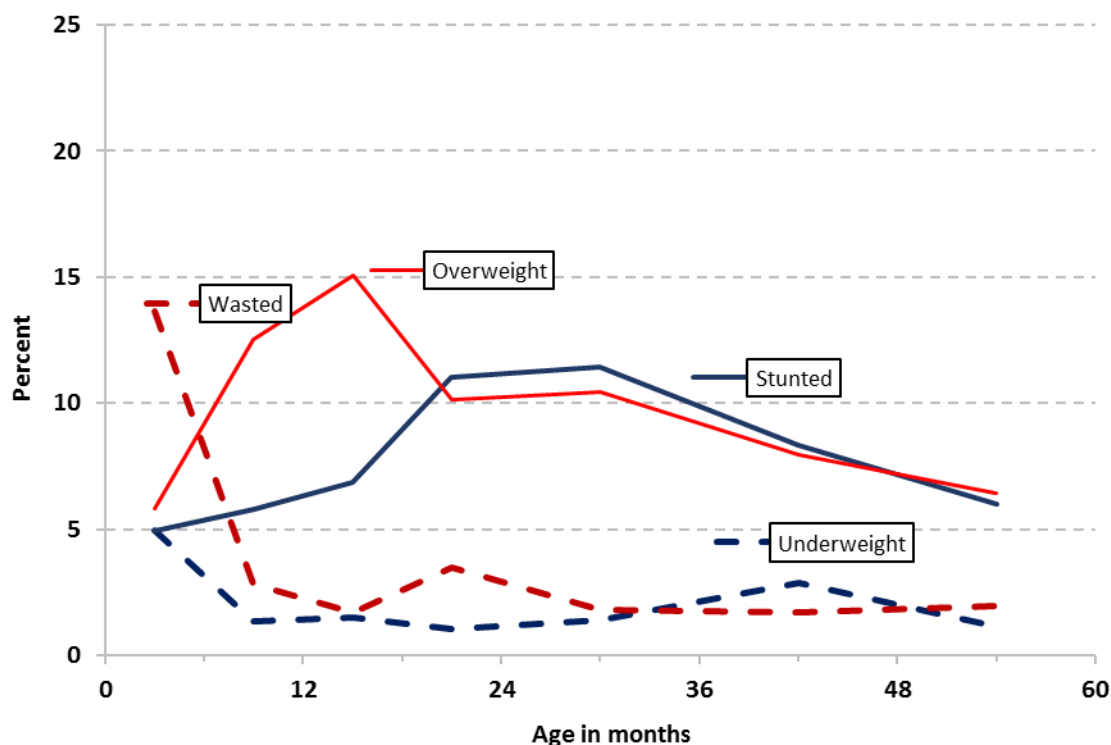
In Kazakhstan, 2.0 percent of children under age five are underweight (Table NU.2). However, 8.0 percent of children are stunted and 3.1 percent of children are wasted for their height. In addition, 9.3 percent of children are overweight.

In country, stunting of children is more prevalent than underweight. The indicator range by region varies from 2.3 percent in the North Kazakhstan region to 11.8 percent in the Atyrau region.

Those children whose mothers have higher education face the least likely to be underweight and stunted, and at the same time, the highest probability to be overweight compared to children of mothers with lower education levels. In urban areas, children are more likely to be overweight than in rural areas.

The age pattern shows that the youngest, namely those <6 months of age, have the highest rates of underweight and wasting, however this might in part be due to larger proportion of children excluded from the analysis due to missing weights (Figure NU.1). The prevalence of overweight is higher among children aged 12-17 months.

**Figure NU.1: Underweight, stunted, wasted and overweight children under age 5 (moderate and severe), Kazakhstan, 2015**



**Breastfeeding and Infant and Young Child Feeding**

Proper feeding of infants and young children can increase their chances of survival; it can also promote optimal growth and development, especially in the critical period from birth to 2 years of age. Breastfeeding in the first days of life protects children from infection, provides an ideal source of

nutrients, and breastfeeding as well as being an economical and safe method of the feeding. Still some mothers do not start to breastfeed newborns immediately after birth, do not breastfeed exclusively for the first 6 months, or stop breastfeeding too soon. For various reasons, mothers switch to infant formula, which sometimes lacks in micronutrients and can lead to growth faltering. In addition, such food can be unsafe if hygienic conditions are not followed, or safe drinking water is absent or is not always available in the household. Studies have shown that, continued breastfeeding along with complementary feeding to the child from 6 months with age-appropriate nutritious and safe solid, semi-solid and soft foods, are the key to a better health and proper development of the child, and makes it possible to eliminate or reduce stunting during the first two years of life.<sup>19</sup>

UNICEF and WHO recommend that infants be breastfed within one hour of birth, breastfed exclusively for the first six months of life and continue to be breastfed up to 2 years of age and beyond.<sup>20</sup> Starting at 6 months, breastfeeding can be combined with safe, age-appropriate feeding of solid, semi-solid and soft foods.<sup>21</sup> A summary of key guiding principles<sup>22, 23</sup> for feeding 6-23 month olds is provided below (Box NU.1) along with proximate measures for these guidelines collected in this survey.

Box NU.1		
Guiding Principle (age 6-23 months)	Proximate measures	Table
Continue frequent, on-demand breastfeeding for two years and beyond	Breastfed in the last 24 hours	NU.4
Appropriate frequency and energy density of meals	<b>Breastfed children</b> Depending on age, two or three meals/snacks provided in the last 24 hours	NU.6
	<b>Non-breastfed children</b> Four meals/snacks <u>and/or milk feeds</u> provided in the last 24 hours	
Appropriate nutrient content and micronutrient in food	Four food groups <sup>24</sup> eaten in the last 24 hours	NU.6
Appropriate amount of food	No standard indicator exists	na
Appropriate consistency of food	No standard indicator exists	na
Use of vitamin-mineral supplements or fortified products for infant and mother	No standard indicator exists	na
Practice good hygiene and proper food handling	While it was not possible to develop indicators to fully capture programme guidance, one standard indicator does cover part of the principle: Not feeding with a bottle with a nipple	NU.9
Practice responsive feeding, applying the principles of psycho-social care	No standard indicator exists	na

The guiding principles for which proximate measures and indicators exist are:

- (i) continued breastfeeding;
- (ii) appropriate frequency of meals (but not energy density); and

<sup>19</sup> Bhuta, Z. et al. 2013. *Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost?* The Lancet June 6, 2013.

<sup>20</sup> WHO. 2003. *Implementing the Global Strategy for Infant and Young Child Feeding*. Meeting Report Geneva, 3-5 February, 2003.

<sup>21</sup> WHO. 2003. *Global Strategy for Infant and Young Child Feeding*.

<sup>22</sup> PAHO. 2003. *Guiding principles for complementary feeding of the breastfed child*.

<sup>23</sup> WHO. 2005. *Guiding principles for feeding non-breastfed children 6-24 months of age*.

<sup>24</sup> Food groups used for assessment of this indicator are 1) Grains, roots and tubers, 2) legumes and nuts, 3) dairy products (milk, yogurt, cheese), 4) flesh foods (meat, fish, poultry and liver/organ meats), 5) eggs, 6) vitamin-A rich fruits and vegetables, and 7) other fruits and vegetables.

- (iii) appropriate nutrient content of food.

Feeding frequency is used as proxy measure for energy intake, requiring children to receive a minimum number of meals/snacks (and milk feeds and milk products for non-breastfed children) for their age. Dietary diversity is used to ascertain the adequacy of the nutrient content of the food (not including iron) consumed. For dietary diversity, seven food groups were created for which a child consuming at least four of these is considered to have a nutritious food. In most populations, consumption of at least four food groups means that the child has a high likelihood of consuming at least one animal-source food and at least one fruit or vegetable, in addition to a staple food (grain, root or tuber).<sup>25</sup>

These three dimensions of child feeding are combined into an assessment of the children who received appropriate feeding, using the indicator of “minimum acceptable diet”. To have a minimum acceptable diet in the previous day, a child must have received:

- (i) the appropriate number of meals/snacks/milk feeds and milk products;
- (ii) food items from at least 4 food groups; and
- (iii) breastmilk or at least 2 milk feeds (for non-breastfed children).

<b>Table NU.3: Initial breastfeeding</b>					
Percentage of last live-born children in the last two years who were ever breastfed, breastfed within one hour of birth, and within one day of birth, and percentage who received a prelacteal feed, Kazakhstan, 2015					
	Percentage who were ever breastfed <sup>1</sup>	Percentage who were first breastfed:		Percentage who received a prelacteal feed	Number of last live-born children in the last two years
		Within one hour of birth <sup>2</sup>	Within one day of birth		
Total	97.1	83.3	92.8	13.7	2157
<b>Region</b>					
Akmola	96.6	77.7	93.2	11.9	93
Aktobe	97.2	76.0	95.7	8.4	145
Almaty oblast	98.5	76.9	89.3	8.1	188
Atyrau	96.1	70.1	90.3	16.3	85
West Kazakhstan	97.7	78.1	96.4	12.7	100
Zhambyl	97.7	88.6	94.5	6.9	165
Karaganda	98.8	84.8	95.0	22.7	139
Kostanai	96.5	74.8	82.6	39.4	82
Kyzylorda	96.4	83.5	91.5	9.1	83
Mangistau	98.7	87.1	93.5	15.3	101
South Kazakhstan	94.9	87.3	91.4	14.6	474
Pavlodar	95.9	75.1	89.9	21.7	67
North Kazakhstan	98.1	81.5	93.9	17.6	44
East Kazakhstan	95.3	89.6	92.0	11.7	100
Astana city	100.0	88.0	98.7	9.3	195
Almaty city	98.2	91.1	94.1	12.1	97
<b>Area</b>					
Urban	97.8	83.0	93.1	13.6	1076
Rural	96.4	83.6	92.6	13.9	1081
<b>Months since last birth</b>					

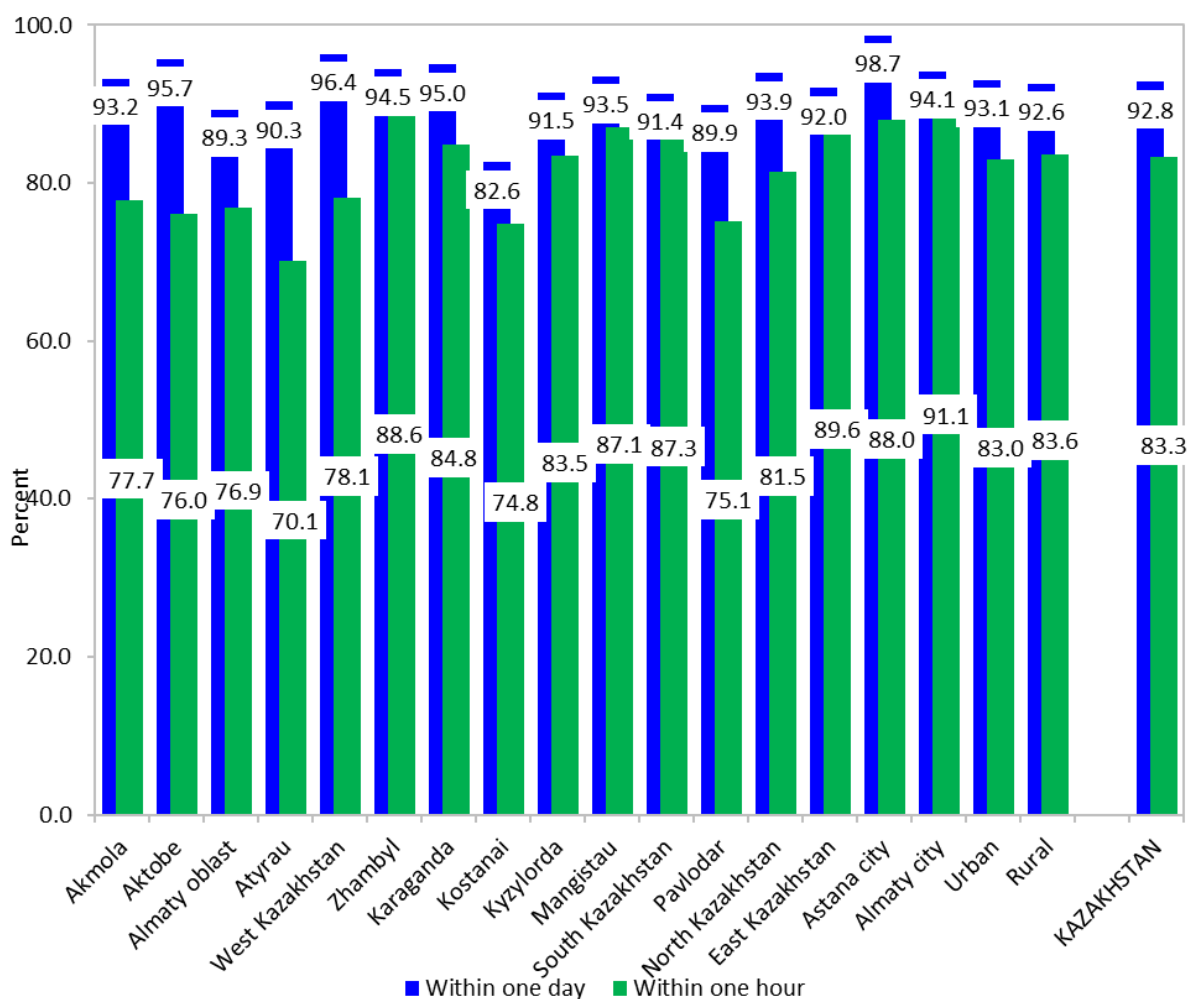
<sup>25</sup> WHO. 2008. *Indicators for assessing infant and young child feeding practices. Part 1: Definitions.*

0-11 months	97.1	83.4	93.0	15.1	1094
12-23 months	97.1	83.2	92.6	12.3	1063
<b>Assistance at delivery</b>					
Skilled attendant	97.6	83.7	93.3	13.8	2144
Other	(*)	(*)	(*)	(*)	1
No one/Missing	(*)	(*)	(*)	(*)	12
<b>Place of delivery</b>					
Home	(*)	(*)	(*)	(*)	2
Health facility	97.6	83.8	93.4	13.8	2142
Public	97.6	83.7	93.3	13.7	2133
Private	(*)	(*)	(*)	(*)	9
Other/DK/Missing	(*)	(*)	(*)	(*)	12
<b>Mother's education</b>					
None/Primary	(*)	(*)	(*)	(*)	2
Lower secondary	95.3	79.5	88.0	15.4	97
Upper secondary	94.8	83.7	90.0	17.3	518
Technical and Professional	97.6	81.8	92.9	14.2	660
Higher	98.3	84.6	95.0	11.1	879
<b>Wealth index quintile</b>					
Poorest	97.4	85.7	94.5	14.3	415
Second	94.6	84.6	90.8	14.7	457
Middle	98.7	81.5	93.9	11.2	502
Fourth	97.3	79.6	91.8	13.1	422
Richest	97.5	85.7	93.1	16.0	360
<b>Ethnicity of household head</b>					
Kazakh	98.1	84.1	94.1	12.2	1520
Russian	95.0	76.7	89.6	15.8	261
Other ethnic groups	94.3	84.8	90.0	18.4	375
<sup>1</sup> MICS indicator 2.5 - Children ever breastfed					
<sup>2</sup> MICS indicator 2.6 - Early initiation of breastfeeding					
(*) Figures that are based on fewer than 25 unweighted cases.					

Table NU.3 is based on mothers' reports of what their last-born child, born in the last two years, was fed in the first few days of life. It indicates the proportion who were ever breastfed, those who were first breastfed within one hour and one day (24 hours) of birth, and those who received a prelacteal feed.<sup>26</sup> During recent years in Kazakhstan, the percentage of mothers who understand the critical importance of early breastfeeding and the establishment of a physical and emotional relationship between the baby and the mother increases; nevertheless only 83.3 percent of babies are breastfed for the first time within one hour of birth, and 92.8 percent of infants are breastfed within one day of birth. The findings are presented in Figure NU.2 by region and urban and rural areas. Differences in urban and rural areas are not observed; the indicator range by regions varies from 70.1 percent in Atyrau region to 91.1 percent in Almaty city. More than 90 percent of mothers breastfeed the newborns within one day of birth in almost all regions of the country.

<sup>26</sup> Prelacteal feed refers to the provision of any liquid or food, other than breastmilk, to a newborn during the period when breastmilk flow is generally being established (estimated here as the first 3 days of life).

**Figure NU.2: Initiation of breastfeeding, Kazakhstan, 2015**



The Infant and Young Child Feeding indicators reported in tables NU.4 through NU.8 are based on the mother’s report of consumption of food and different fluids during the day or night prior to being interviewed.

In Table NU.4, breastfeeding status is presented for both *Exclusively breastfed* and *Predominantly breastfed*. Referring to infants age less than 6 months, it is considered that they are exclusively breastfed, if the baby is given only vitamins, mineral supplements, and medicine in addition to breastmilk; and are predominantly breastfed, if the child is also given plain water and non-milk liquids. In addition, the table shows continued breastfeeding of children at 12-15 and 20-23 months of age.

**Table NU.4: Breastfeeding**

Percentage of living children according to breastfeeding status at selected age groups, Kazakhstan, 2015

	Children aged 0-5 months			Children aged 12-15 months		Children aged 20-23 months	
	Percent exclusively breastfed <sup>1</sup>	Percent predominantly breastfed <sup>2</sup>	Number of children	Percent breastfed (Continued breastfeeding at 1 year) <sup>3</sup>	Number of children	Percent breastfed (Continued breastfeeding at 2 years) <sup>4</sup>	Number of children
<b>Total</b>	37.8	73.2	531	59.8	375	21.1	355
<b>Sex</b>							
Male	38.9	74.9	264	59.9	173	22.3	191
Female	36.6	71.6	267	59.8	202	19.7	164
<b>Region</b>							
Akmola	(35.8)	(69.7)	22	(*)	12	(*)	16
Aktobe	(38.6)	(62.1)	30	(*)	20	(*)	35
Almaty oblast	(22.2)	(77.0)	51	(*)	26	(*)	31
Atyrau	(45.7)	(84.3)	20	(63.9)	13	(26.1)	18
West Kazakhstan	(37.4)	(90.8)	26	(43.6)	19	(*)	10
Zhambyl	(32.1)	(65.8)	40	(75.1)	29	(20.3)	32
Karaganda	(*)	(*)	26	(*)	32	(*)	26
Kostanai	(22.3)	(61.7)	20	(*)	13	(23.9)	18
Kyzylorda	(31.9)	(69.7)	21	(49.4)	14	(23.9)	15
Mangistau	(9.5)	(70.0)	25	(59.9)	18	(31.1)	14
South Kazakhstan	54.1	85.3	120	(59.5)	82	(17.2)	84
Pavlodar	(*)	(*)	13	(*)	13	(*)	11
North Kazakhstan	(*)	(*)	7	(45.8)	13	(*)	5
East Kazakhstan	(*)	(*)	25	(*)	16	(*)	16
Astana city	(50.6)	(72.3)	56	(60.5)	42	(*)	14
Almaty city	(29.6)	(51.1)	30	(*)	14	(*)	10
<b>Area</b>							
Urban	33.7	68.8	271	59.9	186	22.7	156
Rural	42.1	77.9	260	59.8	188	19.9	199
<b>Mother's education</b>							
None/Primary	(*)	(*)	1	-	0	-	0
Lower secondary	(44.3)	(73.2)	30	(*)	17	(*)	14
Upper secondary	38.7	75.5	125	54.1	88	24.8	100
Technical and Professional	35.2	70.3	170	55.5	119	15.3	117
Higher	38.1	74.2	205	70.3	150	23.5	124
<b>Wealth index quintile</b>							
Poorest	35.2	77.7	98	52.7	77	30.3	78
Second	35.8	70.3	107	62.1	70	6.4	81
Middle	45.3	73.8	142	61.3	98	17.3	80
Fourth	35.8	74.4	94	56.2	66	30.1	55
Richest	33.2	69.9	90	67.5	64	25.6	61
<b>Ethnicity of household head</b>							
Kazakh	38.3	73.7	385	62.7	265	21.9	258
Russian	30.8	70.5	54	57.7	48	(25.9)	34

Other ethnic groups	39.7	73.1	92	(49.1)	62	(14.9)	62
	<sup>1</sup> MICS indicator 2.7 - Exclusive breastfeeding under 6 months						
	<sup>2</sup> MICS indicator 2.8 - Predominant breastfeeding under 6 months						
	<sup>3</sup> MICS indicator 2.9 - Continued breastfeeding at 1 year						
	<sup>4</sup> MICS indicator 2.10 - Continued breastfeeding at 2 years						
	( ) Figures that are based on 25–49 unweighted cases.						
	(*) Figures that are based on fewer than 25 unweighted cases.						
	"–" denotes 0 unweighted case in that cell or in the denominator.						

Approximately 38 percent of children aged 0-5 months are exclusively breastfed, and more than 70 percent of children are predominantly breastfed, indicating the prevalence of practice of giving non-milk liquids to infants in addition to breastmilk. By age 12-15 months, almost 60 percent of children are breastfed and by age 20-23 months, 21.1 percent of children are breastfed; 22.3 percent of boys and 19.7 percent of girls aged 20-23 months continue to be breastfed.

Exclusive breastfeeding and predominant breastfeeding are more common in rural areas (42.1 and 77.9 percent, respectively) than in urban areas (33.7 and 68.8 percent, respectively); while the proportion of children aged 20-23 months who continue to be breastfed in urban and rural areas was 22.7 and 19.9 percent, respectively.

Figure NU.3 shows the detailed pattern of breastfeeding by the child’s age in months. Even at the earliest ages, in addition to breast milk, the majority of children are receiving plain water and vitamins, even in the first 4 weeks of life. Moreover, almost 70 percent of infants aged 0-1 months are exclusively breastfed; at 2-3 months, the proportion is more than halved (31.4 percent), and by the age of 4-5 months, it is almost 3 times lower at 23.5 percent. By the age of 2 years, more than 80 percent of children are weaned off the breast.

**Figure NU.3: Infant feeding patterns by age, Kazakhstan, 2015**

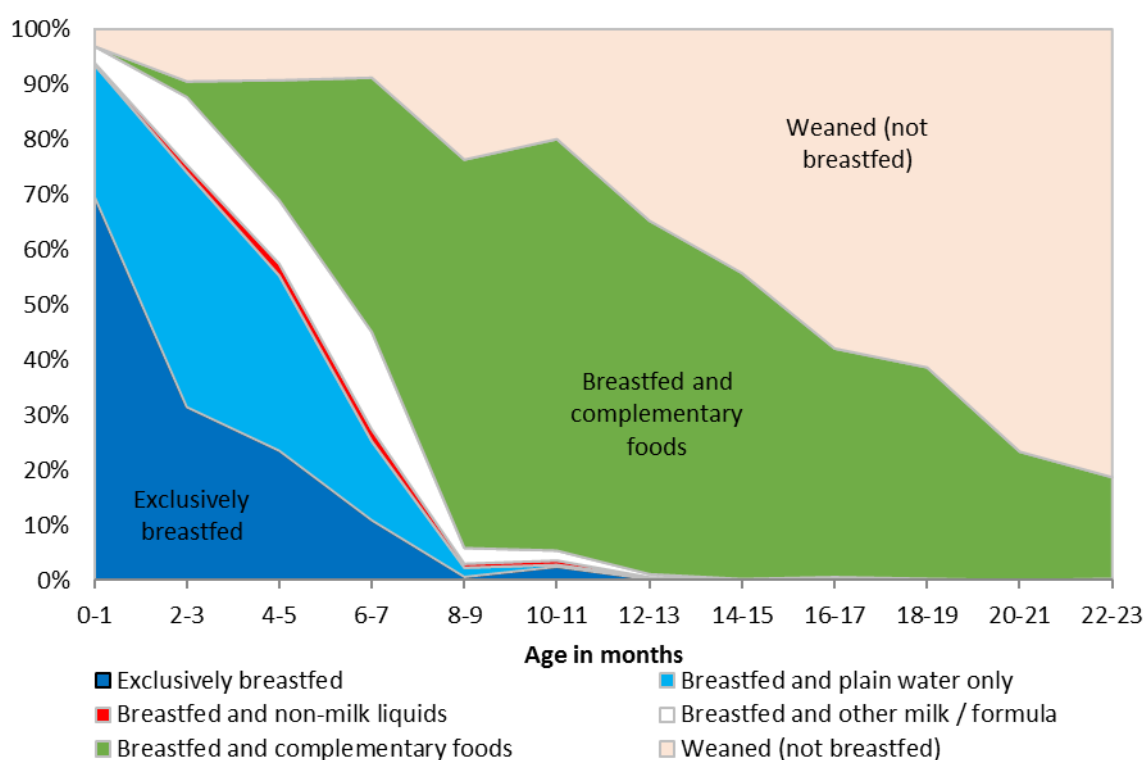


Table NU.5 shows the median duration of breastfeeding by selected background characteristics. Among children under age 3, the median duration is 15.6 months for any breastfeeding, 1.8 months for exclusive breastfeeding, and 4.9 months for predominant breastfeeding. The duration of any breastfeeding in urban and rural areas is almost the same, and the duration of exclusive breastfeeding and predominant breastfeeding in rural areas is slightly higher than in urban areas (2.1 and 1.5 percent, and 5.0 and 4.8 percent, respectively). The shortest duration of exclusive breastfeeding is observed among children living in Mangistau, Akmola, Zhambyl and Karaganda regions, where the duration of breastfeeding ranges from 0.5 to 0.8 months. In the South Kazakhstan region and Astana city, the median duration of exclusive breastfeeding exceeds 2.5 months, and babies from the North Kazakhstan region are exclusively breastfed for almost 4 months.

<b>Table NU.5: Duration of breastfeeding</b>				
Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children aged 0-35 months, Kazakhstan, 2015				
	Median duration (in months) of:			Number of children aged 0-35 months
	Any breastfeeding <sup>1</sup>	Exclusive breastfeeding	Predominant breastfeeding	
Median	15.6	1.8	4.9	3188
<b>Sex</b>				
Male	15.2	1.8	4.9	1636
Female	16.3	1.8	5.0	1552
<b>Region</b>				
Akmola	15.8	0.7	3.9	136
Aktobe	14.5	1.9	6.4	230
Almaty oblast	14.8	1.7	5.2	254
Atyrau	14.7	2.3	5.3	129
West Kazakhstan	16.8	2.1	6.7	143
Zhambyl	15.7	0.7	4.6	254
Karaganda	17.5	0.8	4.2	226
Kostanai	13.1	1.1	3.6	134
Kyzylorda	12.9	1.6	4.4	122
Mangistau	17.4	0.5	5.5	138
South Kazakhstan	14.9	2.8	5.0	681
Pavlodar	16.7	2.0	4.6	105
North Kazakhstan	18.6	3.9	5.5	65
East Kazakhstan	17.4	1.9	3.5	155
Astana city	16.2	2.7	7.1	281
Almaty city	18.8	1.3	2.6	136
<b>Area</b>				
Urban	15.5	1.5	4.8	1574
Rural	15.6	2.1	5.0	1614
<b>Mother's education</b>				
None/Primary	(*)	(*)	(*)	1
Lower secondary	11.2	1.6	5.2	168
Upper secondary	14.9	1.9	5.1	770
Technical and Professional	14.3	1.7	4.5	949
Higher	17.1	1.9	5.0	1299
<b>Wealth index quintile</b>				



Poorest	14.1	1.7	5.0	607
Second	15.0	1.9	4.3	706
Middle	16.3	2.3	5.0	732
Fourth	15.9	1.1	5.2	580
Richest	16.8	1.0	5.5	563
<b>Ethnicity of household head</b>				
Kazakh	16.4	1.9	5.1	2254
Russian	13.4	1.4	4.5	392
Other ethnic groups	13.5	2.0	4.4	541
Mean	16.0	2.6	4.9	3188
<sup>1</sup> MICS indicator 2.11 - Duration of breastfeeding				
(*) Figures that are based on fewer than 25 unweighted cases.				

The age-appropriateness of breastfeeding of children under age 24 months is provided in Table NU.6. Different criteria of feeding are used depending on the age of the child. The criteria for age-appropriate breastfeeding, for infants aged 0-5 months is if they are exclusively breastfed, while for children aged 6-23 months –breastmilk and solid, semi-solid and soft foods.

The feeding pattern shows that almost every second child (49.2 percent) aged 6-23 months is appropriately breastfed. At the same time, age-appropriate breastfeeding among all children aged 0-23 months is 46.3 percent. The percentage of children who are exclusively breastfed in age group of 0-5 months is higher in rural areas than in urban areas (42.1 and 33.7 percent, respectively). Among children aged 6-23 months, those whose mothers have higher education are more likely to be appropriately fed than those whose mothers have lower levels of education.

<b>Table NU.6: Age-appropriate breastfeeding</b>						
Percentage of children aged 0-23 months who were appropriately breastfed during the previous day, Kazakhstan, 2015						
	Children aged 0-5 months		Children aged 6-23 months		Children aged 0-23 months	
	Percent exclusively breastfed <sup>1</sup>	Number of children	Percent currently breastfeeding and receiving solid, semi-solid or soft foods	Number of children	Percent appropriately breastfed <sup>2</sup>	Number of children
Total	37.8	531	49.2	1611	46.3	2143
<b>Sex</b>						
Male	38.9	264	51.3	842	48.3	1106
Female	36.6	267	46.9	770	44.2	1037
<b>Region</b>						
Akmola	(35.8)	22	45.9	68	43.5	89
Aktobe	(38.6)	30	46.7	127	45.1	157
Almaty oblast	(22.2)	51	46.3	130	39.5	180
Atyrau	(45.7)	20	50.9	62	49.6	82
West Kazakhstan	(37.4)	26	48.3	68	45.3	93
Zhambyl	(32.1)	40	48.9	128	44.9	168
Karaganda	(*)	26	58.1	104	52.3	130
Kostanai	(22.3)	20	41.8	61	37.0	80
Kyzylorda	(31.9)	21	37.8	64	36.4	85
Mangistau	(9.5)	25	53.9	69	42.2	93
South Kazakhstan	54.1	120	45.3	371	47.5	491
Pavlodar	(*)	13	50.4	50	47.7	63
North Kazakhstan	(*)	7	49.7	36	53.0	42

East Kazakhstan	(*)	25	62.5	76	52.3	101
Astana city	(50.6)	56	51.5	137	51.2	193
Almaty city	(29.6)	30	62.1	64	51.6	94
<b>Area</b>						
Urban	33.7	271	48.7	770	44.7	1041
Rural	42.1	260	49.6	841	47.9	1101
<b>Mother's education</b>						
None/Primary	(*)	1	-	0	(*)	1
Lower secondary	(44.3)	30	40.2	71	41.4	101
Upper secondary	38.7	125	47.4	402	45.3	527
Technical and Professional	35.2	170	44.7	493	42.2	664
Higher	38.1	205	54.7	645	50.7	850
<b>Wealth index quintile</b>						
Poorest	35.2	98	51.9	324	48.0	422
Second	35.8	107	42.8	362	41.2	469
Middle	45.3	142	51.7	367	49.9	509
Fourth	35.8	94	50.3	297	46.8	391
Richest	33.2	90	49.8	261	45.6	351
<b>Ethnicity of household head</b>						
Kazakh	38.3	385	51.6	1135	48.2	1521
Russian	30.8	54	41.1	194	38.8	248
Other ethnic groups	39.7	92	44.9	282	43.6	374

<sup>1</sup> MICS indicator 2.7 - Exclusive breastfeeding under 6 months

<sup>2</sup> MICS indicator 2.12 - Age-appropriate breastfeeding

( ) Figures that are based on 25–49 unweighted cases.

(\*) Figures that are based on fewer than 25 unweighted cases.

"-" denotes 0 unweighted case in that cell or in the denominator.

According to survey findings, it was revealed that from the total number of children aged 6-8 months, 66.5 percent received solid, semi-solid and soft foods at least once during the previous day. This is lower than optimal to foster good linear growth among young children, as food should be introduced starting at 6 months of age. Furthermore, the major proportion (63.9 percent) are infants who were breastfeeding at the time of interview (Table NU.7). The percentage of boys who are breastfed and receive solid, semi-solid or soft foods (at least – once) is higher than the percentage of girls (78.6 and 48.9 percent); and the percentage of children living in rural areas is higher than in urban areas (70.9 and 57.9 percent, respectively).

**Table NU.7: Introduction of solid, semi-solid, or soft foods**

Percentage of infants aged 6-8 months who received solid, semi-solid, or soft foods during the previous day, Kazakhstan, 2015

	Currently breastfeeding		Currently not breastfeeding		All	
	Percent receiving solid, semi-solid or soft foods	Number of children aged 6-8 months	Percent receiving solid, semi-solid or soft foods	Number of children aged 6-8 months	Percent receiving solid, semi-solid or soft foods <sup>1</sup>	Number of children aged 6-8 months
Total	63.9	204	(85.8)	27	66.5	231
<b>Sex</b>						
Male	78.6	103	(*)	14	80.1	117
Female	48.9	101	(*)	13	52.5	114

<b>Area</b>						
Urban	57.9	110	(*)	11	59.4	121
Rural	70.9	94	(*)	16	74.3	110
<b><sup>1</sup> MICS indicator 2.13 - Introduction of solid, semi-solid or soft foods</b>						
( ) Figures that are based on 25–49 unweighted cases.						
(*) Figures that are based on fewer than 25 unweighted cases.						

Overall, throughout the country, 74.0 percent of children aged 6-23 months received solid, semi-solid and soft foods, at least the minimum number of times per day (Table NU.8). The proportion of boys and girls (72.3 and 75.8 percent, respectively), and the proportion of children living in urban and rural areas (74.8 and 73.2 percent, respectively) of those receiving the minimum meal frequency are almost the same. The proportion of children receiving the minimum dietary diversity, or foods from at least 4 food groups out of 7 food groups, was 68.7 percent being the highest among the oldest age group of 18-23 months (86.1 percent) and the lowest among the youngest children aged 6-8 months (22.6 percent).

**Table NU.8: Infant and young child feeding (IYCF) practices**

Percentage of children aged 6-23 months who received appropriate liquids and solid, semi-solid, or soft foods the minimum number of times or more during the previous day, by breastfeeding status, Kazakhstan, 2015

	Currently breastfeeding				Currently not breastfeeding					All			
	Percent of children who received:				Percent of children who received:					Percent of children who received:			
	Minimum dietary diversity <sup>a</sup>	Minimum meal frequency <sup>b</sup>	Minimum acceptable diet <sup>1, c</sup>	Number of children aged 6-23 months	Minimum dietary diversity <sup>a</sup>	Minimum meal frequency <sup>b</sup>	Minimum acceptable diet <sup>2, c</sup>	At least 2 milk feeds <sup>3</sup>	Number of children aged 6-23 months	Minimum dietary diversity <sup>4, a</sup>	Minimum meal frequency <sup>5, b</sup>	Minimum acceptable diet <sup>c</sup>	Number of children aged 6-23 months
<b>Total</b>	57.8	64.2	42.6	881	85.1	86.7	48.3	79.9	674	68.7	74.0	45.1	1611
<b>Sex</b>													
Male	61.1	61.6	39.8	462	84.3	86.6	51.3	82.9	345	69.9	72.3	44.7	842
Female	54.1	67.1	45.8	418	85.8	86.8	45.3	76.6	329	67.4	75.8	45.6	770
<b>Age</b>													
6-8 months	19.4	55.3	17.9	204	(46.5)	(100.0)	(28.9)	(97.9)	25	22.6	60.1	19.1	231
9-11 months	54.6	54.3	33.8	240	79.0	86.5	51.0	87.0	44	54.1	59.3	36.5	309
12-17 months	77.9	75.7	61.7	297	82.1	87.0	43.8	81.4	241	79.7	80.8	53.7	548
18-23 months	76.2	69.7	53.4	140	90.3	85.7	52.3	76.7	365	86.1	81.3	52.6	523
<b>Region</b>													
Akmola	45.0	79.5	39.8	34	(88.6)	(98.2)	(47.0)	(69.0)	31	66.5	88.5	43.2	68
Aktobe	40.9	49.1	33.2	68	(80.9)	(86.9)	(61.7)	(92.5)	57	58.1	66.3	46.2	127
Almaty oblast	(51.5)	(79.1)	(45.2)	64	(84.1)	(96.5)	(60.0)	(83.9)	63	67.3	87.7	52.5	130
Atyrau	57.0	65.6	43.1	35	84.7	95.4	49.6	78.0	26	68.5	78.4	45.9	62
West Kazakhstan	51.9	45.4	33.5	38	(83.0)	(84.1)	(45.4)	(90.5)	28	64.2	62.0	38.6	68
Zhambyl	73.0	94.7	71.2	65	83.2	92.6	45.1	69.4	60	77.7	93.7	58.7	128
Karaganda	(79.2)	(79.0)	(65.7)	62	(91.2)	(78.6)	(60.1)	(90.1)	39	84.2	78.8	63.5	104
Kostanai	(60.5)	(80.8)	(54.6)	26	(89.6)	(100.0)	(53.7)	(74.3)	32	77.6	91.4	54.1	61
Kyzylorda	32.3	32.3	15.0	32	65.5	73.1	30.4	93.9	30	48.9	52.0	22.4	64
Mangistau	50.0	45.9	20.1	42	67.8	72.8	38.2	77.6	26	57.1	56.2	27.0	69
South Kazakhstan	58.2	41.3	23.3	195	87.7	81.5	37.9	78.0	151	66.7	58.9	29.7	371
Pavlodar	(58.9)	(78.6)	(56.7)	27	(87.8)	(97.0)	(57.1)	(85.2)	22	72.3	86.9	56.9	50

North Kazakhstan	(70.2)	(94.5)	(70.2)	19	(85.7)	(97.5)	(46.1)	(76.4)	16	77.9	95.9	59.1	36
East Kazakhstan	(78.3)	(85.7)	(71.1)	48	(*)	(*)	(*)	(*)	24	84.1	87.3	65.4	76
Astana city	51.9	64.8	41.0	84	(91.0)	(73.5)	(45.3)	(62.5)	49	67.3	68.0	42.6	137
Almaty city	61.6	90.5	61.6	42	(*)	(*)	(*)	(*)	20	68.7	91.4	63.8	64
<b>Area</b>													
Urban	55.6	69.1	46.1	429	83.8	82.4	48.1	76.5	320	67.9	74.8	47.0	770
Rural	59.8	59.5	39.3	452	86.2	90.6	48.6	82.9	354	69.4	73.2	43.4	841
<b>Mother's education</b>													
None/Primary	-	-	-	0	-	-	-	-	0	-	-	-	0
Lower secondary	(62.4)	(76.9)	(55.0)	32	(76.8)	(82.8)	(40.0)	(56.1)	39	70.5	80.1	46.8	71
Upper secondary	64.5	50.6	35.0	207	87.0	87.8	46.3	80.4	162	69.5	66.9	40.0	402
Technical and Professional	53.1	65.4	40.3	239	83.4	84.6	45.5	84.0	247	68.5	75.2	43.0	493
Higher	56.7	69.4	47.0	403	86.9	88.9	54.3	79.0	227	68.1	76.5	49.6	645
<b>Wealth index quintile</b>													
Poorest	61.4	55.4	35.2	180	82.6	88.6	41.5	81.7	137	70.4	69.7	37.9	324
Second	54.8	59.9	39.9	180	83.2	89.4	49.7	83.6	161	64.8	73.8	44.5	362
Middle	62.0	66.8	46.7	203	86.0	87.8	53.5	81.2	154	71.4	75.8	49.6	367
Fourth	59.0	75.4	53.3	163	84.9	83.8	46.2	73.4	127	70.2	79.1	50.2	297
Richest	50.1	64.3	38.0	154	90.5	81.8	50.5	77.4	96	66.5	70.9	42.8	261
<b>Ethnicity of household head</b>													
Kazakh	55.7	65.6	44.1	652	83.7	86.9	46.5	82.4	461	67.3	74.4	45.1	1135
Russian	63.1	70.3	50.7	91	92.3	87.7	56.4	76.8	93	78.0	79.1	53.6	194
Other ethnic groups	64.2	53.4	30.2	138	84.5	85.4	49.0	72.6	120	67.7	68.3	39.0	282

<sup>1</sup> MICS indicator 2.17a – Minimum acceptable diet (breastfed)

<sup>2</sup> MICS indicator 2.17b – Minimum acceptable diet (non-breastfed)

<sup>3</sup> MICS indicator 2.14 – Milk feeding frequency for non-breastfed children

<sup>4</sup> MICS indicator 2.16 – Minimum dietary diversity

<sup>5</sup> MICS indicator 2.15 – Minimum meal frequency

<sup>a</sup> Minimum dietary diversity is defined as receiving foods from at least 4 of 7 food groups: 1) Grains, roots and tubers, 2) legumes and nuts, 3) dairy products (milk, yogurt, cheese), 4) flesh foods (meat, fish, poultry and liver/organ meats), 5) eggs, 6) vitamin-A rich fruits and vegetables, and 7) other fruits and vegetables.

<sup>b</sup> Minimum meal frequency among currently breastfeeding children is defined as children who also received solid, semi-solid, or soft foods 2 times or more daily for children aged 6-8 months and 3 times or more daily for children aged 9-23 months. For non-breastfeeding children aged 6-23 months it is defined as receiving solid, semi-solid or soft foods, or milk feeds, at least 4 times.

<sup>c</sup> The minimum acceptable diet for breastfed children aged 6-23 months is defined as receiving the minimum dietary diversity and the minimum meal frequency, while it for non-breastfed children further requires at least 2 milk feedings and that the minimum dietary diversity is achieved without counting milk feeds.

( ) Figures that are based on 25–49 unweighted cases.

(\*) Figures that are based on fewer than 25 unweighted cases.

“–” denotes 0 unweighted case in that cell or in the denominator.

In the country, the current practice of bottle-feeding is a concern of health workers because of the risk of possible contamination due to unsafe water and lack of hygiene in preparation. Table NU.9 shows that bottle-feeding is quite prevalent in Kazakhstan. More than half of children (51.2 percent) aged 0-23 months are fed using a bottle with a nipple; including 34.1 percent of children aged 0-5 months; by the age of 6-12 months, their proportion is almost doubled (62.6 percent); by the age of 12-23 months the proportion of such children is more than half (53.9 percent). The prevalence of bottle-feeding is the same, in urban and in rural areas. The practice of bottle-feeding is more common in the Mangistau region (65.4 percent), and the least common in the West Kazakhstan region (29.5 percent).

<b>Table NU.9: Bottle feeding</b>		
Percentage of children aged 0-23 months who were fed with a bottle with a nipple during the previous day, Kazakhstan, 2015		
	Percentage of children aged 0-23 months fed with a bottle with a nipple <sup>1</sup>	Number of children aged 0-23 months
<b>Total</b>	51.2	2143
<b>Sex</b>		
Male	50.0	1106
Female	52.4	1037
<b>Age</b>		
0-5 months	34.1	531
6-11 months	62.6	540
12-23 months	53.9	1071
<b>Region</b>		
Akmola	52.7	89
Aktobe	53.2	157
Almaty oblast	46.4	180
Atyrau	48.6	82
West Kazakhstan	29.5	93
Zhambyl	52.2	168
Karaganda	53.2	130
Kostanai	55.8	80
Kyzylorda	59.7	85
Mangistau	65.4	93
South Kazakhstan	53.5	491
Pavlodar	47.1	63
North Kazakhstan	37.7	42
East Kazakhstan	41.1	101
Astana city	53.0	193
Almaty city	52.1	94
<b>Area</b>		
Urban	51.6	1041
Rural	50.7	1101
<b>Mother's education</b>		
None/Primary	(*)	1
Lower secondary	51.3	101
Upper secondary	50.7	527
Technical and Professional	53.8	664
Higher	49.4	850
<b>Wealth index quintile</b>		

Poorest	48.6	422
Second	56.1	469
Middle	49.7	509
Fourth	52.4	391
Richest	48.4	351
<b>Ethnicity of household head</b>		
Kazakh	51.4	1521
Russian	54.1	248
Other ethnic groups	48.4	374
<b><sup>1</sup> MICS indicator 2.18 - Bottle feeding</b>		
(*) Figures that are based on fewer than 25 unweighted cases.		

### ***Salt Iodization***

The world's leading cause of preventable mental retardation and impaired psychomotor development in young children is Iodine Deficiency Disorders (IDD). Iodine is the single micronutrient which is directly involved in hormones synthesis. Iodine is involved in the production of the thyroid hormone – Thyroxine. If insufficient iodine is consumed along with food, the human thyroid produces little thyroxine. This condition is called Hypothyroidism or Iodine Deficiency.

In its most extreme form, iodine deficiency causes cretinism. It also increases the risks of stillbirth and miscarriage in pregnant women. Iodine deficiency is most commonly and visibly associated with the problem of thyroid functioning (“goitre”). Iodine is required for healthy brain development of children during intrauterine growth and early childhood. IDD takes its greatest toll in impaired mental growth and development, contributing in turn to poor school performance, reduced intellectual ability, and impaired work performance.

Universal salt iodization is the main strategy for the elimination of iodine deficiency in the population. The existing deficiency can be compensated by the consumption of adequately iodized salt by each household member.

In accordance with the global policy recommendations, the Law of the Republic of Kazakhstan “On prevention of iodine deficiency disorders” (№ 489-II LRK) was developed and adopted in 2003 by the Government with direct engagement of the Ministry of Health of the Republic of Kazakhstan, the Kazakh Academy of Nutrition, UNICEF and the country office of the Asian Development Bank. A new norm of iodized salt – 40+15 mcg/kg – has been set at the legislative level. Potassium iodate is used for iodization of salt, allowing iodine to be well preserved in salt, in turn this allowed manufacturers to extend the expiration date of iodized salt to 12 months.

The MICS indicator is the percentage of households consuming adequately iodized salt (>15 parts per million).

**Table NU.10: Iodized salt consumption**

Percent distribution of households by consumption of iodized salt, Kazakhstan, 2015

	Percentage of households in which salt was tested	Number of households	Percent of households with:				Total	Number of households in which salt was tested or with no salt
			No salt	Salt test result				
				Not iodized 0 PPM	>0 and <15 PPM	15+ PPM <sup>1</sup>		
<b>Total</b>	98.0	16500	0.6	5.0	3.7	90.7	100.0	16267
<b>Region</b>								
Akmola	98.6	944	0.5	5.1	4.0	90.4	100.0	935
Aktobe	98.9	983	1.1	0.1	5.5	93.3	100.0	983
Almaty oblast	93.8	1260	0.3	0.7	3.3	95.7	100.0	1185
Atyrau	99.9	456	0.0	15.0	1.4	83.5	100.0	455
West Kazakhstan	98.0	764	0.3	40.0	8.7	51.0	100.0	751
Zhambyl	97.9	880	1.1	10.7	3.5	84.7	100.0	872
Karaganda	98.0	1614	0.9	0.7	0.4	98.0	100.0	1596
Kostanai	99.0	978	0.0	1.1	5.1	93.8	100.0	969
Kyzylorda	99.6	402	0.4	0.3	0.6	98.7	100.0	402
Mangistau	99.0	412	0.5	2.0	0.8	96.7	100.0	410
South Kazakhstan	98.4	2055	0.4	8.2	10.3	81.2	100.0	2030
Pavlodar	99.8	829	0.0	2.3	2.0	95.7	100.0	828
North Kazakhstan	98.5	645	0.9	3.8	3.1	92.2	100.0	641
East Kazakhstan	98.9	1523	0.7	2.5	1.1	95.7	100.0	1516
Astana city	99.0	1310	0.4	1.0	2.2	96.5	100.0	1302
Almaty city	94.9	1445	1.5	0.4	1.6	96.5	100.0	1392
<b>Area</b>								
Urban	97.9	9967	0.6	2.6	2.8	94.0	100.0	9822
Rural	98.1	6533	0.5	8.8	5.1	85.6	100.0	6444
<b>Wealth index quintile</b>								
Poorest	97.7	3035	1.2	10.4	5.8	82.5	100.0	3000
Second	98.5	2646	0.1	7.3	5.3	87.3	100.0	2609
Middle	98.0	3109	0.5	5.5	3.3	90.7	100.0	3060
Fourth	97.7	3979	0.7	2.3	2.3	94.6	100.0	3915
Richest	98.3	3731	0.4	1.4	2.7	95.4	100.0	3682

<sup>1</sup> MICS indicator 2.19 - Iodized salt consumption

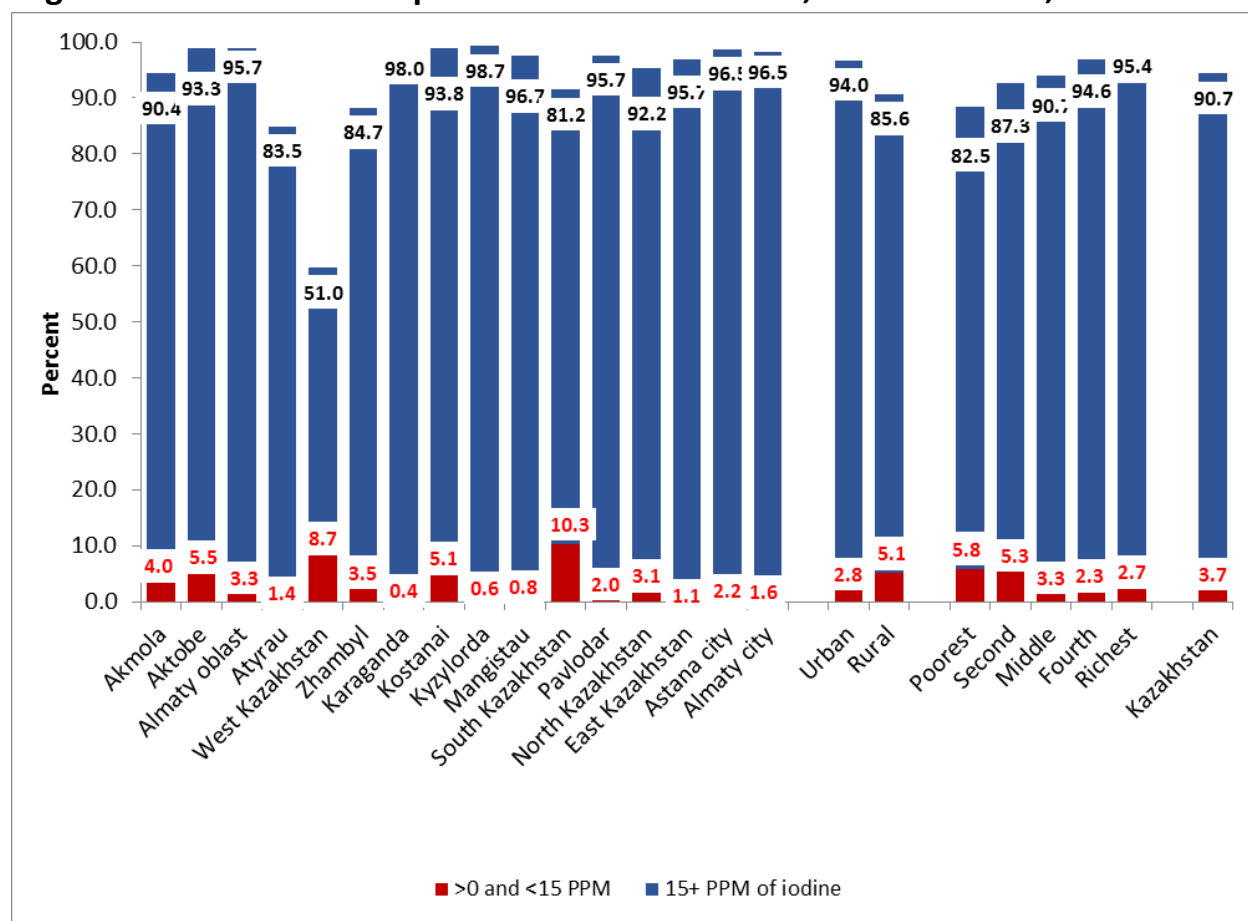


During the Survey, almost in every household (98.0 percent), salt used for cooking was tested for iodine content by using salt test kits for identifying the presence of potassium iodate.

Table NU.10 shows that salt was not available in only 0.6 percent of households; these households are included in the denominator of the indicator. Nearly 91 percent of households consumed adequately iodized ( $\geq 15$  ppm) salt; 3.7 percent of households salts contains less than 15 ppm, while in 5.0 percent of households salt was not iodized (0 ppm). Consumption of salt with at least 15 ppm of iodine was lowest in the West Kazakhstan region (51.0 percent), where 40 percent of the households consumed salt with no iodine at all. In urban areas, 94.0 percent of households were consuming adequately iodized salt ( $\geq 15$  ppm) while for rural areas the figure was 85.6 percent. Consumption of adequately iodized salt ( $\geq 15$  ppm) was higher among richest households when compared to the poorest households (95.4 and 82.5 percent, respectively). In 10.4 percent of the poorest households salt was not iodized.

The consumption of iodized salt is presented in Figure NU.4 together with the percentage of salt that contains less than 15 ppm.

**Figure NU.4: Consumption of iodized salt, Kazakhstan, 2015**



## V. Child Health

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### *Vaccinations*

The Millennium Development Goal (MDG) 4 aimed to reduce child mortality by two thirds between 1990 and 2015. Target 3.2 of the third goal of the Sustainable Development Goals (SDG) adopted in 2015 aims to end preventable deaths of newborns and children under 5 years of age by 2030. Immunization plays a key role in the attainment of this goal. In addition, the Global Vaccine Action Plan (GVAP) was endorsed by the 194 Member States of the World Health Assembly in May 2012 to achieve the Decade of Vaccines vision by delivering universal access to immunization. Immunization has saved the lives of millions of children in the four decades since the launch of the Expanded Programme on Immunization (EPI) in 1974. However, there are still millions of children worldwide not reached by routine immunization and as a result, vaccine-preventable diseases cause more than 2 million deaths every year.

The WHO Recommended Calendar for Routine Immunizations for Children<sup>27</sup> recommends all children to be vaccinated against tuberculosis, diphtheria, pertussis, tetanus, polio, measles, hepatitis B, haemophilus influenzae type b, pneumonia, rotavirus, and rubella.

All doses in the primary series are recommended to be completed before the child's first birthday, although depending on the epidemiological situation in a country, the first doses of measles and rubella containing vaccines may be recommended at 12 months or later. The recommended number and timing of most other doses also vary slightly due to local epidemiology and may include booster doses at older ages.

In Kazakhstan, vaccinations are made with the consent of children's parents or their legal caretakers. Information about all received vaccinations is necessarily recorded in the child's outpatient medical record or vaccination passport. Subsequently, the outpatient medical record or vaccination passport shall be presented at the child's enrollment to kindergarten or school.

In Kazakhstan all performed preventive vaccinations should be registered by the medical professional and should contain the following information: date of administration, vaccine name, batch number, dose, control number, expiration date, nature of infusion reactions and country of origin. Besides the child's outpatient medical record or vaccination passport, information about vaccinations may be contained in the following documents: preventive vaccination card (form 063/y), history of the child's development (form 112/y), child's medical card (form 026/y), and among others.

In Kazakhstan, by the Decree of the Government of the Republic of Kazakhstan №119 from 12 February 2013, the amendments and additions were introduced to the Decree "On approving the list of diseases against which the preventive vaccinations are carried out, on the Rules of their immunization and on population groups that are subject to planned vaccinations" №2295 from 30 December 2009.

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<sup>27</sup> [http://www.who.int/immunization/policy/immunization\\_tables/en/](http://www.who.int/immunization/policy/immunization_tables/en/). Table 2 includes recommendations for all children and additional antigens recommended only for children residing in certain regions of the world or living in certain high-risk population groups.

Below is the schedule for immunization in the Republic of Kazakhstan, as amended and approved in 2013.

### Immunization Schedule in the Republic of Kazakhstan, approved in 2013

Age	Types of Vaccination						
	BCG	HepB (HBV)	Polio (OPV/IPV)	DPT/DTaP	Hib	Pneumococcal (PCV)	Measles (MMR)
1-4 days <sup>28</sup>	+	+					
2 months		+(DPT+Hib+HBV+IPV)				+	
3 months			+(DPT+Hib+IPV)				
4 months		+(DPT+Hib+HBV+IPV)				+	
12-15 months			+(OPV)			+	+
18 months			+(DPT+Hib+IPV)				

The purified pertussis vaccine combined with other toxoids (DTaP) and inactivated polio vaccine (IPV) was introduced in the immunization schedule since 2013.

The immunization schedule in Kazakhstan provides all the above mentioned vaccinations: one dose of the tuberculous vaccine (BCG) and the Hepatitis B vaccines (within 24 hours of birth) at birth, three doses of the diphtheria, pertussis, tetanus (DPT) vaccines, Hepatitis B (HBV), and Haemophilus influenzae type b (Hib) antigens, three doses of the Polio vaccine, one dose of the vaccine containing measles, mumps, and rubella antigens (MMR), three doses of the Pneumococcal vaccine (PNEUMO). The PNEUMO vaccine was implemented in Kazakhstan in stages, starting from 2011, and its introduction took place in different regions of the country at different times until 2015. Due to the fact that the PNEUMO vaccine was not administered universally in the country for 3 years prior to the survey, this vaccination was excluded from the 2015 Kazakhstan MICS Tabulation Plan, though at the time of the survey, data on the PNEUMO vaccine were also recorded from medical documents on the MICS form. Sometimes vaccination is carried out in various combinations as a mixed vaccine: for example, the hepatitis B vaccine (HBV) is administered simultaneously with the polio, diphtheria, pertussis, tetanus (DPT) vaccines and the Haemophilus influenzae type b (Hib) antigens – as a *hexavalent* vaccine; or vaccination against diphtheria, pertussis, tetanus (DTP) can be carried out in combination with vaccines against Haemophilus influenzae type b (Hib) and polio – as a *pentavalent* vaccine.

In accordance with the national immunization schedule, with amendments approved in 2013, every child should receive appropriate doses of vaccines in the recommended age-appropriate period. Exceptions may include a medical exemption from immunization due to illness of the child, as well as the parents' refusal of vaccinations for valid reasons.

<sup>28</sup> HepB-1 vaccine is administered within 24 hours of birth.

All vaccinations should be received during the first year of life except for the doses of MMR at 12 and 15 months. Taking into consideration this national immunization schedule, the estimates for full immunization coverage from the 2015 Kazakhstan MICS are based on children aged 12-23 and 24-35 months.

Information on vaccination coverage was collected for all children under three years of age. In Kazakhstan, the full medical documentation on vaccination of children is mainly stored at health facilities, with a few exceptions – in households. All mothers or caretakers were asked to provide vaccination passports or cards. Only in 1.5 percent of cases for children aged 12-23 months and 2.3 percent of cases for children aged 24-35 months, were the vaccinations recorded based on information provided by mothers. If the vaccination passport/card for a child was at home, the interviewers copied vaccination information from the passports/cards onto the Questionnaire for children. If the vaccination passport/card for a child was not at home, the interviewers asked the mother to recall whether or not the child had received each of the vaccinations, and how many doses of Polio, Hib, DPT and Hep B were received. Information about vaccinations for every child under 3 years was in parallel copied by the teams' supervisors from the vaccination records stored at health facilities, regardless of the presence or absence of vaccination passports/cards in household. The vaccination coverage results of children under 3 years in Kazakhstan are primarily based on data from health facilities records, to a small degree on data from vaccination passports/cards kept at home and in rare cases on mother's recall.

Table CH.1 and Figure CH.1 show the percentage of children aged 12-23 months and 24-35 months who have received each of the specific vaccinations, by source of information (vaccination records at health facilities, vaccination passports/cards and mother's recall). The denominators for the table are comprised of children aged 12-23 months and 24-35 months so that only children who are old enough to be fully vaccinated are counted.. In the first three columns of the Table (provided separately for the age of 12-23 months, and 24-35 months), the numerator includes all children who were vaccinated at any time before the survey according to the vaccination records at health facilities, vaccination passports/cards or the mother's recall. In the last column for each of the above mentioned age groups (12-23 months and 24-35 months), those children who were vaccinated during the first 12 months of life (by their first birthday), and for some vaccines (measles, Polio-4 and Polio-5, DPT-4 and Hib-4) those who were vaccinated by 24 months of age (by the second birthday) respectively, as recommended, are included. For children without vaccination records at health facilities and vaccination passports/cards, the proportion of vaccinations given before the first (second) birthday is assumed to be the same as for children with vaccination passports/cards or vaccination records at health facilities.

98.5 percent of children aged 12-23 months received a BCG vaccination by the age of 12 months; the first dose of Polio, DPT and HepB vaccines were given respectively to 95.6, 95.6 and 97.6 percent of children, and Hib to 94.7 percent. The percentage of vaccinated children declines with each subsequent dose for each type of vaccination: to 93.5 and 94.2 percent respectively for the second dose of Polio and DPT; to 94.7 and 93.5 percent respectively for the HepB and Hib vaccines; the percentage of vaccinated children declines for the third dose of Polio, DPT, HepB and Hib to 89.7, 90.4, 88.4 and 89.3 percent respectively.

By the age of 12 months, the first dose of HepB vaccine was received by 98.6 percent of children aged 24-35 months, the second dose of HepB was received by slightly less – 95.7 percent of children, and by the third dose, the proportion of vaccinated children declined to 90.9 percent. The same trend is observed in relation to other types of vaccination: for example, the first dose of Polio vaccine by 12 months of age was received by 96.7 percent of children aged 24-35 months, the second and third doses of these vaccines were received by 94.1 and 91.2 percent of children; the first dose of DPT vaccine was received by 96.1 percent of children, and the second and third doses were received by 93.8 and 91.0 percent of children aged 24-35 months, and Hib immunization coverage of children for the first, second and third doses was 95.8 , 93.5 and 90.7 percent, respectively. The measles (MMR) immunization coverage of children aged 24-35 months by 24 months of age (by the second birthday) was 95.1 percent. The fourth and fifth doses of Polio vaccine by the second birthday were received by 87.1 and 58.4 percent of children respectively; and the fourth dose of DTP and Hib by – 79.6 and 79.8 percent of children respectively. The survey results show that the percentage of children who received **all** the recommended vaccinations by two years of age (by 24 months) in Kazakhstan is 84.1 percent. 1.1 percent of children aged 24-35 months received none of the recommended vaccinations.

**Table CH.1: Vaccinations in the first year of life**

Percentage of children aged 12-23 months and 24-35 months vaccinated against vaccine preventable childhood diseases at any time before the survey and by their first birthday, Kazakhstan, 2015

	Children aged 12-23 months:				Children aged 24-35 months:			
	Vaccinated at any time before the survey according to:				Vaccinated at any time before the survey according to:			
	Health facility record or vaccination passport/card at home	Mother's report	Either	Vaccinated by 12 months of age <sup>a</sup>	Health facility record or vaccination passport/card at home	Mother's report	Either	Vaccinated by 12 months of age (measles, Polio4, Polio5, DPT4 and Hib4 by 24 months) <sup>a</sup>
<b>Antigen</b>								
BCG <sup>1</sup>	97.3	1.5	98.8	98.5	96.5	2.3	98.9	98.4
<b>Polio</b>								
1	94.1	1.8	95.9	95.6	95.5	2.3	97.9	96.7
2	92.8	1.6	94.4	93.5	94.1	2.3	96.4	94.1
3 <sup>2</sup>	89.2	2.1	91.3	89.7	93.2	2.1	95.3	91.2
4 <sup>b</sup>	52.9	4.2	57.1	na	85.7	2.0	87.7	87.1
5 <sup>b</sup>	18.8	1.8	20.5	na	58.8	3.4	62.2	58.4
<b>DPT</b>								
1	94.3	1.6	95.9	95.6	94.6	2.9	97.5	96.1
2	93.1	1.8	94.9	94.2	93.6	2.8	96.4	93.8
3 <sup>3</sup>	89.8	2.6	92.4	90.4	92.6	2.7	95.4	91.0
4 <sup>b</sup>	26.0	5.6	31.6	na	81.3	3.7	85.0	79.6
<b>HepB</b>								
1 (at birth) <sup>c</sup>	96.1	1.6	97.7	97.6	96.3	2.3	98.6	98.6
2	93.0	2.2	95.2	94.7	94.9	2.4	97.3	95.7
3 <sup>4</sup>	87.6	2.4	90.0	88.4	92.5	2.5	95.0	90.9
<b>Hib</b>								
1	92.9	2.1	95.0	94.7	93.8	3.5	97.3	95.8
2	92.2	2.2	94.4	93.5	93.3	2.7	96.0	93.5
3 <sup>5</sup>	88.6	2.7	91.4	89.3	92.3	2.8	95.1	90.7
4 <sup>b</sup>	27.6	6.2	33.8	na	81.8	3.2	85.0	79.8
Measles (MMR) <sup>6,d</sup>	82.7	6.6	89.4	na	92.7	2.9	95.6	95.1
Fully vaccinated <sup>7,e</sup>	na	na	na	na	91.5	1.3	92.8	84.1

No vaccinations	0.0	1.0	1.1	1.1	0.1	1.0	1.1	1.1
Number of children	1071	1071	1071	1071	1045	1045	1045	1045
<b><sup>1</sup> MICS indicator 3.1 - Tuberculosis immunization coverage</b>								
<b><sup>2</sup> MICS indicator 3.2 - Polio immunization coverage</b>								
<b><sup>3</sup> MICS indicator 3.3 - Diphtheria and tetanus toxoid with acellular pertussis (DPT) immunization coverage</b>								
<b><sup>4</sup> MICS indicator 3.5 - Hepatitis B immunization coverage</b>								
<b><sup>5</sup> MICS indicator 3.6 - Haemophilus influenzae type B (Hib) immunization coverage</b>								
<b><sup>6</sup> MICS indicator 3.4; MDG indicator 4.3 - Measles immunization coverage</b>								
<b><sup>7</sup> MICS indicator 3.8 - Full immunization coverage</b>								
na: not applicable.								
<sup>a</sup> MICS indicators 3.1, 3.2, 3.3, 3.5 and 3.6 refer to the results in the column in the left side; MICS indicators 3.4 and 3.8 refer to this column in the right panel.								
<sup>b</sup> Polio4, Polio5, DPT4 and Hib4 are booster doses and are not included in full vaccination coverage.								
<sup>c</sup> As per the vaccination schedule in Kazakhstan, the first dose of Hepatitis B, that is predominantly received within 24 hours of birth, is labelled as HepB1.								
<sup>d</sup> Measles is administered through the combined measles, mumps and rubella (MMR) as part of the vaccination schedule in Kazakhstan.								
<sup>e</sup> Includes: BCG, Polio3, DPT3, HepB3, Hib3, and Measles (MMR) as per the vaccination schedule in Kazakhstan.								

**Figure CH.1: Vaccination by age 12 months (measles by 24 months), Kazakhstan, 2015**

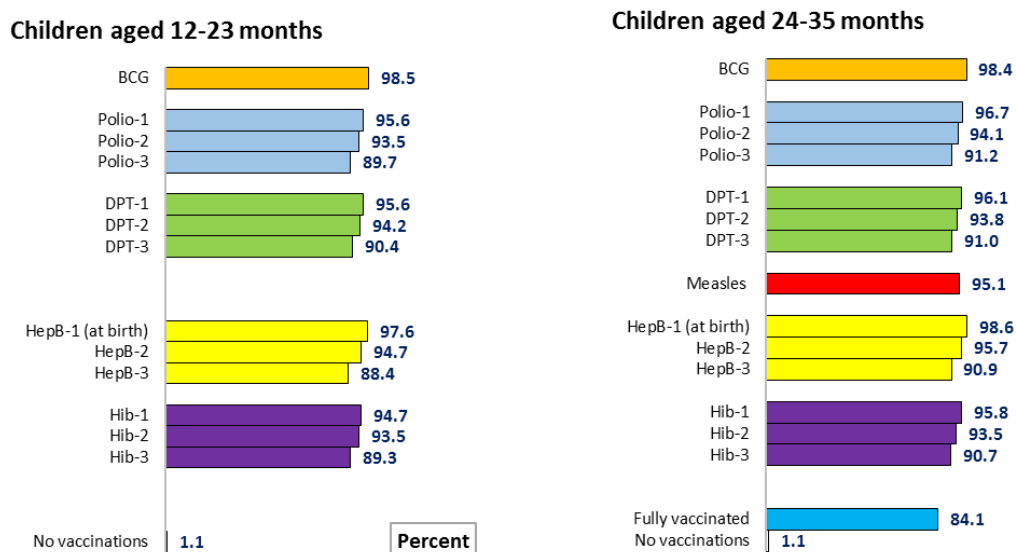


Table CH.2 presents vaccination coverage estimates among children aged 12-23 and 24-35 months by background characteristics. The figures indicate the percentage of children receiving any vaccinations at any time up to the date of the survey, and are mainly based on information from the health facility records, as well as vaccination passports/cards at home and from mothers'/caretakers' reports. Vaccination passports/cards have been seen by the interviewer for 97 percent of children aged 12-23 and 24-35 months.

Generally, the reduction in the percentage of vaccinated children with each subsequent dose for all types of vaccines is greater for urban areas: for example, the proportion of vaccinated children aged 12-23 months with polio 2<sup>nd</sup> and 3<sup>rd</sup> doses in urban areas was 91.8 and 88.1 percent against, respectively, 96.8 and 94.2 percent of children living in rural areas. This tendency persists for almost every subsequent dose for all vaccinations. In addition, it is noted that children living in households in the richest wealth index quintile are less likely to be vaccinated than those living in households in the poorest index quintile.



**Table CH.2: Vaccinations by background characteristics**

Percentage of children aged 12-23 and 24-35 months currently vaccinated against preventable childhood diseases, Kazakhstan, 2015

	Percentage of children aged 12-23 months who received:													Percentage with health facility record or vaccination passport/card at home seen	Number of children aged 12-23 months
	BCG	Polio			DPT			HepB			Hib				
		1	2	3	1	2	3	1 (at birth) <sup>a</sup>	2	3	1	2	3		
<b>Total</b>	98.8	95.9	94.4	91.3	95.9	94.9	92.4	97.7	95.2	90.0	95.0	94.4	91.4	97.5	1071
<b>Sex</b>															
Male	98.8	95.2	93.7	90.1	95.3	94.2	91.5	97.8	95.1	88.3	94.1	93.6	91.0	97.4	532
Female	98.8	96.5	95.1	92.5	96.5	95.6	93.3	97.6	95.3	91.6	95.9	95.2	91.7	97.5	540
<b>Region</b>															
Akmola	98.2	94.1	91.2	87.2	94.1	92.5	91.2	93.1	89.2	86.3	94.1	92.5	88.0	96.7	39
Aktobe	100.0	98.1	97.2	95.8	98.1	97.2	95.8	100.0	98.0	95.7	98.1	97.2	94.9	100.0	83
Almaty	97.0	97.0	95.5	88.9	97.0	95.5	95.5	93.7	97.0	95.5	96.9	95.4	92.6	95.0	90
Atyrau	99.7	98.3	97.4	97.3	98.3	98.3	96.9	99.2	98.3	96.9	98.3	98.3	98.2	100.0	43
West Kazakhstan	98.2	96.1	93.8	85.9	98.1	98.1	94.3	96.8	91.6	88.0	94.5	94.4	90.6	98.2	49
Zhambyl	99.2	94.4	93.8	90.6	94.4	93.8	90.6	97.4	94.4	90.0	94.4	93.8	90.6	97.1	91
Karaganda	(98.0)	(91.4)	(89.8)	(88.1)	(91.4)	(89.8)	(89.8)	(96.4)	(91.4)	(89.8)	(91.4)	(91.4)	(89.6)	(96.4)	77
Kostanai	100.0	96.9	93.9	88.2	95.9	94.7	93.2	100.0	93.9	90.8	95.9	95.9	94.3	100.0	43
Kyzylorda	100.0	98.2	97.5	97.5	99.3	98.6	98.6	100.0	98.2	97.5	90.9	90.9	89.6	100.0	44
Mangistau	96.1	96.1	91.2	89.5	96.1	93.4	90.5	96.1	93.2	89.7	96.1	94.3	90.5	94.0	46
South Kazakhstan	100.0	99.1	98.5	96.8	99.1	98.5	96.1	100.0	100.0	93.7	98.3	98.3	96.7	100.0	230
Pavlodar	93.9	92.0	92.0	89.8	92.0	92.0	89.8	94.1	92.0	89.8	92.0	92.0	89.8	92.0	32
North Kazakhstan	91.6	91.6	87.9	87.9	91.6	87.9	87.9	94.7	91.6	89.7	88.1	86.2	86.2	94.5	25
East Kazakhstan	(100.0)	(100.0)	(100.0)	(97.4)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(94.8)	(100.0)	(100.0)	(100.0)	(100.0)	49
Astana city	100.0	92.4	90.7	81.9	91.7	90.8	76.6	95.3	90.2	65.8	91.7	91.7	76.6	96.5	92
Almaty city	(100.0)	(84.6)	(81.3)	(80.0)	(85.0)	(83.7)	(83.7)	(100.0)	(85.0)	(82.2)	(81.4)	(76.4)	(76.4)	(86.3)	39
<b>Area</b>															
Urban	98.6	94.1	91.8	88.1	94.2	92.6	88.0	97.4	93.2	85.0	93.1	92.2	87.2	96.7	517

Rural	99.0	97.5	96.8	94.2	97.5	97.1	96.5	97.9	97.1	94.6	96.8	96.5	95.2	98.2	554
<b>Mother's education</b>															
None/Primary	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0
Lower secondary	98.8	88.7	87.8	78.1	88.7	87.8	78.1	94.7	92.9	81.4	85.9	85.0	74.9	98.8	48
Upper secondary	99.4	97.7	95.8	92.2	97.9	96.4	94.8	98.5	97.2	93.4	96.6	95.8	93.3	98.2	253
Technical and Professional	98.3	96.4	95.3	94.0	96.6	95.9	95.1	98.2	95.2	90.5	95.8	95.3	94.7	97.0	339
Higher	98.9	95.1	93.6	90.1	95.0	94.1	90.5	97.1	94.3	88.5	94.5	93.9	89.5	97.2	432
<b>Wealth index quintile</b>															
Poorest	98.1	96.7	96.0	94.7	96.7	96.4	94.9	97.4	97.2	95.1	96.0	95.7	93.5	96.8	220
Second	99.7	97.6	97.4	94.9	97.8	97.6	96.8	98.8	96.9	95.2	96.1	95.9	95.6	99.5	217
Middle	99.3	97.5	95.4	92.2	97.4	96.0	95.1	97.4	96.1	90.8	95.6	95.0	94.1	97.7	261
Fourth	98.3	93.9	91.3	86.7	94.4	92.6	84.0	98.9	93.4	82.4	95.0	93.9	84.6	97.1	194
Richest	98.4	92.3	90.7	86.0	92.0	90.8	89.2	95.7	91.3	84.1	91.8	90.7	86.9	95.9	179
<b>Ethnicity of household head</b>															
Kazakh	99.3	97.3	95.7	91.9	97.4	96.4	93.1	98.4	96.5	91.0	96.1	95.4	91.5	97.5	785
Russian	94.9	87.2	86.4	85.9	87.2	86.4	85.9	92.5	86.6	85.3	87.7	86.9	86.0	95.8	129
Other ethnic groups	99.7	95.7	94.5	92.8	95.7	94.5	94.5	98.6	95.7	88.6	95.7	95.6	95.3	98.8	158

Continuation of Table CH.2.

	Percentage of children aged 24-35 months who received:								Percentage with health facility record or vaccination passport/card at home seen	Number of children aged 24-35 months
	measles (MMR) <sup>b</sup>	Full <sup>c</sup>	None	Polio4 <sup>d</sup>	Polio5 <sup>d</sup>	DPT4 <sup>d</sup>	Hib4 <sup>d</sup>			
Total	95.6	92.8	1.1	87.7	62.2	85.0	85.0	96.7	1045	
<b>Sex</b>										
Male	94.6	92.2	1.0	88.0	63.3	84.2	82.9	97.2	530	
Female	96.5	93.5	1.3	87.3	61.0	85.9	87.2	96.2	515	
<b>Region</b>										
Akmola	94.2	92.2	1.3	87.0	44.5	85.1	80.3	97.2	47	
Aktobe	97.9	97.9	1.0	96.6	75.7	93.4	93.3	99.0	72	
Almaty	91.3	87.6	1.8	87.4	66.3	80.3	81.8	90.7	73	
Atyrau	87.1	86.1	2.1	83.1	32.1	82.7	86.4	96.4	46	
West Kazakhstan	95.7	94.3	0.0	91.0	62.8	96.6	88.1	99.0	49	

Zhambyl	94.0	93.0	0.0	91.5	86.6	86.6	86.6	100.0	86
Karaganda	98.7	95.7	1.3	95.3	92.0	95.9	97.1	98.3	96
Kostanai	98.2	93.6	0.0	92.7	58.2	90.1	89.0	100.0	54
Kyzylorda	100.0	96.2	0.0	94.5	25.8	86.2	79.3	100.0	37
Mangistau	98.1	93.1	1.9	92.0	73.1	77.2	77.7	95.1	45
South Kazakhstan	98.3	98.3	1.0	85.1	52.6	79.6	84.0	99.0	191
Pavlodar	92.7	89.5	4.4	88.0	51.0	89.6	88.3	95.6	42
North Kazakhstan	(98.8)	(96.6)	(1.2)	(90.9)	(62.4)	(81.6)	(82.7)	(94.5)	22
East Kazakhstan	(100.0)	(94.9)	(0.0)	(72.4)	(44.4)	(92.2)	(86.1)	(100.0)	54
Astana city	90.2	88.2	0.0	86.1	72.5	78.7	86.7	98.0	88
Almaty city	(90.0)	(72.3)	(5.8)	(64.2)	(30.6)	(65.5)	(48.2)	(68.7)	42
<b>Area</b>									
Urban	94.1	90.8	1.4	85.5	63.2	82.3	82.2	95.6	533
Rural	97.1	95.0	0.9	89.9	61.1	87.8	88.0	97.9	513
<b>Mother's education</b>									
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	0
Lower secondary	95.3	92.3	1.0	86.1	50.6	77.7	85.0	96.7	67
Upper secondary	96.2	94.4	1.4	91.4	68.5	86.4	84.6	97.4	243
Technical and Professional	97.7	92.9	1.2	88.4	63.7	88.2	88.3	96.8	285
Higher	93.9	92.0	1.0	85.4	59.6	83.3	83.1	96.2	450
<b>Wealth index quintile</b>									
Poorest	97.1	94.7	1.1	89.5	61.2	90.0	88.5	98.6	185
Second	96.4	93.8	1.0	87.0	55.8	81.7	83.2	97.6	237
Middle	97.5	95.1	1.1	89.3	67.6	87.4	86.0	97.3	223
Fourth	96.0	90.5	1.1	86.8	61.0	83.6	85.1	93.5	188
Richest	91.0	89.8	1.5	85.9	65.7	83.2	83.0	96.2	211
<b>Ethnicity of household head</b>									
Kazakh	95.3	93.0	1.0	86.0	62.5	84.4	83.9	96.5	734
Russian	95.5	89.6	1.8	87.4	62.1	86.9	86.3	95.8	145
Other ethnic groups	96.9	95.0	1.2	95.3	60.7	86.0	88.7	98.4	167

<sup>a</sup> As per the vaccination schedule in Kazakhstan, the first dose of Hepatitis B, that is predominantly received within 24 hours of birth, is labelled as HepB1.

<sup>b</sup> Measles is administered through the combined measles, mumps and rubella (MMR) as part of the vaccination schedule in Kazakhstan.

<sup>c</sup> Includes: BCG, Polio3, DPT3, HepB3, Hib3, and Measles (MMR) as per the vaccination schedule in Kazakhstan.

<sup>d</sup> Polio4, Polio5, DPT4 and Hib4 are booster doses and are not included in full vaccination coverage.

( ) Figures that are based on 25–49 unweighted cases.

(\*) Figures that are based on fewer than 25 unweighted cases.

"-" denotes 0 unweighted case in that cell or in the denominator.

### ***Knowledge of the two danger signs of pneumonia***

Timely mother's seeking for medical help, as well as having certain knowledge about danger signs and manifestations of various diseases, including awareness of the danger signs of pneumonia is an important step in providing adequate medical care to a sick child. In the 2015 Kazakhstan MICS, mothers (or caretakers) were asked to describe the symptoms of the disease of children under 5 years old, which would constitute a reason for immediate referral to the health facility. Issues related to knowledge of danger signs of pneumonia are presented in Table CH.3.

Overall, 36.7 percent of women know at least one of the two danger signs of pneumonia: *fast breathing and/or difficult breathing*. 27.6 percent of mothers recognise *difficult breathing*, and 15.5 percent of mothers recognise *fast breathing* as a symptom that would cause them to take their child immediately to a health facility. The lowest level of knowledge of at least one of the two danger signs of pneumonia was demonstrated by mothers of Karaganda (17.9 percent) and Kyzylorda (20.2 percent) regions. More than half of mothers from Kostanai region and more than 47 percent of mothers from Atyrau and South Kazakhstan regions are the most aware of at least one of the two main symptoms of pneumonia. The range of the percentage of mothers who recognize fast breathing as one of the danger signs of pneumonia varies from 3.2 percent in the Karaganda region to 28.8 percent in the South-Kazakhstan region. The proportion of mothers who recognize difficult breathing as a danger sign of pneumonia ranges from 13.2 percent in the Kyzylorda region to 39.3 percent in the Almaty oblast. At least one of the two danger signs of pneumonia are recognized by 39.0 percent of mothers living in rural areas and 34.4 percent in urban areas. It is interesting to note that mothers living in the poorest households (40.7 percent) are more likely to recognise at least one of the danger signs of pneumonia than mothers living in the richest households (31.5 percent).

Although the following symptom is not a danger sign of pneumonia, about 90 percent of mothers said that they would take their child under age 5 immediately to a health facility if they *develop a fever*.

**Table CH.3: Knowledge of the two danger signs of pneumonia**

Percentage of women aged 15-49 years who are mothers or caretakers of children under age 5 by symptoms that would cause them to take a child under age 5 immediately to a health facility, and percentage of mothers who recognize fast or difficult breathing as signs for seeking care immediately, Kazakhstan, 2015

	Percentage of mothers/caretakers of children aged 0-59 months who think that a child should be taken immediately to a health facility if the child:												Mothers/caretakers who recognize at least one of the two danger signs of pneumonia (fast and/or difficult breathing)	Number of women aged 15-49 years who are mothers/caretakers of children under age 5
	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	Has a convulsion	Has low body temperature	Has change of skin integuments	Has blood form an umbilical wound	Has other symptoms		
<b>Total</b>	9.2	30.7	88.3	15.5	27.6	7.3	12.6	28.0	7.8	17.6	3.2	27.0	36.7	4249
<b>Region</b>														
Akmola	2.6	18.8	93.5	14.9	24.5	2.8	5.3	6.7	0.4	12.2	0.9	39.1	32.5	183
Aktobe	13.2	32.6	83.6	13.1	28.9	5.6	3.6	25.5	1.2	14.1	3.6	5.4	41.1	296
Almaty	17.6	35.1	80.3	16.9	39.3	22.8	12.9	42.0	13.2	36.6	20.1	22.9	43.3	323
Atyrau	12.0	58.3	66.3	21.9	32.3	2.0	8.2	40.8	10.1	7.1	4.5	24.5	47.8	159
West Kazakhstan	24.6	32.6	96.9	27.6	29.7	4.6	8.9	12.1	1.0	6.8	3.9	17.9	46.2	188
Zhambyl	6.7	15.9	96.2	6.7	22.6	1.1	10.4	14.1	1.4	5.9	0.5	48.4	28.0	297
Karaganda	2.2	24.3	90.8	3.2	14.6	1.8	3.0	17.7	0.4	14.5	0.5	62.0	17.9	307
Kostanai	9.7	20.9	86.7	23.8	38.0	11.3	5.9	40.4	2.7	38.9	7.2	42.8	54.0	208
Kyzylorda	6.0	20.4	94.2	7.1	13.2	0.6	11.4	7.9	0.4	1.0	1.9	8.4	20.2	152
Mangistau	4.6	48.0	84.2	11.0	18.3	2.9	17.6	19.6	18.1	32.0	4.8	0.4	22.8	175
South Kazakhstan	8.8	52.9	91.7	28.8	33.1	15.0	28.9	32.3	24.7	11.1	1.3	12.5	47.3	856
Pavlodar	3.3	19.8	87.5	11.6	30.5	1.8	10.4	28.3	2.0	19.3	0.4	18.4	40.6	142
North Kazakhstan	1.7	7.6	92.9	3.0	21.4	1.0	2.7	9.4	1.0	16.8	0.0	59.2	23.2	105
East Kazakhstan	15.3	18.4	92.8	6.9	25.7	5.1	11.1	34.7	2.2	22.4	0.0	34.6	28.7	216

Astana city	9.7	9.4	79.9	9.4	22.2	4.3	1.8	29.2	0.8	31.8	0.7	39.8	28.2	394
Almaty city	2.2	24.4	93.1	8.6	30.3	2.4	19.1	54.6	0.6	11.8	0.6	20.6	37.7	248
<b>Area</b>														
Urban	8.3	27.6	88.0	13.0	26.2	5.0	8.4	29.0	4.6	20.1	2.0	30.4	34.4	2184
Rural	10.0	34.1	88.7	18.1	29.2	9.7	17.0	26.9	11.2	15.1	4.6	23.4	39.0	2065
<b>Education</b>														
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	5
Lower secondary	5.7	40.5	86.2	16.3	33.4	3.7	14.1	21.7	4.7	16.7	1.5	24.4	42.2	231
Upper secondary	9.6	34.2	91.2	15.9	28.9	10.8	17.2	31.7	11.0	12.3	3.5	23.6	37.4	1008
Technical and Professional	10.9	30.7	87.8	16.8	29.5	7.7	13.1	25.2	8.1	16.9	3.6	23.9	38.6	1225
Higher	8.1	27.6	87.4	14.2	24.9	5.5	9.5	28.7	6.3	21.3	3.1	31.5	34.2	1781
<b>Wealth index quintile</b>														
Poorest	7.8	33.6	90.7	19.5	31.3	9.1	14.9	26.5	12.2	14.0	2.9	22.8	40.7	826
Second	9.3	35.9	90.2	19.2	29.0	7.6	19.5	24.2	13.3	13.8	3.1	21.9	40.4	891
Middle	11.8	33.1	87.0	13.9	27.2	10.3	13.6	30.0	6.5	15.6	5.5	26.7	34.9	880
Fourth	9.9	27.6	87.1	14.4	26.6	6.0	8.6	29.3	4.3	21.5	3.2	32.6	35.8	798
Richest	6.9	22.9	86.7	10.2	24.1	3.5	5.9	30.1	2.5	23.6	1.4	31.6	31.5	855
<b>Ethnicity of household head</b>														
Kazakh	10.5	30.7	86.9	15.6	27.7	6.7	11.4	26.1	6.1	17.9	3.5	25.4	36.9	2878
Russian	7.8	23.5	90.3	12.3	28.7	7.4	5.3	31.4	3.7	21.6	3.0	34.8	36.4	640
Other ethnic groups	5.1	37.1	92.5	17.8	26.4	9.9	23.4	32.5	18.3	13.1	2.3	26.5	35.9	731
(*) Figures that are based on fewer than 25 unweighted cases.														

## ***Solid Fuel Use***

More than 3 billion people around the world rely on solid fuels for their basic energy needs, including cooking and heating. Solid fuels include biomass fuels, such as wood, charcoal, crops or other agricultural waste, dung, shrubs and straw. Cooking and heating with solid fuels leads to high levels of indoor smoke, which contains a complex mix of health-damaging pollutants. The main problem with the use of solid fuels is their incomplete combustion, which produces toxic elements such as carbon monoxide, polyaromatic hydrocarbons, and sulphur dioxide (SO<sub>2</sub>), among others. Use of solid fuels increases the risks of incurring acute respiratory illness, pneumonia, chronic obstructive lung disease, cancer, and possibly tuberculosis, asthma, or cataracts, and may contribute to low birth weight of babies born to pregnant women exposed to smoke. The primary indicator for monitoring use of solid fuels is the proportion of the population using solid fuels as the primary source of energy for cooking, shown in Table CH.4.

In Kazakhstan, natural and liquefied gas (42.7 and 39.1 percent) is mainly used for cooking, which is true by more than 80 percent of the population; while 16.6 percent of the household population use electricity for this. In Kazakhstan, the use of solid fuels for cooking is almost reduced to a minimum (1.5 percent). In the country, coal or lignite is used by only 0.6 percent of the household population, wood – 0.5 percent, animal dung – 0.3 percent. Solid fuels are used almost exclusively by the rural population (3.0 percent), households where the household head has no education or primary education (5.9 percent), as well as the population of the poorest quintile (5.6 percent).

**Table CH.4: Solid fuel use**

Percent distribution of household members according to type of cooking fuel mainly used by the household, and percentage of household members living in households using solid fuels for cooking, Kazakhstan, 2015

	Percentage of household members in households mainly using:												Total	Solid fuels for cooking <sup>1</sup>	Number of household members
	Electricity	Liquefied Gas	Natural Gas	Biogas	Solid fuels				Other fuel	Missing	No food cooked in the household				
					Coal/ Lignite	Charcoal	Wood	Animal dung							
<b>Total</b>	16.6	39.1	42.7	0.0	0.6	0.0	0.5	0.3	0.0	0.0	0.0	100.0	1.5	56803	
<b>Region</b>															
Akmola	6.7	93.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	100.0	0.2	2796	
Aktobe	3.0	8.4	80.7	0.1	6.1	0.0	0.0	1.8	0.0	0.0	0.0	100.0	7.9	3580	
Almaty	1.5	76.2	22.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	4679	
Atyrau	0.5	3.8	95.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	1849	
West Kazakhstan	1.7	12.7	82.0	0.0	0.1	0.0	2.1	1.5	0.0	0.0	0.0	100.0	3.6	2591	
Zhambyl	0.5	27.8	70.1	0.0	0.0	0.0	0.9	0.7	0.0	0.0	0.0	100.0	1.6	3647	
Karaganda	41.7	48.4	7.5	0.0	1.4	0.2	0.5	0.1	0.0	0.0	0.1	100.0	2.2	4630	
Kostanai	3.8	38.4	57.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	2903	
Kyzylorda	0.1	70.6	28.4	0.0	0.0	0.1	0.7	0.0	0.0	0.0	0.0	100.0	0.9	1893	
Mangistau	0.0	0.3	99.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	1841	
South Kazakhstan	0.1	39.2	59.1	0.0	0.0	0.0	1.5	0.0	0.0	0.0	0.0	100.0	1.5	9964	
Pavlodar	75.6	24.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	2274	
North Kazakhstan	7.8	91.9	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	100.0	0.2	1721	
East Kazakhstan	52.7	43.9	0.4	0.0	1.2	0.2	0.7	0.8	0.0	0.0	0.1	100.0	3.0	4117	
Astana city	60.2	39.1	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	100.0	0.0	4047	
Almaty city	11.6	5.3	83.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	4271	
<b>Area</b>															
Urban	26.3	29.5	44.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.1	30222	
Rural	5.7	50.1	41.2	0.0	1.2	0.1	1.2	0.6	0.0	0.0	0.0	100.0	3.0	26582	
<b>Education of household head</b>															
None/Primary	9.3	47.0	37.8	0.0	1.0	0.4	1.9	2.6	0.0	0.0	0.0	100.0	5.9	1135	
Lower secondary	12.1	44.2	41.3	0.0	0.8	0.0	1.0	0.6	0.0	0.1	0.0	100.0	2.3	5704	



Upper secondary	9.8	46.7	41.1	0.0	1.1	0.1	0.7	0.5	0.0	0.0	0.0	100.0	2.4	17668
Technical and Professional	18.0	38.5	42.7	0.0	0.4	0.0	0.3	0.0	0.0	0.0	0.0	100.0	0.7	18200
Higher	25.9	27.9	45.8	0.0	0.1	0.0	0.1	0.1	0.0	0.0	0.0	100.0	0.3	14030
Missing/DK	(0.0)	(13.2)	(16.4)	(0.0)	(0.0)	(0.0)	(70.4)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	(70.4)	66
<b>Wealth index quintile</b>														
Poorest	5.7	69.2	19.4	0.0	1.8	0.2	2.3	1.3	0.0	0.0	0.1	100.0	5.6	11360
Second	5.0	47.5	46.1	0.0	0.8	0.0	0.4	0.2	0.0	0.0	0.0	100.0	1.4	11362
Middle	6.8	38.0	54.9	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.3	11364
Fourth	21.7	31.1	47.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.1	11357
Richest	43.9	9.9	46.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	11360
<b>Ethnicity of household head</b>														
Kazakh	16.0	38.5	43.3	0.0	0.9	0.1	0.7	0.5	0.0	0.0	0.0	100.0	2.1	35426
Russian	25.2	39.7	34.7	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	100.0	0.2	11904
Other ethnic groups	8.1	40.9	50.4	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	100.0	0.5	9472
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	1

<sup>1</sup> MICS indicator 3.15 - Use of solid fuels for cooking

( ) Figures that are based on 25–49 unweighted cases.

(\*) Figures that are based on fewer than 25 unweighted cases.

**Table CH.5: Solid fuel use by place of cooking**

Percent distribution of household members in households using solid fuels by place of cooking, Kazakhstan, 2015

	Place of cooking:						Number of household members in households using solid fuels for cooking
	In the house		In a separate building	Outdoors	Missing	Total	
	In a separate room used as kitchen	Elsewhere in the house					
<b>Total</b>	68.0	6.2	19.3	3.6	2.9	100.0	838
<b>Region</b>							
Akmola	(*)	(*)	(*)	(*)	(*)	100.0	5
Aktobe	93.8	3.1	3.1	0.0	0.0	100.0	282
Almaty oblast	-	-	-	-	-	0.0	0
Atyrau	-	-	-	-	-	0.0	0
West Kazakhstan	92.8	0.0	5.2	0.0	2.0	100.0	95
Zhambyl	24.9	17.3	27.6	30.2	0.0	100.0	58
Karaganda	90.1	4.4	0.0	0.0	5.5	100.0	104
Kostanai	-	-	-	-	-	0.0	0
Kyzylorda	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	100.0	17
Mangistau	-	-	-	-	-	0.0	0
South Kazakhstan	0.0	13.8	86.2	0.0	0.0	100.0	153
Pavlodar	-	-	-	-	-	0.0	0
North Kazakhstan	(*)	(*)	(*)	(*)	(*)	100.0	3
East Kazakhstan	83.1	6.4	0.0	10.5	0.0	100.0	122
Astana city	-	-	-	-	-	0.0	0
Almaty city	(*)	(*)	(*)	(*)	(*)	100.0	0
<b>Area</b>							
Urban	(*)	(*)	(*)	(*)	(*)	100.0	31
Rural	66.8	6.5	20.0	3.7	3.0	100.0	808
<b>Education of household head</b>							
None/Primary	34.3	11.1	37.7	8.6	8.4	100.0	67
Lower secondary	68.9	3.6	24.6	0.0	2.9	100.0	132
Upper secondary	80.1	2.4	9.8	4.6	3.2	100.0	426
Technical and Professional	63.6	23.2	12.1	0.2	0.9	100.0	130
Higher	(86.9)	(0.0)	(0.0)	(13.1)	(0.0)	100.0	37
Missing/DK	(*)	(*)	(*)	(*)	(*)	100.0	46
<b>Wealth index quintile</b>							
Poorest	66.5	6.7	18.2	4.8	3.8	100.0	640
Second	65.0	6.1	28.9	0.0	0.0	100.0	156
Middle	(*)	(*)	(*)	(*)	(*)	100.0	35
Fourth	(*)	(*)	(*)	(*)	(*)	100.0	8
Richest	-	-	-	-	-	0.0	0
<b>Ethnicity of household head</b>							
Kazakh	70.5	3.0	19.3	4.0	3.2	100.0	758
Russian	(*)	(*)	(*)	(*)	(*)	100.0	29
Other ethnic groups	(18.6)	(51.0)	(30.5)	(0.0)	(0.0)	100.0	52

( ) Figures that are based on 25–49 unweighted cases.

(\*) Figures that are based on fewer than 25 unweighted cases.

"—" denotes 0 unweighted case in that cell or in the denominator.

Solid fuel use by place of cooking is depicted in Table CH.5. The presence and extent of indoor pollution are dependent on cooking practices, places used for cooking, as well as types of fuel used.

According to the 2015 Kazakhstan MICS, 68.0 percent of the population living in households where solid fuels are used for cooking, cook in a separate room used as a kitchen; 6.2 percent cook food elsewhere in the same house, 19.3 percent cook meals in separate buildings outside the house. In addition, 3.6 percent of household members cook food outdoors.

## VI. Water and Sanitation

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The reserves of safe water, improved hygiene and sanitation, as well as proper management of water resources are of fundamental importance for the health of people around the world. According to the World Health Organization (WHO), safe drinking water is water that does not constitute a risk to human health within the entire time of its consumption. Nearly one-tenth of the global disease burden could be prevented by expanding access to safe drinking water and improved sanitation and hygiene.

Unsafe drinking water can be the main determinant of diseases such as cholera, typhoid, and schistosomiasis. Drinking water can also be contaminated with chemical and physical contaminants with harmful effects on human health.

According to WHO, providing people with safer water can annually prevent: 1.4 million child deaths from diarrhoea; 500 thousand deaths from malaria; 860 thousand child deaths from malnutrition.

In addition to preventing disease, improved access to drinking water may be particularly important for women and children, especially in rural areas, who bear the primary responsibility for collecting and delivering water, often for long distances.<sup>29</sup>

Inadequate disposal of human excreta and personal hygiene are associated with a range of diseases including diarrhoeal diseases and polio and are important determinants in child development. Access to sanitation, such as simple latrines in the dwelling, prevents contamination of drinking water with human excreta and can reduce the emergence and spread of infections. Frequent hand washing with soap and safe storage of drinking water, and where necessary, its treatment, are practical measures that give excellent results in infection control.

For more details on water and sanitation and to access some reference documents, please visit [data.unicef.org](http://data.unicef.org)<sup>30</sup> or the website of the WHO/UNICEF Joint Monitoring Programme for Water Supply and Sanitation<sup>31</sup>.

### ***Use of Improved Water Sources***

The distribution of the Kazakhstan population by main source of drinking water is shown in Table WS.1. The population using *improved sources* of drinking water are those using any of the following types of supply: piped water (into dwelling, compound, yard or plot, to neighbour, public tap/standpipe), tube well/borehole, protected well, protected spring, and rainwater collection. Bottled water is considered as an improved water source only if the household is permanently using an improved water source for handwashing and cooking.

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<sup>29</sup> WHO/UNICEF. 2012. Advance in Drinking Water Supply and Sanitation: update from 2012.

<sup>30</sup> <http://data.unicef.org/water-sanitation/water.html>.

<sup>31</sup> <http://www.wssinfo.org>.

**Table WS.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, Kazakhstan, 2015

	Main source of drinking water															Percentage using improved sources of drinking water <sup>1</sup>	Number of household members	
	Improved sources								Unimproved sources									
	Piped water				Tube-well/borehole	Protected well	Protected spring	Bottled water <sup>a</sup>	Unprotected well	Unprotected spring	Tanker truck	Cart with tank/drum	Surface water	Bottled water <sup>a</sup>	Other			
	Into dwelling	Into yard/plot	To neighbour	Public tap/stand-pipe														
Total	58.5	14.6	0.5	6.4	5.9	4.4	0.7	6.4	0.1	0.4	1.9	0.0	0.1	0.0	0.0	100.0	97.3	56803
<b>Region</b>																		
Akmola	52.4	0.9	0.3	20.3	11.3	5.0	3.4	6.0	0.1	0.0	0.1	0.0	0.0	0.0	0.4	100.0	99.4	2796
Aktobe	70.6	5.9	2.3	11.7	0.5	8.9	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	3580
Almaty oblast	63.6	27.0	1.4	3.5	0.9	0.4	0.7	0.6	0.1	0.3	1.4	0.0	0.0	0.1	0.0	100.0	98.2	4679
Atyrau	83.1	1.8	0.1	0.0	0.0	8.6	0.0	6.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0	100.0	99.8	1849
West Kazakhstan	52.0	0.5	0.2	7.1	12.8	3.7	0.0	3.8	0.7	0.0	18.6	0.0	0.6	0.0	0.0	100.0	80.1	2591
Zhambyl	51.7	17.8	1.0	5.6	21.4	0.9	0.0	0.2	0.0	0.0	1.5	0.0	0.0	0.0	0.0	100.0	98.5	3647
Karaganda	71.9	0.6	0.0	4.2	5.3	1.9	3.1	11.7	0.1	0.1	1.1	0.0	0.0	0.0	0.0	100.0	98.7	4630
Kostanai	59.3	0.0	0.1	13.8	7.3	3.1	0.5	6.5	0.0	0.2	8.0	0.2	0.8	0.2	0.1	100.0	90.6	2903
Kyzylorda	65.5	17.2	0.5	6.6	0.0	6.5	0.0	0.0	0.2	0.0	3.5	0.0	0.0	0.0	0.0	100.0	96.3	1893
Mangistau	59.4	2.0	0.0	0.0	0.0	38.3	0.1	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	1841
South Kazakhstan	34.2	54.7	0.5	0.7	2.3	4.7	0.4	0.2	0.1	2.1	0.0	0.0	0.0	0.0	0.0	100.0	97.8	9964
Pavlodar	70.0	2.7	0.1	4.0	12.7	4.0	0.0	1.7	0.0	0.0	3.7	0.1	0.5	0.0	0.6	100.0	95.1	2274
North Kazakhstan	37.9	0.2	0.0	33.4	14.9	6.6	0.4	4.7	0.1	0.0	1.7	0.0	0.0	0.0	0.0	100.0	98.2	1721
East Kazakhstan	64.9	2.5	0.4	13.9	14.7	1.1	0.3	1.5	0.3	0.3	0.0	0.0	0.2	0.0	0.0	100.0	99.2	4117
Astana city	57.9	0.6	0.0	2.0	0.0	0.0	0.4	39.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	4047

Almaty city	80.2	1.4	0.0	0.1	0.6	0.7	0.2	15.9	0.0	0.0	0.9	0.0	0.0	0.0	0.0	100.0	99.1	4271
<b>Area</b>																		
Urban	77.6	4.9	0.1	2.7	1.7	0.5	0.9	11.4	0.0	0.0	0.2	0.0	0.0	0.0	0.0	100.0	99.7	30222
Rural	36.8	25.6	1.0	10.6	10.7	8.9	0.4	0.7	0.2	0.9	3.9	0.0	0.2	0.0	0.1	100.0	94.6	26582
<b>Education of household head</b>																		
None/Primary	44.2	21.6	0.3	11.1	12.3	5.2	1.4	1.1	0.0	1.1	1.4	0.0	0.3	0.0	0.0	100.0	97.2	1135
Lower secondary	48.1	16.6	0.5	13.9	8.9	5.6	0.7	2.0	0.1	1.2	2.2	0.0	0.0	0.0	0.2	100.0	96.3	5704
Upper secondary	48.5	20.7	1.0	8.4	7.7	6.1	0.6	2.6	0.2	0.7	3.3	0.0	0.2	0.0	0.0	100.0	95.6	17668
Technical and Professional	63.5	13.7	0.2	5.5	4.9	4.5	0.5	5.4	0.1	0.2	1.3	0.0	0.1	0.0	0.0	100.0	98.2	18200
Higher	70.0	6.4	0.2	1.8	3.2	1.7	0.9	14.7	0.0	0.0	1.1	0.0	0.0	0.0	0.0	100.0	98.8	14030
	(16.4)	(70.4)	(0.0)	(13.2)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	(100.0)	66
<b>Wealth index quintile</b>																		
Poorest	4.5	30.6	0.9	24.7	17.1	11.6	0.7	0.1	0.5	1.9	6.7	0.0	0.5	0.0	0.2	100.0	90.3	11360
Second	33.9	36.4	1.3	6.6	10.0	7.2	0.8	0.7	0.0	0.2	2.7	0.0	0.0	0.0	0.1	100.0	96.9	11362
Middle	83.0	5.9	0.3	0.8	2.2	3.3	1.8	2.4	0.0	0.1	0.3	0.0	0.0	0.0	0.0	100.0	99.6	11364
Fourth	85.9	0.1	0.0	0.0	0.2	0.0	0.0	13.6	0.0	0.0	0.0	0.0	0.0	0.1	0.0	100.0	99.9	11357
Richest	85.1	0.0	0.0	0.0	0.0	0.0	0.0	14.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	11360
<b>Ethnicity of household head</b>																		
Kazakh	55.9	14.2	0.7	7.2	6.0	5.6	0.6	6.5	0.1	0.6	2.3	0.0	0.1	0.0	0.1	100.0	96.8	35426
Russian	72.7	2.3	0.2	6.5	6.3	1.8	1.0	7.4	0.0	0.1	1.5	0.0	0.1	0.1	0.1	100.0	98.1	11904
Other ethnic groups	50.0	31.5	0.0	3.6	5.1	3.4	0.5	4.4	0.0	0.0	1.4	0.0	0.1	0.0	0.0	100.0	98.5	9472
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	1

<sup>1</sup> MICS indicator 4.1; MDG indicator 7.8 - Use of improved drinking water sources

<sup>a</sup> Households using bottled water as the main source of drinking water are classified into improved or unimproved drinking water users according to the water source used for other purposes such as cooking and handwashing.

( ) Figures that are based on 25–49 unweighted cases.

(\*) Figures that are based on fewer than 25 unweighted cases.

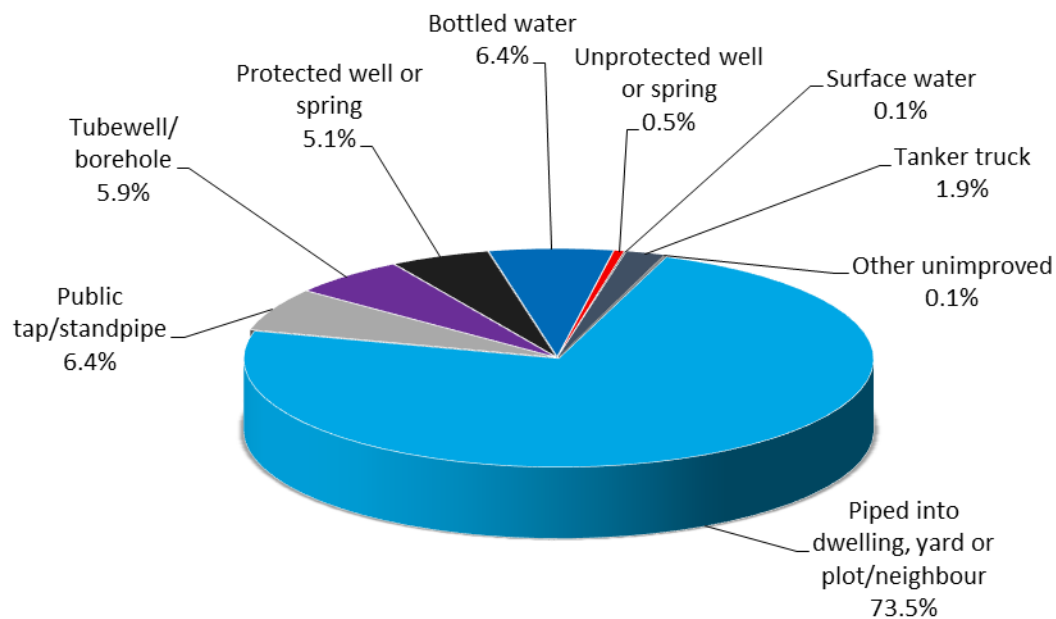
The survey findings revealed that in Kazakhstan the majority, or 97.3 percent of the population, use improved drinking water sources: 99.7 percent in urban and 94.6 percent in rural areas. The situation in the West Kazakhstan region is slightly worse than in other regions; only 80.1 percent of the population in the region have access to improved drinking water sources, and 18.6 percent of the population use the water from the tanker trucks. More favourable situation with access to improved drinking water sources is in the Aktobe and Mangistau regions and in Astana city. The main drinking water source is piped water (including public stand-pipes), which is used by almost 80 percent of the population. Out of this percentage, more than half (58.5 percent) of the population use water piped into their dwellings and 14.6 percent use water piped to the yard or plot; 6.4 percent of the population use public standpipes, and a small proportion of the population (0.5 percent) take water from their neighbours. 6.4 percent of the population use bottled water; 5.9 percent use water from tubewells/boreholes; and 5.1 percent use water from protected wells and springs. 2.7 percent of the population use unimproved sources of drinking water.

The source of drinking water for the population varies noticeably by region (Table WS.1). In the Almaty oblast, Atyrau, Kyzylorda and South Kazakhstan regions and Almaty city, more than 80 percent of the population use drinking water that is piped into their dwellings or into the yard or plot. In the South Kazakhstan region, more than half (54.7 percent) of the population use water piped into their yard or plot, and 34.2 percent – piped into the dwellings; in the North Kazakhstan region, 33.4 percent of the population use water from public stand pipes and about 38 percent – water piped into their dwellings. In Astana city, almost 40 percent of the population use bottled water, and more than half of population (57.9 percent) – use water piped into dwellings. In the Zhambyl region, 70 percent of the population consume piped water, piped into the dwelling/yard/plot and more than 20 percent of the population use water from tubewells/boreholes. In the Mangistau region, about 60 percent of the population use piped water, while about 40 percent take water from protected wells. In the West Kazakhstan region, more than half of the population use piped water (52.0 percent), 12.8 percent use water from tubewells/boreholes and 18.6 percent use water from tanker trucks (unimproved source).

There is a difference between urban and rural populations: in urban areas water piped into the dwellings is more common, while in rural areas water is more likely to be piped into the yard or plot (77.6 and 25.6 percent, respectively).

The main water sources are depicted in Figure WS.1.

**Figure WS.1: Percent distribution of household members by source of drinking water, Kazakhstan 2015**



Note: The figures do not add up to 100 percent because of rounding.

Use of household water treatment is presented in Table WS.2. Households were asked about ways they may be treating water at home to make it safer to drink. The Table shows water treatment by all household members and the percentage of those living in households using unimproved water sources but using appropriate water treatment methods.

Survey findings show that 46.4 percent of the household population that use unimproved drinking water sources also use an appropriate water treatment method. In households, the most commonly used methods of water treatment are boiling, filtration and letting it stand and settle. Boiling water, adding bleach or chlorine, using a water filter, and using solar disinfection are considered as effective treatment of drinking water. The proportion of household members applying drinking water treatment in rural areas is higher than in urban areas (47.2 and 34.2 percent, respectively). Almost a third of the population use *boiling* for water treatment, this water treatment method is often used by the population of the Kostanai and South Kazakhstan regions (80.1 and 67.8 percent, respectively). Another method of water treatment is its *filtering* using different filters, this method is used by about a quarter of the population. The use of water filters is more common among the urban population as compared to the rural population (38.3 and 11.7 percent). The regions, whose residents more often use water filters, include the Kostanai (51.6 percent), Karaganda (41.0 percent), Mangistau and Pavlodar (about 39 percent) regions, as well as citizens of Astana and Almaty cities (47.9 and 37.1 percent respectively). Another method of water treatment is *letting it stand and settle*, which is used by more than 8 percent of the population. This method is used by about the same proportion of the population both in urban and rural areas. More than half of the population of the Kostanai region use this type of treatment.

The use of certain methods of drinking water treatment are associated with the level of household wealth: for example, the use of water filters is more typical for household members from the richest



quintile than the poorest (55.3 and 5.2 percent, respectively), and the boiling method is more likely to be used by household members from the poorest households than the richest (47.4 and 27.9 percent, respectively).

Less than half (45.0 percent) of the household population from the poorest quintile using unimproved drinking water sources, use any water treatment methods.

More than one half of the population using unimproved water sources does not use any water treatment method (53.2 percent).

**Table WS.2: Household water treatment**

Percentage of household population by drinking water treatment method used in the household, and for household members living in households where an unimproved drinking water source is used, the percentage who are using an appropriate treatment method, Kazakhstan, 2015

	Water treatment method used in the household								Number of household members	Percentage of household members in households using unimproved drinking water sources and using an appropriate water treatment method <sup>1</sup>	Number of household members in households using unimproved drinking water sources
	None	Boil	Add bleach/ chlorine	Strain through a cloth/ cotton	Use water filter	Solar disinfection	Let it stand and settle	Other			
<b>Total</b>	42.6	37.3	0.1	0.4	25.8	0.0	8.1	0.2	56803	46.4	1508
<b>Region</b>											
Akmola	46.9	32.4	0.0	0.6	22.3	0.0	2.5	0.0	2796	(*)	16
Aktobe	70.0	14.3	0.0	0.2	17.0	0.0	0.5	0.3	3580	-	0
Almaty oblast	87.1	7.4	0.0	0.0	7.3	0.0	2.1	0.2	4679	18.3	86
Atyrau	32.9	47.2	0.0	1.0	20.0	0.0	3.9	0.9	1849	(*)	3
West Kazakhstan	64.8	20.8	0.9	0.4	23.0	0.3	6.7	0.0	2591	18.1	517
Zhambyl	49.4	42.2	0.0	0.0	9.1	0.0	4.3	0.0	3647	81.9	55
Karaganda	24.3	46.1	0.0	0.4	41.0	0.0	14.7	0.2	4630	(*)	58
Kostanai	8.6	80.1	0.3	0.3	51.6	0.1	51.4	0.1	2903	92.0	273
Kyzylorda	33.6	57.3	0.1	0.0	9.0	0.0	8.6	0.1	1893	71.6	69
Mangistau	39.8	34.0	0.2	7.2	39.5	0.0	7.2	0.0	1841	-	0
South Kazakhstan	24.9	67.8	0.0	0.0	12.5	0.0	4.0	0.5	9964	35.7	215
Pavlodar	19.4	49.2	0.0	0.3	39.0	0.0	16.4	0.2	2274	78.0	112
North Kazakhstan	31.8	34.7	0.1	0.3	34.4	0.0	8.1	0.4	1721	38.5	31
East Kazakhstan	49.8	21.0	0.0	0.1	30.4	0.0	10.4	0.1	4117	(*)	31
Astana city	41.2	14.8	0.2	0.1	47.9	0.0	1.4	0.0	4047	(*)	1
Almaty city	53.6	8.2	0.1	0.2	37.1	0.0	2.8	0.3	4271	(*)	40
<b>Area</b>											
Urban	37.7	31.5	0.0	0.4	38.3	0.0	7.7	0.3	30222	34.2	85
Rural	48.1	43.8	0.1	0.5	11.7	0.0	8.4	0.1	26582	47.2	1423
<b>Main source of drinking water</b>											

Improved	42.3	37.1	0.0	0.4	26.3	0.0	7.7	0.2	55296	na	na
Unimproved	53.2	45.1	1.8	0.0	8.5	0.0	20.4	0.1	1508	46.4	1508
<b>Education of household head</b>											
None/Primary	58.4	34.5	0.0	0.0	7.2	0.0	7.9	0.0	1135	(45.2)	32
Lower secondary	49.0	41.4	0.0	0.6	13.3	0.1	8.8	0.1	5704	31.0	211
Upper secondary	49.8	39.1	0.2	0.4	14.4	0.0	7.1	0.1	17668	44.3	782
Technical and Professional	38.3	39.6	0.1	0.5	29.2	0.0	9.2	0.3	18200	66.7	320
Higher	35.1	30.6	0.0	0.3	42.6	0.0	7.4	0.3	14030	37.1	163
Missing/DK	(71.8)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(28.2)	(0.0)	66	-	0
<b>Wealth index quintile</b>											
Poorest	48.2	47.4	0.0	0.3	5.2	0.0	10.3	0.2	11360	45.0	1100
Second	49.7	44.2	0.3	0.5	9.7	0.0	7.6	0.1	11362	51.0	350
Middle	47.2	37.1	0.0	0.5	21.4	0.0	6.5	0.1	11364	(55.9)	48
Fourth	39.0	29.7	0.1	0.4	37.5	0.0	7.8	0.4	11357	(*)	8
Richest	28.7	27.9	0.0	0.4	55.3	0.0	8.2	0.3	11360	(*)	2
<b>Ethnicity of household head</b>											
Kazakh	45.2	36.1	0.1	0.6	23.4	0.0	7.3	0.2	35426	40.3	1140
Russian	39.8	30.8	0.1	0.2	38.2	0.0	10.7	0.3	11904	67.2	228
Other ethnic groups	36.3	49.8	0.0	0.3	19.2	0.0	7.7	0.1	9472	62.2	140
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1	-	0

<sup>1</sup> MICS indicator 4.2 - Water treatment

na: not applicable.

( ) Figures that are based on 25–49 unweighted cases.

(\*) Figures that are based on fewer than 25 unweighted cases.

"—" denotes 0 unweighted case in that cell or in the denominator.

The amount of time it takes to collect water is presented in Table WS.3 and the persons who usually collect the water in Table WS.4. Note that for Table WS.3, household members using water on premises are also shown in this Table and for others, the 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 WS.3 shows that improved drinking water sources were on the premises for – 89.1 percent of the population

The absence of drinking water on premises or near them requires water collection leading to spending more time for a roundtrip from home to the drinking water source and back, which sometimes takes 30 minutes or more. This leads to the fact that the persons involved in water collection, each time reduce the quantity of delivered water, which, in turn, may negatively affect satisfaction of the most basic drinking water needs of the household<sup>32</sup>.

About 10 percent of household members, for whom drinking water is not available on the premises have to collect water from an outside source; this situation is inherent for 16.9 percent of rural and 4.1 percent of urban residents.

8.2 percent of household members, it takes less than 30 minutes to get to the water source (improved or unimproved) and collect water; 1.8 percent of household members spend 30 minutes and more to birng water. For 6.8 percent of the residents using improved drinking water sources it takes less than 30 minutes to collect water, and for 1.4 percent of population – 30 minutes or more. In rural areas, 14.2 percent of the population spend less than 30 minutes to collect water from improved or unimproved sources, and 2.6 percent of residents spend more than 30 minutes, the indicators for the urban population is 2.9 percent – for improved and 1.2 percent – for unimproved. Approximately 7 percent of household members in the North Kazakhstan, Akmola and Kostanai regions spend 30 minutes or more to collect drinking water from improved or unimproved sources.

<b>Table WS.3: Time to source of drinking water</b>										
Percent distribution of household population according to time to go to source of drinking water, get water and return, for users of improved and unimproved drinking water sources, Kazakhstan, 2015										
	Time to source of drinking water								Total	Number of household members
	Users of improved drinking water sources				Users of unimproved drinking water sources					
	Water on premises	Less than 30 minutes	30 minutes or more	Missing/DK	Water on premises	Less than 30 minutes	30 minutes or more	Missing/DK		
Total	89.1	6.8	1.4	0.1	0.9	1.4	0.4	0.0	100.0	56803
<b>Region</b>										
Akmola	69.0	22.9	7.3	0.2	0.1	0.2	0.3	0.0	100.0	2796
Aktobe	91.5	8.3	0.1	0.0	0.0	0.0	0.0	0.0	100.0	3580

<sup>32</sup> Cairncross, S and Cliff, JL. 1987. *Water use and Health in Mueda, Mozambique*. Transactions of the Royal Society of Tropical Medicine and Hygiene. 81: 51-4.

Almaty oblast	93.5	3.5	1.1	0.0	0.1	1.3	0.5	0.0	100.0	4679
Atyrau	99.8	0.0	0.0	0.0	0.0	0.0	0.0	0.2	100.0	1849
West Kazakhstan	68.6	10.2	1.0	0.2	14.0	5.3	0.6	0.0	100.0	2591
Zhambyl	94.4	3.7	0.1	0.2	0.0	1.5	0.0	0.0	100.0	3647
Karaganda	89.7	6.6	2.5	0.0	0.6	0.5	0.1	0.0	100.0	4630
Kostanai	71.5	15.7	3.4	0.0	0.0	6.4	3.1	0.0	100.0	2903
Kyzylorda	92.7	3.4	0.2	0.0	3.2	0.5	0.0	0.0	100.0	1893
Mangistau	99.7	0.3	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1841
South Kazakhstan	95.6	1.7	0.4	0.1	0.1	1.5	0.6	0.0	100.0	9964
Pavlodar	89.3	4.8	0.7	0.2	0.2	3.6	1.1	0.0	100.0	2274
North Kazakhstan	48.3	42.1	7.7	0.1	0.1	1.7	0.0	0.0	100.0	1721
East Kazakhstan	87.0	10.8	1.4	0.0	0.3	0.4	0.0	0.0	100.0	4117
Astana city	97.6	1.7	0.7	0.0	0.0	0.0	0.0	0.0	100.0	4047
Almaty city	98.4	0.1	0.5	0.0	0.0	0.5	0.4	0.0	100.0	4271
<b>Area</b>										
Urban	95.9	2.7	1.1	0.0	0.0	0.2	0.1	0.0	100.0	30222
Rural	81.3	11.5	1.8	0.1	1.8	2.7	0.8	0.0	100.0	26582
<b>Education of household head</b>										
None/Primary	80.9	13.2	2.9	0.2	0.1	2.3	0.3	0.0	100.0	1135
Lower secondary	80.4	13.1	2.6	0.2	0.6	2.3	0.8	0.0	100.0	5704
Upper secondary	85.2	9.0	1.3	0.0	1.9	1.8	0.7	0.0	100.0	17668
Technical and Professional	90.8	5.8	1.5	0.1	0.3	1.1	0.3	0.0	100.0	18200
Higher	95.8	2.2	0.8	0.0	0.4	0.6	0.1	0.0	100.0	14030
Missing/DK	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	66
<b>Wealth index quintile</b>										
Poorest	61.1	25.1	3.8	0.2	2.9	5.1	1.7	0.0	100.0	11360
Second	87.9	7.3	1.6	0.1	1.2	1.5	0.3	0.0	100.0	11362
Middle	96.4	1.6	1.7	0.0	0.2	0.1	0.1	0.0	100.0	11364
Fourth	99.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	11357
Richest	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	11360
<b>Ethnicity of household head</b>										
Kazakh	87.8	7.5	1.4	0.1	1.2	1.5	0.5	0.0	100.0	35426
Russian	89.5	7.0	1.6	0.0	0.4	1.1	0.4	0.0	100.0	11904
Other ethnic groups	93.2	3.9	1.3	0.0	0.2	1.1	0.2	0.0	100.0	9472
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	1
( ) Figures that are based on 25–49 unweighted cases.										
(*) Figures that are based on fewer than 25 unweighted cases.										

Table WS.4 presents data on persons collecting water. The survey findings show that in the majority of households where the water source is located outside the dwelling or yard/plot, more often the drinking water collection is performed by an adult man (62.6 percent), while in every third household it is an adult woman (33.2 percent). In 3.5 percent of households, the responsibility to collect water lies with children under the age of 15 years, with the proportion of girls and boys being 0.9 and 2.7 percent respectively. In rural areas, adult men collect water in 59.0 percent of cases, while for the rest of the households, adult women (35.9 percent) and male or female children under the age of 15 years (3.3 and 1.1 percent respectively) collect water. In urban areas, the percentage of households where adult men collect water is slightly higher (74.2 percent). The higher the education level of household heads, the less women and children under 15 years are involved in the process of drinking water collection from the outside: in more than 50 percent of households whose household heads have no education or primary education, most often the water collection is performed by adult woman, while in households where the household head has higher education, 22.4 percent of women are engaged in water collection.

**Table WS.4: Person collecting water**

Percentage of households without drinking water on premises, and percent distribution of households without drinking water on premises according to the person usually collecting drinking water used in the household, Kazakhstan, 2015

	Percentage of households without drinking water on premises	Number of households	Person usually collecting drinking water							Total	Number of households without drinking water on premises
			Adult woman	Adult man	Female child under age 15	Male child under age 15	DK	Missing			
<b>Total</b>	10.1	16500	33.2	62.6	0.9	2.7	0.0	0.6	100.0	1663	
<b>Region</b>											
Akmola	28.7	944	32.0	64.4	0.7	1.8	0.2	1.0	100.0	270	
Aktobe	8.6	983	(27.9)	(72.1)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	85	
Almaty oblast	6.4	1260	17.8	74.8	0.0	7.4	0.0	0.0	100.0	80	
Atyrau	0.2	456	(*)	(*)	(*)	(*)	(*)	(*)	100.0	1	
West Kazakhstan	15.0	764	29.9	65.8	3.8	0.0	0.0	0.5	100.0	115	
Zhambyl	4.9	880	(54.4)	(43.4)	(0.0)	(0.0)	(0.0)	(2.2)	100.0	43	
Karaganda	8.2	1614	22.0	76.0	0.0	1.9	0.0	0.0	100.0	133	
Kostanai	24.0	978	31.9	66.2	0.5	1.2	0.0	0.2	100.0	235	
Kyzylorda	5.2	402	(62.8)	(34.4)	(2.8)	(0.0)	(0.0)	(0.0)	100.0	21	
Mangistau	0.3	412	(*)	(*)	(*)	(*)	(*)	(*)	100.0	1	
South Kazakhstan	4.0	2055	(53.7)	(18.0)	(4.6)	(18.9)	(0.0)	(4.9)	100.0	83	
Pavlodar	8.9	829	20.4	77.6	0.0	2.0	0.0	0.0	100.0	74	
North Kazakhstan	48.8	645	35.8	61.4	0.3	2.4	0.0	0.0	100.0	315	
East Kazakhstan	10.2	1523	40.3	56.1	0.7	2.1	0.0	0.7	100.0	155	
Astana city	2.3	1310	(60.2)	(39.8)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	30	
Almaty city	1.5	1445	(*)	(*)	(*)	(*)	(*)	(*)	100.0	22	
<b>Area</b>											
Urban	3.9	9967	24.5	74.2	0.0	0.7	0.0	0.6	100.0	391	
Rural	19.5	6533	35.9	59.0	1.1	3.3	0.0	0.6	100.0	1272	
<b>Education of household head</b>											
None/Primary	20.6	331	50.4	46.9	0.0	2.7	0.0	0.0	100.0	68	
Lower secondary	18.9	1659	35.2	60.6	0.9	2.5	0.1	0.7	100.0	313	
Upper secondary	13.6	4475	35.0	60.3	1.2	3.3	0.0	0.2	100.0	610	

Technical and Professional	9.0	5574	31.1	64.7	0.8	2.3	0.0	1.1	100.0	504
Higher	3.8	4453	22.4	74.6	0.0	1.6	0.0	1.3	100.0	168
Missing/DK	(*)	8	-	-	-	-	-	-	0.0	0
<b>Wealth index quintile</b>										
Poorest	40.2	3035	37.2	58.4	0.7	3.0	0.0	0.7	100.0	1219
Second	12.4	2646	24.1	71.7	1.7	2.3	0.0	0.3	100.0	329
Middle	3.6	3109	18.2	81.1	0.0	0.0	0.0	0.7	100.0	113
Fourth	0.0	3979	(*)	(*)	(*)	(*)	(*)	(*)	100.0	2
Richest	0.0	3731	(*)	(*)	(*)	(*)	(*)	(*)	100.0	
<b>Ethnicity of household head</b>										
Kazakh	11.0	9124	31.4	63.5	0.9	3.3	0.0	0.9	100.0	1008
Russian	9.0	4811	33.3	64.6	0.0	1.9	0.0	0.3	100.0	431
Other ethnic groups	8.7	2564	41.6	54.4	2.2	1.4	0.0	0.3	100.0	224
Missing/DK	(*)	1	-	-	-	-	-	-	0.0	0

( ) Figures that are based on 25–49 unweighted cases.

(\*) Figures that are based on fewer than 25 unweighted cases.

"-" denotes 0 unweighted case in that cell or in the denominator.

## ***Access to Improved Sanitation***

Lack of access for part of the population to improved sanitation and clean water is one of the factors of the spread of intestinal infections that cause various diseases, one of which is diarrhoea. Diarrhoea is a symptom of infections caused by a wide range of bacteria, viruses and parasites, most of which are spread through water contaminated with fecal matter. Infections are most common where there is a shortage of clean water for drinking, cooking and personal hygiene.

An improved sanitation facility is defined as one that hygienically prevents human contact with human excreta. Improved sanitation facilities for excreta disposal include flush or pour flush to a piped sewer system, septic tank, or pit latrine; ventilated improved pit latrine, pit latrine with slab, etc. The data on the use of improved sanitation facilities in Kazakhstan are provided in Table WS.5.

Overall, 99.9 percent of Kazakhstan's population live in households using improved sanitation facilities, while with no notable differences by background characteristics (Table WS.5). The Table shows that, overall, 48.1 percent of the population use flush or pour flush toilet facilities, and 51.8 percent use pit latrines with slabs or ventilated improved pit latrines. In urban areas, more than 68 percent of the population use facilities that flush to a piped sewer system, while in rural areas 85.5 percent of the population use pit latrines with slabs or ventilated improved pit latrines. More than 90 percent of the population of Astana city and about 70-80 percent of the population of the Pavlodar and Karaganda regions and Almaty city use flush or pour flush to a piped sewer system, compared to less than 20 percent of the population of the South Kazakhstan, Kyzylorda, Zhambyl regions and Almaty oblast, using this type of sanitation facility. In the Kyzylorda and South Kazakhstan regions, more than 80 percent of the population use pit latrines with slabs or ventilated improved pit latrines, in Astana city only 5.9 percent of the population use these types of toilet facilities. Pit latrines with slabs or ventilated improved pit latrines are more commonly used by household members living in households of the poorest and middle wealth quintiles, while flush/pour flush toilet facilities are more common for those living in the richest wealth quintile.



**Table WS.5: Types of sanitation facilities**

Percent distribution of household population according to type of toilet facility used by the household, Kazakhstan, 2015

	Type of toilet facility used by household											Number of household members	
	Improved sanitation facility					Unimproved sanitation facility							
	Flush/Pour flush to:					Pit latrine with slab or Ventilated improved pit latrine <sup>33</sup>	Flush/Pour flush to somewhere else	Pit latrine without slab/open pit	Other	Missing/DK	Open defecation (no facility, bush, field)		Total
	Piped sewer system	Septic tank	Pit latrine	Unknown place/not sure/DK where									
Total	38.3	9.1	0.6	0.0	51.8	0.0	0.0	0.0	0.0	0.0	100.0	56803	
<b>Region</b>													
Akmola	24.9	21.0	1.9	0.0	52.0	0.0	0.0	0.0	0.0	0.2	100.0	2796	
Aktobe	31.2	4.7	3.1	0.0	60.9	0.0	0.0	0.0	0.2	0.0	100.0	3580	
Almaty oblast	19.1	17.7	3.0	0.2	59.9	0.0	0.0	0.0	0.0	0.0	100.0	4679	
Atyrau	37.1	10.1	0.0	0.0	52.8	0.0	0.0	0.0	0.0	0.0	100.0	1849	
West Kazakhstan	24.1	11.0	0.0	0.0	64.9	0.0	0.0	0.0	0.0	0.0	100.0	2591	
Zhambyl	17.7	11.2	0.0	0.0	71.1	0.0	0.0	0.0	0.0	0.0	100.0	3647	
Karaganda	68.8	7.9	0.3	0.0	23.1	0.0	0.0	0.0	0.0	0.0	100.0	4630	
Kostanai	47.7	16.3	0.0	0.0	36.0	0.0	0.0	0.0	0.0	0.0	100.0	2903	
Kyzylorda	12.3	4.0	0.0	0.0	83.6	0.0	0.1	0.0	0.1	0.0	100.0	1893	
Mangistau	41.3	0.9	0.3	0.0	57.5	0.0	0.0	0.0	0.0	0.0	100.0	1841	
South Kazakhstan	10.4	7.2	0.0	0.0	82.3	0.0	0.0	0.0	0.1	0.0	100.0	9964	
Pavlodar	65.9	3.4	0.7	0.0	30.0	0.0	0.0	0.0	0.0	0.0	100.0	2274	
North Kazakhstan	29.7	7.9	0.0	0.0	61.2	0.0	0.0	0.5	0.2	0.4	100.0	1721	
East Kazakhstan	45.0	4.6	0.6	0.0	49.7	0.1	0.0	0.0	0.0	0.0	100.0	4117	
Astana city	92.1	2.1	0.0	0.0	5.9	0.0	0.0	0.0	0.0	0.0	100.0	4047	

<sup>33</sup> In connection with the erroneous classification in Aktobe region of 60.1 percent of pit latrines with slabs as ventilated improved pit latrines, these 2 types of toilet facilities are combined into one category for all characteristics.

Almaty city	68.0	13.5	0.0	0.0	18.3	0.0	0.0	0.1	0.1	0.0	100.0	4271
<b>Area</b>												
Urban	68.2	9.1	0.3	0.0	22.2	0.0	0.0	0.0	0.1	0.0	100.0	30222
Rural	4.3	9.1	1.0	0.0	85.5	0.0	0.0	0.0	0.0	0.0	100.0	26582
<b>Education of household head</b>												
None/Primary	17.5	4.6	0.0	0.1	77.7	0.0	0.0	0.0	0.0	0.0	100.0	1135
Lower secondary	20.4	6.9	1.0	0.0	71.6	0.0	0.0	0.0	0.0	0.0	100.0	5704
Upper secondary	19.9	7.8	0.7	0.0	71.4	0.0	0.0	0.0	0.0	0.0	100.0	17668
Technical and Professional	42.8	9.8	0.6	0.0	46.7	0.0	0.0	0.0	0.1	0.0	100.0	18200
Higher	64.7	11.1	0.6	0.0	23.5	0.0	0.0	0.0	0.1	0.0	100.0	14030
Missing/DK	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	66
<b>Wealth index quintile</b>												
Poorest	0.1	0.4	0.3	0.0	99.0	0.0	0.0	0.1	0.0	0.1	100.0	11360
Second	1.4	3.3	1.2	0.0	94.0	0.0	0.0	0.0	0.0	0.0	100.0	11362
Middle	16.6	22.3	0.7	0.0	60.3	0.0	0.0	0.0	0.1	0.0	100.0	11364
Fourth	76.1	17.2	0.9	0.1	5.6	0.1	0.0	0.0	0.1	0.0	100.0	11357
Richest	97.3	2.3	0.2	0.0	0.2	0.0	0.0	0.0	0.0	0.0	100.0	11360
<b>Ethnicity of household head</b>												
Kazakh	35.1	8.0	0.7	0.0	56.1	0.0	0.0	0.0	0.0	0.0	100.0	35426
Russian	59.1	10.4	0.6	0.1	29.7	0.0	0.0	0.1	0.0	0.0	100.0	11904
Other ethnic groups	23.9	11.7	0.4	0.0	63.9	0.0	0.0	0.0	0.1	0.1	100.0	9472
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	1

( ) Figures that are based on 25–49 unweighted cases.

(\*) Figures that are based on fewer than 25 unweighted cases.

The MDGs, up to 2015, and the WHO / UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation classify otherwise acceptable sanitation facilities which are public or shared between two or more households as unimproved. Therefore, “use of improved sanitation” is used both in the context of this report and as an MDG indicator to refer to improved sanitation facilities, which are not public or shared. Data on the use of improved sanitation is presented in Tables WS.6 and WS.7.

As shown in Table WS.6, 99.9 percent of the household population use an improved sanitation facility. 98.0 percent of the population do not share such sanitation facilities with members of other households. Only about 2 percent of households use improved toilet facilities that are public or shared with other households. Urban residents are slightly more likely to use shared toilet facilities of an improved type than rural citizens (2.8 and 0.8 percent, respectively). Across regions, the largest proportion of the household population using improved toilet facilities that are shared is found in Astana city, where 6.4 percent use public facilities and 5.8 percent share facilities with other households. Figure WS.2 presents the distribution of the population by use and sharing of sanitation facilities.

<b>Table WS.6: Use and sharing of sanitation facilities</b>									
Percent distribution of household population by use of private and public sanitation facilities and use of shared facilities, by users of improved and unimproved sanitation facilities, Kazakhstan, 2015									
	Users of improved sanitation facilities					Users of unimproved sanitation facilities		Total	Number of household members
	Not shared <sup>1</sup>	Public facility	Shared by:			Not shared	Open defecation (no facility, bush, field)		
			5 households or less	More than 5 households	Missing/DK				
<b>Total</b>	98.0	0.5	0.8	0.5	0.0	0.1	0.0	100.0	56803
<b>Region</b>									
Akmola	99.5	0.0	0.3	0.0	0.0	0.0	0.2	100.0	2796
Aktobe	97.3	0.0	0.1	2.4	0.0	0.2	0.0	100.0	3580
Almaty oblast	99.8	0.0	0.1	0.1	0.0	0.0	0.0	100.0	4679
Atyrau	99.7	0.0	0.3	0.0	0.0	0.0	0.0	100.0	1849
West Kazakhstan	95.4	0.8	3.6	0.2	0.0	0.0	0.0	100.0	2591
Zhambyl	99.3	0.1	0.0	0.6	0.0	0.0	0.0	100.0	3647
Karaganda	99.9	0.0	0.1	0.0	0.0	0.0	0.0	100.0	4630
Kostanai	98.8	0.0	1.1	0.1	0.0	0.0	0.0	100.0	2903
Kyzylorda	98.2	0.8	0.6	0.1	0.0	0.2	0.0	100.0	1893
Mangistau	98.6	0.2	0.8	0.4	0.0	0.0	0.0	100.0	1841
South Kazakhstan	98.5	0.0	0.9	0.4	0.1	0.1	0.0	100.0	9964
Pavlodar	99.9	0.0	0.1	0.0	0.0	0.0	0.0	100.0	2274
North Kazakhstan	97.6	0.0	0.7	0.5	0.0	0.7	0.4	100.0	1721
East Kazakhstan	99.2	0.0	0.2	0.1	0.3	0.1	0.0	100.0	4117

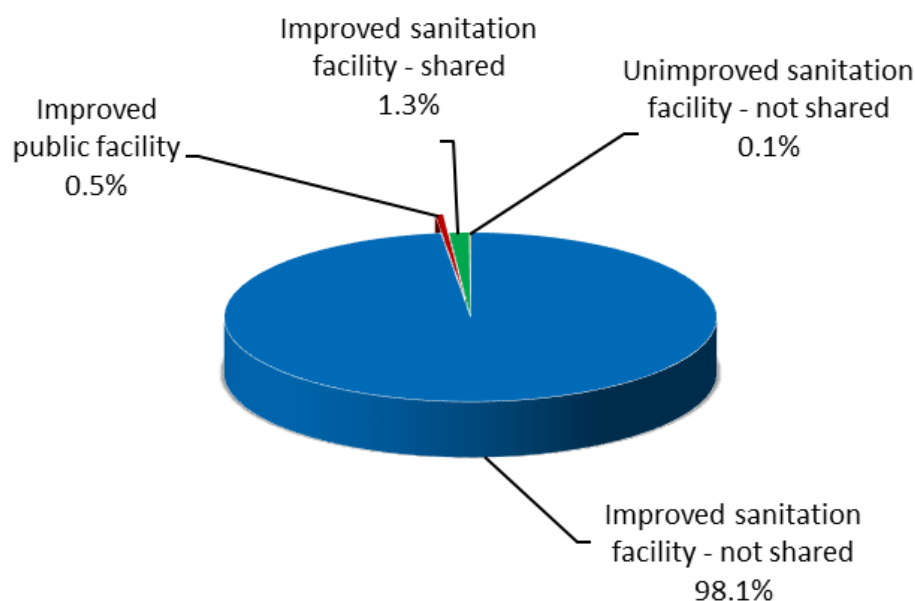
Astana city	87.9	6.4	3.8	2.0	0.0	0.0	0.0	100.0	4047
Almaty city	98.6	0.0	1.0	0.1	0.1	0.2	0.0	100.0	4271
<b>Area</b>									
Urban	97.1	0.9	1.2	0.7	0.0	0.1	0.0	100.0	30222
Rural	99.0	0.1	0.4	0.2	0.1	0.1	0.0	100.0	26582
<b>Education of household head</b>									
None/Primary	99.9	0.0	0.1	0.0	0.0	0.0	0.0	100.0	1135
Lower secondary	98.2	0.1	1.1	0.5	0.0	0.0	0.0	100.0	5704
Upper secondary	97.5	0.8	1.0	0.5	0.1	0.1	0.0	100.0	17668
Technical and Professional	97.8	0.4	1.0	0.6	0.0	0.1	0.0	100.0	18200
Higher	98.6	0.6	0.5	0.3	0.0	0.1	0.0	100.0	14030
Missing/DK	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	66
<b>Wealth index quintile</b>									
Poorest	98.1	0.1	0.9	0.6	0.2	0.1	0.1	100.0	11360
Second	98.6	0.4	0.5	0.4	0.0	0.1	0.0	100.0	11362
Middle	97.7	0.2	1.4	0.6	0.0	0.1	0.0	100.0	11364
Fourth	96.9	1.2	1.2	0.6	0.0	0.1	0.0	100.0	11357
Richest	98.7	0.8	0.2	0.2	0.0	0.0	0.0	100.0	11360
<b>Ethnicity of household head</b>									
Kazakh	97.5	0.7	1.0	0.6	0.1	0.1	0.0	100.0	35426
Russian	98.8	0.1	0.8	0.2	0.0	0.1	0.0	100.0	11904
Other ethnic groups	98.8	0.5	0.2	0.3	0.0	0.1	0.1	100.0	9472
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	1

<sup>1</sup> MICS indicator 4.3; MDG indicator 7.9 - Use of improved sanitation

( ) Figures that are based on 25–49 unweighted cases.

(\*) Figures that are based on fewer than 25 unweighted cases.

**Figure WS.2: Percent distribution of household members by use and sharing of sanitation facilities, Kazakhstan 2015**



Having access to both an improved drinking water source and an improved sanitation facility brings the largest public health benefits to a household.<sup>34</sup> In its 2008 report<sup>35</sup>, the JMP developed a new way of presenting the access figures, by disaggregating and refining the data on drinking-water and sanitation and reflecting them in "ladder" format. This ladder allows for a disaggregated analysis of trends in a three rung ladder for drinking-water and a four-rung ladder for sanitation. For sanitation, this gives an understanding of the proportion of the population a) with no sanitation facilities at all, b) of those using sanitation facilities defined by JMP as "unimproved," c) of those sharing sanitation facilities of otherwise acceptable technology, and d) those using "improved" sanitation facilities.

Table WS.7 presents the percentage of household population by "Drinking water" and "Sanitation" ladders. The table also shows the percentage of household members using both improved sources of drinking water<sup>36</sup> and an improved sanitary means of excreta disposal. Table WS.7 shows that in Kazakhstan, 97.3 percent of households have access to improved sources of drinking water and 98.0 percent of households have access to improved sanitation. Countrywide, 95.4 percent of the population have access to improved sources of drinking water and improved sanitation. The proportion of the urban population using improved sources of drinking water and sanitation is slightly higher than the proportion of rural residents (96.8 and 93.8 percent, respectively). The availability of

<sup>34</sup> Wolf, J et al. 2014. *Systematic review: Assessing the impact of drinking water and sanitation on diarrhoeal disease in low- and middle-income settings: systematic review and meta-regression*. Tropical Medicine and International Health 2014.

DfID. 2013. *Water, Sanitation and Hygiene: Evidence Paper*. DfID: <http://r4d.dfid.gov.uk/pdf/outputs/sanitation/WASH-evidence-paper-april2013.pdf>.

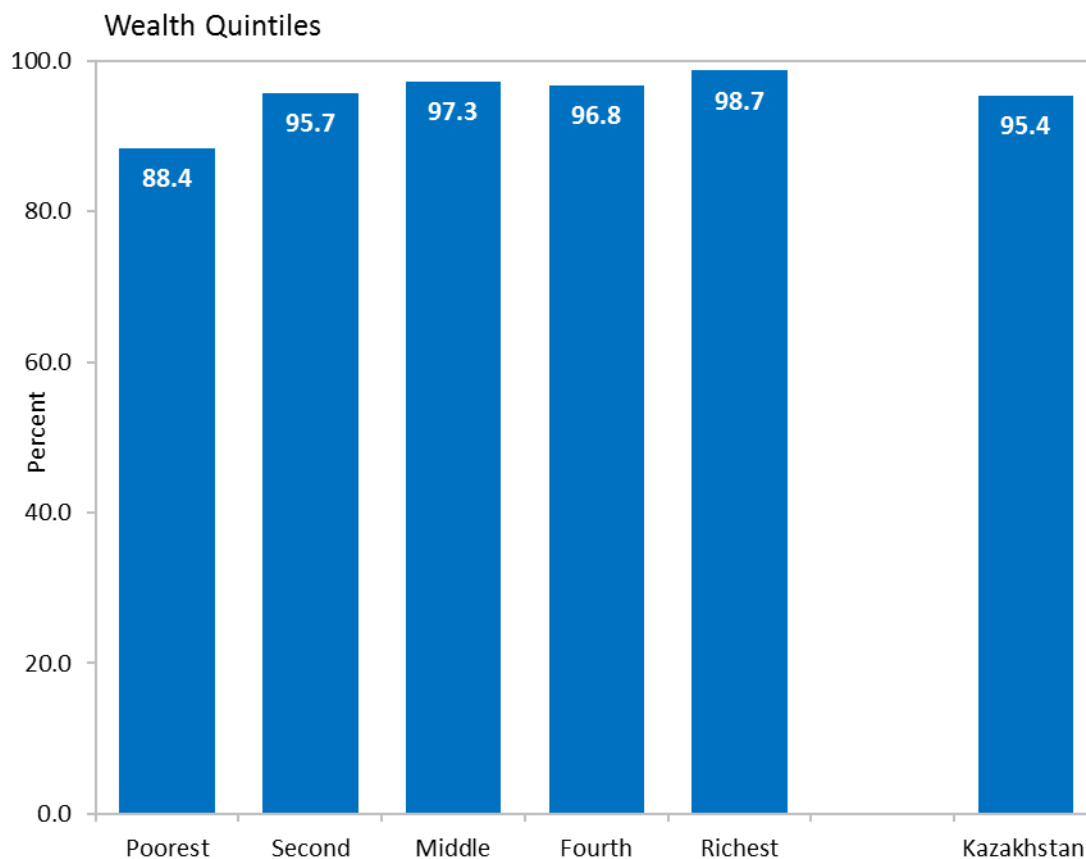
<sup>35</sup> WHO/UNICEF JMP. 2008. *MDG assessment report*. [http://www.wssinfo.org/fileadmin/user\\_upload/resources/1251794333-JMP\\_08\\_en.pdf](http://www.wssinfo.org/fileadmin/user_upload/resources/1251794333-JMP_08_en.pdf).

<sup>36</sup> Those indicating bottled water as the main source of drinking water are distributed according to the water source used for other purposes such as cooking and handwashing.

improved sources of drinking water and improved sanitation is higher in the population living in households in the richest quintile (98.7 percent) than in the poorest quintile (88.4 percent). In the West Kazakhstan region, the proportion of the population with access to improved drinking water and sanitation is only 76.2 percent, which is below the national average by 19.2 percentage points.

These results are presented by wealth quintiles in Figure WS.3.

**Figure WS.3: Percentages of household members using improved drinking water sources and improved sanitation, by wealth quintiles, Kazakhstan, 2015**



**Table WS.7: Drinking water and sanitation ladders**

Percentage of household population by drinking water and sanitation ladders, Kazakhstan, 2015

	Percentage of household population using:										Number of household members
	Improved drinking water <sup>1, a</sup>				Improved sanitation <sup>2</sup>	Unimproved sanitation			Improved drinking water sources and improved sanitation		
	Piped into dwelling, yard or plot	Other improved	Unimproved drinking water	Total		Shared improved facilities	Unimproved facilities	Open defecation		Total	
<b>Total</b>	79.2	18.1	2.7	100.0	98.0	1.9	0.1	0.0	100.0	95.4	56803
<b>Region</b>											
Akmola	58.1	41.3	0.6	100.0	99.5	0.3	0.0	0.2	100.0	98.9	2796
Aktobe	76.6	23.4	0.0	100.0	97.3	2.5	0.2	0.0	100.0	97.3	3580
Almaty oblast	91.2	7.0	1.8	100.0	99.8	0.2	0.0	0.0	100.0	98.0	4679
Atyrau	91.1	8.8	0.2	100.0	99.7	0.3	0.0	0.0	100.0	99.5	1849
West Kazakhstan	56.1	23.9	19.9	100.0	95.4	4.6	0.0	0.0	100.0	76.2	2591
Zhambyl	69.7	28.8	1.5	100.0	99.3	0.7	0.0	0.0	100.0	97.8	3647
Karaganda	83.9	14.9	1.3	100.0	99.9	0.1	0.0	0.0	100.0	98.7	4630
Kostanai	65.8	24.8	9.4	100.0	98.8	1.2	0.0	0.0	100.0	89.4	2903
Kyzylorda	82.7	13.6	3.7	100.0	98.2	1.6	0.2	0.0	100.0	94.6	1893
Mangistau	61.6	38.4	0.0	100.0	98.6	1.4	0.0	0.0	100.0	98.6	1841
South Kazakhstan	89.2	8.7	2.2	100.0	98.5	1.4	0.1	0.0	100.0	96.4	9964
Pavlodar	74.1	21.0	4.9	100.0	99.9	0.1	0.0	0.0	100.0	95.1	2274
North Kazakhstan	42.5	55.7	1.8	100.0	97.6	1.2	0.7	0.4	100.0	95.8	1721
East Kazakhstan	68.9	30.4	0.8	100.0	99.2	0.6	0.1	0.0	100.0	98.5	4117
Astana city	96.7	3.3	0.0	100.0	87.9	12.1	0.0	0.0	100.0	87.9	4047
Almaty city	97.4	1.7	0.9	100.0	98.6	1.2	0.2	0.0	100.0	97.7	4271
<b>Area</b>											

Urban	93.6	6.1	0.3	100.0	97.1	2.8	0.1	0.0	100.0	96.8	30222
Rural	62.9	31.8	5.4	100.0	99.0	0.9	0.1	0.0	100.0	93.8	26582
<b>Education of household head</b>											
None/Primary	66.6	30.6	2.8	100.0	99.9	0.1	0.0	0.0	100.0	97.1	1135
Lower secondary	66.4	29.9	3.7	100.0	98.2	1.7	0.0	0.0	100.0	94.5	5704
Upper secondary	71.6	23.9	4.4	100.0	97.5	2.4	0.1	0.0	100.0	93.2	17668
Technical and Professional	82.4	15.8	1.8	100.0	97.8	2.0	0.1	0.0	100.0	96.1	18200
Higher	90.9	8.0	1.2	100.0	98.6	1.3	0.1	0.0	100.0	97.4	14030
Missing/DK	(86.8)	(13.2)	(0.0)	100.0	(100.0)	(0.0)	(0.0)	(0.0)	100.0	(100.0)	66
<b>Wealth index quintile</b>											
Poorest	35.1	55.2	9.7	100.0	98.1	1.7	0.1	0.1	100.0	88.4	11360
Second	70.5	26.4	3.1	100.0	98.6	1.3	0.1	0.0	100.0	95.7	11362
Middle	91.0	8.6	0.4	100.0	97.7	2.2	0.1	0.0	100.0	97.3	11364
Fourth	99.6	0.3	0.1	100.0	96.9	3.0	0.1	0.0	100.0	96.8	11357
Richest	100.0	0.0	0.0	100.0	98.7	1.3	0.0	0.0	100.0	98.7	11360
<b>Ethnicity of household head</b>											
Kazakh	76.5	20.3	3.2	100.0	97.5	2.4	0.1	0.0	100.0	94.3	35426
Russian	82.2	15.9	1.9	100.0	98.8	1.1	0.1	0.0	100.0	96.9	11904
Other ethnic groups	85.7	12.9	1.5	100.0	98.8	1.0	0.1	0.1	100.0	97.5	9472
Missing/DK	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	100.0	(*)	1

<sup>1</sup> MICS indicator 4.1; MDG indicator 7.8 - Use of improved drinking water sources

<sup>2</sup> MICS indicator 4.3; MDG indicator 7.9 - Use of improved sanitation

<sup>a</sup> Those indicating bottled water as the main source of drinking water are distributed according to the water source used for other purposes such as cooking and handwashing

( ) Figures that are based on 25–49 unweighted cases.

(\*) Figures that are based on fewer than 25 unweighted cases.



## **Handwashing**

Handwashing with water and soap is the most cost effective health intervention to reduce both the incidence of diarrhoea and pneumonia in children under five<sup>37</sup>. It is most effective when done using water and soap after each visit to a toilet, before handling food, before feeding a child or washing the child's hands before eating. Monitoring correct handwashing behaviour at these critical times is challenging. A reliable alternative to observations or self-reported behaviour is assessing the likelihood that correct handwashing behaviour takes place by checking the availability of a specific place where people wash their hands and observing whether water and soap (or other local cleansing materials) are available at this place<sup>38</sup>.

During the survey, interviewers were able to observe a specific place for handwashing in 97.3 percent of households (96.6 percent in urban and 98.4 percent in rural areas). In households from the Almaty oblast and Almaty city, the interviewers were able to see a specific place for handwashing only in 93 percent of households (93.0 and 93.3 percent respectively). In 0.2 percent of households, there was no specific place for handwashing in dwelling yard or plot.

2.5 percent of households were not able or refused to show the place for handwashing (Table WS.8). Almost every household (99.0 percent) had both water and soap at the specific place for handwashing. Availability of a place for handwashing, availability of water and soap do not depend on region of residence, type of area, educational level of the household head or household wealth.

In households where interviewers observed a place for handwashing, in 96.7 percent of households the interviewers observed the soap, in 0.5 percent of households they were shown the soap by the household members, while 0.1 percent of households had no soap. In those households where interviewers did not observe a place for handwashing, 0.8 percent of households showed them the soap; and in 1.8 percent of households interviewers were not able to observe or household members refused to show the soap. In total, 97.9 percent of the country's households have soap for handwashing, with no notable differences by background characteristics (Table WS.9).

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<sup>37</sup> Cairncross, S and Valdmanis, V. 2006. *Water supply, sanitation and hygiene promotion* Chapter 41 in *Disease Control Priorities in Developing Countries*. 2<sup>nd</sup> Edition, Edt. Jameson et al. The World Bank.

<sup>38</sup> Ram, P et al. editors. 2008. *Use of a novel method to detect reactivity to structured observation for measurement of handwashing behavior*. American Society of Tropical Medicine and Hygiene.

**Table WS.8: Water and soap at place for handwashing**

Percentage of households where place for handwashing was observed, percentage with no specific place for handwashing, and percent distribution of households by availability of water and soap at specific place for handwashing, Kazakhstan, 2015

	<u>Percentage of households:</u>			<u>Place for handwashing observed</u>					Total	Percentage of households with a specific place for handwashing where water and soap are present <sup>1</sup>	Number of households where place for handwashing was observed or with no specific place for handwashing in the dwelling, yard, or plot
	Where place for handwashing was observed	With no specific place for handwashing in the dwelling, yard, or plot	Number of households	<u>Water is available and:</u>		<u>Water is not available and:</u>		No specific place for handwashing in the dwelling, yard, or plot			
				Soap present	No soap present	Soap present	No soap present				
<b>Total</b>	97.3	0.2	16500	99.0	0.6	0.2	0.0	0.2	100.0	99.0	16088
<b>Region</b>											
Akmola	99.0	0.1	944	99.5	0.0	0.3	0.1	0.1	100.0	99.5	936
Aktobe	99.9	0.0	983	95.6	4.4	0.0	0.0	0.0	100.0	95.6	982
Almaty oblast	93.0	1.7	1260	98.0	0.0	0.1	0.0	1.8	100.0	98.0	1194
Atyrau	99.2	0.0	456	100.0	0.0	0.0	0.0	0.0	100.0	100.0	452
West Kazakhstan	98.8	0.0	764	99.2	0.8	0.0	0.0	0.0	100.0	99.2	755
Zhambyl	98.7	0.0	880	99.9	0.1	0.0	0.0	0.0	100.0	99.9	869
Karaganda	97.4	0.0	1614	99.9	0.1	0.0	0.0	0.0	100.0	99.9	1572
Kostanai	96.4	0.0	978	99.5	0.5	0.0	0.0	0.0	100.0	99.5	943
Kyzylorda	99.8	0.0	402	99.3	0.6	0.0	0.1	0.0	100.0	99.3	401
Mangistau	97.0	0.0	412	96.9	3.1	0.0	0.0	0.0	100.0	96.9	399
South Kazakhstan	97.9	0.0	2055	98.9	0.8	0.3	0.0	0.0	100.0	98.9	2013
Pavlodar	99.4	0.0	829	99.7	0.1	0.2	0.0	0.0	100.0	99.7	825
North Kazakhstan	98.5	0.1	645	96.6	0.7	2.3	0.3	0.1	100.0	96.6	636
East Kazakhstan	99.2	0.0	1523	100.0	0.0	0.0	0.0	0.0	100.0	100.0	1511
Astana city	95.3	0.3	1310	99.4	0.1	0.2	0.0	0.3	100.0	99.4	1252
Almaty city	93.3	0.0	1445	99.1	0.3	0.3	0.2	0.0	100.0	99.1	1349
<b>Area</b>											
Urban	96.6	0.0	9967	99.2	0.6	0.2	0.0	0.0	100.0	99.2	9636
Rural	98.4	0.4	6533	98.6	0.7	0.3	0.0	0.4	100.0	98.6	6452
<b>Education of household head</b>											

None/Primary	97.4	0.0	331	98.8	0.6	0.7	0.0	0.0	100.0	98.8	322
Lower secondary	97.8	0.1	1659	98.5	0.9	0.4	0.1	0.1	100.0	98.5	1625
Upper secondary	97.6	0.2	4475	99.0	0.6	0.2	0.0	0.2	100.0	99.0	4377
Technical and Professional	97.2	0.2	5574	98.8	0.8	0.2	0.0	0.3	100.0	98.8	5432
Higher	97.0	0.1	4453	99.5	0.3	0.1	0.1	0.1	100.0	99.5	4323
Missing/DK	(*)	(*)	8	(*)	(*)	(*)	(*)	(*)	100.0	(*)	8
<b>Wealth index quintile</b>											
Poorest	98.0	0.3	3035	97.9	0.9	0.7	0.2	0.3	100.0	97.9	2983
Second	98.3	0.1	2646	99.2	0.4	0.3	0.0	0.1	100.0	99.2	2605
Middle	97.3	0.3	3109	98.8	0.8	0.1	0.0	0.3	100.0	98.8	3035
Fourth	96.6	0.1	3979	99.0	0.9	0.0	0.0	0.1	100.0	99.0	3847
Richest	96.9	0.1	3731	99.8	0.1	0.0	0.0	0.1	100.0	99.8	3617
<b>Ethnicity of household head</b>											
Kazakh	98.0	0.2	9124	98.7	0.9	0.1	0.0	0.2	100.0	98.7	8957
Russian	96.0	0.2	4811	99.3	0.2	0.2	0.1	0.2	100.0	99.3	4628
Other ethnic groups	97.6	0.0	2564	99.2	0.4	0.4	0.0	0.0	100.0	99.2	2502
Missing/DK	(*)	(*)	1	(*)	(*)	(*)	(*)	(*)	100.0	(*)	1

<sup>1</sup> MICS indicator 4.5 - Place for handwashing

(\*) Figures that are based on fewer than 25 unweighted cases.

**Table WS.9: Availability of soap**

Percent distribution of households by availability of soap in the dwelling, Kazakhstan, 2015

	<u>Place for handwashing observed</u>					<u>Place for handwashing not observed</u>				Total	Percentage of households with soap anywhere in the dwelling <sup>1</sup>	Number of households
	Soap observed	<u>Soap not observed at place for handwashing</u>				Soap shown	No soap in household	Not able/Does not want to show soap	Missing			
		Soap shown	No soap in household	Not able/Does not want to show soap	Missing							
<b>Total</b>	96.7	0.5	0.1	0.0	0.0	0.8	0.0	1.8	0.0	100.0	97.9	16500
<b>Region</b>												
Akmola	99.0	0.0	0.1	0.0	0.0	0.0	0.1	0.9	0.0	100.0	99.0	944
Aktobe	95.5	3.7	0.7	0.0	0.0	0.0	0.0	0.1	0.0	100.0	99.2	983
Almaty oblast	93.0	0.0	0.0	0.0	0.0	0.7	0.1	6.0	0.1	100.0	93.7	1260
Atyrau	99.2	0.0	0.0	0.0	0.0	0.4	0.0	0.4	0.0	100.0	99.6	456
West Kazakhstan	98.1	0.5	0.3	0.0	0.0	0.3	0.1	0.7	0.0	100.0	98.9	764
Zhambyl	98.6	0.0	0.1	0.0	0.0	0.0	0.0	1.3	0.0	100.0	98.6	880
Karaganda	97.3	0.0	0.0	0.1	0.0	0.1	0.0	2.5	0.0	100.0	97.4	1614
Kostanai	96.0	0.4	0.0	0.0	0.0	2.4	0.0	1.2	0.0	100.0	98.8	978
Kyzylorda	99.1	0.3	0.5	0.0	0.0	0.1	0.0	0.1	0.0	100.0	99.4	402
Mangistau	94.0	2.7	0.2	0.1	0.0	1.2	0.0	1.8	0.0	100.0	97.9	412
South Kazakhstan	97.1	0.6	0.2	0.0	0.0	0.6	0.0	1.5	0.0	100.0	98.3	2055
Pavlodar	99.3	0.0	0.0	0.0	0.1	0.2	0.0	0.4	0.0	100.0	99.4	829
North Kazakhstan	97.6	0.7	0.2	0.0	0.0	0.2	0.1	1.1	0.1	100.0	98.5	645
East Kazakhstan	99.2	0.0	0.0	0.0	0.0	0.6	0.0	0.2	0.0	100.0	99.8	1523
Astana city	95.2	0.1	0.0	0.0	0.0	2.1	0.0	2.5	0.1	100.0	97.4	1310
Almaty city	92.9	0.2	0.0	0.3	0.0	2.1	0.3	4.1	0.1	100.0	95.2	1445
<b>Area</b>												
Urban	96.1	0.5	0.0	0.1	0.0	1.1	0.1	2.2	0.0	100.0	97.6	9967
Rural	97.7	0.5	0.2	0.0	0.0	0.3	0.0	1.3	0.0	100.0	98.4	6533
<b>Education of household head</b>												

None/Primary	96.8	0.0	0.6	0.0	0.0	0.1	0.0	2.5	0.0	100.0	97.0	331
Lower secondary	96.9	0.5	0.5	0.0	0.0	0.7	0.1	1.3	0.1	100.0	98.0	1659
Upper secondary	97.0	0.4	0.2	0.0	0.0	0.6	0.1	1.7	0.0	100.0	98.0	4475
Technical and Professional	96.5	0.7	0.0	0.0	0.0	0.9	0.1	1.8	0.0	100.0	98.1	5574
Higher	96.7	0.3	0.0	0.1	0.0	0.8	0.0	2.1	0.0	100.0	97.7	4453
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	8
<b>Wealth index quintile</b>												
Poorest	96.9	0.5	0.5	0.1	0.0	0.4	0.0	1.5	0.1	100.0	97.8	3035
Second	97.9	0.4	0.0	0.0	0.0	0.4	0.0	1.3	0.0	100.0	98.7	2646
Middle	96.6	0.6	0.1	0.0	0.0	0.6	0.1	2.0	0.0	100.0	97.8	3109
Fourth	95.8	0.8	0.0	0.1	0.0	0.8	0.1	2.5	0.0	100.0	97.3	3979
Richest	96.8	0.1	0.0	0.0	0.0	1.5	0.0	1.6	0.1	100.0	98.3	3731
<b>Ethnicity of household head</b>												
Kazakh	97.1	0.7	0.1	0.0	0.0	0.6	0.0	1.4	0.0	100.0	98.4	9124
Russian	95.8	0.1	0.1	0.1	0.0	1.2	0.1	2.7	0.0	100.0	97.0	4811
Other ethnic groups	97.2	0.2	0.1	0.0	0.0	0.7	0.0	1.6	0.0	100.0	98.2	2564
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	1

<sup>1</sup> MICS indicator 4.6 - Availability of soap<sup>a</sup>

<sup>a</sup> The indicator name has been changed from the standard "MICS indicator 4.6 - Availability of soap or other cleansing agent" since other cleansing agents such as ash, mud or sand are not applicable for Kazakhstan and therefore have not been included in the Household Questionnaire.

(\*) Figures that are based on fewer than 25 unweighted cases.

## VII. Reproductive Health

### Fertility

Measures of current fertility are presented in Table RH.1 for the one-year period preceding the survey. In MICS, age specific and total fertility rates are calculated by using information on the date of last birth of each woman and are based on one-year period (1-12 months) preceding the survey. Rates are slightly underestimated due to absence of information on multiple births (twins, triplets, etc.) and on women who may have had multiple deliveries during the one year period preceding the survey. The total fertility rate is calculated by summing the age-specific fertility rates calculated for each of the 5-year age groups of women, from age 15 to age 49. The total fertility rate (TFR) is a synthetic measure that denotes the number of live births a woman would have if she was subject to the current age-specific fertility rates throughout her reproductive years (15-49 years). The general fertility rate (GFR) is the number of live births occurring during the specified period per 1,000 women aged 15-49. The crude birth rate (CBR) is the number of live births per 1,000 population during the specified period.

<b>Table RH.1: Fertility rates</b>			
Adolescent birth rate, age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the one-year period preceding the survey, by area, Kazakhstan, 2015			
	Urban	Rural	Total
<b>Age</b>			
15-19 <sup>1</sup>	33	40	36
20-24	148	304	213
25-29	156	206	176
30-34	102	111	106
35-39	57	58	57
40-44	15	14	15
45-49	0	0	0
TFR <sup>a</sup>	2.6	3.7	3.0
GFR <sup>b</sup>	82	107	93
CBR <sup>c</sup>	20	23	21
<sup>1</sup> MICS indicator 5.1; MDG indicator 5.4 - Adolescent birth rate			
<sup>a</sup> TFR: Total fertility rate expressed per woman aged 15-49 years.			
<sup>b</sup> GFR: General fertility rate expressed per 1,000 women aged 15-49 years.			
<sup>c</sup> CBR: Crude birth rate expressed per 1,000 population.			

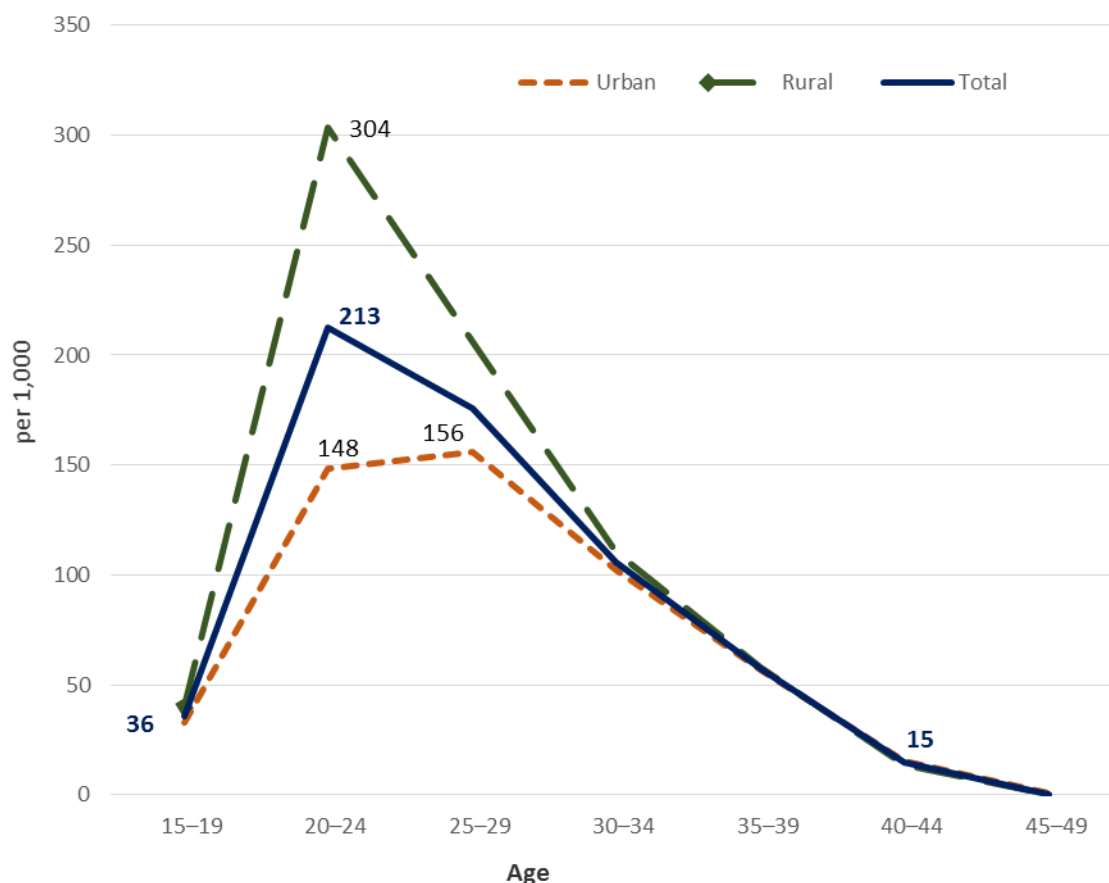
Table RH.1 shows fertility figures in Kazakhstan based on survey findings by urban and rural areas.

In Kazakhstan, the crude birth rate among women aged 15-49 years is 21 births per 1,000 population, in urban and rural areas this figure is 20 and 23 births per 1,000 population, respectively.

The total fertility rate for the one year preceding the Kazakhstan MICS is 3.0 births per woman aged 15-49 years, in rural areas this figure is higher than in urban areas (3.7 births and 2.6 births respectively).

As the age-specific fertility rates show, if compared to urban areas, a higher fertility rate is prevalent in all age groups in rural areas, except for the 40-44 year age group. These results are shown in Figure RH.1 as well.

**Figure RH.1: Age-specific fertility rates by area, Kazakhstan, 2015**



Rates refer to the one year period preceding the survey

There are differences in the age-specific fertility rates of women from urban and rural areas, which are especially pronounced among women aged 20-24 years: while in the urban areas there are 148 births per 1,000 women in this age group, in rural areas the fertility rate is more than twice as high (304 births per 1,000 women). Fertility is quite low among adolescents aged 15-19 years (36 births per 1,000 women), increases to a peak of 213 births per 1,000 women among women aged 20-24 years, and declines thereafter to 15 births per 1,000 among women aged 40-44 years.

Table RH.2 shows adolescent birth rates and total fertility rates by different characteristics. The adolescent birth rate (age-specific fertility rate for women aged 15-19) is defined as the number of births to women aged 15-19 years during the one year period preceding the MICS survey, divided by the average number of women aged 15-19 (number of women-years lived between ages 15 through 19, inclusive) during the same period, expressed per 1,000 women.

**Table RH.2: Adolescent birth rate and total fertility rate**

Adolescent birth rates and total fertility rates for the one-year period preceding the survey, Kazakhstan, 2015		
	Adolescent birth rate <sup>1</sup> (Age-specific fertility rate for women aged 15-19 years)	Total fertility rate
Total	36	3.0
<b>Education</b>		
None/Primary	-	(*)
Lower secondary	31	(4.1)
Upper secondary	54	3.1
Technical and Professional	(1)	(2.5)
Higher	-	-
<b>Wealth index quintile</b>		
Poorest	(47)	(3.5)
Second	(33)	(3.9)
Middle	62	3.6
Fourth	24	2.5
Richest	18	2.0
<b>Ethnicity of household head</b>		
Kazakh	24	3.2
Russian	(57)	(1.9)
Other ethnic groups	(64)	(3.6)
<b><sup>1</sup> MICS indicator 5.1; MDG indicator 5.4 - Adolescent birth rate</b>		
( ) Figures that are based on 125–249 unweighted person-years of exposure. (*) Figures that are based on fewer than 125 unweighted person-years of exposure. "-" denotes 0 unweighted case in that cell or in the denominator.		

Adolescent births are more common among women with lower secondary and upper secondary education and those living in the middle wealth quintile.

Table RH.3 presents some early childbearing<sup>39</sup> indicators for women aged 15-19 and 20-24 years.

**Table RH.3: Early childbearing**

Percentage of women aged 15-19 years who have had a live birth, are pregnant with the first child, have begun childbearing, and who have had a live birth before age 15, and percentage of women aged 20-24 years who have had a live birth before age 18, Kazakhstan, 2015							
	Percentage of women aged 15-19 years who:				Number of women aged 15-19 years	Percentage of women aged 20-24 years who have had a live birth before age 18 <sup>1</sup>	Number of women aged 20-24 years
	Have had a live birth	Are pregnant with first child	Have begun childbearing	Have had a live birth before age 15			
Total	3.9	1.4	5.4	0.0	1346	2.2	1768
<b>Region</b>							
Akmola	9.4	0.0	9.4	0.0	65	2.8	62
Aktobe	1.3	0.0	1.3	0.0	75	0.7	116

<sup>39</sup> Childbearing is the process of giving birth to children. While early childbearing is defined as having had live births before specific young ages, for the purposes of Table RH.3, women age 15-19 years who have begun childbearing includes those who have had a live birth as well as those who have not had a live birth but are pregnant with their first child.



Almaty oblast	2.7	0.0	2.7	0.0	138	1.1	122
Atyrau	10.0	2.0	11.9	0.0	38	4.9	70
West Kazakhstan	3.0	1.0	4.0	0.0	57	3.1	77
Zhambyl	5.7	2.3	7.9	0.0	92	2.5	90
Karaganda	1.4	2.9	4.3	0.0	97	1.3	112
Kostanai	2.2	2.2	4.4	0.0	66	6.7	91
Kyzylorda	4.5	5.8	10.3	0.0	47	2.7	59
Mangistau	5.6	3.8	9.4	0.0	47	5.3	79
South Kazakhstan	6.3	1.5	7.8	0.0	262	1.5	328
Pavlodar	1.5	0.0	1.5	0.0	49	1.1	67
North Kazakhstan	3.8	1.7	5.5	0.0	31	6.4	33
East Kazakhstan	1.6	0.0	1.6	0.0	78	1.9	124
Astana city	0.3	0.3	0.7	0.0	101	1.4	157
Almaty city	3.7	2.1	5.8	0.0	101	0.7	181
<b>Area</b>							
Urban	3.2	1.6	4.8	0.0	722	2.4	1041
Rural	4.8	1.2	6.0	0.0	624	1.9	727
<b>Education</b>							
None/Primary	(*)	(*)	(*)	(*)	1	(*)	1
Lower secondary	5.1	0.5	5.6	0.0	222	15.7	61
Upper secondary	3.5	0.8	4.3	0.0	483	5.3	248
Technical and Professional	5.3	2.4	7.8	0.0	422	1.9	661
Higher	0.9	1.8	2.7	0.0	217	0.5	797
<b>Wealth index quintile</b>							
Poorest	4.4	0.9	5.3	0.0	257	1.8	259
Second	4.9	2.3	7.2	0.0	253	2.4	325
Middle	6.5	2.1	8.6	0.0	283	2.5	399
Fourth	2.1	1.0	3.1	0.0	273	2.4	421
Richest	1.8	0.9	2.7	0.0	280	1.8	364
<b>Ethnicity of household head</b>							
Kazakh	2.3	0.7	3.0	0.0	910	1.8	1178
Russian	6.2	3.4	9.7	0.0	215	3.5	277
Other ethnic groups	8.3	2.6	10.9	0.0	220	2.4	313
Missing/DK	-	-	-	-	0	(*)	1
<b><sup>1</sup> MICS indicator 5.2 - Early childbearing</b>							
(*) Figures that are based on fewer than 25 unweighted cases.							
"- " denotes 0 unweighted case in that cell or in the denominator.							

As shown in Table RH.3, women aged 15-49 years who reached the age of 15 years have no cases of births. 3.9 percent of women of this age have already had a live birth, while 1.4 percent of women in this age group are pregnant with their first child, thus 5.4 percent of women of this age have begun childbearing. In the Akmola and Atyrau region, respectively 9.4 and 10.0 percent of women aged 15-19 have already had a live birth. In the Kyzylorda region, 5.8 percent of women are pregnant with their first child, and 4.5 percent of women have had a live birth.

3.2 percent of women aged 15-19 years in urban areas and 4.8 percent of women in rural areas have had a live birth, 1.6 percent of women this age group in urban areas and 1.2 percent of women in rural areas are pregnant with first child.

The percentage of women aged 20-24 years who have had a live birth before age 18 is 2.2 percent. In addition, women in this age group with lower education levels are more likely to have had a live birth compared to those with higher education (15.7 and 0.5 percent respectively). Early childbearing

among women aged 20-24 years ranges from 0.7 percent in the Aktobe region and Almaty city to 6.7 percent in the Kostanai region.

Table RH.4 presents the percentage of women who have had a live birth, by age 15 and 18, by area and age group. The data shows that in Kazakhstan, there have not been notable changes in early childbearing trends over the last 30-35 years.

**Table RH.4: Trends in early childbearing**

Percentage of women who have had a live birth, by age 15 and 18, by area and age group, Kazakhstan, 2015

	Urban				Rural				All			
	Percentage of women with a live birth before age 15	Number of women aged 15-49 years	Percentage of women with a live birth before age 18	Number of women aged 20-49 years	Percentage of women with a live birth before age 15	Number of women aged 15-49 years	Percentage of women with a live birth before age 18	Number of women aged 20-49 years	Percentage of women with a live birth before age 15	Number of women aged 15-49 years	Percentage of women with a live birth before age 18	Number of women aged 20-49 years
Total	0.0	7140	2.5	6418	0.0	5530	2.9	4907	0.0	12670	2.7	11324
<b>Age</b>												
15-19	0.0	722	na	na	0.0	624	na	na	0.0	1346	na	na
20-24	0.0	1041	2.4	1041	0.0	727	1.9	727	0.0	1768	2.2	1768
25-29	0.0	1306	1.3	1306	0.0	855	2.2	855	0.0	2161	1.6	2161
30-34	0.1	1153	2.8	1153	0.0	845	3.9	845	0.0	1998	3.3	1998
35-39	0.0	1032	4.1	1032	0.1	838	4.1	838	0.0	1870	4.1	1870
40-44	0.0	1009	2.9	1009	0.1	854	2.4	854	0.1	1862	2.6	1862
45-49	0.0	877	1.8	877	0.0	788	2.6	788	0.0	1665	2.2	1665

na: not applicable.

## 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) enabling the period between births to plan timing (schedule) of childbearing, distributed over time, the so-called interval between successive births; and 3) limiting the total number of children. According to the WHO definition, "family planning is ensuring control of the reproductive function for the birth of healthy and wanted children". Therefore, access by all couples to information and services to prevent pregnancies that are too early, too closely spaced, too late or too many is critical.

<b>Table RH.4A: Knowledge of specific contraceptive methods</b>			
Percentage of all women aged 15-49 years, percentage of women aged 15-49 years currently married or in union and percentage of sexually active women aged 15-49 years not married or in union who have heard of any contraceptive method, by specific method, Kazakhstan, 2015			
	All	Currently married or in union	Sexually active women that are not married or in union <sup>a</sup>
<b>Any method</b>	98.8	99.9	100.0
<b>Any modern method</b>	98.8	99.9	100.0
Female sterilization	62.6	66.3	79.0
Male sterilization	41.5	43.6	61.0
Pill	93.6	96.5	99.3
IUD	91.4	96.5	94.8
Injectables	63.1	68.1	67.9
Implants	25.1	26.6	32.4
Male condom	97.0	98.4	99.9
Female condom	28.5	29.8	42.0
Diaphragm	21.7	23.4	30.0
Foam/Jelly	40.0	42.4	57.9
Lactational amenorrhea method (LAM)	52.4	60.5	51.6
Emergency contraception	38.4	40.6	55.0
Transdermal patch	19.9	20.6	30.2
<b>Any traditional method</b>	80.6	88.4	94.6
Periodic abstinence	71.1	78.4	82.5
Withdrawal	74.5	82.1	92.8
Other	2.8	2.9	3.1
Mean number of methods known by women	8.1	8.6	9.7
Number of women	12670	8351	889

<sup>a</sup> Had last sexual intercourse within 30 days preceding the survey.

Table RH.4A shows that in general almost all women aged 15-49 years (98.8 percent) are informed about a contraceptive method, including modern methods, while at the same time only 80.6 percent of the women have heard of traditional methods. Women who are sexually active and are not married/in union are better informed than married women about traditional methods (94.6 percent and 88.4 percent, respectively). The methods of contraception women aged 15-49 years who are married/in union or not married/in union have most commonly heard of are: male condom (97.0 percent), pill (93.6 percent), intrauterine device (91.4 percent), and injection (63.1 percent). Married women are less informed about the following modern contraceptive methods than sexually active

women that are not married: male and female sterilization, implants, female condoms, diaphragm/foam/gels, transdermal patches, and emergency contraception. The mean number of contraceptive methods known to unmarried women is slightly higher than those known to married women (9.7 and 8.6 respectively).

<b>Table RH.4B: Knowledge of contraceptive methods</b>			
Percentage of women aged 15-49 years currently married or in union who have heard of at least one contraceptive method and who have heard of at least one modern method, by background characteristics, Kazakhstan, 2015			
	Any method	Any modern method <sup>a</sup>	Number of women aged 15-49 currently married or in union
<b>Total</b>	99.9	99.9	8351
<b>Region</b>			
Akmola	99.9	99.9	397
Aktobe	100.0	100.0	547
Almaty oblast	100.0	100.0	664
Atyrau	100.0	100.0	259
West Kazakhstan	100.0	100.0	367
Zhambyl	99.8	99.8	558
Karaganda	99.6	99.6	661
Kostanai	100.0	100.0	443
Kyzylorda	99.7	99.6	275
Mangistau	99.7	99.7	286
South Kazakhstan	100.0	100.0	1493
Pavlodar	99.8	99.8	318
North Kazakhstan	100.0	100.0	253
East Kazakhstan	99.6	99.6	559
Astana city	100.0	100.0	678
Almaty city	100.0	100.0	593
<b>Area</b>			
Urban	99.9	99.9	4418
Rural	99.8	99.8	3932
<b>Age</b>			
15-19	100.0	100.0	80
20-24	99.7	99.7	964
25-29	100.0	100.0	1650
30-34	100.0	100.0	1586
35-39	99.9	99.9	1453
40-44	99.9	99.9	1430
45-49	99.8	99.8	1187
<b>Education</b>			
None/Primary	(*)	(*)	7
Lower secondary	99.6	99.6	423
Upper secondary	99.8	99.8	2133
Technical and Professional	99.9	99.9	2651
Higher	100.0	100.0	3137
<b>Wealth index quintile</b>			
Poorest	99.7	99.7	1570
Second	99.9	99.9	1720
Middle	99.9	99.9	1659
Fourth	100.0	100.0	1621
Richest	99.9	99.9	1779
<b>Ethnicity of household head</b>			
Kazakh	99.9	99.9	5387

Russian	100.0	100.0	1546
Other ethnic groups	99.9	99.9	1417
<sup>a</sup> Female sterilization, male sterilization, pill, IUD, injectables, implants, male condom, female condom, diaphragm, foam/jelly, lactational amenorrhea method (LAM), emergency contraception, transdermal patch. (*) Figures that are based on fewer than 25 unweighted cases.			

Table RH.4B shows the percentage of women aged 15-49 who are married/in union, who have heard of at least one method of contraception or at least one modern method of contraception by background characteristics. Awareness of women of at least one method of contraception, or at least one modern method of contraception, is very high (99.9 percent), and this knowledge practically does not vary by background characteristics.

More than half of women aged 15-49 years (55.7 percent), who are currently married/in union reported the use of contraception (Table RH.5)<sup>40</sup>. The most popular method of contraception is the intrauterine device (IUD), which is used by every third women currently married or in union (31.9 percent). The next most commonly used method/means of contraception is the male condom, the use of which is reported by 12.5 percent of women currently married or in union, while more than 6 percent of women use the pill. Means/methods of contraception such as *female sterilization, lactational amenorrhea method (LAM), withdrawal, periodic abstinence, injection, diaphragm/foam/jelly*, they are used by 0.1 – 1.7 percent of women only.

Adolescents aged 15-19 are much less likely to use methods of contraception than older women (20-49 years). Only 28.6 percent of women aged 15-19 who are married/in union currently use a method of contraception, compared to 44.3 percent of women aged 20-24, while among women aged 30-34, more than half (56.3 percent) use contraception, and its use reaches 65.6 percent among 35-39-year-old women. Women of later reproductive age (45-49 years) are less likely to use contraception (39.8 percent).

Results of contraception prevalence by region and area are shown in Figure RH.2. Contraceptive prevalence ranges from 37.1 percent in the Mangistau region to 63 percent in Almaty city. Various methods/means of contraception are used by more than half of married women living in urban and rural areas (55.8 and 55.6 percent, respectively).

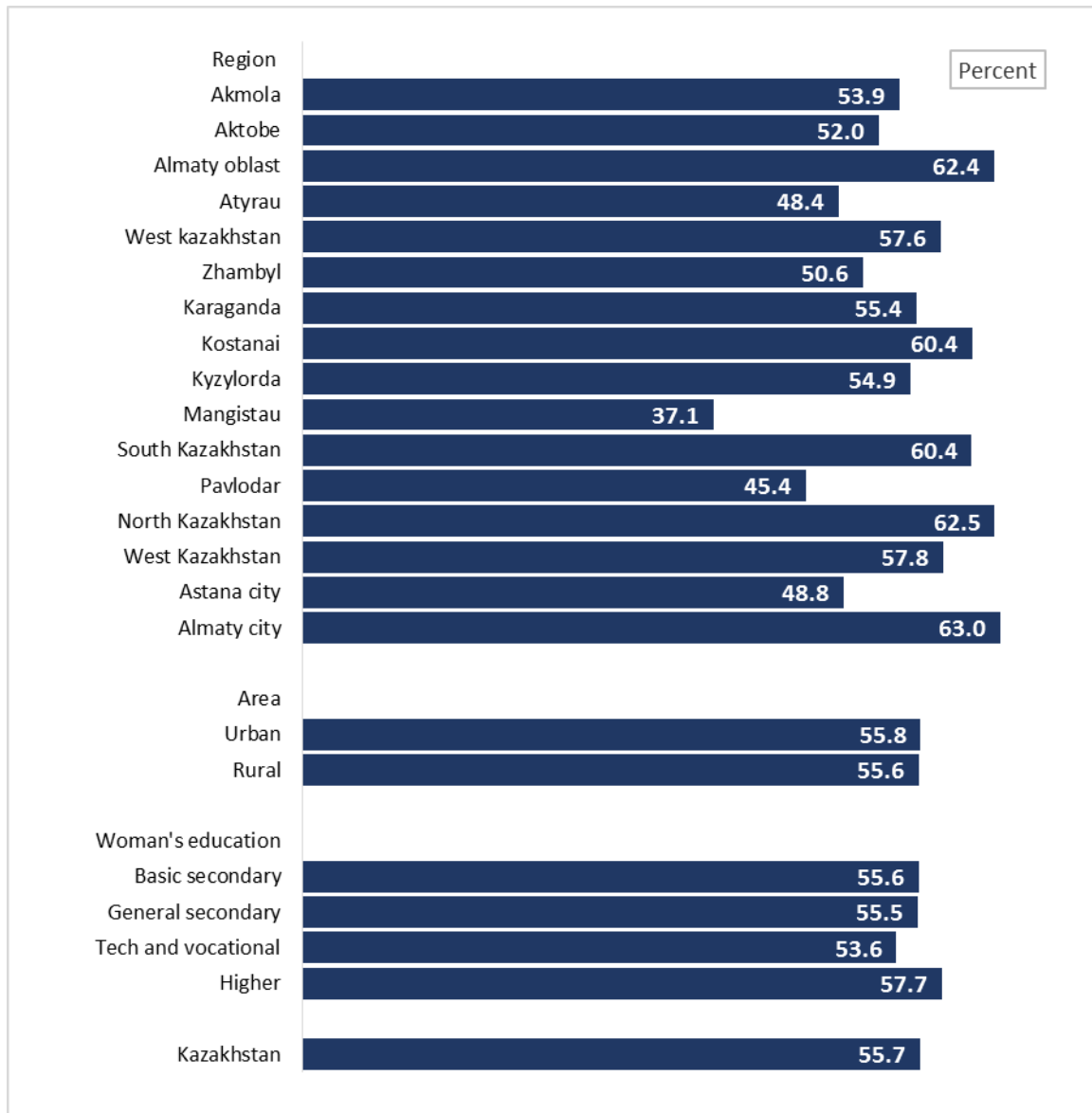
Women with two, three, four or more living children more often use intrauterine devices – IUDs.

The most common method of contraception for married women from the poorest households is the IUD (38.6 percent), while women from the richest households use the IUD less frequently (26.6 percent). At the same time, the percentage of women from the poorest households using the pill and male condoms is almost two times less (3.0 and 7.3 percent) than women from households of the richest quintile (10.7 percent and 14.2 percent respectively).

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<sup>40</sup> All references to married women in this chapter also apply to women in union.

**Figure RH.2: Differentials in contraceptive use, Kazakhstan, 2015**



**Table RH.5: Use of contraception**

Percentage of women aged 15-49 years currently married or in union who are using (or whose partner is using) a contraceptive method, Kazakhstan, 2015

	Percent of women currently married or in union who are using (or whose partner is using):																		Number of women aged 15-49 years currently married or in union		
	No method	Female sterilization	Male sterilization	IUD	Injectables	Implants	Pill	Male condom	Female condom	Diaphragm/Foam/Jelly	LAM	Periodic abstinence	Withdrawal	Transdermal patch	Other	Missing	Any modern method	Any traditional method		Any method <sup>1</sup>	
<b>Total</b>	44.3	1.7	0.0	31.9	0.1	0.0	6.1	12.5	0.0	0.1	1.2	0.6	1.1	0.0	0.4	0.0	53.6	2.1	55.7	8351	
<b>Region</b>																					
Akmola	46.1	0.5	0.0	28.5	0.0	0.0	6.4	14.7	0.0	0.2	0.1	1.3	1.9	0.2	0.0	0.0	50.4	3.4	53.9	397	
Aktobe	48.0	1.8	0.1	36.7	0.0	0.0	3.2	7.9	0.1	0.0	1.2	0.5	0.1	0.0	0.2	0.0	51.1	0.8	52.0	547	
Almaty oblast	37.6	2.0	0.0	39.5	0.0	0.0	8.3	11.3	0.0	0.0	0.2	0.4	0.6	0.0	0.0	0.0	61.4	1.0	62.4	664	
Atyrau	51.6	1.9	0.0	32.1	0.0	0.0	1.2	9.7	0.0	0.0	2.2	0.1	1.2	0.0	0.1	0.0	47.0	1.4	48.4	259	
West Kazakhstan	42.4	3.4	0.0	32.0	0.0	0.0	9.6	9.9	0.0	0.0	0.8	0.4	1.2	0.0	0.3	0.0	55.6	2.0	57.6	367	
Zhambyl	49.4	2.6	0.0	36.4	0.0	0.0	2.3	6.2	0.0	0.0	0.7	0.5	1.1	0.0	0.8	0.0	48.2	2.3	50.6	558	
Karaganda	44.6	2.5	0.0	25.8	0.4	0.0	5.9	17.0	0.0	0.0	0.0	1.1	1.6	0.0	1.1	0.0	51.6	3.8	55.4	661	
Kostanai	39.6	1.7	0.0	26.0	0.0	0.0	12.9	17.3	0.0	0.2	0.6	0.9	0.8	0.0	0.1	0.0	58.6	1.8	60.4	443	
Kyzylorda	45.1	1.2	0.0	43.7	0.2	0.0	2.2	6.4	0.0	0.0	0.0	0.0	1.2	0.0	0.0	0.0	53.6	1.2	54.9	275	
Mangistau	62.9	0.2	0.0	25.9	0.0	0.0	6.3	4.5	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	36.9	0.1	37.1	286	
South Kazakhstan	39.6	2.1	0.0	39.3	0.1	0.0	2.7	10.8	0.0	0.1	3.4	0.1	1.3	0.0	0.4	0.2	58.5	1.7	60.4	1493	
Pavlodar	54.6	0.4	0.0	18.6	0.0	0.0	5.5	17.9	0.0	0.2	0.0	1.1	1.3	0.0	0.4	0.0	42.6	2.8	45.4	318	
North Kazakhstan	37.5	4.4	0.0	25.4	0.0	0.0	7.6	18.3	0.0	0.0	0.4	1.9	3.5	0.0	0.8	0.0	56.2	6.3	62.5	253	
East Kazakhstan	42.2	1.0	0.0	27.1	0.0	0.0	8.4	16.5	0.0	0.4	0.6	1.1	2.0	0.0	0.7	0.0	54.0	3.7	57.8	559	
Astana city	51.2	0.3	0.1	18.7	0.0	0.1	6.4	20.8	0.0	0.0	1.3	0.0	0.6	0.0	0.4	0.0	47.8	1.0	48.8	678	
Almaty city	37.0	1.0	0.0	36.5	0.0	0.0	12.7	8.5	0.0	0.5	1.8	1.2	0.5	0.0	0.2	0.0	61.1	1.9	63.0	593	
<b>Area</b>																					
Urban	44.2	1.2	0.0	28.7	0.1	0.0	7.8	14.1	0.0	0.2	1.1	0.7	1.4	0.0	0.5	0.0	53.2	2.6	55.8	4418	
Rural	44.4	2.3	0.0	35.5	0.0	0.0	4.3	10.6	0.0	0.0	1.3	0.5	0.8	0.0	0.2	0.1	54.0	1.6	55.6	3932	
<b>Age</b>																					
15-19	71.4	0.0	0.0	6.3	0.0	0.0	3.1	14.3	0.0	0.0	3.2	0.0	1.0	0.0	0.7	0.0	26.9	1.7	28.6	80	
20-24	55.7	0.1	0.0	16.5	0.1	0.0	6.1	16.4	0.0	0.0	3.7	0.2	1.2	0.0	0.1	0.0	42.9	1.4	44.3	964	
25-29	43.7	0.3	0.0	24.9	0.0	0.0	6.8	20.3	0.0	0.0	1.6	0.3	1.5	0.0	0.5	0.0	54.0	2.3	56.3	1650	



30-34	39.2	1.6	0.0	35.1	0.0	0.0	7.5	12.9	0.0	0.3	0.9	0.7	1.4	0.0	0.2	0.0	58.4	2.3	60.8	1586
35-39	34.4	2.6	0.1	40.9	0.1	0.0	8.3	10.3	0.1	0.0	1.1	0.2	1.3	0.1	0.5	0.0	63.5	2.0	65.6	1453
40-44	38.1	2.7	0.0	42.5	0.1	0.0	4.7	8.6	0.0	0.1	0.2	1.7	0.7	0.0	0.5	0.0	59.0	3.0	61.9	1430
45-49	60.2	3.0	0.0	27.7	0.0	0.0	2.8	4.8	0.0	0.1	0.0	0.4	0.4	0.0	0.2	0.2	38.5	1.1	39.8	1187
<b>Number of living children</b>																				
0	88.4	0.3	0.0	0.4	0.0	0.0	4.0	6.3	0.0	0.0	0.0	0.0	0.5	0.0	0.0	0.0	11.1	0.5	11.6	639
1	53.3	0.4	0.0	17.1	0.0	0.0	7.8	17.6	0.0	0.0	1.3	0.5	1.3	0.0	0.5	0.0	44.3	2.4	46.7	1832
2	37.1	0.9	0.0	35.3	0.0	0.0	8.7	14.7	0.0	0.3	0.6	0.8	1.2	0.0	0.4	0.0	60.4	2.5	62.9	2832
3	36.2	4.4	0.1	41.5	0.1	0.0	3.9	10.1	0.0	0.0	1.9	0.5	0.8	0.0	0.2	0.0	62.2	1.6	63.8	1786
4+	36.3	2.4	0.0	48.1	0.1	0.0	2.2	6.4	0.0	0.0	1.8	0.5	1.4	0.0	0.5	0.2	61.1	2.4	63.7	1262
<b>Education</b>																				
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	7
Lower secondary	44.4	2.5	0.0	36.3	0.0	0.0	3.4	10.8	0.0	0.0	0.7	0.2	1.6	0.0	0.2	0.0	53.7	1.9	55.6	423
Upper secondary	44.5	2.6	0.0	34.3	0.1	0.0	4.2	10.5	0.0	0.0	1.6	0.5	1.3	0.0	0.3	0.0	53.5	2.0	55.5	2133
Technical and Professional	46.4	1.8	0.1	29.6	0.0	0.0	6.5	12.5	0.0	0.1	0.8	0.8	1.0	0.0	0.3	0.0	51.4	2.2	53.6	2651
Higher	42.3	0.9	0.0	31.6	0.0	0.0	7.5	14.1	0.0	0.2	1.2	0.5	1.1	0.0	0.5	0.1	55.5	2.1	57.7	3137
<b>Wealth index quintile</b>																				
Poorest	45.2	3.1	0.0	38.6	0.0	0.0	3.0	7.3	0.0	0.1	1.1	0.2	1.1	0.0	0.1	0.0	53.3	1.5	54.8	1570
Second	43.9	2.3	0.0	35.3	0.1	0.0	3.5	11.6	0.0	0.0	0.8	0.4	1.5	0.0	0.4	0.1	53.6	2.3	56.1	1720
Middle	44.6	1.4	0.0	31.4	0.1	0.0	6.0	12.5	0.0	0.1	1.9	0.7	1.0	0.0	0.2	0.0	53.5	1.9	55.4	1659
Fourth	43.8	0.9	0.0	28.0	0.1	0.0	7.2	16.4	0.0	0.1	1.2	0.8	0.9	0.0	0.6	0.0	53.8	2.3	56.2	1621
Richest	43.8	0.9	0.0	26.6	0.0	0.0	10.7	14.2	0.0	0.3	1.0	0.8	1.0	0.0	0.5	0.0	53.8	2.4	56.2	1779
<b>Ethnicity of household head</b>																				
Kazakh	47.0	1.6	0.0	34.3	0.1	0.0	4.2	10.2	0.0	0.1	1.1	0.4	0.7	0.0	0.3	0.0	51.6	1.4	53.0	5387
Russian	40.3	1.8	0.0	21.6	0.0	0.0	13.1	18.5	0.0	0.2	0.5	1.2	2.1	0.0	0.7	0.0	55.7	4.0	59.7	1546
Other ethnic groups	38.2	2.2	0.0	34.1	0.1	0.0	6.0	14.3	0.1	0.2	2.0	0.5	1.7	0.0	0.4	0.2	59.0	2.6	61.8	1417

<sup>1</sup> MICS indicator 5.3; MDG indicator 5.3 - Contraceptive prevalence rate

(\*) Figures that are based on fewer than 25 unweighted cases.

## ***Unmet Need***

Unmet need for contraception refers to fecund (fertile) women who are married or in union and are not using any method of contraception, but who wish to postpone the next birth (spacing) or who wish to stop childbearing altogether (limiting). Unmet need is identified in MICS by using a set of questions eliciting current behaviours and preferences pertaining to contraceptive use, pregnancy, and fertility.

Table RH.6 shows the levels of met need for contraception, unmet need, and the demand for contraception satisfied.

Unmet need for spacing is defined as the percentage of women who are married or in union and are not using any method of contraception AND

- are not pregnant, and not postpartum amenorrheic<sup>41</sup>, and are fecund<sup>42</sup>, and say they want to wait two or more years for their next birth OR
- are not pregnant, and not postpartum amenorrheic, and are fecund, and unsure whether they want another child OR
- are pregnant, and say that pregnancy was mistimed: would have wanted to wait OR
- are postpartum amenorrheic, and say that the birth was mistimed: would have wanted to wait.

Unmet need for limiting is defined as percentage of women who are married or in union and are not using any method of contraception AND

- are not pregnant, and not postpartum amenorrheic, and are fecund, and say they do not want any more children OR
- are pregnant, and say they did not want to have a child OR
- are postpartum amenorrheic, and say that they did not want the birth.

Total ***unmet*** need for contraception is the sum of ***unmet*** need for *spacing* and ***unmet*** need for *limiting the number of children*. According to the survey, in Kazakhstan, 5.6 percent of women have an ***unmet*** need for contraception for spacing and 4.3 percent of women for limiting the number of children; therefore, the ***unmet*** need for contraception of women was 9.8 percent for the whole country.

This indicator is also known as unmet need for family planning.

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<sup>41</sup> A woman is postpartum amenorrheic if she had a birth in last two years and is not currently pregnant, and her menstrual period has not returned since the birth of the last child.

<sup>42</sup> A woman is considered infecund if she is neither pregnant nor postpartum amenorrheic, and (1a) has not had menstruation for at least six months, or (1b) never menstruated, or (1c) her last menstruation occurred before her last birth, or (1d) in menopause/has had hysterectomy OR

(2) She declares that she has had hysterectomy, or that she has never menstruated, or that she is menopausal, or that she has been trying to get pregnant for 2 or more years without result in response to questions on why she thinks she is not physically able to get pregnant at the time of survey OR

(3) She declares she cannot get pregnant when asked about desire for future birth OR

(4) She has not had a birth in the preceding 5 years, is currently not using contraception and is currently married and was continuously married during the last 5 years preceding the survey.

**Table RH.6: Unmet need for contraception**

Percentage of women aged 15-49 years currently married or in union with an unmet need for family planning and percentage of demand for contraception satisfied, Kazakhstan, 2015

	Met need for contraception			Unmet need for contraception			Number of women currently married or in union	Percentage of demand for contraception satisfied	Number of women currently married or in union with need for contraception
	For spacing	For limiting	Total	For spacing	For limiting	Total <sup>1</sup>			
Total	29.8	25.9	55.7	5.6	4.3	9.8	8 351	85.0	5 472
<b>Region</b>									
Akmola	28.2	25.6	53.9	6.7	6.7	13.4	397	80.1	267
Aktobe	27.9	24.1	52.0	9.3	4.0	13.3	547	79.6	357
Almaty oblast	26.5	35.9	62.4	4.9	4.0	8.9	664	87.5	474
Atyrau	35.6	12.8	48.4	7.1	3.2	10.3	259	82.5	152
West Kazakhstan	31.1	26.5	57.6	3.9	6.0	9.9	367	85.3	248
Zhambyl	28.3	22.2	50.6	4.3	5.3	9.6	558	84.1	335
Karaganda	29.1	26.3	55.4	4.9	5.4	10.3	661	84.4	434
Kostanai	28.6	31.9	60.4	4.7	4.7	9.4	443	86.5	309
Kyzylorda	31.6	23.3	54.9	6.1	3.5	9.7	275	85.0	177
Mangistau	25.3	11.7	37.1	15.1	3.2	18.3	286	66.9	159
South Kazakhstan	31.0	29.4	60.4	3.0	1.7	4.7	1 493	92.8	971
Pavlodar	23.1	22.3	45.4	6.7	7.6	14.3	318	76.0	190
North Kazakhstan	24.5	38.0	62.5	3.1	8.1	11.2	253	84.8	186
East Kazakhstan	25.5	32.3	57.8	3.8	6.0	9.8	559	85.5	378
Astana city	36.1	12.7	48.8	8.7	3.0	11.7	678	80.7	410
Almaty city	37.1	25.9	63.0	4.8	3.7	8.6	593	88.0	424
<b>Area</b>									
Urban	32.1	23.7	55.8	5.8	4.5	10.2	4 418	84.5	2 918
Rural	27.3	28.4	55.6	5.3	4.0	9.3	3 932	85.7	2 554
<b>Age</b>									
15-19	28.6	0.0	28.6	13.3	0.0	13.3	80	(68.2)	34
20-24	42.6	1.7	44.3	10.7	0.3	11.1	964	80.0	534
25-29	49.3	7.0	56.3	8.9	0.8	9.7	1 650	85.3	1 089
30-34	42.4	18.4	60.8	6.7	1.3	8.0	1 586	88.4	1 091
35-39	28.1	37.5	65.6	3.4	4.3	7.6	1 453	89.6	1 064
40-44	9.2	52.7	61.9	2.7	8.7	11.5	1 430	84.3	1 050
45-49	2.4	37.4	39.8	0.7	11.0	11.7	1 187	77.2	612
<b>Education</b>									
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	7	(*)	3
Lower secondary	20.5	35.1	55.6	5.4	5.6	11.0	423	83.5	282
Upper secondary	26.2	29.4	55.5	4.6	5.0	9.6	2 133	85.2	1 390
Technical and Professional	26.4	27.2	53.6	5.7	5.2	10.9	2 651	83.2	1 708
Higher	36.4	21.3	57.7	6.1	2.8	8.9	3 137	86.6	2 089
<b>Wealth index quintile</b>									
Poorest	25.4	29.4	54.8	4.1	4.9	9.0	1 570	85.8	1 002
Second	28.8	27.3	56.1	5.3	3.8	9.1	1 720	86.1	1 120
Middle	29.4	26.0	55.4	6.7	5.1	11.8	1 659	82.5	1 115

Fourth	32.1	24.1	56.2	5.4	3.7	9.1	1 621	86.0	1 058
Richest	32.9	23.2	56.2	6.0	3.9	10.0	1 779	84.9	1 177
<b>Ethnicity of household head</b>									
Kazakh	29.7	23.3	53.0	6.3	3.9	10.2	5 387	83.8	3 406
Russian	28.4	31.3	59.7	4.4	6.7	11.1	1 546	84.4	1 093
Other ethnic groups	31.8	30.0	61.8	3.9	2.9	6.8	1 417	90.0	973
<sup>1</sup> MICS indicator 5.4; MDG indicator 5.6 - Unmet need									
( ) Figures that are based on 25–49 unweighted cases.									
(*) Figures that are based on fewer than 25 unweighted cases.									

*Met need for limiting* includes women married or in union who are using (or whose partner is using) a contraceptive method<sup>43</sup>, and who want no more children, are using male or female sterilization, or declare themselves as infecund. *Met need for spacing* includes women who are using (or whose partner is using) a contraceptive method, and who want to have another child, or are undecided whether to have another child. The total of *met need for spacing and limiting* adds up to the *total met need for family planning*.

Across the country, overall met need was 55.7 percent: *met need for spacing* was 29.8 percent, and *for limiting the number of children* – 25.9 percent. In five regions of Kazakhstan – Kostanai, South Kazakhstan, Almaty and North Kazakhstan regions and Almaty city, the met need for contraception is more than 60 percent, while the lowest percentage is found in the Mangistau region (37.1 percent).

Women with higher education have better met need for contraception *for spacing* than women with lower secondary education (36.4 and 20.5 percent respectively), while *for limiting* the better met need for contraception have women with lower secondary education than women with higher education (35.1 and 21.3 percent, respectively).

Using information on contraception and unmet need, the percentage of *demand for contraception satisfied* is also estimated from the MICS data. The percentage of demand for contraception satisfied is defined as the proportion of women currently married or in union who are currently using contraception methods, over 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 any contraception. The percentage of demand for contraception satisfied in the country is quite high and amounts to 85.0 percent. The percentage of demand by regions ranges from 66.9 percent in the Mangistau region, to 92.8 percent in the South Kazakhstan region. Apart from differences by region, the indicator remains relatively stable across background characteristics.

Table RH.6 shows that the total *met need* is several times higher than the total *unmet need* for family planning. (55.7 and 9.8 percent respectively).

*Met need for contraception* in urban and in rural areas is almost the same (55.8 and 55.6 percent, respectively). But there are small differences of met need for contraception among women across age groups. In the age group of 15-19 years this indicator is lowest and is 28.6 percent, on the contrary, the indicator peaks to 65.6 percent for women aged 35-39 years; then declines again among women aged 45-59 years to 39.8 percent.

<sup>43</sup> In this chapter, whenever reference is made to the use of a contraceptive by a woman, this may refer to her partner using a contraceptive method (such as male condom).

## Antenatal Care

Coverage of pregnant women during the antenatal period with medical and preventive activities is very important and vital to their health and well-being, as well as for the health and well-being of their children.

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, antenatal care can be used to inform women and families about risks and symptoms in pregnancy and about the risks of labour and delivery. Thus, the information obtained during antenatal care, can play a positive role in persuading pregnant women for early visit to a skilled health care provider during childbirth. Antenatal visits also provide 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 the infant. The prevention and treatment of malaria among pregnant women, management of anaemia during pregnancy and treatment of sexually transmitted infections (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 care 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 bacteriuria and proteinuria
- Blood testing to detect syphilis and severe anaemia
- Weight/height measurement (optional).

It is of crucial importance for pregnant women to start attending antenatal care visits as early in pregnancy as possible in order to prevent and detect pregnancy conditions that could affect both the woman and her baby. Antenatal care should continue throughout the entire pregnancy.

<b>Table RH.7: Antenatal care coverage</b>								
Percent distribution of women aged 15-49 years with a live birth in the last two years by antenatal care provider during the pregnancy for the last birth, Kazakhstan, 2015								
	Provider of antenatal care <sup>a</sup>					Total	Any skilled provider <sup>1,b</sup>	Number of women with a live birth in the last two years
	Medical doctor	Nurse/Midwife	Feldsher	Other/Missing	No antenatal care			
Total	92.2	6.6	0.5	0.0	0.7	100.0	99.3	2157
<b>Region</b>								
Akmola	91.4	5.9	1.3	0.0	1.3	100.0	98.7	93

Aktobe	96.9	3.1	0.0	0.0	0.0	100.0	100.0	145
Almaty oblast	99.3	0.0	0.7	0.0	0.0	100.0	100.0	188
Atyrau	94.5	3.1	0.0	0.0	2.4	100.0	97.6	85
West Kazakhstan	83.4	11.8	4.2	0.0	0.6	100.0	99.4	100
Zhambyl	66.8	32.6	0.0	0.0	0.6	100.0	99.4	165
Karaganda	96.9	2.2	0.9	0.0	0.0	100.0	100.0	139
Kostanai	83.1	16.3	0.7	0.0	0.0	100.0	100.0	82
Kyzylorda	88.2	9.1	0.0	0.5	2.2	100.0	97.3	83
Mangistau	98.7	0.0	0.0	0.0	1.3	100.0	98.7	101
South Kazakhstan	91.3	8.1	0.0	0.0	0.6	100.0	99.4	474
Pavlodar	97.9	0.0	0.0	0.0	2.1	100.0	97.9	67
North Kazakhstan	92.8	4.7	2.5	0.0	0.0	100.0	100.0	44
East Kazakhstan	96.3	0.0	0.9	0.0	2.8	100.0	97.2	100
Astana city	100.0	0.0	0.0	0.0	0.0	100.0	100.0	195
Almaty city	99.5	0.5	0.0	0.0	0.0	100.0	100.0	97
<b>Area</b>								
Urban	96.9	2.5	0.0	0.0	0.6	100.0	99.4	1076
Rural	87.5	10.8	1.0	0.0	0.8	100.0	99.2	1081
<b>Mother's age at birth</b>								
Younger than 20	92.3	6.5	0.6	0.0	0.7	100.0	99.3	98
20-34	92.5	6.4	0.4	0.0	0.6	100.0	99.3	1789
35-49	89.6	8.3	0.9	0.0	1.1	100.0	98.9	270
<b>Education</b>								
None/Primary	(*)	(*)	(*)	(*)	(*)	100.0	(*)	2
Lower secondary	82.5	13.8	0.0	0.0	3.6	100.0	96.4	97
Upper secondary	87.4	10.8	1.3	0.1	0.4	100.0	99.5	518
Technical and Professional	92.5	6.3	0.4	0.0	0.7	100.0	99.3	660
Higher	95.8	3.5	0.1	0.0	0.5	100.0	99.5	879
<b>Wealth index quintile</b>								
Poorest	82.7	15.2	1.5	0.0	0.6	100.0	99.4	415
Second	89.0	9.1	0.5	0.1	1.3	100.0	98.6	457
Middle	94.6	4.7	0.4	0.0	0.3	100.0	99.7	502
Fourth	96.4	2.7	0.0	0.0	1.0	100.0	99.0	422
Richest	98.8	0.9	0.0	0.0	0.3	100.0	99.7	360
<b>Ethnicity of household head</b>								
Kazakh	92.2	6.5	0.5	0.0	0.8	100.0	99.2	1520
Russian	95.4	3.9	0.2	0.0	0.5	100.0	99.5	261
Other ethnic groups	89.9	9.2	0.5	0.0	0.4	100.0	99.6	375

<sup>1</sup> MICS indicator 5.5a; MDG indicator 5.5 - Antenatal care coverage

<sup>a</sup> Only the most qualified provider is considered in cases where more than one provider was reported.

<sup>b</sup> Skilled providers include Medical doctor, Nurse/Midwife and Feldsher.

(\*) Figures that are based on fewer than 25 unweighted cases.

Box RH.1

**Code of the Republic of Kazakhstan "On People's Health and Health Care System"**

***Article 97. Protection of women's health during pregnancy, childbirth and after childbirth***

1. A woman has the right to health and care during pregnancy, childbirth and after childbirth, including preterm defined by international criteria of live birth and stillbirth of the fetus, using methods approved in the territory of the Republic of Kazakhstan.

2. Medical, counseling care to pregnant women, women after childbirth in the health system organizations provided within the guaranteed volume of free health care.

The type of personnel providing antenatal care to women aged 15-49 years who gave birth in the two years preceding the survey is presented in Table RH.7. These results show that in Kazakhstan coverage of antenatal care by skilled health personnel, health care providers, is very high and amounted to 99.3 percent (antenatal and post-natal health care is state guaranteed in Kazakhstan – see Box RH.1).

Thus, antenatal care for pregnant women was predominantly provided by qualified doctors (92.2 percent), for 6.6 percent of pregnant women – by nurses or midwives, for 0.5 percent – by feldshers, these two categories of mid-level medical personnel are mostly typical for rural areas (10.8 and 1.0 percent respectively). Among the regions, it can be noted that in the Zhambyl region every third pregnant woman was followed up by nurses/midwives (32.6 percent). Although across the country, access to antenatal care from any qualified medical personnel is very high; and it does not depend on the type of area of residence of pregnant women or their level of education and women's household wealth or ethnicity; pregnant women living in urban areas (96.9 percent), or in the richest households (98.8 percent), or having higher education (95.8 percent) are more likely to receive antenatal care from doctors than their counterparts.

Table RH.8 shows the percent distribution of women aged 15-49 with a live birth in the last two years, by number of visits for antenatal care during the last pregnancy, which took place during the two years preceding the survey, irrespective of the type of medical personnel, by selected characteristics. 95.3 percent of pregnant women received antenatal care at least four times. All pregnant women from Kostanai and North Kazakhstan regions had four (or more) visits to health care providers as part of antenatal care (100 percent). In Kazakhstan, the access to antenatal care (four or more visits) does not vary greatly by other background characteristics of women. Nevertheless, pregnant women from the poorest households are slightly less likely to have four or more visits to qualified medical personnel as part of antenatal care than women in the richest households (93.7 and 97.4 percent, respectively). About 2 percent of the women, on average, in the Atyrau, Kyzylorda, Pavlodar and East Kazakhstan regions had no visits to health care providers during their last pregnancy.

Table RH.8 also contains information about the timing of the first visit for antenatal care. In terms of the threat of miscarriage and non-developing pregnancy, the first trimester of pregnancy is one of the most critical periods in foetal life, because at this time the child's organs and systems are formed, and a full gemoplatcentary barrier, capable of holding at least a portion of hazardous substances is still missing. Therefore it is very important for pregnant women to have timely access the health facility and qualified health providers in the first trimester of pregnancy to avoid possible risks or negative consequences. Overall, 90.2 percent of women who had a live birth in the past two years, had the first visit to the health care professionals for antenatal care in the first trimester of their last pregnancy, with a median of 2-month pregnancy at the time of the first visit. There are no notable differences by background characteristics in the median number of months of pregnancy at the time of the first antenatal care visit. Only 82.9 percent of women younger than 20 years at time of birth, visited health

workers for antenatal care in the first trimester of pregnancy, compared with 91.1 percent of mothers aged 20-34 years at time of birth.

Types of basic health services provided as part of antenatal care for pregnant women are shown in Table RH.9. In Kazakhstan, almost all women who had a live birth in the two years preceding the survey received the specified minimum range of services and procedures within antenatal care (blood pressure measured, urine sample taken, and blood sample taken). These services are provided to women regardless of region and type of area of residence, level of education, wealth of households and ethnicity. 99.3 percent of women reported that during antenatal visits, health workers took their blood and urine samples and measured their blood pressure.



**Table RH.8: Number of antenatal care visits and timing of first visit**

Percent distribution of women aged 15-49 years with a live birth in the last two years by number of antenatal care visits by any provider and by the timing of first antenatal care visits, Kazakhstan, 2015

	Percent distribution of women who had:						Percent distribution of women by number of months pregnant at the time of first antenatal care visit							Number of women with a live birth in the last two years	Median months pregnant at first ANC visit	Number of women with a live birth in the last two years who had at least one ANC visit
	No antenatal care visits	Two visits	Three visits	4 or more visits <sup>1</sup>	DK/Missing	Total	No antenatal care visits	First trimester	4-5 months	6-7 months	8+ months	DK/Missing	Total			
<b>Total</b>	0.7	0.2	0.7	95.3	3.1	100.0	0.7	90.2	7.8	1.2	0.1	0.1	100.0	2157	2.0	2139
<b>Region</b>																
Akmola	1.3	0.6	0.7	96.2	1.1	100.0	1.3	83.1	8.4	5.8	0.8	0.6	100.0	93	2.3	91
Aktobe	0.0	0.0	0.0	85.5	14.5	100.0	0.0	98.3	1.3	0.4	0.0	0.0	100.0	145	2.0	145
Almaty oblast	0.0	0.0	1.3	93.2	5.4	100.0	0.0	85.7	13.5	0.8	0.0	0.0	100.0	188	2.1	188
Atyrau	2.4	0.0	0.0	97.0	0.6	100.0	2.4	86.3	11.1	0.2	0.0	0.0	100.0	85	2.0	83
West Kazakhstan	0.6	0.0	7.0	89.5	2.9	100.0	0.6	84.9	12.6	2.0	0.0	0.0	100.0	100	2.0	99
Zhambyl	0.6	0.0	0.0	95.2	4.2	100.0	0.6	91.9	5.7	1.8	0.0	0.0	100.0	165	2.0	164
Karaganda	0.0	0.0	0.8	98.1	1.0	100.0	0.0	94.9	5.1	0.0	0.0	0.0	100.0	139	2.0	139
Kostanai	0.0	0.0	0.0	100.0	0.0	100.0	0.0	86.5	12.0	1.5	0.0	0.0	100.0	82	2.0	82
Kyzylorda	2.2	0.0	0.5	94.6	2.7	100.0	2.2	87.1	7.5	2.1	0.5	0.5	100.0	83	2.0	81
Mangistau	1.3	0.5	0.0	92.9	5.3	100.0	1.3	92.3	6.0	0.4	0.0	0.0	100.0	101	2.0	99
South Kazakhstan	0.6	0.5	0.5	97.1	1.3	100.0	0.6	92.6	5.9	0.9	0.0	0.0	100.0	474	2.0	471
Pavlodar	2.1	0.0	0.0	97.9	0.0	100.0	2.1	89.0	6.0	2.9	0.0	0.0	100.0	67	2.0	66
North Kazakhstan	0.0	0.0	0.0	100.0	0.0	100.0	0.0	83.2	10.9	6.0	0.0	0.0	100.0	44	2.3	44
East Kazakhstan	2.8	0.0	0.0	97.2	0.0	100.0	2.8	87.0	10.2	0.0	0.0	0.0	100.0	100	2.3	97
Astana city	0.0	0.0	0.0	98.6	1.4	100.0	0.0	93.2	6.8	0.0	0.0	0.0	100.0	195	2.1	195
Almaty city	0.0	0.5	0.9	91.3	7.2	100.0	0.0	86.3	12.1	0.0	0.0	1.6	100.0	97	2.0	95

<b>Area</b>																
Urban	0.6	0.1	0.2	96.6	2.5	100.0	0.6	90.7	7.5	0.9	0.1	0.2	100.0	1076	2.0	1067
Rural	0.8	0.3	1.2	93.9	3.8	100.0	0.8	89.7	8.0	1.4	0.0	0.0	100.0	1081	2.0	1072
<b>Mother's age at birth</b>																
Younger than 20	0.7	0.0	0.6	98.1	0.6	100.0	0.7	82.9	9.2	6.5	0.7	0.0	100.0	98	2.3	97
20-34	0.6	0.1	0.8	95.1	3.4	100.0	0.6	91.1	7.4	0.7	0.0	0.1	100.0	1789	2.0	1775
35-49	1.1	1.0	0.2	95.2	2.5	100.0	1.1	86.8	9.5	2.3	0.2	0.2	100.0	270	2.0	267
<b>Education</b>																
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2	(*)	2
Lower secondary	3.6	0.0	0.0	95.6	0.8	100.0	3.6	88.9	5.8	1.3	0.0	0.3	100.0	97	2.0	93
Upper secondary	0.4	0.2	0.3	96.3	2.8	100.0	0.4	88.7	8.7	1.9	0.0	0.3	100.0	518	2.0	514
Technical and Professional	0.7	0.3	1.3	93.4	4.2	100.0	0.7	88.7	9.0	1.4	0.2	0.0	100.0	660	2.0	656
Higher	0.5	0.1	0.6	96.2	2.7	100.0	0.5	92.4	6.6	0.5	0.0	0.1	100.0	879	2.0	874
<b>Wealth index quintile</b>																
Poorest	0.6	0.1	1.7	93.7	3.9	100.0	0.6	89.0	7.1	2.7	0.3	0.4	100.0	415	2.0	411
Second	1.3	0.6	1.1	94.3	2.7	100.0	1.3	89.3	8.4	1.0	0.0	0.0	100.0	457	2.0	451
Middle	0.3	0.0	0.5	95.4	3.8	100.0	0.3	90.3	8.7	0.5	0.0	0.2	100.0	502	2.0	500
Fourth	1.0	0.1	0.1	96.0	2.8	100.0	1.0	89.0	9.0	1.1	0.0	0.0	100.0	422	2.0	418
Richest	0.3	0.0	0.0	97.4	2.3	100.0	0.3	94.1	5.2	0.5	0.0	0.0	100.0	360	2.0	359
<b>Ethnicity of household head</b>																
Kazakh	0.8	0.2	0.8	94.6	3.5	100.0	0.8	89.5	8.4	1.1	0.0	0.1	100.0	1520	2.0	1506
Russian	0.5	0.0	0.0	96.7	2.8	100.0	0.5	89.7	7.3	2.3	0.3	0.0	100.0	261	2.0	260
Other ethnic groups	0.4	0.0	0.8	97.0	1.8	100.0	0.4	93.4	5.6	0.5	0.0	0.2	100.0	375	2.0	373

<sup>1</sup> MICS indicator 5.5b; MDG indicator 5.5 - Antenatal care coverage

(\*) Figures that are based on fewer than 25 unweighted cases.

**Table RH.9: Content of antenatal care**

Percentage of women aged 15-49 years with a live birth in the last two years who, at least once, had their blood pressure measured, urine sample taken, and blood sample taken as part of antenatal care, during the pregnancy for the last birth, Kazakhstan, 2015

	Percentage of women who, during the pregnancy of their last birth, had:				Number of women with a live birth in the last two years
	Blood pressure measured	Urine sample taken	Blood sample taken	Blood pressure measured, urine and blood sample taken <sup>1</sup>	
<b>Total</b>	99.3	99.3	99.3	99.3	2157
<b>Region</b>					
Akmola	98.7	98.7	98.7	98.7	93
Aktobe	100.0	100.0	100.0	100.0	145
Almaty oblast	100.0	100.0	100.0	100.0	188
Atyrau	97.6	97.6	97.6	97.6	85
West Kazakhstan	99.4	99.4	99.4	99.4	100
Zhambyl	99.4	99.4	99.4	99.4	165
Karaganda	100.0	100.0	100.0	100.0	139
Kostanai	100.0	100.0	100.0	100.0	82
Kyzylorda	97.8	97.8	97.8	97.8	83
Mangistau	98.7	98.7	98.7	98.7	101
South Kazakhstan	99.4	99.4	99.4	99.4	474
Pavlodar	97.9	97.9	97.9	97.9	67
North Kazakhstan	100.0	100.0	100.0	100.0	44
East Kazakhstan	96.3	97.2	97.2	96.3	100
Astana city	100.0	100.0	100.0	100.0	195
Almaty city	100.0	100.0	100.0	100.0	97
<b>Area</b>					
Urban	99.4	99.4	99.4	99.4	1076
Rural	99.1	99.2	99.2	99.1	1081
<b>Mother's age at birth</b>					
Younger than 20	99.3	99.3	99.3	99.3	98
20-34	99.3	99.4	99.4	99.3	1789
35-49	98.9	98.9	98.9	98.9	270
<b>Education</b>					
None/Primary	(*)	(*)	(*)	(*)	2
Lower secondary	96.4	96.4	96.4	96.4	97
Upper secondary	99.4	99.6	99.6	99.4	518
Technical and Professional	99.3	99.3	99.3	99.3	660
Higher	99.5	99.5	99.5	99.5	879
<b>Wealth index quintile</b>					
Poorest	99.4	99.4	99.4	99.4	415
Second	98.5	98.7	98.7	98.5	457
Middle	99.7	99.7	99.7	99.7	502
Fourth	99.0	99.0	99.0	99.0	422
Richest	99.7	99.7	99.7	99.7	360
<b>Ethnicity of household head</b>					
Kazakh	99.1	99.2	99.2	99.1	1520
Russian	99.5	99.5	99.5	99.5	261
Other ethnic groups	99.6	99.6	99.6	99.6	375

<sup>1</sup> MICS indicator 5.6 - Content of antenatal care

(\*) Figures that are based on fewer than 25 unweighted cases.

## ***Assistance at Delivery***

About three quarters of all maternal deaths occur due to direct obstetric causes.<sup>44</sup> The single most critical intervention for safe motherhood is to ensure that a competent health worker with midwifery skills is present at every birth, and in case of emergency that transportation is available to a referral facility for obstetric care. The skilled attendant at delivery indicator is used to track progress toward the Millennium Development Goal 5 of improving maternal health, as well as for recently adopted Sustainable Development Goals.

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, as well as a feldsher with professional skills of a nurse, midwife and to some extent, a doctor.

In Kazakhstan, nearly all births (99.4 percent), which took place during the two years preceding the MICS, were attended by qualified personnel and practically all births took place in public health facilities (Table RH.10). In 7 regions of the country, 100 percent of births were attended by skilled health personnel. It should be noted that there are no differences in the provision of obstetrical medical care by qualified personnel by women's individual characteristics.

More than 90 percent of births in Kazakhstan were delivered with the assistance of doctors, and 9.1 percent of births with the assistance of nurses and midwives (Figure RH.3). Nursing staff, i.e. nurses and midwives assisted at delivery more frequently in the West Kazakhstan, Zhambyl and Kyzylorda regions and Almaty oblast (28.1, 24.9, 21.9 and 19.5 percent, respectively).

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<sup>44</sup> Say, L et al. 2014. *Global causes of maternal death: a WHO systematic analysis. The Lancet Global Health* 2(6): e323-33. DOI: 10.1016/S2214-109X(14)70227-X.

**Figure RH.3: Person assisting at delivery, Kazakhstan, 2015**

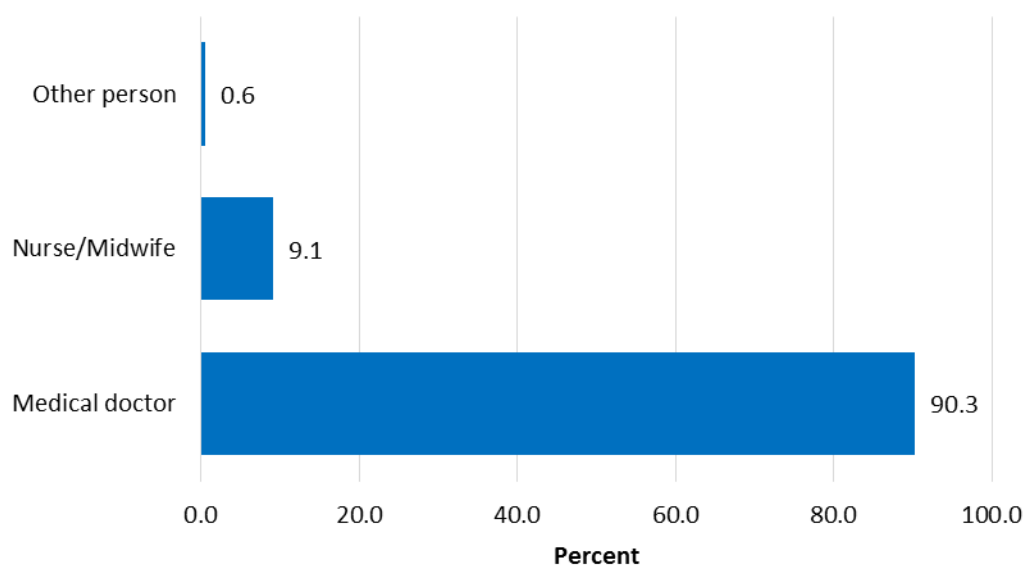


Table RH.10 also shows information on women who delivered by caesarian section (C-section) and provides additional information on the timing of the decision to conduct a C- section (before labour pains began or after) in order to better assess if such decisions are mostly driven by medical or non-medical reasons.

Overall, in Kazakhstan, 14.8 percent of women who delivered had a C-section; for 9.6 percent women, the decision was taken before the onset of labour pains and for 5.3 percent, the decision was made after. The percentages of C-section use in obstetrics ranged from 9.9 percent in the Kyzylorda region to 22.1 percent in the Karaganda region. This method of delivery was used among about 13 percent of women younger than 20 years and 20-34 years at time of birth, and approximately 22 percent among those aged 35-49 years.

**Table RH.10: Assistance at delivery and caesarian section**

Percent distribution of women aged 15-49 years with a live birth in the last two years by person providing assistance at delivery, and percentage of births delivered by C-section, Kazakhstan, 2015

	Person assisting at delivery					Total	Delivery assisted by any skilled attendant <sup>1,a</sup>	Percent delivered by C-section			Number of women who had a live birth in the last two years
	Medical doctor	Nurse/Midwife	Feldsher	Relative/Friend	Other/Missing			Decided before onset of labour pains	Decided after onset of labour pains	Total <sup>2</sup>	
<b>Total</b>	90.3	9.1	0.0	0.0	0.6	100.0	99.4	9.6	5.3	14.8	2157
<b>Region</b>											
Akmola	95.2	4.2	0.0	0.0	0.7	100.0	99.3	13.0	8.0	20.9	93
Aktobe	97.9	2.1	0.0	0.0	0.0	100.0	100.0	9.7	2.1	11.8	145
Almaty oblast	80.5	19.5	0.0	0.0	0.0	100.0	100.0	14.2	4.5	18.8	188
Atyrau	90.4	7.2	0.0	0.0	2.4	100.0	97.6	7.5	5.3	12.8	85
West Kazakhstan	71.3	28.1	0.6	0.0	0.0	100.0	100.0	13.5	2.0	15.5	100
Zhambyl	74.5	24.9	0.0	0.0	0.6	100.0	99.4	16.7	5.4	22.1	165
Karaganda	95.1	4.9	0.0	0.0	0.0	100.0	100.0	9.9	4.1	14.1	139
Kostanai	93.7	6.3	0.0	0.0	0.0	100.0	100.0	9.4	10.7	20.2	82
Kyzylorda	76.3	21.9	0.0	0.0	1.8	100.0	98.2	6.7	3.1	9.9	83
Mangistau	94.1	4.6	0.0	0.0	1.3	100.0	98.7	7.4	4.1	11.5	101
South Kazakhstan	98.4	1.0	0.0	0.0	0.6	100.0	99.4	5.4	6.0	11.3	474
Pavlodar	89.3	8.5	0.0	0.0	2.1	100.0	97.9	10.6	9.1	19.7	67
North Kazakhstan	97.9	2.1	0.0	0.0	0.0	100.0	100.0	5.6	9.8	15.3	44
East Kazakhstan	94.4	4.4	0.0	0.0	1.2	100.0	98.8	11.5	5.5	17.0	100
Astana city	86.6	13.4	0.0	0.0	0.0	100.0	100.0	4.8	6.1	10.9	195
Almaty city	98.9	0.3	0.0	0.8	0.0	100.0	99.2	16.1	1.8	17.8	97
<b>Area</b>											
Urban	93.1	6.4	0.0	0.1	0.5	100.0	99.4	9.9	6.4	16.4	1076
Rural	87.6	11.8	0.1	0.0	0.6	100.0	99.4	9.2	4.1	13.3	1081
<b>Mother's age at birth</b>											
Younger than 20	93.8	5.5	0.0	0.0	0.7	100.0	99.3	5.2	8.2	13.3	98
20-34	90.5	9.0	0.0	0.0	0.5	100.0	99.5	8.8	4.9	13.8	1789
35-49	87.9	11.1	0.0	0.0	0.9	100.0	99.1	15.9	6.5	22.4	270
<b>Place of delivery</b>											

Home	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	2
Health facility	90.9	9.1	0.0	0.0	0.0	100.0	100.0	9.6	5.3	14.9	2142
Public	90.8	9.2	0.0	0.0	0.0	100.0	100.0	9.6	5.3	14.9	2133
Private	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	9
Other/DK/Missing	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	12
<b>Education</b>											
None/Primary	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	2
Lower secondary	92.4	6.2	0.0	0.0	1.4	100.0	98.6	8.0	12.8	20.8	97
Upper secondary	89.3	10.5	0.0	0.0	0.3	100.0	99.7	5.7	3.3	9.0	518
Technical and Professional	90.3	9.0	0.0	0.0	0.7	100.0	99.3	10.8	5.6	16.4	660
Higher	90.8	8.6	0.1	0.1	0.5	100.0	99.4	11.1	5.3	16.4	879
<b>Wealth index quintile</b>											
Poorest	89.2	10.4	0.0	0.0	0.3	100.0	99.7	7.4	6.6	14.0	415
Second	89.2	9.9	0.0	0.0	0.9	100.0	99.1	9.9	3.7	13.6	457
Middle	89.8	9.7	0.1	0.1	0.2	100.0	99.6	8.4	4.9	13.2	502
Fourth	91.9	7.2	0.0	0.0	1.0	100.0	99.0	12.4	6.7	19.1	422
Richest	91.8	7.9	0.0	0.0	0.3	100.0	99.7	10.0	4.5	14.5	360
<b>Ethnicity of household head</b>											
Kazakh	89.3	10.0	0.0	0.0	0.7	100.0	99.3	9.8	5.5	15.3	1520
Russian	93.3	6.4	0.0	0.0	0.3	100.0	99.7	12.8	7.3	20.1	261
Other ethnic groups	92.4	7.2	0.0	0.0	0.4	100.0	99.6	6.2	3.0	9.1	375

<sup>1</sup> MICS indicator 5.7; MDG indicator 5.2 - Skilled attendant at delivery

<sup>2</sup> MICS indicator 5.9 - Caesarean section

<sup>a</sup> Skilled attendants include Medical doctor, Nurse/Midwife, and Feldsher.

(\*) Figures that are based on fewer than 25 unweighted cases.

## Place of Delivery

Increasing the proportion of births that are delivered in health facilities is an important factor in reducing the health risks to both the mother and the baby. Proper medical attention and care by health personnel and hygienic conditions during delivery can reduce the risks of complications and infection that can cause morbidity and mortality to either the mother or the baby. Table RH.11 presents the percent distribution of women aged 15-49 who had a live birth in the two years preceding the survey by place of delivery of their last birth, and the percentage of births delivered in a health facility, according to background characteristics.

<b>Table RH.11: Place of delivery</b>								
Percent distribution of women aged 15-49 years with a live birth in the last two years by place of delivery of their last birth, Kazakhstan, 2015								
	Place of delivery					Total	Delivered in health facility <sup>1</sup>	Number of women with a live birth in the last two years
	Health facility		Home	Missing/DK				
	Public sector	Private sector						
<b>Total</b>	98.9	0.4	0.1	0.6	100.0	99.3	2157	
<b>Region</b>								
Akmola	99.3	0.0	0.0	0.7	100.0	99.3	93	
Aktobe	99.3	0.0	0.7	0.0	100.0	99.3	145	
Almaty oblast	98.7	1.3	0.0	0.0	100.0	100.0	188	
Atyrau	97.1	0.5	0.0	2.4	100.0	97.6	85	
West Kazakhstan	100.0	0.0	0.0	0.0	100.0	100.0	100	
Zhambyl	99.4	0.0	0.0	0.6	100.0	99.4	165	
Karaganda	100.0	0.0	0.0	0.0	100.0	100.0	139	
Kostanai	99.1	0.9	0.0	0.0	100.0	100.0	82	
Kyzylorda	97.5	0.0	0.7	1.8	100.0	97.5	83	
Mangistau	98.7	0.0	0.0	1.3	100.0	98.7	101	
South Kazakhstan	99.4	0.0	0.0	0.6	100.0	99.4	474	
Pavlodar	94.7	3.2	0.0	2.1	100.0	97.9	67	
North Kazakhstan	100.0	0.0	0.0	0.0	100.0	100.0	44	
East Kazakhstan	98.8	0.0	0.0	1.2	100.0	98.8	100	
Astana city	99.2	0.8	0.0	0.0	100.0	100.0	195	
Almaty city	97.3	1.9	0.8	0.0	100.0	99.2	97	
<b>Area</b>								
Urban	98.8	0.6	0.2	0.5	100.0	99.3	1076	
Rural	99.0	0.3	0.1	0.6	100.0	99.3	1081	
<b>Mother's age at birth</b>								
Younger than 20	99.3	0.0	0.0	0.7	100.0	99.3	98	
20-34	99.1	0.3	0.1	0.5	100.0	99.4	1789	
35-49	97.4	1.7	0.0	0.9	100.0	99.1	270	
<b>Number of antenatal care visits</b>								
None	(*)	(*)	(*)	(*)	100.0	(*)	15	
1-3 visits	(*)	(*)	(*)	(*)	100.0	(*)	19	
4+ visits	99.4	0.5	0.1	0.0	100.0	99.9	2055	
Missing/DK	100.0	0.0	0.0	0.0	100.0	100.0	68	
<b>Education</b>								
None/Primary	(*)	(*)	(*)	(*)	100.0	(*)	2	
Lower secondary	98.6	0.0	0.0	1.4	100.0	98.6	97	



Upper secondary	98.9	0.5	0.3	0.3	100.0	99.4	518
Technical and Professional	99.3	0.0	0.0	0.7	100.0	99.3	660
Higher	98.7	0.8	0.1	0.5	100.0	99.4	879
<b>Wealth index quintile</b>							
Poorest	99.1	0.6	0.0	0.3	100.0	99.7	415
Second	98.9	0.0	0.1	0.9	100.0	98.9	457
Middle	99.5	0.1	0.1	0.2	100.0	99.6	502
Fourth	99.0	0.0	0.0	1.0	100.0	99.0	422
Richest	97.7	1.7	0.3	0.3	100.0	99.4	360
<b>Ethnicity of household head</b>							
Kazakh	98.9	0.3	0.1	0.7	100.0	99.3	1520
Russian	98.5	0.8	0.4	0.3	100.0	99.3	261
Other ethnic groups	99.1	0.5	0.0	0.4	100.0	99.6	375
<b><sup>1</sup> MICS indicator 5.8 - Institutional deliveries</b>							
(*) Figures that are based on fewer than 25 unweighted cases.							

In Kazakhstan, 99.3 percent of births are delivered in health facilities: 98.9 percent predominantly occur in public sector facilities. Only a small proportion of births – 0.4 percent – are delivered in private sector health facilities, and 0.1 percent at home. There are no differences in the place of delivery by background characteristics of women. 3.2 percent of women from the Pavlodar region, as well as less than 2 percent of women from the Almaty city and Almaty oblast deliver in private sector health facilities.

### ***Post-natal Health Checks***

The time of birth and immediately after is a critical window of opportunity to deliver lifesaving interventions for both the mother and newborn. Across the world, approximately 3 million newborns annually die in the first month of life<sup>45</sup> and the majority of these deaths occur within a day or two of birth<sup>46</sup>, which is also the time when the majority of maternal deaths occur<sup>47</sup>.

Despite the importance of the first few days following birth, large-scale, nationally representative household survey programmes have not systematically included questions on the post-natal period and care for the mother and newborn. In 2008, the Countdown to 2015 initiative, which monitors progress on maternal, newborn and child health interventions, highlighted this data gap, and called not only for post-natal care (PNC) programmes to be strengthened, but also for better data availability and quality<sup>48</sup>.

Following the establishment and discussions of an Inter-Agency Group on PNC and drawing on lessons learned from earlier attempts of collecting PNC data, a new questionnaire module for MICS was developed and validated. Named the Post-natal Health Checks (PNHC) module, the objective is to collect information on newborns' and mothers' *contact* with a provider, not content of care. The rationale for this is that as PNC programmes scale up, it is important to measure the coverage of that scale up and ensure that the platform for providing essential services is in place. Content is considered

<sup>45</sup> UN Interagency Group for Child Mortality Estimation. 2013. *Levels and Trends in Child Mortality: Report 2013*.

<sup>46</sup> Lawn, JE et al. 2005. *4 million neonatal deaths: When? Where? Why?* Lancet 2005; 365:891–900.

<sup>47</sup> WHO, UNICEF, UNFPA, The World Bank. 2012. *Trends in Maternal Mortality: 1990-2010*. World Health Organization.

<sup>48</sup> HMN, UNICEF, WHO. 2008. *Countdown to 2015: Tracking Progress in Maternal, Newborn & Child Survival, The 2008 Report*. UNICEF.

more difficult to measure, particularly because the respondent is asked to recall services provided soon after birth of her last child delivered up to two years preceding the survey.

Kazakhstan has adopted the WHO strategy of "Safe Motherhood": partnership childbirth, free choice of position in labour, early contact between mother and child, respect for the "thermal chain", early breastfeeding attachment, rooming-in of a mother and a child, exclusive breastfeeding, aimed at nursing of the term and mature children. The country has promoted the principle of "Every child is welcome, every birth is safe".

Table RH.12 presents the percent distribution of women aged 15-49 who had a live birth in a health facility in the two years preceding the survey by duration of stay in the facility following the delivery, according to background characteristics.

<b>Table RH.12: Post-partum stay in health facility</b>												
Percent distribution of women aged 15-49 years with a live birth in the last two years who had their last birth delivered in a health facility by duration of stay in health facility, Kazakhstan, 2015												
	Duration of stay in health facility									Total	12 hours or more <sup>1</sup>	Number of women who had their last birth delivered in a health facility in the last 2 years
	less 12 hours	12 or more hours, but less than two days	2 days	3 days	4 days	5 days	6 days	7 days and more	DK/missing			
<b>Total</b>	0.0	0.7	10.3	44.4	15.6	11.9	2.1	15.0	0.0	100.0	99.9	2142
<b>Region</b>												
Akmola	0.0	0.0	8.6	36.1	16.3	21.3	2.9	14.7	0.0	100.0	100.0	92
Aktobe	0.0	0.0	7.3	56.3	12.7	8.3	0.0	15.4	0.0	100.0	100.0	144
Almaty oblast	0.0	0.0	3.4	35.4	29.0	16.1	4.1	12.0	0.0	100.0	100.0	188
Atyrau	0.0	0.0	3.3	47.0	20.9	8.8	1.5	17.6	0.9	100.0	99.1	83
West Kazakhstan	0.0	5.1	28.4	38.2	2.8	7.5	3.0	15.0	0.0	100.0	100.0	100
Zhambyl	0.0	1.0	6.3	41.6	16.9	18.6	1.6	13.9	0.0	100.0	100.0	164
Karaganda	0.0	0.0	4.4	48.0	10.8	14.6	0.9	21.3	0.0	100.0	100.0	139
Kostanai	0.0	0.0	2.5	28.4	18.5	16.9	8.4	25.3	0.0	100.0	100.0	82
Kyzylorda	0.6	0.6	6.5	45.9	22.4	10.9	1.7	11.4	0.0	100.0	99.4	81
Mangistau	0.0	2.3	18.8	40.5	11.9	11.1	1.1	14.1	0.0	100.0	100.0	99
South Kazakhstan	0.0	0.4	5.4	48.7	16.8	9.9	2.5	16.3	0.0	100.0	100.0	471
Pavlodar	0.0	0.0	1.9	51.1	7.6	9.5	1.1	28.8	0.0	100.0	100.0	66
North Kazakhstan	0.0	2.7	18.2	32.2	7.8	12.7	2.9	23.5	0.0	100.0	100.0	44
East Kazakhstan	0.0	0.0	2.2	48.2	13.6	18.4	2.4	15.2	0.0	100.0	100.0	98
Astana city	0.0	1.2	41.9	40.5	7.0	3.3	0.5	5.7	0.0	100.0	100.0	195
Almaty city	0.0	0.0	3.1	55.3	23.9	10.9	0.4	6.4	0.0	100.0	100.0	96
<b>Area</b>												
Urban	0.0	1.0	13.8	45.4	15.8	9.9	1.7	12.4	0.0	100.0	100.0	1069
Rural	0.0	0.3	6.8	43.3	15.4	13.9	2.5	17.7	0.0	100.0	99.9	1074
<b>Mother's age at birth</b>												
Younger than 20	0.0	0.0	3.4	37.8	18.0	9.8	6.4	24.5	0.0	100.0	100.0	97
20-34	0.0	0.7	11.4	44.9	15.1	11.9	2.1	13.8	0.0	100.0	100.0	1778
35-49	0.2	0.8	5.0	43.0	17.5	12.6	0.8	19.8	0.2	100.0	99.6	268

<b>Type of health facility</b>												
Public	0.0	0.6	10.3	44.3	15.6	11.9	2.1	15.1	0.0	100.0	99.9	2133
Private	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	9
<b>Type of delivery</b>												
Vaginal birth	0.0	0.8	11.4	50.1	16.2	10.4	1.0	10.0	0.0	100.0	99.9	1822
C-section	0.0	0.3	3.8	11.4	11.7	20.4	8.4	43.9	0.0	100.0	100.0	320
<b>Education</b>												
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	2
Lower secondary	0.0	0.0	8.1	30.7	19.3	14.0	6.7	21.2	0.0	100.0	100.0	96
Upper secondary	0.0	0.3	5.9	46.1	19.8	11.0	1.6	15.4	0.0	100.0	100.0	515
Technical and Professional	0.1	0.6	10.6	46.3	12.9	11.9	1.7	15.7	0.1	100.0	99.8	656
Higher	0.0	1.0	12.8	43.4	14.7	12.2	2.2	13.6	0.0	100.0	100.0	874
<b>Wealth index quintile</b>												
Poorest	0.0	0.3	8.0	47.6	13.8	10.5	3.9	15.9	0.0	100.0	100.0	414
Second	0.0	0.6	5.0	37.8	19.4	14.1	2.2	20.8	0.1	100.0	99.9	452
Middle	0.0	0.4	8.4	46.3	14.9	14.4	0.9	14.5	0.0	100.0	100.0	500
Fourth	0.1	1.1	14.7	45.3	13.5	11.0	1.9	12.3	0.0	100.0	99.9	418
Richest	0.0	1.2	16.8	44.9	16.1	8.3	1.8	10.8	0.1	100.0	99.9	358
<b>Ethnicity of household head</b>												
Kazakh	0.0	0.7	12.2	46.1	14.5	10.7	1.8	13.9	0.0	100.0	99.9	1509
Russian	0.0	0.5	8.4	38.9	17.7	13.6	3.4	17.5	0.0	100.0	100.0	260
Other ethnic groups	0.0	0.9	3.7	40.9	18.3	15.6	2.6	18.0	0.0	100.0	100.0	374
<b><sup>1</sup> MICS indicator 5.10 - Post-partum stay in health facility</b>												
(*) Figures that are based on fewer than 25 unweighted cases.												

In Kazakhstan, nearly every woman who gave birth in a health care facility stays in the facility 12 hours or more (99.9 percent) after delivery, with virtually no regional differences. Almost nine of ten women (89.0 percent) stay in health facilities 3 or more days after delivery; of which 44.4 percent stay in health facilities exactly 3 days after delivery; and 11.0 percent of women stay in health facilities less than 3 days after delivery (Table RH.12). The percentage of mothers who stay in health facilities for less than 3 days after delivery ranges from 1.9 percent in the Pavlodar region to 43.1 percent in Astana city.

There is a gap in the percentages for those who stay in health facilities for less than 3 days between urban (14.8 percent) and rural (7.1 percent) women. As expected, more than nine of ten women (95.9 percent) who gave birth by caesarean section, stayed in a medical facility three days or more after delivery, of which 43.9 percent of stay in the hospital for 7 days or more.

Women with higher education (13.9 percent) and those living in the richest households (18.0 percent) are more likely to stay in health facilities for less than 3 days, compared to women with lower and upper secondary education (8.1 and 6.2 percent, respectively) and from the poorest households (8.3 percent).

Safe motherhood programmes have recently increased emphasis on the importance of post-natal care, recommending that all women and newborns receive a health check within two days of delivery. To assess the extent of post-natal care utilization, women were asked whether they and their newborn received a health check after the delivery, the timing of the first check, and the type of health provider for the woman's last birth in the two years preceding the survey.

Table RH.13 shows the percentage of newborns born in the last two years who received health checks while in facility or at home following birth and who received post-natal care visits by any health

provider following discharge from health facility. Please note that *health checks following birth* while in facility or at home refer to checks provided by any health provider regardless of timing (column 1), whereas *post-natal care visits* refer to a separate visit to check on the health of the newborn and provide preventive care services and therefore do not include *health checks following birth* while in facility or at home. The indicator *Post-natal health checks* includes any received health check after birth while in the health facility and at home (column 1), regardless of timing, as well as PNC visits within first two days of delivery (columns 2, 3, and 4).

**Table RH.13: Post-natal health checks for newborns**

Percentage of women aged 15-49 years with a live birth in the last two years whose last live birth received health checks while in facility or at home following birth, percent distribution whose last live birth received post-natal care (PNC) visits from any health provider after birth, by timing of visit, and percentage who received post natal health checks, Kazakhstan, 2015

	Health check following birth while in facility or at home <sup>a</sup>	PNC visit for newborns <sup>b</sup>								Post-natal health check for the newborn <sup>1,c</sup>	Number of last live births in the last two years	PNC visit for newborns by time following discharge from health facility <sup>d</sup>								Number of last live births in the last two years delivered in health facility
		Same day	1 day following birth	2 days following birth	3-6 days following birth	After the first week following birth	No post-natal care visit	Missing/DK	Total			Same day	1 day following discharge	2 days following discharge	3-6 days following discharge <sup>e</sup>	After the first week following discharge	No post-natal care visit following discharge	Missing/DK	Total	
<b>Total</b>	99.4	1.0	2.2	1.9	56.2	36.1	1.7	0.8	100.0	99.4	2157	2.6	30.7	23.5	30.5	10.2	1.7	0.9	100.0	2154
<b>Region</b>																				
Akmola	99.3	0.0	3.1	0.6	48.3	44.0	2.2	1.7	100.0	99.3	93	2.7	25.7	24.9	30.2	12.6	2.2	1.7	100.0	93
Aktobe	100.0	6.9	2.9	2.7	69.9	16.2	0.9	0.5	100.0	100.0	145	8.0	29.1	39.4	9.7	12.4	0.9	0.5	100.0	144
Almaty oblast	100.0	2.4	2.7	3.3	52.6	34.0	3.7	1.3	100.0	100.0	188	3.3	26.3	34.6	24.9	5.9	3.7	1.3	100.0	188
Atyrau	97.6	0.6	3.8	0.6	45.8	43.5	3.1	2.6	100.0	97.6	85	0.6	25.9	17.6	38.4	11.2	3.1	3.3	100.0	85
West Kazakhstan	100.0	1.3	1.2	2.4	59.9	29.1	0.7	5.4	100.0	100.0	100	1.3	35.6	22.3	26.1	8.7	0.7	5.4	100.0	100
Zhambyl	99.4	0.0	5.1	3.5	43.1	46.5	1.1	0.6	100.0	99.4	165	6.2	30.6	12.6	41.5	7.4	1.1	0.6	100.0	165
Karaganda	100.0	0.9	3.6	1.0	52.6	41.8	0.0	0.0	100.0	100.0	139	2.8	30.9	17.6	38.3	10.4	0.0	0.0	100.0	139
Kostanai	100.0	0.0	0.0	1.8	41.3	55.3	1.5	0.0	100.0	100.0	82	0.0	30.7	12.5	45.8	9.4	1.5	0.0	100.0	82
Kyzylorda	97.7	0.4	2.3	1.8	55.8	36.1	3.0	0.5	100.0	97.7	83	3.4	16.7	29.5	35.7	11.1	3.0	0.5	100.0	82
Mangistau	98.7	0.4	4.7	3.9	59.9	26.4	4.7	0.0	100.0	98.7	101	0.8	41.0	24.0	22.6	6.9	4.7	0.0	100.0	101
South Kazakhstan	99.4	0.5	0.0	0.4	66.3	31.1	1.4	0.4	100.0	99.4	474	0.8	36.7	24.3	22.8	13.7	1.4	0.4	100.0	474
Pavlodar	97.9	0.0	5.0	7.3	18.8	65.8	3.2	0.0	100.0	97.9	67	2.7	11.3	12.9	45.8	24.1	3.2	0.0	100.0	67
North Kazakhstan	100.0	1.2	3.9	3.6	57.9	32.3	1.1	0.0	100.0	100.0	44	6.3	34.6	17.5	35.3	5.2	1.1	0.0	100.0	44
East Kazakhstan	98.8	0.0	0.0	0.0	53.7	43.0	1.2	2.1	100.0	98.8	100	0.0	32.2	19.7	32.4	12.4	1.2	2.1	100.0	100
Astana city	100.0	0.0	3.0	1.9	72.5	21.4	1.3	0.0	100.0	100.0	195	3.5	39.3	21.0	32.1	2.9	1.3	0.0	100.0	195
Almaty city	99.2	0.0	0.0	2.1	38.3	59.3	0.0	0.4	100.0	100.0	97	0.9	10.1	28.9	51.0	8.8	0.0	0.4	100.0	96

<b>Area</b>																				
Urban	99.4	0.5	1.1	1.7	59.3	35.7	1.1	0.6	100.0	99.5	1076	1.9	31.5	24.1	31.9	9.0	1.1	0.6	100.0	1074
Rural	99.4	1.5	3.3	2.2	53.1	36.5	2.3	1.1	100.0	99.4	1081	3.3	29.9	22.9	29.1	11.3	2.3	1.2	100.0	1080
<b>Mother's age at birth</b>																				
Younger than 20	99.3	0.0	1.4	0.3	45.0	46.2	5.2	1.9	100.0	99.3	98	1.3	21.8	17.7	35.5	16.7	5.2	1.9	100.0	98
20-34	99.4	0.9	1.9	2.0	58.2	34.8	1.4	0.8	100.0	99.5	1789	2.6	31.4	23.9	30.2	9.7	1.4	0.8	100.0	1786
35-49	99.1	1.8	4.4	2.2	47.0	41.2	2.5	0.8	100.0	99.1	270	3.0	29.1	22.6	30.8	10.9	2.5	1.0	100.0	270
<b>Place of delivery</b>																				
Home	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	2	na	na	na	na	na	na	na	na	na
Health facility	100.0	0.9	2.2	1.9	56.6	36.3	1.2	0.8	100.0	100.0	2142	2.6	30.9	23.6	30.7	10.2	1.2	0.9	100.0	2142
Public	100.0	0.9	2.2	1.9	56.6	36.3	1.1	0.9	100.0	100.0	2133	2.6	31.0	23.6	30.6	10.2	1.1	0.9	100.0	2133
Private	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	9	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	9
Other/DK/Missing	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	12	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	12
<b>Education</b>																				
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	2	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	2
Lower secondary	98.6	0.0	4.5	1.8	42.8	48.1	1.8	1.1	100.0	98.6	97	4.1	21.8	15.1	42.1	14.0	1.8	1.1	100.0	97
Upper secondary	99.7	1.2	1.1	1.7	61.8	32.2	1.4	0.6	100.0	99.7	518	1.8	32.8	25.0	26.0	12.5	1.4	0.6	100.0	516
Technical and Professional	99.2	0.3	2.0	1.9	56.4	35.3	2.5	1.6	100.0	99.2	660	1.8	30.8	24.5	27.5	11.3	2.5	1.6	100.0	660
Higher	99.4	1.5	2.8	2.1	54.4	37.5	1.3	0.4	100.0	99.5	879	3.6	30.4	22.9	33.9	7.5	1.3	0.4	100.0	879
<b>Wealth index quintile</b>																				
Poorest	99.7	0.7	2.6	1.3	56.9	35.5	1.0	2.1	100.0	99.7	415	2.2	30.7	24.2	28.3	11.6	1.0	2.1	100.0	415
Second	99.1	0.8	2.9	2.0	49.4	41.0	3.3	0.6	100.0	99.1	457	2.2	29.3	20.8	28.9	14.8	3.4	0.7	100.0	456
Middle	99.5	2.2	2.3	1.9	57.4	34.1	1.0	1.1	100.0	99.7	502	3.8	32.7	21.8	31.2	8.5	1.0	1.1	100.0	501
Fourth	99.0	0.4	2.0	2.8	59.7	32.9	2.0	0.2	100.0	99.0	422	1.8	29.8	27.0	29.7	9.5	2.0	0.2	100.0	422
Richest	99.7	0.6	1.0	1.5	58.3	37.2	1.2	0.2	100.0	99.7	360	2.9	30.8	24.3	35.0	5.6	1.2	0.2	100.0	359
<b>Ethnicity of household head</b>																				
Kazakh	99.3	1.0	2.4	2.0	56.5	35.1	2.0	0.9	100.0	99.3	1520	3.1	30.8	23.0	30.7	9.6	2.0	1.0	100.0	1519
Russian	99.7	0.9	3.4	2.9	52.9	38.8	1.2	0.0	100.0	99.7	261	1.7	33.5	23.9	28.4	11.3	1.2	0.0	100.0	260
Other ethnic groups	99.6	0.8	0.7	0.9	57.5	38.3	0.8	1.0	100.0	99.6	375	1.5	28.4	25.3	31.2	11.8	0.8	1.0	100.0	375

<sup>1</sup> MICS indicator 5.11 - Post-natal health check for the newborn

na: not applicable.

<sup>a</sup> Health checks by any health provider following facility births (before discharge from facility) or following home births (before departure of provider from home).

<sup>b</sup> Post-natal care visits (PNC) refer to a separate visit by any health provider to check on the health of the newborn and provide preventive care services. PNC visits do not include health checks following birth while in facility or at home (see note <sup>a</sup> above).

<sup>c</sup> Post-natal health checks include any health check performed while in the health facility or at home following birth (see note <sup>a</sup> above), as well as PNC visits (see note <sup>b</sup> above) within two days of delivery.

<sup>d</sup>The same length of stay in the health facility is used for both the mother and the newborn child (since only information on the duration of stay of the mother is collected).

<sup>e</sup>Including women that report time of the first PNC check in weeks.

(\*) Figures that are based on fewer than 25 unweighted cases.

Overall, 99.4 percent of newborns in Kazakhstan receive a health check following birth while in a facility or at home. With regards to PNC visits, these predominantly occur either on the first day following discharge (30.7 percent) or 3-6 days (30.5 percent) following discharge. Approximately every fourth PNC visit for newborns (23.5 percent) was carried out 2 days following discharge, and 10.2 percent after the first week following discharge. In general, almost every newborn child (with some exceptions) in the country received PNC visits following discharge from health facility, while 1.7 percent of children received no PNC visit following discharge from the medical facility.

**Table RH.14: Post-natal care visits for newborns within the first week following discharge from health facility<sup>a</sup>**

Percent distribution of women aged 15-49 years with a live birth in the last two years whose last live birth received a post-natal care (PNC) visit within the first week following discharge from the health facility, by location and provider of the first PNC visit, Kazakhstan, 2015

	Location of first PNC visit for newborns within the first week following discharge from the health facility		Total	Provider of first PNC visit for newborns within the first week following discharge from the health facility		Total	Number of last live births in the last two years with a PNC visit within the first week following discharge from the health facility
	Home	Public Sector		Doctor/ nurse/ midwife	Feldsher		
	Total	97.4		2.6	100.0		
<b>Region</b>							
Akmola	98.3	1.7	100.0	94.7	5.3	100.0	77
Aktobe	90.8	9.2	100.0	86.3	13.7	100.0	124
Almaty oblast	97.6	2.4	100.0	100.0	0.0	100.0	168
Atyrau	100.0	0.0	100.0	100.0	0.0	100.0	70
West Kazakhstan	96.2	3.8	100.0	74.1	25.9	100.0	85
Zhambyl	99.3	0.7	100.0	98.6	1.4	100.0	150
Karaganda	99.0	1.0	100.0	98.9	1.1	100.0	124
Kostanai	99.1	0.9	100.0	92.2	7.8	100.0	73
Kyzylorda	100.0	0.0	100.0	98.1	1.9	100.0	70
Mangistau	85.9	14.1	100.0	100.0	0.0	100.0	89
South Kazakhstan	99.9	0.1	100.0	95.9	4.1	100.0	401
Pavlodar	97.3	2.7	100.0	100.0	0.0	100.0	49
North Kazakhstan	100.0	0.0	100.0	80.0	20.0	100.0	42
East Kazakhstan	96.4	3.6	100.0	97.5	2.5	100.0	84
Astana city	96.8	3.2	100.0	100.0	0.0	100.0	187
Almaty city	95.9	4.1	100.0	100.0	0.0	100.0	87
<b>Area</b>							
Urban	97.5	2.5	100.0	99.2	0.8	100.0	960
Rural	97.2	2.8	100.0	92.1	7.9	100.0	921
<b>Mother's age at birth</b>							
Younger than 20	96.8	3.2	100.0	98.8	1.2	100.0	74
20-34	97.4	2.6	100.0	95.8	4.2	100.0	1575
35-49	97.2	2.8	100.0	94.3	5.7	100.0	231
<b>Place of delivery</b>							
Health facility	97.4	2.6	100.0	95.7	4.3	100.0	1880
Public	97.3	2.7	100.0	95.7	4.3	100.0	1873
Private	(*)	(*)	100.0	(*)	(*)	100.0	7
<b>Education</b>							
None/Primary							
Lower secondary	(*)	(*)	100.0	(*)	(*)	100.0	2
Upper secondary	97.6	2.4	100.0	97.0	3.0	100.0	81



Technical and Professional	98.6	1.4	100.0	94.1	5.9	100.0	441
Higher	95.8	4.2	100.0	94.7	5.3	100.0	559
<b>Wealth index quintile</b>	97.8	2.2	100.0	97.2	2.8	100.0	798
Poorest							
Second	98.1	1.9	100.0	90.1	9.9	100.0	355
Middle	97.6	2.4	100.0	94.9	5.1	100.0	370
Fourth	96.4	3.6	100.0	96.3	3.7	100.0	449
Richest	97.3	2.7	100.0	98.7	1.3	100.0	373
<b>Ethnicity of household head</b>	97.7	2.3	100.0	98.5	1.5	100.0	334
Kazakh							
Russian	96.8	3.2	100.0	94.6	5.4	100.0	1328
Other ethnic groups	99.3	0.7	100.0	97.6	2.4	100.0	228
Total	98.2	1.8	100.0	98.9	1.1	100.0	324
<sup>a</sup> The same length of stay in the health facility is used for both the mother and the newborn child (since only information on the duration of stay of the mother is collected).							
(*) Figures that are based on fewer than 25 unweighted cases.							

In Table RH.14, the percentage of newborns who received the first PNC visit within the first week following discharge from the health facility is shown by location and type of provider of service. As defined above, a visit does not include a check up in the facility or at home following birth.

In Kazakhstan, 97.4 percent of first PNC visits for newborns within the first week following discharge occur at home, and 2.6 percent in public health facilities. No major differences are observed by background characteristics of respondents. The first PNC visits for newborns within the first week following discharge are most commonly carried out by doctors, nurses and midwives (95.7 percent) and less frequently by feldshers (4.3 percent).

The distribution by area of residence shows that the first PNC visits for newborns within the first week following discharge was provided by a doctor, nurse or midwife in urban areas more frequently than in rural areas (99.2 and 92.1 percent, respectively); while in rural areas – such visits were conducted by feldshers more frequently than in urban areas (7.9 and 0.8 percent, respectively) since feldshers usually work in rural areas.

Tables RH.15 and RH.16 present information on post-natal health checks and visits of mothers, which are similar to those given in Tables RH.13 and RH.14 that present the PNC data on newborns.

Table RH.15 presents a pattern somewhat similar to Table RH.13, but with some important differences. In Kazakhstan, 97.4 percent of mothers receive a health check following birth while in facility or at home. Regarding PNC visit for mothers following discharge from the health facility, it was found that 26.4 percent of visits were made after the first week following discharge, and 17.3 percent – 3-6 days following discharge. At the same time, 36.7 percent of mothers had no PNC visits after being discharged from the health care facility. More than a quarter of women (26.1 percent) delivered by C-section were not covered by a PNC following discharge. However, overall 62.2 percent of mothers were covered with postnatal care following discharge across the country.

Maternal postnatal care coverage following discharge from the health facility ranges from 37.7 percent in the Atyrau region to more than 75 percent in the Zhambyl, Karaganda, Pavlodar and North Kazakhstan regions.

Mothers from the urban and rural areas have similar chances to receive postnatal care – both soon after delivery, and taking into account total PNC visits following discharge; moreover, there are no notable differences for post-natal health checks for mothers by education level of the woman or household wealth. The main difference between PNC data for newborns in Table RH.13 and PNC data for mothers in Table RH.15 is that the proportion of visits for mothers is lower than for babies – both soon after birth, and during PNC visits after discharge. If we compare the data of only those mothers and newborns who are not covered by PNC visits, their percentages amount to 36.7 and 1.7 percent respectively.

**Table RH.15: Post-natal health checks for mothers**

Percentage of women aged 15-49 years with a live birth in the last two years who received health checks while in facility or at home following birth, percent distribution who received post-natal care (PNC) visits from any health provider after birth at the time of last birth, and following discharge from the health facility, by timing of visit, and percentage who received post-natal health checks, Kazakhstan, 2015

	Health check following birth while in facility or at home <sup>a</sup>	PNC visit for mothers <sup>b</sup>								Post-natal health check for the mother <sup>1,c</sup>	Number of women with a live birth in the last two years	PNC visit for mothers by time following discharge from health facility <sup>d</sup>								Number of women with a live birth in the last two years delivered in health facility
		Same day	1 day following birth	2 days following birth	3-6 days following birth	After the first week following birth	No post-natal care visit	Missing/DK	Total			Same day	1 day following discharge	2 days following discharge	3-6 days following discharge <sup>e</sup>	After the first week following discharge	No post-natal care visit following discharge	Missing/DK	Total	
<b>Total</b>	97.4	0.3	0.5	0.7	19.5	41.2	36.7	1.1	100.0	97.5	2157	1.2	9.0	8.3	17.3	26.4	36.7	1.1	100.0	2154
<b>Region</b>																				
Akmola	97.1	0.0	0.0	0.0	15.8	36.5	47.1	0.6	100.0	97.1	93	2.0	3.4	11.0	14.0	22.0	47.1	0.6	100.0	93
Aktobe	93.3	1.1	0.7	1.2	39.6	19.2	37.1	1.1	100.0	93.3	145	1.6	10.3	28.0	6.3	15.2	37.4	1.1	100.0	144
Almaty oblast	99.2	0.0	0.0	0.0	2.2	60.9	32.7	4.2	100.0	99.2	188	0.8	1.4	0.0	2.7	58.2	32.7	4.2	100.0	188
Atyrau	97.0	0.6	1.1	0.0	12.8	23.3	58.1	4.2	100.0	97.0	85	0.6	8.4	3.6	14.5	10.6	58.1	4.2	100.0	85
West Kazakhstan	100.0	1.1	0.6	1.2	11.5	56.1	29.4	0.0	100.0	100.0	100	1.1	5.2	4.9	21.4	37.9	29.4	0.0	100.0	100
Zhambyl	98.1	1.0	1.6	4.4	29.5	41.1	22.4	0.0	100.0	98.7	165	5.6	19.4	8.9	30.6	13.1	22.4	0.0	100.0	165
Karaganda	100.0	0.9	0.0	0.0	21.6	53.9	23.6	0.0	100.0	100.0	139	1.9	14.2	2.6	20.9	36.9	23.6	0.0	100.0	139
Kostanai	98.3	0.0	0.0	0.0	6.1	50.5	43.4	0.0	100.0	98.3	82	0.0	4.2	0.9	13.4	38.1	43.4	0.0	100.0	82
Kyzylorda	97.1	0.0	1.1	0.6	32.0	26.9	39.4	0.0	100.0	97.1	83	1.3	10.8	13.6	23.7	11.0	39.7	0.0	100.0	82
Mangistau	97.7	0.0	0.4	1.0	35.6	21.3	40.8	0.9	100.0	97.7	101	1.3	18.8	12.8	16.1	9.5	40.8	0.9	100.0	101
South Kazakhstan	95.4	0.0	0.0	0.4	28.4	31.7	39.1	0.5	100.0	95.4	474	0.4	12.6	13.0	17.4	17.0	39.1	0.5	100.0	474
Pavlodar	94.6	0.0	0.0	4.1	3.9	68.1	23.9	0.0	100.0	94.6	67	1.8	0.0	6.3	24.6	43.5	23.9	0.0	100.0	67
North Kazakhstan	98.9	0.0	1.2	0.0	10.1	64.1	22.5	2.1	100.0	98.9	44	1.3	3.0	1.0	33.7	36.4	22.5	2.1	100.0	44

East Kazakhstan	98.8	0.0	1.2	0.0	13.1	49.6	32.6	3.5	100.0	98.8	100	0.0	5.9	6.2	29.7	22.0	32.6	3.5	100.0	100
Astana city	99.8	0.0	0.9	0.0	10.2	36.6	51.8	0.5	100.0	99.8	195	0.3	5.2	2.0	18.1	22.1	51.8	0.5	100.0	195
Almaty city	98.2	0.0	0.0	0.0	2.2	65.4	30.6	1.8	100.0	98.2	97	0.0	0.6	0.3	7.0	59.3	30.9	1.8	100.0	96
<b>Area</b>																				
Urban	98.4	0.0	0.3	0.4	15.7	46.1	36.4	1.1	100.0	98.4	1076	0.4	7.1	6.4	17.2	31.3	36.5	1.1	100.0	1074
Rural	96.5	0.6	0.7	1.0	23.3	36.3	36.9	1.1	100.0	96.6	1081	2.0	10.9	10.1	17.4	21.6	37.0	1.1	100.0	1080
<b>Mother's age at birth</b>																				
Younger than 20	98.8	0.0	0.5	0.0	18.1	35.4	45.2	0.8	100.0	98.8	98	0.5	5.2	10.9	14.2	23.2	45.2	0.8	100.0	98
20-34	97.4	0.3	0.5	0.8	20.5	40.8	36.1	0.9	100.0	97.4	1789	1.3	9.5	8.5	17.2	26.4	36.2	0.9	100.0	1786
35-49	97.3	0.4	0.3	0.7	13.3	45.6	37.2	2.4	100.0	97.3	270	1.1	6.7	5.8	18.9	27.9	37.2	2.4	100.0	270
<b>Place of delivery</b>																				
Home	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	2	na	na	na	na	na	na	na	na	na
Health facility	98.0	0.3	0.4	0.7	19.6	41.4	36.4	1.1	100.0	98.1	2142	1.2	9.0	8.3	17.4	26.6	36.4	1.1	100.0	2142
Public	98.0	0.3	0.4	0.8	19.7	41.4	36.3	1.1	100.0	98.1	2133	1.2	9.1	8.4	17.4	26.5	36.3	1.1	100.0	2133
Private	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	9	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	9
Other/DK/Missing	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	12	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	12
<b>Type of delivery</b>																				
Vaginal birth	97.2	0.3	0.4	0.6	21.1	38.0	38.5	1.1	100.0	97.2	1836	1.1	9.5	8.9	16.6	24.2	38.6	1.1	100.0	1834
C-section	98.9	0.4	1.0	1.4	10.4	59.6	26.1	1.2	100.0	98.9	320	1.6	5.9	4.9	21.1	39.2	26.1	1.2	100.0	320
<b>Education</b>																				
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	2	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2
Lower secondary	98.0	0.0	0.0	0.8	7.8	46.2	43.9	1.3	100.0	98.0	97	1.5	0.5	4.0	31.0	17.9	43.9	1.3	100.0	97
Upper secondary	95.6	0.5	0.4	0.8	22.4	36.5	38.7	0.7	100.0	95.6	518	1.4	10.0	10.4	14.4	24.2	38.9	0.7	100.0	516
Technical and Professional	97.5	0.3	0.1	0.8	21.7	40.9	35.1	1.1	100.0	97.5	660	1.1	9.6	9.5	18.5	25.2	35.1	1.1	100.0	660
Higher	98.5	0.2	0.8	0.7	17.6	43.4	35.9	1.3	100.0	98.6	879	1.1	8.9	6.7	16.4	29.7	35.9	1.3	100.0	879
<b>Wealth index quintile</b>																				
Poorest	98.5	1.0	0.1	0.6	24.3	37.2	35.6	1.2	100.0	98.5	415	2.0	11.3	9.9	20.4	19.6	35.6	1.2	100.0	415
Second	94.6	0.0	1.0	1.1	22.8	40.6	33.7	0.7	100.0	94.6	457	1.1	9.9	11.8	18.2	24.5	33.8	0.7	100.0	456
Middle	98.2	0.2	0.4	1.2	22.0	36.7	37.7	1.8	100.0	98.2	502	1.0	11.0	9.6	15.2	23.6	37.7	1.8	100.0	501
Fourth	97.4	0.3	0.1	0.2	14.0	45.3	38.8	1.2	100.0	97.6	422	1.1	5.4	4.7	15.0	33.9	38.8	1.2	100.0	422
Richest	98.9	0.0	0.7	0.4	12.9	48.0	37.7	0.4	100.0	98.9	360	0.9	6.6	4.3	18.1	31.9	37.8	0.4	100.0	359
<b>Ethnicity of household head</b>																				
Kazakh	97.9	0.3	0.5	0.9	21.4	39.5	36.1	1.3	100.0	97.9	1520	1.5	9.6	9.0	17.6	24.8	36.1	1.3	100.0	1519
Russian	97.9	0.5	1.1	0.4	11.5	49.4	36.1	1.0	100.0	97.9	261	0.7	8.1	2.8	14.9	36.3	36.2	1.0	100.0	260

Other ethnic groups	95.4	0.0	0.0	0.4	17.4	42.3	39.4	0.4	100.0	95.4	375	0.2	7.2	9.1	17.7	26.0	39.4	0.4	100.0	375
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**<sup>1</sup> MICS indicator 5.12 - Post-natal health check for the mother**

na: not applicable.

<sup>a</sup> Health checks by any health provider following facility births (before discharge from facility) or following home births (before departure of provider from home).

<sup>b</sup> Post-natal care visits (PNC) refer to a separate visit by any health provider to check on the health of the mother and provide preventive care services. PNC visits do not include health checks following birth while in facility or at home (see note <sup>a</sup> above).

<sup>c</sup> Post-natal health checks include any health check performed while in the health facility or at home following birth (see note <sup>a</sup> above), as well as PNC visits (see note <sup>b</sup> above) within two days of delivery.

<sup>d</sup> The same length of stay in the health facility is used for both the mother and the newborn child (since only information on the duration of stay of the mother is collected).

<sup>e</sup> Including women that report time of the first PNC check in weeks.

(\*) Figures that are based on fewer than 25 unweighted cases.

**Table RH.16: Post-natal care visits for mothers within the first week following discharge from health facility**

Percent distribution of women aged 15-49 years with a live birth in the last two years who received a post-natal care (PNC) visit within the first week following discharge from the health facility, by location and provider of the first PNC visit, Kazakhstan, 2015

	Location of first PNC visit for mothers within the first week following discharge from the health facility				Total	Provider of first PNC visit for mothers within the first week following discharge from the health facility		Total	Number of women with a live birth in the last two years who received a PNC visit within the first week following discharge from the health facility
	Home	Public Sector	Private sector	Missing/DK		Doctor/nurse/midwife	Feldsher		
<b>Total</b>	74.0	25.4	0.6	0.1	100.0	96.6	3.4	100.0	770
<b>Region</b>									
Akmola	(51.9)	(43.8)	(4.3)	(0.0)	100.0	(97.7)	(2.3)	100.0	28
Aktobe	57.2	42.1	0.7	0.0	100.0	93.5	6.5	100.0	67
Almaty oblast	(*)	(*)	(*)	(*)	100.0	(*)	(*)	100.0	9
Atyrau	(90.5)	(9.5)	(0.0)	(0.0)	100.0	(100.0)	(0.0)	100.0	23
West Kazakhstan	(59.8)	(40.2)	(0.0)	(0.0)	100.0	(74.6)	(25.4)	100.0	33
Zhambyl	89.1	10.9	0.0	0.0	100.0	98.0	2.0	100.0	107
Karaganda	(74.2)	(25.8)	(0.0)	(0.0)	100.0	(100.0)	(0.0)	100.0	55
Kostanai	(*)	(*)	(*)	(*)	100.0	(*)	(*)	100.0	15
Kyzylorda	82.5	17.5	0.0	0.0	100.0	95.7	4.3	100.0	41
Mangistau	77.8	22.2	0.0	0.0	100.0	100.0	0.0	100.0	49
South Kazakhstan	97.4	2.6	0.0	0.0	100.0	97.3	2.7	100.0	206
Pavlodar	(68.2)	(31.8)	(0.0)	(0.0)	100.0	(100.0)	(0.0)	100.0	22
North Kazakhstan	(20.6)	(79.4)	(0.0)	(0.0)	100.0	(96.9)	(3.1)	100.0	17
East Kazakhstan	(57.3)	(42.7)	(0.0)	(0.0)	100.0	(97.9)	(2.1)	100.0	42
Astana city	(35.8)	(60.3)	(3.9)	(0.0)	100.0	(100.0)	(0.0)	100.0	50
Almaty city	(*)	(*)	(*)	(*)	100.0	(*)	(*)	100.0	8
<b>Area</b>									
Urban	67.2	31.9	0.9	0.0	100.0	99.8	0.2	100.0	334
Rural	79.2	20.4	0.3	0.2	100.0	94.2	5.8	100.0	436
<b>Mother's age at birth</b>									
Younger than 20	(88.6)	(9.3)	(2.1)	(0.0)	100.0	(97.6)	(2.4)	100.0	30
20-34	73.2	26.1	0.6	0.1	100.0	96.7	3.3	100.0	652
35-49	74.5	25.5	0.0	0.0	100.0	95.9	4.1	100.0	88
<b>Place of delivery</b>									
Health facility	74.0	25.4	0.6	0.1	100.0	96.6	3.4	100.0	770
Public	73.9	25.4	0.6	0.1	100.0	96.6	3.4	100.0	769
Private	(*)	(*)	(*)	(*)	100.0	(*)	(*)	100.0	1
<b>Type of delivery</b>									
Vaginal birth	76.9	22.5	0.5	0.1	100.0	96.4	3.6	100.0	663
C-section	55.6	43.4	1.0	0.0	100.0	98.2	1.8	100.0	107
<b>Education</b>									
None/Primary	(*)	(*)	(*)	(*)	100.0	(*)	(*)	100.0	2
Lower secondary	(71.0)	(27.2)	(1.8)	(0.0)	100.0	(100.0)	(0.0)	100.0	36
Upper secondary	79.0	20.3	0.6	0.0	100.0	94.5	5.5	100.0	187
Technical and Professional	73.3	26.7	0.0	0.0	100.0	95.8	4.2	100.0	255
Higher	71.5	27.4	0.8	0.3	100.0	98.3	1.7	100.0	290

<b>Wealth index quintile</b>									
Poorest	78.8	20.3	0.9	0.0	100.0	94.0	6.0	100.0	181
Second	83.7	16.3	0.0	0.0	100.0	94.4	5.6	100.0	187
Middle	75.8	23.9	0.3	0.0	100.0	98.5	1.5	100.0	185
Fourth	55.4	44.3	0.3	0.0	100.0	98.2	1.8	100.0	110
Richest	64.8	33.0	1.5	0.7	100.0	100.0	0.0	100.0	108
<b>Ethnicity of household head</b>									
Kazakh	74.0	25.6	0.3	0.1	100.0	95.7	4.3	100.0	573
Russian	55.5	43.3	1.2	0.0	100.0	98.8	1.2	100.0	69
Other ethnic groups	83.8	14.8	1.4	0.0	100.0	99.6	0.4	100.0	128
( ) Figures that are based on 25–49 unweighted cases.									
(*) Figures that are based on fewer than 25 unweighted cases.									

Table RH.16 matches Table RH.14, but it deals with first PNC visits for mothers within the first week following discharge from the health care facility by location and type of provider. As defined above, a visit does not include a check in the facility or at home following birth.

Across the country, 74.0 percent of first PNC visit to mothers within the first week following discharge from the health facility are held at home; while in the urban areas the figure is slightly lower than in rural areas (67.2 and 79.2 percent respectively). In addition, this indicator is higher in urban health facilities of public sector than in rural health facilities of public sector (31.9 and 20.4 percent, respectively). The percentage of mothers who delivered by C-section and had a PNC visit during the first week following discharge at home was 55.6 percent, while the percentage of mothers who had PNC visits in public sector health facilities was 43.4 percent. No specific differences were observed by background characteristics of women. The PNC visits for mothers within the first week following discharge are mainly carried out by doctors, nurses and midwives (96.6 percent), and less frequently – by feldshers (3.4 percent) and their distribution in urban and rural areas is quite similar.

<b>Table RH.17: Post-natal health checks for mothers and newborns</b>						
Percent distribution of women aged 15-49 years with a live birth in the last two years by post-natal health checks for the mother and newborn, within two days of the most recent birth, Kazakhstan, 2015						
	<b>Post-natal health checks within two days of birth for:</b>				Total	Number of women with a live birth in the last two years
	Both mothers and newborns	Newborns only	Neither mother nor newborn	Missing		
Total	97.4	1.9	0.6	0.1	100.0	2157
<b>Region</b>						
Akmola	96.5	2.3	0.7	0.6	100.0	93
Aktobe	93.3	6.7	0.0	0.0	100.0	145
Almaty oblast	99.2	0.8	0.0	0.0	100.0	188
Atyrau	95.1	0.6	2.4	1.9	100.0	85
West Kazakhstan	100.0	0.0	0.0	0.0	100.0	100
Zhambyl	98.7	0.7	0.6	0.0	100.0	165
Karaganda	100.0	0.0	0.0	0.0	100.0	139
Kostanai	98.3	1.7	0.0	0.0	100.0	82
Kyzylorda	97.1	0.6	2.3	0.0	100.0	83
Mangistau	97.7	1.0	1.3	0.0	100.0	101
South Kazakhstan	95.4	4.0	0.6	0.0	100.0	474

Pavlodar	94.6	3.3	2.1	0.0	100.0	67
North Kazakhstan	98.9	1.1	0.0	0.0	100.0	44
East Kazakhstan	98.8	0.0	1.2	0.0	100.0	100
Astana city	99.8	0.2	0.0	0.0	100.0	195
Almaty city	98.2	1.8	0.0	0.0	100.0	97
<b>Area</b>						
Urban	98.3	1.1	0.5	0.1	100.0	1076
Rural	96.5	2.8	0.6	0.1	100.0	1081
<b>Mother's age at birth</b>						
Younger than 20	98.8	0.5	0.7	0.0	100.0	98
20-34	97.4	2.0	0.5	0.1	100.0	1789
35-49	97.0	1.8	0.9	0.3	100.0	270
<b>Place of delivery</b>						
Home	(*)	(*)	(*)	(*)	100.0	2
Health facility	98.0	1.9	0.0	0.1	100.0	2142
Public	98.0	1.9	0.0	0.1	100.0	2133
Private	(*)	(*)	(*)	(*)	100.0	9
Other/DK/Missing	(*)	(*)	(*)	(*)	100.0	12
<b>Type of delivery</b>						
Vaginal birth	97.2	2.1	0.7	0.1	100.0	1836
C-section	98.7	1.1	0.0	0.2	100.0	320
<b>Education</b>						
None/Primary	(*)	(*)	(*)	(*)	100.0	2
Lower secondary	98.0	0.7	1.4	0.0	100.0	97
Upper secondary	95.6	4.1	0.3	0.0	100.0	518
Technical and Professional	97.3	1.7	0.8	0.2	100.0	660
Higher	98.5	0.9	0.5	0.1	100.0	879
<b>Wealth index quintile</b>						
Poorest	98.5	1.1	0.3	0.0	100.0	415
Second	94.4	4.5	0.9	0.2	100.0	457
Middle	98.1	1.5	0.3	0.1	100.0	502
Fourth	97.5	1.5	1.0	0.1	100.0	422
Richest	98.8	0.8	0.3	0.2	100.0	360
<b>Ethnicity of household head</b>						
Kazakh	97.8	1.4	0.7	0.1	100.0	1520
Russian	97.9	1.8	0.3	0.0	100.0	261
Other ethnic groups	95.4	4.2	0.4	0.0	100.0	375
(*) Figures that are based on fewer than 25 unweighted cases.						

Table RH.17 presents the percent distribution of women with a live birth in the two years preceding the survey by receipt of health checks or PNC visits within 2 days of birth to the mother and the newborn, thus combining the indicators presented in Tables RH.13 and RH.15.

Results of the 2015 Kazakhstan MICS showed that for 97.4 of live births, both the mothers and their newborns receive either a health check following birth or a timely PNC visit, within two days of the most recent birth, whereas for 0.6 percent of cases after childbirth, both the mothers and their newborns neither received health checks or timely visits, and in 1.9 percent of cases – only newborns received this care. In general, both urban and rural mothers and their newborn children alike were



provided health checks and timely PNC visits within two days of the most recent birth (98.3 and 96.5 percent, respectively). Differences depending on other background characteristics are minimal.

### ***Abortions***

A number of questions about pregnancies not ending in childbirth were included in the 2015 Kazakhstan MICS Questionnaire for Individual Women, by UNFPA country office recommendations; women were asked whether they have ever had pregnancy that ended in a miscarriage or abortion. In addition, women aged 15-49 years who have had abortions in the last 2 years prior to the survey were asked questions with respect to gestational age at which a fetus was aborted, as well as to clarify the month and year of the abortion.

The abortion module is not a standard MICS module, so the experience of international organizations and other MICS surveys was used to obtain the necessary abortion indicators.

**Table RH.18: Lifetime experience with wasted pregnancies**

Mean number of live births and induced abortions, percentage of women who have ever had an induced abortion and percent distribution by number of abortions, Kazakhstan, 2015

	Mean number of:		Percentage of women with at least one induced abortion <sup>1</sup>	Number of women aged 15-49	Among women who had an abortion, percent distribution by number of abortions			Total	Number of women aged 15-49 with abortions
	Live births	Induced Abortions			1	2-3	4+		
<b>Total</b>	1.8	0.4	20.1	12670	55.1	38.8	6.1	100.0	2550
<b>Region</b>									
Akmola	1.7	0.6	32.5	624	55.9	38.9	5.2	100.0	203
Aktobe	1.8	0.2	12.8	806	68.1	30.7	1.3	100.0	103
Almaty oblast	1.6	0.4	17.3	1042	44.6	48.6	6.7	100.0	180
Atyrau	1.9	0.2	13.4	402	51.9	45.9	2.2	100.0	54
West Kazakhstan	1.6	0.4	23.0	572	56.7	40.9	2.3	100.0	132
Zhambyl	2.1	0.3	20.3	778	62.2	31.4	6.5	100.0	158
Karaganda	1.6	0.4	24.6	1035	48.1	46.2	5.7	100.0	255
Kostanai	1.5	0.6	31.1	675	50.9	36.8	12.3	100.0	210
Kyzylorda	2.2	0.2	13.4	399	70.1	27.5	2.4	100.0	54
Mangistau	2.0	0.2	12.8	408	76.6	20.3	3.1	100.0	52
South Kazakhstan	2.5	0.2	13.9	2079	58.0	37.1	5.0	100.0	290
Pavlodar	1.5	0.5	25.8	517	44.9	44.4	10.6	100.0	134
North Kazakhstan	1.6	0.6	31.0	351	51.3	40.6	8.0	100.0	109
East Kazakhstan	1.5	0.6	31.7	880	51.0	39.2	9.8	100.0	279
Astana city	1.3	0.2	12.7	1086	58.3	37.9	3.9	100.0	138
Almaty city	1.3	0.3	19.8	1015	63.5	34.8	1.7	100.0	201
<b>Area</b>									
Urban	1.4	0.4	20.7	7140	55.2	39.2	5.6	100.0	1477
Rural	2.2	0.3	19.4	5530	55.1	38.2	6.7	100.0	1073
<b>Age</b>									
15-19	0.0	0.0	0.0	1346	-	-	-	0.0	0
20-24	0.7	0.0	3.7	1768	85.5	14.5	0.0	100.0	66
25-29	1.4	0.2	12.2	2161	68.8	27.3	3.9	100.0	265
30-34	2.1	0.3	19.9	1998	66.9	29.1	4.0	100.0	398
35-39	2.5	0.5	29.1	1870	56.4	38.0	5.5	100.0	544
40-44	2.6	0.7	34.5	1862	46.8	46.2	7.0	100.0	642
45-49	2.6	0.7	38.2	1665	46.2	45.4	8.4	100.0	635
<b>Education</b>									
None/Primary	(*)	(*)	(*)	16	(*)	(*)	(*)	(*)	0
Lower secondary	1.8	0.4	22.4	778	57.4	34.2	8.4	100.0	174
Upper secondary	2.2	0.4	19.4	3140	49.8	43.5	6.7	100.0	609
Technical and Professional	1.7	0.4	25.0	3990	54.2	39.2	6.6	100.0	996
Higher	1.5	0.3	16.3	4745	60.1	35.6	4.4	100.0	771
<b>Wealth index quintile</b>									
Poorest	2.3	0.3	18.1	2276	57.7	34.6	7.6	100.0	412
Second	2.2	0.4	20.3	2334	51.2	43.0	5.8	100.0	474
Middle	1.8	0.4	21.4	2464	56.1	37.5	6.4	100.0	528

Fourth	1.3	0.3	20.0	2708	56.9	38.2	4.9	100.0	540
Richest	1.4	0.4	20.6	2888	54.0	40.0	6.0	100.0	596
<b>Ethnicity of household head</b>									
Kazakh	1.8	0.3	17.0	8149	60.5	36.4	3.1	100.0	1382
Russian	1.3	0.6	31.0	2506	48.1	42.1	9.8	100.0	777
Other ethnic groups	1.9	0.4	19.4	2014	50.1	40.8	9.1	100.0	392
Missing/DK	(*)	(*)	(*)	1	-	-	-	0.0	0
<b><sup>1</sup>Survey-specific indicator 5.S1 - Lifetime experience with abortion</b>									
(*) Figures that are based on fewer than 25 unweighted cases.									
"-" denotes 0 unweighted case in that cell or in the denominator.									

Table RH.18 gives data on the mean number of live births and induced abortions, the percentage of women who have ever undergone an induced abortion, and the percentage distribution of the number of abortions. In Kazakhstan, according to the survey, the mean number of live births was 1.8, and the average number of induced abortions – 0.4. One in five women (20.1 percent) aged 15-49 had at least one induced abortion during their lifetime. In four regions – North Kazakhstan, Kostanai, East Kazakhstan and Akmola regions – one in three (31-32.5 percent) of women aged 15-49 had at least one abortion. In urban and rural areas, the proportion of women had at least one induced abortions is about the same (20.7 and 19.4 percent, respectively). Women at the age of 40-44 years and 45-49 years are more likely to have had at least one abortion, compared with young women (3.7 percent of women at the age of 20-24 years).

Household wealth level does not have special significance, whereby the proportion of women with at least one induced abortion is almost equal for the richest and for the poorest quintiles. 55.1 percent of women had 1 abortion, 38.8 percent – two or three abortions, and 6.1 percent – four or more abortions. The highest percentages of women who have had 2-3 or 4 and more abortions is observed among women in the age group of 40-44 years and 45-49 years (46.2 and 45.4 percent, respectively, and 7.0 and 8.4 percent respectively).

<b>Table RH.19: Induced abortion rates by area</b>			
Age-specific abortion rates (per 1,000 women), total abortion rates (TAR), and general abortion rate (GAR) for the two-year period preceding the survey, by area, Kazakhstan, 2015			
	Area		
	Urban	Rural	Total
<b>Age<sup>a</sup></b>			
15-19	4	1	3
20-24	12	16	13
25-29	19	21	20
30-34	14	11	13
35-39	12	12	12
40-44	5	4	5
45-49	2	0	1
<b>TAR 15-49<sup>1,b</sup></b>	0.3	0.3	0.3
<b>GAR<sup>2,c</sup></b>	11	10	10
<b><sup>1</sup> Survey-specific indicator 5.S2 - Total abortion rate</b>			
<b><sup>2</sup> Survey-specific indicator 5.S3 - General abortion rate</b>			
<sup>a</sup> Age specific abortion rates: AVERAGE number of abortions per 1,000 woman per 5-year age group.			
<sup>b</sup> TAR: a summary measure of the age specific rates expressed per woman.			
<sup>c</sup> GAR: number of abortions per 1,000 women aged 15-49.			

Table RH.19 gives age-specific abortion rates (per 1,000 women), the total abortion rate (TAR) and the general abortion rate (GAR) for a two-year period preceding the survey, depending on the area of residence. Age-specific abortion rates express the number of abortions per 1,000 women of the age group. The total abortion rate, expressed per 1 woman aged 15-49 is a summary and specific factor derived from a combination of age-specific rates. The total abortion rate is the total number of abortions a woman will have in her lifetime if current levels persist. The general abortion rate is the number of abortions per 1,000 women aged 15-49 years. In Kazakhstan, the age-specific abortion rates is 3 abortions per 1,000 women among women age 15-19 years, it peaks at 20 abortions per 1,000 women among women age 25-29 years and declines to 1 abortion per 1,000 women for women age 45-49 years. In the rural areas, for the 20-24 and 25-29 year age groups, abortion rates (16 and 21 per 1,000, respectively) are somewhat higher than in urban areas (12 and 19 per 1,000, respectively), while in the 30-34 and 35-39 years+ age groups, the rates are almost identical.

According to the survey, the total abortion rate in Kazakhstan was 0.3 per 1 woman aged 15-49 years; the general abortion rate amounted to 10 abortions per 1,000 women. There are no differences between urban and rural areas.

<b>Table RH.20: Induced abortion rates</b>		
Total abortion rates among women aged 15-49 years for the two years preceding the survey and mean number of abortions among women aged 40-49 years, Kazakhstan, 2015		
	Total abortion rate among women aged 15-49 <sup>1</sup>	Mean number of abortions among women aged 40-49
Total	0.3	0.7
<b>Region</b>		
Akmola	(0.6)	1.0
Aktobe	(0.4)	0.3
Almaty oblast	(0.2)	0.7
Atyrau	(0.4)	0.5
West Kazakhstan	(*)	0.6
Zhambyl	(0.4)	0.7
Karaganda	(*)	0.9
Kostanai	(0.5)	1.1
Kyzylorda	(0.2)	0.3
Mangistau	(0.2)	0.3
South Kazakhstan	(0.2)	0.5
Pavlodar	(0.2)	0.8
North Kazakhstan	(*)	1.1
East Kazakhstan	(*)	1.0
Astana city	(0.2)	0.4
Almaty city	(0.3)	0.6
<b>Area</b>		
Urban	0.3	0.7
Rural	0.3	0.7
<b>Education</b>		
None/Primary	(*)	0.0
Lower secondary	(0.6)	0.8
Upper secondary	0.4	0.6

Technical and Professional	0.4	0.8
Higher	0.3	0.6
<b>Wealth index quintile</b>		
Poorest	0.3	0.6
Second	0.4	0.8
Middle	0.3	0.8
Fourth	0.3	0.7
Richest	0.3	0.7
<b>Ethnicity of household head</b>		
Kazakh	0.3	0.5
Russian	0.4	1.1
Other ethnic groups	0.4	0.8
<b><sup>1</sup> Survey-specific indicator 5.S2 - Total abortion rate</b>		
( ) Figures that are based on 125–249 unweighted person-years of exposure.		
(*) Figures that are based on fewer than 125 unweighted person-years of exposure.		

Table RH.20 gives total abortion rates among women aged 15-49 in the two years preceding the survey, and the average number of abortions among women aged 40-49 years.

The average number of abortions among women aged 40-49 years was 0.7. In three regions, Akmola, Kostanai and North Kazakhstan regions (1 to 1.1) – indicators of the average number of abortions among women in the age group of 40-49 years are a bit higher than for the Aktobe, Kyzylorda and Mangistau regions (0.3 in each region). There are almost no differences by background characteristics.

## VIII. Early Childhood Development

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### *Early Childhood Care and Education*

Readiness of children for school is a combination of certain knowledge and skills that the child should have to adapt quickly to the school environment and the educational process in all its manifestations. Readiness of children for primary school can be improved through attendance to quality pre-school and early childhood education programmes. Early childhood education programmes include programmes for children that have organised learning components as opposed to baby-sitting and day-care (even at specialized facilities), which do not typically have organised education and learning.

In Kazakhstan, pre-school organizations vary by the following types:

1) nursery; 2) kindergarten; 3) family nursery; 4) sanatorium nursery; 5) school-kindergarten combination facility; 6) pre-school mini-center.

Pre-school organizations by type of ownership are divided into *state* and *private*. Educational process in pre-school organization is carried out in accordance with programmes and education plans developed on the basis of the *state compulsory standard of pre-school education and training* (Box CD.1), as well as determined by the preschool organization's charter.

Box CD.1.

#### State compulsory standard

Education and training in pre-school institutions of Kazakhstan, irrespective of their type of ownership, is carried out in accordance with the state compulsory educational standard. The general educational program of pre-school education and training are aimed at the full physical development, protection of life and improvement of the child's health, development of speech and language, culture of communication, revealing the child's creative abilities in graphic, artistic and verbal, musical activities. Each program provides for comprehensive development of the child in five key areas: "Health", "Communication", "Knowledge", "Creativity", "Society".

#### Government Programmes for Early Childhood Learning

##### «Алғашқы қадам» (First Steps)

With this program starts pre-school education and training of children. It is designed for children from 1 year to 3 years of age. Priority in the program is given to motor activity, and the basics of the child's communication with peers and adults.

##### «Зерек бала» (Talented Child)

This is a sequel of new programmes package meeting modern requirements of the State educational standards of the Republic of Kazakhstan for pre-school education and training. The program is designed for children aged 3-5 years. It is based on the process of a child's life in the society through awareness of his/her capabilities, abilities and needs. The program also provides for the introduction in the educational process of the educational unit corresponding to the cognitive interest of the child in these five educational areas.

##### «Біз мектепке барамыз» (We start the school)

The third and the widest in terms of learning pre-school educational program is designed for children aged 5-6 years. The educational area "Health" focuses on the formation of a conscious compliance with the healthy lifestyle rules, development of physical and volitional powers. The educational area "Communication" is aimed at the development of coherent speech, ability to build meaningful dialogue and monologue. The educational area "Knowledge" teaches the child to navigate the world around, compare, analyze, synthesize, and engage in elementary search activity. Educational area "Creativity" is responsible for the formation of various artistic abilities. The educational area "Society" prepares the child for later life in the society with its norms, values, traditions and rules.

More than half (55.3 percent) of children aged 36-59 months are attending an organised early childhood education programme (Table CD.1). Urban-rural and regional differentials are notable – facilities with such programmes are attended by 62.2 percent of children from urban areas compared to 48.9 percent from rural areas. Among children aged 36-59 months, attendance to early childhood education programmes ranges from 31.7 percent in the Almaty oblast to 81.9 percent in the Western Kazakhstan region. The attendance of organised early childhood education programmes depends on the differences caused by educational level of the mother and socioeconomic situation of households. These programmes are attended by about 70 percent of children living in the richest 20 percent of households, while the corresponding figure drops to 45.3 percent for children in the poorest households. These programmes were attended three times more by the children whose mothers have higher education than by those whose mothers have lower secondary school education (67.7 and 20.6 percent, respectively). Less than half of children aged 36-47 months (47.9 percent) and two-thirds of children (63.8 percent) aged 48-59 months attend early childhood education programmes.

<b>Table CD.1: Early childhood education</b>		
Percentage of children aged 36-59 months who are attending an organized early childhood education programme, Kazakhstan, 2015		
	Percentage of children aged 36-59 months attending early childhood education <sup>1</sup>	Number of children aged 36-59 months
<b>Total</b>	55.3	2322
<b>Sex</b>		
Male	52.8	1160
Female	57.9	1162
<b>Region</b>		
Akmola	53.9	89
Aktobe	77.9	146
Almaty oblast	31.7	159
Atyrau	55.4	74
West Kazakhstan	81.9	84
Zhambyl	53.8	160
Karaganda	67.0	155
Kostanai	69.6	104
Kyzylorda	52.9	92
Mangistau	44.2	85
South Kazakhstan	48.3	564
Pavlodar	75.5	61
North Kazakhstan	64.5	53
East Kazakhstan	46.5	119
Astana city	49.7	220
Almaty city	62.0	157
<b>Area</b>		
Urban	62.2	1130
Rural	48.9	1192
<b>Age of child</b>		
36-47 months	47.6	1208
48-59 months	63.8	1114
<b>Mother's education</b>		
None/Primary	(*)	5
Lower secondary	20.6	143
Upper secondary	43.2	616

Technical and Professional	57.0	610
Higher	67.7	949
<b>Wealth index quintile</b>		
Poorest	45.3	517
Second	49.1	512
Middle	51.6	451
Fourth	64.6	386
Richest	69.5	456
<b>Ethnicity of household head</b>		
Kazakh	57.3	1584
Russian	61.9	295
Other ethnic groups	44.0	444
<b><sup>1</sup> MICS indicator 6.1 - Attendance to early childhood education</b>		
(*) Figures that are based on fewer than 25 unweighted cases.		

### Quality of Care

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 a major determinant of the child's development during this period.<sup>49</sup> In this context, engagement of adults in activities with children, presence of books in the home for the child, and the conditions of care are important indicators of quality of home care. As set out in *A World Fit for Children*, "children should be physically healthy, mentally alert, emotionally secure, socially competent and ready to learn".<sup>50</sup>

Information on a number of activities that support early learning was collected in the survey. These included the involvement of adults, including biological parents (mothers and fathers) 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.

Survey data shows that for more than 85 percent of children aged 36-59 months, an adult household member engaged in four (or more) activities that promote learning and school readiness during the 3 days preceding the survey (Table CD.2). The mean number of activities that adults engaged in with children was 5. The Table also indicates that the father's involvement in such activities was very limited. The percentage of children with whom the biological father engaged in four or more activities was only 6.6 percent, while at the same time 87.3 percent of children aged 36-59 months were living with their biological fathers. The mean number of activities that fathers engaged in with children was 1.1. Fathers living in Almaty city (0.6 percent) and the Zhambyl region (1.4 percent) were less likely to engage with their children in activities that promote learning and school readiness. Fathers in the Karaganda and Pavlodar regions (22.5 and 22.7 percent, respectively) were more commonly engaged in such activities.

<sup>49</sup> Grantham-McGregor, S et al. 2007. *Developmental Potential in the First 5 Years for Children in Developing Countries*. The Lancet 369: 60–70.

Belsky, J et al. 2006. *Socioeconomic Risk, Parenting During the Preschool Years and Child Health Age 6 Years*. European Journal of Public Health 17(5): 511–2.

<sup>50</sup> UNICEF. 2002. *A World Fit For Children* adopted by the UN General Assembly at the 27th Special Session, 10 May 2002: 2.



96.8 percent of children aged 36-59 months were living with their biological mother. At the same time, with half of children (50.7 percent) did the biological mothers engage in four (or more) activities that promote learning and school readiness; mean number of activities with mothers was 3.3.

Involvement of adult household members in activities that promote learning and school readiness ranges from 69.7 percent in the South Kazakhstan region and 73.9 percent in the Kyzylorda region, to 98.5 percent in the Kostanai region.

Thus only about one-third of mothers in the Kyzylorda (28 percent), South Kazakhstan (30.5 percent) and Aktobe (34.4 percent) regions were engaged with their children to promote the development of knowledge and skills in order to prepare them for school, compared with 84.2 percent of the mothers in the Kostanai region.

There are no notable differences by sex or age of child in the engagement of biological fathers and mothers in four or more activities that promote learning and school readiness.

Adult members of the households were more commonly engaged in activities with children in urban areas and in the richest households (91.1 and 95.4 percent, respectively) than those in rural areas and in the poorest households (80.4 and 82.7 percent, respectively). The participation of mothers in joint exercises with the children in different activities depends on level of wealth – in the richest households, mothers more frequently than in the poorest households participated in joint activities with the children to acquire knowledge and skills in preparation for school (68.5 and 38.9 percent respectively).

**Table CD.2: Support for learning**

Percentage of children aged 36-59 months with whom adult household members engaged in activities that promote learning and school readiness during the last three days, and engagement in such activities by biological fathers and mothers, Kazakhstan, 2015

	Percentage of children with whom adult household members have engaged in four or more activities <sup>1</sup>	Mean number of activities with adult household members	Percentage of children living with:		Number of children aged 36-59 months	Percentage of children with whom biological fathers have engaged in four or more activities <sup>2</sup>	Mean number of activities with biological fathers	Number of children aged 36-59 months living with their biological fathers	Percentage of children with whom biological mothers have engaged in four or more activities <sup>3</sup>	Mean number of activities with biological mothers	Number of children aged 36-59 months living with their biological mothers
			Biological father	Biological mother							
<b>Total</b>	85.6	5.0	87.3	96.8	2322	6.6	1.1	2028	50.7	3.3	2248
<b>Sex</b>											
Male	84.0	5.0	88.8	97.0	1160	7.2	1.2	1030	50.4	3.3	1125
Female	87.2	5.1	85.9	96.7	1162	6.1	1.0	998	51.0	3.3	1123
<b>Region</b>											
Akmola	85.8	5.1	72.7	95.0	89	8.4	0.8	65	58.7	3.7	85
Aktobe	92.0	5.4	86.4	94.2	146	6.5	0.9	126	34.4	2.9	137
Almaty oblast	96.2	5.4	86.6	94.4	159	2.3	0.8	138	55.6	3.8	150
Atyrau	86.3	5.0	91.5	100.0	74	3.5	0.9	67	40.4	3.0	74
West Kazakhstan	95.7	5.6	89.1	96.1	84	12.5	1.9	75	51.2	3.5	81
Zhambyl	84.9	4.9	86.3	92.9	160	1.4	0.5	138	38.8	2.8	149
Karaganda	94.4	5.4	84.5	97.1	155	22.5	1.9	131	77.0	4.4	150
Kostanai	98.5	5.8	79.1	96.1	104	5.7	1.5	82	84.2	4.8	100
Kyzylorda	73.9	4.5	89.1	95.5	92	3.2	0.8	82	28.0	2.4	88
Mangistau	82.5	4.9	93.0	100.0	85	7.8	1.2	79	43.3	3.3	85
South Kazakhstan	69.7	4.4	89.4	98.3	564	5.3	1.0	505	30.5	2.2	555
Pavlodar	94.8	5.5	86.7	98.8	61	22.7	1.8	53	72.4	4.3	61
North Kazakhstan	89.8	5.1	86.5	97.1	53	5.3	1.0	45	77.0	4.4	51
East Kazakhstan	92.5	5.2	86.6	94.6	119	8.6	1.1	103	55.2	3.5	112
Astana city	93.3	5.4	92.3	99.4	220	4.4	1.5	203	78.0	4.7	219

Almaty city	91.1	5.2	85.9	96.7	157	0.6	0.8	135	56.3	3.5	151
<b>Area</b>											
Urban	91.1	5.3	88.6	98.3	1130	8.4	1.3	1000	62.6	3.9	1111
Rural	80.4	4.8	86.2	95.4	1192	5.0	0.9	1027	39.5	2.8	1137
<b>Age</b>											
36-47 months	83.1	4.9	89.1	97.6	1208	7.2	1.1	1077	50.0	3.3	1179
48-59 months	88.4	5.2	85.4	96.0	1114	6.0	1.1	951	51.5	3.4	1069
<b>Mother's education<sup>1</sup></b>											
None/Primary	(*)	(*)	(*)	(*)	5	(*)	(*)	3	(*)	(*)	3
Lower secondary	89.6	4.9	65.2	97.8	143	3.2	0.6	93	42.3	2.9	140
Upper secondary	78.0	4.7	86.6	94.6	616	5.6	0.9	533	40.3	2.7	583
Technical and Professional	87.6	5.2	85.8	96.0	610	5.2	0.9	523	54.6	3.5	585
Higher	88.6	5.2	92.2	98.8	949	8.8	1.4	875	56.5	3.7	937
<b>Father's education</b>											
None/Primary	(*)	(*)	(*)	(*)	5	(*)	(*)	5	(*)	(*)	5
Lower secondary	85.5	4.9	100.0	100.0	117	8.2	1.0	117	56.1	3.5	117
Upper secondary	78.8	4.8	100.0	100.0	679	3.6	1.0	679	43.1	3.0	679
Technical and Professional	85.6	5.1	100.0	99.0	553	9.2	1.3	553	53.4	3.4	547
Higher	89.7	5.2	100.0	99.5	674	10.1	1.5	674	57.8	3.8	671
Father not in the household	92.3	5.2	0.0	77.8	294	na	na	na	45.2	2.8	229
<b>Wealth index quintile</b>											
Poorest	82.7	4.9	87.0	94.6	517	6.4	0.9	450	38.9	2.8	489
Second	75.0	4.6	88.7	95.8	512	2.8	0.9	454	42.1	2.8	490
Middle	86.2	5.1	86.0	98.1	451	6.3	1.0	387	46.3	3.1	442
Fourth	91.2	5.3	84.1	97.5	386	7.1	1.1	325	62.0	3.9	377
Richest	95.4	5.5	90.1	98.6	456	11.2	1.6	411	68.5	4.3	450
<b>Ethnicity of household head</b>											
Kazakh	87.8	5.1	89.5	96.0	1584	6.2	1.1	1417	50.3	3.4	1520
Russian	92.2	5.4	76.6	97.7	295	10.5	1.3	226	68.9	4.1	288
Other ethnic groups	73.2	4.5	86.8	99.3	444	5.7	1.0	385	39.9	2.7	441

<sup>1</sup> MICS indicator 6.2 - Support for learning

<sup>2</sup> MICS Indicator 6.3 - Father's support for learning

**<sup>3</sup> MICS Indicator 6.4 - Mother's support for learning**

na: not applicable.

<sup>a</sup>The background characteristic "Mother's education" refers to the education level of the respondent to the Questionnaire for Children Under Five, and covers both mothers and primary caretakers, who are interviewed when the mother is not listed in the same household. Since indicator 6.4 reports on the biological mother's support for learning, this background characteristic refers to only the educational levels of biological mothers when calculated for the indicator in question.

(\* ) Figures that are based on fewer than 25 unweighted cases.

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 at home is important for later school performance. During the survey the mothers/caretakers of all children under 5 were asked about number of children's books or picture books they have for the child, and the types of playthings and toys that are available at home.

In Kazakhstan, more than half (50.9 percent) of children aged 0-59 months live in households where at least 3 children's books are available for the child (Table CD.3). The proportion of children with 10 or more books was 22 percent. The availability of children's books is not related to the child's gender, but there are differences in access to children's books across other background characteristics: urban children (60.1 percent) are more likely to have 3 or more children's books compared to children living in rural areas (42.0 percent). The presence of children's books is positively correlated with the child's age, 64.0 percent of children aged of 24-59 months have 3 or more children's books, the same indicator for children aged 0-23 months is twice as low and is 30.3 percent.

In Kostanai region, 82.0 percent of children under 5 years of age have 3 or more books available, and more than half of the children (56.5 percent) – 10 books and more. These percentages are much higher than in South Kazakhstan and Kyzylorda regions, where about 20 percent of children under 5 years have 3 or more children's books and 4.5 percent have 10 or more children's books.

Availability of books for children is closely linked to mother's education and household wealth – such books are more available to children whose mothers have higher education and living in the richest households. 3 or more, and 10 or more children's books are more likely to be available in households where the head is Russian (79.7 and 51.4 percent respectively). 3 or more children's books are present in half of the households (50.7 percent) where the head is Kazakh.

**Table CD.3: Learning materials**

Percentage of children under age 5 by numbers of children's books present in the household, and by playthings that child plays with, Kazakhstan, 2015

	Percentage of children living in households that have for the child:		Percentage of children who play with:				Number of children under age 5
	3 or more children's books <sup>1</sup>	10 or more children's books	Homemade toys	Toys from a shop/manufactured toys	Household objects/objects found outside	Two or more types of playthings <sup>2</sup>	
<b>Total</b>	50.9	22.0	15.4	94.0	57.4	59.5	5510
<b>Sex</b>							
Male	49.2	21.3	15.4	93.8	56.1	58.8	2796
Female	52.7	22.7	15.5	94.2	58.8	60.2	2714
<b>Region</b>							
Akmola	59.9	29.6	10.2	96.3	59.5	60.0	225
Aktobe	70.5	19.3	3.1	97.0	50.0	50.6	376
Almaty oblast	62.9	29.1	15.3	95.5	67.9	68.6	413
Atyrau	44.5	10.5	5.8	89.1	46.0	47.5	202
West Kazakhstan	50.8	24.3	7.1	96.5	47.0	47.2	227
Zhambyl	53.7	16.9	21.4	92.1	65.8	66.6	414
Karaganda	72.0	40.0	17.2	99.0	62.7	65.3	381

Kostanai	82.0	56.5	26.7	96.2	65.2	68.0	239
Kyzylorda	21.0	4.5	7.5	91.5	38.5	40.2	214
Mangistau	30.4	6.4	15.4	92.8	49.3	52.4	224
South Kazakhstan	20.3	4.8	14.0	92.8	53.4	54.2	1246
Pavlodar	70.9	45.5	35.5	97.8	47.2	68.7	166
North Kazakhstan	70.8	49.1	17.6	96.4	63.0	65.2	117
East Kazakhstan	64.3	31.4	17.9	94.8	74.4	75.3	274
Astana city	69.2	36.7	15.3	91.2	59.0	62.9	501
Almaty city	54.1	11.2	26.4	90.6	64.0	65.0	292
<b>Area</b>							
Urban	60.1	27.8	17.0	94.1	56.0	58.7	2704
Rural	42.0	16.4	14.0	93.8	58.8	60.3	2806
<b>Age</b>							
0-23 months	30.3	12.5	8.2	85.5	38.9	40.3	2143
24-59 months	64.0	28.0	20.1	99.4	69.2	71.7	3367
<b>Mother's education</b>							
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	6
Lower secondary	38.7	14.5	17.4	94.1	59.9	63.1	311
Upper secondary	38.3	13.1	13.6	93.7	59.6	60.5	1386
Technical and Professional	52.0	21.5	16.3	93.1	55.2	57.8	1559
Higher	59.6	28.9	15.7	94.7	57.3	59.5	2248
<b>Wealth index quintile</b>							
Poorest	35.2	12.8	19.2	93.8	61.1	62.7	1124
Second	39.4	14.2	13.7	93.9	57.0	58.8	1218
Middle	49.5	18.0	13.5	92.0	55.4	56.8	1183
Fourth	62.2	28.7	13.3	95.4	56.0	58.1	966
Richest	72.8	39.7	17.6	95.2	57.7	61.3	1019
<b>Ethnicity of household head</b>							
Kazakh	50.7	18.5	14.7	93.5	56.8	58.8	3838
Russian	79.7	51.4	22.6	96.6	61.7	64.9	687
Other ethnic groups	31.6	15.0	13.4	94.1	56.7	58.4	985
<sup>1</sup> MICS indicator 6.5 - Availability of children's books							
<sup>2</sup> MICS indicator 6.6 - Availability of playthings							
(*) Figures that are based on fewer than 25 unweighted cases.							

Table CD.3 also shows that 59.5 percent of children aged 0-59 months had 2 or more types of playthings to play with in their homes. The types of playthings included in the Questionnaire for Children Under Five were homemade toys (such as dolls and cars, or other toys made at home), toys that came from a store/factory production, and household objects (such as pots and bowls) or objects and materials found outside the home (such as sticks, rocks, animal shells, or leaves). It is interesting to note that more than half of the children (57.4 percent) play with household objects or objects found outside; and 15.4 percent – with homemade toys; at the same time, 94.0 percent of children play with toys from a shop/factory production. In terms of the presence in the house of 2 or more types of playthings, gender differences and differences between urban and rural areas are negligible. The percentage of children aged 24-59 months, who have two or more playthings at home is about 1.5 times higher than children aged 0-23 months (71.7 and 40.3 percent respectively). Differentials are small by socioeconomic status of households, and regions.

Leaving children alone or in the presence of other young children is known to increase the risk of injuries.<sup>51</sup> In 2015 MICS, mothers were asked two questions to find out whether children aged 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.4 shows that 4.6 percent of children aged 0-59 months were left in the care of other children, while 0.7 percent were left alone during the week preceding the interview. Combining the two care indicators, it is calculated that a total of 5 percent of children were left with inadequate care during the past week, either by being left alone or in the care of another child younger than 10 years of age. The percentage of children left with inadequate care in the past week is 7.1 percent in rural areas and 2.8 percent in urban areas. In addition, children aged 24-59 months are almost 4 times more likely to be left unattended than children aged 0-23 months (7.0 and 1.8 percent, respectively). Children from the poorest households are more likely to be left with inadequate care than children from the richest households (8.0 and 2.6 percent, respectively).

<b>Table CD.4: Inadequate care</b>				
Percentage of children under age 5 left alone or left in the care of another child younger than 10 years of age for more than one hour at least once during the past week, Kazakhstan, 2015				
	Percentage of children under 5 that:			Number of children under age 5
	Left alone in the past week	Left in the care of another child younger than 10 years of age in the past week	Left with inadequate care in the past week <sup>1</sup>	
<b>Total</b>	0.7	4.6	5.0	5510
<b>Sex</b>				
Male	0.6	3.9	4.1	2796
Female	0.8	5.4	5.9	2714
<b>Region</b>				
Akmola	0.2	3.4	3.6	225
Aktobe	1.9	16.9	17.9	376
Almaty oblast	0.9	4.3	4.3	413
Atyrau	0.5	2.1	2.3	202
West Kazakhstan	0.3	1.3	1.3	227
Zhambyl	0.9	1.1	1.7	414
Karaganda	1.0	4.8	5.5	381
Kostanai	0.9	3.6	4.2	239
Kyzylorda	0.8	4.5	4.7	214
Mangistau	0.0	0.7	0.7	224
South Kazakhstan	0.7	7.3	7.7	1246
Pavlodar	0.4	3.1	3.5	166
North Kazakhstan	0.2	2.4	2.7	117
East Kazakhstan	0.0	2.1	2.1	274
Astana city	0.5	0.9	1.4	501
Almaty city	1.0	1.7	1.9	292
<b>Area</b>				
Urban	0.6	2.5	2.8	2704
Rural	0.8	6.6	7.1	2806

<sup>51</sup> Grossman, DC. 2000. The History of Injury Control and the Epidemiology of Child and Adolescent Injuries. The Future of Children, 10(1): 23-52.

<b>Age</b>				
0-23 months	0.2	1.8	1.8	2143
24-59 months	1.0	6.4	7.0	3367
<b>Mother's education</b>				
None/Primary	(*)	(*)	(*)	6
Lower secondary	1.9	4.5	5.4	311
Upper secondary	0.4	7.2	7.5	1386
Technical and Professional	0.8	4.0	4.2	1559
Higher	0.7	3.5	3.9	2248
<b>Wealth index quintile</b>				
Poorest	1.2	7.5	8.0	1124
Second	0.8	4.7	5.4	1218
Middle	0.5	5.0	5.0	1183
Fourth	0.6	3.3	3.5	966
Richest	0.4	2.2	2.6	1019
<b>Ethnicity of household head</b>				
Kazakh	0.8	4.8	5.2	3838
Russian	0.4	1.8	2.1	687
Other ethnic groups	0.6	5.6	5.9	985
<sup>1</sup> MICS indicator 6.7 - Inadequate care				
(*) Figures that are based on fewer than 25 unweighted cases.				

### **Early Child Development Index (ECDI)**

Early childhood development is defined as an orderly, predictable process along a continuous path, in which a child learns to handle more complicated levels of moving, thinking, speaking, feeling and interaction with others. Physical growth, literacy and numeracy skills, socio-emotional development and readiness to learn are vital domains of a child's overall development, which is a basis for overall human development.<sup>52</sup>

As part of MICS, a 10-item module was used to calculate the Early Child Development Index (ECDI). The primary purpose of the ECDI is to inform public policy regarding the developmental status of children in Kazakhstan. The index is based on selected milestones that children are expected to achieve by ages 3 and 4. The 10 items are used to determine if children are developmentally on track in four domains:

- **Literacy-numeracy:** Children are identified as being developmentally on track by ages 3 and 4 based on whether they can identify/name at least ten letters of the alphabet, whether they can read at least four simple, popular words, and whether they know the name and recognize the symbols of all numbers from 1 to 10. If at least two of these are true, then the child is considered developmentally on track.
- **Physical:** If the child can pick up a small object with two fingers, like a stick or a rock from the ground and/or the mother/caretaker does not indicate that the child is sometimes too sick to play, then the child is regarded as being developmentally on track in the physical domain.
- **Social-emotional:** Children are considered to be developmentally on track if two of the following are true: If the child gets along well with other children, if the child does not kick, bite, or hit other children and if the child does not get distracted easily.

<sup>52</sup> Shonkoff, J and Phillips, D (eds). 2000. *From neurons to neighborhoods: the science of early childhood development*. Committee on Integrating the Science of Early Childhood Development, National Research Council, 2000.



- **Learning:** If the child follows simple directions on how to do something correctly and/or when given something to do, is able to do it independently, then the child is considered to be developmentally on track in this domain.

ECDI is then calculated as the percentage of children who are developmentally on track in at least three of these four domains.

<b>Table CD.5: Early child development index</b>						
Percentage of children aged 36-59 months who are developmentally on track in literacy-numeracy, physical, social-emotional, and learning domains, and the early child development index score, Kazakhstan, 2015						
	Percentage of children aged 36-59 months who are developmentally on track for indicated domains				Early child development index score <sup>1</sup>	Number of children aged 36-59 months
	Literacy-numeracy	Physical	Social-Emotional	Learning		
<b>Total</b>	27.7	98.3	82.1	97.2	85.5	2322
<b>Sex</b>						
Male	25.6	97.9	80.4	97.1	84.8	1160
Female	29.8	98.7	83.8	97.4	86.3	1162
<b>Region</b>						
Akmola	36.2	96.7	75.3	96.7	81.0	89
Aktobe	41.8	96.8	98.0	96.9	95.0	146
Almaty oblast	50.5	99.2	86.2	99.2	96.8	159
Atyrau	15.8	99.3	82.4	96.3	82.0	74
West Kazakhstan	16.9	98.5	85.6	98.6	86.6	84
Zhambyl	14.0	99.4	79.5	97.7	79.4	160
Karaganda	23.2	98.3	78.6	97.4	80.6	155
Kostanai	32.2	98.1	90.5	98.1	92.5	104
Kyzylorda	22.0	96.2	92.4	93.5	88.6	92
Mangistau	14.5	95.6	79.2	93.8	79.5	85
South Kazakhstan	19.8	99.0	80.9	97.3	82.2	564
Pavlodar	23.5	100.0	80.1	100.0	88.5	61
North Kazakhstan	22.7	96.0	83.0	94.5	83.5	53
East Kazakhstan	24.1	99.0	84.2	98.1	84.2	119
Astana city	39.3	97.1	68.6	96.3	84.5	220
Almaty city	42.9	99.6	83.2	98.9	90.8	157
<b>Area</b>						
Urban	33.1	98.0	80.7	96.9	86.0	1130
Rural	22.7	98.6	83.4	97.6	85.1	1192
<b>Age</b>						
36-47 months	16.8	97.4	78.4	96.0	81.4	1208
48-59 months	39.6	99.2	86.0	98.5	90.0	1114
<b>Attendance to early childhood education</b>						
Attending	34.7	99.7	84.5	99.0	89.0	1285
Not attending	19.0	96.6	79.0	95.1	81.2	1037
<b>Mother's education</b>						
None/Primary	(*)	(*)	(*)	(*)	(*)	5
Lower secondary	14.1	99.3	84.7	97.9	85.9	143
Upper secondary	24.5	98.2	79.7	97.3	82.0	616
Technical and Professional	28.8	97.6	81.3	96.3	85.2	610
Higher	31.2	98.7	83.6	97.6	87.9	949

<b>Wealth index quintile</b>						
Poorest	22.1	98.2	85.8	96.7	87.2	517
Second	23.1	98.3	81.1	96.9	82.4	512
Middle	26.0	98.6	79.3	98.2	83.2	451
Fourth	32.8	98.0	84.4	96.4	87.3	386
Richest	36.6	98.3	79.8	98.0	87.9	456
<b>Ethnicity of household head</b>						
Kazakh	28.2	98.4	82.9	97.1	86.2	1584
Russian	39.4	97.0	80.9	96.6	87.0	295
Other ethnic groups	18.3	98.9	80.0	98.2	82.0	444
<sup>1</sup> MICS indicator 6.8 - Early child development index						
(*) Figures that are based on fewer than 25 unweighted cases.						

The ECDI results are presented in Table CD.5. In Kazakhstan, 85.5 percent of children aged 36-59 months are developmentally on track. There is no difference in ECDI for boys and girls (84.8 and 86.3 percent respectively). As expected, ECDI is somewhat higher in the older age group (90.0 percent among children aged 48-59 months compared to 81.4 percent among those aged 36-47 months), since children develop more skills with increasing age. ECDI for children attending to an early childhood education programme and children who are not attending such programmes is 89.0 and 81.2 percent respectively. ECDI ranges from about 79 percent in the Zhambyl and Mangistau regions (79.4 and 79.5 percent respectively) to 96.8 percent in the Almaty oblast.

Analysis of the four domains of child development shows that 98.3 percent of children develop in accordance with the age in the domain of physical development, 97.2 percent – in learning, and 82.1 percent – in social-emotional development. However, the percentage of children aged 36-59 months who are developmentally on track in the literacy- numeracy domains is 3 to 3.5 times (27.7 percent) lower than in the other domains. The percentage of children attending an early childhood learning programme, who are developmentally on track in the literacy-numeracy domain is almost 2 times higher than the percentage of children who do not attend such programmes (34.7 and 19.0 percent, respectively). There is a positive association between the percentage of children who are developmentay on track and household wealth in the literacy-numeracy domain. Thus, 22.1 percent of children living in the poorest households are on track in this domain compared to 36.6 percent of children in richest households.

## IX. Literacy and Education

Education is one of the essential priorities of the long-term Kazakhstan – 2030 Strategy. Kazakhstan has adopted and implemented many reforms aimed at improving the educational system and increasing the quality of the country's human potential through better education.

Global experience shows that investing in human capital, namely in the education of the population, contributes to substantial returns to the economy, the society and the state. The educated population is the state's potential, which will enable to introduce and implement the scientific development, innovation and technology, leading not only to the scientific but also primarily to the economic development of the country.

Therefore, now it attaches great importance to improving the population literacy and receiving different levels and types of education.

### *Literacy among Young Women*

As a measure of the effectiveness of primary education, the Youth Literacy Rate is often seen as a measure of social progress and economic achievements of the country. As during 2015 Kazakhstan MICS, only the questionnaire for women was used, the results are based only on data on women aged 15-24. Literacy is estimated by the respondent's ability to read a short simple statement or on the basis of primary school attendance at least.

The percentage of literate women is given in Table ED.1. The figures in Table ED.1 show that all young women aged 15-24 years in Kazakhstan are literate (under the Constitution of the Republic of Kazakhstan secondary education is mandatory in the country). Because of universal literacy among young women, there are no differences in literacy rates by background characteristics.

<b>Table ED.1: Literacy</b>			
Percentage of women aged 15-24 years who are literate, Kazakhstan, 2015			
	Percentage literate <sup>1</sup>	Percentage not known	Number of women aged 15-24 years
Total	100.0	0.0	3114
<b>Region</b>			
Akmola	100.0	0.0	127
Aktobe	100.0	0.0	191
Almaty oblast	100.0	0.0	260
Atyrau	100.0	0.0	109
West Kazakhstan	100.0	0.0	135
Zhambyl	100.0	0.0	182
Karaganda	100.0	0.0	209
Kostanai	100.0	0.0	157
Kyzylorda	100.0	0.0	106
Mangistau	100.0	0.0	127
South Kazakhstan	100.0	0.0	590
Pavlodar	100.0	0.0	116

North Kazakhstan	100.0	0.0	65
East Kazakhstan	99.4	0.0	202
Astana city	100.0	0.0	258
Almaty city	100.0	0.0	281
<b>Area</b>			
Urban	100.0	0.0	1763
Rural	99.9	0.0	1351
<b>Education</b>			
None/Primary	(*)	(*)	2
Lower secondary	100.0	0.0	283
Upper secondary	100.0	0.0	731
Technical and Professional	100.0	0.0	1083
Higher	100.0	0.0	1014
<b>Age</b>			
15-19	100.0	0.0	1346
20-24	99.9	0.0	1768
<b>Wealth index quintile</b>			
Poorest	99.8	0.0	516
Second	100.0	0.0	578
Middle	100.0	0.0	682
Fourth	100.0	0.0	694
Richest	100.0	0.0	644
<b>Ethnicity of household head</b>			
Kazakh	100.0	0.0	2088
Russian	100.0	0.0	492
Other ethnic groups	100.0	0.0	533
Missing/DK	(*)	(*)	1
<sup>1</sup> MICS indicator 7.1; MDG indicator 2.3 - Literacy rate among young women			
(*) Figures that are based on fewer than 25 unweighted cases.			

### **School Readiness**

Development and improvement of pre-school education is a priority of Kazakhstan's state policy. General pre-school educational programmes are developed based on the State Compulsory Educational Standard. On this basis, public and private pre-school facilities provide pre-school education to children from 2-3 years to 6-7 years of age.

In accordance with paragraph 2 of Article 30 of the Law "On Education", in the Republic of Kazakhstan, pre-school education starts at five in the form of pre-school preparation of children for school. Pre-school education is obligatory and is carried out in the family, pre-school facilities, pre-school grades of secondary schools, lyceums and university-preparatory schools.

The so-called "Pre-school" or "0 grade" is a relatively new phenomenon in Kazakhstan's education system. Pre-schools were opened for a number of reasons, first and foremost – the mass closing of pre-school facilities in the late 1990s. As a result, the vast majority of children used to start the school without the necessary level of overall development, without psychological preparation for school. Now the one-year pre-school classes for 5-6 year-old children have been opened in many educational establishments, including early child education facilities. The advantage of pre-school classes is that along with the standard pre-school education programmes, teachers through additional tasks prepare the pre-schoolers for the primary school curriculum, which is taught in these schools. Therefore, the

first-graders that studied in "0 grade"/ Pre-school have fewer difficulties when starting Grade 1, and their adaptation takes 1-2 weeks.

Thus, attendance to pre-school education is important for the readiness of children to school. Table ED.2 shows the proportion of children in the first grade of primary school (regardless of age) who attended pre-school the previous year<sup>53</sup>. In Kazakhstan, in general, 90.8 percent of children who are currently attending the first grade of primary school were attending pre-school the previous year. The proportion among boys and girls is about the same (91.1 and 90.4 percent), while nine out of ten first grade pupils – both in urban and in rural areas – attend a pre-school educational institution (90.6 and 90.9 percent, respectively). There are significant regional differences: in 4 regions – Aktobe, Kostanai and Mangistau regions and Astana city – all first graders enrolled at the time of the survey, attended pre-school facilities before school (100.0 percent); and in other regions the percentages range from 58.4 percent in Almaty city to 98.8 percent in the Akmola region. Socio-economic status of the household seems to play a positive role in preparing children for school: 96.7 percent of children living in the richest households attended pre-school facilities in the previous year, while the corresponding figure among children in the poorest households was only 88.3 percent.

<b>Table ED.2: School readiness</b>		
Percentage of children attending first grade of primary school who attended pre-school the previous year, Kazakhstan, 2015		
	Percentage of children attending first grade who attended preschool in previous year <sup>1</sup>	Number of children attending first grade of primary school
Total	90.8	1179
<b>Sex</b>		
Male	91.1	642
Female	90.4	537
<b>Region</b>		
Akmola	98.8	51
Aktobe	100.0	89
Almaty oblast	82.4	107
Atyrau	98.5	45
West Kazakhstan	(100.0)	34
Zhambyl	92.0	89
Karaganda	94.0	78
Kostanai	100.0	46
Kyzylorda	69.6	48
Mangistau	100.0	47
South Kazakhstan	87.4	255
Pavlodar	(95.4)	30
North Kazakhstan	94.9	29
East Kazakhstan	96.6	70
Astana city	100.0	98
Almaty city	58.4	60
<b>Area</b>		
Urban	90.6	563

<sup>53</sup> The computation of the indicator does not exclude repeaters, and therefore is inclusive of both children who are attending primary school for the first time, as well as those who were in the first grade of primary school the previous school year and are repeating. Children repeating may have attended pre-school prior to the school year during which they attended the first grade of primary school for the first time; these children are not captured in the numerator of the indicator.

Rural	90.9	616
<b>Age</b>		
5	(*)	22
6	89.8	767
7 and older	92.1	390
<b>Mother's education</b>		
None/Primary	(*)	5
Lower secondary	95.5	61
Upper secondary	83.2	330
Technical and Professional	92.0	329
Higher	94.6	451
Missing/DK	(*)	1
<b>Wealth index quintile</b>		
Poorest	88.3	240
Second	87.2	277
Middle	89.4	232
Fourth	93.5	209
Richest	96.7	221
<b>Ethnicity of household head</b>		
Kazakh	92.3	846
Russian	95.6	147
Other ethnic groups	79.9	186
<sup>1</sup> MICS indicator 7.2 - School readiness		
() Figures that are based on 25–49 unweighted cases.		
(*) Figures that are based on fewer than 25 unweighted cases.		

To study the situation with pre-school preparation of children aged 5-6 years an additional Table ED.2A has been developed, which gives data on attendance to pre-school facilities and primary school, as well as shows the adjusted net attendance ratio (NAR) in pre-primary education. Pre-school (adjusted) NAR is the percentage of children of pre-school age (at the beginning of the school year) currently attending a pre-school facility (pre-school, kindergarten or an educational programme for young children) or primary school. The ratio given in this Table is adjusted, since it takes into account not only the numerator of children attending pre-school, but also of children attending primary school.

Findings show that the percentage of 5-6-year-old children who attend pre-school was 47.8 percent and primary school – 36.1 percent. The adjusted NAR in pre-primary education was 84.0 percent. At the same time, the highest proportion of children aged 5 attend pre-school (68.1 percent of children), and only 2.6 percent attend primary school; among children aged 6 years, approximately one third of children attend pre-school facilities (28.9 percent) and 67.4 percent attend primary school.

There are notable regional differences: the lowest (adjusted) NAR in pre-primary education is in Almaty city (48.1 percent) while in the Kostanai, Aktobe and West Kazakhstan regions this figure exceeded 95 percent. In addition, in rural areas, the (adjusted) NAR in pre-primary education is slightly higher than in urban areas (88.3 and 79.4 percent, respectively); differences between boys and girls are negligible (83.3 and 84.8 percent, respectively). There is no clear association between (adjusted) NAR in pre-primary education and mother's education level or household wealth.

**Table ED.2A: Pre-primary education attendance**

Percentage of children of pre-primary education age (5 or 6 years at the beginning of the school year) attending pre-primary education or higher, Kazakhstan, 2015				
	Percentage of children attending:		Percentage of children attending pre-primary or primary education (adjusted NAR in pre-primary education)	Number of children aged 5-6 years at the beginning of the school year
	Kindergarten/Pre-primary	Primary school <sup>a</sup>		
<b>Total</b>	47.8	36.1	84.0	2294
<b>Sex</b>				
Male	47.1	36.2	83.3	1222
Female	48.7	36.1	84.8	1072
<b>Region</b>				
Akmola	59.1	30.3	89.5	96
Aktobe	41.7	55.9	97.6	143
Almaty oblast	26.6	37.6	64.2	203
Atyrau	49.9	44.3	94.2	87
West Kazakhstan	61.0	35.9	96.9	82
Zhambyl	46.8	39.2	85.9	175
Karaganda	60.1	34.7	94.8	154
Kostanai	80.7	17.3	98.1	95
Kyzylorda	40.3	49.4	89.7	91
Mangistau	43.2	42.4	85.6	87
South Kazakhstan	57.0	37.4	94.4	516
Pavlodar	73.8	19.3	93.1	73
North Kazakhstan	57.5	27.4	84.9	55
East Kazakhstan	50.1	32.2	82.3	133
Astana city	19.6	31.7	51.3	180
Almaty city	21.3	26.8	48.1	124
<b>Area</b>				
Urban	47.3	32.1	79.4	1114
Rural	48.4	39.9	88.3	1180
<b>Age at beginning of school year</b>				
5	68.1	2.6	70.7	1107
6	28.9	67.4	96.4	1186
<b>Mother's education</b>				
None/Primary	(*)	(*)	(*)	5
Lower secondary	48.0	32.1	80.0	132
Upper secondary	48.1	36.8	84.9	688
Technical and Professional	49.4	35.5	84.9	625
Higher	46.8	36.3	83.1	839
Missing/DK	(*)	(*)	(*)	3
<b>Wealth index quintile</b>				
Poorest	57.0	30.3	87.3	510
Second	43.9	43.8	87.7	502
Middle	46.7	38.0	84.7	470
Fourth	37.1	36.3	73.4	392
Richest	52.7	31.8	84.5	419
<b>Ethnicity of household head</b>				
Kazakh	46.6	38.9	85.5	1608
Russian	54.6	24.1	78.7	306
Other ethnic groups	47.6	34.1	81.7	380

<sup>a</sup> The entrance age for primary education is 6 or 7 years.

(\*) Figures that are based on fewer than 25 unweighted cases.

## ***Primary and Secondary School Attendance***

Universal access to basic education and the completion of primary education by the world's children is one of the Millennium Development Goals and a goal of the document "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.

In accordance with the Law "On Education" in the Republic of Kazakhstan (as amended in April 2016), the education system includes the following levels of education:

- 1) pre-school education;
- 2) primary education;
- 3) lower secondary education;
- 4) secondary education (upper secondary education, technical and professional education);
- 5) post-secondary education;
- 6) higher education;
- 7) postgraduate study.

The main types of secondary education institutions teaching the educational curricula of primary, lower secondary, upper secondary education are the school, rural ungraded school, gymnasium, lyceum, vocational school.

The period for learning the general curriculum of primary education is four years (grades 1-4), for lower secondary education it is five years (grades 5-9) and for upper secondary education it is two years (grades 10-11). The school year typically runs from September of one year to June of the following year.

The general educational primary school curriculum is aimed at development of the child's personality, development of his/her individual abilities, positive learning motivation and skills: strong reading, writing, numeracy skills, language communication experiences, creative self-fulfillment, culture of behaviour for the subsequent learning of basic school curricula.

In Kazakhstan, children are enrolled in Grade 1 from six/seven years. In connection with the existing practice, each parent has the right to determine at what age to enrol his/her child in school, taking into account the various aspects and features of his/her development – physical and psycho-emotional and other.

When describing primary school entry, analysis is conducted among children aged 7 years (Table ED.3) and separately for the age of 6 years (Table ED.3A).

Among children who are of primary school entry age (full 7 years) in Kazakhstan, 99.2 percent of children attend the first grade of primary school (Table ED.3). There are no differences by sex (99 percent), differences between urban and rural areas (98.7 and 99.6 percent, respectively) are negligible; however, there are minor differences between the regions. In general, in almost all regions of the country, this figure ranges from 100.0 percent in 6 regions (Almaty city, Almaty oblast, Zhambyl, Karaganda, South Kazakhstan and East Kazakhstan regions) to 95.8 percent in Astana city. Timely



enrollment of children in the first grade is not related to the mother's level of education and socio-economic status of the household.

<b>Table ED.3: Primary school entry</b>		
Percentage of children of primary school entry age entering grade 1 (net intake rate), Kazakhstan, 2015		
	Percentage of children of primary school entry age entering grade 1 <sup>1</sup>	Number of children of primary school entry age
<b>Total</b>	99.2	1134
<b>Sex</b>		
Male	99.1	590
Female	99.3	544
<b>Region</b>		
Akmola	98.4	55
Aktobe	99.1	71
Almaty oblast	100.0	93
Atyrau	(99.1)	38
West Kazakhstan	98.1	52
Zhambyl	100.0	86
Karaganda	100.0	65
Kostanai	(100.0)	49
Kyzylorda	(97.7)	37
Mangistau	(98.6)	45
South Kazakhstan	100.0	285
Pavlodar	(95.0)	27
North Kazakhstan	(98.2)	27
East Kazakhstan	100.0	68
Astana city	95.8	75
Almaty city	100.0	60
<b>Area</b>		
Urban	98.7	524
Rural	99.6	610
<b>Mother's education</b>		
None/Primary	(*)	4
Lower secondary	97.4	73
Upper secondary	99.5	345
Technical and Professional	98.9	316
Higher	99.4	396
<b>Wealth index quintile</b>		
Poorest	99.4	293
Second	99.3	255
Middle	99.2	197
Fourth	99.3	184
Richest	98.6	205
<b>Ethnicity of household head</b>		
Kazakh	99.1	768
Russian	98.9	141
Other ethnic groups	99.5	225
<sup>1</sup> MICS indicator 7.3 - Net intake rate in primary education		
( ) Figures that are based on 25–49 unweighted cases.		
(*) Figures that are based on fewer than 25 unweighted cases.		

Table ED.3A provides data on children entering the first grade at the age of 6 years. In Kazakhstan, among children of primary school entry age – 6 years, 67.4 percent of children attend the first grade of primary school, (Table ED.3A). The percentage of children enrolled in first grade of primary at the age of 6 years in urban areas is 64.0 percent and in rural areas 70.2 percent. Regionally, there are notable differences: for example, while in the Mangistau region, 91.7 percent of children are enter first grade at the age of 6 years, in Pavlodar and Kostanai regions only 36.7 and 41.0 percent of children enter school at the age of 6. Primary school entry at age 6 years is not related to mother's education level.

<b>Table ED.3A: Primary school entry</b>		
Percentage of children of primary school entry age (age 6 years) entering grade 1 (net intake rate), Kazakhstan, 2015		
	Percentage of children of primary school entry age entering grade 1 <sup>1</sup>	Number of children of primary school entry age
<b>Total</b>	67.4	1186
<b>Sex</b>		
Male	66.4	640
Female	68.6	546
<b>Region</b>		
Akmola	52.9	53
Aktobe	85.4	86
Almaty oblast	73.0	98
Atyrau	87.4	44
West Kazakhstan	(86.7)	34
Zhambyl	76.5	88
Karaganda	58.6	87
Kostanai	41.0	40
Kyzylorda	86.4	50
Mangistau	91.7	38
South Kazakhstan	63.7	300
Pavlodar	36.7	38
North Kazakhstan	(64.4)	23
East Kazakhstan	62.8	66
Astana city	64.9	83
Almaty city	52.7	57
<b>Area</b>		
Urban	64.0	538
Rural	70.2	649
<b>Mother's education</b>		
None/Primary	(*)	5
Lower secondary	68.0	62
Upper secondary	66.1	374
Technical and Professional	69.2	309
Higher	66.7	434
Missing/DK	(*)	1
<b>Wealth index quintile</b>		
Poorest	55.7	271
Second	77.4	271
Middle	75.2	230
Fourth	71.6	196
Richest	57.3	217

<b>Ethnicity of household head</b>		
Kazakh	72.5	833
Russian	53.0	136
Other ethnic groups	57.0	217
<b><sup>1</sup> MICS indicator 7.3 - Net intake rate in primary education</b>		
( ) Figures that are based on 25–49 unweighted cases.		
(*) Figures that are based on fewer than 25 unweighted cases.		

Table ED.4 provides the percentage of children of primary school aged 7-10, who attend primary or secondary school<sup>54</sup> and those who are out of school. The primary school (adjusted) net attendance ratio (NAR) was 99.5 percent. There is no difference in primary school NAR between boys and girls. Only 0.5 percent of children aged 7-10 years do not attend primary school: of these children, 0.4 percent are not attending school or pre-school and 0.1 are attending pre-school. There were no differences in primary school attendance in urban and rural areas, as well as by level of education of the mother or the wealth of households. There is virtually no difference, the figure ranges from 100.0 percent in the Almaty oblast, Zhambyl, South Kazakhstan and East Kazakhstan regions to 96.9 percent in the Atyrau region.

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<sup>54</sup> Ratios presented in this table are "adjusted" since they include not only primary school attendance, but also secondary school attendance in the numerator.

**Table ED.4: Primary school attendance and out of school children**

Percentage of children of primary school age attending primary or secondary school (adjusted net attendance ratio), percentage attending pre-school, and percentage out of school, Kazakhstan, 2015

	Male					Female					Total				
	Net attendance ratio (adjusted)	Percentage of children:			Number of children	Net attendance ratio (adjusted)	Percentage of children:			Number of children	Net attendance ratio (adjusted)	Percentage of children:			Number of children
		Not attending school or preschool	Attending preschool	Out of school <sup>a</sup>			Not attending school or preschool	Attending preschool	Out of school <sup>a</sup>			Not attending school or preschool	Attending preschool	Out of school <sup>a</sup>	
<b>Total</b>	99.6	0.4	0.1	0.4	2201	99.5	0.4	0.1	0.5	2003	99.5	0.4	0.1	0.5	4204
<b>Region</b>															
Akmola	100.0	0.0	0.0	0.0	106	99.0	0.0	1.0	1.0	86	99.6	0.0	0.4	0.4	192
Aktobe	98.9	1.1	0.0	1.1	136	99.5	0.0	0.5	0.5	125	99.2	0.6	0.3	0.8	261
Almaty oblast	100.0	0.0	0.0	0.0	170	100.0	0.0	0.0	0.0	170	100.0	0.0	0.0	0.0	341
Atyrau	100.0	0.0	0.0	0.0	79	93.8	6.2	0.0	6.2	80	96.9	3.1	0.0	3.1	160
West Kazakhstan	100.0	0.0	0.0	0.0	92	98.7	1.3	0.0	1.3	78	99.4	0.6	0.0	0.6	171
Zhambyl	100.0	0.0	0.0	0.0	163	100.0	0.0	0.0	0.0	135	100.0	0.0	0.0	0.0	298
Karaganda	99.1	0.9	0.0	0.9	136	100.0	0.0	0.0	0.0	125	99.5	0.5	0.0	0.5	261
Kostanai	99.1	0.9	0.0	0.9	94	100.0	0.0	0.0	0.0	83	99.5	0.5	0.0	0.5	178
Kyzylorda	100.0	0.0	0.0	0.0	89	99.5	0.5	0.0	0.5	72	99.8	0.2	0.0	0.2	161
Mangistau	99.3	0.7	0.0	0.7	91	100.0	0.0	0.0	0.0	80	99.6	0.4	0.0	0.4	171
South Kazakhstan	100.0	0.0	0.0	0.0	524	100.0	0.0	0.0	0.0	493	100.0	0.0	0.0	0.0	1016
Pavlodar	98.2	0.9	0.9	1.8	75	98.9	0.0	1.1	1.1	62	98.5	0.5	1.0	1.5	137
North Kazakhstan	99.0	0.0	1.0	1.0	49	100.0	0.0	0.0	0.0	45	99.5	0.0	0.5	0.5	94
East Kazakhstan	100.0	0.0	0.0	0.0	120	100.0	0.0	0.0	0.0	119	100.0	0.0	0.0	0.0	239
Astana city	97.8	2.0	0.2	2.2	142	100.0	0.0	0.0	0.0	122	98.8	1.1	0.1	1.2	264
Almaty city	99.7	0.3	0.0	0.3	134	98.2	1.8	0.0	1.8	126	99.0	1.0	0.0	1.0	260
<b>Area</b>															
Urban	99.6	0.3	0.1	0.4	1004	99.0	0.8	0.2	1.0	927	99.3	0.6	0.1	0.7	1931

Rural	99.5	0.4	0.1	0.5	1198	99.8	0.1	0.1	0.2	1075	99.7	0.3	0.1	0.3	2273
<b>Age at beginning of school year</b>															
7	99.2	0.6	0.3	0.8	590	99.3	0.3	0.4	0.7	544	99.2	0.5	0.3	0.8	1134
8	99.5	0.5	0.0	0.5	546	99.1	0.9	0.0	0.9	535	99.3	0.7	0.0	0.7	1081
9	99.9	0.1	0.0	0.1	552	100.0	0.0	0.0	0.0	447	99.9	0.1	0.0	0.1	999
10	99.9	0.1	0.0	0.1	513	99.5	0.5	0.0	0.5	477	99.7	0.3	0.0	0.3	989
<b>Mother's education</b>															
None/Primary	(*)	(*)	(*)	(*)	4	(*)	(*)	(*)	(*)	3	(*)	(*)	(*)	(*)	7
Lower secondary	99.6	0.0	0.4	0.4	160	99.1	0.3	0.7	0.9	128	99.3	0.1	0.5	0.7	288
Upper secondary	99.7	0.3	0.1	0.3	688	99.1	0.9	0.0	0.9	625	99.4	0.6	0.0	0.6	1314
Technical and Professional	99.5	0.5	0.0	0.5	614	99.4	0.4	0.1	0.6	567	99.5	0.5	0.1	0.5	1181
Higher	99.7	0.2	0.0	0.3	734	99.9	0.0	0.1	0.1	679	99.8	0.1	0.1	0.2	1412
Missing/DK	(*)	(*)	(*)	(*)	2	(*)	(*)	(*)	(*)	1	(*)	(*)	(*)	(*)	3
<b>Wealth index quintile</b>															
Poorest	99.4	0.5	0.1	0.6	576	100.0	0.0	0.0	0.0	444	99.6	0.3	0.1	0.4	1020
Second	99.9	0.0	0.1	0.1	483	99.7	0.0	0.3	0.3	525	99.8	0.0	0.2	0.2	1009
Middle	99.6	0.3	0.1	0.4	392	99.1	0.7	0.2	0.9	356	99.3	0.5	0.2	0.7	748
Fourth	99.4	0.6	0.0	0.6	347	99.7	0.3	0.0	0.3	328	99.5	0.5	0.0	0.5	675
Richest	99.5	0.5	0.0	0.5	403	98.6	1.4	0.0	1.4	349	99.1	0.9	0.0	0.9	753
<b>Ethnicity of household head</b>															
Kazakh	99.6	0.3	0.0	0.4	1495	99.5	0.4	0.0	0.5	1382	99.6	0.4	0.0	0.4	2878
Russian	99.6	0.3	0.2	0.4	303	98.7	1.0	0.3	1.3	254	99.2	0.6	0.2	0.8	557
Other ethnic groups	99.4	0.5	0.1	0.6	403	99.8	0.0	0.2	0.2	367	99.6	0.2	0.2	0.4	770

<sup>1</sup>MICS indicator 7.4; MDG indicator 2.1 - Primary school net attendance ratio (adjusted)

<sup>a</sup>The percentage of children of primary school age out of school are those not attending school and those attending preschool.

(\*) Figures that are based on fewer than 25 unweighted cases.

The secondary school (adjusted) net attendance ratio is presented in Table ED.5<sup>55</sup>. 98.9 percent of children aged 11-17 years attend secondary school, and the figure is very high. 0.3 percent of children of secondary school age attend primary school, these are mainly children aged 11, who entered primary school later.

NAR (adjusted) for boys is 98.7 percent, for girls – 99.1 percent, NAR for urban and rural areas is 99.1 and 98.7 percent, respectively.

The level of mother's education and household wealth level or ethnicity does not affect the secondary school (adjusted) NAR.

Tables ED.5A and ED.5B are similar to Table ED.5 and they present information on lower secondary school attendance and upper secondary school attendance (individually).

Table ED.5A shows the percentage of children of lower secondary school age (grades 5-9), who are currently attending lower secondary school or higher (adjusted net attendance ratio), the percentage of children attending primary school, and the percentage of children who are out of school. Among children aged 11-15 years, lower secondary school attendance remains very high and amounts to 99.4 percent among both boys and girls. There are no differences by background characteristics. 0.4 percent of children of lower secondary school age are in primary education and 0.2 percent are out of the education system. In the North-Kazakhstan region 1.2 percent of children are out of school, while in Astana city 0.8 percent are out of school. On the other hand, the percentage of children aged 11-15 years who are still attending primary school, in the Mangistau region and Almaty city is 1.1 and 0.9 percent respectively.

Table ED.5B shows the percentage of upper secondary school age children (grades 10-11), who are currently attending upper secondary school or a higher education level establishment (adjusted net attendance ratio), the percentage of children attending primary or lower secondary school, and the percentage of children out of school. The indicator has some regional differences: for example, in the Zhambyl region, the upper secondary school NAR was only 85.5 percent, while in the Kostanai and North Kazakhstan regions and Almaty city, the indicator was 100.0 percent. There are no differences by area of residence, by urban and rural areas, the attendance of the upper secondary school for rural girls is slightly lower than in urban areas (93.6 and 98.6 percent, respectively); there are no differences between urban and rural boys (95.4 and 95.3 percent, respectively). In general, the upper secondary school (adjusted) NAR for 16 year olds is 94.7 percent and for 17 year olds is 97.0 percent. Upper secondary school NAR positively correlates with mother's education level – for children whose mothers have lower school education (87.1 percent) the NAR is lower than that for children whose mothers have higher education (99.6 percent).

2.5 percent of children are out of upper secondary school, 1.7 percent of children aged 16-17 years attend primary or lower secondary school. In rural areas, the proportion of children who are out of school is 3.7 percent and in urban areas it is 1.4 percent. The highest percentage of children who are out of school is in the Zhambyl region (12.7 percent). 5.1 percent of children aged 16-17 in the Almaty oblast are attending either in primary or lower secondary school.

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<sup>55</sup> Ratios presented in this table are "adjusted" since they include not only secondary school attendance, but also attendance to higher levels in the numerator.

**Table ED.5: Secondary school attendance and out of school children**

Percentage of children of secondary school age (grades 5-11) attending secondary school or higher (adjusted net attendance ratio), percentage attending primary school, and percentage out of school, Kazakhstan, 2015

	Male				Female				Total			
	Net attendance ratio (adjusted)	Percentage of children:		Number of children	Net attendance ratio (adjusted)	Percentage of children:		Number of children	Net attendance ratio (adjusted) <sup>1</sup>	Percentage of children:		Number of children
		Attending primary school	Out of school <sup>a</sup>			Attending primary school	Out of school <sup>a</sup>			Attending primary school	Out of school <sup>a</sup>	
<b>Total</b>	98.7	0.2	1.2	2737	99.1	0.4	0.5	2343	98.9	0.3	0.9	5080
<b>Region</b>												
Akmola	99.0	0.0	1.0	122	100.0	0.0	0.0	111	99.5	0.0	0.5	232
Aktobe	99.5	0.0	0.5	145	98.7	0.9	0.0	166	99.1	0.5	0.2	311
Almaty oblast	98.0	0.7	1.3	214	98.8	0.0	1.2	243	98.5	0.3	1.2	456
Atyrau	99.5	0.0	0.5	94	99.1	0.0	0.9	68	99.4	0.0	0.6	162
West Kazakhstan	97.3	0.0	2.7	112	99.3	0.0	0.7	104	98.3	0.0	1.7	215
Zhambyl	97.4	0.0	2.6	203	96.2	0.6	3.2	167	96.9	0.3	2.9	370
Karaganda	97.6	0.0	2.4	224	100.0	0.0	0.0	159	98.6	0.0	1.4	383
Kostanai	99.4	0.0	0.6	120	99.4	0.6	0.0	121	99.4	0.3	0.3	240
Kyzylorda	99.6	0.0	0.4	101	100.0	0.0	0.0	87	99.8	0.0	0.2	188
Mangistau	98.2	1.1	0.7	92	99.3	0.7	0.0	87	98.7	0.9	0.4	179
South Kazakhstan	99.4	0.0	0.6	648	99.0	1.0	0.0	441	99.2	0.4	0.4	1089
Pavlodar	99.7	0.0	0.3	92	99.1	0.9	0.0	85	99.5	0.4	0.1	177
North Kazakhstan	98.2	0.7	1.1	76	99.2	0.0	0.8	63	98.7	0.4	1.0	139
East Kazakhstan	100.0	0.0	0.0	150	99.1	0.0	0.9	166	99.5	0.0	0.5	316
Astana city	96.3	0.0	3.7	146	100.0	0.0	0.0	137	98.1	0.0	1.9	283
Almaty city	98.6	1.0	0.4	201	100.0	0.0	0.0	138	99.2	0.6	0.2	339
<b>Area</b>												
Urban	98.8	0.2	1.0	1260	99.4	0.4	0.1	1113	99.1	0.3	0.6	2373
Rural	98.5	0.2	1.3	1477	98.8	0.3	0.8	1231	98.7	0.2	1.1	2707
<b>Age at beginning of school year</b>												
11	98.2	1.2	0.7	437	98.1	1.8	0.1	387	98.1	1.5	0.4	825

12	99.6	0.0	0.4	432	99.6	0.4	0.0	354	99.6	0.2	0.2	787
13	99.8	0.0	0.2	405	99.8	0.2	0.0	373	99.8	0.1	0.1	778
14	99.6	0.0	0.4	397	100.0	0.0	0.0	342	99.8	0.0	0.2	738
15	98.4	0.0	1.6	382	100.0	0.0	0.0	365	99.2	0.0	0.8	748
16	97.8	0.0	2.2	373	97.9	0.0	1.8	272	97.9	0.0	2.0	645
17	96.5	0.0	3.5	310	97.5	0.0	2.5	250	97.0	0.0	3.0	560
<b>Mother's education</b>												
None/Primary	(*)	(*)	(*)	2	(*)	(*)	(*)	3	(*)	(*)	(*)	5
Lower secondary	96.9	0.3	2.8	187	97.2	0.9	1.9	167	97.0	0.6	2.4	354
Upper secondary	98.1	0.3	1.6	924	99.0	0.5	0.5	747	98.5	0.4	1.1	1671
Technical and Professional	98.6	0.2	1.1	789	99.6	0.1	0.3	720	99.1	0.2	0.7	1509
Higher	99.9	0.0	0.1	718	99.4	0.6	0.0	607	99.7	0.3	0.1	1325
Cannot be determined <sup>b</sup>	98.1	0.0	1.9	116	98.1	0.0	1.9	99	98.1	0.0	1.9	215
Missing/DK	-	-	-	0	(*)	(*)	(*)	1	(*)	(*)	(*)	1
<b>Wealth index quintile</b>												
Poorest	98.5	0.2	1.3	680	98.6	1.0	0.4	576	98.6	0.6	0.9	1256
Second	98.2	0.1	1.7	584	99.5	0.0	0.5	488	98.8	0.1	1.2	1072
Middle	99.1	0.2	0.7	550	99.0	0.1	0.9	444	99.1	0.2	0.8	994
Fourth	99.3	0.3	0.4	418	99.2	0.3	0.3	412	99.2	0.3	0.4	830
Richest	98.3	0.1	1.6	505	99.3	0.4	0.3	423	98.8	0.2	1.0	928
<b>Ethnicity of household head</b>												
Kazakh	99.2	0.1	0.7	1778	99.5	0.4	0.1	1635	99.3	0.2	0.4	3414
Russian	99.1	0.1	0.8	423	99.1	0.2	0.7	393	99.1	0.2	0.8	816
Other ethnic groups	96.5	0.4	3.1	535	97.0	0.8	2.1	316	96.7	0.6	2.7	851

<sup>1</sup> MICS indicator 7.5 - Secondary school net attendance ratio (adjusted)

<sup>a</sup> The percentage of children of secondary school age out of school are those who are not attending primary, secondary, or higher education.

<sup>b</sup> Children age 15 or higher at the time of the interview whose mothers were not living in the household.

(\*) Figures that are based on fewer than 25 unweighted cases.

"-" denotes 0 unweighted case in that cell or in the denominator.



**Table ED.5A: Lower secondary school attendance and out of school children**

Percentage of children of lower secondary school age (grades 5-9) attending lower secondary school or higher (adjusted net attendance ratio), percentage attending primary school, and percentage out of school, Kazakhstan, 2015

	Male				Female				Total			
	Net attendance ratio (adjusted)	Percentage of children:		Number of children	Net attendance ratio (adjusted)	Percentage of children:		Number of children	Net attendance ratio (adjusted) <sup>1</sup>	Percentage of children:		Number of children
		Attending primary school	Out of school <sup>a</sup>			Attending primary school	Out of school <sup>a</sup>			Attending primary school	Out of school <sup>a</sup>	
<b>Total</b>	99.4	0.2	0.4	2053	99.5	0.5	0.0	1822	99.4	0.4	0.2	3875
<b>Region</b>												
Akmola	100.0	0.0	0.0	95	100.0	0.0	0.0	86	100.0	0.0	0.0	181
Aktobe	99.4	0.0	0.6	114	98.9	1.1	0.0	136	99.1	0.6	0.3	250
Almaty oblast	98.3	0.9	0.8	168	100.0	0.0	0.0	178	99.2	0.4	0.4	346
Atyrau	100.0	0.0	0.0	69	100.0	0.0	0.0	53	100.0	0.0	0.0	122
West Kazakhstan	99.2	0.0	0.8	78	100.0	0.0	0.0	79	99.6	0.0	0.4	157
Zhambyl	100.0	0.0	0.0	153	99.3	0.7	0.0	133	99.7	0.3	0.0	286
Karaganda	99.1	0.0	0.9	166	100.0	0.0	0.0	124	99.5	0.0	0.5	291
Kostanai	99.3	0.0	0.7	92	99.2	0.8	0.0	89	99.2	0.4	0.4	181
Kyzylorda	100.0	0.0	0.0	73	100.0	0.0	0.0	67	100.0	0.0	0.0	140
Mangistau	98.6	1.4	0.0	72	99.1	0.9	0.0	71	98.9	1.1	0.0	142
South Kazakhstan	100.0	0.0	0.0	488	98.7	1.3	0.0	356	99.5	0.5	0.0	844
Pavlodar	99.6	0.0	0.4	65	98.9	1.1	0.0	69	99.3	0.5	0.2	134
North Kazakhstan	97.7	0.8	1.5	59	99.0	0.0	1.0	49	98.3	0.5	1.2	109
East Kazakhstan	100.0	0.0	0.0	122	100.0	0.0	0.0	132	100.0	0.0	0.0	254
Astana city	98.5	0.0	1.5	104	100.0	0.0	0.0	95	99.2	0.0	0.8	199
Almaty city	97.9	1.5	0.5	136	100.0	0.0	0.0	104	98.8	0.9	0.3	240
<b>Area</b>												
Urban	99.2	0.3	0.5	926	99.4	0.6	0.1	845	99.3	0.4	0.3	1771
Rural	99.5	0.2	0.3	1127	99.6	0.4	0.0	977	99.5	0.3	0.2	2104
<b>Age at beginning of school year</b>												
11	98.2	1.2	0.7	437	98.1	1.8	0.1	387	98.1	1.5	0.4	825
12	99.6	0.0	0.4	432	99.6	0.4	0.0	354	99.6	0.2	0.2	787

13	99.8	0.0	0.2	405	99.8	0.2	0.0	373	99.8	0.1	0.1	778
14	99.6	0.0	0.4	397	100.0	0.0	0.0	342	99.8	0.0	0.2	738
15	99.5	0.0	0.5	382	100.0	0.0	0.0	365	99.8	0.0	0.2	748
<b>Mother's education</b>												
None/Primary	(*)	(*)	(*)	2	(*)	(*)	(*)	2	(*)	(*)	(*)	4
Lower secondary	99.1	0.4	0.5	139	98.8	1.2	0.0	137	99.0	0.8	0.2	276
Upper secondary	98.9	0.4	0.7	708	99.5	0.5	0.0	621	99.2	0.5	0.4	1329
Technical and Professional	99.3	0.3	0.4	610	99.8	0.1	0.1	555	99.5	0.2	0.3	1165
Higher	99.9	0.0	0.1	561	99.3	0.7	0.0	480	99.6	0.3	0.0	1042
Cannot be determined <sup>b</sup>	(100.0)	(0.0)	(0.0)	33	(*)	(*)	(*)	26	100.0	0.0	0.0	59
<b>Wealth index quintile</b>												
Poorest	99.6	0.3	0.1	509	98.8	1.2	0.0	462	99.2	0.7	0.1	971
Second	99.2	0.1	0.7	443	100.0	0.0	0.0	373	99.6	0.1	0.4	815
Middle	99.5	0.3	0.2	408	99.8	0.2	0.0	357	99.6	0.2	0.1	765
Fourth	99.3	0.4	0.2	310	99.4	0.4	0.2	315	99.4	0.4	0.2	626
Richest	99.1	0.1	0.8	383	99.5	0.5	0.0	315	99.3	0.3	0.4	698
<b>Ethnicity of household head</b>												
Kazakh	99.4	0.2	0.4	1375	99.5	0.5	0.0	1261	99.5	0.3	0.2	2637
Russian	99.2	0.2	0.6	312	99.8	0.2	0.0	303	99.5	0.2	0.3	614
Other ethnic groups	99.2	0.6	0.2	366	99.0	1.0	0.0	258	99.1	0.8	0.1	624

<sup>1</sup> Survey-specific indicator 7.S1 - Lower secondary school net attendance ratio (adjusted)

<sup>a</sup> The percentage of children of lower secondary school age out of school are those who are not attending primary, lower secondary, upper secondary, or higher education.

<sup>b</sup> Children age 15 or higher at the time of the interview whose mothers were not living in the household.

( ) Figures that are based on 25–49 unweighted cases.

(\*) Figures that are based on fewer than 25 unweighted cases.

**Table ED.5B: Upper secondary school attendance and out of school children**

Percentage of children of upper secondary school age (grades 10-11) attending upper secondary school or higher (adjusted net attendance ratio), percentage attending primary or lower secondary school, and percentage out of school, Kazakhstan, 2015

	Male				Female				Total			
	Percentage of children:				Percentage of children:				Percentage of children:			
	Net attendance ratio (adjusted)	Attending primary or lower secondary school	Out of school <sup>a</sup>	Number of children	Net attendance ratio (adjusted)	Attending primary or lower secondary school	Out of school <sup>a</sup>	Number of children	Net attendance ratio (adjusted) <sup>1</sup>	Attending primary or lower secondary school	Out of school <sup>a</sup>	Number of children
<b>Total</b>	95.4	1.8	2.8	684	96.2	1.6	2.1	522	95.7	1.7	2.5	1205
<b>Region</b>												
Akmola	(89.3)	(6.1)	(4.6)	27	(100.0)	(0.0)	(0.0)	25	94.5	3.1	2.4	52
Aktobe	(95.7)	(4.3)	(0.0)	31	(97.7)	(0.0)	(0.0)	30	96.7	2.2	0.0	61
Almaty oblast	(90.5)	(6.7)	(2.9)	45	(91.6)	(4.0)	(4.4)	65	91.1	5.1	3.8	110
Atyrau	(98.2)	(0.0)	(1.8)	25	(96.0)	(0.0)	(4.0)	15	97.4	0.0	2.6	40
West Kazakhstan	(98.1)	(0.0)	(1.9)	33	(*)	(*)	(*)	25	97.7	0.0	2.3	58
Zhambyl	87.6	1.9	10.5	50	(82.4)	(1.8)	(15.9)	34	85.5	1.8	12.7	84
Karaganda	(91.3)	(2.2)	(6.5)	57	(*)	(*)	(*)	35	92.9	3.0	4.1	92
Kostanai	(100.0)	(0.0)	(0.0)	28	(100.0)	(0.0)	(0.0)	31	100.0	0.0	0.0	59
Kyzylorda	98.4	0.0	1.6	28	(97.8)	(2.2)	(0.0)	20	98.1	0.9	0.9	48
Mangistau	(96.8)	(0.0)	(3.2)	21	(100.0)	(0.0)	(0.0)	16	98.2	0.0	1.8	37
South Kazakhstan	99.0	0.0	1.0	160	(97.3)	(2.7)	(0.0)	85	98.4	0.9	0.6	245
Pavlodar	(97.3)	(2.7)	(0.0)	27	(*)	(*)	(*)	16	96.8	3.2	0.0	43
North Kazakhstan	(100.0)	(0.0)	(0.0)	17	(100.0)	(0.0)	(0.0)	14	100.0	0.0	0.0	31
East Kazakhstan	(*)	(*)	(*)	28	(95.5)	(0.0)	(4.5)	35	(95.6)	(2.0)	(2.5)	63
Astana city	(85.1)	(5.5)	(9.4)	42	(100.0)	(0.0)	(0.0)	42	92.6	2.8	4.7	84
Almaty city	(100.0)	(0.0)	(0.0)	65	(100.0)	(0.0)	(0.0)	34	100.0	0.0	0.0	99
<b>Area</b>												
Urban	95.4	2.4	2.2	334	98.6	0.8	0.3	268	96.9	1.7	1.4	602
Rural	95.3	1.3	3.4	350	93.6	2.4	4.0	254	94.6	1.7	3.7	604

<b>Age at beginning of school year</b>												
16	94.4	3.3	2.2	373	95.0	3.0	1.8	272	94.7	3.2	2.0	645
17	96.5	0.0	3.5	310	97.5	0.0	2.5	250	97.0	0.0	3.0	560
<b>Mother's education</b>												
None/Primary	-	-	-	0	(*)	(*)	(*)	1	(*)	(*)	(*)	1
Lower secondary	(93.0)	(0.0)	(7.0)	49	(77.4)	(11.9)	(10.7)	30	87.1	4.5	8.4	78
Upper secondary	94.0	2.7	3.3	216	96.4	0.4	2.7	126	94.9	1.8	3.1	342
Technical and Professional	94.4	1.9	3.7	179	97.5	1.6	0.9	165	95.9	1.8	2.4	344
Higher	99.3	0.4	0.3	157	100.0	0.0	0.0	126	99.6	0.2	0.2	283
Cannot be determined <sup>b</sup>	94.9	3.2	1.9	83	95.4	2.1	2.6	73	95.1	2.7	2.2	157
Missing/DK	-	-	-	0	(*)	(*)	(*)	1	(*)	(*)	(*)	1
<b>Wealth index quintile</b>												
Poorest	96.0	1.2	2.8	171	95.6	2.4	2.0	114	95.9	1.7	2.4	285
Second	94.3	0.7	4.9	141	94.9	2.8	2.3	115	94.6	1.7	3.7	256
Middle	97.1	1.8	1.1	143	94.9	0.7	4.5	87	96.2	1.4	2.4	230
Fourth	95.7	3.4	0.9	107	98.4	0.0	0.9	97	97.0	1.8	0.9	204
Richest	93.4	2.5	4.1	122	97.3	1.4	1.3	108	95.2	2.0	2.8	230
<b>Ethnicity of household head</b>												
Kazakh	97.2	1.4	1.4	403	97.4	2.0	0.4	374	97.3	1.7	0.9	777
Russian	94.8	3.8	1.4	111	96.1	0.7	3.2	90	95.4	2.4	2.2	202
Other ethnic groups	91.4	1.5	7.1	169	(88.3)	(0.0)	(11.7)	58	90.6	1.1	8.2	227

<sup>1</sup>Survey-specific indicator 7.S2 - Upper secondary school net attendance ratio (adjusted)

<sup>a</sup> The percentage of children of upper secondary school age out of school are those who are not attending primary, lower secondary, upper secondary, or higher education.

<sup>b</sup> Children age 15 or higher at the time of the interview whose mothers were not living in the household.

( ) Figures that are based on 25–49 unweighted cases.

(\*) Figures that are based on fewer than 25 unweighted cases.

"-" denotes 0 unweighted case in that cell or in the denominator.

The percentage of children entering first grade who eventually reach the last grade of primary school is presented in Table ED.6. The MICS included only questions on school attendance in the current and previous year. Thus, the indicator is calculated synthetically by computing the cumulative probability of survival from the first to the last grade of primary school, as opposed to calculating the indicator for a real cohort which would need to be followed from the time a cohort of children entered primary school, up to the time they reached the last grade of primary school. Repeaters are excluded from the calculation of the indicator, because it is not known whether they will eventually graduate. As an example, the probability that a child will move from the first grade to the second grade is computed by dividing the number of children who moved from the first grade to the second grade (during the two consecutive school years covered by the survey) by the number of children who have moved from the first to the second grade plus the number of children who were in the first grade the previous school year, but dropped out for various reasons. Both the numerator and denominator exclude children who repeated during the two school years under consideration.

In Kazakhstan, of the total number of children entering first grade, 100 percent eventually reach the 4th grade of primary school. There are no differences by background characteristics for this indicator.

<b>Table ED.6: Children reaching last grade of primary school</b>				
Percentage of children entering first grade of primary school who eventually reach the last grade of primary school (Survival rate to last grade of primary school), Kazakhstan, 2015				
	Percent attending grade 1 last school year who are in grade 2 this school year	Percent attending grade 2 last school year who are attending grade 3 this school year	Percent attending grade 3 last school year who are attending grade 4 this school year	Percent who reach grade 4 of those who enter grade 1 <sup>1</sup>
Total	100.0	100.0	100.0	100.0
<b>Sex</b>				
Male	99.9	100.0	100.0	99.9
Female	100.0	100.0	100.0	100.0
<b>Region</b>				
Akmola	100.0	100.0	100.0	100.0
Aktobe	100.0	100.0	(100.0)	(100.0)
Almaty oblast	100.0	100.0	100.0	100.0
Atyrau	100.0	100.0	100.0	100.0
West Kazakhstan	100.0	(100.0)	100.0	(100.0)
Zhambyl	100.0	100.0	100.0	100.0
Karaganda	(100.0)	(100.0)	(100.0)	(100.0)
Kostanai	100.0	100.0	100.0	100.0
Kyzylorda	100.0	100.0	100.0	100.0
Mangistau	100.0	100.0	100.0	100.0
South Kazakhstan	100.0	100.0	100.0	100.0
Pavlodar	100.0	(100.0)	100.0	(100.0)
North Kazakhstan	(100.0)	100.0	(100.0)	(100.0)
East Kazakhstan	(100.0)	100.0	(100.0)	(100.0)
Astana city	100.0	(100.0)	(100.0)	(100.0)
Almaty city	99.6	100.0	100.0	99.6
<b>Area</b>				
Urban	99.9	100.0	100.0	99.9
Rural	100.0	100.0	100.0	100.0
<b>Mother's education</b>				
None/Primary	(*)	(*)	-	-

Lower secondary	100.0	100.0	100.0	100.0
Upper secondary	100.0	100.0	100.0	100.0
Technical and Professional	100.0	100.0	100.0	100.0
Higher	99.9	100.0	100.0	99.9
Missing/DK	(*)	(*)	-	-
<b>Wealth index quintile</b>				
Poorest	100.0	100.0	100.0	100.0
Second	100.0	100.0	100.0	100.0
Middle	100.0	100.0	100.0	100.0
Fourth	100.0	100.0	100.0	100.0
Richest	99.8	100.0	100.0	99.8
<b>Ethnicity of household head</b>				
Kazakh	100.0	100.0	100.0	100.0
Russian	100.0	100.0	100.0	100.0
Other ethnic groups	100.0	100.0	100.0	100.0
<b><sup>1</sup> MICS indicator 7.6; MDG indicator 2.2 - Children reaching last grade of primary</b>				
() Figures that are based on 25–49 unweighted cases.				
(*) Figures that are based on fewer than 25 unweighted cases.				
"–" denotes 0 unweighted case in that cell or in the denominator.				

It is important for pupils to learn the curriculum provided for each level of school education in full and on time, which involves the timely transition of pupils from one level of education to the next level.

The primary and lower secondary school completion rates and, transition and effective transition rates from primary school to lower secondary school and from lower secondary school to upper secondary school are presented in Table ED.7. The primary completion rate is the ratio of the total number of students (regardless of age), entering the last grade of primary school for the first time, to the number of children of the primary completion age at the beginning of the current (or most recent) school year.

Table ED.7 shows that the primary school completion rate is 102.1 percent. At the same time, the proportion of boys who finished primary school exceeds that of girls (109.3 and 94.3 percent, respectively), while the proportion of children in rural areas is higher than in urban (111.2 and 91.8 percent, respectively). The (simple) transition rate to lower secondary education amounted to 99.9 percent. The Table also provides the “effective” transition rates from primary school to lower secondary school and from lower secondary school to upper secondary school, which take into account of the presence of repeaters in the final grade of primary school and the final grade of lower secondary school, respectively. The effective transition rates better reflect situations in which pupils repeat the last grade of primary or lower secondary school but eventually make the transition to the lower or upper secondary school level. The simple transition rate tends to underestimate the pupils’ progression to lower or upper secondary schools as it assumes that the repeaters never reach the next school level. Table ED.7 shows that in Kazakhstan, in general, 100.0 percent of children studying in the last grade of primary school, and almost 98 percent of students enrolled in the last grade of lower secondary school, as expected, will transition to the appropriate secondary education. There are no significant differences for transition from primary school to the lower secondary education by region, by area of residence, education level and other background characteristics.

The lower secondary school completion rate was 110.8 percent. The proportion of boys who have finished lower secondary school is slightly higher than the proportion of girls (114.7 and 106.7 percent, respectively), while the share of rural students is higher than urban (124.4 and 97.0 percent, respectively). The simple transition rate from lower secondary to upper secondary education is 97.9

percent, while the "effective" transition rate is about 98 percent. Thus there is little difference between boys and girls (96.8 and 99.4 percent, respectively) and area of residence (99.7 and 96.4 percent, respectively).

**Table ED.7: Primary school completion and transition to lower secondary school**

Primary and lower secondary school completion rates and transition and effective transition rates from primary to lower secondary school and from lower secondary to upper secondary school, Kazakhstan, 2015

	Primary school completion rate <sup>1</sup>	Number of children of primary school completion age	Transition rate to lower secondary school <sup>2</sup>	Number of children who were in the last grade of primary school the previous year	Effective transition rate to lower secondary school	Number of children who were in the last grade of primary school the previous year and are not repeating that grade in the current school year	Lower secondary school completion rate <sup>3</sup>	Number of children of lower secondary school completion age	Transition rate from lower secondary school to upper secondary school <sup>4</sup>	Number of children who were in the last grade of lower secondary school the previous year	Effective transition rate to upper secondary school	Number of children who were in the last grade of lower secondary school the previous year and are not repeating that grade in the current school year
<b>Total</b>	102.1	989	99.9	868	100.0	867	110.8	748	97.9	711	98.0	711
<b>Sex</b>												
Male	109.3	513	99.9	413	100.0	413	114.7	382	96.7	377	96.8	376
Female	94.3	477	100.0	454	100.0	454	106.7	365	99.4	335	99.4	335
<b>Region</b>												
Akmola	85.5	52	100.0	48	100.0	48	(109.5)	35	(100.0)	30	(100.0)	30
Aktobe	(109.1)	43	(100.0)	37	(100.0)	37	(89.9)	46	(100.0)	46	(100.0)	46
Almaty oblast	(117.9)	64	100.0	76	100.0	76	(131.8)	61	(100.0)	68	(100.0)	68
Atyrau	(128.2)	28	100.0	31	100.0	31	(88.3)	24	(100.0)	23	(100.0)	23
West Kazakhstan	117.3	39	100.0	40	100.0	40	(111.5)	37	(96.3)	32	(96.3)	32
Zhambyl	126.7	62	100.0	59	100.0	59	(119.8)	48	95.0	50	95.0	50
Karaganda	(96.6)	53	(100.0)	61	(100.0)	61	(86.7)	65	95.3	79	95.3	79
Kostanai	85.0	48	100.0	42	100.0	42	(111.2)	37	(97.4)	31	(97.4)	31
Kyzylorda	91.2	44	100.0	41	100.0	41	117.4	25	97.8	27	97.8	27
Mangistau	101.0	42	100.0	43	100.0	43	128.2	26	98.7	25	98.7	25
South Kazakhstan	103.4	263	100.0	186	100.0	186	126.3	141	(100.0)	131	(100.0)	131
Pavlodar	(148.9)	29	(98.3)	31	(100.0)	30	(125.1)	24	(100.0)	19	(102.8)	19
North Kazakhstan	82.0	25	(100.0)	24	(100.0)	24	(104.5)	22	(100.0)	22	(100.0)	22
East Kazakhstan	(99.1)	55	(100.0)	50	(100.0)	50	(111.3)	64	(88.7)	38	(88.7)	38



Astana city	(85.5)	73	(100.0)	47	(100.0)	47	(96.6)	38	(98.7)	38	(98.7)	38
Almaty city	81.4	70	(100.0)	54	(100.0)	54	90.3	55	(98.6)	50	(98.6)	50
<b>Area</b>												
Urban	91.8	465	100.0	422	100.0	422	97.0	372	99.7	347	99.7	347
Rural	111.2	524	99.9	445	100.0	445	124.4	376	96.3	364	96.4	364
<b>Mother's education</b>												
None/Primary	-	0	(*)	2	(*)	2	-	0	-	0	-	0
Lower secondary	113.2	73	100.0	59	100.0	59	(136.3)	57	(90.7)	27	(90.7)	27
Upper secondary	106.7	292	100.0	289	100.0	289	113.5	218	97.8	208	97.8	208
Technical and Professional	90.5	300	99.8	271	100.0	270	116.7	224	99.4	198	99.7	198
Higher	106.2	324	100.0	248	100.0	248	105.3	193	100.0	227	100.0	227
Cannot be determined <sup>a</sup>	-	0	-	0	-	0	69.7	56	87.5	51	87.5	51
Missing/DK	-	0	-	0	-	0	-	0	(*)	1	(*)	1
<b>Wealth index quintile</b>												
Poorest	104.6	224	99.8	213	100.0	212	120.6	166	97.5	143	97.9	143
Second	104.9	257	100.0	195	100.0	195	119.7	150	95.5	179	95.5	179
Middle	112.2	170	100.0	152	100.0	152	117.2	162	99.3	152	99.3	152
Fourth	81.7	174	100.0	156	100.0	156	93.6	134	99.6	117	99.6	117
Richest	105.4	165	100.0	151	100.0	151	98.3	135	98.8	120	98.8	120
<b>Ethnicity of household head</b>												
Kazakh	103.5	665	99.9	635	100.0	634	108.7	496	98.0	474	98.1	474
Russian	90.4	149	100.0	135	100.0	135	106.4	120	99.6	112	99.6	112
Other ethnic groups	106.6	176	100.0	98	100.0	98	122.5	132	96.4	125	96.4	125

<sup>1</sup> MICS indicator 7.7 - Primary completion rate

<sup>2</sup> MICS indicator 7.8 - Transition rate to lower<sup>a</sup> secondary school

<sup>3</sup> Survey-specific indicator 7.S3 - Lower secondary school completion rate

<sup>4</sup> Survey-specific indicator 7.S4 - Transition rate to upper secondary school

<sup>a</sup> Transition rate to lower secondary school corresponds to transition rate to secondary school as defined in MICS global indicator 7.8.

( ) Figures that are based on 25–49 unweighted cases.

(\*) Figures that are based on fewer than 25 unweighted cases.

"-" denotes 0 unweighted case in that cell or in the denominator.

The ratio of girls to boys attending primary and secondary (lower and upper secondary) education is provided in Table ED.8. These ratios are better known as the Gender Parity Index (GPI). Notice that the ratios included here are obtained from (adjusted) net attendance ratios rather than gross attendance ratios. The latter provide an erroneous description of the GPI mainly because, in most cases, the majority of over-age children attending primary education tend to be boys.

In general, in Kazakhstan, the Gender Parity Index for primary, lower secondary education and secondary education is 1.00, indicating no difference in the attendance to these school levels by girls and boys, except for GPI in upper secondary education, which is 1.01. In general, there are no GPI differences by background characteristics. The Gender Parity Index for upper secondary school (adjusted) NAR indicates that there is a gender gap between upper secondary school attendance of girls and boys in urban areas and also between girls and boys in rural areas (1.03 and 0.98 percent respectively).

**Table ED.8: Education gender parity**

Ratio of adjusted net attendance ratios of girls to boys, in primary, lower secondary, upper secondary and secondary school, Kazakhstan, 2015

	Primary school			Lower secondary school			Upper secondary school			Secondary school		
	Primary school adjusted net attendance ratio (NAR), girls	Primary school adjusted net attendance ratio (NAR), boys	Gender parity index (GPI) for primary school adjusted NAR <sup>1</sup>	Lower secondary school adjusted net attendance ratio (NAR), girls	Lower secondary school adjusted net attendance ratio (NAR), boys	Gender parity index (GPI) for lower secondary school adjusted NAR <sup>2</sup>	Upper secondary school adjusted net attendance ratio (NAR), girls	Upper secondary school adjusted net attendance ratio (NAR), boys	Gender parity index (GPI) for upper secondary school adjusted NAR <sup>3</sup>	Secondary school adjusted net attendance ratio (NAR), girls	Secondary school adjusted net attendance ratio (NAR), boys	Gender parity index (GPI) for secondary school adjusted NAR <sup>4</sup>
Total	99.5	99.6	1.00	99.5	99.4	1.00	96.2	95.4	1.01	99.1	98.7	1.00
<b>Region</b>												
Akmola	99.0	100.0	0.99	100.0	100.0	1.00	(100.0)	(89.3)	(1.12)	100.0	99.0	1.01
Aktobe	99.5	98.9	1.01	98.9	99.4	1.00	(97.7)	(95.7)	(1.02)	98.7	99.5	0.99
Almaty oblast	100.0	100.0	1.00	100.0	98.3	1.02	(91.6)	(90.5)	(1.01)	98.8	98.0	1.01
Atyrau	93.8	100.0	0.94	100.0	100.0	1.00	(96.0)	(98.2)	(0.98)	99.1	99.5	1.00
West Kazakhstan	98.7	100.0	0.99	100.0	99.2	1.01	(*)	(98.1)	(*)	99.3	97.3	1.02
Zhambyl	100.0	100.0	1.00	99.3	100.0	0.99	(82.4)	87.6	(0.94)	96.2	97.4	0.99
Karaganda	100.0	99.1	1.01	100.0	99.1	1.01	(*)	(91.3)	(*)	100.0	97.6	1.02
Kostanai	100.0	99.1	1.01	99.2	99.3	1.00	(100.0)	(100.0)	(1.00)	99.4	99.4	1.00
Kyzylorda	99.5	100.0	0.99	100.0	100.0	1.00	(97.8)	98.4	(0.99)	100.0	99.6	1.00
Mangistau	100.0	99.3	1.01	99.1	98.6	1.00	(100.0)	(96.8)	(1.03)	99.3	98.2	1.01
South Kazakhstan	100.0	100.0	1.00	98.7	100.0	0.99	(97.3)	99.0	(0.98)	99.0	99.4	1.00
Pavlodar	98.9	98.2	1.01	98.9	99.6	0.99	(*)	(97.3)	(*)	99.1	99.7	0.99
North Kazakhstan	100.0	99.0	1.01	99.0	97.7	1.01	(100.0)	(100.0)	(1.00)	99.2	98.2	1.01
East Kazakhstan	100.0	100.0	1.00	100.0	100.0	1.00	(95.5)	(*)	(*)	99.1	100.0	0.99
Astana city	100.0	97.8	1.02	100.0	98.5	1.01	(100.0)	(85.1)	(1.18)	100.0	96.3	1.04
Almaty city	98.2	99.7	0.98	100.0	97.9	1.02	(100.0)	(100.0)	(1.00)	100.0	98.6	1.01

<b>Area</b>													
Urban	99.0	99.6	0.99	99.4	99.2	1.00	98.6	95.4	1.03	99.4	98.8	1.01	
Rural	99.8	99.5	1.00	99.6	99.5	1.00	93.6	95.3	0.98	98.8	98.5	1.00	
<b>Mother's education</b>													
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	-	-	(*)	(*)	(*)	
Lower secondary	99.1	99.6	0.99	98.8	99.1	1.00	(77.4)	(93.0)	(0.83)	97.2	96.9	1.00	
Upper secondary	99.1	99.7	0.99	99.5	98.9	1.01	96.4	94.0	1.02	99.0	98.1	1.01	
Technical and Professional	99.4	99.5	1.00	99.8	99.3	1.00	97.5	94.4	1.03	99.6	98.6	1.01	
Higher	99.9	99.7	1.00	99.3	99.9	0.99	100.0	99.3	1.01	99.4	99.9	1.00	
Cannot be determined <sup>a</sup>	na	na	na	(*)	(100.0)	(*)	95.4	94.9	1.00	98.1	98.1	1.00	
Missing/DK	(*)	(*)	(*)	-	-	-	(*)	-	-	(*)	-	-	
<b>Wealth index quintile</b>													
Poorest	100.0	99.4	1.01	98.8	99.6	0.99	95.6	96.0	1.00	98.6	98.5	1.00	
Second	99.7	99.9	1.00	100.0	99.2	1.01	94.9	94.3	1.01	99.5	98.2	1.01	
Middle	99.1	99.6	1.00	99.8	99.5	1.00	94.9	97.1	0.98	99.0	99.1	1.00	
Fourth	99.7	99.4	1.00	99.4	99.3	1.00	98.4	95.7	1.03	99.2	99.3	1.00	
Richest	98.6	99.5	0.99	99.5	99.1	1.00	97.3	93.4	1.04	99.3	98.3	1.01	
<b>Ethnicity of household head</b>													
Kazakh	99.5	99.6	1.00	99.5	99.4	1.00	97.4	97.2	1.00	99.5	99.2	1.00	
Russian	98.7	99.6	0.99	99.8	99.2	1.01	96.1	94.8	1.01	99.1	99.1	1.00	
Other ethnic groups	99.8	99.4	1.00	99.0	99.2	1.00	(88.3)	91.4	(0.97)	97.0	96.5	1.01	
<sup>1</sup> MICS indicator 7.9; MDG indicator 3.1 - Gender parity index (primary school) <sup>2</sup> Survey-specific indicator 7.S5 - Gender parity index (lower secondary school) <sup>3</sup> Survey-specific indicator 7.S6 - Gender parity index (upper secondary school) <sup>4</sup> MICS indicator 7.10; MDG indicator 3.1 - Gender parity index (secondary school)													
<sup>a</sup> Children age 15 or higher at the time of the interview whose mothers were not living in the household. na: not applicable. ( ) Figures that are based on 25–49 unweighted cases. (*) Figures that are based on fewer than 25 unweighted cases. "–" denotes 0 unweighted case in that cell or in the denominator.													

Figure ED.1 combines all the indicators related to the attendance to primary, secondary (lower and upper secondary) school and transition to the next stage of secondary school described in this chapter, by sex. It is also includes information on attendance to early childhood education described in Chapter 8, Table CD.1.

**Figure ED.1: Education indicators by sex, Kazakhstan, 2015**

		Percent							
<b>School readiness</b>		<b>91.1</b>	<b>90.4</b>						
<b>Net intake rate in primary education</b>		<b>99.1</b>	<b>99.3</b>	<b>Primary school completion rate</b>		<b>Transition rate to lower secondary school</b>		<b>Transition rate to upper secondary school</b>	
				<b>109.3</b>	<b>94.3</b>	<b>99.9</b>	<b>100.0</b>	<b>96.7</b>	<b>99.4</b>
<b>Attendance to early childhood education</b>		<b>Primary school attendance</b>		<b>Lower secondary school attendance</b>		<b>Upper secondary school attendance</b>			
<b>52.8</b>	<b>57.9</b>	<b>99.6</b>	<b>99.5</b>	<b>99.4</b>	<b>99.5</b>	<b>95.4</b>	<b>96.2</b>		
		<b>Children reaching last grade of primary</b>		<b>Secondary school attendance</b>					
		<b>99.9</b>	<b>100.0</b>	<b>98.7</b>		<b>99.1</b>			
								<b>Boys</b>	<b>Girls</b>

Note: All indicator values are in per cent

## X. Child Protection

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### ***Birth Registration***

A name and citizenship is every child's right, enshrined in the Convention on the Rights of the Child (CRC) and other international treaties. Yet the births of around one in four children under the age of five worldwide have never been recorded.<sup>56</sup> This lack of formal recognition by the State usually means that a child is unable to obtain a birth certificate. The birth certificate is a document certifying the identity of an individual, certifying the state registration of the fact of his/her birth. As a result, he or she may be denied health care or education. Later in life, the lack of official identification documents can mean that a child may enter into marriage or the labour market, or be conscripted into the armed forces, before the legal age. In adulthood, birth certificates may be required to obtain social assistance or a job in the formal sector, to buy or prove the right to inherit property, to vote and to obtain a passport. Registering children at birth is the first step in securing their recognition before the law, safeguarding their rights, and ensuring that any violation of these rights does not go unnoticed.<sup>57</sup>

In Kazakhstan, the Birth Certificate is issued by the local executive body carrying out state registration of civil status acts.

An application for state registration of the birth of a child should be filed in writing by parents (or one of them) no later than *two months* from the date of his/her birth, and in the case of death, illness or inability to file an application otherwise – by the interested persons or by management of the health organization, in which the mother was at delivery (*this period was valid at the time of the survey in 2015, since April 2016, the deadline for submission of application for registration shall be 3 days after birth – Box CP.1*).

After verification of the documents received for state registration of birth, information on birth registration shall be entered into the Information System "Civil Status Registration" (hereinafter – the IS CSR).

After the state registration of the child's birth in the IS CSR, the birth record is printed in duplicate. Birth Certificate is issued on the basis of birth records. In the case of the birth of two or more children, a birth certificate is issued for each child.

In Kazakhstan, the electronic government portal **www.egov.kz** launched the service "*Submission of Electronic Application for the Registration of Birth of the Child*", which allows citizens to receive the birth certificate on-line (in the Kazakh or Russian languages – at the parents' discretion).

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<sup>56</sup> UNICEF. 2014. *The State of the World's Children 2015*. UNICEF.

<sup>57</sup> UNICEF. 2013. *Every Child's Birth Right: Inequities and trends in birth registration*. UNICEF.

Box CP.1:

The Code of the Republic of Kazakhstan "On Marriage and Family" was amended by **Article 189** dated April 9, 2016. **"Period for Application on the Birth Registration of a Child"**:

Application on the Birth Registration of a Child must be filed by parents or other interested parties to the registration authorities **within three business days from the date of his/her birth**, and in the case of stillbirth – the application is submitted by the responsible officer of the medical organization no later than **one business day from the moment of stillbirth**.

**Table CP.1: Birth registration**

Percentage of children under age 5 by whether birth is registered, Kazakhstan, 2015

	Children under age 5 whose birth is registered with civil authorities				Number of children under age 5
	Has birth certificate:			Total registered <sup>1</sup>	
	Seen	Not seen	No birth certificate		
Total	78.2	21.3	0.2	99.7	5510
<b>Sex</b>					
Male	78.4	21.1	0.2	99.7	2796
Female	78.0	21.5	0.2	99.7	2714
<b>Region</b>					
Akmola	91.0	9.0	0.0	100.0	225
Aktobe	71.4	28.6	0.0	100.0	376
Almaty oblast	58.5	40.6	0.0	99.1	413
Atyrau	78.0	20.9	0.0	98.9	202
West Kazakhstan	80.1	19.1	0.5	99.7	227
Zhambyl	87.7	11.5	0.2	99.4	414
Karaganda	85.3	14.0	0.3	99.6	381
Kostanai	87.5	12.5	0.0	100.0	239
Kyzylorda	85.5	13.4	0.6	99.5	214
Mangistau	65.7	34.1	0.0	99.8	224
South Kazakhstan	77.7	21.8	0.3	99.8	1246
Pavlodar	90.9	8.7	0.4	100.0	166
North Kazakhstan	83.1	16.3	0.0	99.5	117
East Kazakhstan	93.5	6.5	0.0	100.0	274
Astana city	67.3	32.1	0.2	99.7	501
Almaty city	74.9	24.3	0.8	100.0	292
<b>Area</b>					
Urban	78.2	21.5	0.2	99.9	2704
Rural	78.3	21.1	0.2	99.5	2806
<b>Age</b>					
0-11 months	77.7	20.0	1.1	98.7	1071
0-5 months	78.1	17.1	2.2	97.5	531
0-1 months	65.6	18.4	7.7	91.7	129

2-3 months	76.7	21.1	0.9	98.7	206
4-5 months	87.9	12.1	0.0	100.0	196
6-11 months	77.2	22.8	0.0	100.0	540
12-23 months	80.0	20.0	0.0	100.0	1071
24-35 months	81.5	18.5	0.0	100.0	1045
36-47 months	76.0	23.7	0.0	99.8	1208
48-59 months	76.4	23.6	0.0	100.0	1114
<b>Mother's education</b>					
None/Primary	(*)	(*)	(*)	(*)	6
Lower secondary	79.2	20.5	0.2	99.9	311
Upper secondary	80.4	18.6	0.4	99.5	1386
Technical and Professional	78.3	21.3	0.2	99.8	1559
Higher	76.6	23.0	0.1	99.8	2248
<b>Wealth index quintile</b>					
Poorest	80.4	18.7	0.3	99.4	1124
Second	78.6	21.0	0.2	99.8	1218
Middle	77.5	22.0	0.1	99.6	1183
Fourth	74.1	25.5	0.4	99.9	966
Richest	80.1	19.6	0.1	99.8	1019
<b>Ethnicity of household head</b>					
Kazakh	78.6	20.8	0.2	99.7	3838
Russian	76.9	22.5	0.4	99.8	687
Other ethnic groups	77.6	22.2	0.0	99.8	985
<b><sup>1</sup> MICS indicator 8.1 - Birth registration</b>					
<p><sup>a</sup> The findings for children under age 5 whose birth is not registered and whose mother/caretaker knows how to register the birth are not presented in the table because the number of children under age 5 without birth registration are based on fewer than 25 unweighted cases.</p> <p>(*) Figures that are based on fewer than 25 unweighted cases.</p>					

Table CP.1 shows that birth registration in Kazakhstan is almost universal (99.7 percent), with no differences by background characteristics. The data show the differences between the proportion of children whose birth certificate was seen personally by the interviewer and the proportion of those whose birth certificate was not seen by the interviewer (78.2 and 21.3 percent, respectively). Only 0.2 percent of children had no birth certificates, and this situation is mainly typical of children aged 0-5 months; most of them – newborns aged 0-1 months (7.7 percent) whose parents at the time of the survey have not yet managed to obtain the birth certificate, as according to the national legislation at the time, they had two months to register a child.

### ***Child Discipline***

In every culture, there are methods of teaching children self-control and acceptable behaviour in their environment – at home, in public places, etc. – which is an integral part of upbringing. Positive parenting practices involve providing guidance on how to handle emotions or conflicts in manners that encourage judgment and responsibility and preserve children's self-esteem, physical and psychological integrity and dignity. Too often however, children are raised through the use of punitive methods that rely on the use of physical force or verbal intimidation to obtain desired behaviors. Studies<sup>58</sup> have found that exposing

<sup>58</sup> Straus, MA and Paschall MJ. 2009. *Corporal Punishment by Mothers and Development of Children's Cognitive Ability: A*



children to violent discipline have harmful consequences, which range from immediate impacts to long-term harm that children carry forward into adult life. Violence hampers children’s development, learning abilities and school performance; it inhibits positive relationships, provokes low self-esteem, emotional distress and depression; and, at times, it leads to risk taking and self-harm.

The 2015 Kazakhstan MICS results provide an opportunity to assess methods used to discipline the child, from non-violent methods to psychological aggression and the use of physical (both any and severe) punishment.

The survey asked the question about what methods of teaching right behaviour or addressing a behavioural problem parents or other adult members of the household used for children aged 1-14 years in the last one month prior to the survey. One child was randomly selected for the “Child Discipline” module and respondents were asked a series of questions on the disciplining methods, which adult members of the household used towards a selected child during the past month.

<b>Table CP.2: Child discipline</b>						
Percentage of children aged 1-14 years by child disciplining methods experienced during the last one month, Kazakhstan, 2015						
	Percentage of children aged 1-14 years who experienced:					Number of children aged 1-14 years
	Only non-violent discipline	Psychological aggression	Physical punishment		Any violent discipline method <sup>1</sup>	
			Any	Severe		
<b>Total</b>	38.9	47.2	26.2	1.0	52.7	13575
<b>Sex</b>						
Male	35.5	49.6	30.6	1.4	55.2	7070
Female	42.7	44.7	21.4	0.6	49.9	6505
<b>Region</b>						
Akmola	56.5	32.8	17.4	0.2	38.6	590
Aktobe	64.6	22.0	12.2	0.1	30.2	880
Almaty oblast	25.7	55.2	36.8	0.4	65.0	1112
Atyrau	36.7	57.3	27.3	0.8	59.9	489
West Kazakhstan	41.2	38.6	21.7	3.4	42.7	539
Zhambyl	32.4	60.9	25.2	1.5	67.0	1009
Karaganda	51.2	40.9	24.2	2.0	47.1	936
Kostanai	32.7	56.4	33.0	1.1	65.4	602
Kyzylorda	50.2	37.8	17.9	1.0	41.9	521
Mangistau	33.6	58.1	37.8	1.6	65.1	532
South Kazakhstan	29.5	51.7	26.0	1.1	53.6	3109
Pavlodar	37.4	53.1	27.0	0.3	60.1	437

*longitudinal study of two nationally representative age cohorts.* Journal of Aggression, Maltreatment & Trauma 18(5): 459-83.  
 Erickson, MF and Egeland, B. 1987. *A Developmental View of the Psychological Consequences of Maltreatment.* School Psychology Review 16: 156-68.  
 Schneider, MW et al. 2005. *Do Allegations of Emotional Maltreatment Predict Developmental Outcomes Beyond that of Other Forms of Maltreatment.* Child Abuse & Neglect 29(5): 513–32.

North Kazakhstan	54.9	38.0	14.3	0.3	41.1	325
East Kazakhstan	47.1	39.3	23.5	0.6	47.1	751
Astana city	29.7	60.8	37.5	1.2	64.2	965
Almaty city	45.3	29.7	26.0	0.4	38.4	778
<b>Area</b>						
Urban	39.7	46.6	26.0	1.0	51.7	6387
Rural	38.3	47.8	26.4	1.0	53.5	7188
<b>Age</b>						
1-2	41.3	30.7	21.2	0.5	38.3	2257
1	38.2	25.8	17.3	0.4	32.5	1089
2	44.3	35.2	24.8	0.7	43.7	1168
3-4	35.8	45.4	31.7	0.8	53.2	2277
5-9	38.1	52.4	31.0	1.1	57.8	5158
10-14	40.5	51.0	19.6	1.4	53.9	3883
<b>Education of household head</b>						
None/Primary	29.6	52.4	40.7	3.4	65.9	245
Lower secondary	35.6	50.8	30.1	2.2	56.9	1309
Upper secondary	40.1	46.4	24.6	0.8	51.5	4648
Technical and Professional	37.9	47.2	25.6	1.1	52.5	3988
Higher	40.7	46.3	26.4	0.6	51.7	3360
Missing/DK	(*)	(*)	(*)	(*)	(*)	26
<b>Wealth index quintile</b>						
Poorest	33.2	53.1	30.2	1.8	59.2	3152
Second	38.1	46.3	24.1	0.4	50.9	3029
Middle	40.4	43.1	24.2	1.0	48.5	2651
Fourth	42.2	44.5	25.1	1.0	50.7	2252
Richest	42.7	47.7	26.9	0.8	52.8	2491
<b>Ethnicity of household head</b>						
Kazakh	40.3	46.6	26.8	1.1	52.3	9400
Russian	41.9	48.0	26.0	1.5	53.6	1852
Other ethnic groups	31.0	49.1	23.9	0.3	53.2	2324
<b><sup>1</sup> MICS indicator 8.3 - Violent discipline</b>						
(*) Figures that are based on fewer than 25 unweighted cases.						

According to the survey in Kazakhstan, more than half (52.7 percent) of children aged 1-14 years were subjected to at least one form of psychological or physical punishment by the adult members of the household during the past month before the survey. Household members sometimes use a combination of psychological aggression and physical punishment, to control and adjust the behavior of children by any means possible. While 47.2 percent of children were subjected to psychological aggression, about 26.2 percent of children were exposed to physical punishment. The most severe forms of physical punishment (hitting the child on the head, ears or face, or repetitive hits) are not common in the country: 1.0 percent of children was subjected to severe punishment (Table CP.2 and Figure CP.1).

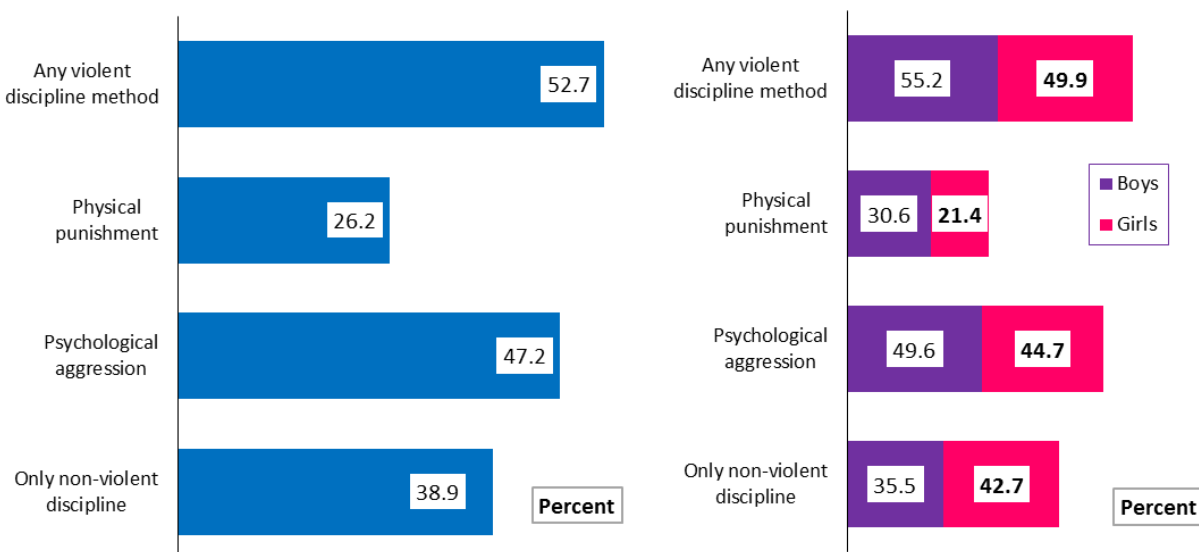
55.2 percent of boys and 49.9 percent of girls have been subjected to any violent discipline method. Prevalence of any violent discipline ranges from 30.2 percent in the Aktobe region to 67.0 percent in the Zhambyl region. Unfortunately, more than a third of children from early age (1-2 years) are **already** subjected to violent methods of discipline (38.3 percent) – both psychological aggression (30.7 percent) and any and even severe physical punishments (21.2 and 0.5 percent, respectively). The prevalence of any

physical violence shows an increasing trend up to and including the age of 9 years (ranging from about 21 to 31 percent), after which it decreases for children aged 10-14 years (19.6 percent). Violent discipline methods are used to more than 50 percent of children aged 3-4 years, 5-9 years and 10-14 years (53.2, 58.8 and 53.9 percent, respectively). At the same time, slightly more than half of children in the age groups 5-9 and 10-14 years are more often subjected to psychological aggression from adults, than children of the younger age groups: 1-2 and 3-4 years.

Only non-violent discipline methods were used in respect of 42.7 percent of girls and 35.5 percent of boys. With respect to 42.7 percent of children living in the richest households, adults used only non-violent discipline methods, compared to 33.2 percent of children living in the poorest households.

Figure CP.1 shows discipline methods in general and from a gender perspective.

**Figure CP.1: Child disciplining methods, children aged 1-14 years, Kazakhstan, 2015**



While violent methods are extremely common forms of discipline, Table CP.3 reveals that only 4.7 percent of respondents to the household questionnaire believe that physical punishment is a necessary part of child-rearing. The percentage of respondents who believe that physical punishment is needed to bring up, raise, or educate a child properly ranges from none in the Aktobe region and 0.7 percent in the West Kazakhstan region to 11.9 percent in the Kostanai region. There are no differences by other background characteristics.

**Table CP.3: Attitudes toward physical punishment**

Percentage of respondents to the child discipline module who believe that physical punishment is needed to bring up, raise, or educate a child properly, Kazakhstan, 2015

	Respondent believes that a child needs to be physically punished	Number of respondents to the Child Discipline module
<b>Total</b>	4.7	7769
<b>Sex</b>		
Male	3.9	1401
Female	4.8	6368
<b>Region</b>		
Akmola	6.3	384
Aktobe	0.0	502
Almaty oblast	4.2	658
Atyrau	2.0	256
West Kazakhstan	0.7	349
Zhambyl	4.3	530
Karaganda	5.4	600
Kostanai	11.9	406
Kyzylorda	1.0	252
Mangistau	2.6	261
South Kazakhstan	3.7	1413
Pavlodar	6.4	308
North Kazakhstan	7.6	215
East Kazakhstan	7.2	488
Astana city	4.8	626
Almaty city	7.1	521
<b>Area</b>		
Urban	5.3	4063
Rural	4.0	3706
<b>Age</b>		
<25	4.0	501
25-39	5.6	3719
40-59	3.9	2840
60+	3.1	710
<b>Respondent's relationship to selected child</b>		
Mother	5.3	4853
Father	4.2	1012
Other	3.2	1903
<b>Respondent's education</b>		
None/Primary	(0.0)	28
Lower secondary	8.3	505
Upper secondary	3.4	2208
Technical and Professional	5.3	2480
Higher	4.5	2545
Missing/DK	(*)	3
<b>Wealth index quintile</b>		
Poorest	5.1	1532
Second	2.8	1555

Middle	5.1	1550
Fourth	5.0	1453
Richest	5.3	1679
<b>Ethnicity of household head</b>		
Kazakh	3.5	5121
Russian	8.2	1393
Other ethnic groups	5.6	1255
() Figures that are based on 25–49 unweighted cases.		
(*) Figures that are based on fewer than 25 unweighted cases.		

## Early Marriage

Marriage<sup>59</sup> before the age of 18 is a reality for many young girls in the world. 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 professional training reinforcing the gendered nature of poverty.<sup>60</sup> 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.

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 and other sexually transmitted infections. The demand for this young wife to reproduce and the power imbalance resulting from the age differential lead to very low condom use among such couples.<sup>61</sup>

In Kazakhstan, the official marriage age for women and men is 18 years, and only in exceptional cases by the decision of the local executive bodies can this age be reduced by a period not exceeding two years for exceptional reasons: 1) pregnancy or 2) birth of a child.

The percentages of women married before ages 15 and 18 years are provided in Table CP.4. Among women aged 15–49 years, 0.1 percent of girls are married before age 15, and among women aged 20–49 years – 7.8 percent of women were married before age 18.

<sup>59</sup> All references to marriage in this chapter include marital union as well.

<sup>60</sup> Bajracharya, A. and Amin, S. (Баджрачарья и Амин.) 2010. *Poverty, marriage timing, and transitions to adulthood in Nepal: A longitudinal analysis using the Nepal living standards survey*. Poverty, Gender, and Youth Working Paper No. 19. Population Council.

Godha, D et al. (Годха и др.) 2011. *The influence of child marriage on fertility, fertility-control, and maternal health care utilization*. MEASURE/Evaluation PRH Project Working paper 11-124.

<sup>61</sup> Clark, S et al. 2006. *Protecting young women from HIV/AIDS: the case against child and adolescent marriage*. International Family Planning Perspectives 32(2): 79-88.

Raj, A et al. 2009. *Prevalence of child marriage and its effect on fertility and fertility-control outcomes of young women in India: a cross-sectional, observational study*. The Lancet 373(9678): 1883–9.

At the time of the survey, 6 percent of young women aged 15-19 were married/in union. In the Mangistau, Kyzylorda, Zhambyl and Atyrau regions, the proportion of young women aged 15-19 who are married, is more than 10 percent, and in the Pavlodar and Aktobe regions, the proportion of married women is not higher than 1.5 percent. In the East Kazakhstan region, there were no such early marriages found at all. The proportion of young married women aged 15-19 years is about the same in urban areas (5.0 percent) and rural areas (7.1 percent). However, the percentage of women aged 20-49 years who first married or entered a marital union before age 18 and living in rural areas is higher compared to women in urban areas (9.5 percent and 6.5, respectively). At the same time, the percentage of women aged 20-49 years who first married or entered a marital union before age 18 and having lower secondary education is notably higher than the percentage of women with higher education (27.2 and 2.5 percent respectively).

**Table CP.4: Early marriage**

Percentage of women aged 15-49 years who first married or entered a marital union before their 15th birthday, percentages of women aged 20-49 years who first married or entered a marital union before their 15th and 18th birthdays, and the percentage of women aged 15-19 years currently married or in union, Kazakhstan, 2015

	Women aged 15-49 years		Women aged 20-49 years			Women aged 15-19 years	
	Percentage married before age 15 <sup>1</sup>	Number of women aged 15-49 years	Percentage married before age 15	Percentage married before age 18 <sup>2</sup>	Number of women aged 20-49 years	Percentage currently married/in union <sup>3</sup>	Number of women aged 15-19 years
<b>Total</b>	0.1	12670	0.1	7.8	11324	6.0	1346
<b>Region</b>							
Akmola	0.1	624	0.1	8.0	559	5.9	65
Aktobe	0.1	806	0.1	6.0	731	1.3	75
Almaty oblast	0.0	1042	0.0	7.3	904	2.7	138
Atyrau	0.2	402	0.1	6.9	363	10.3	38
West Kazakhstan	0.1	572	0.1	8.3	515	4.1	57
Zhambyl	0.1	778	0.1	10.9	686	11.1	92
Karaganda	0.0	1035	0.0	6.9	938	4.3	97
Kostanai	0.3	675	0.3	9.9	609	5.6	66
Kyzylorda	0.0	399	0.0	6.8	352	11.4	47
Mangistau	0.0	408	0.0	10.2	360	14.7	47
South Kazakhstan	0.1	2079	0.1	9.9	1817	9.3	262
Pavlodar	0.0	517	0.0	10.7	468	1.5	49
North Kazakhstan	0.0	351	0.0	10.6	320	5.9	31
East Kazakhstan	0.3	880	0.3	7.4	802	0.0	78
Astana city	0.0	1086	0.0	3.2	985	2.2	101
Almaty city	0.0	1015	0.0	5.0	915	5.8	101
<b>Area</b>							
Urban	0.1	7140	0.1	6.5	6418	5.0	722
Rural	0.1	5530	0.1	9.5	4907	7.1	624

<b>Age</b>							
15-19	0.0	1346	na	na	na	6.0	1346
20-24	0.2	1768	0.2	7.0	1768	na	na
25-29	0.0	2161	0.0	5.2	2161	na	na
30-34	0.0	1998	0.0	6.6	1998	na	na
35-39	0.2	1870	0.2	12.9	1870	na	na
40-44	0.0	1862	0.0	9.1	1862	na	na
45-49	0.0	1665	0.0	6.2	1665	na	na
<b>Education</b>							
None/Primary	(*)	16	(*)	(*)	15	(*)	1
Lower secondary	0.3	778	0.5	27.2	555.8	5.3	222
Upper secondary	0.2	3140	0.2	13.7	2656.7	4.5	483
Technical and Professional	0.0	3990	0.0	7.0	3568	9.7	422
Higher	0.0	4745	0.0	2.5	4528	2.8	217
<b>Wealth index quintile</b>							
Poorest	0.1	2276	0.1	10.6	2019	6.9	257
Second	0.1	2334	0.1	8.3	2081	7.9	253
Middle	0.1	2464	0.1	9.5	2180	9.6	283
Fourth	0.0	2708	0.0	6.0	2436	3.0	273
Richest	0.0	2888	0.0	5.5	2608	2.5	280
<b>Ethnicity of household head</b>							
Kazakh	0.0	8149	0.0	5.1	7239	4.3	910
Russian	0.2	2506	0.2	12.5	2291	7.3	215
Other ethnic groups	0.1	2014	0.1	12.7	1794	11.8	220
Missing/DK	(*)	1	(*)	(*)	1	na	na
<sup>1</sup> MICS indicator 8.4 - Marriage before age 15							
<sup>2</sup> MICS indicator 8.5 - Marriage before age 18							
<sup>3</sup> MICS indicator 8.6 - Young women aged 15-19 years currently married or in union							
na: not applicable.							
(*) Figures that are based on fewer than 25 unweighted cases.							

Table CP.5 and Figure CP.2 present respectively the share of women who were first married or entered into a marital union before age 15 and 18 by area and age groups. Examining the percentages of women who were married/in union before age 15 and 18 by different age groups allow for trends to be observed in early marriage over time.

Data show that the prevalence of the proportion of women who were married or in union by age of 18 has fluctuated over time: the overall trend shows that the proportion of women who got married before age 18 peaked some 20-25 years ago, after which it declined again. In all the age groups of women, it can be stated that marriage before age 18 is slightly more common among women in rural areas than urban areas.

As mentioned at Table CP.4, a very small proportion of women aged 15-49 years were married before age 15 (0.1 percent).

**Table CP.5: Trends in early marriage**

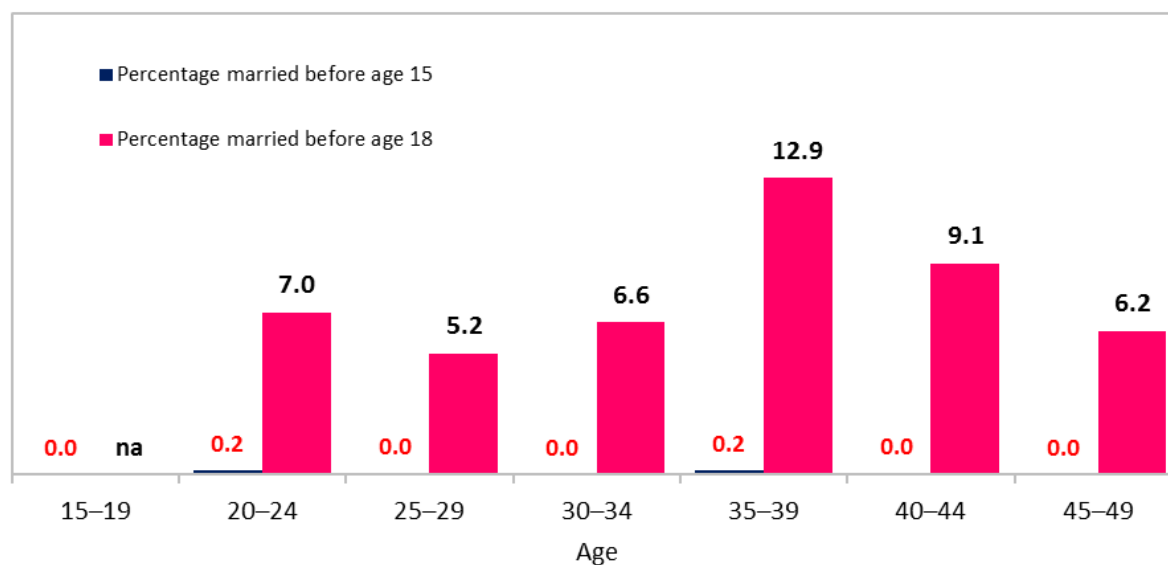
Percentage of women who were first married or entered into a marital union before age 15 and 18, by area and age groups, Kazakhstan, 2015

	Urban				Rural				All			
	Percentage of women married before age 15	Number of women aged 15-49 years	Percentage of women married before age 18	Number of women aged 20-49 years	Percentage of women married before age 15	Number of women aged 15-49 years	Percentage of women married before age 18	Number of women aged 20-49 years	Percentage of women married before age 15	Number of women aged 15-49 years	Percentage of women married before age 18	Number of women aged 20-49 years
<b>Total</b>	0.1	7140	6.5	6418	0.1	5530	9.5	4907	0.1	12670	7.8	11324
<b>Age</b>												
15-19	0.0	722	na	na	0.0	624	na	na	0.0	1346	na	na
20-24	0.2	1041	6.0	1041	0.2	727	8.4	727	0.2	1768	7.0	1768
25-29	0.1	1306	4.4	1306	0.0	855	6.5	855	0.0	2161	5.2	2161
30-34	0.1	1153	5.9	1153	0.0	845	7.6	845	0.0	1998	6.6	1998
35-39	0.1	1032	9.0	1032	0.2	838	17.6	838	0.2	1870	12.9	1870
40-44	0.1	1009	9.0	1009	0.0	854	9.3	854	0.0	1862	9.1	1862
45-49	0.0	877	5.3	877	0.0	788	7.2	788	0.0	1665	6.2	1665

na: not applicable.



**Figure CP.2: Early marriage among women, Kazakhstan, 2015**



na: not applicable

Another parameter is the spousal age difference with the indicator being the percentage of married/in union women 10 or more years younger than their current spouse. Table CP.6 presents the results of the age difference between spouses.

The 2015 Kazakhstan MICS results show that among women currently married/in union aged 15-19 years, in half of cases the husband is 0-4 years older than his wife (52.0 percent) and in more than a third of cases – 5-9 years older (39.6 percent). The age difference between husband and wife for women aged 20-24, is on average 0-4 years (61.8 percent) and among a smaller proportion of women 5-9 years (23.9 percent).

Among currently married/in union women aged 20-24 years, 4.5 percent are married/in union with a man who is older by ten years or more. Among married/in union women aged 15-19 years, the share of women whose husband is older by ten years or more is about 5.8 percent.

Marriages among young women aged 20-24, where the spouse is older than his wife by 10 years or more are more common among women with lower levels of education (7.4 percent) and living in the households of the poorest quintile (8.5 percent).

**Table CP.6: Spousal age difference**

Percent distribution of women currently married/in union aged 15-19 and 20-24 years according to the age difference with their husband or partner, Kazakhstan, 2015

	Percentage of currently married/in union women aged 15-19 years whose husband or partner is:					Number of women aged 15-19 years currently married/in union	Percentage of currently married/in union women aged 20-24 years whose husband or partner is:					Number of women aged 20-24 years currently married/ in union
	Younger	0-4 years older	5-9 years older	10+ years older <sup>1</sup>	Total		Younger	0-4 years older	5-9 years older	10+ years older <sup>1</sup>	Total	
Total	2.5	52.0	39.6	5.8	100.0	80	9.7	61.8	23.9	4.5	100.0	964
<b>Region</b>												
Akmola	(*)	(*)	(*)	(*)	100.0	4	21.7	44.6	29.2	4.6	100.0	37
Aktobe	(*)	(*)	(*)	(*)	100.0	1	(14.0)	(65.5)	(19.4)	(1.1)	100.0	66
Almaty oblast	(*)	(*)	(*)	(*)	100.0	4	(12.4)	(59.2)	(11.8)	(16.6)	100.0	63
Atyrau	(*)	(*)	(*)	(*)	100.0	4	6.2	68.6	23.3	1.9	100.0	33
West Kazakhstan	(*)	(*)	(*)	(*)	100.0	2	5.4	60.8	29.7	4.2	100.0	42
Zhambyl	(*)	(*)	(*)	(*)	100.0	10	3.2	59.7	29.3	7.8	100.0	61
Karaganda	(*)	(*)	(*)	(*)	100.0	4	(8.3)	(55.4)	(33.0)	(3.3)	100.0	49
Kostanai	(*)	(*)	(*)	(*)	100.0	4	12.5	47.6	26.6	13.3	100.0	48
Kyzylorda	(*)	(*)	(*)	(*)	100.0	5	12.9	55.5	27.9	3.6	100.0	33
Mangistau	(*)	(*)	(*)	(*)	100.0	7	11.0	74.3	12.0	2.7	100.0	46
South Kazakhstan	(*)	(*)	(*)	(*)	100.0	24	6.6	65.6	24.8	3.0	100.0	233
Pavlodar	(*)	(*)	(*)	(*)	100.0	1	14.5	61.1	20.7	3.6	100.0	34
North Kazakhstan	(*)	(*)	(*)	(*)	100.0	2	(11.1)	(64.0)	(22.7)	(2.2)	100.0	18
East Kazakhstan	-	-	-	-	0.0	0	(9.4)	(54.7)	(31.7)	(4.2)	100.0	52
Astana city	(*)	(*)	(*)	(*)	100.0	2	6.9	66.3	25.3	1.5	100.0	81
Almaty city	(*)	(*)	(*)	(*)	100.0	6	15.2	65.7	17.7	1.5	100.0	67
<b>Area</b>												
Urban	(2.1)	(55.6)	(32.3)	(10.0)	100.0	36	10.7	60.7	25.0	3.6	100.0	503
Rural	(2.9)	(49.1)	(45.7)	(2.3)	100.0	44	8.7	63.1	22.7	5.5	100.0	461
<b>Age</b>												
15-19	2.5	52.0	39.6	5.8	100.0	80	na	na	na	na	na	na
20-24	na	na	na	na	na	na	9.7	61.8	23.9	4.5	100.0	964
<b>Education</b>												
None/Primary	-	-	-	-	0.0	0	-	-	-	-	0.0	0

Lower secondary	(*)	(*)	(*)	(*)	100.0	12	(19.2)	(30.6)	(39.5)	(10.6)	100.0	43
Upper secondary	(*)	(*)	(*)	(*)	100.0	22	2.4	64.4	25.9	7.4	100.0	199
Technical and Professional	5.0	57.2	30.4	7.3	100.0	41	9.6	61.3	24.3	4.8	100.0	385
Higher	(*)	(*)	(*)	(*)	100.0	6	12.9	64.9	20.4	1.8	100.0	338
<b>Wealth index quintile</b>												
Poorest	(*)	(*)	(*)	(*)	100.0	18	9.3	54.4	27.8	8.5	100.0	163
Second	(*)	(*)	(*)	(*)	100.0	20	10.1	55.7	29.3	4.9	100.0	216
Middle	(1.1)	(62.8)	(29.9)	(6.1)	100.0	27	9.0	70.4	17.9	2.7	100.0	238
Fourth	(*)	(*)	(*)	(*)	100.0	8	11.5	64.5	20.8	3.2	100.0	202
Richest	(*)	(*)	(*)	(*)	100.0	7	8.3	61.6	25.8	4.2	100.0	145
<b>Ethnicity of household head</b>												
Kazakh	5.3	60.4	31.8	2.5	100.0	39	9.5	62.3	23.9	4.3	100.0	602
Russian	(*)	(*)	(*)	(*)	100.0	16	11.2	54.3	28.3	6.2	100.0	141
Other ethnic groups	(*)	(*)	(*)	(*)	100.0	26	9.3	65.4	21.1	4.2	100.0	221
<sup>1</sup> MICS indicator 8.8a - Spousal age difference (among women aged 15-19) <sup>2</sup> MICS indicator 8.8b - Spousal age difference (among women aged 20-24)												
na: not applicable.												
( ) Figures that are based on 25–49 unweighted cases.												
(*) Figures that are based on fewer than 25 unweighted cases.												
"–" denotes 0 unweighted case in that cell or in the denominator.												

## Attitudes toward Domestic Violence

The 2015 Kazakhstan MICS assessed the attitudes of women aged 15-49 years towards physical violence from the spouse/partner: whether the respondents think that husbands/partners are justified to hit or beat their wives/partners in a variety of life situations: 1) if she goes out without telling him; 2) if she neglects children; 3) if she argues with him; 4) if she refuses sex with him; 5) if she burns the food. A *sixth* situation was introduced in the “Attitudes toward Domestic Violence” module for the Kazakhstan MICS: *if she neglects housework*. The purpose of these questions is to identify the social justification of violence as a disciplinary action applied, in husband’s opinion, when a woman does not comply with certain expected gender roles.

The responses to these questions can be found in Table CP.7. According to the 2015 Kazakhstan MICS, as a whole, 14.2 percent of women believe that a husband/partner may hit or beat his wife/partner in at least one of these five situations, while a similar percentage of women (15.1 percent) believe this in at least in one of the six situations (the sixth situation being the additional survey-specific situation). Women who justify a husband’s violence, most commonly agree and justify it in instances when: a wife neglects the children (10.8 percent) or goes out without telling her husband (4.1 percent), or argues with him (5.4 percent). 6.5 percent of women believe that it is justified for a husband to beat his wife if she neglects the housework. A small share of women justifies wife-beating when she refuses to have sex with the husband (1.5 percent) or if she burns the food (0.7 percent). Women aged 25-29 years (17.0 percent), those living in rural areas (20.6 percent), currently married/in union (17.7 percent), with a lower secondary education (23.7 percent), living in the poorest quintile of households (24.3 percent) more often than others justify the use of physical violence by the husband in any of the six situations. Physical violence by a husband against his wife in at least one of these six situations is justified by one in three women living in the Mangistau region (32.9 percent) and nearly one in four women in the Pavlodar region (24.2 percent). By contrast, women in Almaty city (5.9 percent) and in the Aktobe region (7.8 percent) are less likely to justify physical violence by husbands in these situations. The respondents from the youngest age group of 15-19 years (8.2 and 8.7 percent respectively) and women who have never been married (7.6 and 8.2 percent respectively) had the least positive attitude to domestic violence by the husband for at least one of these five or six situations, respectively.

**Table CP.7: Attitudes toward domestic violence**

Percentage of women aged 15-49 years who believe a husband is justified in beating his wife in various circumstances, Kazakhstan, 2015

	Percentage of women aged 15-49 years who believe a husband is justified in beating his wife:								Number of women aged 15-49 years
	If she goes out without telling him	If she neglects the children	If she argues with him	If she refuses sex with him	If she burns the food	For any of these five reasons <sup>1</sup>	If she neglects housework	For any of these six reasons <sup>2</sup>	
Total	4.1	10.8	5.4	1.5	0.7	14.2	6.5	15.1	12670
<b>Region</b>									
Akmola	2.1	14.0	2.6	1.3	0.7	14.6	6.7	15.3	624
Aktobe	2.0	4.1	3.7	0.7	0.5	7.3	1.9	7.8	806

Almaty oblast	2.1	9.6	1.3	0.3	0.4	10.8	8.5	12.9	1042
Atyrau	2.5	6.1	7.4	1.2	0.3	10.9	2.0	10.9	402
West Kazakhstan	2.5	9.7	1.8	0.1	0.3	10.5	8.9	12.8	572
Zhambyl	7.5	9.4	8.8	2.1	1.2	16.8	6.0	17.2	778
Karaganda	2.4	10.7	3.3	1.5	0.6	13.0	6.9	14.2	1035
Kostanai	1.4	16.2	3.3	1.8	0.7	17.6	7.4	18.0	675
Kyzylorda	4.3	10.3	7.7	1.5	0.7	13.9	5.2	15.5	399
Mangistau	13.1	22.4	23.8	7.7	1.9	32.8	9.0	32.9	408
South Kazakhstan	9.8	10.9	11.0	2.0	0.5	18.8	5.2	18.8	2079
Pavlodar	7.6	20.2	7.4	4.0	1.1	21.1	18.8	24.2	517
North Kazakhstan	2.1	19.1	4.0	2.0	1.5	19.6	10.9	20.6	351
East Kazakhstan	1.8	11.5	1.6	1.5	1.2	12.8	5.2	13.6	880
Astana city	0.4	9.6	2.4	0.2	0.8	11.1	6.4	12.9	1086
Almaty city	1.0	4.1	1.5	0.2	0.1	5.2	3.0	5.9	1015
<b>Area</b>									
Urban	2.2	8.1	3.0	0.8	0.5	9.9	4.7	10.8	7140
Rural	6.6	14.3	8.6	2.4	1.0	19.6	8.8	20.6	5530
<b>Age</b>									
15-19	1.9	7.0	3.5	0.4	0.4	8.2	4.9	8.7	1346
20-24	4.5	9.4	6.7	1.8	0.4	13.6	5.8	14.1	1768
25-29	4.5	12.3	6.4	1.2	0.3	15.3	7.3	17.0	2161
30-34	4.4	11.6	4.6	1.0	0.9	15.6	6.4	16.3	1998
35-39	4.7	12.1	6.2	2.3	1.3	15.9	6.6	16.7	1870
40-44	4.2	12.2	5.9	1.8	0.9	15.7	7.3	16.7	1862
45-49	3.6	9.7	4.2	1.8	0.7	12.8	6.5	13.8	1665
<b>Marital/Union status</b>									
Currently married/in union	5.1	12.3	6.6	1.9	0.8	16.6	7.1	17.7	8351
Formerly married/in union	3.2	10.9	3.9	0.8	0.7	12.5	6.7	13.1	1629
Never married/in union	1.5	6.2	2.7	0.6	0.3	7.6	4.2	8.2	2690
<b>Education</b>									
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	16
Lower secondary	6.4	18.0	7.2	2.8	2.0	21.2	13.7	23.7	778
Upper secondary	7.4	14.6	8.1	2.5	1.2	19.9	9.1	20.8	3140
Technical and Professional	3.1	10.6	5.6	1.6	0.6	13.8	5.6	14.7	3990
Higher	2.4	7.4	3.2	0.5	0.2	9.5	4.2	10.3	4745
<b>Wealth index quintile</b>									
Poorest	7.9	16.7	8.7	2.5	1.5	23.1	10.8	24.3	2276
Second	7.0	14.3	9.1	2.6	0.7	19.6	7.4	20.4	2334
Middle	3.0	9.2	5.3	1.0	0.7	12.2	6.4	13.2	2464
Fourth	1.7	7.7	2.4	0.8	0.5	8.9	4.1	10.1	2708
Richest	2.0	7.7	2.9	0.9	0.3	9.3	4.7	10.0	2888
<b>Ethnicity of household head</b>									
Kazakh	3.8	10.9	5.8	1.5	0.9	14.6	6.7	15.6	8149
Russian	1.4	8.6	1.7	0.6	0.1	9.0	4.7	9.9	2506
Other ethnic groups	8.6	13.3	8.5	2.5	0.7	19.0	7.8	19.7	2014
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1

<sup>1</sup> MICS indicator 8.12 - Attitudes towards domestic violence

<sup>2</sup> Survey-specific indicator 8.S1 - Attitudes towards domestic violence (including additional circumstance)

(\*) Figures that are based on fewer than 25 unweighted cases.

## ***Children’s Living Arrangements and Orphanhood***

The CRC recognizes that “the child, for the full and harmonious development of his or her personality, should grow up in a family environment, in an atmosphere of happiness, love and understanding”. Millions of children around the world grow up without the care of their parents for several reasons, including due to the premature death of the parents or labour migration. In most cases, these children are cared for by members of their extended families, while in others, children may be living in households other than their own, as live-in house workers, for instance. Understanding the children’s living arrangements, including the composition of the households where they live and the relationships with their primary caregivers, is the key to design targeted interventions aimed at promoting child’s care and wellbeing.

Table CP.8 presents information on the living arrangements and orphanhood status of children under age 18.

According to the 2015 Kazakhstan MICS, approximately four out of five children (82.0 percent) aged 0-17 years live in a two-parent family with both parents, 13.1 percent – only with the mother, and 1.1 percent – only with their father. 9.2 percent of children live only with their mother, despite the fact that their own father is alive, and 0.8 percent of children live with their father despite the fact that their biological mother is alive. 3.2 percent of children do not live with their biological parents, while for 2.6 percent of such children both parents are alive. Nearly 5 percent of children have lost one or both parents.

As expected, the older children (15-17 years) are less likely to live with both parents than younger children (0-4 years) (67.6 and 89.3 percent, respectively), in addition, 10.8 percent of children aged 15-17 years have lost one or both parents, compared to 1.7 percent of children aged 0-4 years. The high percentage of children who live only with their mother while their (biological) father alive is observed in the Akmola (18.1 percent), Pavlodar (16.7 percent), Kostanai and Karaganda (14.9 and 14.5 percent) regions.

The percentages of children living apart from their biological parents or those who have lost one or both parents in rural areas are 3.9 and 5.6 percent respectively. In urban areas, this category of children is 2.5 and 4.1 percent respectively. At the same time, the percentage of children who live only with their mothers while their father is alive is 12.2 percent in urban areas and 6.4 percent in rural areas.

Prevalence of orphanhood among children ranges by regions from 6 percent in the East Kazakhstan (6.0 percent), Pavlodar (6.3 percent) and Akmola (6.9 percent) regions to 3 percent in the Kyzylorda (3.4 percent), Zhambyl (3.6 percent) and Mangistau (3.7 percent) regions.

In Kazakhstan, less than 1 percent of children aged 10-14 years are orphans. The Table with MICS indicator 9.16 “Ratio of school attendance of orphans to school attendance of non-orphans” is not shown in the report because the total number of orphan children age 10-14 years is fewer than 25 unweighted cases.

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

Percent distribution of children aged 0-17 years according to living arrangements, percentage of children aged 0-17 years not living with a biological parent and percentage of children who have one or both parents dead, Kazakhstan, 2015

	Living with both parents	Living with neither biological parent				Living with mother only		Living with father only		Missing information on father/ mother	Total	Living with neither biological parent <sup>1</sup>	One or both parents dead <sup>2</sup>	Number of children aged 0-17 years
		Only father alive	Only mother alive	Both alive	Both dead	Father alive	Father dead	Mother alive	Mother dead					
<b>Total</b>	82.0	0.1	0.3	2.6	0.3	9.2	3.9	0.8	0.3	0.6	100.0	3.2	4.9	17469
<b>Sex</b>														
Male	81.9	0.1	0.2	2.5	0.2	9.1	4.0	0.9	0.4	0.6	100.0	3.1	5.0	9155
Female	82.1	0.1	0.3	2.7	0.4	9.3	3.7	0.6	0.2	0.6	100.0	3.4	4.7	8314
<b>Region</b>														
Akmola	68.8	0.4	0.4	5.1	0.7	18.1	5.2	0.7	0.1	0.6	100.0	6.6	6.9	762
Aktobe	85.8	0.1	0.0	2.5	0.1	6.4	4.3	0.5	0.3	0.0	100.0	2.7	4.8	1116
Almaty oblast	81.6	0.2	0.1	3.7	0.2	8.4	3.5	0.8	0.7	1.0	100.0	4.1	4.6	1439
Atyrau	86.2	0.1	0.1	1.5	0.0	6.8	4.5	0.4	0.4	0.0	100.0	1.7	5.1	626
West Kazakhstan	76.2	0.0	0.1	4.1	2.7	13.0	2.5	0.5	0.2	0.7	100.0	6.9	5.4	710
Zhambyl	84.9	0.1	0.1	4.3	0.2	5.5	3.2	0.8	0.0	0.9	100.0	4.7	3.6	1286
Karaganda	77.4	0.0	0.5	2.9	0.1	14.5	3.6	0.4	0.3	0.2	100.0	3.5	4.6	1210
Kostanai	75.8	0.2	0.4	2.8	0.1	14.9	3.7	0.9	0.1	1.0	100.0	3.4	5.1	772
Kyzylorda	86.6	0.1	0.3	2.2	0.3	6.1	2.3	0.9	0.4	0.8	100.0	2.8	3.4	668
Mangistau	90.4	0.0	0.1	1.7	0.2	3.3	3.2	0.3	0.1	0.7	100.0	2.0	3.7	673
South Kazakhstan	86.7	0.0	0.3	0.9	0.0	6.0	4.5	0.9	0.4	0.2	100.0	1.2	5.2	3959
Pavlodar	72.5	0.0	0.2	2.9	0.7	16.7	5.1	0.3	0.3	1.3	100.0	3.8	6.3	564
North Kazakhstan	75.7	0.2	0.9	2.6	0.0	12.8	4.0	1.1	0.3	2.4	100.0	3.7	5.8	415
East Kazakhstan	76.3	0.0	0.7	4.9	0.6	11.0	3.7	0.9	1.0	1.0	100.0	6.1	6.0	977
Astana city	83.4	0.0	0.0	2.1	0.3	8.9	2.9	1.5	0.1	0.9	100.0	2.4	3.3	1256
Almaty city	81.2	0.2	0.4	2.3	0.1	10.5	4.1	0.2	0.4	0.6	100.0	3.0	5.2	1035

<b>Area</b>															
Urban	80.3	0.0	0.3	2.0	0.2	12.2	3.4	0.8	0.2	0.7	100.0	2.5	4.1	8315	
Rural	83.6	0.1	0.3	3.2	0.4	6.4	4.3	0.7	0.5	0.6	100.0	3.9	5.6	9154	
<b>Age</b>															
0-4	89.3	0.0	0.0	2.0	0.0	6.5	1.5	0.2	0.1	0.3	100.0	2.0	1.7	5877	
0-2	91.1	0.0	0.0	1.7	0.0	6.2	0.5	0.1	0.1	0.2	100.0	1.8	0.6	3434	
3-4	86.8	0.0	0.1	2.3	0.1	6.9	2.9	0.3	0.1	0.5	100.0	2.4	3.1	2443	
5-9	82.4	0.1	0.2	2.5	0.3	9.6	3.5	0.7	0.3	0.6	100.0	3.0	4.3	5509	
10-14	77.9	0.2	0.6	2.4	0.5	10.5	5.4	1.4	0.5	0.6	100.0	3.7	7.3	4129	
15-17	67.6	0.2	0.5	5.3	0.7	13.4	8.5	1.3	0.9	1.7	100.0	6.6	10.8	1954	
<b>Wealth index quintile</b>															
Poorest	80.3	0.1	0.3	3.2	0.2	8.7	5.0	1.0	0.5	0.7	100.0	3.8	6.1	3989	
Second	85.7	0.1	0.2	3.2	0.7	6.1	2.6	0.7	0.3	0.5	100.0	4.1	3.9	3882	
Middle	83.5	0.2	0.4	2.5	0.1	6.5	5.1	0.6	0.4	0.6	100.0	3.2	6.3	3472	
Fourth	79.1	0.0	0.3	2.2	0.3	13.5	3.0	0.8	0.1	0.5	100.0	2.8	3.8	2932	
Richest	80.7	0.0	0.2	1.7	0.2	12.4	3.3	0.6	0.2	0.8	100.0	2.0	3.9	3194	
<b>Ethnicity of household head</b>															
Kazakh	85.1	0.1	0.2	3.1	0.2	6.6	3.1	0.7	0.4	0.6	100.0	3.6	3.9	12005	
Russian	68.0	0.1	0.7	1.8	0.3	21.7	5.8	0.7	0.0	0.9	100.0	2.8	7.0	2415	
Other ethnic groups	80.8	0.1	0.1	1.3	0.6	9.6	5.5	1.1	0.4	0.5	100.0	2.1	6.8	3049	
<sup>1</sup> MICS indicator 8.13 - Children's living arrangements															
<sup>2</sup> MICS indicator 8.14 - Prevalence of children with one or both parents dead															



## **XI. HIV/AIDS and Sexual Behaviour**

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### ***Knowledge about HIV Transmission and Misconceptions about HIV***

One of the most important prerequisites for reducing the rate of HIV infection is correct knowledge of how HIV is transmitted and strategies for prevention of transmission. Correct information is the first step towards raising awareness and giving adolescents and young people the tools to protect themselves from infection. Misconceptions about HIV are common and can confuse adolescents and young people and to hinder prevention efforts. The UN General Assembly Special Session on HIV/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 on reducing HIV infections by half include raising the level of knowledge on HIV and its prevention, and changing behaviours to prevent further spread of the disease. HIV module(s) were administered to women aged 15-49 years. Please note that the questions in this module often refer to “the AIDS virus”. This terminology is used strictly as a method of data collection to aid respondents, preferred over the correct terminology of “HIV” that is used here in reporting the results, where appropriate.

**Table HA.1: Knowledge about HIV transmission, misconceptions about HIV, and comprehensive knowledge about HIV transmission**

Percentage of women aged 15-49 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can be HIV-positive, percentage who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission, Kazakhstan, 2015

	Percentage who have heard of AIDS	Percentage who know transmission can be prevented by:			Percentage who know that a healthy looking person can be HIV-positive	Percentage who know that HIV cannot be transmitted by:					Percentage who reject the two most common misconceptions and know that a healthy looking person can be HIV-positive	Percentage with comprehensive knowledge <sup>1,a</sup>	Number of women aged 15-49
		Having only one faithful uninfected sex partner	Using a condom every time	Both		Mosquito bites	Supernatural means	Sharing food with someone with HIV	Hugging or shaking hands with someone with HIV	Kissing with someone with HIV			
<b>Total</b>	97.9	82.3	71.7	65.4	74.1	66.7	89.1	80.0	88.4	71.5	44.0	33.7	12670
<b>Region</b>													
Akmola	99.0	81.8	73.5	63.6	85.2	49.0	87.5	71.0	84.7	59.1	32.0	24.8	624
Aktobe	97.7	91.1	88.9	83.9	74.9	72.9	95.0	81.8	94.5	75.5	47.5	40.5	806
Almaty oblast	96.2	90.6	76.1	73.8	45.5	76.8	93.1	77.7	83.5	71.2	32.2	28.3	1042
Atyrau	97.5	81.4	56.9	52.6	58.6	69.2	83.1	78.2	88.1	71.0	35.4	28.5	402
West Kazakhstan	93.4	81.3	71.7	67.8	67.3	81.3	85.0	80.6	87.6	80.1	52.6	43.8	572
Zhambyl	98.8	64.7	54.6	42.2	56.3	49.0	79.4	55.6	72.8	39.9	17.2	10.7	778
Karaganda	99.6	88.2	83.4	77.7	86.9	62.8	88.7	77.2	87.7	67.9	43.6	37.0	1035
Kostanai	99.9	96.1	93.3	91.3	84.9	68.6	94.6	88.1	94.8	74.0	50.2	46.8	675
Kyzylorda	97.5	77.3	64.6	55.8	51.3	65.3	88.5	68.2	86.3	57.2	28.3	22.5	399
Mangistau	97.7	52.0	46.6	34.9	81.7	75.9	78.6	71.9	82.9	65.5	48.4	17.6	408
South Kazakhstan	95.6	72.8	59.0	51.8	64.2	65.4	87.8	85.1	89.6	72.1	38.5	28.1	2079
Pavlodar	99.0	90.3	88.8	83.6	83.5	59.9	81.0	78.4	82.1	67.5	41.6	36.6	517
North Kazakhstan	99.9	86.0	85.7	75.8	92.3	52.9	87.3	71.0	85.3	60.0	38.2	32.7	351
East Kazakhstan	98.1	79.8	80.3	71.1	86.7	58.3	87.7	82.1	87.5	74.0	47.7	40.9	880
Astana city	99.8	84.6	53.0	47.6	93.6	77.5	96.1	93.2	96.7	89.2	69.7	33.1	1086
Almaty city	99.6	94.3	83.1	80.0	83.1	72.2	96.3	88.4	97.0	88.9	64.8	56.4	1015
<b>Area</b>													
Urban	99.0	86.5	75.3	69.5	80.8	68.8	92.6	84.6	92.7	77.0	50.9	38.8	7140
Rural	96.5	76.9	67.1	60.1	65.5	63.8	84.7	74.1	82.9	64.3	35.3	27.0	5530

<b>Age</b>													
15-24 <sup>1</sup>	95.4	73.2	63.1	54.8	69.0	63.5	87.1	74.7	85.8	67.3	39.3	26.7	3114
15-19	91.2	63.2	52.2	43.5	62.2	58.0	80.9	66.9	79.8	59.7	32.9	19.6	1346
20-24	98.7	80.7	71.5	63.4	74.1	67.6	91.7	80.6	90.4	73.1	44.3	32.0	1768
25-29	98.9	85.2	74.6	69.1	76.6	69.7	91.4	83.8	91.1	75.4	48.7	38.6	2161
30-39	98.5	85.3	74.1	68.9	74.8	67.2	89.7	81.3	89.0	71.7	44.1	35.0	3868
40-49	98.8	85.3	74.9	68.7	76.4	67.0	89.0	81.0	88.6	72.5	45.3	35.4	3527
<b>Marital status</b>													
Ever married/in union	98.8	84.8	73.8	68.0	75.3	67.4	89.7	80.9	88.9	72.0	44.7	35.1	9980
Never married/in union	94.7	72.9	63.9	55.8	69.7	64.0	87.0	76.5	86.8	69.4	41.7	28.5	2690
<b>Education</b>													
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	16
Lower secondary	93.2	69.2	57.1	50.7	61.3	51.4	79.7	64.2	75.4	53.0	24.9	17.5	778
Upper secondary	95.7	73.8	62.2	54.3	60.4	59.7	82.6	70.0	81.2	59.7	29.2	21.4	3140
Technical and Professional	98.8	83.8	74.5	67.9	77.3	67.9	90.1	81.2	89.5	72.5	45.6	34.5	3990
Higher	99.6	89.1	78.2	73.2	82.8	72.9	94.5	88.5	94.7	81.5	55.8	43.9	4745
<b>Wealth index quintile</b>													
Poorest	94.3	73.3	60.4	52.8	60.8	60.3	80.6	68.6	78.3	58.7	28.3	19.7	2276
Second	97.4	77.9	67.5	61.1	67.4	60.4	84.9	74.6	83.8	63.4	33.6	26.6	2334
Middle	98.4	79.4	72.9	64.3	72.9	67.6	89.7	80.0	89.4	70.6	44.2	33.1	2464
Fourth	99.4	88.7	76.5	71.6	80.7	71.8	93.9	86.1	93.6	79.5	52.6	41.3	2708
Richest	99.4	89.4	78.5	74.1	84.9	71.0	94.3	87.8	94.6	81.2	56.6	43.7	2888
<b>Ethnicity of household head</b>													
Kazakh	97.7	81.3	69.3	62.9	72.2	66.9	88.1	78.4	87.6	70.4	43.0	31.7	8149
Russian	99.5	90.6	83.2	78.5	84.4	68.4	93.7	85.3	92.1	76.7	50.6	42.3	2506
Other ethnic groups	97.0	76.0	67.0	59.0	69.1	63.3	87.6	79.7	87.1	69.3	40.1	30.7	2014
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1

<sup>1</sup>MICS indicator 9.1; MDG indicator 6.3 - Knowledge about HIV prevention among young women

<sup>a</sup> Comprehensive knowledge about HIV prevention is the knowledge of all of the following: (1) that the chance of getting HIV can be reduced by having only one faithful uninfected partner and using a condom every time (two main ways of HIV prevention), (2) that a healthy looking person can be HIV-positive, and (3) that HIV cannot be transmitted by mosquito bites and by kissing with someone with HIV.

(\*) Figures that are based on fewer than 25 unweighted cases.

One indicator which is both an MDG and the Global AIDS Response Progress Reporting (GARPR; formerly UNGASS) indicator is the percentage of young people who have comprehensive and correct knowledge of HIV prevention and transmission. Comprehensive knowledge is defined as: 1) knowing that consistent use of a condom during sexual intercourse and having just one uninfected faithful partner can reduce the chance of getting HIV, 2) knowing that a healthy looking person can be HIV-positive, and 3) rejecting the two most common local misconceptions about transmission of HIV.

During the 2015 Kazakhstan MICS, all women, who have heard of AIDS, were interviewed about whether or not they know all three above-mentioned components; the results are shown in Table HA.1.

In Kazakhstan, nearly every woman aged 15-49, or 97.9 percent of the respondents, have heard of AIDS. Despite this, the percentage of women who know both main ways of preventing HIV transmission, firstly, having only one faithful uninfected sex partner, and, secondly, using a condom every time during intercourse – was only 65.4 percent. At the same time, women's awareness about each individual way is quite high: 82.3 percent of women know that the main way of preventing HIV transmission is to have just one uninfected faithful partner and 71.7 percent of women know that using a condom every time during intercourse is one of the most reliable ways to prevent HIV transmission. In urban areas, women are slightly more aware of both main ways of HIV prevention than women in rural areas (69.5 and 60.1 percent, respectively). The female residents of the Kostanai region are the most knowledgeable about HIV prevention (91.3 percent), and only 34.9 percent of residents of the Mangistau region are aware of the two major ways of preventing HIV transmission.

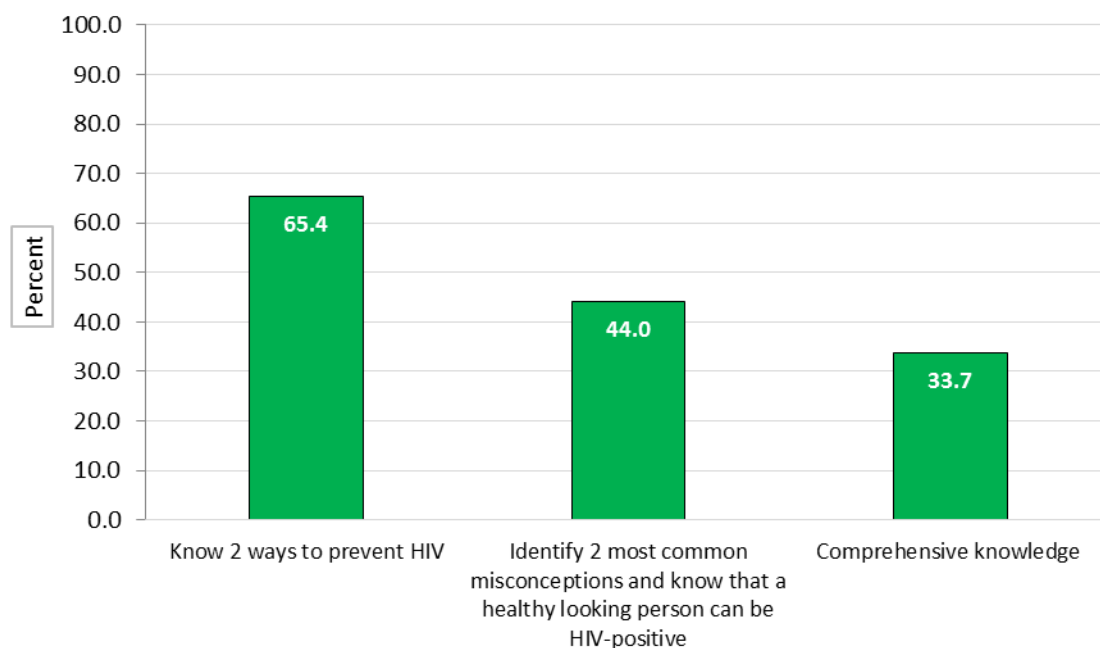
Table HA.1 also presents the percentage of women who reject misconceptions concerning HIV. The indicator is based on the two most common and relevant misconceptions in Kazakhstan namely, that HIV can be transmitted through mosquito bites or kissing with someone with HIV. The Table also provides information on whether women know that HIV cannot be transmitted by supernatural means or through sharing food with a person living with HIV or through hugging and shaking hands with a person living with HIV. Overall, less than half (44.0 percent) of women reject the two most common misconceptions about HIV transmission and know that a healthy looking person can be HIV-positive. 71.5 percent of women believe that HIV cannot be transmitted by kissing, and 66.7 percent of women know that HIV cannot be transmitted through mosquito bites; three out of four women (74.1 percent) know that a healthy looking person can be HIV-positive. 88.4 percent of women know that HIV is not transmitted by shaking hands or hugging, about the same percentage (89.1 percent) – that HIV is not transmitted by supernatural means, and 80.0 percent of women know that HIV cannot be transmitted by sharing food.

Only 17.2 percent of women of Zhambyl and 28.3 percent of women of Kyzylorda regions reject the two most common misconceptions and know that a healthy looking person can be HIV-positive. On the other hand, 64.8 percent of women in Almaty city and 69.7 percent of those in Astana city have such knowledge. In rural areas, women aged 15-49 years are slightly less likely to be aware of both main ways of preventing HIV transmission, and all misconceptions about HIV transmission: for example, the proportion of women who reject the two most common misconceptions about HIV transmission and who know that a healthy looking person can be HIV-positive was only 35.3 percent in rural areas, whereas in urban areas, such women make up slightly more than half of the population of women aged 15-49 years (50.9 percent). Young women and girls aged 15-24 years, and, in particular, those aged 15-19 years, are less informed about both main ways of preventing HIV

transmission and all the misconceptions about HIV than older women. It should also be noted that the level of knowledge about HIV is positively associated to both the woman’s education level and household wealth. Women, who have ever been married, are more likely to know the two main methods of HIV prevention than women, who have never been married (68.0 and 55.8 percent respectively).

Figure HA.1 shows the percentages of women with comprehensive knowledge of HIV transmission.

**Figure HA.1: Women with comprehensive knowledge of HIV transmission, Kazakhstan, 2015**



Women who have **comprehensive knowledge** about HIV prevention and transmission include those who know: *of the two main ways of HIV prevention (having only one faithful uninfected sex partner and using a condom every time during intercourse)*, who know that *a healthy looking person can be HIV-positive*, and who **reject the two most common misconceptions about HIV transmission in the country**. In Kazakhstan, comprehensive knowledge of HIV prevention methods and transmission is fairly low although there are differences depending on various characteristics. The survey results show that in the country only one third of women aged 15-49 (33.7 percent) have comprehensive knowledge about the ways of HIV transmission and prevention. At the same time, in urban areas the figure is slightly higher than in rural areas (38.8 and 27.0 percent, respectively). As expected, the percentage of women with comprehensive knowledge about HIV increases with their level of education and household wealth: a higher percentage of women with higher education have comprehensive knowledge and awareness about HIV than women with lower secondary education (43.9 and 17.5 percent, respectively); and women from the richest households are more likely to have comprehensive knowledge than women from the poorest households (43.7 and 19.7 percent, respectively).

**Table HA.2: Knowledge of mother-to-child HIV transmission**

Percentage of women aged 15-49 years who correctly identify means of HIV transmission from mother to child, Kazakhstan, 2015

	Percentage of women aged 15-49 who have heard of AIDS and:						Do not know any of the specific means of HIV transmission from mother to child	Number of women aged 15-49
	Know HIV can be transmitted from mother to child:							
	During pregnancy	During delivery	By breastfeeding	By at least one of the three means	By all three means <sup>1</sup>			
<b>Total</b>	83.8	77.3	64.7	88.3	58.0	9.6	12670	
<b>Region</b>								
Akmola	85.0	76.2	57.8	87.8	52.0	11.3	624	
Aktobe	75.1	67.0	64.0	77.3	57.1	20.4	806	
Almaty oblast	85.1	75.3	73.2	87.4	67.6	8.8	1042	
Atyrau	83.4	73.9	78.1	88.7	66.1	8.8	402	
West Kazakhstan	87.2	84.5	72.1	91.4	66.2	2.0	572	
Zhambyl	88.3	80.2	63.5	91.1	58.1	7.7	778	
Karaganda	89.2	77.5	52.4	95.3	45.4	4.3	1035	
Kostanai	77.1	79.3	52.5	86.1	48.4	13.8	675	
Kyzylorda	89.1	87.3	77.0	90.4	75.4	7.1	399	
Mangistau	77.4	46.6	54.3	80.6	39.1	17.1	408	
South Kazakhstan	71.9	74.9	69.2	83.3	56.2	12.3	2079	
Pavlodar	92.8	84.8	69.8	94.1	67.4	5.0	517	
North Kazakhstan	88.8	81.1	60.0	91.8	54.8	8.1	351	
East Kazakhstan	78.5	71.2	51.4	81.8	47.6	16.2	880	
Astana city	94.9	87.3	65.0	96.6	60.2	3.2	1086	
Almaty city	93.4	84.5	72.9	94.0	71.0	5.7	1015	
<b>Area</b>								
Urban	87.5	79.9	64.6	90.8	59.5	8.2	7140	
Rural	79.0	73.9	64.7	85.1	56.0	11.4	5530	
<b>Age group</b>								
15-24	72.6	63.4	55.8	77.3	48.0	18.2	3114	
15-19	61.8	53.9	47.1	67.3	39.8	23.9	1346	
20-24	80.9	70.6	62.5	84.8	54.2	13.8	1768	

25-29	88.1	80.9	69.1	92.2	62.3	6.7	2161
30-39	86.3	81.1	65.6	91.4	58.9	7.1	3868
40-49	88.2	83.2	68.7	92.4	63.1	6.4	3527
<b>Marital status</b>							
Ever married/in union	87.4	81.8	68.0	92.0	61.3	6.8	9980
Never married/in union	70.3	60.6	52.4	74.8	45.7	19.9	2690
<b>Education</b>							
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	16
Lower secondary	76.8	67.7	55.3	80.6	47.6	12.7	778
Upper secondary	78.2	72.1	61.8	83.2	55.0	12.4	3140
Technical and Professional	83.0	77.9	65.0	88.4	58.0	10.4	3990
Higher	89.5	82.0	68.0	93.1	61.7	6.5	4745
<b>Wealth index quintile</b>							
Poorest	75.4	70.9	61.7	81.9	53.6	12.5	2276
Second	82.1	77.2	65.9	86.8	59.2	10.5	2334
Middle	82.0	75.1	67.3	88.1	57.3	10.3	2464
Fourth	88.3	80.8	64.8	91.6	59.4	7.8	2708
Richest	89.0	81.1	63.6	91.8	59.6	7.6	2888
<b>Ethnicity of household head</b>							
Kazakh	83.5	75.4	65.6	87.4	58.7	10.3	8149
Russian	88.1	81.7	62.6	92.1	57.7	7.4	2506
Other ethnic groups	79.5	79.5	63.5	87.4	55.2	9.5	2014
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	1

<sup>1</sup> MICS indicator 9.2 - Knowledge of mother-to-child transmission of HIV

(\*) Figures that are based on fewer than 25 unweighted cases.

Knowledge of mother-to-child HIV transmission 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, during delivery, and by breastfeeding (through breast milk). The level of knowledge among women aged 15-49 concerning mother-to-child HIV transmission is presented in Table HA.2.

More than half (58.0 percent) of women aged 15-49 years know all three ways of mother-to-child HIV transmission, while at the same time, one in ten (9.6 percent) of women are unaware of any specific means of HIV transmission. The most common is HIV transmission to the child (fetus) through the placenta during pregnancy, which is known to 83.8 percent of women, while 77.3 percent of women know that HIV can be transmitted during delivery. 64.7 percent of women know that HIV can be transmitted from mother to child by breastfeeding.

There are significant regional differences in women's awareness about mother-to-child transmission of HIV. For example, while in the Mangistau region only 39.1 percent of women know about all three means of mother-to-child HIV transmission, in the Kyzylorda region and Almaty city about three out of four women know about this (75.4 and 71.0 percent, respectively). Differences in the level of knowledge about all three means of HIV transmission among women living in urban and rural areas are small (59.5 and 56.0 percent respectively). In the age group of women aged 20-24 years, more than half of them (54.2 percent) are aware of all three ways of HIV transmission – both individually and in total, compared to women aged 15-19 years (39.8 percent). Women in the 25-29, 30-39 and 40-49 age groups are more likely to know of all three means of mother-to-child HIV transmission ranging from 58.9 to 63.1 percent than women aged 15-24 (48.0 percent). Women who have ever been married are more likely to know all the three means of mother-to-child HIV transmission (61.3 percent) than those who have never been married (45.7 percent). The prevalence of knowledge about mother-to-child HIV transmission often depends on the women's education level: 61.7 percent of women with higher education and 47.6 percent with lower secondary education know all three means of mother-to-child HIV transmission. Knowledge of all three means of mother-to-child HIV transmission is similar across wealth index quintiles. More than 12 percent of women with lower school education or living in the poorest households do not know any of the specific means of HIV transmission from mother-to-child.

### ***Accepting Attitudes toward People Living with HIV***

The indicators on attitudes toward people living with HIV measure stigma and discrimination in the community. Stigma and discrimination are considered low if respondents report an accepting attitude on the following four questions: 1) would you be willing to care for a family member with AIDS in your own home? 2) would you buy fresh vegetables from a shopkeeper or vendor who is HIV-positive? 3) do you think that a female teacher who is HIV-positive should be allowed to continue teaching at school? and 4) would you not want to keep it a secret if a member of your family is HIV-positive?



**Table HA.3: Accepting attitudes toward people living with HIV**

Percentage of women aged 15-49 years who have heard of AIDS who express an accepting attitude towards people living with HIV, Kazakhstan, 2015

	Percentage of women who:						Percentage of women who:		Number of women aged 15-49 who have heard of AIDS
	Are willing to care for a family member with AIDS in own home	Would buy fresh vegetables from a shopkeeper or vendor who is HIV-positive	Believe that a female teacher who is HIV-positive and is not sick should be allowed to continue teaching	Would not want to keep secret that a family member is HIV-positive	Agree with at least one accepting attitude	Express accepting attitudes on all four indicators <sup>1</sup>	Think children living with HIV should be able to attend school with children who are HIV-negative	Report discriminatory attitudes towards people living with HIV <sup>a</sup>	
<b>Total</b>	82.2	20.1	34.9	20.5	90.8	2.5	39.0	76.0	12405
<b>Region</b>									
Akmola	86.9	17.4	34.3	23.8	93.3	2.4	38.2	77.4	618
Aktobe	88.6	17.2	32.5	2.7	89.7	0.2	58.6	71.0	788
Almaty oblast	75.5	10.1	17.8	15.7	86.4	0.5	21.3	89.9	1003
Atyrau	48.2	4.0	12.1	36.5	72.6	0.2	13.6	93.7	392
West Kazakhstan	68.7	26.3	38.2	20.4	83.5	0.4	36.4	63.6	534
Zhambyl	82.7	15.0	18.9	36.0	92.8	2.3	27.0	83.6	768
Karaganda	84.3	24.9	41.7	25.3	92.3	4.7	42.5	70.1	1032
Kostanai	96.5	18.1	45.1	4.8	98.3	1.0	48.8	74.1	675
Kyzylorda	60.2	15.1	10.1	29.9	80.7	1.9	10.0	92.3	389
Mangistau	77.8	7.0	20.5	36.5	92.0	0.5	12.2	91.9	398
South Kazakhstan	79.2	25.7	39.5	25.4	87.2	5.8	36.9	68.4	1988
Pavlodar	92.3	22.2	48.8	23.6	96.7	1.3	49.6	77.4	512
North Kazakhstan	87.0	23.5	44.3	12.5	93.5	0.6	42.4	71.3	350
East Kazakhstan	92.2	19.2	36.2	11.9	96.7	1.2	41.1	77.4	863
Astana city	92.9	31.5	51.9	14.7	97.5	4.8	58.3	69.8	1084
Almaty city	78.6	19.4	36.1	19.3	91.5	2.3	48.7	75.1	1012

<b>Area</b>									
Urban	83.7	22.3	39.8	18.9	92.1	2.7	44.1	73.6	7067
Rural	80.3	17.1	28.5	22.5	89.1	2.3	32.2	79.1	5338
<b>Age</b>									
15-24	79.9	17.8	32.4	19.1	88.1	2.2	35.2	78.4	2972
15-19	75.9	17.1	31.3	18.2	83.5	2.5	31.9	79.2	1227
20-24	82.7	18.4	33.2	19.7	91.4	2.0	37.4	77.9	1744
25-29	81.8	19.5	35.8	21.0	91.1	1.8	38.2	75.9	2137
30-39	81.8	21.3	34.7	20.8	91.0	3.0	38.7	75.2	3811
40-49	84.9	21.0	36.7	20.9	92.7	2.8	43.0	74.8	3485
<b>Marital status</b>									
Ever married/in union	83.4	20.6	35.0	21.0	91.8	2.7	39.4	75.6	9858
Never married/in union	77.5	18.1	34.6	18.2	87.0	2.1	37.4	77.3	2547
<b>Education</b>									
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	6
Lower secondary	80.4	16.4	26.2	23.6	90.1	2.0	33.1	77.9	726
Upper secondary	78.9	14.0	23.7	22.2	86.6	1.6	26.8	83.0	3004
Technical and Professional	82.9	20.3	35.7	20.6	91.7	3.0	40.5	74.9	3942
Higher	84.0	24.4	42.7	18.8	92.8	2.9	46.3	72.0	4728
<b>Wealth index quintile</b>									
Poorest	79.0	14.8	26.5	24.5	88.5	2.0	30.2	81.6	2147
Second	80.7	18.5	28.7	22.2	89.2	2.4	30.9	78.8	2273
Middle	80.8	20.6	31.9	21.6	89.7	3.1	35.8	74.7	2424
Fourth	83.5	23.5	40.7	17.3	92.2	2.9	46.3	72.1	2692
Richest	85.8	21.7	43.2	18.0	93.4	2.3	47.8	74.3	2870
<b>Ethnicity of household head</b>									
Kazakh	80.6	18.5	32.7	21.8	89.9	2.5	37.0	77.6	7958
Russian	86.7	23.9	42.0	16.1	93.7	1.7	47.9	70.4	2494
Other ethnic groups	83.1	21.7	34.9	20.7	90.7	3.7	35.5	76.3	1953
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1

<sup>1</sup> MICS indicator 9.3 - Accepting attitudes towards people living with HIV

<sup>a</sup> This is a composite of those who respond "No" to any of the two situations in columns 2 and 7 (buying vegetables and attending school).

(\*) Figures that are based on fewer than 25 unweighted cases.

**Figure HA.2: Accepting attitudes toward people living with HIV/AIDS, Kazakhstan, 2015**

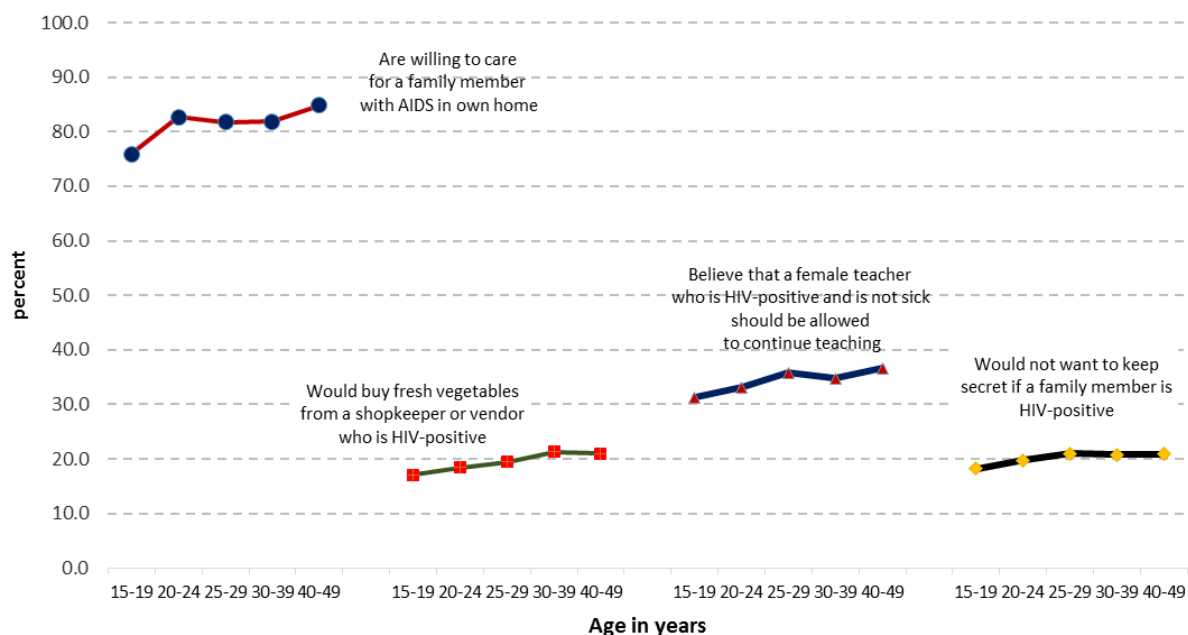


Table HA.3 and Figure HA.2 present the attitudes of women towards people living with HIV. In Kazakhstan, 90.8 percent of women aged 15-49 years who have heard of AIDS agree with at least one accepting statement. The most common accepting attitude is willingness to care for a family member with AIDS in ones own home (82.2 percent). More than a third of women believe that a female teacher who is HIV-positive, but is not sick should be allowed to continue teaching (34.9 percent); every fifth woman is willing to buy fresh vegetables from a shopkeeper or vendor who is HIV-positive and would not want to keep it a secret if her family member was HIV-positive (20.1 and 20.5 percent, respectively). The variation of responses on attitude to HIV-positive people in different regions of the country for each of the four cases separately is interesting: for example, only 4.0 percent of women in the Atyrau region and 7.0 percent in the Mangistau region would buy fresh vegetables from a shopkeeper or vendor who is HIV-positive, while in Astana city, the proportion of such women was 31.5 percent. Only 10.1 percent of women of Kyzylorda region believe that a female teacher who is HIV-positive, but is not sick should be allowed to continue teaching and more than half of the respondents in Astana city (51.9 percent) are accepting of this issue. Women who are willing to care for a family member with AIDS in their own home in the Atyrau region is twice as low (only 48.2 percent) than in the Kostanai region (96.5 percent). If a family member was HIV-positive, only 2.7 percent of women in the Aktobe region and 4.8 percent in the Kostanai region would **not** want to keep it a secret, and on the contrary, the proportion of women with the above attitude in the Atyrau, Mangistau and Zhambyl regions was about 36 percent. Despite the fact that countrywide women who have ever heard of AIDS express accepting attitudes for the individual indicators (about from 20 to 82 percent), overall, 2.5 percent of women who have ever heard of AIDS express accepting attitudes on all four indicators. A similar proportion of women in urban and rural areas express accepting attitudes on all four indicators (2.7 and 2.3 percent, respectively).

An additional question about *whether women think that children living with HIV should be able to attend school with children who are HIV-negative* was included in the HIV/AIDS module. 39.0 percent of women expressed an accepting attitude on this indicator. At the same time, the highest percentage

of positive responses was given by women of Aktobe region and Astana city (about 58 percent). Urban women are somewhat more likely to give a positive answer to this question than women living in rural areas (44.1 and 32.2 percent, respectively). Women with higher education and those living in the richest households are more likely to think that children living with HIV should be able to attend school with children who are HIV-negative, than their counterparts that have lower secondary education or live in poorest households. Age of women is also important: the proportion of women that gave a positive answer to this question is higher among older women (40-49 years) than among 15-24-year-olds (43.0 percent and 35.2 percent, respectively).

In Kazakhstan, 76.0 percent of women reported discriminatory attitudes towards people living with HIV on a combination of the following two indicators, calculated based on **negative** answers to questions: 1) would *buy fresh vegetables from a shopkeeper or vendor who is HIV-positive* and 2) *think that children living with HIV should be able to attend school with children who are HIV-negative*. Nine out of ten women in the Atyrau, Kyzylorda and Mangistau regions (93.7, 92.3 and 91.9 percent, respectively) reported higher discriminatory attitudes towards people living with HIV; and on the other hand, the most tolerant in this respect were women from the South Kazakhstan region, Astana city and Karaganda region (5.8, 4.8 and 4.7 percent respectively).

### **Knowledge of a Place for HIV Testing, Counselling and Testing during Antenatal Care**

Another important indicator is the knowledge of facilities and places to be tested for HIV and use of such services. In order to protect themselves and to prevent infecting others, it is important for individuals to know their HIV status. Knowledge of own status is also a critical factor in the decision to seek treatment in health facilities.

**Table HA.4: Knowledge of a place for HIV testing**

Percentage of women aged 15-49 years who know where to get an HIV test, percentage who have ever been tested, percentage who have ever been tested and know the result of the most recent test, percentage who have been tested in the last 12 months, and percentage who have been tested in the last 12 months and know the result<sup>2, 3</sup>, Kazakhstan, 2015

	Percentage of women who:					Number of women aged 15-49
	Know a place to get tested <sup>1</sup>	Have ever been tested	Have ever been tested and know the result of the most recent test	Have been tested in the last 12 months	Have been tested in the last 12 months and know the result <sup>2, 3</sup>	
Total	86.9	74.4	69.4	24.4	23.3	12670
<b>Region</b>						
Akmola	80.0	69.7	65.2	30.2	28.2	624
Aktobe	89.3	64.7	62.1	20.1	19.1	806
Almaty oblast	89.5	79.8	77.1	19.8	19.2	1042
Atyrau	84.6	67.3	55.4	21.1	18.5	402
West Kazakhstan	81.3	61.3	58.8	23.1	22.5	572
Zhambyl	85.7	80.9	78.8	33.7	32.9	778
Karaganda	92.4	82.1	80.1	34.8	34.2	1035
Kostanai	96.4	83.9	77.1	28.3	27.0	675
Kyzylorda	80.2	62.6	50.6	25.2	21.8	399
Mangistau	84.1	65.3	62.9	17.8	17.0	408
South Kazakhstan	80.0	65.8	55.9	16.6	14.8	2079
Pavlodar	89.5	79.8	78.9	24.5	23.9	517
North Kazakhstan	92.6	82.6	77.5	33.8	32.1	351

East Kazakhstan	83.2	74.2	71.8	18.7	18.2	880
Astana city	92.3	83.8	81.0	34.8	33.8	1086
Almaty city	91.4	80.7	73.7	19.9	19.4	1015
<b>Area</b>						
Urban	90.3	78.0	74.3	26.2	25.4	7140
Rural	82.4	69.7	63.1	22.1	20.7	5530
<b>Age</b>						
15-24	71.4	48.2	44.8	23.1	22.0	3114
15-19	54.0	22.4	20.9	11.3	10.9	1346
20-24	84.6	67.7	62.9	32.1	30.4	1768
25-29	93.2	85.6	79.4	31.8	30.0	2161
30-39	93.3	85.5	79.1	26.4	25.2	3868
40-49	89.7	78.5	74.4	18.8	18.3	3527
<b>Age and sexual activity in the last 12 months</b>						
Sexually active	93.0	85.0	78.9	28.3	26.9	9566
15-24 <sup>3</sup>	91.5	81.0	73.7	41.6	39.0	1252
15-19	85.7	63.3	50.7	41.0	37.8	112
20-24	92.1	82.8	76.0	41.7	39.2	1141
25-49	93.2	85.6	79.7	26.2	25.1	8313
Sexually inactive	68.1	41.6	40.0	12.6	12.3	3104
<b>Marital status</b>						
Ever married/in union	92.5	84.8	78.8	27.3	26.0	9980
Never married/in union	66.0	35.8	34.6	13.5	13.3	2690
<b>Education</b>						
None/Primary	(*)	(*)	(*)	(*)	(*)	16
Lower secondary	70.9	55.2	49.9	19.1	17.2	778
Upper secondary	79.7	66.7	60.9	18.3	17.5	3140
Technical and Professional	89.4	76.4	71.6	26.6	25.4	3990
Higher	92.3	81.0	76.6	27.6	26.4	4745
<b>Wealth index quintile</b>						
Poorest	78.9	67.1	59.6	20.5	18.9	2276
Second	84.1	71.7	64.8	22.3	20.9	2334
Middle	86.0	73.0	68.5	26.1	24.7	2464
Fourth	91.1	77.9	74.0	25.7	24.8	2708
Richest	92.2	80.1	77.3	26.6	26.1	2888
<b>Ethnicity of household head</b>						
Kazakh	85.5	72.3	67.1	24.9	23.7	8149
Russian	93.1	82.3	79.4	24.8	24.0	2506
Other ethnic groups	84.9	73.1	66.1	21.9	20.9	2014
Missing/DK	(*)	(*)	(*)	(*)	(*)	1
<sup>1</sup> MICS indicator 9.4 - Women who know where to be tested for HIV						
<sup>2</sup> MICS indicator 9.5 - Women who have been tested for HIV and know the results						
<sup>3</sup> MICS indicator 9.6 - Sexually active young women who have been tested for HIV and know the results						
(*) Figures that are based on fewer than 25 unweighted cases.						

Questions related to knowledge of a facility for HIV testing and whether a woman has ever been tested are presented in Table HA.4. In Kazakhstan, 86.9 percent of women know where to get tested, and 69.4 percent know the results of the most recent test. In the Akmola, Kyzylorda and South Kazakhstan regions, about 80 percent of women know where to be tested for HIV, compared with 96.4 percent of women in the Kostanai region. Women in urban areas are somewhat better informed on this issue than women in rural areas (90.3 and 82.4 percent). The prevalence of awareness of a place to get

tested for HIV – among young women aged 15-19 years is lower than among young women aged 20-24 years (54.0 and 84.6 percent, respectively), while women in the of 25-29 and 30-39 year age groups (about 93 percent) appeared to be the most knowledgeable. Women with higher education are better informed about the places to get tested than women with lower secondary education (92.3 and 70.9 percent, respectively). Household wealth level also affects the women's awareness about this: 92.2 percent of women living in the richest and 78.9 percent of those living in the poorest households know where to get tested for HIV.

Approximately one in four women got tested for HIV in the last 12 months (24.4 percent), with most of them knowing the test results (23.3 percent). The lowest percentage of women tested for HIV and knowing the result was in the South Kazakhstan and Mangistau regions (14.8 and 17.0 percent respectively), while the highest rate – in the Zhambyl, Karaganda and North Kazakhstan regions and Astana city (more than 30 percent). Differences on this indicator among women living in urban and rural areas are minor (25.4 and 20.7 percent).

In general it can be noted that awareness of a place (facility) to get tested for HIV, frequency of HIV tests and obtaining the results are positively influenced by the woman's education level, household wealth, marital status and age.

**Table HA.5: HIV testing and counselling during antenatal care**

Percentage of women aged 15-49 with a live birth in the last 2 years who received antenatal care from a health professional during the last pregnancy, percentage who received HIV counselling, percentage who were offered and tested for HIV, percentage who were offered, tested and received the results of the HIV test, and percentage who received counselling and were offered, accepted and received the results of the HIV test, Kazakhstan, 2015

	Percentage of women who:					
	Received antenatal care from a health care professional for last pregnancy <sup>a</sup>	Received HIV counselling during antenatal care <sup>1</sup>	Were offered an HIV test and were tested for HIV during antenatal care	Were offered an HIV test and were tested for HIV during antenatal care, and received the results <sup>2</sup>	Received HIV counselling, were offered an HIV test, accepted and received the results	Number of women aged 15-49 with a live birth in the last 2 years
Total	99.3	67.2	85.0	79.0	60.2	2157
<b>Region</b>						
Akmola	98.7	46.2	74.5	71.8	40.9	93
Aktobe	100.0	75.9	74.6	72.5	69.5	145
Almaty oblast	100.0	81.2	96.1	93.1	78.8	188
Atyrau	97.6	53.7	78.3	61.5	39.3	85
West Kazakhstan	99.4	89.3	86.8	82.7	80.6	100
Zhambyl	99.4	67.1	84.3	83.7	66.6	165
Karaganda	100.0	51.5	91.7	91.7	49.7	139
Kostanai	100.0	36.4	77.5	75.8	34.0	82
Kyzylorda	97.3	77.7	83.6	73.4	63.5	83
Mangistau	98.7	66.5	81.2	78.1	63.7	101
South Kazakhstan	99.4	70.3	89.7	72.9	56.1	474
Pavlodar	97.9	73.8	91.9	91.9	70.0	67
North Kazakhstan	100.0	51.2	80.1	78.1	49.3	44
East Kazakhstan	97.2	62.5	81.6	81.6	59.3	100
Astana city	100.0	61.9	78.8	78.8	59.3	195
Almaty city	100.0	79.9	86.0	80.1	65.9	97
<b>Area</b>						
Urban	99.4	68.0	85.6	82.1	62.6	1076
Rural	99.2	66.4	84.3	75.8	57.8	1081
<b>Age</b>						
15-24	99.2	69.4	86.0	78.9	61.4	662
15-19	100.0	61.4	73.3	67.9	52.1	50

20-24	99.2	70.1	87.1	79.8	62.2	611
25-29	99.7	66.0	82.9	78.0	59.1	735
30-39	99.1	66.5	85.8	79.1	59.7	679
40-49	97.7	66.1	88.0	86.7	64.2	81
<b>Marital status</b>						
Ever married/in union	99.3	67.1	84.8	78.8	60.1	2129
Never married/in union	(*)	(*)	(*)	(*)	(*)	28
<b>Education</b>						
None/Primary	(*)	(*)	(*)	(*)	(*)	2
Lower secondary	96.4	54.4	73.8	65.3	44.9	97
Upper secondary	99.5	65.6	82.2	73.3	56.0	518
Technical and Professional	99.3	68.8	86.6	80.1	61.2	660
Higher	99.5	68.4	86.6	83.0	63.6	879
<b>Wealth index quintile</b>						
Poorest	99.4	62.8	85.9	76.6	53.2	415
Second	98.6	67.5	87.3	77.2	60.9	457
Middle	99.7	73.7	83.2	78.2	63.5	502
Fourth	99.0	67.1	86.2	83.0	62.4	422
Richest	99.7	63.1	81.7	80.1	60.1	360
<b>Ethnicity of household head</b>						
Kazakh	99.2	69.4	84.6	78.8	62.1	1520
Russian	99.5	59.1	87.3	85.6	56.9	261
Other ethnic groups	99.6	64.1	84.9	74.9	54.8	375

<sup>1</sup> MICS indicator 9.7 - HIV counselling during antenatal care

<sup>2</sup> MICS indicator 9.8 - HIV testing during antenatal care

<sup>a</sup> Health care professionals include Medical doctor, Nurse/Midwife, and Feldsher.

(\*) Figures that are based on fewer than 25 unweighted cases.



The percentage of women who had given a birth within the two years preceding the survey, who received HIV counselling and HIV testing during antenatal care is presented in Table HA.5.

In Kazakhstan, almost all, or 99.3 percent, of women that gave birth within 2 years prior to the survey received antenatal care from a health care professional for their last pregnancy, and 67.2 percent of women received antenatal HIV counselling services. While in the Kostanai region only 36.4 percent of women received such services, in the West Kazakhstan region and Almaty oblast more than 80 percent of pregnant women were counselled on this issue. There is only a slight difference between urban and rural women (68.0 and 66.4 percent, respectively). Women with higher education receive HIV counselling during antenatal care more often than women with lower secondary education (68.4 and 54.4 percent, respectively).

85.0 percent of women were offered an HIV test and were tested for HIV during antenatal care, while 79.0 percent of women were offered an HIV test and were tested for HIV during antenatal care, and received the results. 60.2 percent of women with a live birth in the last 2 years, received HIV counselling, were offered an HIV test, accepted and received the results. Among women age 15-19 years with a live birth in the last 2 years, 73.3 percent were offered an HIV test and were tested for HIV during antenatal care; 67.9 percent were offered an HIV test and were tested for HIV during antenatal care, and received the results; while only 52.1 percent received HIV counselling, were offered an HIV test, accepted and received the results.

Women from the Atyrau region (61.5 percent) were the least likely to be offered an HIV test, get tested for HIV during antenatal care, and receive the results; while this proportion is much higher in the Almaty oblast, Karaganda and Pavlodar regions (over 90 percent). Urban women were slightly more likely to be offered an HIV test, were tested and received the test results than rural women (82.1 and 75.8 percent, respectively). In general, findings show the timeliness and frequency of HIV testing, receiving HIV counselling and receiving test results is positively associated with the women's education level, household wealth and age.

### ***Sexual Behaviour Related to HIV Transmission***

Promoting safer sexual behaviour is critical for reducing HIV prevalence. The use of condoms during sex, especially when non-regular or multiple partners are involved, is particularly important for reducing the spread of HIV. A set of questions was administered to all women 15-49 years of age to assess their risk of HIV infection. Risk factors include sex at an early age, sex with a man who is much older, or with a partner, with whom she is not married/ in union, sex with non-regular partners (more than one partner), avoiding the use of condoms for such contacts, etc.

**Table HA.6: Sex with multiple partners**

Percentage of women aged 15-49 years who ever had sex, percentage who had sex in the last 12 months, percentage who had sex with more than one partner in the last 12 months, mean number of sexual partners in lifetime for women who have ever had sex, and among those who had sex with multiple partners in the last 12 months, the percentage who used a condom at last sex, Kazakhstan, 2015

	Percentage of women who:			Number of women aged 15-49 years	Mean number of sexual partners in lifetime	Number of women aged 15-49 years who have ever had sex	Percentage of women who had more than one sexual partner in the last 12 months reporting that a condom was used the last time they had sex <sup>2</sup>	Number of women aged 15-49 years who had more than one sexual partner in the last 12 months
	Ever had sex	Had sex in the last 12 months	Had sex with more than one partner in last 12 months <sup>1</sup>					
<b>Total</b>	83.3	75.5	0.8	12670	1.6	10560	40.6	98
<b>Region</b>								
Akmola	85.5	76.4	0.5	624	2.0	533	(*)	3
Aktobe	81.9	73.6	0.2	806	1.2	660	(*)	2
Almaty oblast	80.2	72.5	0.8	1042	1.8	836	(*)	8
Atyrau	79.2	71.7	0.3	402	1.2	318	(*)	1
West Kazakhstan	84.6	74.2	1.3	572	1.5	484	(*)	8
Zhambyl	82.7	75.6	0.2	778	1.2	643	(*)	1
Karaganda	85.1	76.6	0.9	1035	1.9	881	(*)	10
Kostanai	88.0	81.4	1.8	675	2.1	594	(*)	12
Kyzylorda	78.7	73.3	0.2	399	1.1	314	(*)	1
Mangistau	79.1	73.7	0.1	408	1.1	323	(*)	0
South Kazakhstan	83.0	74.1	0.1	2079	1.1	1726	(*)	2
Pavlodar	85.2	78.3	0.7	517	1.8	441	(*)	4
North Kazakhstan	89.8	82.5	1.8	351	2.2	315	(*)	6
East Kazakhstan	84.3	76.0	1.2	880	2.1	742	(*)	10
Astana city	84.2	76.8	1.4	1086	1.7	914	(*)	15
Almaty city	82.3	75.4	1.5	1015	1.8	836	(*)	15
<b>Area</b>								
Urban	82.9	74.9	1.0	7140	1.8	5916	44.7	72
Rural	84.0	76.3	0.5	5530	1.4	4644	(28.9)	25
<b>Age</b>								
15-24	41.5	40.2	0.9	3114	1.3	1293	(62.7)	28
15-19	8.5	8.3	0.2	1346	1.3	115	(*)	3
20-24	66.6	64.5	1.4	1768	1.3	1178	(64.4)	25
25-29	92.3	88.6	0.8	2161	1.5	1994	(*)	18
30-39	98.0	90.4	0.9	3868	1.7	3791	(31.2)	34
40-49	98.7	82.2	0.5	3527	1.6	3482	(*)	17
<b>Marital status</b>								
Ever married/in union	100.0	91.3	0.7	9980	1.6	9977	23.4	66
Never married/in union	21.7	16.9	1.2	2690	2.4	583	(77.2)	31
<b>Education</b>								
None/Primary	(*)	(*)	(*)	16	(*)	10	-	0
Lower secondary	70.4	61.2	0.6	778	1.8	548	(*)	5
Upper secondary	83.2	73.8	0.8	3140	1.5	2614	(*)	25

Technical and Professional	84.6	76.7	0.8	3990	1.6	3377	(49.3)	31
Higher	84.5	78.1	0.8	4745	1.6	4011	(39.6)	37
<b>Wealth index quintile</b>								
Poorest	85.0	75.5	0.5	2276	1.4	1933	(*)	12
Second	84.1	77.3	0.4	2334	1.3	1963	(*)	9
Middle	82.9	75.5	0.6	2464	1.6	2043	(*)	15
Fourth	82.1	73.6	1.4	2708	1.8	2225	(44.0)	39
Richest	83.0	75.8	0.8	2888	1.8	2397	(*)	22
<b>Ethnicity of household head</b>								
Kazakh	80.7	73.0	0.5	8149	1.4	6578	(46.4)	39
Russian	89.6	81.6	1.9	2506	2.3	2245	33.0	47
Other ethnic groups	86.2	77.9	0.6	2014	1.6	1737	(*)	11
Missing/DK	(*)	(*)	(*)	1	(*)	1	-	0
<sup>1</sup> MICS indicator 9.12 - Multiple sexual partnerships								
<sup>2</sup> MICS indicator 9.13 - Condom use at last sex among people with multiple sexual partnerships								
() Figures that are based on 25–49 unweighted cases.								
(*) Figures that are based on fewer than 25 unweighted cases.								
"–" denotes 0 unweighted case in that cell or in the denominator.								

Table HA.6 shows that 83.3 percent of women aged 15-49 have ever had sex, and three out of four women (75.5 percent) aged 15-49 reported having sex in the last 12 months. However, only 0.8 percent of women reported that they had sex with more than one partner in last 12 months. In the Kostanai and North Kazakhstan regions, 1.8 percent of women have had sex with more than one partner, and in the Mangistau, South Kazakhstan, Aktobe, Zhambyl and Kyzylorda regions, this figure was 0.1-0.2 percent. Only 40.6 percent of women, who reported having sex with more than one partner in last 12 months, reported that a condom was used the last time they had sex.

### ***HIV Indicators for Young Women***

In many countries, over half of new cases of HIV infections are among young people aged 15-24 years thus a change in behaviour among members of this age group is especially important to reduce new cases of infections. The next Tables present specific information on this age group.

**Table HA.7: Key HIV and AIDS indicators**

Percentage of women aged 15-24 years by key HIV and AIDS indicators, Kazakhstan, 2015

	Percentage of women aged 15-24 years who:						Number of women aged 15-24 years	Percentage of sexually active young women who have been tested for HIV in the last 12 months and know the result <sup>2</sup>	Number of women aged 15-24 years who had sex in the last 12 months	Percentage who express accepting attitudes towards people living with HIV on all four indicators <sup>b</sup>	Percentage who report discriminatory attitudes towards people living with HIV <sup>b</sup>	Number of women aged 15-24 years who have heard of AIDS
	Have comprehensive knowledge <sup>1,a</sup>	Know all three means of HIV transmission from mother to child	Know a place to get tested for HIV	Have ever been tested and know the result of the most recent test	Have been tested for HIV in the last 12 months and know the result	Had sex in the last 12 months						
<b>Total</b>	26.7	48.0	71.4	44.8	22.0	40.2	3114	39.0	1252	2.2	78.4	2972
<b>Region</b>												
Akmola	20.0	50.4	62.9	37.5	21.1	41.1	127	45.0	52	2.1	80.9	125
Aktobe	40.5	39.9	84.7	49.5	27.4	35.0	191	63.2	67	0.0	69.8	184
Almaty oblast	18.7	44.5	73.2	44.2	25.6	29.0	260	36.5	76	1.3	91.2	226
Atyrau	18.8	55.9	61.2	24.1	10.4	37.9	109	24.3	41	0.5	92.9	100
West Kazakhstan	29.4	58.4	67.5	38.2	18.8	45.0	135	30.2	61	0.0	68.5	121
Zhambyl	8.9	48.5	66.0	57.4	27.4	39.8	182	44.8	72	2.3	87.8	177
Karaganda	33.0	41.3	74.6	48.3	24.6	35.6	209	37.3	74	3.5	78.1	208
Kostanai	45.3	38.5	89.0	44.0	20.3	51.2	157	30.4	80	0.5	73.6	157
Kyzylorda	18.3	66.2	58.0	30.6	18.6	38.5	106	39.2	41	2.5	90.7	102
Mangistau	11.1	32.1	77.7	51.2	17.9	43.8	127	38.4	55	0.0	93.0	120
South Kazakhstan	15.2	47.9	67.1	41.5	16.8	44.4	590	33.0	262	4.7	69.3	536
Pavlodar	31.7	60.0	71.7	51.7	17.6	39.7	116	36.9	46	1.8	80.2	115
North Kazakhstan	34.0	63.3	79.0	46.8	21.9	47.1	65	39.3	30	0.8	69.3	65
East Kazakhstan	36.4	40.7	58.3	32.5	11.9	36.5	202	22.8	74	0.0	79.6	200
Astana city	25.9	51.3	76.0	52.9	36.2	40.8	258	58.0	105	3.6	83.1	258
Almaty city	49.8	51.9	75.7	53.3	26.6	40.8	281	45.3	115	2.9	71.5	279
<b>Area</b>												
Urban	31.1	49.3	73.7	46.3	23.2	39.8	1763	39.8	701	2.6	76.5	1717
Rural	20.8	46.3	68.3	42.8	20.3	40.8	1351	38.1	552	1.7	80.9	1255

<b>Age</b>												
15-19	19.6	39.8	54.0	20.9	10.9	8.3	1346	37.8	112	2.5	79.2	1227
15-17	16.2	39.8	44.9	12.3	6.6	1.8	855	(*)	16	2.1	79.0	758
18-19	25.7	39.9	69.8	35.9	18.2	19.6	491	37.5	96	3.1	79.4	469
20-24	32.0	54.2	84.6	62.9	30.4	64.5	1768	39.2	1141	2.0	77.9	1744
20-22	30.7	49.1	81.1	58.2	30.9	55.0	1021	44.9	561	1.6	80.6	1004
23-24	33.8	61.2	89.4	69.3	29.7	77.5	747	33.6	579	2.5	74.1	740
<b>Marital status</b>												
Ever married/in union	30.5	59.6	92.9	77.9	40.4	97.4	1120	40.5	1091	2.6	77.4	1108
Never married/in union	24.5	41.5	59.2	26.1	11.6	8.1	1993	29.1	161	2.0	79.0	1864
<b>Education</b>												
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	2	-	0	-	-	0
Lower secondary	17.6	44.9	50.2	20.6	9.5	22.3	283	31.9	63	0.4	74.8	255
Upper secondary	16.2	43.5	60.0	32.6	11.6	32.2	731	25.9	235	1.9	79.7	670
Technical and Professional	26.3	47.6	77.3	49.8	27.8	47.5	1083	42.0	514	2.8	80.2	1044
Higher	37.1	52.7	79.2	54.9	26.7	43.4	1014	43.6	440	2.3	76.5	1002
<b>Wealth index quintile</b>												
Poorest	15.0	44.5	61.9	38.9	18.5	38.4	516	37.6	198	2.2	79.9	466
Second	24.5	51.2	71.2	45.3	22.3	44.5	578	37.3	257	2.9	78.9	533
Middle	24.6	49.4	69.6	46.4	22.4	44.7	682	39.1	305	1.2	77.4	661
Fourth	33.1	47.3	77.5	47.8	24.3	40.1	694	39.9	278	3.3	75.6	683
Richest	33.0	47.3	74.3	44.0	21.4	33.3	644	41.2	214	1.4	80.9	629
<b>Ethnicity of household head</b>												
Kazakh	26.1	46.8	68.8	43.5	22.2	35.5	2088	42.1	742	2.6	79.4	1988
Russian	37.1	47.7	78.9	48.6	21.1	50.1	492	32.5	247	1.4	76.5	483
Other ethnic groups	19.2	53.0	74.4	46.3	21.9	49.4	533	36.6	263	1.5	76.2	500
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	1	(*)	1	(*)	(*)	1
<sup>1</sup> MICS indicator 9.1; MDG indicator 6.3 - Knowledge about HIV prevention among young women												
<sup>2</sup> MICS indicator 9.6 - Sexually active young women who have been tested for HIV and know the results												
<p><sup>a</sup> Comprehensive knowledge about HIV prevention is the knowledge of all of the following: (1) that the chance of getting HIV can be reduced by having only one faithful uninfected partner and using a condom every time (two main ways of HIV prevention), (2) that a healthy looking person can be HIV-positive, and (3) that HIV cannot be transmitted by mosquito bites and by kissing with someone with HIV.</p> <p><sup>b</sup> Refer to Table HA.3 for the components of this indicator.</p> <p>(*) Figures that are based on fewer than 25 unweighted cases.</p> <p>"-" denotes 0 unweighted case in that cell or in the denominator.</p>												

Table HA.7 summarizes information on key HIV indicators for young women.

Analysis of HIV indicators shows 1) the level of comprehensive knowledge about HIV, 2) knowledge about mother-to-child transmission of HIV, and 3) knowledge of a place to get tested for HIV, in general, among young women aged 15-24. Approximately one in four women aged 15-24 have comprehensive knowledge about HIV (26.7 percent); about half of women aged 15-24 know all three ways of mother-to-child HIV transmission (48.0 percent); and more than two-thirds of women in this age group are aware of a place (facility) to get tested for HIV (71.4 percent).

2.2 percent of women aged 15-24 years express accepting attitudes towards people living with HIV on all four indicators described above. 2.6 percent of young women in urban areas, and 1.7 percent of those living in rural areas express accepting attitudes towards people living with HIV. 78.4 percent of young women report discriminatory attitudes towards people living with HIV<sup>62</sup>, which is comparable to the rate for women aged 15-49 years. Overall, 39.0 percent of sexually active young women in this age group were tested for HIV in the last 12 months and know the test results; while this is the case for 40.5 percent of young women who have been ever married/in union, and 29.1 percent of those who have never been married/in union.

Prevalence of comprehensive knowledge about HIV among young women ranges from 8.9 percent in the Zhambyl region to 49.8 percent in Almaty city. Young urban women are more likely to have comprehensive knowledge about HIV than their rural peers (31.1 and 20.8 percent, respectively). Comprehensive knowledge about HIV is twice as high among women with a higher education, compared to women with a lower secondary (37.1 and 17.6 percent, respectively), and among women living in the richest households compared with those in the poorest households (33.0 and 15.0 percent respectively). As expected, the indicator level among young women aged 15-17 years is much lower than among women aged 18-19 and 20-24 years for most parameters of knowledge and awareness of HIV (including HIV testing and receiving test results and other indicators).

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<sup>62</sup>This is a composite of young women who respond "No" to any of the two situations: would you buy fresh vegetables from a shopkeeper or vendor who is HIV-positive and do you think that children living with HIV should be able to attend school with children who are HIV-negative.

**Table HA.8: Key sexual behaviour indicators**

Percentage of women aged 15-24 years by key sexual behaviour indicators, Kazakhstan, 2015

	Percentage of women aged 15-24 years who:			Number of women aged 15-24 years	Percentage of women who never had sex <sup>2</sup>	Number of never-married women aged 15-24 years	Percentage of women aged 15-24 years who in the last 12 months had sex with:		Number of women aged 15-24 years who had sex in the last 12 months	Percentage reporting the use of a condom during the last sexual intercourse with a non-marital, non-cohabiting partner in the last 12 months <sup>5</sup>	Number of women aged 15-24 years who had sex with a non-marital, non-cohabiting partner in last 12 months
	Had sex before age 15 <sup>1</sup>	Ever had sex	Had sex with more than one partner in last 12 months				A man 10 or more years older <sup>3</sup>	A non-marital, non-cohabiting partner <sup>4</sup>			
<b>Total</b>	0.2	41.5	0.9	3114	91.3	1993	5.5	16.6	1252	63.7	208
<b>Region</b>											
Akmola	0.0	43.6	0.6	127	84.0	84	5.8	24.0	52	(*)	13
Aktobe	0.7	35.0	0.0	191	100.0	124	1.1	0.0	67	-	0
Almaty oblast	0.0	30.5	1.0	260	95.0	190	15.6	14.4	76	(*)	11
Atyrau	0.3	39.4	0.2	109	95.7	69	1.5	7.8	41	(*)	3
West Kazakhstan	0.0	49.6	0.9	135	82.7	82	4.6	28.0	61	(*)	17
Zhambyl	0.4	41.7	0.0	182	100.0	106	9.4	1.0	72	(*)	1
Karaganda	0.0	36.6	1.8	209	89.2	148	4.0	29.9	74	(*)	22
Kostanai	0.9	52.4	1.7	157	75.8	99	9.6	34.0	80	(65.3)	27
Kyzylorda	0.4	39.7	0.0	106	98.8	65	6.3	3.9	41	(*)	2
Mangistau	0.0	44.1	0.4	127	99.4	71	3.3	4.0	55	(*)	2
South Kazakhstan	0.0	45.4	0.0	590	99.5	324	4.9	2.0	262	(*)	5
Pavlodar	0.0	39.7	1.8	116	87.0	80	2.7	25.7	46	(*)	12
North Kazakhstan	1.3	50.3	5.2	65	76.3	42	5.8	34.1	30	(*)	10
East Kazakhstan	1.3	39.3	0.6	202	87.9	140	3.0	27.3	74	(*)	20
Astana city	0.0	40.9	2.5	258	91.9	166	4.5	20.2	105	(*)	21
Almaty city	0.0	42.2	1.3	281	79.9	203	4.6	35.7	115	(43.6)	41
<b>Area</b>											
Urban	0.2	41.2	1.2	1763	88.1	1177	5.3	23.0	701	63.3	161
Rural	0.3	42.0	0.5	1351	95.8	817	5.8	8.5	552	(65.4)	47
<b>Age</b>											
15-19	0.2	8.5	0.2	1346	97.8	1258	5.8	25.3	112	(80.7)	28

15-17	0.1	1.9	0.1	855	99.1	847	(*)	(*)	16	(*)	8
18-19	0.4	20.1	0.6	491	95.2	412	5.7	21.3	96	(*)	20
20-24	0.3	66.6	1.4	1768	80.1	735	5.5	15.7	1141	61.1	179
20-22	0.2	57.2	1.5	1021	83.3	524	7.4	17.2	561	64.9	97
23-24	0.4	79.6	1.3	747	72.2	211	3.6	14.3	579	56.6	83
<b>Marital status</b>											
Ever married/in union	0.6	99.9	1.3	1120	na	na	5.9	4.4	1091	41.0	48
Never married/in union	0.1	8.7	0.7	1993	91.3	1993	2.8	99.1	161	70.6	160
<b>Education</b>											
None/Primary	(*)	(*)	(*)	2	(*)	2	-	-	0	-	0
Lower secondary	0.8	22.5	0.7	283	98.8	222	16.3	15.5	63	(*)	10
Upper secondary	0.3	33.1	0.5	731	98.0	499	8.7	7.9	235	(*)	18
Technical and Professional	0.2	49.3	1.5	1083	88.4	620	6.0	16.4	514	65.1	85
Higher	0.1	44.7	0.7	1014	86.2	650	1.6	21.5	440	60.9	95
<b>Wealth index quintile</b>											
Poorest	0.2	41.2	0.4	516	94.9	320	8.5	8.0	198	(*)	16
Second	0.5	45.0	0.5	578	95.3	332	5.6	8.0	257	(*)	20
Middle	0.0	46.3	0.6	682	92.3	397	5.3	12.4	305	(51.8)	38
Fourth	0.6	41.5	2.1	694	87.0	467	4.8	25.0	278	68.1	70
Richest	0.0	33.7	0.7	644	89.3	478	3.8	29.8	214	61.5	64
<b>Ethnicity of household head</b>											
Kazakh	0.1	36.4	0.8	2088	94.3	1406	4.9	12.8	742	61.7	95
Russian	0.8	52.3	1.9	492	75.2	312	6.8	37.1	247	63.8	92
Other ethnic groups	0.3	51.4	0.6	533	94.2	274	5.9	7.6	263	(71.9)	20
Missing/DK	(*)	(*)	(*)	1	(*)	1	(*)	(*)	1	(*)	1

<sup>1</sup> MICS indicator 9.10 - Sex before age 15 among young women

<sup>2</sup> MICS indicator 9.9 - Young women who have never had sex

<sup>3</sup> MICS indicator 9.11 - Age-mixing among sexual partners

<sup>4</sup> MICS indicator 9.14 - Sex with non-regular partners

<sup>5</sup> MICS indicator 9.15; MDG indicator 6.2 - Condom use with non-regular partners

na: not applicable.

<sup>a</sup> The findings for the percentage of women age 15-24 years who had sex with more than one partner in the last 12 months and reported that a condom was used the last time they had sex are not presented in the table because the denominators for background characteristics are based on fewer than 25 unweighted cases.

( ) Figures that are based on 25-49 unweighted cases.

(\*) Figures that are based on fewer than 25 unweighted cases.

"-" denotes 0 unweighted case in that cell or in the denominator.



Certain behaviour may create, increase, or perpetuate risk of exposure to HIV. For the 15-24 year age group, such behaviour includes sex at an early age and women having sex with older men.

Table HA.8 shows the percentages of women aged 15-24 on key indicators of sexual behavior.

Overall, only 0.2 percent of young women reported having sex before the age of 15 years. In addition, only 0.9 percent of young women had sex with more than one partner in the last 12 months. On the other hand, 16.6 percent of young women have had sex with a non-marital, non-cohabiting partner in the last 12 months; of these only 63.7 percent of women reported the use of a condom during the last sexual intercourse. 5.5 percent of women aged 15-24 had sex in the last 12 months with a man 10 or more years older.

In Almaty oblast 15.6 percent, and in the Zhambyl and Kostanai regions almost 10 percent (9.4 and 9.6 percent, respectively) of young women had sex with a man 10 or more years older, while, in the Aktobe and Atyrau regions, the proportion is less than 1.5 percent. The highest proportion of women who have had sex with men 10 or more years older was identified among women with lower secondary education (16.3 percent) and those living in the poorest household (8.5 percent). Sex with a non-marital, non-cohabiting partner is more likely among young women of the Kostanai and North Kazakhstan regions (34.0 and 34.1 percent, respectively) and Almaty city (35.7 percent), and less likely among those – in the Zhambyl and South Kazakhstan regions (1.0 and 2.0 percent, respectively), while in the Aktobe region there are no women who had sex with a non-marital, non-cohabiting partner in the last 12 months. Urban women are about 2.7 times more likely than rural women to have had sex with a non-marital, non-cohabiting partner in the last 12 months (23.0 and 8.5 percent, respectively), while never married/in union women are more likely to have had sex with a non-marital, non-cohabiting partner in the last 12 months than ever-married/in union women (99.1 and 4.4 percent, respectively).

62.7 of women age 15-24 years who had sex with more than one partner in the last 12 months reported that a condom was used the last time they had sex (data not shown in Table HA.8), however this figure is based on 25-49 unweighted cases and should be treated with caution.

## XII. Access to Mass Media and Use of Information/Communication Technology

The 2015 Kazakhstan MICS collected information on women's exposure to mass media and the use of computers and the Internet. Information was collected on exposure to newspapers/magazines, radio and television among women aged 15-49 years, while the questions on the use of computers and the use of the Internet were asked to women aged 15-24.

### Access to Mass Media

Table MT.1 shows the percentage of women aged 15-49 who use certain types of media: read the newspaper, listen to the radio or watch television at least once a week.

Almost half of women aged 15-49, or 49.0 percent, read newspapers or magazines at least once a week, while about one in four women, or 26.5 percent, listen to the radio and 96.0 percent watch television at least once a week. Overall, only 2.3 percent of women do not have regular exposure to any of the three media, while 97.7 percent use at least one type of media, and 16.1 percent – all three media types at least once a week.

<b>Table MT.1: Exposure to mass media</b>							
Percentage of women aged 15-49 years who are exposed to specific mass media on a weekly basis, Kazakhstan, 2015							
	Percentage of women aged 15-49 years who:			All three media at least once a week <sup>1</sup>	Any media at least once a week	None of the media at least once a week	Number of women aged 15-49 years
	Read a newspaper at least once a week	Listen to the radio at least once a week	Watch television at least once a week				
<b>Total</b>	49.0	26.5	96.0	16.1	97.7	2.3	12670
<b>Age</b>							
15-19	39.1	29.2	93.9	15.0	96.2	3.8	1346
15-17	38.3	27.8	94.0	15.3	95.5	4.5	855
18-19	40.6	31.7	93.8	14.5	97.5	2.5	491
20-24	42.3	28.0	94.6	15.0	96.9	3.0	1768
25-29	44.8	29.8	96.2	16.2	97.9	2.1	2161
30-34	48.7	26.6	96.1	16.5	98.0	1.9	1998
35-39	52.7	27.0	95.5	18.1	97.0	3.0	1870
40-44	57.0	24.2	97.5	16.0	98.8	1.2	1862
45-49	56.6	20.3	97.5	15.4	98.9	1.1	1665
<b>Region</b>							
Akmola	57.9	19.0	93.8	11.3	97.9	2.0	624
Aktobe	74.9	22.4	98.5	18.3	99.4	.5	806
Almaty oblast	29.3	22.8	96.7	11.6	97.3	2.7	1042
Atyrau	61.3	25.7	97.4	19.5	98.7	1.3	402
West Kazakhstan	50.5	22.4	98.3	14.7	99.0	1.0	572
Zhambyl	53.2	21.2	96.1	12.4	98.3	1.7	778
Karaganda	56.3	31.2	92.4	17.6	95.4	4.6	1035
Kostanai	61.1	28.3	96.5	20.2	98.6	1.4	675
Kyzylorda	56.2	25.2	95.6	14.8	97.1	2.8	399

Mangistau	44.4	15.3	97.9	9.6	98.6	1.4	408
South Kazakhstan	38.0	11.8	97.5	8.3	97.9	2.1	2079
Pavlodar	66.7	38.8	95.0	29.6	97.8	2.2	517
North Kazakhstan	61.3	30.1	95.4	19.2	97.5	2.5	351
East Kazakhstan	65.1	26.8	95.8	19.7	97.9	2.1	880
Astana city	37.7	44.6	96.6	26.6	97.8	2.2	1086
Almaty city	24.5	47.0	92.3	16.6	96.3	3.7	1015
<b>Area</b>							
Urban	48.1	34.8	95.2	20.6	97.3	2.7	7140
Rural	50.0	15.8	97.0	10.2	98.2	1.8	5530
<b>Education</b>							
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	16
Lower secondary	34.4	14.4	96.2	6.7	97.3	2.7	778
Upper secondary	38.7	16.7	96.0	9.0	97.3	2.7	3140
Technical and Professional	50.6	26.0	96.9	15.9	98.2	1.8	3990
Higher	56.8	35.5	95.2	22.5	97.7	2.3	4745
<b>Wealth index quintile</b>							
Poorest	41.6	12.2	96.5	7.1	98.0	2.0	2276
Second	52.2	17.0	96.8	10.4	98.3	1.7	2334
Middle	49.8	23.8	96.0	15.0	97.5	2.4	2464
Fourth	48.5	33.8	94.7	20.4	96.9	3.1	2708
Richest	51.8	40.9	96.0	24.7	98.0	2.0	2888
<b>Ethnicity of household head</b>							
Kazakh	50.6	25.5	96.5	15.7	98.2	1.8	8149
Russian	52.5	35.0	94.6	21.3	97.1	2.9	2506
Other ethnic groups	38.0	19.8	95.3	11.2	96.7	3.3	2014
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	1
<b><sup>1</sup> MICS indicator 10.1 - Exposure to mass media</b>							
(*) Figures that are based on fewer than 25 unweighted cases.							

In each age group, women use all three media with minor differences in the indicator, from 14.5 percent – among 18-19-year-olds to 18.1 percent – among 35-39 year old women. Women in urban areas are twice as likely to listen to the radio at least once a week than women in rural areas (34.8 percent and 15.8, respectively); while the prevalence of reading newspapers at least once a week is similar (48.1 percent and 50.0, respectively). Newspapers and magazines are read by more than half of women aged 35-49 years (52.7-57.0 percent), while 39.1 percent of women aged 15-19 years read them at least once a week. Young women aged 18-19 years (31.7 percent) are more likely to listen to the radio at least once a week, compared to women aged 45-49 (20.3 percent).

Television is very popular in the country, and at least every 9 women out of ten watch it at least once a week (96.0 percent); there are virtually no differentials by background characteristics.

At the same time, there differences depending on the region and type of area of residence, level of education and economic status of the household regarding exposure to all three types of media, primarily due to differences in reading printed newspapers and magazines, as well as listening to the radio at least once a week.

In the Pavlodar region and Astana city, about one in three women (29.6 and 26.6 percent, respectively) uses all three types of media at least once a week, whereas this proportion is more than twice as low in the Mangistau and South Kazakhstan regions (9.6 and 8.3 percent).

Larger proportions of women are exposed to all the media types in rural areas (20.6 percent) than in urban areas (10.2 percent). Women with higher education are more than three times more likely to have been exposed to all three types of media than women with lower secondary education (22.5 and 6.7 percent, respectively). Similarly, women from the richest households are about three times more likely to have been exposed to all the three media forms than those from the poorest households (24.7 and 7.1 percent, respectively). 21.3 percent of women in households whose head is of Russian ethnicity are exposed to all the three media forms at least once a week, while the corresponding proportion of women in households whose head is of Kazakh ethnicity is 15.7 percent, and 11.2 percent of women in households whose head is of ethnicity other than Kazakh or Russian.

### ***Use of Information/Communication Technology***

The use of information and communication technologies (ICT) helps young people discover their academic and creative potential, gain new knowledge and skills, broaden outlook in any area and increase professionalism. Use of ICT by young people enables them to contribute to the development of the society and improve the country's competitiveness.

As shown in Table MT.2, in Kazakhstan, the use of ICT by young women is at a high level. Among women aged 15-24 years, 97.9 percent of women have ever used a computer; 88.2 percent of women used a computer in the last 12 months, and 77.0 percent used it at least once a week during the last one month. Overall, 96.8 percent of women aged 15-24 have ever used the Internet, while 94.6 percent used the Internet in the last 12 months prior to the survey. The share of young women who use the Internet more frequently, i.e., at least once a week during the last month, was 89.8 percent.

As expected, the use of both a computer and the Internet in the last 12 months is slightly more prevalent among young women aged 15-19 years. Use of a computer and the Internet to some extent is connected with the region, with the area of residence and household wealth.

Thus, women living in urban areas are more likely to have used computers in the last 12 months (92.5 percent) than women in rural areas (82.6 percent). Among women in the poorest households 57.1 percent used a computer at least once a week during the last one month compared to 91.9 percent of women in the richest households.

The level of Internet use in the last 12 months is slightly higher among young women living in urban areas (98.5 percent) than in rural areas (89.4 percent). During the last 12 months, the Internet was used most often by women living in Pavlodar, Mangistau regions and in Astana and Almaty cities (98.6-99.7 percent), and much less – in Kyzylorda, South Kazakhstan and Zhambyl regions (79.6 -89.4 percent). At the same time, almost every woman or 99.6 percent of women from the richest quintile of households used the Internet at least once a week during the last one month, while from the poorest households only 74.9 percent of women did so.

**Table MT.2: Use of computers and Internet**

Percentage of young women aged 15-24 years who have ever used a computer and the Internet, percentage who have used during the last 12 months, and percentage who have used at least once weekly during the last one month, Kazakhstan, 2015

	Percentage of women aged 15-24 years who have:						
	Ever used a computer	Used a computer during the last 12 months <sup>1</sup>	Used a computer at least once a week during the last one month	Ever used a computer	Used a computer during the last 12 months <sup>1</sup>	Used a computer at least once a week during the last one month	Number of women aged 15-24 years
<b>Total</b>	97.9	88.2	77.0	96.8	94.6	89.8	3114
<b>Age</b>							
15-19	99.2	95.1	84.7	98.2	97.1	93.8	1346
15-17	99.2	97.0	87.7	98.4	97.3	93.9	855
18-19	99.1	91.7	79.3	98.0	96.6	93.5	491
20-24	97.0	82.9	71.2	95.7	92.7	86.8	1768
<b>Region</b>							
Akmola	100.0	92.9	77.4	98.7	97.4	93.2	127
Aktobe	99.5	88.4	83.4	100.0	95.2	93.6	191
Almaty oblast	99.5	95.0	85.1	99.6	97.6	91.1	260
Atyrau	99.0	87.1	70.8	97.4	97.4	93.5	109
West Kazakhstan	95.7	82.4	69.7	93.9	92.1	89.2	135
Zhambyl	91.6	77.9	63.9	93.5	89.4	88.1	182
Karaganda	99.2	93.2	87.9	99.0	97.3	93.0	209
Kostanai	98.4	96.0	89.8	96.2	94.9	92.1	157
Kyzylorda	96.7	79.6	61.4	87.9	79.6	69.6	106
Mangistau	98.5	96.9	77.7	98.9	98.9	92.7	127
South Kazakhstan	96.1	73.8	57.0	91.6	87.7	77.4	590
Pavlodar	100.0	98.5	95.0	99.5	98.6	98.0	116
North Kazakhstan	99.2	97.5	87.1	100.0	97.8	92.7	65
East Kazakhstan	98.9	97.7	83.3	98.9	98.2	94.3	202
Astana city	99.8	92.5	83.8	100.0	99.7	99.1	258
Almaty city	98.6	93.9	91.1	100.0	99.7	97.4	281
<b>Area</b>							
Urban	99.1	92.5	83.4	99.5	98.5	96.4	1763
Rural	96.4	82.6	68.6	93.2	89.4	81.2	1351
<b>Education</b>							
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	2
Lower secondary	98.2	89.9	78.8	93.2	92.2	82.8	283
Upper secondary	94.5	79.5	65.4	92.7	89.5	81.1	731
Technical and Professional	98.9	87.8	75.3	98.0	95.1	90.7	1083
Higher	99.5	94.6	86.9	99.5	98.4	97.1	1014
<b>Wealth index quintile</b>							
Poorest	92.4	76.7	57.1	88.6	83.9	74.9	516
Second	98.1	81.3	68.2	94.0	89.1	82.2	578
Middle	98.3	88.3	77.2	99.2	97.4	90.8	682
Fourth	99.7	93.1	85.2	99.8	99.4	97.2	694
Richest	99.9	98.3	91.9	100.0	99.8	99.6	644
<b>Ethnicity of household head</b>							
Kazakh	98.5	89.3	77.5	97.7	95.5	91.6	2088
Russian	98.9	93.9	84.8	99.5	98.8	94.8	492
Other ethnic groups	94.9	78.6	67.7	90.7	87.1	78.2	533
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	1

<sup>1</sup> MICS indicator 10.2 - Use of computers

<sup>2</sup> MICS indicator 10.3 - Use of Internet

(\*) Figures that are based on fewer than 25 unweighted cases.

### **XIII. Subjective well-being**

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Subjective perception by individuals of their incomes, education, health, living environments, etc., plays a significant role in their lives and can impact their perception of well-being, irrespective of objective conditions such as actual income and physical health status<sup>63</sup>. In the MICS, women aged 15-24 years were asked a set of questions to understand how satisfied this group of young women with different areas of their lives, such as their family life, friendship, school, job, income, health, living conditions (living environment, including the neighbourhood and the dwelling), how they are treated by others, and how they look.

Life satisfaction is a measure of an individual's perceived level of well-being. Understanding young women's satisfaction with different areas of their lives can help to gain a comprehensive picture of young women's life situations. A distinction can also be made between life satisfaction and happiness. Happiness is a fleeting emotion that can be affected by numerous factors, including day-to-day factors such as weather, or a recent tragic event in life. It is possible for a person to be satisfied with job, income, family life, friends, and other aspects of life, but still be unhappy, or vice versa. In addition to the set of questions on life satisfaction, the survey also asked questions about happiness and the respondents' perceptions of a better life in the future (in one year).

To assist respondents in answering the set of questions on happiness and life satisfaction they were shown a card with smiling faces and sad faces that corresponded to the response categories (see the Questionnaires in Appendix F) 'very satisfied', 'somewhat satisfied', 'neither satisfied nor unsatisfied', 'somewhat unsatisfied' and 'very unsatisfied'. For the question on happiness, the same principle was used, this time ranging from 'very happy' to 'very unhappy'.

Table SW.1 shows the proportion of young women aged 15-24 years, who are very or somewhat satisfied in selected domains of their lives. Note that for three domains, satisfaction with school, job and income, the denominators are confined to those who are currently attending school, have a job, and have an income. Of the different domains, about 97 percent of young women are the most satisfied with family life (97.1 percent), the way they look (97.2 percent), treatment by others (97.1 percent), health (96.6 percent) and friendship (96.7 percent). 92.4 percent of young women are satisfied with their living environment. Women are least satisfied with their current income (89.0 percent), with 75.0 percent of young women having no income. Only 4.6 percent of young women aged 15-19 and 40.5 percent of women aged 20-24 have an income. Satisfaction with income was expressed by about 89.0 percent of women aged 15-24 years.

Overall, 96.4 percent of women aged 15-24 years are very or somewhat satisfied with school (with 49.6 percent of women this age attending school). 97.5 percent of women aged 20-24 years are very or somewhat satisfied with school (with the percentage attending being 21.5 percent).

Satisfaction with living environment among young women ranges from 78.1 percent in Almaty city to about 99 percent in the Mangistau and Karaganda regions. Less than 90 percent of women living in Astana city and Aktobe region expressed satisfaction with school (87.7 and 89.0 percent, respectively).

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<sup>63</sup> OECD. 2013. *OECD Guidelines on Measuring Subjective Well Being*. OECD. <http://dx.doi.org/10.1787/9789264191655-en>.

There are no notable differences by background characteristics for findings by selected domains of life satisfaction among young women.

**Table SW.1: Domains of life satisfaction**

Percentage of women aged 15-24 years who are very or somewhat satisfied in selected domains of satisfaction, Kazakhstan, 2015

	Percentage of women aged 15-24 years who are very or somewhat satisfied in selected domains:						Percentage of women aged 15-24 years who:			Number of women aged 15-24 years	Percentage of women aged 15-24 years who are very or somewhat satisfied with school	Number of women aged 15-24 years attending school	Percentage of women aged 15-24 years who are very or somewhat satisfied with their job	Number of women aged 15-24 years who have a job	Percentage of women aged 15-24 years who are very or somewhat satisfied with their income	Number of women aged 15-24 years who have an income
	Family life	Friendships	Health	Living environment	Treatment by others	The way they look	Are attending school	Have a job	Have an income							
Total	97.1	96.1	96.6	92.4	97.1	97.2	49.6	23.7	25.0	3114	96.4	1543	97.0	737	89.0	777
<b>Age</b>																
15-19	97.6	97.7	97.4	94.8	97.9	96.9	86.5	4.0	4.6	1346	96.1	1164	97.2	53	89.0	61
15-17	97.1	97.4	97.9	95.4	97.8	96.5	95.3	0.2	0.8	855	95.4	815	(*)	2	(*)	6
18-19	98.3	98.1	96.6	93.8	97.9	97.6	71.1	10.5	11.2	491	97.5	349	97.1	52	93.1	55
20-24	96.8	94.9	96.0	90.6	96.5	97.4	21.5	38.7	40.5	1768	97.5	380	97.0	683	89.0	716
<b>Region</b>																
Akmola	98.2	95.4	95.2	97.7	98.4	97.1	53.3	27.6	30.0	127	92.6	68	(100.0)	35	99.2	38
Aktobe	91.1	97.0	95.6	86.5	95.9	84.6	43.7	23.9	26.5	191	89.0	84	(94.2)	46	(77.1)	51
Almaty oblast	97.4	99.4	98.9	93.1	96.6	96.3	49.9	21.6	21.9	260	98.9	130	(94.5)	56	(77.2)	57
Atyrau	99.8	98.8	99.6	93.2	99.4	98.7	35.7	29.4	30.5	109	100.0	39	100.0	32	97.1	33
West Kazakhstan	98.2	100.0	100.0	96.1	99.5	99.2	44.3	24.7	25.6	135	100.0	60	(100.0)	33	(98.4)	34
Zhambyl	98.9	94.7	96.8	97.3	99.6	98.4	43.7	17.9	17.3	182	98.0	79	(95.3)	33	(89.2)	31
Karaganda	97.7	96.9	93.1	99.4	97.8	95.7	61.9	25.9	35.4	209	96.9	129	(92.8)	54	78.6	74
Kostanai	97.2	98.4	98.4	94.0	98.3	97.4	48.6	27.6	27.6	157	100.0	76	95.1	43	94.4	43
Kyzylorda	97.9	97.2	95.4	90.9	95.5	98.7	45.1	21.2	20.7	106	98.0	48	(94.6)	23	(89.5)	22
Mangistau	99.7	96.4	99.1	99.2	94.9	98.5	44.6	28.5	35.4	127	98.3	56	100.0	36	100.0	45
South Kazakhstan	97.7	91.7	94.8	94.5	94.8	99.1	43.9	14.4	14.4	590	98.5	259	(100.0)	85	(98.3)	85
Pavlodar	94.5	97.7	97.2	94.7	94.9	99.5	52.4	35.5	38.1	116	95.7	61	96.7	41	89.5	44
North Kazakhstan	98.5	95.2	94.3	93.6	99.2	96.2	52.8	30.9	30.9	65	94.2	34	(91.7)	20	(92.1)	20



East Kazakhstan	96.4	96.7	94.3	97.2	97.7	96.8	53.9	27.7	28.3	202	98.0	109	(95.6)	56	(90.0)	57
Astana city	97.3	96.1	98.9	84.4	96.2	97.0	51.6	32.3	31.7	258	87.7	133	99.8	83	89.6	82
Almaty city	96.0	96.8	97.5	78.1	99.8	99.6	63.6	21.6	21.4	281	97.2	179	97.0	61	77.6	60
<b>Area</b>																
Urban	96.8	97.0	96.7	90.9	97.3	97.0	53.6	26.4	28.0	1763	95.5	945	97.2	466	88.4	494
Rural	97.6	95.0	96.5	94.4	96.7	97.4	44.3	20.0	21.0	1351	97.9	599	96.7	271	89.9	283
<b>Marital Status</b>																
Ever married/in union	96.8	93.5	94.7	90.8	96.4	97.8	11.3	26.7	29.6	1120	98.9	127	96.8	299	88.2	331
Never married/in union	97.3	97.6	97.7	93.3	97.5	96.8	71.1	22.0	22.4	1993	96.2	1417	97.2	438	89.5	446
<b>Education</b>																
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2	-	0	-	0	-	0
Lower secondary	95.2	96.3	96.0	95.3	97.8	95.9	68.2	8.6	10.9	283	98.1	193	(*)	24	(81.4)	31
Upper secondary	97.3	92.6	95.0	93.2	95.5	96.5	55.1	6.5	6.5	731	93.8	403	(99.4)	48	(83.5)	47
Technical and Professional	96.9	96.9	96.6	90.9	97.3	97.1	38.3	31.1	32.0	1083	97.6	415	96.0	336	87.4	347
Higher	97.8	97.8	97.9	92.7	97.8	98.1	52.5	32.3	34.8	1014	96.9	532	97.4	328	91.9	353
<b>Wealth index quintile</b>																
Poorest	98.2	95.8	96.8	93.7	97.0	96.2	45.2	17.6	18.3	516	97.7	233	96.5	91	90.8	94
Second	96.5	94.2	94.7	92.1	95.5	97.4	40.9	23.2	24.8	578	96.9	236	95.4	134	88.5	143
Middle	97.3	95.7	97.5	93.6	97.4	98.5	44.1	24.5	25.9	682	97.2	301	99.1	167	87.9	176
Fourth	96.7	96.6	95.4	88.9	97.7	95.7	55.0	25.8	26.9	694	98.0	382	95.8	179	86.9	186
Richest	97.2	97.9	98.6	94.3	97.5	98.1	60.8	25.8	27.5	644	93.2	391	97.9	166	91.6	177
<b>Ethnicity of household head</b>																
Kazakh	97.6	97.5	97.7	92.0	97.5	97.1	52.8	24.0	25.4	2088	96.5	1102	97.3	502	88.8	531
Russian	95.4	96.4	93.9	93.8	97.2	96.5	48.1	28.5	29.4	492	95.3	237	96.5	140	87.2	145
Other ethnic groups	97.2	90.4	94.9	92.7	95.2	98.2	38.4	17.7	19.0	533	97.4	204	96.1	94	92.3	101
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1	(*)	1	(*)	1	(*)	1

( ) Figures that are based on 25–49 unweighted cases.

(\*) Figures that are based on fewer than 25 unweighted cases.

"—" denotes 0 unweighted case in that cell or in the denominator.

In Tables SW.2, the proportion of women aged 15-24 years with overall life satisfaction is shown. “Life satisfaction” is based on a single question, which was asked after the life satisfaction questions on all of the above-mentioned domains, with the exception of the question on satisfaction with income, which was asked later. 96.8 percent of 15-24-year-old women are satisfied with their life overall – the figure ranges from 96.0 percent of women living in the poorest households to 97.8 percent among those living in the richest households, showing there are no notable differences in overall life-satisfaction across wealth index quintiles. The proportion of women satisfied with their life in urban and rural areas is similar (96.9 and 96.6 percent), there are no major differentials by marital status, education level and ethnicity.

As a summary measure, the average life satisfaction score is also calculated and presented in Table SW.2. This indicator is simply calculated by averaging the responses to the question on overall life satisfaction, ranging from very satisfied (1) to very unsatisfied (5) (see questionnaires in Appendix F). Therefore, the *lower* the average score, the **higher** the life satisfaction levels. The average score of women’s life satisfaction is 1.3, which remains stable for many characteristics that clearly indicates the absence of a relationship between the average life satisfaction score and the main characteristics of young women.

The Table SW.2 also shows that 98.5 percent of women aged 15-24 years are very or somewhat happy. There are no differentials for this indicator by wealth, education, marital status, or age groups. The proportion of women that are very or somewhat happy in the age groups 15-19 years and 20-24 years is 98.7 and 98.3 percent, respectively.

<b>Table SW.2: Overall life satisfaction and happiness</b>				
Percentage of women aged 15-24 years who are very or somewhat satisfied with their life overall, the average overall life satisfaction score, and percentage of women aged 15-24 years who are very or somewhat happy, Kazakhstan, 2015				
	Percentage of women with overall life satisfaction <sup>1</sup>	Average life satisfaction score	Percentage of women who are very or somewhat happy <sup>2</sup>	Number of women aged 15-24 years
Total	96.8	1.3	98.5	3114
<b>Age</b>				
15-19	97.0	1.3	98.7	1346
15-17	96.7	1.3	98.8	855
18-19	97.4	1.3	98.4	491
20-24	96.6	1.4	98.3	1768
<b>Region</b>				
Akmola	98.0	1.2	97.3	127
Aktobe	88.1	1.7	97.8	191
Almaty oblast	97.8	1.4	98.9	260
Atyrau	99.8	1.2	99.3	109
West Kazakhstan	99.2	1.4	100.0	135
Zhambyl	97.6	1.3	99.6	182
Karaganda	96.8	1.2	96.8	209
Kostanai	99.1	1.3	98.5	157
Kyzylorda	97.6	1.2	98.5	106
Mangistau	99.2	1.1	99.7	127
South Kazakhstan	95.4	1.3	97.6	590
Pavlodar	98.2	1.3	100.0	116

North Kazakhstan	97.0	1.3	96.5	65
East Kazakhstan	98.2	1.3	98.4	202
Astana city	97.0	1.3	99.1	258
Almaty city	96.6	1.4	99.0	281
<b>Area</b>				
Urban	96.9	1.3	98.4	1763
Rural	96.6	1.3	98.5	1351
<b>Marital Status</b>				
Ever married/in union	96.9	1.3	98.4	1120
Never married/in union	96.7	1.3	98.5	1993
<b>Education</b>				
None/Primary	(*)	(*)	(*)	2
Lower secondary	95.4	1.4	96.8	283
Upper secondary	96.1	1.3	98.7	731
Technical and Professional	96.9	1.3	98.2	1083
Higher	97.5	1.3	99.1	1014
<b>Wealth index quintile</b>				
Poorest	96.0	1.4	97.4	516
Second	96.1	1.4	98.5	578
Middle	97.5	1.3	98.3	682
Fourth	96.3	1.3	98.2	694
Richest	97.8	1.2	99.6	644
<b>Ethnicity of household head</b>				
Kazakh	97.0	1.3	98.7	2088
Russian	95.0	1.4	97.7	492
Other ethnic groups	97.6	1.3	98.4	533
Missing/DK	(*)	(*)	(*)	1
<sup>1</sup> MICS Indicator 11.1 - Life satisfaction				
<sup>2</sup> MICS indicator 11.2 - Happiness				
(*) Figures that are based on fewer than 25 unweighted cases.				

In addition to the series of questions on life satisfaction and happiness, respondents were also asked two simple questions on whether they think their life improved during the last one year, and whether they think their life will get better after one year. The combination of responses and their analysis may contribute to our understanding of perceptions that may exist among young women – despair, hopelessness in the past year, and what hopes they have for the future.

Table SW.3 shows the subjective assessment of the women's ability to change their lives for the better. The proportion of women aged 15-24 years, who believe that life improved during the last one year and expect that it will get better after one year, is 64.9 percent. Regionally, the indicator ranges from 51.5 percent in the Kostanai region to 84.0 percent in the Kyzylorda region. Differences in the hope of life changes for the better are dependent on the wealth index quintile: only 54.0 percent of young women living in households in the poorest wealth quintile believe that their life has improved during the last year, and expect that it will get better after one year, while the corresponding proportion of young women living in households of the richest quintile is 69.7 percent. There are differences in this indicator, depending on the level of education and marital status of women: the more educated young women and those that have experience in marital relationships are more optimistic of the current situation and expectations for the improvement of life in the future. A similar proportion of urban and rural women think that their life has improved during the last year and that their life will get better after one year (65.4 and 64.3 percent, respectively).

**Table SW.3: Perception of a better life**

Percentage of women aged 15-24 years who think that their lives improved during the last one year and those who expect that their lives will get better after one year, Kazakhstan, 2015

	Percentage of women who think that their life			Number of women aged 15-24 years
	Improved during the last one year	Will get better after one year	Both <sup>1</sup>	
Total	66.4	93.5	64.9	3114
<b>Age</b>				
15-19	63.6	92.7	62.2	1346
15-17	60.3	91.6	59.2	855
18-19	69.4	94.7	67.5	491
20-24	68.5	94.1	67.0	1768
<b>Region</b>				
Akmola	79.9	92.8	77.4	127
Aktobe	58.8	97.7	57.0	191
Almaty oblast	55.1	80.6	54.0	260
Atyrau	60.9	98.6	60.9	109
West Kazakhstan	59.5	95.6	59.1	135
Zhambyl	60.5	94.3	59.7	182
Karaganda	78.5	91.8	75.9	209
Kostanai	58.1	84.2	51.5	157
Kyzylorda	84.8	98.8	84.0	106
Mangistau	74.3	99.2	74.3	127
South Kazakhstan	68.5	91.8	66.3	590
Pavlodar	77.8	97.0	77.2	116
North Kazakhstan	71.3	90.8	66.3	65
East Kazakhstan	56.5	94.3	56.5	202
Astana city	78.4	98.1	77.9	258
Almaty city	56.3	99.1	56.3	281
<b>Area</b>				
Urban	67.0	94.5	65.4	1763
Rural	65.7	92.1	64.3	1351
<b>Marital Status</b>				
Ever married/in union	75.3	94.2	73.6	1120
Never married/in union	61.4	93.1	60.1	1993
<b>Education</b>				
None/Primary	(*)	(*)	(*)	2
Lower secondary	55.3	83.3	53.0	283
Upper secondary	60.5	92.4	59.1	731
Technical and Professional	65.1	94.0	63.5	1083
Higher	75.2	96.5	74.1	1014
<b>Wealth index quintile</b>				
Poorest	55.4	92.0	54.0	516
Second	70.3	91.7	68.0	578
Middle	66.4	93.7	65.4	682
Fourth	67.0	95.2	65.7	694
Richest	71.2	94.1	69.7	644
<b>Ethnicity of household head</b>				
Kazakh	68.5	94.3	67.2	2088
Russian	63.7	93.5	61.6	492
Other ethnic groups	60.7	90.1	59.0	533
Missing/DK	(*)	(*)	(*)	1

<sup>1</sup> MICS indicator 11.3 - Perception of a better life

(\*) Figures that are based on fewer than 25 unweighted cases.

## **XIV. Tobacco and Alcohol Use**

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Tobacco products are products made entirely or partly of leaf tobacco as raw material, which are intended to be smoked, sucked, chewed, or snuffed. *Tobacco products* are a set of *smoking and smokeless tobacco products*, similar in consumer properties and method of consumption. They include cigarettes, cigars, cigarillos, smokables, water pipe tobacco, smoking shag tobacco, pipe tobacco, bidis, kretek, sucking tobacco (snus), chewing tobacco, snuff tobacco, naswar and other tobacco products. All contain the highly addictive psychoactive ingredient, nicotine. Tobacco use is one of the main risk factors for a number of chronic diseases, including cancer, lung diseases, and cardiovascular diseases.<sup>64</sup> Smoking among women, particularly young women, has a significant impact on their own health and their children's health, as well as on the course and outcome of pregnancies. Smoking during pregnancy adversely affects foetal development; moreover, the likelihood of miscarriage or foetal prematurity and birth defects or low birth weight is high for women smoking during pregnancy.

Alcohol abuse carries a risk of adverse health and social consequences related to its intoxicating, toxic and dependence-producing properties. In the long-term, alcohol abuse may lead to problems with the cardiovascular system, neurological disorders, liver disease and social problems. In addition to the chronic diseases that may develop in those who drink large amounts of alcohol, alcohol use is also associated with an increased risk of acute health conditions, such as injuries, including from traffic accidents.<sup>65</sup> Alcohol abuse destroys family relationships, affects proper upbringing of children, and thus, in general, has a negative impact on society.<sup>66</sup>

The 2015 Kazakhstan MICS collected information on ever and current use of tobacco and alcohol and intensity of use among women aged 15-49 years. This section presents the main results.

### ***Tobacco Use***

Table TA.1 presents the current and ever use of tobacco products by women aged 15-49 years.

According to the 2015 Kazakhstan MICS results, 26.9 percent of women reported having ever used any tobacco product, with 8.4 percent of women having smoked cigarettes or used tobacco or smokeless tobacco products at any time during the last one month prior to the survey.

Ever use of any tobacco products by women in urban areas is twice as high as in rural areas (34.7 and 16.9 percent, respectively); the share of urban women having smoked at any time during the last one month is more than twice that of women in rural areas (11.4 and 4.7 percent, respectively). The highest percentage of women who ever used any tobacco products live in Almaty city and the North Kazakhstan and Kostanai regions (ranging from 44.1 to 46.1 percent). Less than 10 percent of women used any tobacco products in the Kyzylorda, Mangistau and Aktobe regions (7.8, 8.8 and 9.9 percent, respectively). 18.3 percent of women who have ever used tobacco products have smoked only cigarettes, while 5.7 percent have used cigarettes and other tobacco products. During the last one month 7.1 percent of women smoked only cigarettes out of all tobacco products. Almost one third of women in the 25-29, 30-34 and 35-39 age groups (about 32 percent in each age group) have ever used

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<sup>64</sup> WHO. <http://www.who.int/topics/tobacco/en/>.

<sup>65</sup> WHO. [http://www.who.int/topics/alcohol\\_drinking/en/](http://www.who.int/topics/alcohol_drinking/en/).

<sup>66</sup> WHO. <http://www.who.int/mediacentre/factsheets/fs349/en/>.

any tobacco products. And the same women age groups and women aged 40-44 years prevail in the use of tobacco products in the last one month (about 9-11 percent) (Figure TA.1). The youngest age group of 15-19-year-old women was the least likely to use tobacco products in the last one month or ever in their lifetime (2.3 and 8.4 percent, respectively). The proportion of women living in households with at least one child under age of 5 years and having ever used tobacco products is lower than in households without children under 5 (22.0 and 30.2 percent, respectively), and among those that smoked in the last one month the share is lower in both cases (5.0 and 10.8 percent, respectively).

The share of women who have ever used tobacco products from households in the richest wealth index quintile is twice higher than among women living in households of the poorest wealth index quintile (37.3 and 17.1 percent, respectively).

More than half of women living in households where the household head is of Russian ethnicity (56.8 percent) have ever used a tobacco product, while about one-fifth (23.4 percent) have used a tobacco product in the last one month.

73.0 percent of women aged 15-49 years reported that they have never smoked and did not use any kind of tobacco product, while in rural areas the share of such women is much higher than in urban areas (83.1 and 65.2 percent, respectively).

**Table TA.1: Current and ever use of tobacco**

Percentage of women aged 15-49 years by pattern of use of tobacco, Kazakhstan, 2015

	Never smoked cigarettes or used other tobacco products	Ever users				Users of tobacco products at any time during the last one month				Number of women aged 15-49 years
		Only cigarettes	Cigarettes and other tobacco products	Only other tobacco products	Any tobacco product	Only cigarettes	Cigarettes and other tobacco products	Only other tobacco products	Any tobacco product <sup>1</sup>	
<b>Total</b>	73.0	18.3	5.7	2.8	26.9	7.1	0.5	0.8	8.4	12670
<b>Age</b>										
15-19	91.5	4.3	1.7	2.5	8.4	0.9	0.2	1.2	2.3	1346
15-17	94.6	3.2	0.8	1.3	5.3	0.4	0.0	0.5	0.9	855
18-19	86.2	6.2	3.3	4.4	13.8	1.7	0.4	2.5	4.7	491
20-24	75.1	11.3	7.8	5.7	24.8	5.1	0.9	2.1	8.1	1768
25-29	67.8	18.4	8.8	4.9	32.1	6.8	0.9	1.5	9.2	2161
30-34	66.9	22.4	8.3	2.1	32.8	8.1	0.7	0.5	9.2	1998
35-39	67.6	25.2	5.8	1.4	32.4	10.2	0.7	0.1	11.0	1870
40-44	70.8	24.0	3.1	2.1	29.1	9.0	0.3	0.2	9.5	1862
45-49	78.4	18.3	2.6	0.7	21.5	7.5	0.1	0.2	7.8	1665
<b>Region</b>										
Akmola	61.8	29.0	6.3	2.8	38.2	11.9	0.0	0.1	12.0	624
Aktobe	90.1	9.2	0.5	0.2	9.9	1.4	0.0	0.0	1.5	806
Almaty oblast	63.8	26.8	7.6	1.7	36.1	11.1	0.8	1.0	12.9	1042
Atyrau	89.5	8.3	1.7	0.5	10.5	1.9	0.1	0.0	2.0	402
West Kazakhstan	87.1	9.5	1.8	1.5	12.8	4.6	0.1	0.1	4.8	572
Zhambyl	81.7	13.7	3.1	1.4	18.3	5.0	0.0	0.6	5.6	778
Karaganda	62.9	25.2	7.3	4.5	37.1	12.0	0.3	0.3	12.6	1035
Kostanai	53.8	33.4	9.2	3.5	46.1	10.5	0.4	2.1	13.0	675
Kyzylorda	92.0	5.4	1.0	1.4	7.8	1.1	0.0	0.4	1.5	399
Mangistau	91.2	3.6	2.3	2.9	8.8	2.0	0.2	0.8	2.9	408
South Kazakhstan	88.6	9.5	0.8	0.9	11.1	2.1	0.1	0.1	2.3	2079
Pavlodar	62.2	27.6	7.7	2.5	37.8	11.4	0.3	1.6	13.3	517
North Kazakhstan	55.1	32.9	9.2	2.8	44.8	11.8	0.3	0.6	12.7	351

East Kazakhstan	66.5	20.9	8.0	4.7	33.5	8.4	0.2	1.1	9.8	880
Astana city	66.1	18.4	9.3	6.2	33.8	5.1	0.6	2.1	7.8	1086
Almaty city	55.9	23.0	14.8	6.2	44.1	13.7	4.0	2.2	19.9	1015
<b>Area</b>										
Urban	65.2	22.2	8.4	4.0	34.7	9.2	0.8	1.4	11.4	7140
Rural	83.1	13.3	2.3	1.3	16.9	4.3	0.2	0.1	4.7	5530
<b>Education</b>										
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	16
Lower secondary	74.9	21.4	2.9	0.6	25.0	13.2	0.4	0.6	14.3	778
Upper secondary	81.6	14.7	2.6	1.0	18.4	6.5	0.2	0.2	7.0	3140
Technical and Professional	70.0	21.9	6.0	2.2	30.0	8.3	0.7	0.6	9.6	3990
Higher	69.5	17.3	8.1	4.9	30.4	5.4	0.7	1.4	7.5	4745
<b>Under-5s in the same household</b>										
At least one	77.9	15.3	4.4	2.3	22.0	4.5	0.2	0.3	5.0	5128
None	69.7	20.4	6.6	3.2	30.2	8.8	0.8	1.2	10.8	7542
<b>Wealth index quintile</b>										
Poorest	82.8	14.9	1.7	0.5	17.1	5.5	0.1	0.1	5.7	2276
Second	84.5	12.3	1.8	1.2	15.3	4.1	0.1	0.1	4.2	2334
Middle	75.8	17.8	4.4	1.9	24.2	7.0	0.3	0.6	7.8	2464
Fourth	63.4	22.5	9.6	4.5	36.6	10.0	1.1	1.6	12.6	2708
Richest	62.7	22.5	9.6	5.2	37.3	8.1	1.0	1.6	10.6	2888
<b>Ethnicity of household head</b>										
Kazakh	81.2	12.5	3.5	2.7	18.7	3.0	0.3	0.8	4.0	8149
Russian	43.2	39.3	13.4	4.1	56.8	20.7	1.5	1.2	23.4	2506
Other ethnic groups	76.9	15.9	5.3	1.9	23.1	6.6	0.4	0.6	7.6	2014
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1

<sup>1</sup> MICS indicator 12.1 - Tobacco use

(\*) Figures that are based on fewer than 25 unweighted cases.



**Figure TA.1: Ever and current smokers, Kazakhstan, 2015**

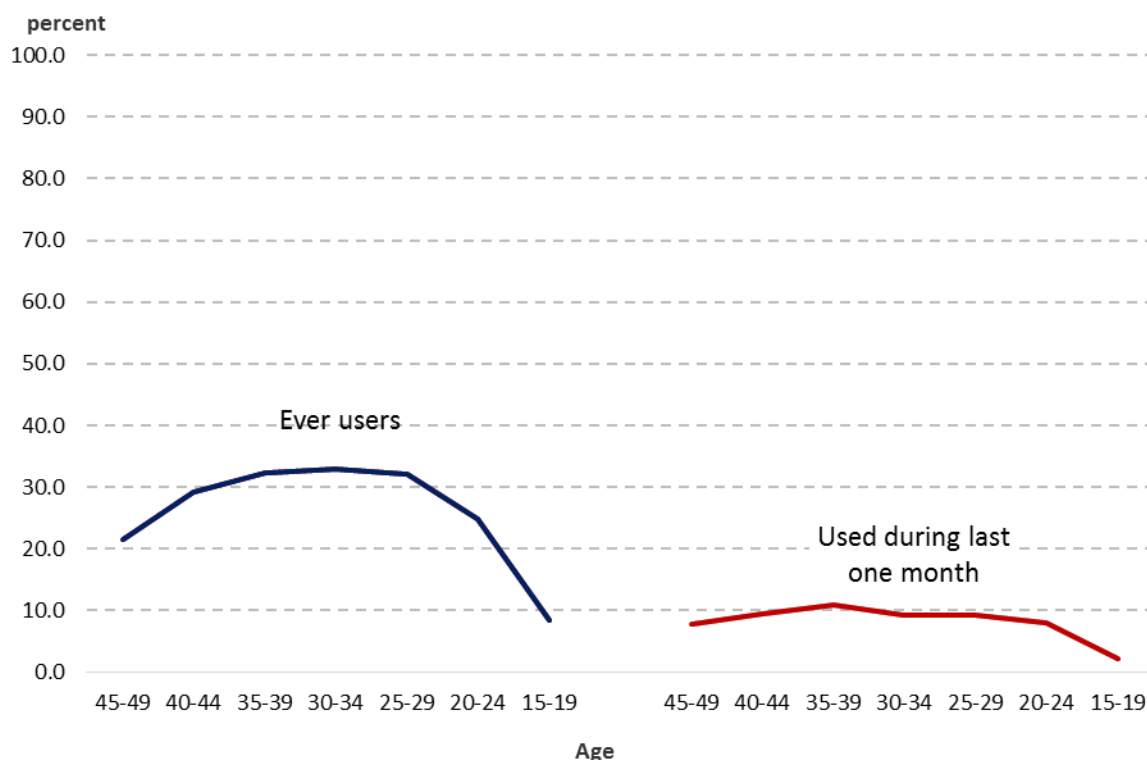


Table TA.2 shows the percentage of women aged 15-49 who smoked a whole cigarette for the first time before the age of 15 years, and the percentage of women by number of smoked cigarettes. The survey results show that in Kazakhstan, the prevalence of smoking before reaching 15 years of age among women is very low: only 0.9 percent of women smoked their first cigarette before 15 years of age. Young women (before 15 years of age) with lower levels of education and those from wealthier households more often start smoking early.

The frequency of smoking among women is characterized by the fact that someone limits herself to 1-4- cigarettes a day, and some women smoked 10-20 or more cigarettes in the last 24 hours. 28.2 percent of women smoked in the last 24 hours less than 5 cigarettes, and 29.0 percent – 5-9 cigarettes. Among women who smoked cigarettes during the last 24 hours, 10.5 percent smoked 20 cigarettes or more during this time (at least a standard pack of cigarettes). The percentage of women who smoked 10-19 cigarettes in the last 24 hours is 32.2 percent. Women with lower education levels are more likely to have smoked 20 or more cigarettes in the last 24 hours than women with higher education (15.8 percent and 8.0 percent, respectively).

**Table TA.2: Age at first use of cigarettes and frequency of use**

Percentage of women who smoked a whole cigarette before age 15 <sup>1</sup>		Number of women aged 15-49 years		Number of cigarettes in the last 24 hours					Number of women aged 15-49 years who are current cigarette smokers
Less than 5	5-9	10-19	20+	DK/Missing	Total				

Total	0.9	12670	28.2	29.0	32.2	10.5	0.2	100.0	964
<b>Age</b>									
15-19	1.0	1346	(*)	(*)	(*)	(*)	(*)	100.0	14
15-17	1.0	855	(*)	(*)	(*)	(*)	(*)	100.0	3
18-19	0.9	491	(*)	(*)	(*)	(*)	(*)	100.0	11
20-24	0.9	1768	32.4	28.9	28.9	9.7	0.0	100.0	105
25-29	1.5	2161	35.7	29.1	28.7	5.7	0.8	100.0	166
30-34	1.1	1998	21.1	34.4	36.1	8.4	0.0	100.0	175
35-39	0.9	1870	25.2	27.3	32.7	14.8	0.0	100.0	204
40-44	0.4	1862	29.3	25.1	33.9	11.6	0.0	100.0	174
45-49	0.1	1665	26.7	29.7	32.7	10.6	0.3	100.0	127
<b>Region</b>									
Akmola	2.2	624	49.3	24.4	18.2	8.1	0.0	100.0	74
Aktobe	0.2	806	(*)	(*)	(*)	(*)	(*)	100.0	11
Almaty oblast	0.4	1042	20.5	32.5	39.4	7.5	0.0	100.0	123
Atyrau	0.5	402	(*)	(*)	(*)	(*)	(*)	100.0	8
West Kazakhstan	0.0	572	(23.0)	(34.0)	(28.1)	(14.9)	(0.0)	100.0	27
Zhambyl	0.4	778	(52.6)	(12.7)	(28.8)	(5.9)	(0.0)	100.0	39
Karaganda	0.8	1035	40.2	22.3	19.0	17.5	1.0	100.0	127
Kostanai	2.6	675	28.0	42.7	26.9	2.3	0.0	100.0	74
Kyzylorda	0.2	399	(*)	(*)	(*)	(*)	(*)	100.0	5
Mangistau	0.1	408	(*)	(*)	(*)	(*)	(*)	100.0	9
South Kazakhstan	0.1	2079	(31.9)	(20.6)	(44.5)	(2.9)	(0.0)	100.0	47
Pavlodar	1.8	517	21.7	30.8	42.9	4.5	0.0	100.0	60
North Kazakhstan	1.7	351	30.7	32.9	20.8	15.6	0.0	100.0	42
East Kazakhstan	2.5	880	20.1	31.9	35.2	12.8	0.0	100.0	76
Astana city	0.7	1086	19.8	30.8	38.0	11.4	0.0	100.0	62
Almaty city	1.1	1015	16.1	29.3	41.0	13.5	0.0	100.0	180
<b>Area</b>									
Urban	1.2	7140	26.4	28.1	34.8	10.4	0.2	100.0	714
Rural	0.5	5530	33.1	31.3	24.9	10.6	0.0	100.0	250
<b>Education</b>									
None/Primary	(*)	16	-	-	-	-	-	0.0	0
Lower secondary	2.7	778	27.3	22.3	34.7	15.8	0.0	100.0	106
Upper secondary	0.9	3140	25.5	24.4	38.2	11.6	0.2	100.0	211
Technical and Professional	0.9	3990	27.3	32.9	29.3	10.2	0.4	100.0	359
Higher	0.5	4745	31.5	29.8	30.7	8.0	0.0	100.0	287
<b>Under-5s in the same household</b>									
At least one	0.8	5128	27.7	32.1	32.3	7.9	0.0	100.0	243
None	0.9	7542	28.3	27.9	32.2	11.3	0.2	100.0	720
<b>Wealth index quintile</b>									
Poorest	0.6	2276	37.8	22.3	27.4	12.5	0.0	100.0	128
Second	0.5	2334	35.3	29.2	23.8	11.3	0.4	100.0	97
Middle	0.8	2464	23.3	31.6	32.2	13.0	0.0	100.0	179
Fourth	1.2	2708	24.7	32.5	31.6	11.2	0.0	100.0	299
Richest	1.1	2888	28.1	26.3	38.5	6.6	0.5	100.0	261
<b>Ethnicity of household head</b>									
Kazakh	0.3	8149	42.0	29.7	22.6	5.6	0.2	100.0	266
Russian	2.5	2506	20.6	30.9	37.3	11.0	0.2	100.0	556
Other ethnic groups	1.2	2014	31.6	20.0	30.8	17.6	0.0	100.0	141
Missing/DK	(*)	1	(*)	(*)	(*)	(*)	(*)	100.0	1
<sup>1</sup> MICS indicator 12.2 - Smoking before age 15									
() Figures that are based on 25–49 unweighted cases.									
(*) Figures that are based on fewer than 25 unweighted cases.									
"–" denotes 0 unweighted case in that cell or in the denominator.									

## Alcohol Use

Table TA.3 shows the use of alcohol among women aged 15-49.

In Kazakhstan, at least one in four women (25.1 percent) had at least one alcoholic drink<sup>67</sup> at any time during the last one month. Only 0.5 percent of women in the same age group had at least one alcoholic drink before the age of 15, while 33.7 percent of women have never had an alcoholic drink.

Women aged 30 to 49 years are more likely to have had at least one alcoholic drink at any time during the last one month (ranging from 30 to 35 percent), compared with younger women (ranging from 3.1 percent for women aged 15-19 years to 21.7 percent for those aged 25-29 years). Approximately 45 percent of women in Almaty city, as well as in the Kostanai and North Kazakhstan regions had at least one alcohol drink in the last one month, which is more than 7 times higher than for women of the Mangistau region (3.5 percent) and 3 times for women of the Kyzylorda, Atyrau and Aktobe regions (ranging from 11.7 to 13.5 percent). The share of urban women who used alcohol in the last one month prevails over rural women (28.8 and 20.4 percent, respectively).

<b>Table TA.3: Use of alcohol</b>				
Percentage of women aged 15-49 years who have never had an alcoholic drink, percentage who first had an alcoholic drink before age 15, and percentage of women who have had at least one alcoholic drink at any time during the last one month, Kazakhstan, 2015				
	Percentage of women who:			Number of women aged 15-49 years
	Never had an alcoholic drink	Had at least one alcoholic drink before age 15 <sup>1</sup>	Had at least one alcoholic drink at any time during the last one month <sup>2</sup>	
Total	33.7	0.5	25.1	12670
<b>Age</b>				
15-19	83.8	1.1	3.1	1346
15-17	91.2	1.4	0.8	855
18-19	71.0	0.5	7.2	491
20-24	46.8	0.6	13.6	1768
25-29	30.4	0.7	21.7	2161
30-34	24.6	0.5	30.0	1998
35-39	22.8	0.3	31.3	1870
40-44	19.6	0.2	35.7	1862
45-49	22.3	0.2	34.7	1665
<b>Region</b>				
Akmola	23.1	1.4	31.9	624
Aktobe	53.1	0.1	13.5	806
Almaty oblast	33.5	0.0	26.2	1042
Atyrau	49.2	0.1	12.0	402
West Kazakhstan	37.6	0.1	19.8	572
Zhambyl	38.9	0.3	20.9	778
Karaganda	27.7	0.8	27.1	1035
Kostanai	13.4	1.0	44.6	675
Kyzylorda	43.5	0.1	11.7	399
Mangistau	71.2	0.3	5.7	408
South Kazakhstan	44.0	0.0	18.7	2079

<sup>67</sup> Standard dose/drink contains about 10 grams of pure alcohol, but this value may vary in different countries. In MICS Questionnaire, one drink of alcohol refers to one can or bottle of beer, a glass of wine or a glass of cognac, vodka, whiskey or rum.

Pavlodar	26.7	0.8	22.5	517
North Kazakhstan	12.5	1.9	45.4	351
East Kazakhstan	26.0	1.4	34.3	880
Astana city	26.8	0.6	18.9	1086
Almaty city	16.9	0.4	44.6	1015
<b>Area</b>				
Urban	26.7	0.6	28.8	7140
Rural	42.7	0.3	20.4	5530
<b>Education</b>				
None/Primary	(*)	(*)	(*)	16
Lower secondary	48.2	1.3	22.3	778
Upper secondary	42.0	0.5	21.0	3140
Technical and Professional	32.0	0.5	27.5	3990
Higher	27.0	0.4	26.3	4745
<b>Wealth index quintile</b>				
Poorest	39.6	0.4	22.9	2276
Second	43.2	0.3	18.2	2334
Middle	38.5	0.6	23.4	2464
Fourth	26.6	0.4	30.0	2708
Richest	23.8	0.7	29.4	2888
<b>Ethnicity of household head</b>				
Kazakh	38.9	0.1	19.8	8149
Russian	12.4	1.6	43.8	2506
Other ethnic groups	38.9	0.7	23.5	2014
Missing/DK	(*)	(*)	(*)	1
<sup>1</sup> MICS indicator 12.4 - Use of alcohol before age 15				
<sup>2</sup> MICS indicator 12.3 - Use of alcohol				
(*) Figures that are based on fewer than 25 unweighted cases.				

## Appendix A. Sample Design

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The major features of the sample design for the 2015 Kazakhstan MICS are described in this appendix. Sample design features include target sample size, sample allocation, sampling frame and listing, choice of domains, sampling stages, stratification, and the calculation of sample weights.

The primary objective of the sample design for the 2015 Kazakhstan MICS was to produce statistically reliable estimates of most indicators, at the national level, for urban and rural areas, and for 16 administrative districts (14 regions and 2 cities) of the country: Akmola, Aktobe, Almaty oblast, Atyrau, West Kazakhstan, Zhambyl, Karaganda, Kostanai, Kyzylorda, Mangistau, South Kazakhstan, Pavlodar, North Kazakhstan and East Kazakhstan regions, and two large cities Astana and Almaty. Urban and rural areas in each of the 14 regions and 2 large cities of republican significance – Astana and Almaty – were defined as the sampling strata.

A two-stage, stratified cluster sampling approach was used for the selection of the survey sample.

### **Sample Size and Sample Allocation**

In determining the sample size for the 2015 Kazakhstan MICS, first, the sample design for the 2010-2011 MICS and the resulting level of precision was examined. The geographic domains of estimation were the same as those for the 2010-2011 MICS. In estimating the sample size for the 2015 MICS, the percent of currently married/in union women that use contraceptives was chosen as the key indicator.

The following formula was used to estimate the required sample size for this indicator at the regional level:

$$n = \frac{[4(r)(1-r)(deff)]}{[(0.12r)^2(pb)(AveSize)(RR)]}$$

where

- n is the required sample size, expressed as number of households
- 4 is a factor to achieve the 95 percent level of confidence
- r is the proportion of women using contraceptives by region
- RR is the expected response rate
- deff is the shortened symbol for design effect
- 0.12r is the margin of error to be tolerated for a region (corresponding to a maximum relative margin of error of 12 percent)
- pb is the proportion of the total population upon which the indicator, r, is based
- AveSize is the average number of persons per household

It should be noted that the values of the parameters can vary by region. The recommended value for the relative margin of error is generally 0.12 (12 percent); a minimum value of 0.05 to a maximum value of 0.12 was used in this formula for each region. The value of deff (design effect) was based on estimates from previous surveys, *r* (percentage of women who currently use contraceptives) was taken for each region between 0.35 to 0.73, and *AveSize* (average household size) was taken as 2.8 to 4.6 persons per household (based on the 2009 Population Census). Using this formula, the required sample size for each region, as rounded numbers, varied between 880 to 1,280 households, resulting in a total sample size of 16,800 households (Table SD.1).

The number of households selected per cluster for the Kazakhstan MICS5 was determined as 20 households, based on a number of considerations, including the design effect, the budget available, and the time that would be needed for 1 team to complete one cluster. This resulted in a total sample of 840 clusters and 16,800 households. Within each region, the sample was allocated to the urban and rural areas proportionally to the number of households in the frame for each stratum. Table SD1 shows the allocation of the clusters (sample segments) and households by region, urban and rural stratum.

<b>Table SD1: Sample Allocation of Clusters and Households by Region/Urban-Rural for the 2015 Kazakhstan MICS</b>						
Regions	No of Clusters (PSUs)			No of Households		
	Urban	Rural	Total	Urban	Rural	Total
<b>Kazakhstan</b>	<b>538</b>	<b>302</b>	<b>840</b>	<b>10760</b>	<b>6040</b>	<b>16800</b>
Akmola	34	30	64	680	600	1280
Aktobe	30	14	44	600	280	880
Almaty oblast	14	32	46	280	640	920
Atyrau	28	16	44	560	320	880
West Kazakhstan	28	20	48	560	400	960
Zhambyl	24	22	46	480	440	920
Karaganda	46	10	56	920	200	1120
Kostanai	38	26	64	760	520	1280
Kyzylorda	20	24	44	400	480	880
Mangistau	28	16	44	560	320	880
South Kazakhstan	24	20	44	480	400	880
Pavlodar	44	16	60	880	320	1200
North Kazakhstan	30	34	64	600	680	1280
East Kazakhstan	38	22	60	760	440	1200
Astana City	48		48	960		960
Almaty City	64		64	1280		1280

### ***Sampling Frame and Selection of Clusters***

The sampling frame for a national household survey such as the MICS is generally based on the information and cartographic materials from the most recent Population Census. The latest census in Kazakhstan was conducted by the Statistics Committee (former Agency of Statistics of the Republic of Kazakhstan) in March 2009. For that purpose, the territory of Kazakhstan was divided into 1,672 Census departments, 13,419 Census sectors (Instructor areas) and 55,540 Census enumeration areas. Each Census Sector covered on average of 1,200 persons, and each Census Enumeration Area covered on average 300 persons.

Since a frame of census enumeration areas is available in Kazakhstan, it was decided to consider the census enumeration areas as PSUs for the 2015 Kazakhstan MICS. A stratified, two-stage sample design was used for the 2015 Kazakhstan MICS.

In order to increase the efficiency of the sample design for the 2015 Kazakhstan MICS, the sampling frame was divided into strata that were as homogeneous as possible. The strata were consistent with above mentioned geographic disaggregation by 14 regions by urban/rural divisions in addition to two large cities of republican significance, Almaty and Astana.

At the first sampling stage, the enumeration areas were selected systematically with probability proportional to size (PPS) within each of 30 strata (16 urban strata in 14 regions and 2 large cities – Almaty and Astana, and 14 rural strata) from the ordered list of enumeration areas in the sampling frame. The measures of size for the enumeration areas were based on the number of households identified in the sampling frame of the 2009 Census. The census enumeration areas within each stratum were ordered geographically, in order to provide implicit geographic stratification and ensure a proportional distribution of the sample to all parts of the region.

### ***Listing Activities***

Since the sampling frame (the 2009 Census) was not up-to-date, a new listing operation of households was conducted in all sample enumeration areas prior to the selection of households.

In order to update household lists in the sample census enumeration areas for the 2015 MICS, it was decided to perform a mapping and listing activity to draw maps and to produce household lists as one of the most important stages of the 2015 Kazakhstan MICS preparatory activities.

The Statistics Committee formed 59 listing teams comprised of 2 persons each (that is, a total of 118 persons) from the staff members of the territorial Statistics Departments. Each team consisted of 1 “lister” and 1 “mapper”. In each region, the numbers of listing teams and days were differentiated depending on the number of clusters and the number of households in one cluster, as well as the distances between the settlements (Table SD.2).

There are 840 clusters in the sample; on average, each team covered 14.2 clusters for the entire listing period. The supervisors from the Statistics Departments (16 persons) coordinated the team work in each region.

**Table SD.2: Number of teams and days for listing implementation by region**

	Number of PSU (EA)	Number of listing teams	Number of team members	Average number of days	Number of sample HHs (sample size)
<b>Kazakhstan</b>	<b>840</b>	<b>59</b>	<b>118</b>	<b>20.7</b>	<b>16800</b>
Akmola	64	5	10	20	1280
Aktobe	44	3	6	21	880
Almaty oblast	46	3	6	21	920
Atyrau	44	3	6	21	880
West Kazakhstan	48	3	6	21	960
Zhambyl	46	3	6	21	920
Karaganda	56	4	8	21	1120
Kostanai	64	5	10	20	1280
Kyzylorda	44	3	6	21	880
Mangistau	44	3	6	21	880
South Kazakhstan	44	4	8	21	880
Pavlodar	60	4	8	21	1200
North Kazakhstan	64	5	10	20	1280
East Kazakhstan	60	4	8	21	1200
Astana City	48	3	6	20	960
Almaty City	64	4	8	20	1280

The standard UNICEF Listing Guidelines and listing forms for MICS 5 were adapted for the 2015 Kazakhstan MICS and printed in the Russian and Kazakh languages.

The listing training seminar took place from the 7<sup>th</sup> to 10<sup>th</sup> of July 2015. The staff of the Statistics Committee and UNICEF Country Office facilitated this seminar as well as invited consultants from the UNICEF Regional Office and UNICEF Kyrgyzstan.

From 13 July to 4 August 2015, in accordance with the work schedule developed by the Statistics Committee, the work of mapping and listing in the sample clusters for the 2015 MICS was carried out.

Supervisors prepared the best routes of teams' travel in the clusters and performed the proper oversight and monitoring of the quality of work of each team in the region. Each team was provided with cartographic materials from the 2009 Census, and if necessary, with forms #3 "Composition of instructor and enumeration areas" of the 2009 Census organizational plans, which were used by listers to find the boundaries of each enumeration area (cluster). When the boundaries of enumeration areas were not clear, the supervisors contacted local authorities and solved the problems with them. Each listing team visited each household in the enumeration area and entered it into the "Household Listing Form", noting the address of the structure location, type of structure (residential or non-residential), and other necessary attributes.

During the listing in big cities, such as Astana and Almaty cities, and in some administrative centres, listers informed that many new houses and buildings appeared in the enumeration areas, which were not in the 2009 Census organizational plan. In such enumeration areas sometimes there were more than 300 households. Therefore, according to the Listing manual, segmentation was performed for such enumeration areas.



During the listing, some cases were identified when the population of entire micro-districts or villages was relocated due to the government policy: the population was resettled from the areas with hostile environmental conditions, as well as from areas with low economic development capacity to communities with a higher potential for development; some buildings were demolished because of their disrepair. In these clusters, if the number of households did not reach 25, the teams had to do additional listing in a neighbouring enumeration area within the same instructor area and merge them into one cluster.

Supervisors also collected all the listing information and scanned the original listing forms, including the listing sketch map, for sending to the Statistics Committee with a copy to the RSE “Information and Computing Centre”, and provided feedback to the central office.

Out of 840 clusters which were liable for verification, the cluster #338, located in Karaganda region, was inaccessible due to the fact that this territory is under a long-term lease to the Russian Federation and thus under its jurisdiction.

Thus, out of the 840 clusters in the 2015 MICS sample, 839 clusters were subject to surveying.

Segmentation was conducted in 18 large sample enumeration areas. After each of these enumeration areas was divided into smaller segments, one segment was selected with PPS. In general, throughout the country, out of 7,255 households that were counted before segmentation, 2,087 households were included in the lists of households in the selected segments (Table SD.3).

<b>Table SD.3: Number of segmented clusters by region</b>					
Region	Region code	Cluster number	Number of HHs before segmentation	Number of HHs in selected segment	TOTAL
Kazakhstan	00	x	7255	2087	18
Atyrau	04	181	754	180	1
Zhambyl	06	258	202	72	1
South Kazakhstan	11	533	376	56	1
North Kazakhstan	13	610	277	89	1
East Kazakhstan	14	671	258	178	1
Astana city	15	x	3860	1018	8
		729	656	160	
		740	417	83	
		755	609	107	
		756	267	172	
		757	268	100	
		765	858	170	
		766	498	113	
		769	287	113	
Almaty city	16		1528	494	5
		800	417	112	
		808	227	113	
		825	291	77	
		831	288	52	
		835	305	140	

### ***Selection of Households***

The listing teams prepared lists of households in the field for each enumeration area. The households were then sequentially numbered from 1 to n (the total number of households in each enumeration

area or segment) at the regional level Statistics Departments, where the selection of 20 households in each enumeration area was carried out using random systematic selection procedures.

### **Calculation of Sample Weights**

In order for estimates from the sample of the 2015 Kazakhstan MICS to be representative of the population, it is necessary to multiply the data by a sampling weight, or expansion factor. The basic weight for each sample household would be equal to the inverse of its probability of selection (calculated by multiplying the probabilities at each sampling stage). A household weight was attached to each sample household record in the data files. In addition, woman weights and under-5 children weights were also calculated.

The 2015 Kazakhstan MICS sample is not self-weighting. A disproportionate number of households was allocated to each region because of the variability in their size, so different sampling fractions were used for each region. For this reason, sample weights were calculated and used in the subsequent analyses of the survey data.

The major component of the weight is the reciprocal of the sampling fraction employed in selecting the number of sample households in that particular sampling stratum ( $h$ ) and PSU ( $i$ ):

$$W_{hi} = \frac{1}{f_{hi}}$$

The term  $f_{hi}$ , the sampling fraction for the sample households in the  $i$ -th sample PSU in the  $h$ -th stratum, is the product of probabilities of selection at every stage in each sampling stratum:

$$f_{hi} = p_{1hi} \times p_{2hi} \times p_{3hi}$$

where  $p_{shi}$  is the probability of selection of the sampling unit at stage  $s$  for the  $i$ -th sample PSU in the  $h$ -th sampling stratum. Based on the sample design, these probabilities were calculated as follows:

$$p_{1hi} = \frac{n_h \times M_{hi}}{M_h},$$

$n_h$  = number of sample PSUs selected in stratum  $h$

$M_{hi}$  = number of households in the 2009 Census frame for the  $i$ -th sample PSU in stratum  $h$

$M_h$  = total number of households in the 2009 Census frame for stratum  $h$

$p_{2hi}$  = proportion of the PSU listed the  $i$ -th sample PSU in stratum  $h$  (in the case of PSUs that were segmented); for non-segmented PSUs,  $p_{2hi} = 1$

$$p_{3hi} = \frac{20}{M'_{hi}}$$

$M'_{hi}$  = number of households listed in the  $i$ -th sample PSU in stratum  $h$

Since the number of households in each enumeration area (PSU) from the 2009 Census frame used for the first stage selection and the number of households in the enumeration area identified in the updated listing are generally different, individual probabilities of selection for households in each sample enumeration area (cluster) were calculated.

A final component in the calculation of sample weights takes into account the level of non-response for the household and individual interviews. The adjustment for household non-response in each stratum is equal to:

$$\frac{1}{RR_h}$$

where  $RR_h$  is the response rate for the sample households in stratum  $h$ , defined as the proportion of the number of interviewed households in stratum  $h$  out of the number of selected households found to be occupied during the fieldwork in stratum  $h$ .

Similarly, adjustment for non-response at the individual level (women and under-5 children) for each stratum is equal to:

$$\frac{1}{RR_h}$$

where  $RR_h$  is the response rate for the individual questionnaires in stratum  $h$ , defined as the proportion of eligible individuals (women and under-5 children) in the sample households in stratum  $h$  who were successfully interviewed.

After the completion of fieldwork, response rates were calculated for each sampling stratum. These were used to adjust the sample weights calculated for each cluster. Response rates in the 2015 Kazakhstan MICS are shown in Table HH.1 in this report.

The non-response adjustment factors for the individual women and under-5 questionnaires were applied to the adjusted household weights. The numbers of eligible women and under-5 children were obtained from the roster of household members in the Household Questionnaire for households where interviews were completed.

The design weights for the households were calculated by multiplying the inverse of the probabilities of selection by the non-response adjustment factor for each enumeration area. These weights were then standardized (or normalized), one purpose of which is to make the weighted sum of the interviewed observation units equal to the total sample size at the national level. Normalization is achieved by dividing the full sample weights (adjusted for non-response) by the average of these weights at the national level. This is performed by multiplying the sample weights by a constant factor equal to the unweighted number of households at the national level divided by the weighted total number of households (using the full sample weights adjusted for non-response). A similar standardization procedure was followed in obtaining standardized weights for the individual women and under-5 questionnaires. Adjusted (normalized) weights for households varied between 0.078982831 and 15.69742236 in the 839 sample enumeration areas (clusters).

The standardized sample weights were appended to all data sets, and analyses were performed by weighting households, women and under-5 children with these sample weights.

## **Appendix B. List of Personnel Involved in the Survey**

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### **MANAGERIAL PERSONNEL**

Nurbolat Aidapkelov – Chairman of the Statistics Committee of the Ministry of National Economy of the Republic of Kazakhstan (MNE RK) since 26 May 2016;

Alikhan Smailov – Chairman of the Statistics Committee of the MNE RK until 11 December 2015;

Aidyn Ashuyev – Deputy Chairman of the Statistics Committee of the MNE RK until 31 December 2015;

Bakhytbek Imanaliev – Deputy Chairman of the Statistics Committee of the MNE RK until 26 May 2016;

Kairat Orunkhanov – Deputy Chairman of the Statistics Committee of the MNE RK since 25 December 2015;

Gulmira Karaulova – Head of Division of social and demographic statistics of the Statistics Committee of the MNE RK.

### **PERSONNEL OF THE STATISTICS COMMITTEE OF THE MNE RK**

Zhuldyz Aidarbekova – Division of social and demographic statistics;

Zhanar Sabirova – Division of social and demographic statistics;

Gulzhan Daurenbekova – Division of social and demographic statistics;

Gulmira Makhanbetova – Division of social and demographic statistics;

Bolat Akylov – Division of social and demographic statistics;

Erbolat Mussabek – Division of social and demographic statistics;

Zhandos Kozbanov – Division of registers.

### **INTERNATIONAL ORGANIZATIONS**

Yuri Oksamitnyi – UNICEF Representative in the Republic of Kazakhstan;

Attila Hancioglu – Global MICS Coordinator, UNICEF Headquarters, New York;

Ivana Bjelic – Statistics Specialist, UNICEF Headquarters, New York;

Turgay Unalan – Statistics Specialist (Household Surveys), UNICEF Headquarters, New York;

Yadigar Coskun – Statistics and Monitoring Specialist, UNICEF Headquarters, New York;

Siraj Mahmudlu – M&E Specialist/Regional MICS Coordinator, UNICEF Regional Office for CEE/CIS;

Teuta Halimi – Monitoring Officer, UNICEF Regional Office for CEE/CIS;

Fiachra McAsey – UNICEF Deputy Representative in the Republic of Kazakhstan;

Zhanar Sagimbayeva – UNICEF MICS focal point, UNICEF Child rights monitoring specialist in the Republic of Kazakhstan;

Raimbek Sissemaiev – UNFPA Assistant Representative in the Republic of Kazakhstan;

Gaziza Moldakulova – Programme Coordinator on Population and Development, UNFPA in the Republic of Kazakhstan;

Gyulnara Kukanova – National MICS Consultant in the Republic of Kazakhstan;

Dilyara Beisenova – MICS Assistant in the Republic of Kazakhstan.

#### **INTERNATIONAL CONSULTANTS**

Ahmet Sinan Turkyilmaz, Sampling Specialist, UNICEF Regional MICS Consultant;

Ana Abdelbasit, Household Survey Specialist, UNICEF Regional MICS Consultant;

Hans Pettersson, Sampling Specialist, UNICEF Regional MICS Consultant;

Ikhtier Kholmatov, Data Processing Specialist, UNICEF Regional MICS Consultant;

Ismet Koc, Sampling Specialist, UNICEF Regional MICS Consultant;

Larisa Praslova, Household Survey Specialist, UNICEF Regional MICS Consultant.

#### **PERSONNEL OF REPUBLICAN STATE ENTERPRISE “INFORMATION AND COMPUTING CENTRE” UNDER THE STATISTICS COMMITTEE OF THE MNE RK (RSE “ICC under the Statistics Committee of the MNE RK”)**

Eldar Kazganbayev – Director of RSE “ICC under the Statistics Committee of the MNE RK”;

Nurlybek Rakhmetov – MICS Coordinator, Deputy Director of RSE “ICC under the Statistics Committee of the MNE RK”;

Assem Gabdullina – Data entry and processing Coordinator, Director of Maintenance Department of information and statistical systems;

Akzhibek Khamit – Chief Accountant, Head of Division on Accounting and Reporting;

Gulden Urshukova – Lawyer, Head of Regulatory Affairs and Personnel Department – Deputy Director of Administrative Department;

Saule Dauylbaeva – Sampling expert;

Kanatbek Bayten – Head of Department of General Services;

Duman Yessilbayev – driver.

#### **PERSONNEL ON DATA ENTRY AND PROCESSING (RSE “ICC under the Statistics Committee of the MNE RK”)**

Aigul Kapisheva – Programmer for CSPRO data input and SPSS data output, Head of Department of Information Support.

<b>Supervisor</b>	<b>Editors</b>	<b>Data Entry and Processing Administrator</b>
Marina Pissotskaya	Salima Agaissina, Svetlana Strakholis	Zhanar Yergaliyeva

<b>Data Entry Operators</b>	
Anna Abylkassymova, Karlygash Zhabagina, Zhazira Baltayeva, Danagul Beysembayeva, Indira Kozhamsugirova,	Ainur Abdrashova, Balausa Ikbaeva, Daulet Kassym, Aigul Bekenova, Meruyert Galymzhankyzy

### **TEAMS THAT CONDUCTED FIELDWORKS IN REGIONS**

<b>Akmola region</b>	<b>Aktobe region</b>
Rasul Ergaliev, supervisor Saltanat Mirendinova, editor Aitzhan Ibysheva, interviewer Shuga Olzhabayeva, interviewer Gulnar Kurmangalieva, interviewer Lyazzat Turuzhanova, interviewer Samat Tausheev, measurer	Zholdaskali Beissof, supervisor Gulmira Abilzhanova, editor Amangul Zhamanbayeva, interviewer Zhanar Kamysbayeva, interviewer Zhanna Baimasheva, interviewer Amangul Utemuratova, interviewer Damirlan Bekmagambetov, measurer
<b>Almaty oblast</b>	<b>Atyrau region</b>
Svetlana Malogolovaya, supervisor Lyudmila Simonova, editor Gulnara Kapanova, interviewer Gulzhan Avgusthanova, interviewer Dinara Moldagulova, interviewer Marzhan Isaeva, interviewer Yuruslan Malkarov, measurer	Ainash Yeszhanova, supervisor Zhanargul Mukusheva, editor Aigul Urynbayeva, interviewer Botagoz Kussainova, interviewer Gulnaz Kurmanova, interviewer Zhanara Keikesheva, interviewer Adilbek Zhexenov, measurer
<b>West Kazakhstan region</b>	<b>Zhambyl region</b>
Amanzhan Zhumanov, supervisor Roza Arystanaliyeva, editor Onaisha Shaikhiyeva, interviewer Zhemiskanym Ziyedenova, interviewer Assel Umarova, interviewer Agerke Aldavzharova, interviewer Kaisar Arenov, measurer	Inga Shevcova, supervisor Ulmeken Aidarkhanova, editor Zhanat Ustabaeva, interviewer Zhanyl Kurmanbekova, interviewer Mubara Rakhimova, interviewer Aizhan Zhakipova, interviewer Kalzhan Atalykova, measurer
<b>Karaganda region</b>	<b>Kostanai region</b>
Saule Komutova, supervisor Gulden Kairbekova, editor Saltanat Tursumbekova, interviewer Darya Finogenova, interviewer Auyes Yermukhanbetova, interviewer Dana Malikova, interviewer Abil Khan Jexembayev, measurer	Rakiya Ryschchanova, supervisor Anar Kassenova, editor Natalya Valiyeva, interviewer Kulnar Sagimbayeva, interviewer Svetlana Levitskaya, interviewer Yelena Kurlayeva, interviewer Zhanna Danilova, measurer

#### **Kyzylorda region**

Nurman Talkanbaev, supervisor  
Galina Ermekova, editor  
Asel Doszhanova, interviewer  
Roza Duisenbieva, interviewer  
Aigyl Tulegenova, interviewer  
Gulnur Skakova, interviewer  
Ikram Iniat, measurer

#### **South Kazakhstan region**

Yernazar Kultayev, supervisor  
Zhanat Buribekova, editor  
Gulnara Rustemova, interviewer  
Nassikhat Kabulova, interviewer  
Nurgul Kablanova, interviewer  
Zhanat Zhetpisbayeva, interviewer  
Mirakhmet Tasbolatov, measurer

#### **North Kazakhstan region**

Slushash Sultanova, supervisor  
Lyudmila Semykina, editor  
Irina Rodimova, interviewer  
Irina Vdovina, interviewer  
Saule Meimanova, interviewer  
Danna Sadvokasova, interviewer  
Tlektes Tyuleev, measurer

#### **Astana city**

Zhanar Serikbayeva, supervisor  
Dameli Shayakhmetova, editor  
Aizhan Agybayeva, interviewer  
Zhuldyz Rakhimova, interviewer  
Botagoz Aidossova, interviewer  
Gulistan Akisheva, interviewer  
Bauyrzhan Ismailov, measurer

#### **Mangistau region**

Raira Kabdrakhmanova, supervisor  
Gulmira Kenzhebekova, editor  
Raushan Amanshayeva, interviewer  
Akmaral Zhaxugulova, interviewer  
Aigul Khudaibergenova, interviewer  
Aigul Baimagambetova, interviewer  
Aiman Izzhanova, measurer

#### **Pavlodar region**

Zhakan Zhakenov, supervisor  
Karlygash Begezhanova, editor  
Ainura Smatayeva, interviewer  
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## Appendix C. Estimates of Sampling Errors

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The sample of respondents selected in the Multiple Indicator Cluster Survey – 2015 Kazakhstan MICS – 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 the estimates from all possible samples. The extent of variation or variability is not known exactly, but can be estimated statistically from the survey data.

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

- *Standard error (se)*: Standard error is the square root of the variance of the estimate. For survey indicators that are means, proportions or ratios, the Taylor series linearization method is used for the estimation of standard errors. For more complex statistics, such as fertility and mortality rates, the Jackknife repeated replication method is used for standard error estimation.
- *Coefficient of variation (se/r)* is the ratio of the standard error to the value ( $r$ ) of the indicator, and is a measure of the relative sampling error.
- *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 based on the same sample size. The *square root of the design effect (deft)* is used to show the efficiency of the sample design in relation to the precision. A *deft* value of 1.0 indicates that the sample design of the survey is as efficient as a simple random sample for a particular indicator, while a *deft* value above 1.0 indicates an 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, with a specified level of confidence. For any given statistic calculated from the survey, the value of that statistic will fall within a range of plus or minus two times the standard error ( $r + 2.se$  or  $r - 2.se$ ) of the statistic in 95 percent of all possible samples of identical size and design.

For the calculation of sampling errors from MICS data, programmes developed in CSPro Version 5.0 and SPSS Version 21 Complex Samples module have 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. Given the use of normalized weights, by comparing the weighted and unweighted counts it is possible to determine whether a particular domain has been under-sampled or over-sampled compared to the average sampling rate. If the weighted count is smaller than the unweighted count, this means that the particular domain had been over-sampled. As explained later in the footnote of Table SE.1, there is an exception in

the case of indicators 3.15, 4.1 and 4.3, for which the unweighted count represents the number of sample households, and the weighted counts reflect the total population.

Sampling errors are calculated for indicators of primary interest, for the national level, for urban and rural areas, and for all 16 regions. Of the selected indicators, 9 are based on household members, 17 are based on women, and 14 are based on children under 5. 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.20 show the calculated sampling errors for selected territorial units (Total, urban area, rural area and 16 regions – separately).

<b>Table SE.1: Indicators selected for sampling error calculations</b>	
List of indicators selected for sampling error calculations, and base populations (denominators) for each indicator, Kazakhstan, 2015	
<b>2015 MICS Indicator</b>	<b>Base Population</b>
<b>Household members</b>	
3.15 Use of solid fuels for cooking	All household members <sup>a</sup>
4.1 Use of improved drinking water sources	All household members <sup>a</sup>
4.3 Use of improved sanitation	All household members <sup>a</sup>
7.2 School readiness (children attending first grade of primary)	Children attending first grade of primary school
7.4 Primary school net attendance ratio (adjusted)	Children of primary school age
7.S1 Lower secondary school net attendance ratio (adjusted)	Children of lower secondary school age
7.S2 Upper secondary school net attendance ratio (adjusted)	Children of upper secondary school age
7.5 Secondary school net attendance ratio (adjusted)	Children of secondary school age
8.3 Violent discipline	Children aged 1-14 years <sup>b</sup>
<b>Women</b>	
2.6 Early initiation of breastfeeding	Number of last live-born children in the last two years
5.1 Adolescent birth rate	Women years of exposure to childbirth during ages 15-19 years
- Total fertility rate	Women age 15-49 years with a live birth in the last 2 years
5.2 Early childbearing	Women age 20-24 years with a live birth before age 18
5.3 Contraceptive prevalence rate	Women age 15-49 years who are currently married or in union
5.4 Unmet need	Women age 15-49 years who are currently married or in union
5.5a Antenatal care coverage (1+ times, skilled provider)	Women aged 15-49 years with a live birth in the last 2 years
5.5b Antenatal care coverage (4+ times, any provider)	Women aged 15-49 years with a live birth in the last 2 years

5.7	Skilled attendant at delivery	Women aged 15-49 years with a live birth in the last 2 years
5.9	Caesarean section	Women aged 15-49 years with a live birth in the last 2 years
7.1	Literacy rate (young women)	Women aged 15-24 years
8.5	Marriage before age 18	Women aged 20-49 years
9.1	Knowledge about HIV prevention (young women)	Women aged 15-24 years
9.15	Condom use with non-regular partners	Women aged 15-24 years who had sex with a non-marital, non-cohabiting partner in the last 12 months
10.3	Use of internet	Women aged 15-24 years
11.1	Life satisfaction	Women aged 15-24 years
12.2	Smoking before age 15	Women aged 15-49 years
<b>Under-5s</b>		
2.1a	Underweight prevalence (moderate and severe)	Children under age 5 years
2.1b	Underweight prevalence (severe)	Children under age 5 years
2.2a	Stunting prevalence (moderate and severe)	Children under age 5 years
2.4	Overweight prevalence	Children under age 5 years
2.7	Exclusive breastfeeding under 6 months	Children aged 0-5 months
-	Tuberculosis immunization coverage at any time before the survey	Children aged 12-23 months <sup>c</sup>
-	Polio immunization coverage at any time before the survey	Children aged 12-23 months <sup>c</sup>
-	Diphtheria, pertussis and tetanus (DPT) immunization coverage at any time before the survey	Children aged 12-23 months <sup>c</sup>
-	Hepatitis B immunization coverage at any time before the survey	Children aged 12-23 months <sup>c</sup>
-	Haemophilus influenzae type B (Hib) immunization coverage at any time before the survey	Children aged 12-23 months <sup>c</sup>
-	Measles immunization coverage at any time before the survey	Children aged 24-35 months <sup>c</sup>
-	Children fully vaccinated at any time before the survey	Children aged 24-35 months <sup>c</sup>
6.1	Attendance to early childhood education	Children aged 36-59 months
6.8	Early child development index	Children aged 36-59 months

<sup>a</sup> To calculate the weighted results of MICS Indicators 3.15, 4.1 and 4.3, the household weight is multiplied by the number of household members in each household. Therefore the unweighted base population presented in the SE tables reflect the unweighted number of households, whereas the weighted numbers reflect the household population.

<sup>b</sup> Random selection of one child age 1-14 years per household with children this age is carried out during fieldwork for administering the child discipline module. To account for the random selection and calculate MICS Indicator 8.3, the household weight is multiplied by the total number of children aged 1-14 years in each household. Therefore the unweighted base population presented in the SE tables reflect the unweighted number of households with children aged 1-14 years, whereas the weighted numbers reflect the number of children aged 1-14 years.

<sup>c</sup> Due to the way missing values are treated, the weighted count of children for immunization indicators in Tables SE.2-SE.10 tables is different from the number in Table CH.1.

**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, Kazakhstan, 2015

	MICS Indicator	MDG Indicator	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	
										Lower bound r - 2se	Upper bound r + 2se
<b>Household members</b>											
Use of solid fuels for cooking	3.15		0.0148	0.0034	0.229	13.011	3.607	56803	16500	0.008	0.022
Use of improved drinking water sources	4.1	7.8	0.9735	0.0068	0.007	29.874	5.466	56803	16500	0.960	0.987
Use of improved sanitation	4.3	7.9	0.9800	0.0058	0.006	28.647	5.352	56803	16500	0.968	0.992
School readiness (children attending first grade of primary)	7.2		0.9076	0.0129	0.014	2.171	1.474	1179	1100	0.882	0.933
Primary school net attendance ratio (adjusted)	7.4	2.1	0.9952	0.0013	0.001	1.354	1.164	4204	3935	0.993	0.998
Lower secondary school net attendance ratio (adjusted)	7.S1		0.9941	0.0014	0.001	1.213	1.101	3875	3707	0.991	0.997
Upper secondary school net attendance ratio (adjusted)	7.S2		0.9573	0.0069	0.007	1.353	1.163	1205	1158	0.943	0.971
Secondary school net attendance ratio (adjusted)	7.5		0.9885	0.0019	0.002	1.605	1.267	5080	4865	0.985	0.992
Violent discipline	8.3		0.5267	0.0087	0.016	5.056	2.249	13575	7494	0.509	0.544
<b>Women</b>											
Early initiation of breastfeeding	2.6		0.8329	0.0084	0.010	1.065	1.032	2157	2106	0.816	0.850
Adolescent birth rate	5.1	5.4	36.0218	6.3958	0.178	na	na	na	na	23.230	48.813
Total fertility rate	-		3.0134	0.1353	0.045	na	na	na	na	2.743	3.284
Early childbearing	5.2		0.0221	0.0035	0.159	1.007	1.004	1768	1771	0.015	0.029
Contraceptive prevalence rate	5.3	5.3	0.5572	0.0081	0.015	2.215	1.488	8351	8297	0.541	0.573
Unmet need	5.4	5.6	0.0980	0.0045	0.046	1.941	1.393	8351	8297	0.089	0.107
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.9929	0.0019	0.002	1.017	1.008	2157	2106	0.989	0.997
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.9529	0.0063	0.007	1.885	1.373	2157	2106	0.940	0.966
Skilled attendant at delivery	5.7	5.2	0.9941	0.0016	0.002	0.964	0.982	2157	2106	0.991	0.997
Caesarean section	5.9		0.1482	0.0086	0.058	1.241	1.114	2157	2106	0.131	0.165
Literacy rate (young women)	7.1	2.3	0.9997	0.0003	0.000	0.891	0.944	3114	3087	0.999	1.000

Marriage before age 18	8.5		0.0780	0.0040	0.051	2.533	1.592	11324	11354	0.070	0.086
Knowledge about HIV prevention (young women)	9.1	6.3	0.2666	0.0138	0.052	3.010	1.735	3114	3087	0.239	0.294
Condom use with non-regular partners	9.15	6.2	0.6373	0.0237	0.037	0.538	0.734	208	222	0.590	0.685
Use of internet	10.3		0.9457	0.0074	0.008	3.274	1.809	3114	3087	0.931	0.960
Life satisfaction	11.1		0.9677	0.0042	0.004	1.757	1.326	3114	3087	0.959	0.976
Smoking before age 15	12.2		0.0086	0.0009	0.101	1.120	1.058	12670	12670	0.007	0.010
<b>Under-5s</b>											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.0195	0.0028	0.143	2.161	1.470	5304	5292	0.014	0.025
Underweight prevalence (severe)	2.1b	1.8	0.0025	0.0007	0.286	1.099	1.048	5304	5292	0.001	0.004
Stunting prevalence (moderate and severe)	2.2a		0.0804	0.0056	0.070	2.246	1.499	5277	5264	0.069	0.092
Overweight prevalence	2.4		0.0935	0.0061	0.065	2.289	1.513	5218	5190	0.081	0.106
Exclusive breastfeeding under 6 months	2.7		0.3777	0.0246	0.065	1.309	1.144	531	508	0.328	0.427
Tuberculosis immunization coverage at any time before the survey	-		0.9883	0.0023	0.002	0.512	0.716	1070	1101	0.984	0.993
Polio immunization coverage at any time before the survey	-		0.9132	0.0084	0.009	0.965	0.982	1052	1092	0.896	0.930
Diphtheria, pertussis and tetanus (DPT) immunization coverage at any time before the survey	-		0.9242	0.0079	0.008	0.961	0.980	1060	1093	0.908	0.940
Hepatitis B immunization coverage at any time before the survey	-		0.8997	0.0089	0.010	0.956	0.978	1066	1097	0.882	0.917
Haemophilus influenzae type B (Hib) immunization coverage at any time before the survey	-		0.9137	0.0084	0.009	0.958	0.979	1043	1071	0.897	0.930
Measles immunization coverage at any time before the survey	-		0.9558	0.0096	0.010	2.373	1.540	1037	1083	0.937	0.975
Children fully vaccinated at any time before the survey	-		0.9284	0.0100	0.011	1.603	1.266	1027	1071	0.908	0.948
Attendance to early childhood education	6.1		0.5534	0.0248	0.045	5.655	2.378	2322	2277	0.504	0.603
Early child development index	6.8		0.8553	0.0130	0.015	3.118	1.766	2322	2277	0.829	0.881
na: not applicable.											

**Table SE.3: Sampling errors: Urban**

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Kazakhstan, 2015

	MICS Indicator	MDG Indicator	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	
										Lower bound r - 2se	Upper bound r + 2se
<b>Household members</b>											
Use of solid fuels for cooking	3.15		0.0010	0.0005	0.493	2.588	1.609	30222	10540	0.000	0.002
Use of improved drinking water sources	4.1	7.8	0.9972	0.0015	0.001	8.014	2.831	30222	10540	0.994	1.000
Use of improved sanitation	4.3	7.9	0.9709	0.0107	0.011	42.306	6.504	30222	10540	0.950	0.992
School readiness (children attending first grade of primary)	7.2		0.9062	0.0113	0.012	0.867	0.931	563	576	0.884	0.929
Primary school net attendance ratio (adjusted)	7.4	2.1	0.9933	0.0023	0.002	1.595	1.263	1931	2049	0.989	0.998
Lower secondary school net attendance ratio (adjusted)	7.S1		0.9929	0.0022	0.002	1.258	1.122	1771	1902	0.989	0.997
Upper secondary school net attendance ratio (adjusted)	7.S2		0.9685	0.0058	0.006	0.698	0.835	602	640	0.957	0.980
Secondary school net attendance ratio (adjusted)	7.5		0.9907	0.0023	0.002	1.425	1.194	2373	2542	0.986	0.995
Violent discipline	8.3		0.5174	0.0116	0.022	5.740	2.396	7169	4281	0.494	0.541
<b>Women</b>											
Early initiation of breastfeeding	2.6		0.8297	0.0110	0.013	1.022	1.011	1076	1194	0.808	0.852
Adolescent birth rate	5.1	5.4	32.7266	6.3641	0.194	na	na	na	na	19.998	45.455
Total fertility rate	-		2.5587	0.1253	0.049	na	na	na	na	2.308	2.809
Early childbearing	5.2		0.0244	0.0052	0.211	1.302	1.141	1041	1169	0.014	0.035
Contraceptive prevalence rate	5.3	5.3	0.5579	0.0089	0.016	1.549	1.245	4418	4822	0.540	0.576
Unmet need	5.4	5.6	0.1025	0.0048	0.047	1.219	1.104	4418	4822	0.093	0.112
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.9938	0.0023	0.002	1.067	1.033	1076	1194	0.989	0.998
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.9664	0.0055	0.006	1.123	1.060	1076	1194	0.955	0.977
Skilled attendant at delivery	5.7	5.2	0.9944	0.0022	0.002	1.059	1.029	1076	1194	0.990	0.999
Caesarean section	5.9		0.1637	0.0119	0.073	1.228	1.108	1076	1194	0.140	0.187
Literacy rate (young women)	7.1	2.3	1.0000	0.0000	0.000	na	na	1763	1952	1.000	1.000
Marriage before age 18	8.5		0.0653	0.0036	0.055	1.462	1.209	6418	7027	0.058	0.072

Knowledge about HIV prevention (young women)	9.1	6.3	0.3112	0.0135	0.043	1.654	1.286	1763	1952	0.284	0.338
Condom use with non-regular partners	9.15	6.2	0.6326	0.0273	0.043	0.551	0.742	161	173	0.578	0.687
Use of internet	10.3		0.9854	0.0025	0.003	0.872	0.934	1763	1952	0.980	0.990
Life satisfaction	11.1		0.9692	0.0047	0.005	1.451	1.204	1763	1952	0.960	0.979
Smoking before age 15	12.2		0.0116	0.0013	0.112	1.148	1.072	7140	7810	0.009	0.014
<b>Under-5s</b>											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.0146	0.0030	0.208	1.860	1.364	2573	2909	0.009	0.021
Underweight prevalence (severe)	2.1b	1.8	0.0019	0.0007	0.384	0.802	0.895	2573	2909	0.000	0.003
Stunting prevalence (moderate and severe)	2.2a		0.0717	0.0067	0.093	1.928	1.389	2561	2898	0.058	0.085
Overweight prevalence	2.4		0.1119	0.0094	0.084	2.535	1.592	2510	2837	0.093	0.131
Exclusive breastfeeding under 6 months	2.7		0.3365	0.0229	0.068	0.674	0.821	271	287	0.291	0.382
Tuberculosis immunization coverage at any time before the survey	-		0.9862	0.0039	0.004	0.666	0.816	516	598	0.978	0.994
Polio immunization coverage at any time before the survey	-		0.8809	0.0129	0.015	0.934	0.967	499	591	0.855	0.907
Diphtheria, pertussis and tetanus (DPT) immunization coverage at any time before the survey	-		0.8798	0.0128	0.015	0.911	0.954	507	592	0.854	0.905
Hepatitis B immunization coverage at any time before the survey	-		0.8499	0.0110	0.013	0.558	0.747	512	594	0.828	0.872
Haemophilus influenzae type B (Hib) immunization coverage at any time before the survey	-		0.8718	0.0133	0.015	0.915	0.956	499	579	0.845	0.898
Measles immunization coverage at any time before the survey	-		0.9414	0.0168	0.018	3.045	1.745	528	598	0.908	0.975
Children fully vaccinated at any time before the survey	-		0.9075	0.0166	0.018	1.934	1.391	524	590	0.874	0.941
Attendance to early childhood education	6.1		0.6216	0.0222	0.036	2.600	1.612	1130	1242	0.577	0.666
Early child development index	6.8		0.8601	0.0124	0.014	1.576	1.255	1130	1242	0.835	0.885

na: not applicable.

**Table SE.4: Sampling errors: Rural**

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Kazakhstan, 2015

	MICS Indicator	MDG Indicator	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	
										Lower bound r - 2se	Upper bound r + 2se
<b>Household members</b>											
Use of solid fuels for cooking	3.15		0.0304	0.0071	0.234	10.258	3.203	26582	5960	0.016	0.045
Use of improved drinking water sources	4.1	7.8	0.9465	0.0145	0.015	24.588	4.959	26582	5960	0.918	0.975
Use of improved sanitation	4.3	7.9	0.9904	0.0025	0.003	4.052	2.013	26582	5960	0.985	0.995
School readiness (children attending first grade of primary)	7.2		0.9089	0.0224	0.025	3.175	1.782	616	524	0.864	0.954
Primary school net attendance ratio (adjusted)	7.4	2.1	0.9968	0.0013	0.001	1.007	1.004	2273	1886	0.994	0.999
Lower secondary school net attendance ratio (adjusted)	7.S1		0.9951	0.0018	0.002	1.182	1.087	2104	1805	0.992	0.999
Upper secondary school net attendance ratio (adjusted)	7.S2		0.9461	0.0126	0.013	1.618	1.272	604	518	0.921	0.971
Secondary school net attendance ratio (adjusted)	7.5		0.9866	0.0030	0.003	1.624	1.274	2707	2323	0.981	0.993
Violent discipline	8.3		0.5350	0.0127	0.024	4.159	2.039	6406	3213	0.510	0.560
<b>Women</b>											
Early initiation of breastfeeding	2.6		0.8360	0.0127	0.015	1.068	1.033	1081	912	0.811	0.861
Adolescent birth rate	5.1	5.4	40.1869	12.2713	0.305	na	na	na	na	15.644	64.730
Total fertility rate	-		3.6616	0.2469	0.067	na	na	na	na	3.168	4.155
Early childbearing	5.2		0.0187	0.0041	0.221	0.560	0.748	727	602	0.010	0.027
Contraceptive prevalence rate	5.3	5.3	0.5565	0.0141	0.025	2.780	1.667	3932	3475	0.528	0.585
Unmet need	5.4	5.6	0.0931	0.0078	0.084	2.520	1.587	3932	3475	0.077	0.109
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.9919	0.0029	0.003	0.931	0.965	1081	912	0.986	0.998
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.9394	0.0116	0.012	2.156	1.468	1081	912	0.916	0.963
Skilled attendant at delivery	5.7	5.2	0.9939	0.0024	0.002	0.857	0.926	1081	912	0.989	0.999
Caesarean section	5.9		0.1328	0.0122	0.092	1.175	1.084	1081	912	0.108	0.157
Literacy rate (young women)	7.1	2.3	0.9993	0.0007	0.001	0.762	0.873	1351	1135	0.998	1.000
Marriage before age 18	8.5		0.0946	0.0073	0.077	2.693	1.641	4907	4327	0.080	0.109



Knowledge about HIV prevention (young women)	9.1	6.3	0.2083	0.0241	0.116	4.000	2.000	1351	1135	0.160	0.257
Condom use with non-regular partners	9.15	6.2	(0.6537)	(0.0477)	(0.073)	(0.482)	(0.694)	47	49	(0.558)	(0.749)
Use of internet	10.3		0.8939	0.0142	0.016	2.409	1.552	1351	1135	0.865	0.922
Life satisfaction	11.1		0.9658	0.0075	0.008	1.956	1.399	1351	1135	0.951	0.981
Smoking before age 15	12.2		0.0048	0.0010	0.207	1.002	1.001	5530	4860	0.003	0.007
<b>Under-5s</b>											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.0241	0.0047	0.195	2.247	1.499	2731	2383	0.015	0.034
Underweight prevalence (severe)	2.1b	1.8	0.0032	0.0012	0.393	1.169	1.081	2731	2383	0.001	0.006
Stunting prevalence (moderate and severe)	2.2a		0.0885	0.0088	0.100	2.293	1.514	2716	2366	0.071	0.106
Overweight prevalence	2.4		0.0764	0.0070	0.092	1.647	1.283	2709	2353	0.062	0.090
Exclusive breastfeeding under 6 months	2.7		0.4208	0.0432	0.103	1.686	1.298	260	221	0.334	0.507
Tuberculosis immunization coverage at any time before the survey	-		0.9903	0.0026	0.003	0.355	0.595	554	503	0.985	0.996
Polio immunization coverage at any time before the survey	-		0.9422	0.0099	0.010	0.896	0.947	553	501	0.922	0.962
Diphtheria, pertussis and tetanus (DPT) immunization coverage at any time before the survey	-		0.9649	0.0077	0.008	0.870	0.933	553	501	0.950	0.980
Hepatitis B immunization coverage at any time before the survey	-		0.9456	0.0125	0.013	1.534	1.239	554	503	0.921	0.971
Haemophilus influenzae type B (Hib) immunization coverage at any time before the survey	-		0.9521	0.0092	0.010	0.904	0.951	544	492	0.934	0.970
Measles immunization coverage at any time before the survey	-		0.9708	0.0081	0.008	1.130	1.063	509	485	0.955	0.987
Children fully vaccinated at any time before the survey	-		0.9502	0.0096	0.010	0.943	0.971	503	481	0.931	0.969
Attendance to early childhood education	6.1		0.4888	0.0393	0.080	6.389	2.528	1192	1035	0.410	0.567
Early child development index	6.8		0.8507	0.0221	0.026	3.967	1.992	1192	1035	0.807	0.895
na: not applicable.											
( ) Figures that are based on 25–49 unweighted cases.											

**Table SE.5: Sampling errors: Akmola**

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Kazakhstan, 2015

	MICS Indicator	MDG Indicator	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	
										Lower bound r - 2se	Upper bound r + 2se
<b>Household members</b>											
Use of solid fuels for cooking	3.15		0.0017	0.0011	0.632	0.850	0.922	2796	1243	0.000	0.004
Use of improved drinking water sources	4.1	7.8	0.9943	0.0024	0.002	1.276	1.130	2796	1243	0.989	0.999
Use of improved sanitation	4.3	7.9	0.9952	0.0023	0.002	1.319	1.148	2796	1243	0.991	1.000
School readiness (children attending first grade of primary)	7.2		0.9876	0.0121	0.012	0.794	0.891	51	67	0.963	1.000
Primary school net attendance ratio (adjusted)	7.4	2.1	0.9955	0.0044	0.004	1.089	1.043	192	252	0.987	1.000
Lower secondary school net attendance ratio (adjusted)	7.S1		1.0000	0.0000	0.000	na	na	181	236	1.000	1.000
Upper secondary school net attendance ratio (adjusted)	7.S2		0.9445	0.0302	0.032	1.205	1.098	52	70	0.884	1.000
Secondary school net attendance ratio (adjusted)	7.5		0.9947	0.0052	0.005	1.527	1.236	232	306	0.984	1.000
Violent discipline	8.3		0.3856	0.0159	0.041	1.343	1.159	825	499	0.354	0.417
<b>Women</b>											
Early initiation of breastfeeding	2.6		0.7774	0.0449	0.058	1.365	1.168	93	118	0.688	0.867
Adolescent birth rate	5.1	5.4	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Total fertility rate	-		(*)	(*)	(*)	na	na	na	na	(*)	(*)
Early childbearing	5.2		0.0281	0.0112	0.399	0.387	0.622	62	85	0.006	0.051
Contraceptive prevalence rate	5.3	5.3	0.5386	0.0199	0.037	0.842	0.918	397	532	0.499	0.578
Unmet need	5.4	5.6	0.1340	0.0129	0.096	0.756	0.870	397	532	0.108	0.160
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.9866	0.0135	0.014	1.622	1.273	93	118	0.960	1.000
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.9622	0.0178	0.019	1.022	1.011	93	118	0.927	0.998
Skilled attendant at delivery	5.7	5.2	0.9933	0.0068	0.007	0.805	0.897	93	118	0.980	1.000
Caesarean section	5.9		0.2094	0.0340	0.162	0.817	0.904	93	118	0.141	0.277
Literacy rate (young women)	7.1	2.3	1.0000	0.0000	0.000	na	na	127	171	1.000	1.000
Marriage before age 18	8.5		0.0795	0.0115	0.145	1.339	1.157	559	739	0.056	0.103
Knowledge about HIV prevention (young women)	9.1	6.3	0.2000	0.0340	0.170	1.226	1.107	127	171	0.132	0.268

Condom use with non-regular partners	9.15	6.2	(*)	(*)	(*)	(*)	(*)	13	14	(*)	(*)
Use of internet	10.3		0.9742	0.0144	0.015	1.410	1.187	127	171	0.945	1.000
Life satisfaction	11.1		0.9797	0.0121	0.012	1.254	1.120	127	171	0.955	1.000
Smoking before age 15	12.2		0.0220	0.0050	0.225	0.940	0.969	624	825	0.012	0.032
<b>Under-5s</b>											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.0111	0.0063	0.569	1.115	1.056	223	308	0.000	0.024
Underweight prevalence (severe)	2.1b	1.8	0.0000	0.0000	0.000	na	na	223	308	0.000	0.000
Stunting prevalence (moderate and severe)	2.2a		0.0292	0.0107	0.365	1.227	1.108	223	307	0.008	0.050
Overweight prevalence	2.4		0.0490	0.0137	0.280	1.241	1.114	223	308	0.022	0.076
Exclusive breastfeeding under 6 months	2.7		(0.3580)	(0.0357)	(0.100)	(0.139)	(0.372)	22	26	(0.287)	(0.429)
Tuberculosis immunization coverage at any time before the survey	-		0.9817	0.0183	0.019	1.029	1.015	39	56	0.945	1.000
Polio immunization coverage at any time before the survey	-		0.8722	0.0201	0.023	0.199	0.446	39	56	0.832	0.912
Diphtheria, pertussis and tetanus (DPT) immunization coverage at any time before the survey	-		0.9120	0.0192	0.021	0.251	0.501	39	56	0.874	0.950
Hepatitis B immunization coverage at any time before the survey	-		0.8625	0.0090	0.010	0.037	0.194	39	56	0.845	0.881
Haemophilus influenzae type B (Hib) immunization coverage at any time before the survey	-		0.8800	0.0260	0.030	0.346	0.588	38	55	0.828	0.932
Measles immunization coverage at any time before the survey	-		0.9421	0.0218	0.023	0.578	0.760	47	67	0.898	0.986
Children fully vaccinated at any time before the survey	-		0.9224	0.0222	0.024	0.454	0.674	47	67	0.878	0.967
Attendance to early childhood education	6.1		0.5389	0.0437	0.081	0.946	0.973	89	124	0.451	0.626
Early child development index	6.8		0.8096	0.0274	0.034	0.599	0.774	89	124	0.755	0.864
na: not applicable.											
( ) Figures that are based on 25–49 unweighted cases.											
(*) Figures that are based on fewer than 25 unweighted cases; for fertility rates, figures that are based on fewer than 125 unweighted person-years of exposure.											

**Table SE.6: Sampling errors: Aktobe**

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Kazakhstan, 2015

	MICS Indicator	MDG Indicator	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	
										Lower bound r - 2se	Upper bound r + 2se
<b>Household members</b>											
Use of solid fuels for cooking	3.15		0.0788	0.0360	0.457	15.285	3.910	3580	856	0.007	0.151
Use of improved drinking water sources	4.1	7.8	1.0000	0.0000	0.000	na	na	3580	856	1.000	1.000
Use of improved sanitation	4.3	7.9	0.9731	0.0225	0.023	16.586	4.073	3580	856	0.928	1.000
School readiness (children attending first grade of primary)	7.2		1.0000	0.0000	0.000	na	na	89	58	1.000	1.000
Primary school net attendance ratio (adjusted)	7.4	2.1	0.9919	0.0061	0.006	0.964	0.982	261	207	0.980	1.000
Lower secondary school net attendance ratio (adjusted)	7.S1		0.9912	0.0063	0.006	0.932	0.965	250	205	0.979	1.000
Upper secondary school net attendance ratio (adjusted)	7.S2		0.9671	0.0234	0.024	1.033	1.017	61	61	0.920	1.000
Secondary school net attendance ratio (adjusted)	7.5		0.9907	0.0056	0.006	0.887	0.942	311	266	0.980	1.000
Violent discipline	8.3		0.3016	0.0230	0.076	2.332	1.527	738	412	0.256	0.348
<b>Women</b>											
Early initiation of breastfeeding	2.6		0.7603	0.0229	0.030	0.358	0.599	145	125	0.714	0.806
Adolescent birth rate	5.1	5.4	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Total fertility rate	-		(*)	(*)	(*)	na	na	na	na	(*)	(*)
Early childbearing	5.2		0.0066	0.0022	0.338	0.066	0.257	116	88	0.002	0.011
Contraceptive prevalence rate	5.3	5.3	0.5196	0.0323	0.062	1.970	1.404	547	472	0.455	0.584
Unmet need	5.4	5.6	0.1330	0.0151	0.114	0.934	0.966	547	472	0.103	0.163
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	1.0000	0.0000	0.000	na	na	145	125	1.000	1.000
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.8554	0.0459	0.054	2.116	1.455	145	125	0.764	0.947
Skilled attendant at delivery	5.7	5.2	1.0000	0.0000	0.000	na	na	145	125	1.000	1.000
Caesarean section	5.9		0.1183	0.0235	0.198	0.655	0.810	145	125	0.071	0.165
Literacy rate (young women)	7.1	2.3	1.0000	0.0000	0.000	na	na	191	156	1.000	1.000
Marriage before age 18	8.5		0.0604	0.0179	0.297	3.500	1.871	731	618	0.025	0.096

Knowledge about HIV prevention (young women)	9.1	6.3	0.4048	0.0359	0.089	0.829	0.910	191	156	0.333	0.477
Condom use with non-regular partners	9.15	6.2	(*)	(*)	(*)	(*)	(*)	0	0	(*)	(*)
Use of internet	10.3		0.9520	0.0281	0.030	2.678	1.637	191	156	0.896	1.000
Life satisfaction	11.1		0.8808	0.0349	0.040	1.803	1.343	191	156	0.811	0.951
Smoking before age 15	12.2		0.0022	0.0014	0.634	0.598	0.773	806	686	0.000	0.005
<b>Under-5s</b>											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.0308	0.0146	0.473	2.221	1.490	368	313	0.002	0.060
Underweight prevalence (severe)	2.1b	1.8	0.0058	0.0038	0.649	0.770	0.878	368	313	0.000	0.013
Stunting prevalence (moderate and severe)	2.2a		0.0659	0.0251	0.380	3.196	1.788	370	314	0.016	0.116
Overweight prevalence	2.4		0.1026	0.0137	0.133	0.626	0.791	366	310	0.075	0.130
Exclusive breastfeeding under 6 months	2.7		(0.3862)	(0.0303)	(0.078)	(0.112)	(0.335)	30	30	(0.326)	(0.447)
Tuberculosis immunization coverage at any time before the survey	-		1.0000	0.0000	0.000	na	na	83	64	1.000	1.000
Polio immunization coverage at any time before the survey	-		0.9581	0.0197	0.021	0.611	0.782	83	64	0.919	0.998
Diphtheria, pertussis and tetanus (DPT) immunization coverage at any time before the survey	-		0.9581	0.0197	0.021	0.611	0.782	83	64	0.919	0.998
Hepatitis B immunization coverage at any time before the survey	-		0.9574	0.0252	0.026	0.967	0.983	82	63	0.907	1.000
Haemophilus influenzae type B (Hib) immunization coverage at any time before the survey	-		0.9492	0.0250	0.026	0.818	0.905	83	64	0.899	0.999
Measles immunization coverage at any time before the survey	-		0.9790	0.0131	0.013	0.546	0.739	72	66	0.953	1.000
Children fully vaccinated at any time before the survey	-		0.9790	0.0131	0.013	0.546	0.739	72	66	0.953	1.000
Attendance to early childhood education	6.1		0.7790	0.0704	0.090	3.565	1.888	146	125	0.638	0.920
Early child development index	6.8		0.9502	0.0206	0.022	1.115	1.056	146	125	0.909	0.991
na: not applicable.											
( ) Figures that are based on 25–49 unweighted cases.											
(*) Figures that are based on fewer than 25 unweighted cases; for fertility rates, figures that are based on fewer than 125 unweighted person-years of exposure.											

**Table SE.7: Sampling errors: Almaty oblast**

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Kazakhstan, 2015

	MICS Indicator	MDG Indicator	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	
										Lower bound r - 2se	Upper bound r + 2se
<b>Household members</b>											
Use of solid fuels for cooking	3.15		0.0000	0.0000	0.000	na	na	4679	902	0.000	0.000
Use of improved drinking water sources	4.1	7.8	0.9816	0.0143	0.015	10.146	3.185	4679	902	0.953	1.000
Use of improved sanitation	4.3	7.9	0.9982	0.0018	0.002	1.628	1.276	4679	902	0.995	1.000
School readiness (children attending first grade of primary)	7.2		0.8239	0.0393	0.048	0.743	0.862	107	71	0.745	0.902
Primary school net attendance ratio (adjusted)	7.4	2.1	1.0000	0.0000	0.000	na	na	341	240	1.000	1.000
Lower secondary school net attendance ratio (adjusted)	7.S1		0.9916	0.0058	0.006	0.959	0.979	346	241	0.980	1.000
Upper secondary school net attendance ratio (adjusted)	7.S2		0.9112	0.0341	0.037	1.122	1.059	110	79	0.843	0.979
Secondary school net attendance ratio (adjusted)	7.5		0.9845	0.0079	0.008	1.298	1.139	456	320	0.969	1.000
Violent discipline	8.3		0.6504	0.0220	0.034	2.255	1.502	820	462	0.606	0.694
<b>Women</b>											
Early initiation of breastfeeding	2.6		0.7692	0.0339	0.044	0.867	0.931	188	135	0.701	0.837
Adolescent birth rate	5.1	5.4	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Total fertility rate	-		(*)	(*)	(*)	na	na	na	na	(*)	(*)
Early childbearing	5.2		0.0114	0.0011	0.100	0.010	0.100	122	88	0.009	0.014
Contraceptive prevalence rate	5.3	5.3	0.6243	0.0248	0.040	1.264	1.124	664	481	0.575	0.674
Unmet need	5.4	5.6	0.0891	0.0114	0.128	0.766	0.875	664	481	0.066	0.112
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	1.0000	0.0000	0.000	na	na	188	135	1.000	1.000
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.9322	0.0273	0.029	1.580	1.257	188	135	0.878	0.987
Skilled attendant at delivery	5.7	5.2	1.0000	0.0000	0.000	na	na	188	135	1.000	1.000
Caesarean section	5.9		0.1879	0.0253	0.135	0.564	0.751	188	135	0.137	0.239
Literacy rate (young women)	7.1	2.3	1.0000	0.0000	0.000	na	na	260	188	1.000	1.000
Marriage before age 18	8.5		0.0731	0.0115	0.158	1.287	1.135	904	656	0.050	0.096

Knowledge about HIV prevention (young women)	9.1	6.3	0.1874	0.0258	0.138	0.816	0.904	260	188	0.136	0.239
Condom use with non-regular partners	9.15	6.2	(*)	(*)	(*)	(*)	(*)	11	7	(*)	(*)
Use of internet	10.3		0.9765	0.0102	0.010	0.839	0.916	260	188	0.956	0.997
Life satisfaction	11.1		0.9783	0.0110	0.011	1.067	1.033	260	188	0.956	1.000
Smoking before age 15	12.2		0.0041	0.0031	0.746	1.742	1.320	1042	756	0.000	0.010
<b>Under-5s</b>											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.0283	0.0150	0.528	2.226	1.492	368	275	0.000	0.058
Underweight prevalence (severe)	2.1b	1.8	0.0000	0.0000	0.000	na	na	368	275	0.000	0.000
Stunting prevalence (moderate and severe)	2.2a		0.0813	0.0214	0.263	1.687	1.299	370	277	0.039	0.124
Overweight prevalence	2.4		0.0635	0.0213	0.335	2.068	1.438	365	273	0.021	0.106
Exclusive breastfeeding under 6 months	2.7		(0.2218)	(0.0572)	(0.258)	(0.682)	(0.826)	51	37	(0.107)	(0.336)
Tuberculosis immunization coverage at any time before the survey	-		0.9696	0.0105	0.011	0.249	0.499	90	67	0.949	0.991
Polio immunization coverage at any time before the survey	-		0.8895	0.0106	0.012	0.075	0.274	90	67	0.868	0.911
Diphtheria, pertussis and tetanus (DPT) immunization coverage at any time before the survey	-		0.9548	0.0103	0.011	0.163	0.404	90	67	0.934	0.975
Hepatitis B immunization coverage at any time before the survey	-		0.9548	0.0103	0.011	0.163	0.404	90	67	0.934	0.975
Haemophilus influenzae type B (Hib) immunization coverage at any time before the survey	-		0.9263	0.0104	0.011	0.103	0.320	89	66	0.906	0.947
Measles immunization coverage at any time before the survey	-		0.9129	0.0269	0.030	0.484	0.696	72	54	0.859	0.967
Children fully vaccinated at any time before the survey	-		0.8759	0.0272	0.031	0.360	0.600	72	54	0.822	0.930
Attendance to early childhood education	6.1		0.3165	0.0426	0.135	0.999	1.000	159	120	0.231	0.402
Early child development index	6.8		0.9680	0.0133	0.014	0.684	0.827	159	120	0.941	0.995
na: not applicable.											
( ) Figures that are based on 25–49 unweighted cases.											
(*) Figures that are based on fewer than 25 unweighted cases; for fertility rates, figures that are based on fewer than 125 unweighted person-years of exposure.											

**Table SE.8: Sampling errors: Atyrau**

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Kazakhstan, 2015

	MICS Indicator	MDG Indicator	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	
										Lower bound r - 2se	Upper bound r + 2se
<b>Household members</b>											
Use of solid fuels for cooking	3.15		0.0000	0.0000	0.000	na	na	1849	854	0.000	0.000
Use of improved drinking water sources	4.1	7.8	0.9984	0.0013	0.001	0.875	0.935	1849	854	0.996	1.000
Use of improved sanitation	4.3	7.9	0.9967	0.0026	0.003	1.800	1.342	1849	854	0.991	1.000
School readiness (children attending first grade of primary)	7.2		0.9850	0.0150	0.015	1.143	1.069	45	76	0.955	1.000
Primary school net attendance ratio (adjusted)	7.4	2.1	0.9686	0.0173	0.018	2.689	1.640	160	273	0.934	1.000
Lower secondary school net attendance ratio (adjusted)	7.S1		1.0000	0.0000	0.000	na	na	122	224	1.000	1.000
Upper secondary school net attendance ratio (adjusted)	7.S2		0.9739	0.0152	0.016	0.740	0.860	40	82	0.943	1.000
Secondary school net attendance ratio (adjusted)	7.5		0.9936	0.0045	0.005	0.988	0.994	162	306	0.984	1.000
Violent discipline	8.3		0.5993	0.0352	0.059	4.751	2.180	922	461	0.529	0.670
<b>Women</b>											
Early initiation of breastfeeding	2.6		0.7009	0.0382	0.055	1.144	1.070	85	165	0.624	0.777
Adolescent birth rate	5.1	5.4	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Total fertility rate	-		(*)	(*)	(*)	na	na	na	na	(*)	(*)
Early childbearing	5.2		0.0487	0.0383	0.787	3.867	1.967	70	123	0.000	0.125
Contraceptive prevalence rate	5.3	5.3	0.4842	0.0237	0.049	1.095	1.047	259	487	0.437	0.532
Unmet need	5.4	5.6	0.1025	0.0231	0.226	2.830	1.682	259	487	0.056	0.149
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.9760	0.0156	0.016	1.696	1.302	85	165	0.945	1.000
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.9701	0.0158	0.016	1.409	1.187	85	165	0.939	1.000
Skilled attendant at delivery	5.7	5.2	0.9760	0.0156	0.016	1.696	1.302	85	165	0.945	1.000
Caesarean section	5.9		0.1283	0.0213	0.166	0.664	0.815	85	165	0.086	0.171
Literacy rate (young women)	7.1	2.3	1.0000	0.0000	0.000	na	na	109	198	1.000	1.000
Marriage before age 18	8.5		0.0695	0.0182	0.262	3.504	1.872	363	686	0.033	0.106



Knowledge about HIV prevention (young women)	9.1	6.3	0.1881	0.0256	0.136	0.842	0.918	109	198	0.137	0.239
Condom use with non-regular partners	9.15	6.2	(*)	(*)	(*)	(*)	(*)	3	10	(*)	(*)
Use of internet	10.3		0.9740	0.0178	0.018	2.465	1.570	109	198	0.938	1.000
Life satisfaction	11.1		0.9977	0.0023	0.002	0.460	0.678	109	198	0.993	1.000
Smoking before age 15	12.2		0.0048	0.0025	0.519	0.991	0.996	402	761	0.000	0.010
<b>Under-5s</b>											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.0363	0.0129	0.355	1.854	1.362	198	393	0.011	0.062
Underweight prevalence (severe)	2.1b	1.8	0.0079	0.0057	0.718	1.605	1.267	198	393	0.000	0.019
Stunting prevalence (moderate and severe)	2.2a		0.1181	0.0205	0.173	1.565	1.251	193	390	0.077	0.159
Overweight prevalence	2.4		0.1475	0.0283	0.192	2.449	1.565	195	385	0.091	0.204
Exclusive breastfeeding under 6 months	2.7		(0.4571)	(0.0519)	(0.114)	(0.391)	(0.625)	20	37	(0.353)	(0.561)
Tuberculosis immunization coverage at any time before the survey	-		0.9965	0.0035	0.004	0.306	0.553	43	87	0.990	1.000
Polio immunization coverage at any time before the survey	-		0.9730	0.0158	0.016	0.786	0.886	42	84	0.941	1.000
Diphtheria, pertussis and tetanus (DPT) immunization coverage at any time before the survey	-		0.9687	0.0119	0.012	0.393	0.627	43	85	0.945	0.993
Hepatitis B immunization coverage at any time before the survey	-		0.9687	0.0119	0.012	0.393	0.627	43	85	0.945	0.993
Haemophilus influenzae type B (Hib) immunization coverage at any time before the survey	-		0.9825	0.0121	0.012	0.697	0.835	41	83	0.958	1.000
Measles immunization coverage at any time before the survey	-		0.8713	0.0605	0.069	2.941	1.715	45	91	0.750	0.992
Children fully vaccinated at any time before the survey	-		0.8606	0.0603	0.070	2.667	1.633	44	89	0.740	0.981
Attendance to early childhood education	6.1		0.5535	0.0661	0.119	2.510	1.584	74	143	0.421	0.686
Early child development index	6.8		0.8203	0.0355	0.043	1.214	1.102	74	143	0.749	0.891

na: not applicable.

( ) Figures that are based on 25–49 unweighted cases.

(\*) Figures that are based on fewer than 25 unweighted cases; for fertility rates, figures that are based on fewer than 125 unweighted person-years of exposure.

**Table SE.9: Sampling errors: West Kazakhstan**

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Kazakhstan, 2015

	MICS Indicator	MDG Indicator	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	
										Lower bound r - 2se	Upper bound r + 2se
<b>Household members</b>											
Use of solid fuels for cooking	3.15		0.0365	0.0107	0.294	3.097	1.760	2591	950	0.015	0.058
Use of improved drinking water sources	4.1	7.8	0.8006	0.1025	0.128	62.501	7.906	2591	950	0.596	1.000
Use of improved sanitation	4.3	7.9	0.9543	0.0140	0.015	4.295	2.072	2591	950	0.926	0.982
School readiness (children attending first grade of primary)	7.2		(1.0000)	(0.0000)	(0.000)	na	na	34	48	(1.000)	(1.000)
Primary school net attendance ratio (adjusted)	7.4	2.1	0.9942	0.0058	0.006	1.152	1.073	171	201	0.983	1.000
Lower secondary school net attendance ratio (adjusted)	7.S1		0.9960	0.0039	0.004	0.728	0.853	157	186	0.988	1.000
Upper secondary school net attendance ratio (adjusted)	7.S2		0.9773	0.0172	0.018	0.738	0.859	58	56	0.943	1.000
Secondary school net attendance ratio (adjusted)	7.5		0.9827	0.0083	0.008	0.974	0.987	215	242	0.966	0.999
Violent discipline	8.3		0.4265	0.0344	0.081	5.324	2.307	700	428	0.358	0.495
<b>Women</b>											
Early initiation of breastfeeding	2.6		0.7810	0.0448	0.057	1.536	1.239	100	132	0.691	0.871
Adolescent birth rate	5.1	5.4	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Total fertility rate	-		(*)	(*)	(*)	na	na	na	na	(*)	(*)
Early childbearing	5.2		0.0308	0.0185	0.601	1.159	1.076	77	102	0.000	0.068
Contraceptive prevalence rate	5.3	5.3	0.5760	0.0177	0.031	0.593	0.770	367	463	0.541	0.611
Unmet need	5.4	5.6	0.0991	0.0168	0.170	1.462	1.209	367	463	0.065	0.133
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.9944	0.0059	0.006	0.815	0.903	100	132	0.983	1.000
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.8952	0.0372	0.042	1.935	1.391	100	132	0.821	0.970
Skilled attendant at delivery	5.7	5.2	1.0000	0.0000	0.000	na	na	100	132	1.000	1.000
Caesarean section	5.9		0.1550	0.0327	0.211	1.072	1.035	100	132	0.089	0.220
Literacy rate (young women)	7.1	2.3	1.0000	0.0000	0.000	na	na	135	167	1.000	1.000
Marriage before age 18	8.5		0.0825	0.0120	0.145	1.253	1.119	515	660	0.059	0.107

Knowledge about HIV prevention (young women)	9.1	6.3	0.2944	0.0305	0.104	0.742	0.862	135	167	0.233	0.355
Condom use with non-regular partners	9.15	6.2	(*)	(*)	(*)	(*)	(*)	17	20	(*)	(*)
Use of internet	10.3		0.9205	0.0236	0.026	1.269	1.126	135	167	0.873	0.968
Life satisfaction	11.1		0.9925	0.0074	0.007	1.209	1.099	135	167	0.978	1.000
Smoking before age 15	12.2		0.0000	0.0000	0.000	na	na	572	725	0.000	0.000
<b>Under-5s</b>											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.0138	0.0071	0.515	1.098	1.048	223	297	0.000	0.028
Underweight prevalence (severe)	2.1b	1.8	0.0089	0.0062	0.698	1.291	1.136	223	297	0.000	0.021
Stunting prevalence (moderate and severe)	2.2a		0.0738	0.0161	0.219	1.125	1.061	222	296	0.042	0.106
Overweight prevalence	2.4		0.0801	0.0175	0.219	1.214	1.102	220	292	0.045	0.115
Exclusive breastfeeding under 6 months	2.7		(0.3741)	(0.0392)	(0.105)	(0.171)	(0.413)	26	27	(0.296)	(0.452)
Tuberculosis immunization coverage at any time before the survey	-		0.9818	0.0180	0.018	1.252	1.119	49	70	0.946	1.000
Polio immunization coverage at any time before the survey	-		0.8585	0.0666	0.078	2.481	1.575	48	69	0.725	0.992
Diphtheria, pertussis and tetanus (DPT) immunization coverage at any time before the survey	-		0.9434	0.0304	0.032	1.139	1.067	47	67	0.883	1.000
Hepatitis B immunization coverage at any time before the survey	-		0.8796	0.0680	0.077	3.012	1.736	49	70	0.744	1.000
Haemophilus influenzae type B (Hib) immunization coverage at any time before the survey	-		0.9062	0.0474	0.052	1.716	1.310	46	66	0.811	1.000
Measles immunization coverage at any time before the survey	-		0.9575	0.0383	0.040	2.092	1.446	48	59	0.881	1.000
Children fully vaccinated at any time before the survey	-		0.9434	0.0411	0.044	1.774	1.332	47	57	0.861	1.000
Attendance to early childhood education	6.1		0.8194	0.0389	0.048	1.158	1.076	84	114	0.742	0.897
Early child development index	6.8		0.8665	0.0375	0.043	1.371	1.171	84	114	0.792	0.941
na: not applicable.											
( ) Figures that are based on 25–49 unweighted cases.											
(*) Figures that are based on fewer than 25 unweighted cases; for fertility rates, figures that are based on fewer than 125 unweighted person-years of exposure.											

**Table SE.10: Sampling errors: Zhambyl**

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Kazakhstan, 2015

	MICS Indicator	MDG Indicator	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	
										Lower bound r - 2se	Upper bound r + 2se
<b>Household members</b>											
Use of solid fuels for cooking	3.15		0.0158	0.0082	0.516	3.896	1.974	3647	911	0.000	0.032
Use of improved drinking water sources	4.1	7.8	0.9850	0.0152	0.015	14.214	3.770	3647	911	0.955	1.000
Use of improved sanitation	4.3	7.9	0.9929	0.0059	0.006	4.456	2.111	3647	911	0.981	1.000
School readiness (children attending first grade of primary)	7.2		0.9200	0.0340	0.037	1.417	1.190	89	91	0.852	0.988
Primary school net attendance ratio (adjusted)	7.4	2.1	1.0000	0.0000	0.000	na	na	298	295	1.000	1.000
Lower secondary school net attendance ratio (adjusted)	7.S1		0.9967	0.0033	0.003	0.929	0.964	286	280	0.990	1.000
Upper secondary school net attendance ratio (adjusted)	7.S2		0.8550	0.0426	0.050	1.243	1.115	84	86	0.770	0.940
Secondary school net attendance ratio (adjusted)	7.5		0.9686	0.0114	0.012	1.555	1.247	370	366	0.946	0.991
Violent discipline	8.3		0.6696	0.0218	0.033	2.266	1.505	1058	528	0.626	0.713
<b>Women</b>											
Early initiation of breastfeeding	2.6		0.8864	0.0265	0.030	1.145	1.070	165	165	0.833	0.939
Adolescent birth rate	5.1	5.4	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Total fertility rate	-		(*)	(*)	(*)	na	na	na	na	(*)	(*)
Early childbearing	5.2		0.0254	0.0152	0.599	0.871	0.934	90	94	0.000	0.056
Contraceptive prevalence rate	5.3	5.3	0.5056	0.0240	0.048	1.316	1.147	558	570	0.457	0.554
Unmet need	5.4	5.6	0.0956	0.0128	0.134	1.083	1.041	558	570	0.070	0.121
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.9937	0.0063	0.006	1.043	1.021	165	165	0.981	1.000
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.9520	0.0148	0.016	0.784	0.886	165	165	0.922	0.982
Skilled attendant at delivery	5.7	5.2	0.9937	0.0063	0.006	1.043	1.021	165	165	0.981	1.000
Caesarean section	5.9		0.2209	0.0437	0.198	1.821	1.349	165	165	0.133	0.308
Literacy rate (young women)	7.1	2.3	1.0000	0.0000	0.000	na	na	182	191	1.000	1.000
Marriage before age 18	8.5		0.1087	0.0184	0.169	2.463	1.569	686	709	0.072	0.145

Knowledge about HIV prevention (young women)	9.1	6.3	0.0885	0.0252	0.284	1.492	1.221	182	191	0.038	0.139
Condom use with non-regular partners	9.15	6.2	(*)	(*)	(*)	(*)	(*)	1	1	(*)	(*)
Use of internet	10.3		0.8937	0.0426	0.048	3.621	1.903	182	191	0.809	0.979
Life satisfaction	11.1		0.9764	0.0087	0.009	0.619	0.787	182	191	0.959	0.994
Smoking before age 15	12.2		0.0044	0.0016	0.368	0.477	0.690	778	806	0.001	0.008
<b>Under-5s</b>											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.0298	0.0068	0.229	0.674	0.821	408	418	0.016	0.043
Underweight prevalence (severe)	2.1b	1.8	0.0078	0.0042	0.537	0.947	0.973	408	418	0.000	0.016
Stunting prevalence (moderate and severe)	2.2a		0.0689	0.0142	0.206	1.311	1.145	408	418	0.040	0.097
Overweight prevalence	2.4		0.0611	0.0108	0.177	0.853	0.924	408	418	0.039	0.083
Exclusive breastfeeding under 6 months	2.7		(0.3208)	(0.0744)	(0.232)	(0.940)	(0.969)	40	38	(0.172)	(0.470)
Tuberculosis immunization coverage at any time before the survey	-		0.9925	0.0075	0.008	0.746	0.864	91	99	0.977	1.000
Polio immunization coverage at any time before the survey	-		0.9057	0.0305	0.034	1.064	1.032	91	99	0.845	0.967
Diphtheria, pertussis and tetanus (DPT) immunization coverage at any time before the survey	-		0.9057	0.0305	0.034	1.064	1.032	91	99	0.845	0.967
Hepatitis B immunization coverage at any time before the survey	-		0.9003	0.0306	0.034	1.019	1.010	91	99	0.839	0.961
Haemophilus influenzae type B (Hib) immunization coverage at any time before the survey	-		0.9057	0.0305	0.034	1.064	1.032	91	99	0.845	0.967
Measles immunization coverage at any time before the survey	-		0.9399	0.0277	0.029	1.139	1.067	85	85	0.885	0.995
Children fully vaccinated at any time before the survey	-		0.9299	0.0292	0.031	1.103	1.050	85	85	0.871	0.988
Attendance to early childhood education	6.1		0.5384	0.0410	0.076	1.110	1.054	160	165	0.456	0.620
Early child development index	6.8		0.7937	0.0339	0.043	1.148	1.071	160	165	0.726	0.861
na: not applicable.											
( ) Figures that are based on 25–49 unweighted cases.											
(*) Figures that are based on fewer than 25 unweighted cases; for fertility rates, figures that are based on fewer than 125 unweighted person-years of exposure.											

**Table SE.11: Sampling errors: Karaganda**

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Kazakhstan, 2015

	MICS Indicator	MDG Indicator	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	
										Lower bound r - 2se	Upper bound r + 2se
<b>Household members</b>											
Use of solid fuels for cooking	3.15		0.0224	0.0060	0.270	1.768	1.330	4630	1062	0.010	0.034
Use of improved drinking water sources	4.1	7.8	0.9874	0.0069	0.007	4.071	2.018	4630	1062	0.974	1.000
Use of improved sanitation	4.3	7.9	0.9992	0.0006	0.001	0.479	0.692	4630	1062	0.998	1.000
School readiness (children attending first grade of primary)	7.2		0.9396	0.0265	0.028	0.644	0.803	78	53	0.887	0.993
Primary school net attendance ratio (adjusted)	7.4	2.1	0.9954	0.0049	0.005	0.909	0.953	261	173	0.986	1.000
Lower secondary school net attendance ratio (adjusted)	7.S1		0.9947	0.0053	0.005	1.063	1.031	291	200	0.984	1.000
Upper secondary school net attendance ratio (adjusted)	7.S2		0.9292	0.0439	0.047	1.813	1.346	92	63	0.841	1.000
Secondary school net attendance ratio (adjusted)	7.5		0.9862	0.0102	0.010	2.018	1.421	383	263	0.966	1.000
Violent discipline	8.3		0.4708	0.0189	0.040	1.426	1.194	659	397	0.433	0.509
<b>Women</b>											
Early initiation of breastfeeding	2.6		0.8479	0.0335	0.039	0.791	0.890	139	92	0.781	0.915
Adolescent birth rate	5.1	5.4	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Total fertility rate	-		(*)	(*)	(*)	na	na	na	na	(*)	(*)
Early childbearing	5.2		0.0128	0.0128	1.002	1.028	1.014	112	80	0.000	0.038
Contraceptive prevalence rate	5.3	5.3	0.5540	0.0253	0.046	1.173	1.083	661	452	0.503	0.605
Unmet need	5.4	5.6	0.1025	0.0149	0.146	1.091	1.045	661	452	0.073	0.132
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	1.0000	0.0000	0.000	na	na	139	92	1.000	1.000
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.9814	0.0082	0.008	0.334	0.578	139	92	0.965	0.998
Skilled attendant at delivery	5.7	5.2	1.0000	0.0000	0.000	na	na	139	92	1.000	1.000
Caesarean section	5.9		0.1407	0.0361	0.257	0.983	0.991	139	92	0.068	0.213
Literacy rate (young women)	7.1	2.3	1.0000	0.0000	0.000	na	na	209	148	1.000	1.000
Marriage before age 18	8.5		0.0690	0.0093	0.135	0.866	0.931	938	640	0.050	0.088

Knowledge about HIV prevention (young women)	9.1	6.3	0.3304	0.0393	0.119	1.028	1.014	209	148	0.252	0.409
Condom use with non-regular partners	9.15	6.2	(*)	(*)	(*)	(*)	(*)	22	16	(*)	(*)
Use of internet	10.3		0.9726	0.0085	0.009	0.400	0.633	209	148	0.956	0.990
Life satisfaction	11.1		0.9678	0.0136	0.014	0.877	0.936	209	148	0.940	0.995
Smoking before age 15	12.2		0.0077	0.0032	0.412	0.927	0.963	1035	708	0.001	0.014
<b>Under-5s</b>											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.0150	0.0073	0.489	0.908	0.953	351	251	0.000	0.030
Underweight prevalence (severe)	2.1b	1.8	0.0000	0.0000	0.000	na	na	351	251	0.000	0.000
Stunting prevalence (moderate and severe)	2.2a		0.0541	0.0184	0.340	1.649	1.284	351	251	0.017	0.091
Overweight prevalence	2.4		0.0642	0.0170	0.265	1.204	1.097	351	251	0.030	0.098
Exclusive breastfeeding under 6 months	2.7		(*)	(*)	(*)	(*)	(*)	26	20	(*)	(*)
Tuberculosis immunization coverage at any time before the survey	-		(0.9802)	(0.0039)	(0.004)	(0.038)	(0.194)	77	48	(0.972)	(0.988)
Polio immunization coverage at any time before the survey	-		(0.8808)	(0.0343)	(0.039)	(0.527)	(0.726)	77	48	(0.812)	(0.949)
Diphtheria, pertussis and tetanus (DPT) immunization coverage at any time before the survey	-		(0.8984)	(0.0345)	(0.038)	(0.613)	(0.783)	77	48	(0.829)	(0.967)
Hepatitis B immunization coverage at any time before the survey	-		(0.8984)	(0.0345)	(0.038)	(0.613)	(0.783)	77	48	(0.829)	(0.967)
Haemophilus influenzae type B (Hib) immunization coverage at any time before the survey	-		(0.8964)	(0.0331)	(0.037)	(0.553)	(0.744)	77	48	(0.830)	(0.963)
Measles immunization coverage at any time before the survey	-		0.9871	0.0129	0.013	0.892	0.945	95	69	0.961	1.000
Children fully vaccinated at any time before the survey	-		0.9574	0.0184	0.019	0.566	0.752	95	69	0.921	0.994
Attendance to early childhood education	6.1		0.6695	0.0546	0.082	1.521	1.233	155	114	0.560	0.779
Early child development index	6.8		0.8055	0.0416	0.052	1.250	1.118	155	114	0.722	0.889
na: not applicable.											
( ) Figures that are based on 25–49 unweighted cases.											
(*) Figures that are based on fewer than 25 unweighted cases; for fertility rates, figures that are based on fewer than 125 unweighted person-years of exposure.											

**Table SE.12: Sampling errors: Kostanai**

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Kazakhstan, 2015

	MICS Indicator	MDG Indicator	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	
										Lower bound r - 2se	Upper bound r + 2se
<b>Household members</b>											
Use of solid fuels for cooking	3.15		0.0000	0.0000	0.000	na	na	2903	1271	0.000	0.000
Use of improved drinking water sources	4.1	7.8	0.9059	0.0400	0.044	23.844	4.883	2903	1271	0.826	0.986
Use of improved sanitation	4.3	7.9	0.9880	0.0079	0.008	6.640	2.577	2903	1271	0.972	1.000
School readiness (children attending first grade of primary)	7.2		1.0000	0.0000	0.000	na	na	46	58	1.000	1.000
Primary school net attendance ratio (adjusted)	7.4	2.1	0.9954	0.0046	0.005	1.077	1.038	178	235	0.986	1.000
Lower secondary school net attendance ratio (adjusted)	7.S1		0.9925	0.0052	0.005	0.856	0.925	181	240	0.982	1.000
Upper secondary school net attendance ratio (adjusted)	7.S2		1.0000	0.0000	0.000	na	na	59	79	1.000	1.000
Secondary school net attendance ratio (adjusted)	7.5		0.9943	0.0039	0.004	0.848	0.921	240	319	0.987	1.000
Violent discipline	8.3		0.6537	0.0229	0.035	3.362	1.834	836	531	0.608	0.699
<b>Women</b>											
Early initiation of breastfeeding	2.6		0.7484	0.0370	0.049	0.807	0.899	82	112	0.674	0.822
Adolescent birth rate	5.1	5.4	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Total fertility rate	-		(*)	(*)	(*)	na	na	na	na	(*)	(*)
Early childbearing	5.2		0.0666	0.0212	0.319	0.879	0.937	91	122	0.024	0.109
Contraceptive prevalence rate	5.3	5.3	0.6043	0.0233	0.039	1.327	1.152	443	587	0.558	0.651
Unmet need	5.4	5.6	0.0945	0.0118	0.125	0.952	0.976	443	587	0.071	0.118
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	1.0000	0.0000	0.000	na	na	82	112	1.000	1.000
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	1.0000	0.0000	0.000	na	na	82	112	1.000	1.000
Skilled attendant at delivery	5.7	5.2	1.0000	0.0000	0.000	na	na	82	112	1.000	1.000
Caesarean section	5.9		0.2015	0.0339	0.168	0.793	0.891	82	112	0.134	0.269
Literacy rate (young women)	7.1	2.3	1.0000	0.0000	0.000	na	na	157	212	1.000	1.000
Marriage before age 18	8.5		0.0986	0.0111	0.112	1.126	1.061	609	817	0.076	0.121



Knowledge about HIV prevention (young women)	9.1	6.3	0.4533	0.0450	0.099	1.725	1.313	157	212	0.363	0.543
Condom use with non-regular partners	9.15	6.2	(0.6533)	(0.0308)	(0.047)	(0.151)	(0.388)	27	37	(0.592)	(0.715)
Use of internet	10.3		0.9494	0.0074	0.008	0.243	0.493	157	212	0.935	0.964
Life satisfaction	11.1		0.9914	0.0061	0.006	0.929	0.964	157	212	0.979	1.000
Smoking before age 15	12.2		0.0260	0.0052	0.198	0.951	0.975	675	907	0.016	0.036
<b>Under-5s</b>											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.0090	0.0039	0.433	0.559	0.748	233	330	0.001	0.017
Underweight prevalence (severe)	2.1b	1.8	0.0022	0.0022	0.981	0.701	0.837	233	330	0.000	0.007
Stunting prevalence (moderate and severe)	2.2a		0.1136	0.0186	0.164	1.135	1.065	233	330	0.076	0.151
Overweight prevalence	2.4		0.1252	0.0162	0.129	0.776	0.881	228	325	0.093	0.158
Exclusive breastfeeding under 6 months	2.7		(0.2233)	(0.0409)	(0.183)	(0.270)	(0.520)	20	29	(0.141)	(0.305)
Tuberculosis immunization coverage at any time before the survey	-		1.0000	0.0000	0.000	na	na	43	63	1.000	1.000
Polio immunization coverage at any time before the survey	-		0.8825	0.0421	0.048	1.041	1.020	43	62	0.798	0.967
Diphtheria, pertussis and tetanus (DPT) immunization coverage at any time before the survey	-		0.9316	0.0221	0.024	0.475	0.689	43	63	0.887	0.976
Hepatitis B immunization coverage at any time before the survey	-		0.9083	0.0327	0.036	0.794	0.891	43	63	0.843	0.974
Haemophilus influenzae type B (Hib) immunization coverage at any time before the survey	-		0.9430	0.0223	0.024	0.564	0.751	42	62	0.898	0.988
Measles immunization coverage at any time before the survey	-		0.9821	0.0179	0.018	1.344	1.159	53	75	0.946	1.000
Children fully vaccinated at any time before the survey	-		0.9356	0.0291	0.031	1.057	1.028	54	76	0.877	0.994
Attendance to early childhood education	6.1		0.6957	0.0342	0.049	0.806	0.898	104	147	0.627	0.764
Early child development index	6.8		0.9249	0.0289	0.031	1.756	1.325	104	147	0.867	0.983
na: not applicable.											
( ) Figures that are based on 25–49 unweighted cases.											
(*) Figures that are based on fewer than 25 unweighted cases; for fertility rates, figures that are based on fewer than 125 unweighted person-years of exposure.											

**Table SE.13: Sampling errors: Kyzylorda**

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Kazakhstan, 2015

	MICS Indicator	MDG Indicator	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	
										Lower bound r - 2se	Upper bound r + 2se
<b>Household members</b>											
Use of solid fuels for cooking	3.15		0.0087	0.0038	0.438	1.486	1.219	1893	879	0.001	0.016
Use of improved drinking water sources	4.1	7.8	0.9633	0.0237	0.025	13.939	3.733	1893	879	0.916	1.000
Use of improved sanitation	4.3	7.9	0.9823	0.0084	0.009	3.546	1.883	1893	879	0.966	0.999
School readiness (children attending first grade of primary)	7.2		0.6959	0.0585	0.084	1.684	1.298	48	105	0.579	0.813
Primary school net attendance ratio (adjusted)	7.4	2.1	0.9976	0.0024	0.002	0.799	0.894	161	340	0.993	1.000
Lower secondary school net attendance ratio (adjusted)	7.S1		1.0000	0.0000	0.000	na	na	140	301	1.000	1.000
Upper secondary school net attendance ratio (adjusted)	7.S2		0.9813	0.0131	0.013	0.943	0.971	48	102	0.955	1.000
Secondary school net attendance ratio (adjusted)	7.5		0.9976	0.0024	0.002	0.962	0.981	188	403	0.993	1.000
Violent discipline	8.3		0.4191	0.0234	0.056	2.256	1.502	1187	543	0.372	0.466
<b>Women</b>											
Early initiation of breastfeeding	2.6		0.8351	0.0312	0.037	1.283	1.133	83	183	0.773	0.897
Adolescent birth rate	5.1	5.4	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Total fertility rate	-		(*)	(*)	(*)	na	na	na	na	(*)	(*)
Early childbearing	5.2		0.0268	0.0133	0.497	0.880	0.938	59	130	0.000	0.054
Contraceptive prevalence rate	5.3	5.3	0.5487	0.0226	0.041	1.243	1.115	275	603	0.503	0.594
Unmet need	5.4	5.6	0.0966	0.0116	0.120	0.922	0.960	275	603	0.073	0.120
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.9729	0.0140	0.014	1.354	1.163	83	183	0.945	1.000
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.9457	0.0218	0.023	1.684	1.298	83	183	0.902	0.989
Skilled attendant at delivery	5.7	5.2	0.9820	0.0142	0.014	2.082	1.443	83	183	0.954	1.000
Caesarean section	5.9		0.0987	0.0252	0.256	1.301	1.141	83	183	0.048	0.149
Literacy rate (young women)	7.1	2.3	1.0000	0.0000	0.000	na	na	106	233	1.000	1.000
Marriage before age 18	8.5		0.0684	0.0101	0.148	1.246	1.116	352	781	0.048	0.089

Knowledge about HIV prevention (young women)	9.1	6.3	0.1830	0.0227	0.124	0.797	0.893	106	233	0.138	0.228
Condom use with non-regular partners	9.15	6.2	(*)	(*)	(*)	(*)	(*)	2	4	(*)	(*)
Use of internet	10.3		0.7964	0.0332	0.042	1.574	1.254	106	233	0.730	0.863
Life satisfaction	11.1		0.9762	0.0104	0.011	1.082	1.040	106	233	0.955	0.997
Smoking before age 15	12.2		0.0018	0.0013	0.710	0.811	0.901	399	884	0.000	0.004
<b>Under-5s</b>											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.0102	0.0046	0.451	1.028	1.014	213	493	0.001	0.019
Underweight prevalence (severe)	2.1b	1.8	0.0020	0.0020	0.987	0.954	0.977	213	493	0.000	0.006
Stunting prevalence (moderate and severe)	2.2a		0.0999	0.0161	0.161	1.403	1.184	211	490	0.068	0.132
Overweight prevalence	2.4		0.0857	0.0200	0.234	2.462	1.569	208	482	0.046	0.126
Exclusive breastfeeding under 6 months	2.7		(0.3192)	(0.0627)	(0.196)	(0.849)	(0.922)	21	48	(0.194)	(0.445)
Tuberculosis immunization coverage at any time before the survey	-		1.0000	0.0000	0.000	na	na	43	100	1.000	1.000
Polio immunization coverage at any time before the survey	-		0.9754	0.0144	0.015	0.861	0.928	44	101	0.947	1.000
Diphtheria, pertussis and tetanus (DPT) immunization coverage at any time before the survey	-		0.9857	0.0103	0.010	0.744	0.863	43	100	0.965	1.000
Hepatitis B immunization coverage at any time before the survey	-		0.9750	0.0146	0.015	0.865	0.930	43	100	0.946	1.000
Haemophilus influenzae type B (Hib) immunization coverage at any time before the survey	-		0.8962	0.0334	0.037	1.091	1.045	39	92	0.829	0.963
Measles immunization coverage at any time before the survey	-		1.0000	0.0000	0.000	na	na	36	83	1.000	1.000
Children fully vaccinated at any time before the survey	-		0.9622	0.0216	0.022	1.003	1.001	35	79	0.919	1.000
Attendance to early childhood education	6.1		0.5286	0.0505	0.096	2.203	1.484	92	216	0.428	0.630
Early child development index	6.8		0.8864	0.0188	0.021	0.758	0.870	92	216	0.849	0.924
na: not applicable.											
( ) Figures that are based on 25–49 unweighted cases.											
(*) Figures that are based on fewer than 25 unweighted cases; for fertility rates, figures that are based on fewer than 125 unweighted person-years of exposure.											

**Table SE.14: Sampling errors: Mangistau**

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Kazakhstan, 2015

	MICS Indicator	MDG Indicator	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	
										Lower bound r - 2se	Upper bound r + 2se
<b>Household members</b>											
Use of solid fuels for cooking	3.15		0.0000	0.0000	0.000	na	na	1841	862	0.000	0.000
Use of improved drinking water sources	4.1	7.8	1.0000	0.0000	0.000	na	na	1841	862	1.000	1.000
Use of improved sanitation	4.3	7.9	0.9864	0.0036	0.004	0.841	0.917	1841	862	0.979	0.994
School readiness (children attending first grade of primary)	7.2		1.0000	0.0000	0.000	na	na	47	96	1.000	1.000
Primary school net attendance ratio (adjusted)	7.4	2.1	0.9963	0.0038	0.004	1.342	1.158	171	350	0.989	1.000
Lower secondary school net attendance ratio (adjusted)	7.S1		0.9887	0.0065	0.007	1.113	1.055	142	297	0.976	1.000
Upper secondary school net attendance ratio (adjusted)	7.S2		0.9822	0.0128	0.013	0.737	0.859	37	80	0.957	1.000
Secondary school net attendance ratio (adjusted)	7.5		0.9874	0.0058	0.006	1.012	1.006	179	377	0.976	0.999
Violent discipline	8.3		0.6507	0.0285	0.044	3.667	1.915	1155	544	0.594	0.708
<b>Women</b>											
Early initiation of breastfeeding	2.6		0.8708	0.0292	0.034	1.457	1.207	101	193	0.812	0.929
Adolescent birth rate	5.1	5.4	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Total fertility rate	-		(*)	(*)	(*)	na	na	na	na	(*)	(*)
Early childbearing	5.2		0.0532	0.0128	0.240	0.487	0.698	79	152	0.028	0.079
Contraceptive prevalence rate	5.3	5.3	0.3706	0.0264	0.071	1.711	1.308	286	572	0.318	0.424
Unmet need	5.4	5.6	0.1833	0.0228	0.124	1.987	1.409	286	572	0.138	0.229
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.9869	0.0078	0.008	0.894	0.946	101	193	0.971	1.000
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.9288	0.0167	0.018	0.810	0.900	101	193	0.895	0.962
Skilled attendant at delivery	5.7	5.2	0.9869	0.0078	0.008	0.894	0.946	101	193	0.971	1.000
Caesarean section	5.9		0.1152	0.0191	0.166	0.686	0.828	101	193	0.077	0.153
Literacy rate (young women)	7.1	2.3	1.0000	0.0000	0.000	na	na	127	249	1.000	1.000
Marriage before age 18	8.5		0.1015	0.0109	0.107	0.946	0.973	360	732	0.080	0.123

Knowledge about HIV prevention (young women)	9.1	6.3	0.1114	0.0184	0.165	0.846	0.920	127	249	0.075	0.148
Condom use with non-regular partners	9.15	6.2	(*)	(*)	(*)	(*)	(*)	2	5	(*)	(*)
Use of internet	10.3		0.9886	0.0082	0.008	1.466	1.211	127	249	0.972	1.000
Life satisfaction	11.1		0.9921	0.0057	0.006	1.038	1.019	127	249	0.981	1.000
Smoking before age 15	12.2		0.0011	0.0011	1.001	0.903	0.950	408	829	0.000	0.003
<b>Under-5s</b>											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.0180	0.0081	0.451	1.544	1.242	195	416	0.002	0.034
Underweight prevalence (severe)	2.1b	1.8	0.0042	0.0030	0.720	0.897	0.947	195	416	0.000	0.010
Stunting prevalence (moderate and severe)	2.2a		0.0450	0.0151	0.335	2.147	1.465	191	407	0.015	0.075
Overweight prevalence	2.4		0.0491	0.0110	0.223	1.018	1.009	186	397	0.027	0.071
Exclusive breastfeeding under 6 months	2.7		(0.0955)	(0.0412)	(0.431)	(0.942)	(0.971)	25	49	(0.013)	(0.178)
Tuberculosis immunization coverage at any time before the survey	-		0.9612	0.0167	0.017	0.715	0.845	46	96	0.928	0.995
Polio immunization coverage at any time before the survey	-		0.8955	0.0330	0.037	1.107	1.052	46	96	0.829	0.962
Diphtheria, pertussis and tetanus (DPT) immunization coverage at any time before the survey	-		0.9053	0.0288	0.032	0.917	0.957	46	96	0.848	0.963
Hepatitis B immunization coverage at any time before the survey	-		0.8973	0.0342	0.038	1.208	1.099	46	96	0.829	0.966
Haemophilus influenzae type B (Hib) immunization coverage at any time before the survey	-		0.9053	0.0288	0.032	0.917	0.957	46	96	0.848	0.963
Measles immunization coverage at any time before the survey	-		0.9814	0.0132	0.013	0.931	0.965	45	99	0.955	1.000
Children fully vaccinated at any time before the survey	-		0.9311	0.0294	0.032	1.320	1.149	45	99	0.872	0.990
Attendance to early childhood education	6.1		0.4423	0.0353	0.080	0.909	0.954	85	181	0.372	0.513
Early child development index	6.8		0.7955	0.0357	0.045	1.407	1.186	85	181	0.724	0.867
na: not applicable.											
( ) Figures that are based on 25–49 unweighted cases.											
(*) Figures that are based on fewer than 25 unweighted cases; for fertility rates, figures that are based on fewer than 125 unweighted person-years of exposure.											

**Table SE.15: Sampling errors: South Kazakhstan**

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Kazakhstan, 2015

	MICS Indicator	MDG Indicator	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	
										Lower bound r - 2se	Upper bound r + 2se
<b>Household members</b>											
Use of solid fuels for cooking	3.15		0.0154	0.0086	0.560	4.247	2.061	9964	867	0.000	0.033
Use of improved drinking water sources	4.1	7.8	0.9785	0.0165	0.017	11.160	3.341	9964	867	0.946	1.000
Use of improved sanitation	4.3	7.9	0.9851	0.0067	0.007	2.653	1.629	9964	867	0.972	0.999
School readiness (children attending first grade of primary)	7.2		0.8742	0.0474	0.054	2.109	1.452	255	104	0.779	0.969
Primary school net attendance ratio (adjusted)	7.4	2.1	1.0000	0.0000	0.000	na	na	1016	376	1.000	1.000
Lower secondary school net attendance ratio (adjusted)	7.S1		0.9945	0.0038	0.004	0.898	0.947	844	336	0.987	1.000
Upper secondary school net attendance ratio (adjusted)	7.S2		0.9843	0.0114	0.012	0.756	0.870	245	90	0.961	1.000
Secondary school net attendance ratio (adjusted)	7.5		0.9919	0.0040	0.004	0.867	0.931	1089	426	0.984	1.000
Violent discipline	8.3		0.5364	0.0250	0.047	2.486	1.577	1285	559	0.486	0.586
<b>Women</b>											
Early initiation of breastfeeding	2.6		0.8734	0.0215	0.025	0.831	0.911	474	199	0.830	0.916
Adolescent birth rate	5.1	5.4	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Total fertility rate	-		(*)	(*)	(*)	na	na	na	na	(*)	(*)
Early childbearing	5.2		0.0153	0.0091	0.592	0.763	0.874	328	141	0.000	0.033
Contraceptive prevalence rate	5.3	5.3	0.6038	0.0258	0.043	1.727	1.314	1493	621	0.552	0.655
Unmet need	5.4	5.6	0.0469	0.0110	0.235	1.678	1.295	1493	621	0.025	0.069
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.9941	0.0042	0.004	0.590	0.768	474	199	0.986	1.000
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.9708	0.0147	0.015	1.518	1.232	474	199	0.941	1.000
Skilled attendant at delivery	5.7	5.2	0.9941	0.0042	0.004	0.590	0.768	474	199	0.986	1.000
Caesarean section	5.9		0.1133	0.0189	0.167	0.706	0.840	474	199	0.075	0.151
Literacy rate (young women)	7.1	2.3	1.0000	0.0000	0.000	na	na	590	244	1.000	1.000
Marriage before age 18	8.5		0.0995	0.0159	0.160	2.175	1.475	1817	771	0.068	0.131

Knowledge about HIV prevention (young women)	9.1	6.3	0.1517	0.0427	0.282	3.446	1.856	590	244	0.066	0.237
Condom use with non-regular partners	9.15	6.2	(*)	(*)	(*)	(*)	(*)	5	3	(*)	(*)
Use of internet	10.3		0.8774	0.0256	0.029	1.482	1.217	590	244	0.826	0.929
Life satisfaction	11.1		0.9536	0.0165	0.017	1.485	1.219	590	244	0.921	0.986
Smoking before age 15	12.2		0.0009	0.0009	0.993	0.797	0.893	2079	874	0.000	0.003
<b>Under-5s</b>											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.0224	0.0083	0.372	1.623	1.274	1231	513	0.006	0.039
Underweight prevalence (severe)	2.1b	1.8	0.0019	0.0020	1.020	1.030	1.015	1231	513	0.000	0.006
Stunting prevalence (moderate and severe)	2.2a		0.1144	0.0168	0.147	1.417	1.190	1220	507	0.081	0.148
Overweight prevalence	2.4		0.0759	0.0118	0.155	1.007	1.003	1223	509	0.052	0.100
Exclusive breastfeeding under 6 months	2.7		0.5405	0.0770	0.142	1.216	1.103	120	52	0.387	0.694
Tuberculosis immunization coverage at any time before the survey	-		1.0000	0.0000	0.000	na	na	230	108	1.000	1.000
Polio immunization coverage at any time before the survey	-		0.9683	0.0171	0.018	1.014	1.007	230	108	0.934	1.000
Diphtheria, pertussis and tetanus (DPT) immunization coverage at any time before the survey	-		0.9613	0.0185	0.019	0.986	0.993	230	108	0.924	0.998
Hepatitis B immunization coverage at any time before the survey	-		0.9365	0.0252	0.027	1.141	1.068	230	108	0.886	0.987
Haemophilus influenzae type B (Hib) immunization coverage at any time before the survey	-		0.9669	0.0177	0.018	1.023	1.012	224	105	0.931	1.000
Measles immunization coverage at any time before the survey	-		0.9831	0.0116	0.012	0.706	0.840	191	88	0.960	1.000
Children fully vaccinated at any time before the survey	-		0.9827	0.0118	0.012	0.711	0.843	187	87	0.959	1.000
Attendance to early childhood education	6.1		0.4827	0.0764	0.158	5.193	2.279	564	223	0.330	0.636
Early child development index	6.8		0.8221	0.0390	0.047	2.304	1.518	564	223	0.744	0.900

na: not applicable.

(\*) Figures that are based on fewer than 25 unweighted cases; for fertility rates, figures that are based on fewer than 125 unweighted person-years of exposure.

**Table SE.16: Sampling errors: Pavlodar**

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Kazakhstan, 2015

	MICS Indicator	MDG Indicator	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	
										Lower bound r - 2se	Upper bound r + 2se
<b>Household members</b>											
Use of solid fuels for cooking	3.15		0.0000	0.0000	0.000	na	na	2274	1196	0.000	0.000
Use of improved drinking water sources	4.1	7.8	0.9507	0.0257	0.027	16.865	4.107	2274	1196	0.899	1.000
Use of improved sanitation	4.3	7.9	0.9991	0.0009	0.001	1.097	1.048	2274	1196	0.997	1.000
School readiness (children attending first grade of primary)	7.2		(0.9545)	(0.0445)	(0.047)	(1.821)	(1.349)	30	41	(0.866)	(1.000)
Primary school net attendance ratio (adjusted)	7.4	2.1	0.9849	0.0113	0.011	1.661	1.289	137	196	0.962	1.000
Lower secondary school net attendance ratio (adjusted)	7.S1		0.9928	0.0054	0.005	0.763	0.873	134	188	0.982	1.000
Upper secondary school net attendance ratio (adjusted)	7.S2		0.9684	0.0144	0.015	0.393	0.627	43	59	0.940	0.997
Secondary school net attendance ratio (adjusted)	7.5		0.9946	0.0041	0.004	0.754	0.868	177	247	0.986	1.000
Violent discipline	8.3		0.6014	0.0168	0.028	1.554	1.247	655	438	0.568	0.635
<b>Women</b>											
Early initiation of breastfeeding	2.6		0.7512	0.0370	0.049	0.726	0.852	67	100	0.677	0.825
Adolescent birth rate	5.1	5.4	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Total fertility rate	-		(*)	(*)	(*)	na	na	na	na	(*)	(*)
Early childbearing	5.2		0.0110	0.0109	0.988	1.085	1.042	67	101	0.000	0.033
Contraceptive prevalence rate	5.3	5.3	0.4541	0.0191	0.042	0.691	0.831	318	472	0.416	0.492
Unmet need	5.4	5.6	0.1431	0.0173	0.121	1.153	1.074	318	472	0.108	0.178
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.9786	0.0147	0.015	1.016	1.008	67	100	0.949	1.000
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.9786	0.0147	0.015	1.016	1.008	67	100	0.949	1.000
Skilled attendant at delivery	5.7	5.2	0.9786	0.0147	0.015	1.016	1.008	67	100	0.949	1.000
Caesarean section	5.9		0.1968	0.0377	0.192	0.891	0.944	67	100	0.121	0.272
Literacy rate (young women)	7.1	2.3	1.0000	0.0000	0.000	na	na	116	169	1.000	1.000
Marriage before age 18	8.5		0.1069	0.0113	0.106	0.926	0.962	468	692	0.084	0.130



Knowledge about HIV prevention (young women)	9.1	6.3	0.3171	0.0369	0.116	1.058	1.028	116	169	0.243	0.391
Condom use with non-regular partners	9.15	6.2	(*)	(*)	(*)	(*)	(*)	12	17	(*)	(*)
Use of internet	10.3		0.9858	0.0084	0.009	0.850	0.922	116	169	0.969	1.000
Life satisfaction	11.1		0.9821	0.0098	0.010	0.910	0.954	116	169	0.963	1.000
Smoking before age 15	12.2		0.0183	0.0046	0.253	0.908	0.953	517	760	0.009	0.028
<b>Under-5s</b>											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.0076	0.0074	0.975	1.831	1.353	165	252	0.000	0.022
Underweight prevalence (severe)	2.1b	1.8	0.0000	0.0000	0.000	na	na	165	252	0.000	0.000
Stunting prevalence (moderate and severe)	2.2a		0.0550	0.0146	0.266	1.028	1.014	165	251	0.026	0.084
Overweight prevalence	2.4		0.0970	0.0235	0.242	1.544	1.243	162	247	0.050	0.144
Exclusive breastfeeding under 6 months	2.7		(*)	(*)	(*)	(*)	(*)	13	20	(*)	(*)
Tuberculosis immunization coverage at any time before the survey	-		(0.9394)	(0.0288)	(0.031)	(0.697)	(0.835)	32	49	(0.882)	(0.997)
Polio immunization coverage at any time before the survey	-		0.8981	0.0482	0.054	1.243	1.115	32	50	0.802	0.994
Diphtheria, pertussis and tetanus (DPT) immunization coverage at any time before the survey	-		0.8981	0.0482	0.054	1.243	1.115	32	50	0.802	0.994
Hepatitis B immunization coverage at any time before the survey	-		0.8981	0.0482	0.054	1.243	1.115	32	50	0.802	0.994
Haemophilus influenzae type B (Hib) immunization coverage at any time before the survey	-		0.8981	0.0482	0.054	1.243	1.115	32	50	0.802	0.994
Measles immunization coverage at any time before the survey	-		0.9271	0.0378	0.041	1.307	1.143	42	63	0.852	1.000
Children fully vaccinated at any time before the survey	-		0.8950	0.0396	0.044	1.020	1.010	42	62	0.816	0.974
Attendance to early childhood education	6.1		0.7551	0.0608	0.081	1.862	1.364	61	94	0.633	0.877
Early child development index	6.8		0.8848	0.0318	0.036	0.922	0.960	61	94	0.821	0.948
na: not applicable.											
( ) Figures that are based on 25–49 unweighted cases.											
(*) Figures that are based on fewer than 25 unweighted cases; for fertility rates, figures that are based on fewer than 125 unweighted person-years of exposure.											

**Table SE.17: Sampling errors: North Kazakhstan**

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Kazakhstan, 2015

	MICS Indicator	MDG Indicator	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	
										Lower bound r - 2se	Upper bound r + 2se
<b>Household members</b>											
Use of solid fuels for cooking	3.15		0.0019	0.0009	0.482	0.558	0.747	1721	1266	0.000	0.004
Use of improved drinking water sources	4.1	7.8	0.9817	0.0143	0.015	14.434	3.799	1721	1266	0.953	1.000
Use of improved sanitation	4.3	7.9	0.9762	0.0049	0.005	1.306	1.143	1721	1266	0.966	0.986
School readiness (children attending first grade of primary)	7.2		0.9489	0.0239	0.025	0.669	0.818	29	58	0.901	0.997
Primary school net attendance ratio (adjusted)	7.4	2.1	0.9948	0.0052	0.005	0.984	0.992	94	192	0.984	1.000
Lower secondary school net attendance ratio (adjusted)	7.S1		0.9829	0.0089	0.009	0.992	0.996	109	213	0.965	1.000
Upper secondary school net attendance ratio (adjusted)	7.S2		1.0000	0.0000	0.000	na	na	31	63	1.000	1.000
Secondary school net attendance ratio (adjusted)	7.5		0.9867	0.0069	0.007	0.992	0.996	139	276	0.973	1.000
Violent discipline	8.3		0.4106	0.0264	0.064	3.272	1.809	682	426	0.358	0.464
<b>Women</b>											
Early initiation of breastfeeding	2.6		0.8146	0.0453	0.056	1.207	1.098	44	90	0.724	0.905
Adolescent birth rate	5.1	5.4	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Total fertility rate	-		(*)	(*)	(*)	na	na	na	na	(*)	(*)
Early childbearing	5.2		0.0642	0.0297	0.463	0.984	0.992	33	68	0.005	0.124
Contraceptive prevalence rate	5.3	5.3	0.6247	0.0225	0.036	1.093	1.045	253	508	0.580	0.670
Unmet need	5.4	5.6	0.1123	0.0135	0.120	0.927	0.963	253	508	0.085	0.139
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	1.0000	0.0000	0.000	na	na	44	90	1.000	1.000
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	1.0000	0.0000	0.000	na	na	44	90	1.000	1.000
Skilled attendant at delivery	5.7	5.2	1.0000	0.0000	0.000	na	na	44	90	1.000	1.000
Caesarean section	5.9		0.1534	0.0258	0.168	0.455	0.674	44	90	0.102	0.205
Literacy rate (young women)	7.1	2.3	1.0000	0.0000	0.000	na	na	65	131	1.000	1.000
Marriage before age 18	8.5		0.1056	0.0122	0.116	1.012	1.006	320	643	0.081	0.130

Knowledge about HIV prevention (young women)	9.1	6.3	0.3401	0.0310	0.091	0.556	0.745	65	131	0.278	0.402
Condom use with non-regular partners	9.15	6.2	(*)	(*)	(*)	(*)	(*)	10	22	(*)	(*)
Use of internet	10.3		0.9777	0.0132	0.014	1.044	1.022	65	131	0.951	1.000
Life satisfaction	11.1		0.9702	0.0075	0.008	0.251	0.501	65	131	0.955	0.985
Smoking before age 15	12.2		0.0170	0.0049	0.289	1.016	1.008	351	706	0.007	0.027
<b>Under-5s</b>											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.0077	0.0054	0.704	0.929	0.964	115	244	0.000	0.018
Underweight prevalence (severe)	2.1b	1.8	0.0041	0.0041	0.997	0.987	0.994	115	244	0.000	0.012
Stunting prevalence (moderate and severe)	2.2a		0.0230	0.0079	0.343	0.663	0.814	113	240	0.007	0.039
Overweight prevalence	2.4		0.0558	0.0182	0.325	1.496	1.223	113	240	0.019	0.092
Exclusive breastfeeding under 6 months	2.7		(*)	(*)	(*)	(*)	(*)	7	15	(*)	(*)
Tuberculosis immunization coverage at any time before the survey	-		0.9160	0.0517	0.056	1.805	1.344	25	53	0.813	1.000
Polio immunization coverage at any time before the survey	-		0.8794	0.0546	0.062	1.459	1.208	25	53	0.770	0.988
Diphtheria, pertussis and tetanus (DPT) immunization coverage at any time before the survey	-		0.8794	0.0546	0.062	1.459	1.208	25	53	0.770	0.988
Hepatitis B immunization coverage at any time before the survey	-		0.8973	0.0546	0.061	1.683	1.297	25	53	0.788	1.000
Haemophilus influenzae type B (Hib) immunization coverage at any time before the survey	-		0.8617	0.0630	0.073	1.666	1.291	25	51	0.736	0.988
Measles immunization coverage at any time before the survey	-		(0.9879)	(0.0005)	(0.001)	(0.001)	(0.034)	22	48	(0.987)	(0.989)
Children fully vaccinated at any time before the survey	-		(0.9663)	(0.0214)	(0.022)	(0.633)	(0.795)	22	46	(0.923)	(1.000)
Attendance to early childhood education	6.1		0.6453	0.0466	0.072	1.034	1.017	53	110	0.552	0.738
Early child development index	6.8		0.8354	0.0383	0.046	1.165	1.079	53	110	0.759	0.912
na: not applicable.											
( ) Figures that are based on 25–49 unweighted cases.											
(*) Figures that are based on fewer than 25 unweighted cases; for fertility rates, figures that are based on fewer than 125 unweighted person-years of exposure.											

**Table SE.18: Sampling errors: East Kazakhstan**

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Kazakhstan, 2015

	MICS Indicator	MDG Indicator	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	
										Lower bound r - 2se	Upper bound r + 2se
<b>Household members</b>											
Use of solid fuels for cooking	3.15		0.0297	0.0116	0.389	5.444	2.333	4117	1175	0.007	0.053
Use of improved drinking water sources	4.1	7.8	0.9924	0.0054	0.005	4.539	2.131	4117	1175	0.982	1.000
Use of improved sanitation	4.3	7.9	0.9924	0.0034	0.003	1.858	1.363	4117	1175	0.986	0.999
School readiness (children attending first grade of primary)	7.2		0.9664	0.0023	0.002	0.009	0.093	70	53	0.962	0.971
Primary school net attendance ratio (adjusted)	7.4	2.1	1.0000	0.0000	0.000	na	na	239	186	1.000	1.000
Lower secondary school net attendance ratio (adjusted)	7.S1		1.0000	0.0000	0.000	na	na	254	193	1.000	1.000
Upper secondary school net attendance ratio (adjusted)	7.S2		(0.9555)	(0.0036)	(0.004)	(0.015)	(0.122)	63	49	(0.948)	(0.963)
Secondary school net attendance ratio (adjusted)	7.5		0.9951	0.0048	0.005	1.148	1.072	316	242	0.985	1.000
Violent discipline	8.3		0.4709	0.0296	0.063	3.480	1.866	613	379	0.412	0.530
<b>Women</b>											
Early initiation of breastfeeding	2.6		0.8956	0.0358	0.040	1.055	1.027	100	78	0.824	0.967
Adolescent birth rate	5.1	5.4	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Total fertility rate	-		(*)	(*)	(*)	na	na	na	na	(*)	(*)
Early childbearing	5.2		0.0187	0.0133	0.713	0.941	0.970	124	98	0.000	0.045
Contraceptive prevalence rate	5.3	5.3	0.5777	0.0204	0.035	0.759	0.871	559	444	0.537	0.619
Unmet need	5.4	5.6	0.0979	0.0122	0.125	0.752	0.867	559	444	0.073	0.122
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.9723	0.0196	0.020	1.095	1.047	100	78	0.933	1.000
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.9723	0.0196	0.020	1.095	1.047	100	78	0.933	1.000
Skilled attendant at delivery	5.7	5.2	0.9882	0.0118	0.012	0.928	0.963	100	78	0.965	1.000
Caesarean section	5.9		0.1701	0.0460	0.271	1.155	1.075	100	78	0.078	0.262
Literacy rate (young women)	7.1	2.3	0.9956	0.0046	0.005	0.749	0.865	202	160	0.986	1.000
Marriage before age 18	8.5		0.0737	0.0096	0.130	0.858	0.926	802	635	0.055	0.093

Knowledge about HIV prevention (young women)	9.1	6.3	0.3643	0.0386	0.106	1.023	1.011	202	160	0.287	0.442
Condom use with non-regular partners	9.15	6.2	(*)	(*)	(*)	(*)	(*)	20	17	(*)	(*)
Use of internet	10.3		0.9816	0.0093	0.009	0.758	0.871	202	160	0.963	1.000
Life satisfaction	11.1		0.9816	0.0122	0.012	1.299	1.140	202	160	0.957	1.000
Smoking before age 15	12.2		0.0250	0.0058	0.233	0.966	0.983	880	697	0.013	0.037
<b>Under-5s</b>											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.0194	0.0100	0.519	1.160	1.077	271	219	0.000	0.039
Underweight prevalence (severe)	2.1b	1.8	0.0000	0.0000	0.000	na	na	271	219	0.000	0.000
Stunting prevalence (moderate and severe)	2.2a		0.0719	0.0208	0.289	1.413	1.189	271	219	0.030	0.114
Overweight prevalence	2.4		0.0924	0.0136	0.147	0.477	0.690	269	217	0.065	0.120
Exclusive breastfeeding under 6 months	2.7		(*)	(*)	(*)	(*)	(*)	25	21	(*)	(*)
Tuberculosis immunization coverage at any time before the survey	-		(1.0000)	(0.0000)	(0.000)	na	na	49	38	(1.000)	(1.000)
Polio immunization coverage at any time before the survey	-		(0.9742)	(0.0039)	(0.004)	(0.021)	(0.146)	48	37	(0.966)	(0.982)
Diphtheria, pertussis and tetanus (DPT) immunization coverage at any time before the survey	-		(1.0000)	(0.0000)	(0.000)	na	na	49	38	(1.000)	(1.000)
Hepatitis B immunization coverage at any time before the survey	-		(0.9482)	(0.0076)	(0.008)	(0.043)	(0.208)	49	38	(0.933)	(0.963)
Haemophilus influenzae type B (Hib) immunization coverage at any time before the survey	-		(1.0000)	(0.0000)	(0.000)	na	na	49	38	(1.000)	(1.000)
Measles immunization coverage at any time before the survey	-		(1.0000)	(0.0000)	(0.000)	na	na	54	44	(1.000)	(1.000)
Children fully vaccinated at any time before the survey	-		(0.9495)	(0.0379)	(0.040)	(1.285)	(1.134)	54	44	(0.874)	(1.000)
Attendance to early childhood education	6.1		0.4653	0.0491	0.106	0.922	0.960	119	96	0.367	0.564
Early child development index	6.8		0.8421	0.0268	0.032	0.512	0.716	119	96	0.789	0.896
na: not applicable.											
( ) Figures that are based on 25–49 unweighted cases.											
(*) Figures that are based on fewer than 25 unweighted cases; for fertility rates, figures that are based on fewer than 125 unweighted person-years of exposure.											

**Table SE.19: Sampling errors: Astana city**

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Kazakhstan, 2015

	MICS Indicator	MDG Indicator	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	
										Lower bound r - 2se	Upper bound r + 2se
<b>Household members</b>											
Use of solid fuels for cooking	3.15		0.0000	0.0000	0.000	na	na	4047	949	0.000	0.000
Use of improved drinking water sources	4.1	7.8	0.9997	0.0003	0.000	0.285	0.534	4047	949	0.999	1.000
Use of improved sanitation	4.3	7.9	0.8789	0.0734	0.083	47.926	6.923	4047	949	0.732	1.000
School readiness (children attending first grade of primary)	7.2		1.0000	0.0000	0.000	na	na	98	59	1.000	1.000
Primary school net attendance ratio (adjusted)	7.4	2.1	0.9881	0.0070	0.007	0.772	0.878	264	188	0.974	1.000
Lower secondary school net attendance ratio (adjusted)	7.S1		0.9924	0.0077	0.008	1.221	1.105	199	158	0.977	1.000
Upper secondary school net attendance ratio (adjusted)	7.S2		0.9257	0.0161	0.017	0.222	0.472	84	60	0.894	0.958
Secondary school net attendance ratio (adjusted)	7.5		0.9808	0.0121	0.012	1.671	1.293	283	218	0.957	1.000
Violent discipline	8.3		0.6423	0.0355	0.055	5.880	2.425	683	418	0.571	0.713
<b>Women</b>											
Early initiation of breastfeeding	2.6		0.8805	0.0310	0.035	1.032	1.016	195	114	0.818	0.942
Adolescent birth rate	5.1	5.4	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Total fertility rate	-		(*)	(*)	(*)	na	na	na	na	(*)	(*)
Early childbearing	5.2		0.0141	0.0070	0.495	0.463	0.680	157	133	0.000	0.028
Contraceptive prevalence rate	5.3	5.3	0.4882	0.0366	0.075	2.604	1.614	678	486	0.415	0.561
Unmet need	5.4	5.6	0.1171	0.0167	0.143	1.316	1.147	678	486	0.084	0.151
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	1.0000	0.0000	0.000	na	na	195	114	1.000	1.000
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.9857	0.0055	0.006	0.240	0.490	195	114	0.975	0.997
Skilled attendant at delivery	5.7	5.2	1.0000	0.0000	0.000	na	na	195	114	1.000	1.000
Caesarean section	5.9		0.1088	0.0314	0.288	1.147	1.071	195	114	0.046	0.172
Literacy rate (young women)	7.1	2.3	1.0000	0.0000	0.000	na	na	258	215	1.000	1.000
Marriage before age 18	8.5		0.0320	0.0071	0.223	1.206	1.098	985	739	0.018	0.046

Knowledge about HIV prevention (young women)	9.1	6.3	0.2587	0.0493	0.190	2.707	1.645	258	215	0.160	0.357
Condom use with non-regular partners	9.15	6.2	(*)	(*)	(*)	(*)	(*)	21	19	(*)	(*)
Use of internet	10.3		0.9966	0.0033	0.003	0.715	0.845	258	215	0.990	1.000
Life satisfaction	11.1		0.9704	0.0146	0.015	1.596	1.263	258	215	0.941	1.000
Smoking before age 15	12.2		0.0068	0.0029	0.421	0.999	0.999	1086	821	0.001	0.013
<b>Under-5s</b>											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.0115	0.0085	0.744	1.936	1.391	479	302	0.000	0.029
Underweight prevalence (severe)	2.1b	1.8	0.0000	0.0000	0.000	na	na	479	302	0.000	0.000
Stunting prevalence (moderate and severe)	2.2a		0.0706	0.0219	0.310	2.180	1.476	473	299	0.027	0.114
Overweight prevalence	2.4		0.1619	0.0398	0.246	3.274	1.810	452	282	0.082	0.241
Exclusive breastfeeding under 6 months	2.7		(0.5063)	(0.0929)	(0.183)	(1.001)	(1.000)	56	30	(0.321)	(0.692)
Tuberculosis immunization coverage at any time before the survey	-		1.0000	0.0000	0.000	na	na	92	54	1.000	1.000
Polio immunization coverage at any time before the survey	-		0.8190	0.0457	0.056	0.690	0.831	76	50	0.728	0.910
Diphtheria, pertussis and tetanus (DPT) immunization coverage at any time before the survey	-		0.7663	0.0475	0.062	0.630	0.794	84	51	0.671	0.861
Hepatitis B immunization coverage at any time before the survey	-		0.6581	0.0253	0.038	0.147	0.384	89	53	0.608	0.709
Haemophilus influenzae type B (Hib) immunization coverage at any time before the survey	-		0.7663	0.0475	0.062	0.630	0.794	84	51	0.671	0.861
Measles immunization coverage at any time before the survey	-		0.9021	0.0829	0.092	4.123	2.030	88	54	0.736	1.000
Children fully vaccinated at any time before the survey	-		0.8822	0.0819	0.093	3.357	1.832	87	53	0.718	1.000
Attendance to early childhood education	6.1		0.4975	0.0780	0.157	3.500	1.871	220	145	0.342	0.653
Early child development index	6.8		0.8453	0.0440	0.052	2.135	1.461	220	145	0.757	0.933
na: not applicable.											
( ) Figures that are based on 25–49 unweighted cases.											
(*) Figures that are based on fewer than 25 unweighted cases; for fertility rates, figures that are based on fewer than 125 unweighted person-years of exposure.											

**Table SE.20: Sampling errors: Almaty city**

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Kazakhstan, 2015

	MICS Indicator	MDG Indicator	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	
										Lower bound r - 2se	Upper bound r + 2se
<b>Household members</b>											
Use of solid fuels for cooking	3.15		0.0001	0.0001	1.005	0.093	0.306	4271	1257	0.000	0.000
Use of improved drinking water sources	4.1	7.8	0.9907	0.0090	0.009	11.048	3.324	4271	1257	0.973	1.000
Use of improved sanitation	4.3	7.9	0.9864	0.0044	0.004	1.848	1.359	4271	1257	0.978	0.995
School readiness (children attending first grade of primary)	7.2		0.5842	0.0416	0.071	0.435	0.659	60	62	0.501	0.667
Primary school net attendance ratio (adjusted)	7.4	2.1	0.9899	0.0062	0.006	0.895	0.946	260	231	0.977	1.000
Lower secondary school net attendance ratio (adjusted)	7.S1		0.9884	0.0068	0.007	0.849	0.922	240	209	0.975	1.000
Upper secondary school net attendance ratio (adjusted)	7.S2		1.0000	0.0000	0.000	na	na	99	79	1.000	1.000
Secondary school net attendance ratio (adjusted)	7.5		0.9918	0.0049	0.005	0.831	0.912	339	288	0.982	1.000
Violent discipline	8.3		0.3844	0.0342	0.089	6.070	2.464	757	469	0.316	0.453
<b>Women</b>											
Early initiation of breastfeeding	2.6		0.9111	0.0195	0.021	0.488	0.698	97	105	0.872	0.950
Adolescent birth rate	5.1	5.4	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Total fertility rate	-		(*)	(*)	(*)	na	na	na	na	(*)	(*)
Early childbearing	5.2		0.0073	0.0062	0.841	0.863	0.929	181	166	0.000	0.020
Contraceptive prevalence rate	5.3	5.3	0.6296	0.0274	0.043	1.754	1.324	593	547	0.575	0.684
Unmet need	5.4	5.6	0.0856	0.0160	0.187	1.796	1.340	593	547	0.054	0.118
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	1.0000	0.0000	0.000	na	na	97	105	1.000	1.000
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.9130	0.0270	0.030	0.951	0.975	97	105	0.859	0.967
Skilled attendant at delivery	5.7	5.2	0.9924	0.0074	0.007	0.747	0.864	97	105	0.978	1.000
Caesarean section	5.9		0.1782	0.0364	0.204	0.940	0.970	97	105	0.105	0.251
Literacy rate (young women)	7.1	2.3	1.0000	0.0000	0.000	na	na	281	255	1.000	1.000
Marriage before age 18	8.5		0.0498	0.0099	0.198	1.719	1.311	915	836	0.030	0.070

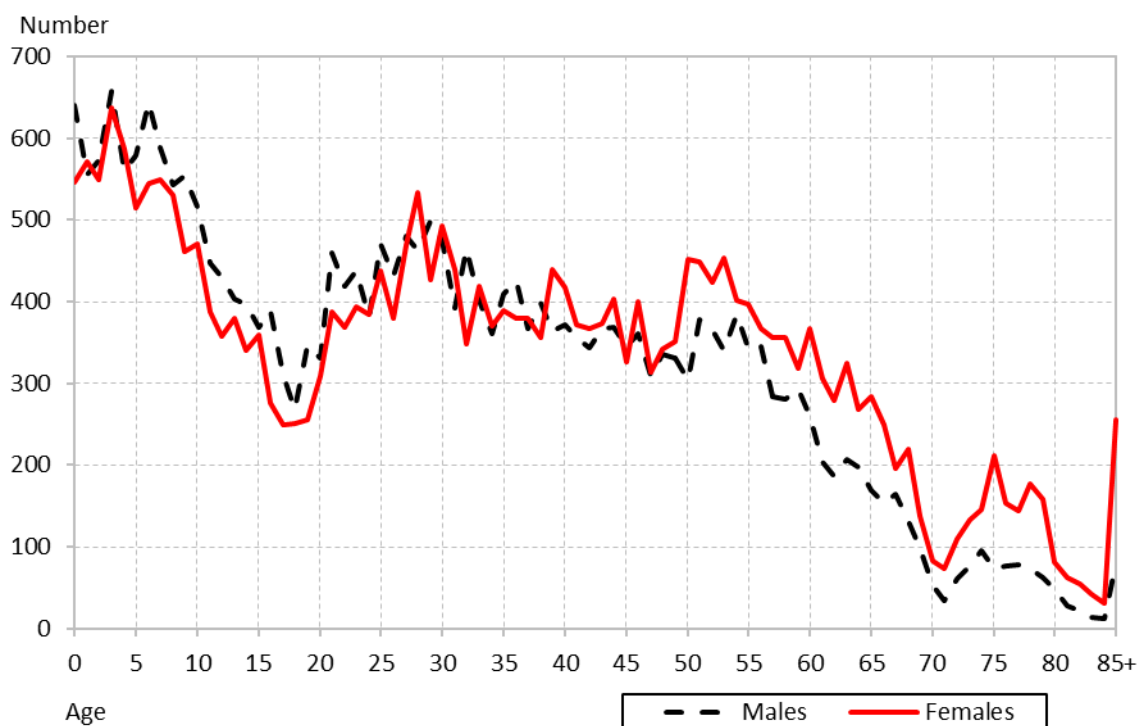


Knowledge about HIV prevention (young women)	9.1	6.3	0.4979	0.0281	0.057	0.804	0.897	281	255	0.442	0.554
Condom use with non-regular partners	9.15	6.2	(0.4365)	(0.1013)	(0.232)	(1.211)	(1.100)	41	30	(0.234)	(0.639)
Use of internet	10.3		0.9966	0.0026	0.003	0.521	0.722	281	255	0.991	1.000
Life satisfaction	11.1		0.9658	0.0110	0.011	0.928	0.963	281	255	0.944	0.988
Smoking before age 15	12.2		0.0108	0.0044	0.405	1.651	1.285	1015	925	0.002	0.020
<b>Under-5s</b>											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.0131	0.0091	0.692	1.695	1.302	264	268	0.000	0.031
Underweight prevalence (severe)	2.1b	1.8	0.0000	0.0000	0.000	na	na	264	268	0.000	0.000
Stunting prevalence (moderate and severe)	2.2a		0.0628	0.0219	0.350	2.186	1.478	264	268	0.019	0.107
Overweight prevalence	2.4		0.2158	0.0353	0.164	1.864	1.365	249	254	0.145	0.286
Exclusive breastfeeding under 6 months	2.7		(0.2958)	(0.0483)	(0.163)	(0.313)	(0.560)	30	29	(0.199)	(0.392)
Tuberculosis immunization coverage at any time before the survey	-		(1.0000)	(0.0000)	(0.000)	na	na	39	49	(1.000)	(1.000)
Polio immunization coverage at any time before the survey	-		(0.8002)	(0.0299)	(0.037)	(0.263)	(0.513)	39	48	(0.740)	(0.860)
Diphtheria, pertussis and tetanus (DPT) immunization coverage at any time before the survey	-		(0.8370)	(0.0186)	(0.022)	(0.119)	(0.345)	39	48	(0.800)	(0.874)
Hepatitis B immunization coverage at any time before the survey	-		(0.8220)	(0.0191)	(0.023)	(0.117)	(0.342)	39	48	(0.784)	(0.860)
Haemophilus influenzae type B (Hib) immunization coverage at any time before the survey	-		(0.7637)	(0.0440)	(0.058)	(0.471)	(0.686)	36	45	(0.676)	(0.852)
Measles immunization coverage at any time before the survey	-		(0.9001)	(0.0036)	(0.004)	(0.005)	(0.072)	42	38	(0.893)	(0.907)
Children fully vaccinated at any time before the survey	-		(0.7232)	(0.0133)	(0.018)	(0.033)	(0.181)	42	38	(0.697)	(0.750)
Attendance to early childhood education	6.1		0.6203	0.0450	0.073	1.368	1.170	157	160	0.530	0.710
Early child development index	6.8		0.9081	0.0282	0.031	1.518	1.232	157	160	0.852	0.965
na: not applicable.											
( ) Figures that are based on 25–49 unweighted cases.											
(*) Figures that are based on fewer than 25 unweighted cases; for fertility rates, figures that are based on fewer than 125 unweighted person-years of exposure.											

## Appendix D. Data Quality Tables

<b>Table DQ.1: Age distribution of household population</b>										
Single-year age distribution of household population by sex, Kazakhstan, 2015										
	Males		Females		Age	Males		Females		
	Number	Percent	Number	Percent		Number	Percent	Number	Percent	
Age					Age					
0	641	2.3	546	1.9	45	345	1.2	326	1.1	
1	555	2.0	571	2.0	46	361	1.3	400	1.4	
2	572	2.1	549	1.9	47	309	1.1	314	1.1	
3	658	2.4	637	2.2	48	335	1.2	342	1.2	
4	560	2.0	588	2.0	49	330	1.2	352	1.2	
5	579	2.1	515	1.8	50	304	1.1	452	1.6	
6	643	2.3	545	1.9	51	379	1.4	449	1.5	
7	589	2.1	549	1.9	52	365	1.3	423	1.5	
8	543	2.0	530	1.8	53	341	1.2	453	1.6	
9	553	2.0	462	1.6	54	384	1.4	401	1.4	
10	516	1.9	471	1.6	55	343	1.2	398	1.4	
11	447	1.6	388	1.3	56	345	1.2	367	1.3	
12	430	1.6	358	1.2	57	283	1.0	356	1.2	
13	403	1.5	380	1.3	58	281	1.0	356	1.2	
14	397	1.4	341	1.2	59	293	1.1	319	1.1	
15	369	1.3	359	1.2	60	261	0.9	367	1.3	
16	389	1.4	276	0.9	61	204	0.7	306	1.1	
17	311	1.1	250	0.9	62	186	0.7	280	1.0	
18	268	1.0	251	0.9	63	207	0.7	324	1.1	
19	346	1.3	256	0.9	64	198	0.7	268	0.9	
20	331	1.2	310	1.1	65	169	0.6	285	1.0	
21	460	1.7	387	1.3	66	154	0.6	250	0.9	
22	419	1.5	369	1.3	67	165	0.6	197	0.7	
23	437	1.6	395	1.4	68	131	0.5	220	0.8	
24	381	1.4	385	1.3	69	98	0.4	138	0.5	
25	472	1.7	438	1.5	70	53	0.2	83	0.3	
26	431	1.6	380	1.3	71	34	0.1	73	0.3	
27	480	1.7	469	1.6	72	62	0.2	110	0.4	
28	463	1.7	534	1.8	73	77	0.3	134	0.5	
29	500	1.8	427	1.5	74	96	0.3	146	0.5	
30	476	1.7	493	1.7	75	73	0.3	212	0.7	
31	392	1.4	439	1.5	76	77	0.3	153	0.5	
32	465	1.7	349	1.2	77	79	0.3	145	0.5	
33	401	1.5	419	1.4	78	73	0.3	178	0.6	
34	361	1.3	371	1.3	79	63	0.2	159	0.5	
35	409	1.5	390	1.3	80	49	0.2	82	0.3	
36	425	1.5	380	1.3	81	28	0.1	62	0.2	
37	366	1.3	380	1.3	82	22	0.1	55	0.2	
38	399	1.4	356	1.2	83	14	0.1	42	0.1	
39	364	1.3	439	1.5	84	12	0.0	31	0.1	
40	373	1.3	418	1.4	85+	80	0.3	255	0.9	
41	356	1.3	372	1.3						
42	344	1.2	368	1.3	DK/Missing	0	0.0	0	0.0	
43	367	1.3	374	1.3						
44	369	1.3	403	1.4	Total	27676	100.0	29127	100.0	

**Figure DQ.1: Household population by single ages, Kazakhstan, 2015**



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

Household population of women aged 10-54 years, interviewed women aged 15-49 years, and percentage of eligible women who were interviewed, by five-year age groups, Kazakhstan, 2015

Age	Household population of women aged 10-54 years	Interviewed women aged 15-49 years		Percentage of eligible women interviewed (Completion rate)
	Number	Number	Percent	
10-14	1937	na	na	na
15-19	1391	1378	10.6	99.0
20-24	1845	1810	14.0	98.1
25-29	2248	2213	17.1	98.4
30-34	2070	2047	15.8	98.9
35-39	1945	1914	14.8	98.4
40-44	1934	1906	14.7	98.5
45-49	1734	1705	13.1	98.3
50-54	2178	na	na	na
Total (15-49)	13169	12972	100.0	98.5
Ratio of 50-54 to 45-49	1.26	na	na	na

na: not applicable.

**Table DQ.3: Age distribution of children in household and under-5 questionnaires**

Household population of children aged 0-7 years, children aged 0-4 years whose mothers/caretakers were interviewed, and percentage of under-5 children whose mothers/caretakers were interviewed, by single years of age, Kazakhstan, 2015

	<u>Household population of children 0-7 years</u>	<u>Under-5s with completed interviews</u>		Percentage of eligible under-5s with completed interviews (Completion rate)
	Number	Number	Percent	
<b>Возраст</b>				
0	1187	1176	20.2	99.1
1	1126	1117	19.1	99.2
2	1121	1108	19.0	98.8
3	1295	1287	22.1	99.3
4	1148	1144	19.6	99.7
5	1094	na	na	na
6	1189	na	na	na
7	1138	na	na	na
Total (0-4)	5877	5831	100.0	99.2
Ratio of 5 to 4	0.95	na	na	na
na: not applicable.				

**Table DQ.4: Birth date reporting: Household population**

Percent distribution of household population by completeness of date of birth information, Kazakhstan, 2015

	<u>Completeness of reporting of month and year of birth</u>				Total	Number of household members
	Year and month of birth	Year of birth only	Month of birth only	Both missing		
Total	100.0	0.0	0.0	0.0	100.0	56803
<b>Age</b>						
0-4	100.0	0.0	0.0	0.0	100.0	5877
5-14	100.0	0.0	0.0	0.0	100.0	9638
15-24	100.0	0.0	0.0	0.0	100.0	6949
25-49	100.0	0.0	0.0	0.0	100.0	19824
50-64	100.0	0.0	0.0	0.0	100.0	9893
65-84	100.0	0.0	0.0	0.0	100.0	4286
85+	99.7	0.3	0.0	0.0	100.0	336
<b>Region</b>						
Akmola	100.0	0.0	0.0	0.0	100.0	2796
Aktobe	100.0	0.0	0.0	0.0	100.0	3580
Almaty oblast	100.0	0.0	0.0	0.0	100.0	4679
Atyrau	100.0	0.0	0.0	0.0	100.0	1849
West Kazakhstan	99.8	0.2	0.0	0.0	100.0	2591
Zhambyl	100.0	0.0	0.0	0.0	100.0	3647
Karaganda	100.0	0.0	0.0	0.0	100.0	4630
Kostanai	100.0	0.0	0.0	0.0	100.0	2903
Kyzylorda	100.0	0.0	0.0	0.0	100.0	1893
Mangistau	100.0	0.0	0.0	0.0	100.0	1841
South Kazakhstan	100.0	0.0	0.0	0.0	100.0	9964
Pavlodar	100.0	0.0	0.0	0.0	100.0	2274

North Kazakhstan	100.0	0.0	0.0	0.0	100.0	1721
East Kazakhstan	100.0	0.0	0.0	0.0	100.0	4117
Astana city	100.0	0.0	0.0	0.0	100.0	4047
Almaty city	100.0	0.0	0.0	0.0	100.0	4271
<b>Area</b>						
Urban	100.0	0.0	0.0	0.0	100.0	30222
Rural	100.0	0.0	0.0	0.0	100.0	26582

**Table DQ.5: Birth date and age reporting: Women**

Percent distribution of women aged 15-49 years by completeness of date of birth/age information, Kazakhstan, 2015

	Completeness of reporting of date of birth and age						Number of women aged 15-49 years
	Year and month of birth	Year of birth and age	Year of birth only	Age only	Other/DK/Missing	Total	
Total	100.0	0.0	0.0	0.0	0.0	100.0	12670
<b>Region</b>							
Akmola	100.0	0.0	0.0	0.0	0.0	100.0	624
Aktobe	99.9	0.1	0.0	0.0	0.0	100.0	806
Almaty oblast	100.0	0.0	0.0	0.0	0.0	100.0	1042
Atyrau	100.0	0.0	0.0	0.0	0.0	100.0	402
West Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	572
Zhambyl	100.0	0.0	0.0	0.0	0.0	100.0	778
Karaganda	100.0	0.0	0.0	0.0	0.0	100.0	1035
Kostanai	100.0	0.0	0.0	0.0	0.0	100.0	675
Kyzylorda	100.0	0.0	0.0	0.0	0.0	100.0	399
Mangistau	100.0	0.0	0.0	0.0	0.0	100.0	408
South Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	2079
Pavlodar	100.0	0.0	0.0	0.0	0.0	100.0	517
North Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	351
East Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	880
Astana city	100.0	0.0	0.0	0.0	0.0	100.0	1086
Almaty city	100.0	0.0	0.0	0.0	0.0	100.0	1015
<b>Area</b>							
Urban	100.0	0.0	0.0	0.0	0.0	100.0	7140
Rural	100.0	0.0	0.0	0.0	0.0	100.0	5530

**Table DQ.6: Birth date and age reporting: Under-5s**

Percent distribution of children under 5 by completeness of date of birth/age information, Kazakhstan, 2015

	Completeness of reporting of date of birth and age						Number of under-5 children
	Year and month of birth	Year of birth and age	Year of birth only	Age only	Other/DK/Missing	Total	
Total	100.0	0.0	0.0	0.0	0.0	100.0	5510
<b>Region</b>							
Akmola	100.0	0.0	0.0	0.0	0.0	100.0	225
Aktobe	100.0	0.0	0.0	0.0	0.0	100.0	376
Almaty oblast	100.0	0.0	0.0	0.0	0.0	100.0	413

Atyrau	100.0	0.0	0.0	0.0	0.0	100.0	202
West Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	227
Zhambyl	100.0	0.0	0.0	0.0	0.0	100.0	414
Karaganda	100.0	0.0	0.0	0.0	0.0	100.0	381
Kostanai	100.0	0.0	0.0	0.0	0.0	100.0	239
Kyzylorda	100.0	0.0	0.0	0.0	0.0	100.0	214
Mangistau	100.0	0.0	0.0	0.0	0.0	100.0	224
South Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	1246
Pavlodar	100.0	0.0	0.0	0.0	0.0	100.0	166
North Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	117
East Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	274
Astana city	100.0	0.0	0.0	0.0	0.0	100.0	501
Almaty city	100.0	0.0	0.0	0.0	0.0	100.0	292
<b>Area</b>							
Urban	100.0	0.0	0.0	0.0	0.0	100.0	2704
Rural	100.0	0.0	0.0	0.0	0.0	100.0	2806

**Table DQ.7: Birth date reporting: Children, adolescents and young people**

Percent distribution of children, adolescents and young people aged 5-24 years by completeness of date of birth information, Kazakhstan, 2015

	Completeness of reporting of month and year of birth				Total	Number of children, adolescents and young people aged 5-24 years
	Year and month of birth	Year of birth only	Month of birth only	Both missing		
Total	100.0	0.0	0.0	0.0	100.0	16588
<b>Region</b>						
Akmola	100.0	0.0	0.0	0.0	100.0	715
Aktobe	100.0	0.0	0.0	0.0	100.0	1041
Almaty oblast	100.0	0.0	0.0	0.0	100.0	1390
Atyrau	100.0	0.0	0.0	0.0	100.0	600
West Kazakhstan	100.0	0.0	0.0	0.0	100.0	663
Zhambyl	100.0	0.0	0.0	0.0	100.0	1145
Karaganda	100.0	0.0	0.0	0.0	100.0	1183
Kostanai	100.0	0.0	0.0	0.0	100.0	741
Kyzylorda	100.0	0.0	0.0	0.0	100.0	633
Mangistau	100.0	0.0	0.0	0.0	100.0	649
South Kazakhstan	100.0	0.0	0.0	0.0	100.0	3613
Pavlodar	100.0	0.0	0.0	0.0	100.0	557
North Kazakhstan	100.0	0.0	0.0	0.0	100.0	381
East Kazakhstan	100.0	0.0	0.0	0.0	100.0	975
Astana city	100.0	0.0	0.0	0.0	100.0	1110
Almaty city	99.9	0.1	0.0	0.0	100.0	1191
<b>Area</b>						
Urban	100.0	0.0	0.0	0.0	100.0	8243
Rural	100.0	0.0	0.0	0.0	100.0	8345

**Table DQ.8: Birth date reporting: First and last births**

Percent distribution of first and last births to women aged 15-49 years by completeness of date of birth, Kazakhstan, 2015

	Completeness of reporting of date of birth										
	Date of first birth					Date of last birth					
	Year and month of birth	Year of birth only	Completed years since first birth only	Other/DK/ Missing	Total	Number of first births	Year and month of birth	Year of birth only	Other/DK/ Missing	Total	Number of last births
Total	99.9	0.1	0.0	0.0	100.0	9374	99.9	0.0	0.1	100.0	6811
<b>Region</b>											
Akmola	100.0	0.0	0.0	0.0	100.0	481	100.0	0.0	0.0	100.0	332
Aktobe	99.7	0.3	0.0	0.0	100.0	622	100.0	0.0	0.0	100.0	477
Almaty oblast	100.0	0.0	0.0	0.0	100.0	734	100.0	0.0	0.0	100.0	524
Atyrau	100.0	0.0	0.0	0.0	100.0	290	100.0	0.0	0.0	100.0	230
West Kazakhstan	100.0	0.0	0.0	0.0	100.0	431	100.0	0.0	0.0	100.0	292
Zhambyl	99.8	0.2	0.0	0.0	100.0	599	100.0	0.0	0.0	100.0	470
Karaganda	100.0	0.0	0.0	0.0	100.0	775	100.0	0.0	0.0	100.0	512
Kostanai	100.0	0.0	0.0	0.0	100.0	497	100.0	0.0	0.0	100.0	325
Kyzylorda	100.0	0.0	0.0	0.0	100.0	287	99.8	0.0	0.2	100.0	248
Mangistau	99.9	0.1	0.0	0.0	100.0	302	99.8	0.0	0.2	100.0	241
South Kazakhstan	99.8	0.2	0.0	0.0	100.0	1639	100.0	0.0	0.0	100.0	1419
Pavlodar	100.0	0.0	0.0	0.0	100.0	385	99.5	0.0	0.5	100.0	242
North Kazakhstan	100.0	0.0	0.0	0.0	100.0	278	100.0	0.0	0.0	100.0	189
East Kazakhstan	100.0	0.0	0.0	0.0	100.0	630	99.8	0.0	0.2	100.0	437
Astana city	100.0	0.0	0.0	0.0	100.0	760	100.0	0.0	0.0	100.0	458
Almaty city	99.8	0.2	0.0	0.0	100.0	665	99.3	0.0	0.7	100.0	415
<b>Area</b>											
Urban	99.9	0.1	0.0	0.0	100.0	5055	99.9	0.0	0.1	100.0	3276
Rural	99.9	0.1	0.0	0.0	100.0	4320	99.9	0.0	0.1	100.0	3535

**Table DQ.9: Completeness of reporting**

Percentage of observations that are missing information for selected questions and indicators, Kazakhstan, 2015 год			
Questionnaire and type of missing information	Reference group	Percent with missing/incomplete information <sup>a</sup>	Number of cases
<b>Household</b>			
Salt test result	All households interviewed that have salt	0.1	16500
Starting time of interview	All households interviewed	0.1	16500
Ending time of interview	All households interviewed	0.1	16500
<b>Women</b>			
Date of first marriage/union	All ever married women aged 15-49		
Only month		0.3	9980
Both month and year		0.2	9980
Age at first marriage/union	All ever married women aged 15-49 with year of first marriage not known	0.2	9980
Age at first intercourse	All women aged 15-24 who have ever had sex	0.0	1293
Time since last intercourse	All women aged 15-24 who have ever had sex	0.0	1293
Starting time of interview	All women interviewed	0.1	12670
Ending time of interview	All women interviewed	0.1	12670
<b>Under-5</b>			
Starting time of interview	All under-5 children	0.1	5510
Ending time of interview	All under-5 children	0.1	5510

<sup>a</sup> Includes "Don't know" responses.

**Table DQ.10: Completeness of information for anthropometric indicators: Underweight**

Percent distribution of children under 5 by completeness of information on date of birth and weight, Kazakhstan, 2015								
	Valid weight and date of birth	Reason for exclusion from analysis				Total	Percent of children excluded from analysis	Number of children under 5
		Weight not measured	Incomplete date of birth	Weight not measured and incomplete date of birth	Flagged cases (outliers)			
Total	96.3	3.6	0.0	0.0	0.1	100.0	3.7	5510
<b>Age</b>								
<6 months	86.8	13.2	0.0	0.0	0.0	100.0	13.2	531
6-11 months	95.6	4.0	0.0	0.0	0.4	100.0	4.4	540
12-23 months	97.0	2.9	0.0	0.0	0.1	100.0	3.0	1071
24-35 months	97.8	2.1	0.0	0.0	0.2	100.0	2.2	1045
36-47 months	98.1	1.8	0.0	0.0	0.0	100.0	1.9	1208
48-59 months	96.9	2.9	0.0	0.0	0.2	100.0	3.1	1114
<b>Region</b>								
Akmola	99.2	0.8	0.0	0.0	0.0	100.0	0.8	225



Aktobe		98.1	1.3	0.0	0.0	0.7	100.0	1.9	376
Almaty oblast		89.1	10.9	0.0	0.0	0.0	100.0	10.9	413
Atyrau		97.7	2.3	0.0	0.0	0.0	100.0	2.3	202
West Kazakhstan		98.1	1.9	0.0	0.0	0.0	100.0	1.9	227
Zhambyl		98.5	1.5	0.0	0.0	0.0	100.0	1.5	414
Karaganda		92.1	7.9	0.0	0.0	0.0	100.0	7.9	381
Kostanai		97.5	2.5	0.0	0.0	0.0	100.0	2.5	239
Kyzylorda		99.5	0.5	0.0	0.0	0.0	100.0	0.5	214
Mangistau		87.2	11.8	0.0	0.0	1.0	100.0	12.8	224
South Kazakhstan		98.8	1.0	0.0	0.0	0.1	100.0	1.2	1246
Pavlodar		99.2	0.8	0.0	0.0	0.0	100.0	0.8	166
North Kazakhstan		98.4	1.6	0.0	0.0	0.0	100.0	1.6	117
East Kazakhstan		99.2	0.8	0.0	0.0	0.0	100.0	0.8	274
Astana city		95.6	4.4	0.0	0.0	0.0	100.0	4.4	501
Almaty city		90.2	9.5	0.0	0.0	0.3	100.0	9.8	292
<b>Age</b>	<b>Region</b>								
<6 months	Akmola	100.0	0.0	0.0	0.0	0.0	100.0	0.0	22
	Aktobe	100.0	0.0	0.0	0.0	0.0	100.0	0.0	30
	Almaty oblast	52.8	47.2	0.0	0.0	0.0	100.0	47.2	51
	Atyrau	87.3	12.7	0.0	0.0	0.0	100.0	12.7	20
	West Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	26
	Zhambyl	97.5	2.5	0.0	0.0	0.0	100.0	2.5	40
	Karaganda	85.2	14.8	0.0	0.0	0.0	100.0	14.8	26
	Kostanai	82.3	17.7	0.0	0.0	0.0	100.0	17.7	20
	Kyzylorda	100.0	0.0	0.0	0.0	0.0	100.0	0.0	21
	Mangistau	65.5	34.5	0.0	0.0	0.0	100.0	34.5	25
	South Kazakhstan	98.7	1.3	0.0	0.0	0.0	100.0	1.3	120
	Pavlodar	95.0	5.0	0.0	0.0	0.0	100.0	5.0	13
	North Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	7
	East Kazakhstan	95.2	4.8	0.0	0.0	0.0	100.0	4.8	25
	Astana city	73.4	26.6	0.0	0.0	0.0	100.0	26.6	56
Almaty city	71.7	28.3	0.0	0.0	0.0	100.0	28.3	30	
6-11 months	Akmola	100.0	0.0	0.0	0.0	0.0	100.0	0.0	29
	Aktobe	100.0	0.0	0.0	0.0	0.0	100.0	0.0	44
	Almaty oblast	83.2	16.8	0.0	0.0	0.0	100.0	16.8	39
	Atyrau	100.0	0.0	0.0	0.0	0.0	100.0	0.0	19
	West Kazakhstan	97.0	3.0	0.0	0.0	0.0	100.0	3.0	19
	Zhambyl	95.4	4.6	0.0	0.0	0.0	100.0	4.6	37
	Karaganda	100.0	0.0	0.0	0.0	0.0	100.0	0.0	27
	Kostanai	100.0	0.0	0.0	0.0	0.0	100.0	0.0	18
	Kyzylorda	97.8	2.2	0.0	0.0	0.0	100.0	2.2	20
	Mangistau	75.5	22.2	0.0	0.0	2.3	100.0	24.5	23
	South Kazakhstan	93.6	5.1	0.0	0.0	1.3	100.0	6.4	141
	Pavlodar	100.0	0.0	0.0	0.0	0.0	100.0	0.0	17
	North Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	10
	East Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	27
	Astana city	100.0	0.0	0.0	0.0	0.0	100.0	0.0	45
Almaty city	100.0	0.0	0.0	0.0	0.0	100.0	0.0	25	
12-23 months	Akmola	100.0	0.0	0.0	0.0	0.0	100.0	0.0	39
	Aktobe	99.1	0.9	0.0	0.0	0.0	100.0	0.9	83
	Almaty oblast	90.2	9.8	0.0	0.0	0.0	100.0	9.8	90

	Atyrau	97.1	2.9	0.0	0.0	0.0	100.0	2.9	43
	West Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	49
	Zhambyl	99.1	0.9	0.0	0.0	0.0	100.0	0.9	91
	Karaganda	91.3	8.7	0.0	0.0	0.0	100.0	8.7	77
	Kostanai	96.8	3.2	0.0	0.0	0.0	100.0	3.2	43
	Kyzylorda	100.0	0.0	0.0	0.0	0.0	100.0	0.0	44
	Mangistau	87.1	10.0	0.0	0.0	2.9	100.0	12.9	46
	South Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	230
	Pavlodar	97.9	2.1	0.0	0.0	0.0	100.0	2.1	32
	North Kazakhstan	97.9	2.1	0.0	0.0	0.0	100.0	2.1	25
	East Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	49
	Astana city	95.3	4.7	0.0	0.0	0.0	100.0	4.7	92
	Almaty city	97.1	2.9	0.0	0.0	0.0	100.0	2.9	39
	Akmola	97.2	2.8	0.0	0.0	0.0	100.0	2.8	47
	Aktobe	98.0	1.0	0.0	0.0	1.0	100.0	2.0	72
	Almaty oblast	94.1	5.9	0.0	0.0	0.0	100.0	5.9	73
	Atyrau	100.0	0.0	0.0	0.0	0.0	100.0	0.0	46
	West Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	49
	Zhambyl	100.0	0.0	0.0	0.0	0.0	100.0	0.0	86
	Karaganda	93.4	6.6	0.0	0.0	0.0	100.0	6.6	96
24-35 months	Kostanai	100.0	0.0	0.0	0.0	0.0	100.0	0.0	54
	Kyzylorda	100.0	0.0	0.0	0.0	0.0	100.0	0.0	37
	Mangistau	92.4	7.6	0.0	0.0	0.0	100.0	7.6	45
	South Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	191
	Pavlodar	100.0	0.0	0.0	0.0	0.0	100.0	0.0	42
	North Kazakhstan	97.9	2.1	0.0	0.0	0.0	100.0	2.1	22
	East Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	54
	Astana city	100.0	0.0	0.0	0.0	0.0	100.0	0.0	88
	Almaty city	85.6	12.1	0.0	0.0	2.3	100.0	14.4	42
	Akmola	98.8	1.2	0.0	0.0	0.0	100.0	1.2	44
	Aktobe	98.5	1.5	0.0	0.0	0.0	100.0	1.5	58
	Almaty oblast	100.0	0.0	0.0	0.0	0.0	100.0	0.0	70
	Atyrau	98.1	1.9	0.0	0.0	0.0	100.0	1.9	41
	West Kazakhstan	97.3	2.7	0.0	0.0	0.0	100.0	2.7	35
	Zhambyl	98.9	1.1	0.0	0.0	0.0	100.0	1.1	80
	Karaganda	96.7	3.3	0.0	0.0	0.0	100.0	3.3	77
36-47 months	Kostanai	99.0	1.0	0.0	0.0	0.0	100.0	1.0	56
	Kyzylorda	100.0	0.0	0.0	0.0	0.0	100.0	0.0	44
	Mangistau	94.1	5.0	0.0	0.0	0.9	100.0	5.9	48
	South Kazakhstan	99.6	0.4	0.0	0.0	0.0	100.0	0.4	336
	Pavlodar	100.0	0.0	0.0	0.0	0.0	100.0	0.0	24
	North Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	24
	East Kazakhstan	98.2	1.8	0.0	0.0	0.0	100.0	1.8	61
	Astana city	98.4	1.6	0.0	0.0	0.0	100.0	1.6	130
	Almaty city	89.9	10.1	0.0	0.0	0.0	100.0	10.1	79
	Akmola	100.0	0.0	0.0	0.0	0.0	100.0	0.0	45
	Aktobe	95.1	2.9	0.0	0.0	2.0	100.0	4.9	87
48-59 months	Almaty oblast	98.6	1.4	0.0	0.0	0.0	100.0	1.4	89
	Atyrau	100.0	0.0	0.0	0.0	0.0	100.0	0.0	32
	West Kazakhstan	94.1	5.9	0.0	0.0	0.0	100.0	5.9	49
	Zhambyl	97.8	2.2	0.0	0.0	0.0	100.0	2.2	80

Karaganda	86.3	13.7	0.0	0.0	0.0	100.0	13.7	78
Kostanai	98.9	1.1	0.0	0.0	0.0	100.0	1.1	48
Kyzylorda	98.8	1.2	0.0	0.0	0.0	100.0	1.2	48
Mangistau	93.8	6.2	0.0	0.0	0.0	100.0	6.2	38
South Kazakhstan	98.7	1.3	0.0	0.0	0.0	100.0	1.3	228
Pavlodar	100.0	0.0	0.0	0.0	0.0	100.0	0.0	37
North Kazakhstan	97.0	3.0	0.0	0.0	0.0	100.0	3.0	28
East Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	58
Astana city	98.9	1.1	0.0	0.0	0.0	100.0	1.1	90
Almaty city	93.5	6.5	0.0	0.0	0.0	100.0	6.5	78

**Table DQ.11: Completeness of information for anthropometric indicators: Stunting**

Percent distribution of children under 5 by completeness of information on date of birth and length or height, Kazakhstan, 2015

	Valid length/height and date of birth	Reason for exclusion from analysis				Total	Percent of children excluded from analysis	Number of children under 5
		Length/Height not measured	Incomplete date of birth	Length/Height not measured, incomplete date of birth	Flagged cases (outliers)			
Total	95.8	3.7	0.0	0.0	0.6	100.0	4.2	5510
<b>Age</b>								
<6 months	85.7	13.0	0.0	0.0	1.3	100.0	14.3	531
6-11 months	94.9	4.0	0.0	0.0	1.1	100.0	5.1	540
12-23 months	95.9	3.1	0.0	0.0	1.0	100.0	4.1	1071
24-35 months	97.5	2.1	0.0	0.0	0.4	100.0	2.5	1045
36-47 months	97.7	2.0	0.0	0.0	0.3	100.0	2.3	1208
48-59 months	97.1	2.9	0.0	0.0	0.0	100.0	2.9	1114
<b>Region</b>								
Akmola	99.0	0.8	0.0	0.0	0.2	100.0	1.0	225
Aktobe	98.5	1.3	0.0	0.0	0.3	100.0	1.5	376
Almaty oblast	89.6	10.4	0.0	0.0	0.0	100.0	10.4	413
Atyrau	95.2	2.3	0.0	0.0	2.5	100.0	4.8	202
West Kazakhstan	97.8	2.2	0.0	0.0	0.0	100.0	2.2	227
Zhambyl	98.5	1.5	0.0	0.0	0.0	100.0	1.5	414
Karaganda	92.1	7.9	0.0	0.0	0.0	100.0	7.9	381
Kostanai	97.5	2.5	0.0	0.0	0.0	100.0	2.5	239
Kyzylorda	98.8	0.5	0.0	0.0	0.7	100.0	1.2	214
Mangistau	85.3	11.9	0.0	0.0	2.8	100.0	14.7	224
South Kazakhstan	97.9	1.3	0.0	0.0	0.7	100.0	2.1	1246
Pavlodar	98.9	0.8	0.0	0.0	0.3	100.0	1.1	166
North Kazakhstan	96.8	2.8	0.0	0.0	0.4	100.0	3.2	117
East Kazakhstan	99.2	0.8	0.0	0.0	0.0	100.0	0.8	274
Astana city	94.5	4.4	0.0	0.0	1.1	100.0	5.5	501
Almaty city	90.2	9.5	0.0	0.0	0.3	100.0	9.8	292
<b>Age</b>	<b>Region</b>							
<6 months	Akmola	100.0	0.0	0.0	0.0	100.0	0.0	22
	Aktobe	100.0	0.0	0.0	0.0	100.0	0.0	30

	Almaty oblast	55.0	45.0	0.0	0.0	0.0	100.0	45.0	51
	Atyrau	70.9	12.7	0.0	0.0	16.5	100.0	29.1	20
	West Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	26
	Zhambyl	97.5	2.5	0.0	0.0	0.0	100.0	2.5	40
	Karaganda	85.2	14.8	0.0	0.0	0.0	100.0	14.8	26
	Kostanai	82.3	17.7	0.0	0.0	0.0	100.0	17.7	20
	Kyzylorda	98.0	0.0	0.0	0.0	2.0	100.0	2.0	21
	Mangistau	64.0	34.5	0.0	0.0	1.4	100.0	36.0	25
	South Kazakhstan	98.0	1.3	0.0	0.0	0.8	100.0	2.0	120
	Pavlodar	91.4	5.0	0.0	0.0	3.6	100.0	8.6	13
	North Kazakhstan	93.0	0.0	0.0	0.0	7.0	100.0	7.0	7
	East Kazakhstan	95.2	4.8	0.0	0.0	0.0	100.0	4.8	25
	Astana city	72.2	26.6	0.0	0.0	1.2	100.0	27.8	56
	Almaty city	71.7	28.3	0.0	0.0	0.0	100.0	28.3	30
	Akmola	100.0	0.0	0.0	0.0	0.0	100.0	0.0	29
	Aktobe	97.9	0.0	0.0	0.0	2.1	100.0	2.1	44
	Almaty oblast	83.2	16.8	0.0	0.0	0.0	100.0	16.8	39
	Atyrau	100.0	0.0	0.0	0.0	0.0	100.0	0.0	19
	West Kazakhstan	97.0	3.0	0.0	0.0	0.0	100.0	3.0	19
	Zhambyl	95.4	4.6	0.0	0.0	0.0	100.0	4.6	37
	Karaganda	100.0	0.0	0.0	0.0	0.0	100.0	0.0	27
6-11 months	Kostanai	100.0	0.0	0.0	0.0	0.0	100.0	0.0	18
	Kyzylorda	97.8	2.2	0.0	0.0	0.0	100.0	2.2	20
	Mangistau	74.0	22.2	0.0	0.0	3.9	100.0	26.0	23
	South Kazakhstan	94.9	5.1	0.0	0.0	0.0	100.0	5.1	141
	Pavlodar	100.0	0.0	0.0	0.0	0.0	100.0	0.0	17
	North Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	10
	East Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	27
	Astana city	90.9	0.0	0.0	0.0	9.1	100.0	9.1	45
	Almaty city	100.0	0.0	0.0	0.0	0.0	100.0	0.0	25
	Akmola	98.7	0.0	0.0	0.0	1.3	100.0	1.3	39
	Aktobe	99.1	0.9	0.0	0.0	0.0	100.0	0.9	83
	Almaty oblast	91.3	8.7	0.0	0.0	0.0	100.0	8.7	90
	Atyrau	97.1	2.9	0.0	0.0	0.0	100.0	2.9	43
	West Kazakhstan	99.0	1.0	0.0	0.0	0.0	100.0	1.0	49
	Zhambyl	99.1	0.9	0.0	0.0	0.0	100.0	0.9	91
	Karaganda	91.3	8.7	0.0	0.0	0.0	100.0	8.7	77
12-23 months	Kostanai	96.8	3.2	0.0	0.0	0.0	100.0	3.2	43
	Kyzylorda	97.6	0.0	0.0	0.0	2.4	100.0	2.4	44
	Mangistau	83.1	10.0	0.0	0.0	6.9	100.0	16.9	46
	South Kazakhstan	96.3	1.1	0.0	0.0	2.6	100.0	3.7	230
	Pavlodar	97.9	2.1	0.0	0.0	0.0	100.0	2.1	32
	North Kazakhstan	97.9	2.1	0.0	0.0	0.0	100.0	2.1	25
	East Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	49
	Astana city	95.3	4.7	0.0	0.0	0.0	100.0	4.7	92
	Almaty city	97.1	2.9	0.0	0.0	0.0	100.0	2.9	39
	Akmola	97.2	2.8	0.0	0.0	0.0	100.0	2.8	47
	Aktobe	99.0	1.0	0.0	0.0	0.0	100.0	1.0	72
24-35 months	Almaty oblast	94.1	5.9	0.0	0.0	0.0	100.0	5.9	73
	Atyrau	96.3	0.0	0.0	0.0	3.7	100.0	3.7	46
	West Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	49

	Zhambyl	100.0	0.0	0.0	0.0	0.0	100.0	0.0	86
	Karaganda	93.4	6.6	0.0	0.0	0.0	100.0	6.6	96
	Kostanai	100.0	0.0	0.0	0.0	0.0	100.0	0.0	54
	Kyzylorda	100.0	0.0	0.0	0.0	0.0	100.0	0.0	37
	Mangistau	91.0	7.6	0.0	0.0	1.3	100.0	9.0	45
	South Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	191
	Pavlodar	100.0	0.0	0.0	0.0	0.0	100.0	0.0	42
	North Kazakhstan	94.4	5.6	0.0	0.0	0.0	100.0	5.6	22
	East Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	54
	Astana city	99.2	0.0	0.0	0.0	0.8	100.0	0.8	88
	Almaty city	85.6	12.1	0.0	0.0	2.3	100.0	14.4	42
	Akmola	98.8	1.2	0.0	0.0	0.0	100.0	1.2	44
	Aktobe	98.5	1.5	0.0	0.0	0.0	100.0	1.5	58
	Almaty oblast	100.0	0.0	0.0	0.0	0.0	100.0	0.0	70
	Atyrau	98.1	1.9	0.0	0.0	0.0	100.0	1.9	41
	West Kazakhstan	97.3	2.7	0.0	0.0	0.0	100.0	2.7	35
	Zhambyl	98.9	1.1	0.0	0.0	0.0	100.0	1.1	80
	Karaganda	96.7	3.3	0.0	0.0	0.0	100.0	3.3	77
36-47	Kostanai	99.0	1.0	0.0	0.0	0.0	100.0	1.0	56
months	Kyzylorda	100.0	0.0	0.0	0.0	0.0	100.0	0.0	44
	Mangistau	92.4	5.0	0.0	0.0	2.6	100.0	7.6	48
	South Kazakhstan	98.6	0.8	0.0	0.0	0.6	100.0	1.4	336
	Pavlodar	100.0	0.0	0.0	0.0	0.0	100.0	0.0	24
	North Kazakhstan	97.6	2.4	0.0	0.0	0.0	100.0	2.4	24
	East Kazakhstan	98.2	1.8	0.0	0.0	0.0	100.0	1.8	61
	Astana city	98.4	1.6	0.0	0.0	0.0	100.0	1.6	130
	Almaty city	89.9	10.1	0.0	0.0	0.0	100.0	10.1	79
	Akmola	100.0	0.0	0.0	0.0	0.0	100.0	0.0	45
	Aktobe	97.1	2.9	0.0	0.0	0.0	100.0	2.9	87
	Almaty oblast	98.6	1.4	0.0	0.0	0.0	100.0	1.4	89
	Atyrau	100.0	0.0	0.0	0.0	0.0	100.0	0.0	32
	West Kazakhstan	94.1	5.9	0.0	0.0	0.0	100.0	5.9	49
	Zhambyl	97.8	2.2	0.0	0.0	0.0	100.0	2.2	80
	Karaganda	86.3	13.7	0.0	0.0	0.0	100.0	13.7	78
48-59	Kostanai	98.9	1.1	0.0	0.0	0.0	100.0	1.1	48
months	Kyzylorda	98.8	1.2	0.0	0.0	0.0	100.0	1.2	48
	Mangistau	92.8	7.2	0.0	0.0	0.0	100.0	7.2	38
	South Kazakhstan	98.7	1.3	0.0	0.0	0.0	100.0	1.3	228
	Pavlodar	100.0	0.0	0.0	0.0	0.0	100.0	0.0	37
	North Kazakhstan	97.0	3.0	0.0	0.0	0.0	100.0	3.0	28
	East Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	58
	Astana city	98.9	1.1	0.0	0.0	0.0	100.0	1.1	90
	Almaty city	93.5	6.5	0.0	0.0	0.0	100.0	6.5	78

**Table DQ.12: Completeness of information for anthropometric indicators: Wasting**

Percent distribution of children under 5 by completeness of information on weight and length or height, Kazakhstan, 2015

		Reason for exclusion from analysis					Total	Percent of children excluded from analysis	Number of children under 5
		Valid weight and length/height	Weight not measured	Length/Height not measured	Weight and length/height not measured	Flagged cases (outliers)			
Total		94.7	0.0	0.1	3.6	1.6	100.0	5.3	5510
<b>Age</b>									
<6 months		85.7	0.2	0.0	13.0	1.1	100.0	14.3	531
6-11 months		95.8	0.0	0.0	4.0	0.2	100.0	4.2	540
12-23 months		96.5	0.1	0.3	2.8	0.3	100.0	3.5	1071
24-35 months		96.9	0.0	0.1	2.1	1.0	100.0	3.1	1045
36-47 months		96.6	0.0	0.2	1.8	1.5	100.0	3.4	1208
48-59 months		92.7	0.0	0.0	2.9	4.4	100.0	7.3	1114
<b>Region</b>									
Akmola		99.2	0.0	0.0	0.8	0.0	100.0	0.8	225
Aktobe		97.4	0.0	0.0	1.3	1.3	100.0	2.6	376
Almaty oblast		88.4	0.5	0.0	10.4	0.7	100.0	11.6	413
Atyrau		96.5	0.0	0.0	2.3	1.2	100.0	3.5	202
West Kazakhstan		96.8	0.0	0.2	1.9	1.0	100.0	3.2	227
Zhambyl		98.5	0.0	0.0	1.5	0.0	100.0	1.5	414
Karaganda		92.1	0.0	0.0	7.9	0.0	100.0	7.9	381
Kostanai		95.8	0.0	0.0	2.5	1.7	100.0	4.2	239
Kyzylorda		97.4	0.0	0.0	0.5	2.2	100.0	2.6	214
Mangistau		83.2	0.0	0.2	11.8	4.9	100.0	16.8	224
South Kazakhstan		98.2	0.0	0.3	1.0	0.5	100.0	1.8	1246
Pavlodar		97.3	0.0	0.0	0.8	1.9	100.0	2.7	166
North Kazakhstan		96.8	0.0	1.2	1.6	0.4	100.0	3.2	117
East Kazakhstan		98.3	0.0	0.0	0.8	0.8	100.0	1.7	274
Astana city		90.3	0.0	0.0	4.4	5.3	100.0	9.7	501
Almaty city		85.0	0.0	0.0	9.5	5.5	100.0	15.0	292
<b>Age</b>	<b>Region</b>								
	Akmola	100.0	0.0	0.0	0.0	0.0	100.0	0.0	22
	Aktobe	97.7	0.0	0.0	0.0	2.3	100.0	2.3	30
	Almaty oblast	52.8	2.1	0.0	45.0	0.0	100.0	47.2	51
	Atyrau	85.6	0.0	0.0	12.7	1.8	100.0	14.4	20
	West Kazakhstan	98.0	0.0	0.0	0.0	2.0	100.0	2.0	26
	Zhambyl	97.5	0.0	0.0	2.5	0.0	100.0	2.5	40
	Karaganda	85.2	0.0	0.0	14.8	0.0	100.0	14.8	26
<6 months	Kostanai	78.0	0.0	0.0	17.7	4.3	100.0	22.0	20
	Kyzylorda	93.9	0.0	0.0	0.0	6.1	100.0	6.1	21
	Mangistau	65.5	0.0	0.0	34.5	0.0	100.0	34.5	25
	South Kazakhstan	98.7	0.0	0.0	1.3	0.0	100.0	1.3	120
	Pavlodar	95.0	0.0	0.0	5.0	0.0	100.0	5.0	13
	North Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	7
	East Kazakhstan	95.2	0.0	0.0	4.8	0.0	100.0	4.8	25
	Astana city	70.8	0.0	0.0	26.6	2.6	100.0	29.2	56

6-11 months	Almaty city	70.0	0.0	0.0	28.3	1.7	100.0	30.0	30
	Akmola	100.0	0.0	0.0	0.0	0.0	100.0	0.0	29
	Aktobe	100.0	0.0	0.0	0.0	0.0	100.0	0.0	44
	Almaty oblast	83.2	0.0	0.0	16.8	0.0	100.0	16.8	39
	Atyrau	98.1	0.0	0.0	0.0	1.9	100.0	1.9	19
	West Kazakhstan	93.7	0.0	0.0	3.0	3.3	100.0	6.3	19
	Zhambyl	95.4	0.0	0.0	4.6	0.0	100.0	4.6	37
	Karaganda	100.0	0.0	0.0	0.0	0.0	100.0	0.0	27
	Kostanai	100.0	0.0	0.0	0.0	0.0	100.0	0.0	18
	Kyzylorda	97.8	0.0	0.0	2.2	0.0	100.0	2.2	20
	Mangistau	77.8	0.0	0.0	22.2	0.0	100.0	22.2	23
	South Kazakhstan	94.9	0.0	0.0	5.1	0.0	100.0	5.1	141
	Pavlodar	100.0	0.0	0.0	0.0	0.0	100.0	0.0	17
	North Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	10
	East Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	27
Astana city	100.0	0.0	0.0	0.0	0.0	100.0	0.0	45	
Almaty city	100.0	0.0	0.0	0.0	0.0	100.0	0.0	25	
12-23 months	Akmola	100.0	0.0	0.0	0.0	0.0	100.0	0.0	39
	Aktobe	99.1	0.0	0.0	0.9	0.0	100.0	0.9	83
	Almaty oblast	88.3	1.0	0.0	8.7	1.9	100.0	11.7	90
	Atyrau	97.1	0.0	0.0	2.9	0.0	100.0	2.9	43
	West Kazakhstan	99.0	0.0	1.0	0.0	0.0	100.0	1.0	49
	Zhambyl	99.1	0.0	0.0	0.9	0.0	100.0	0.9	91
	Karaganda	91.3	0.0	0.0	8.7	0.0	100.0	8.7	77
	Kostanai	95.2	0.0	0.0	3.2	1.6	100.0	4.8	43
	Kyzylorda	99.0	0.0	0.0	0.0	1.0	100.0	1.0	44
	Mangistau	89.1	0.0	0.0	10.0	0.9	100.0	10.9	46
	South Kazakhstan	98.9	0.0	1.1	0.0	0.0	100.0	1.1	230
	Pavlodar	97.9	0.0	0.0	2.1	0.0	100.0	2.1	32
	North Kazakhstan	97.9	0.0	0.0	2.1	0.0	100.0	2.1	25
	East Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	49
	Astana city	95.3	0.0	0.0	4.7	0.0	100.0	4.7	92
Almaty city	97.1	0.0	0.0	2.9	0.0	100.0	2.9	39	
24-35 months	Akmola	97.2	0.0	0.0	2.8	0.0	100.0	2.8	47
	Aktobe	96.8	0.0	0.0	1.0	2.2	100.0	3.2	72
	Almaty oblast	92.3	0.0	0.0	5.9	1.8	100.0	7.7	73
	Atyrau	98.2	0.0	0.0	0.0	1.8	100.0	1.8	46
	West Kazakhstan	98.7	0.0	0.0	0.0	1.3	100.0	1.3	49
	Zhambyl	100.0	0.0	0.0	0.0	0.0	100.0	0.0	86
	Karaganda	93.4	0.0	0.0	6.6	0.0	100.0	6.6	96
	Kostanai	100.0	0.0	0.0	0.0	0.0	100.0	0.0	54
	Kyzylorda	98.7	0.0	0.0	0.0	1.3	100.0	1.3	37
	Mangistau	92.4	0.0	0.0	7.6	0.0	100.0	7.6	45
	South Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	191
	Pavlodar	98.5	0.0	0.0	0.0	1.5	100.0	1.5	42
	North Kazakhstan	94.4	0.0	3.5	2.1	0.0	100.0	5.6	22
	East Kazakhstan	97.7	0.0	0.0	0.0	2.3	100.0	2.3	54
	Astana city	97.0	0.0	0.0	0.0	3.0	100.0	3.0	88
Almaty city	85.4	0.0	0.0	12.1	2.5	100.0	14.6	42	
Akmola	98.8	0.0	0.0	1.2	0.0	100.0	1.2	44	

36-47 months	Aktobe	96.8	0.0	0.0	1.5	1.7	100.0	3.2	58
	Almaty oblast	100.0	0.0	0.0	0.0	0.0	100.0	0.0	70
	Atyrau	97.6	0.0	0.0	1.9	0.5	100.0	2.4	41
	West Kazakhstan	97.3	0.0	0.0	2.7	0.0	100.0	2.7	35
	Zhambyl	98.9	0.0	0.0	1.1	0.0	100.0	1.1	80
	Karaganda	96.7	0.0	0.0	3.3	0.0	100.0	3.3	77
	Kostanai	97.7	0.0	0.0	1.0	1.3	100.0	2.3	56
	Kyzylorda	98.3	0.0	0.0	0.0	1.7	100.0	1.7	44
	Mangistau	90.4	0.0	0.0	5.0	4.7	100.0	9.6	48
	South Kazakhstan	98.7	0.0	0.4	0.4	0.6	100.0	1.3	336
	Pavlodar	97.5	0.0	0.0	0.0	2.5	100.0	2.5	24
	North Kazakhstan	97.6	0.0	2.4	0.0	0.0	100.0	2.4	24
	East Kazakhstan	96.4	0.0	0.0	1.8	1.8	100.0	3.6	61
	Astana city	92.9	0.0	0.0	1.6	5.5	100.0	7.1	130
	Almaty city	87.3	0.0	0.0	10.1	2.6	100.0	12.7	79
48-59 months	Akmola	100.0	0.0	0.0	0.0	0.0	100.0	0.0	45
	Aktobe	95.1	0.0	0.0	2.9	2.0	100.0	4.9	87
	Almaty oblast	98.6	0.0	0.0	1.4	0.0	100.0	1.4	89
	Atyrau	98.1	0.0	0.0	0.0	1.9	100.0	1.9	32
	West Kazakhstan	92.9	0.0	0.0	5.9	1.1	100.0	7.1	49
	Zhambyl	97.8	0.0	0.0	2.2	0.0	100.0	2.2	80
	Karaganda	86.3	0.0	0.0	13.7	0.0	100.0	13.7	78
	Kostanai	95.2	0.0	0.0	1.1	3.8	100.0	4.8	48
	Kyzylorda	95.3	0.0	0.0	1.2	3.5	100.0	4.7	48
	Mangistau	70.7	0.0	1.0	6.2	22.1	100.0	29.3	38
	South Kazakhstan	97.0	0.0	0.0	1.3	1.7	100.0	3.0	228
	Pavlodar	94.7	0.0	0.0	0.0	5.3	100.0	5.3	37
	North Kazakhstan	95.1	0.0	0.0	3.0	1.8	100.0	4.9	28
	East Kazakhstan	100.0	0.0	0.0	0.0	0.0	100.0	0.0	58
	Astana city	81.8	0.0	0.0	1.1	17.0	100.0	18.2	90
Almaty city	77.5	0.0	0.0	6.5	16.0	100.0	22.5	78	

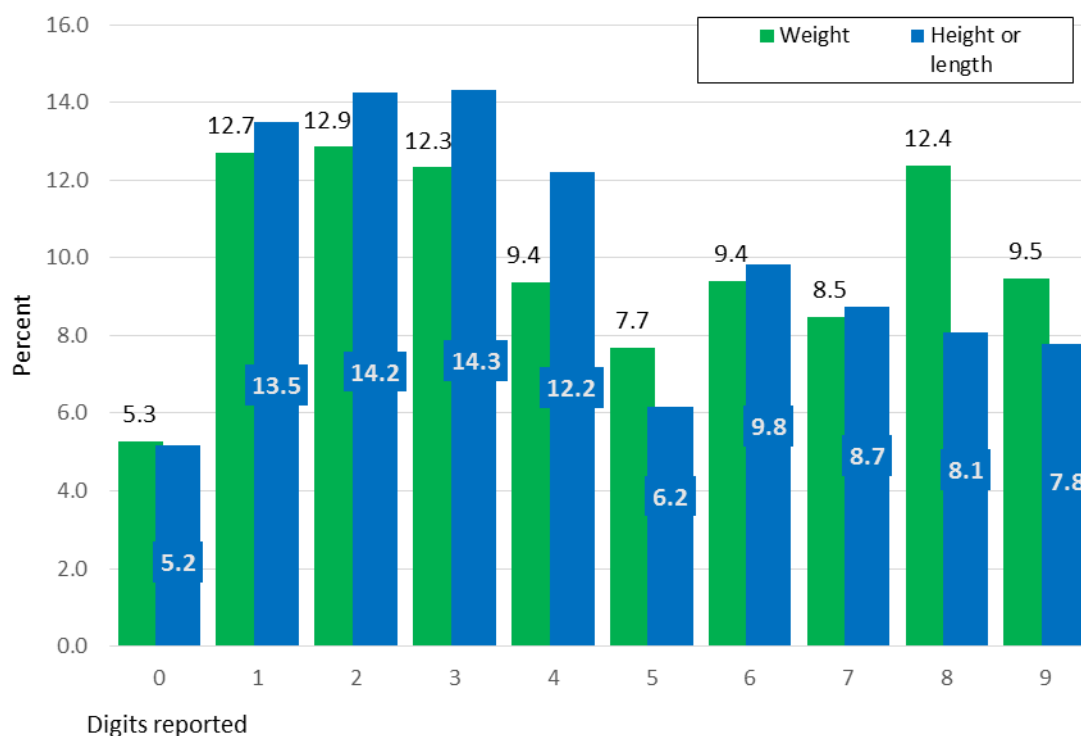
**Table DQ.13: Heaping in anthropometric measurements**

Distribution of weight and height/length measurements by digits reported for the decimal points, Kazakhstan, 2015

	Weight		Height or length	
	Number	Percent	Number	Percent
Total	5311	100.0	5313	100.0
<b>Digits</b>				
0	280	5.3	274	5.2
1	675	12.7	717	13.5
2	683	12.9	757	14.2
3	655	12.3	761	14.3
4	498	9.4	648	12.2
5	409	7.7	328	6.2
6	500	9.4	522	9.8
7	451	8.5	463	8.7
8	658	12.4	430	8.1
9	503	9.5	413	7.8
0 or 5	689	13.0	602	11.3



**Figure DQ.2: Weight and height/length measurements by digits reported for the decimal points, Kazakhstan, 2015**



**Table DQ.14: Observation of birth certificates**

Percent distribution of children under 5 by presence of birth certificates, and percentage of birth certificates seen, Kazakhstan, 2015

	Child has birth certificate		Child does not have birth certificate	DK/Missing	Total	Percentage of birth certificates seen by the interviewer (1)/(1+2)*100	Number of children under age 5
	Seen by the interviewer (1)	Not seen by the interviewer (2)					
<b>Total</b>	78.2	21.3	0.5	0.0	100.0	78.6	5510
<b>Region</b>							
Akmola	91.0	9.0	0.0	0.0	100.0	91.0	225
Aktobe	71.4	28.6	0.0	0.0	100.0	71.4	376
Almaty oblast	58.5	40.6	0.9	0.0	100.0	59.0	413
Atyrau	78.0	20.9	1.1	0.0	100.0	78.9	202
West Kazakhstan	80.1	19.1	0.8	0.0	100.0	80.8	227
Zhambyl	87.7	11.5	0.8	0.0	100.0	88.4	414
Karaganda	85.3	14.0	0.7	0.0	100.0	85.9	381
Kostanai	87.5	12.5	0.0	0.0	100.0	87.5	239
Kyzylorda	85.5	13.4	1.1	0.0	100.0	86.4	214
Mangistau	65.7	34.1	0.2	0.0	100.0	65.8	224
South Kazakhstan	77.7	21.8	0.5	0.0	100.0	78.1	1246
Pavlodar	90.9	8.7	0.4	0.0	100.0	91.2	166
North Kazakhstan	83.1	16.3	0.5	0.0	100.0	83.6	117
East Kazakhstan	93.5	6.5	0.0	0.0	100.0	93.5	274

Astana city	67.3	32.1	0.5	0.0	100.0	67.7	501
Almaty city	74.9	24.3	0.8	0.0	100.0	75.5	292
<b>Area</b>							
Urban	78.2	21.5	0.4	0.0	100.0	78.4	2704
Rural	78.3	21.1	0.7	0.0	100.0	78.8	2806
<b>Child's age</b>							
0-5 months	78.1	17.1	4.8	0.0	100.0	82.0	531
6-11 months	77.2	22.8	0.0	0.0	100.0	77.2	540
12-23 months	80.0	20.0	0.0	0.0	100.0	80.0	1071
24-35 months	81.5	18.5	0.0	0.0	100.0	81.5	1045
36-47 months	76.0	23.7	0.2	0.0	100.0	76.2	1208
48-59 months	76.4	23.6	0.0	0.0	100.0	76.4	1114

**Table DQ.15: Observation of vaccination passports/cards at home and in health facility**

Percent distribution of children aged 0-35 months by presence of a vaccination passport/card, and the percentage of vaccination passports/cards seen by the interviewers, Kazakhstan, 2015

	Child does not have vaccination passport/card at home		Child has vaccination passport/card at home			Child has vaccination passport/card at health facility			Percentage of vaccination passports/cards seen by the interviewer (at home and/or in health facility)	Number of children aged 0-35 months
	Had vaccination passport/card at home previously	Never had vaccination passport/card at home	Seen by the interviewer at home	Not seen by the interviewer at home	Missing/DK	Seen by the interviewer at health facility	Not seen by the interviewer at health facility	Missing/DK		
<b>Total</b>	19.4	2,1	9.8	68.4	0.3	97.3	1.0	1.8	98.0	3188
<b>Region</b>										
Akmola	9.8	3,8	40.9	44.3	1.2	96.9	0.5	2.6	98.4	136
Aktobe	1.0	9,4	0.5	89.1	0.0	99.7	0.0	0.3	99.7	230
Almaty oblast	19.2	5,5	7.3	66.6	1.5	95.5	0.4	4.0	97.0	254
Atyrau	46.3	1,7	2.4	49.6	0.0	97.9	0.0	2.1	99.4	129
West Kazakhstan	19.0	0,8	2.5	77.7	0.0	98.7	0.0	1.3	98.7	143
Zhambyl	92.6	2,6	3.0	1.8	0.0	99.0	0.8	0.3	99.2	254
Karaganda	0.0	0,6	10.5	88.9	0.0	98.1	0.5	1.4	98.1	226
Kostanai	83.5	2,6	2.4	11.5	0.0	100.0	0.0	0.0	100.0	134
Kyzylorda	2.1	0,0	8.6	89.0	0.3	99.3	0.3	0.4	99.3	122
Mangistau	8.4	0,6	3.0	88.0	0.0	96.2	0.7	3.1	96.5	138
South Kazakhstan	1.6	0,0	1.7	96.5	0.3	99.5	0.5	0.0	99.7	681
Pavlodar	23.3	4,8	6.8	64.5	0.6	93.4	0.0	6.6	98.8	105
North Kazakhstan	23.1	4,5	35.6	36.8	0.0	92.8	4.9	2.3	94.4	65
East Kazakhstan	12.2	0,0	12.0	75.8	0.0	99.2	0.8	0.0	99.2	155
Astana city	5.5	0,2	42.3	52.0	0.0	96.9	1.7	1.4	97.6	281
Almaty city	16.9	2,3	1.0	79.8	0.0	79.2	8.8	12.0	81.2	136
<b>Area</b>										
Urban	18.5	2,1	14.0	65.2	0.3	96.1	1.5	2.3	97.1	1574
Rural	20.3	2,2	5.7	71.5	0.3	98.3	0.4	1.2	98.8	1614
<b>Child's age</b>										
0-5 months	17.3	4,1	13.3	64.8	0.5	97.0	1.2	1.8	97.8	531
6-11 months	17.0	2,2	7.3	73.2	0.3	98.8	0.1	1.1	99.1	540
12-23 months	20.0	1,2	10.0	68.6	0.2	97.2	1.0	1.8	98.1	1071
24-35 months	21.2	2,0	9.0	67.5	0.2	96.6	1.2	2.1	97.3	1045

**Table DQ.16: Observation of places for handwashing**

Percent distribution of places for handwashing observed by the interviewers in all interviewed households, Kazakhstan, 2015

	Place for handwashing				Total	Number of households interviewed
	Observed	Not observed				
		Not in the dwelling, plot or yard	No permission to see	Other reason		
<b>Total</b>	97.3	0.2	2.4	0.1	100.0	16500
<b>Region</b>						
Akmola	99.0	0.1	0.8	0.0	100.0	944
Aktobe	99.9	0.0	0.1	0.0	100.0	983
Almaty oblast	93.0	1.7	5.3	0.0	100.0	1260
Atyrau	99.2	0.0	0.8	0.0	100.0	456
West Kazakhstan	98.8	0.0	0.9	0.3	100.0	764
Zhambyl	98.7	0.0	1.3	0.0	100.0	880
Karaganda	97.4	0.0	2.6	0.0	100.0	1614
Kostanai	96.4	0.0	3.6	0.0	100.0	978
Kyzylorda	99.8	0.0	0.2	0.0	100.0	402
Mangistau	97.0	0.0	3.0	0.0	100.0	412
South Kazakhstan	97.9	0.0	2.1	0.0	100.0	2055
Pavlodar	99.4	0.0	0.4	0.2	100.0	829
North Kazakhstan	98.5	0.1	1.3	0.1	100.0	645
East Kazakhstan	99.2	0.0	0.8	0.0	100.0	1523
Astana city	95.3	0.3	4.4	0.1	100.0	1310
Almaty city	93.3	0.0	6.3	0.4	100.0	1445
<b>Area</b>						
Urban	96.6	0.0	3.3	0.1	100.0	9967
Rural	98.4	0.4	1.2	0.1	100.0	6533
<b>Wealth index quintile</b>						
Poorest	98.0	0.3	1.6	0.1	100.0	3035
Second	98.3	0.1	1.5	0.1	100.0	2646
Middle	97.3	0.3	2.3	0.1	100.0	3109
Fourth	96.6	0.1	3.2	0.1	100.0	3979
Richest	96.9	0.1	3.1	0.0	100.0	3731

**Table DQ.17: Respondent to the under-5 questionnaire**

Distribution of children under five by respondent to the under-5 questionnaire, Kazakhstan, 2015

	Mother in the household	Mother not in the household and primary caretaker identified:		Total	Number of children under 5
		Father	Other adult female		
<b>Total</b>	97.5	0.0	2.5	100.0	5877
<b>Age</b>					
0	99.0	0.0	1.0	100.0	1187
1	97.6	0.0	2.4	100.0	1126
2	97.3	0.0	2.7	100.0	1121
3	97.4	0.1	2.5	100.0	1295
4	96.0	0.1	3.9	100.0	1148

**Table DQ.18: Selection of children aged 1-14 years for the child discipline module**

Percent distribution of households by the number of children aged 1-14 years, and the percentage of households with at least two children aged 1-14 years where correct selection of one child for the child discipline module was performed, Kazakhstan, 2015

	Number of children aged 1-14 years			Total	Number of households	Percentage of households where correct selection was performed	Number of households with 2 or more children aged 1-14 years
	None	One	Two or more				
<b>Total</b>	52.9	21.6	25.5	100.0	16500	98.9	4211
<b>Region</b>							
Akmola	59.3	22.7	18.0	100.0	944	99.4	170
Aktobe	48.9	20.9	30.2	100.0	983	98.2	297
Almaty oblast	47.8	24.7	27.5	100.0	1260	99.6	347
Atyrau	43.8	21.3	34.9	100.0	456	98.7	159
West Kazakhstan	54.3	24.3	21.4	100.0	764	94.7	164
Zhambyl	39.8	23.3	36.9	100.0	880	100.0	325
Karaganda	62.8	18.9	18.3	100.0	1614	98.2	296
Kostanai	58.5	23.4	18.1	100.0	978	99.3	177
Kyzylorda	37.4	19.2	43.3	100.0	402	99.1	174
Mangistau	36.5	21.3	42.2	100.0	412	99.3	174
South Kazakhstan	31.2	21.4	47.4	100.0	2055	99.1	973
Pavlodar	62.9	22.8	14.3	100.0	829	98.8	119
North Kazakhstan	66.7	18.1	15.3	100.0	645	98.7	98
East Kazakhstan	67.9	18.2	13.9	100.0	1523	98.5	211
Astana city	52.2	25.0	22.7	100.0	1310	99.4	298
Almaty city	64.0	20.1	15.9	100.0	1445	99.7	230
<b>Area</b>							
Urban	59.2	21.5	19.3	100.0	9967	99.2	1920
Rural	43.3	21.7	35.1	100.0	6533	98.8	2291
<b>Wealth index quintile</b>							
Poorest	49.5	17.5	33.0	100.0	3035	98.2	1001
Second	41.2	23.2	35.6	100.0	2646	99.2	941
Middle	50.2	22.7	27.1	100.0	3109	98.8	844
Fourth	63.5	19.4	17.2	100.0	3979	99.5	683
Richest	55.0	25.1	19.9	100.0	3731	99.4	741

**Table DQ.19: School attendance by single age**

Distribution of household population aged 5-24 years by educational level and grade attended in the current (or most recent) school year, Kazakhstan, 2015

	Not attending school	Currently attending																		DK/Missing	Total	Number of household members	
		Preschool	Primary school Grade				Lower Secondary school Grade					Upper Secondary school Grade		Technical and Professional				Higher					
			1	2	3	4	5	6	7	8	9	10	11	1	2	3	4						
<b>Age at beginning of school year</b>																							
5	28.1	69.2	2.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	1107
6	3.6	28.9	65.8	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	1186
7	0.5	0.3	30.9	64.2	4.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	1134
8	0.7	0.0	1.7	32.4	62.0	2.9	0.1	0.0	0.1	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	1081
9	0.1	0.0	0.1	1.0	33.0	60.8	4.8	0.1	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	999
10	0.3	0.0	0.0	0.0	1.0	36.2	57.6	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	989
11	0.4	0.0	0.1	0.1	0.0	1.3	28.3	66.0	3.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	825
12	0.2	0.0	0.0	0.0	0.0	0.2	1.8	30.4	61.5	5.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	787
13	0.1	0.0	0.0	0.0	0.0	0.1	0.1	2.1	31.3	60.7	5.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	778
14	0.2	0.0	0.0	0.0	0.0	0.0	0.1	0.1	2.1	32.7	59.8	4.3	0.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	738
15	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.8	43.2	35.5	2.7	14.3	0.7	0.0	0.0	0.0	0.0	0.0	0.0	100	748
16	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	2.8	29.1	35.8	16.1	13.4	0.3	0.0	0.0	0.0	0.0	0.0	100	645
17	13.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	33.7	7.2	16.6	13.2	0.2	13.7	0.0	0.0	0.0	100	560
18	21.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	1.0	4.7	12.3	20.5	6.2	33.4	0.0	0.0	0.0	100	541
19	42.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.4	6.2	12.9	7.2	30.8	0.0	0.0	0.0	100	603
20	57.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.4	1.3	4.9	1.8	34.1	0.0	0.0	0.0	100	638
21	71.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.2	1.8	0.9	24.7	0.0	0.0	0.0	100	843
22	86.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	1.3	0.3	12.1	0.0	0.0	0.0	100	797
23	90.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.1	9.2	0.1	0.0	0.0	100	825
24 <sup>a</sup>	96.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	3.4	0.0	0.0	0.0	100	737

<sup>a</sup> Those age 25 at the time of interview who were age 24 at beginning of school year are excluded as current attendance was only collected for those age 5-24 at the time of interview.

## Appendix E. MICS Indicators, Kazakhstan, 2015: Numerators and Denominators

MICS INDICATOR		Module <sup>68</sup>	Numerator	Denominator	MDG Indicator Reference <sup>69</sup>
<b>NUTRITION</b>					
2.1a 2.1b	Underweight prevalence	AN	Number of children under age 5 who fall below (a) minus two standard deviations (moderate and severe) (b) minus three standard deviations (severe) of the median weight for age of the WHO standard	Total number of children under age 5	MDG 1.8
2.2a 2.2b	Stunting prevalence	AN	Number of children under age 5 who fall below (a) minus two standard deviations (moderate and severe) (b) below minus three standard deviations (severe) of the median height for age of the WHO standard	Total number of children under age 5	
2.3a 2.3b	Wasting prevalence	AN	Number of children under age 5 who fall below (a) minus two standard deviations (moderate and severe) (b) minus three standard deviations (severe) of the median weight for height of the WHO standard	Total number of children under age 5	
2.4	Overweight prevalence	AN	Number of children under age 5 who are above two standard deviations of the median weight for height of the WHO standard	Total number of children under age 5	
2.5	Children ever breastfed	MN	Number of women with a live birth in the last 2 years who breastfed their last live-born child at any time	Total number of women with a live birth in the last 2 years	
2.6	Early initiation of breastfeeding	MN	Number of women with a live birth in the last 2 years who put their last newborn to the breast within one hour of birth	Total number of women with a live birth in the last 2 years	
2.7	Exclusive breastfeeding under 6 months	BD	Number of infants under 6 months of age who are exclusively breastfed <sup>70</sup>	Total number of infants under 6 months of age	

<sup>68</sup> Some indicators are constructed by using questions from several modules in the MICS questionnaires. In such cases, only the module(s) which contains most of the necessary information is indicated.

<sup>69</sup> Millennium Development Goals (MDG) indicators, effective 15 January 2008 – <http://mdgs.un.org/unsd/mdg/Host.aspx?Content=Indicators/OfficialList.htm>, accessed 10 June 2013.

<sup>70</sup> Infants receiving breast milk, and not receiving any other fluids or foods, with the exception of oral rehydration solution, vitamins, mineral supplements and medicines.

MICS INDICATOR		Module <sup>68</sup>	Numerator	Denominator	MDG Indicator Reference <sup>69</sup>
2.8	Predominant breastfeeding under 6 months	BD	Number of infants under 6 months of age who received breast milk as the predominant source of nourishment <sup>71</sup> during the previous day	Total number of infants under 6 months of age	
2.9	Continued breastfeeding at 1 year	BD	Number of children aged 12-15 months who received breast milk during the previous day	Total number of children aged 12-15 months	
2.10	Continued breastfeeding at 2 years	BD	Number of children aged 20-23 months who received breast milk during the previous day	Total number of children aged 20-23 months	
2.11	Duration of breastfeeding	BD	The age in months when 50 percent of children aged 0-35 months did not receive breast milk during the previous day		
2.12	Age-appropriate breastfeeding	BD	Number of children aged 0-23 months appropriately fed <sup>72</sup> during the previous day	Total number of children aged 0-23 months	
2.13	Introduction of solid, semi-solid or soft foods	BD	Number of infants aged 6-8 months who received solid, semi-solid or soft foods during the previous day	Total number of infants aged 6-8 months	
2.14	Milk feeding frequency for non-breastfed children	BD	Number of non-breastfed children aged 6-23 months who received at least 2 milk feedings during the previous day	Total number of non-breastfed children aged 6-23 months	
2.15	Minimum meal frequency	BD	Number of children aged 6-23 months who received solid, semi-solid and soft foods (plus milk feeds for non-breastfed children) the minimum number of times <sup>73</sup> or more during the previous day	Total number of children aged 6-23 months	
2.16	Minimum dietary diversity	BD	Number of children aged 6–23 months who received foods from 4 or more food groups <sup>74</sup> during the previous day	Total number of children aged 6–23 months	

<sup>71</sup> Infants who receive breast milk and certain fluids (water and water-based drinks, fruit juice, ritual fluids, oral rehydration solution, drops, vitamins, minerals, and medicines), but do not receive anything else (in particular, non-human milk and food-based fluids).

<sup>72</sup> Infants aged 0-5 months who are exclusively breastfed, and children aged 6-23 months who are breastfed and ate solid, semi-solid or soft foods.

<sup>73</sup> Breastfeeding children: Solid, semi-solid, or soft foods, two times for infants aged 6-8 months, and three times for children 9-23 months; Non-breastfeeding children: Solid, semi-solid, or soft foods, or milk feeds, four times for children aged 6-23 months.

<sup>74</sup> The indicator is based on consumption of any amount of food from at least 4 out of the 7 following food groups: 1) grains, roots and tubers, 2) legumes and nuts, 3) dairy products (milk, yogurt, cheese), 4) flesh foods (meat, fish, poultry and liver/organ meats), 5) eggs, 6) vitamin-A rich fruits and vegetables, and 7) other fruits and vegetables.



MICS INDICATOR		Module <sup>68</sup>	Numerator	Denominator	MDG Indicator Reference <sup>69</sup>
2.17a 2.17b	Minimum acceptable diet	BD	(a) Number of breastfed children aged 6–23 months who had at least the minimum dietary diversity and the minimum meal frequency during the previous day (b) Number of non-breastfed children aged 6–23 months who received at least 2 milk feedings and had at least the minimum dietary diversity not including milk feeds and the minimum meal frequency during the previous day	(a) Number of breastfed children aged 6–23 months (b) Number of non-breastfed children aged 6–23 months	
2.18	Bottle feeding	BD	Number of children aged 0-23 months who were fed with a bottle during the previous day	Total number of children aged 0-23 months	
2.19	Iodized salt consumption	SI	Number of households with salt testing 15 parts per million or more of iodate	Total number of households in which salt was tested or where there was no salt	
2.20	Low-birthweight infants	MN	Number of most recent live births in the last 2 years weighing below 2,500 grams at birth	Total number of most recent live births in the last 2 years	
2.21	Infants weighed at birth	MN	Number of most recent live births in the last 2 years who were weighed at birth	Total number of most recent live births in the last 2 years	

CHILD HEALTH					
3.1	Tuberculosis immunization coverage	IM	Number of children aged 12-23 months who received BCG vaccine by their first birthday	Total number of children aged 12-23 months	
3.2	Polio immunization coverage	IM	Number of children aged 12-23 months who received the third dose of OPV vaccine (OPV3) by their first birthday	Total number of children aged 12-23 months	
3.3	Diphtheria, pertussis and tetanus (DPT) immunization coverage	IM	Number of children aged 12-23 months who received the third dose of DPT vaccine (DPT3) by their first birthday	Total number of children aged 12-23 months	
3.4	Measles immunization coverage <sup>75</sup>	IM	Number of children aged 24-35 months who received measles vaccine by their second birthday	Total number of children aged 24-35 months	MDG 4.3
3.5	Hepatitis B immunization coverage	IM	Number of children aged 12-23 months who received the third dose of Hepatitis B vaccine (HepB3) by their first birthday	Total number of children aged 12-23 months	

<sup>75</sup> In countries where measles vaccination is administered before 12 months of age according to the vaccination schedule, the indicator is calculated as the proportion of children aged 12-23 months who received the measles vaccine by 12 months of age.

MICS INDICATOR		Module <sup>68</sup>	Numerator	Denominator	MDG Indicator Reference <sup>69</sup>
3.6	Haemophilus influenzae type B (Hib) immunization coverage	IM	Number of children aged 12-23 months who received the third dose of Hib vaccine (Hib3) by their first birthday	Total number of children aged 12-23 months	
3.8	Full immunization coverage	IM	Number of children aged 24-35 months who received all vaccinations <sup>76</sup> recommended in the national immunization schedule by their first birthday (for measles – by their second birthday)	Total number of children aged 24-35 months	
3.15	Use of solid fuels for cooking	HC	Number of household members in households that use solid fuels as the primary source of domestic energy to cook	Total number of household members	

WATER AND SANITATION					
4.1	Use of improved drinking water sources	WS	Number of household members using improved sources of drinking water	Total number of household members	MDG 7.8
4.2	Water treatment	WS	Number of household members in households using unimproved drinking water who use an appropriate treatment method	Total number of household members in households using unimproved drinking water sources	
4.3	Use of improved sanitation	WS	Number of household members using improved sanitation facilities which are not shared	Total number of household members	MDG 7.9
4.5	Place for handwashing	HW	Number of households with a specific place for hand washing where water and soap or other cleansing agent are present	Total number of households	
4.6	Availability of soap <sup>77</sup>	HW	Number of households with soap	Total number of households	

<sup>76</sup> The full vaccination includes the following: One dose of BCG and three doses of Polio, DPT, HepB and Hib by 12 months of age and one dose of measles by 24 months of age (according to the national immunization schedule in Kazakhstan, the measles vaccine is administered at 12-15 months of age).

<sup>77</sup> The indicator name has been changed from the standard “MICS indicator 4.6 - Availability of soap or other cleansing agent” since other cleansing agents such as ash, mud or sand are not applicable for Kazakhstan.

MICS INDICATOR	Module <sup>68</sup>	Numerator	Denominator	MDG Indicator Reference <sup>69</sup>
<b>REPRODUCTIVE HEALTH</b>				
-	Total fertility rate <sup>78</sup>	CM	Total fertility rate for women aged 15-49 years	
5.1	Adolescent birth rate <sup>79</sup>	CM	Age-specific fertility rate for women aged 15-19 years	MDG 5.4
5.2	Early childbearing	CM	Number of women aged 20-24 years who had at least one live birth before age 18	Total number of women aged 20-24 years
5.3	Contraceptive prevalence rate	CP	Number of women aged 15-49 years currently married or in union who are using (or whose partner is using) a (modern or traditional) contraceptive method	Total number of women aged 15-49 years who are currently married or in union
5.4	Unmet need <sup>80</sup>	UN	Number of women aged 15-49 years who are currently married or in union who are fecund and want to space their births or limit the number of children they have and who are not currently using contraception	Total number of women aged 15-49 years who are currently married or in union
5.5a 5.5b	Antenatal care coverage	MN	Number of women aged 15-49 years with a live birth in the last 2 years who were attended during their last pregnancy that led to a live birth (a) at least once by skilled health personnel (b) at least four times by any provider	Total number of women aged 15-49 years with a live birth in the last 2 years
5.S1 <sup>81</sup>	Lifetime experience with abortion	CM	Percentage of women aged 15-49 years who had at least one induced abortion	Total number of women aged 15-49 years
5.S2	Total abortion rate	CM	Number of women aged 15-49 who had a pregnancy in the last 2 years that ended in abortion	Total number of women aged 15-49 years
5.S3	General abortion rate <sup>82</sup>	CM	General abortion rate for women aged 15-49 years	

<sup>78</sup> The age-specific fertility rate is defined as the number of live births to women in a specific age group during a specified period, divided by the average number of women in that age group during the same period, expressed per 1000 women. The age-specific fertility rate for women age 15-19 years is also termed as the adolescent birth rate. The total fertility rate (TFR) is calculated by summing the age-specific fertility rates calculated for each of the 5-year age groups of women, from age 15 through to age 49. The TFR denotes the average number of children to which a woman will have given birth by the end of her reproductive years (by age 50) if current fertility rates prevailed.

<sup>79</sup> When estimated using the Fertility module only, the rate refers to the last one year.

<sup>80</sup> Women with an unmet need for contraception are women age 15-19 years who are married or in a marital union but are not using any method of contraception, and report not wanting any more children (limiting) or wanting to delay the next child (spacing).

<sup>81</sup> The indicator numbering system #.S# denotes a survey-specific indicator calculated by the introduction of a non-standard module or question(s) to this survey that is not part of the global MICS5 Questionnaires or by applying a non-standard calculation method that is not included in the global MICS5 Tabulation Plan.

<sup>82</sup> The general abortion rate (GAR) is the number of abortions to women age 15-49 years during a specified period, divided by the average number of women in the same age group during the same period, expressed

MICS INDICATOR		Module <sup>68</sup>	Numerator	Denominator	MDG Indicator Reference 69
5.6	Content of antenatal care	MN	Number of women aged 15-49 years with a live birth in the last 2 years who had their blood pressure measured and gave urine and blood samples during the last pregnancy that led to a live birth	Total number of women aged 15-49 years with a live birth in the last 2 years	
5.7	Skilled attendant at delivery	MN	Number of women aged 15-49 years with a live birth in the last 2 years who were attended by skilled health personnel during their most recent live birth	Total number of women aged 15-49 years with a live birth in the last 2 years	MDG 5.2
5.8	Institutional deliveries	MN	Number of women aged 15-49 years with a live birth in the last 2 years whose most recent live birth was delivered in a health facility	Total number of women aged 15-49 years with a live birth in the last 2 years	
5.9	Caesarean section	MN	Number of women aged 15-49 years whose most recent live birth in the last 2 years was delivered by caesarean section	Total number of women aged 15-49 years with a live birth in the last 2 years	
5.10	Post-partum stay in health facility	PN	Number of women aged 15-49 years who stayed in the health facility for 12 hours or more after the delivery of their most recent live birth in the last 2 years	Total number of women aged 15-49 years with a live birth in the last 2 years	
5.11	Post-natal health check for the newborn	PN	Number of last live births in the last 2 years who received a health check while in facility or at home following delivery, or a post-natal care visit within 2 days after delivery	Total number of last live births in the last 2 years	
5.12	Post-natal health check for the mother	PN	Number of women aged 15-49 years who received a health check while in facility or at home following delivery, or a post-natal care visit within 2 days after delivery of their most recent live birth in the last 2 years	Total number of women aged 15-49 years with a live birth in the last 2 years	

#### CHILD DEVELOPMENT

6.1	Attendance to early childhood education	EC	Number of children aged 36-59 months who are attending an early childhood education programme	Total number of children aged 36-59 months	
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per 1,000 women.

MICS INDICATOR		Module <sup>68</sup>	Numerator	Denominator	MDG Indicator Reference 69
6.2	Support for learning	EC	Number of children aged 36-59 months with whom an adult has engaged in four or more activities to promote learning and school readiness in the last 3 days	Total number of children aged 36-59 months	
6.3	Father's support for learning	EC	Number of children aged 36-59 months whose father has engaged in four or more activities to promote learning and school readiness in the last 3 days	Total number of children aged 36-59 months	
6.4	Mother's support for learning	EC	Number of children aged 36-59 months whose mother has engaged in four or more activities to promote learning and school readiness in the last 3 days	Total number of children aged 36-59 months	
6.5	Availability of children's books	EC	Number of children under age 5 who have three or more children's books	Total number of children under age 5	
6.6	Availability of playthings	EC	Number of children under age 5 who play with two or more types of playthings	Total number of children under age 5	
6.7	Inadequate care	EC	Number of children under age 5 left alone or in the care of another child younger than 10 years of age for more than one hour at least once in the last week	Total number of children under age 5	
6.8	Early child development index	EC	Number of children aged 36-59 months who are developmentally on track in at least three of the following four domains: literacy-numeracy, physical, social-emotional, and learning	Total number of children aged 36-59 months	

LITERACY AND EDUCATION					
7.1	Literacy rate among young women	WB	Number of women aged 15-24 years who are able to read a short simple statement about everyday life or who attended secondary or higher education	Total number of women aged 15-24 years	MDG 2.3
7.2	School readiness	ED	Number of children in first grade of primary school who attended pre-school during the previous school year	Total number of children attending the first grade of primary school	
7.3	Net intake rate in primary education	ED	Number of children of school-entry age who enter the first grade of primary school	Total number of children of school-entry age	
7.4	Primary school net attendance ratio (adjusted)	ED	Number of children of primary school age currently attending primary or secondary school	Total number of children of primary school age	MDG 2.1

MICS INDICATOR		Module <sup>68</sup>	Numerator	Denominator	MDG Indicator Reference <sup>69</sup>
7.5	Secondary school net attendance ratio (adjusted)	ED	Number of children of secondary school age currently attending secondary school or higher (age 11-17 years)	Total number of children of secondary school age	
7.S1	Lower secondary school net attendance ratio <sup>83</sup> (adjusted)	ED	Number of children of lower secondary school age currently attending lower secondary school (age 11-15 years)	Total number of children of lower secondary school age	
7.S2	Upper secondary school net attendance ratio <sup>84</sup> (adjusted)	ED	Number of children of upper secondary school age currently attending upper secondary school or higher (age 16-17 years)	Total number of children of upper secondary school age	
7.6	Children reaching last grade of primary	ED	Proportion of children entering the first grade of primary school who eventually reach last grade		MDG 2.2
7.7	Primary completion rate	ED	Number of children 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)	
7.8	Transition rate to lower secondary school <sup>85</sup>	ED	Number of children attending the last grade of primary school during the previous school year who are in the first grade of lower secondary school during the current school year	Total number of children attending the last grade of primary school during the previous school year	
7.S3	Lower secondary school completion rate	ED	Number of children attending the last grade of lower secondary school (excluding repeaters)	Total number of children of lower secondary school completion age (age appropriate to final grade of lower secondary school)	
7.S4	Transition rate to upper secondary school	ED	Number of children attending the first grade of upper secondary school or in the first grade of technical and professional education during the current school year	Total number of children attending the last grade of lower secondary school during the previous school year	
7.9	Gender parity index (primary school)	ED	Primary school net attendance ratio (adjusted) for girls	Primary school net attendance ratio (adjusted) for boys	MDG 3.1
7.10	Gender parity index (secondary school)	ED	Secondary school net attendance ratio (adjusted) for girls	Secondary school net attendance ratio (adjusted) for boys	MDG 3.1
7.S5	Gender parity index (lower secondary school)	ED	Lower secondary school net attendance ratio (adjusted) for girls	Lower secondary school net attendance ratio (adjusted) for boys	

<sup>83</sup> Lower secondary school consists of grades 5-9 of secondary school.

<sup>84</sup> Upper secondary school consists of grades 10-11 of secondary school.

<sup>85</sup> Transition rate to lower secondary school corresponds to transition rate to secondary school as defined in MICS global indicator 7.8.

MICS INDICATOR		Module <sup>68</sup>	Numerator	Denominator	MDG Indicator Reference <sup>69</sup>
7.S6	Gender parity index (upper secondary school)	ED	Upper secondary school net attendance ratio (adjusted) for girls	Upper secondary school net attendance ratio (adjusted) for boys	

CHILD PROTECTION					
8.1	Birth registration	BR	Number of children under age 5 whose births are reported registered	Total number of children under age 5	
8.3	Violent discipline	CD	Number of children aged 1-14 years who experienced psychological aggression or physical punishment during the last one month	Total number of children aged 1-14 years	
8.4	Marriage before age 15	MA	Number of women aged 15-49 years who were first married or in union before age 15	Total number of women aged 15-49 years	
8.5	Marriage before age 18	MA	Number of women aged 20-49 years who were first married or in union before age 18	Total number of women aged 20-49 years	
8.6	Young women aged 15-19 years currently married or in union	MA	Number of women aged 15-19 years who are married or in union	Total number of women aged 15-19 years	
8.8a 8.8b	Spousal age difference	MA	Number of women who are married or in union and whose spouse is 10 or more years older, (a) among women aged 15-19 years, (b) among women aged 20-24 years	Total number of women who are married or in union (a) aged 15-19 years, (b) aged 20-24 years	
8.12	Attitudes towards domestic violence	DV	Number of women who state that a husband is justified in hitting or beating his wife in at least one of the following circumstances: (1) she goes out without telling him, (2) she neglects the children, (3) she argues with him, (4) she refuses sex with him, (5) she burns the food	Total number of women aged 15-49 years	
8.S1	Attitudes towards domestic violence (including additional circumstance)	DV	Number of women who state that a husband is justified in hitting or beating his wife in at least one of the following circumstances: (1) she goes out without telling him, (2) she neglects the children, (3) she argues with him, (4) she refuses sex with him, (5) she burns the food, (6) she neglects housework	Total number of women aged 15-49 years	
8.13	Children's living arrangements	HL	Number of children aged 0-17 years living with neither biological parent	Total number of children aged 0-17 years	

MICS INDICATOR		Module <sup>68</sup>	Numerator	Denominator	MDG Indicator Reference <sup>69</sup>
8.14	Prevalence of children with one or both parents dead	HL	Number of children aged 0-17 years with one or both biological parents dead	Total number of children aged 0-17 years	

HIV/AIDS AND SEXUAL BEHAVIOUR					
-	Have heard of AIDS	HA	Percentage of women aged 15-49 years who have heard of AIDS		
9.1	Knowledge about HIV prevention among young women	HA	Number of women aged 15-24 years who correctly identify ways of preventing the sexual transmission of HIV <sup>86</sup> , and who reject major misconceptions about HIV transmission	Total number of women aged 15-24 years	MDG 6.3
9.2	Knowledge of mother-to-child transmission of HIV	HA	Number of women aged 15-49 years who correctly identify all three means <sup>87</sup> of mother-to-child transmission of HIV	Total number of women aged 15-49 years	
9.3	Accepting attitudes towards people living with HIV	HA	Number of women aged 15-49 years expressing accepting attitudes on all four questions <sup>88</sup> toward people living with HIV	Total number of women aged 15-49 years who have heard of HIV	
9.4	Women who know where to be tested for HIV	HA	Number of women aged 15-49 years who state knowledge of a place to be tested for HIV	Total number of women aged 15-49 years	
9.5	Women who have been tested for HIV and know the results	HA	Number of women aged 15-49 years who have been tested for HIV in the last 12 months and who know their results	Total number of women aged 15-49 years	
9.6	Sexually active young women who have been tested for HIV and know the results	HA	Number of women aged 15-24 years who have had sex in the last 12 months, who have been tested for HIV in the last 12 months and who know their results	Total number of women aged 15-24 years who have had sex in the last 12 months	
9.7	HIV counselling during antenatal care	HA	Number of women aged 15-49 years who had a live birth in the last 2 years and received antenatal care during the pregnancy of their most recent birth, reporting that they received counselling on HIV during antenatal care	Total number of women aged 15-49 years who had a live birth in the last 2 years	

<sup>86</sup> Using condoms and limiting sex to one faithful, uninfected partner.

<sup>87</sup> Transmission during pregnancy, during delivery, and by breastfeeding.

<sup>88</sup> Women (1) who think that a female teacher with the AIDS virus should be allowed to teach in school, (2) who would buy fresh vegetables from a shopkeeper or vendor who has the AIDS virus, (3) who would not want to keep it as a secret if a family member became infected with the AIDS virus, and (4) who would be willing to care for a family member who became sick with the AIDS virus.



MICS INDICATOR		Module <sup>68</sup>	Numerator	Denominator	MDG Indicator Reference 69
9.8	HIV testing during antenatal care	HA	Number of women aged 15-49 years who had a live birth in the last 2 years and received antenatal care during the pregnancy of their most recent birth, reporting that they were offered and accepted an HIV test during antenatal care and received their results	Total number of women aged 15-49 years who had a live birth in the last 2 years	
9.9	Young women who have never had sex	SB	Number of never married women aged 15-24 years who have never had sex	Total number of never married women aged 15-24 years	
9.10	Sex before age 15 among young women	SB	Number of women aged 15-24 years who had sexual intercourse before age 15	Total number of women aged 15-24 years	
9.11	Age-mixing among sexual partners	SB	Number of women aged 15-24 years who had sex in the last 12 months with a partner who was 10 or more years older	Total number of women aged 15-24 years who had sex in the last 12 months	
9.12	Multiple sexual partnerships	SB	Number of women aged 15-49 years who had sexual intercourse with more than one partner in the last 12 months	Total number of women aged 15-49 years	
9.13	Condom use at last sex among people with multiple sexual partnerships	SB	Number of women aged 15-49 years who report having had more than one sexual partner in the last 12 months who also reported that a condom was used the last time they had sex	Total number of women aged 15-49 years who reported having had more than one sexual partner in the last 12 months	
9.14	Sex with non-regular partners	SB	Number of sexually active women aged 15-24 years who had sex with a non-marital, non-cohabitating partner in the last 12 months	Total number of women aged 15-24 years who had sex in the last 12 months	
9.15	Condom use with non-regular partners	SB	Number of women aged 15-24 years reporting the use of a condom during the last sexual intercourse with a non-marital, non-cohabitating sex partner in the last 12 months	Total number of women aged 15-24 years who had sex with a non-marital, non-cohabitating partner in the last 12 months	MDG 6.2
<b>ORPHANS</b>					
9.16	Ratio of school attendance of orphans to school attendance of non-orphans	HA	Proportion attending school among children age 10-14 years who have lost both parents divided by proportion attending school among children age 10-14 years whose parents are alive and who are living with one or both parents		<b>MDG 6.4</b>

MICS INDICATOR	Module <sup>68</sup>	Numerator	Denominator	MDG Indicator Reference 69
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#### ACCESS TO MASS MEDIA AND USE OF INFORMATION/COMMUNICATION TECHNOLOGY

10.1	Exposure to mass media	MT	Number of women aged 15-49 years who, at least once a week, read a newspaper or magazine, listen to the radio, and watch television	Total number of women aged 15-49 years	
10.2	Use of computers	MT	Number of young women aged 15-24 years who used a computer during the last 12 months	Total number of women aged 15-24 years	
10.3	Use of internet	MT	Number of young women aged 15-24 who used the internet during the last 12 months	Total number of women aged 15-24 years	

#### SUBJECTIVE WELL-BEING

11.1	Life satisfaction	LS	Number of women aged 15-24 years who are very or somewhat satisfied with their life, overall	Total number of women aged 15-24 years	
11.2	Happiness	LS	Number of women aged 15-24 years who are very or somewhat happy	Total number of women aged 15-24 years	
11.3	Perception of a better life	LS	Number of women aged 15-24 years whose life improved during the last one year, and who expect that their life will be better after one year	Total number of women aged 15-24 years	

#### TOBACCO AND ALCOHOL USE

12.1	Tobacco use	TA	Number of women aged 15-49 years who smoked cigarettes, or used smoked or smokeless tobacco products at any time during the last one month	Total number of women aged 15-49 years	
12.2	Smoking before age 15	TA	Number of women aged 15-49 years who smoked a whole cigarette before age 15	Total number of women aged 15-49 years	
12.3	Use of alcohol	TA	Number of women aged 15-49 years who had at least one alcoholic drink at any time during the last one month	Total number of women aged 15-49 years	
12.4	Use of alcohol before age 15	TA	Number of women aged 15-49 years who had at least one alcoholic drink before age 15	Total number of women aged 15-49 years	



**F1. Household Questionnaire**



**HOUSEHOLD QUESTIONNAIRE  
Multiple Indicator Cluster Survey**

**HOUSEHOLD INFORMATION PANEL HH**

<b>HH1.</b> Cluster number: _____	<b>HH2.</b> Household number: _____																
<b>HH3.</b> Interviewer's name and number: Name _____	<b>HH4.</b> Supervisor's name and number: Name _____																
<b>HH5.</b> Day / Month / Year of interview: _____ / _____ / <b>2015</b>	<b>HH7.</b> Region: <table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">Akmola..... 01</td> <td style="width: 50%;">Kyzylorda.....09</td> </tr> <tr> <td>Aktobe..... 02</td> <td>Mangistau.....10</td> </tr> <tr> <td>Almaty oblast ..... 03</td> <td>South Kazakhstan .....11</td> </tr> <tr> <td>Atyrau ..... 04</td> <td>Pavlodar .....12</td> </tr> <tr> <td>West Kazakhstan..... 05</td> <td>North Kazakhstan.....13</td> </tr> <tr> <td>Zhambyl ..... 06</td> <td>East Kazakhstan .....14</td> </tr> <tr> <td>Karaganda ..... 07</td> <td>Astana City .....15</td> </tr> <tr> <td>Kostanai..... 08</td> <td>Almaty City .....16</td> </tr> </table>	Akmola..... 01	Kyzylorda.....09	Aktobe..... 02	Mangistau.....10	Almaty oblast ..... 03	South Kazakhstan .....11	Atyrau ..... 04	Pavlodar .....12	West Kazakhstan..... 05	North Kazakhstan.....13	Zhambyl ..... 06	East Kazakhstan .....14	Karaganda ..... 07	Astana City .....15	Kostanai..... 08	Almaty City .....16
Akmola..... 01	Kyzylorda.....09																
Aktobe..... 02	Mangistau.....10																
Almaty oblast ..... 03	South Kazakhstan .....11																
Atyrau ..... 04	Pavlodar .....12																
West Kazakhstan..... 05	North Kazakhstan.....13																
Zhambyl ..... 06	East Kazakhstan .....14																
Karaganda ..... 07	Astana City .....15																
Kostanai..... 08	Almaty City .....16																
<b>HH6.</b> Area: Urban .....1 Rural.....2																	

WE ARE FROM THE STATISTICS COMMITTEE OF THE MINISTRY OF NATIONAL ECONOMY OF THE REPUBLIC OF KAZAKHSTAN.

WE ARE CONDUCTING A SURVEY ABOUT THE SITUATION OF CHILDREN, FAMILIES AND HOUSEHOLDS. I WOULD LIKE TO TALK TO YOU ABOUT THESE SUBJECTS. THE INTERVIEW WILL TAKE ABOUT 25 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND ANONYMOUS.

MAY I START NOW?

Yes, permission is given ⇒ Go to HH18 to record the time and then begin the interview.

No, permission is not given ⇒ Circle 04 in HH9. Discuss this result with your supervisor.

**HH9.** Result of household interview:

Completed.....	01
No household member or no competent respondent at home at time of visit.....	02
Entire household absent for extended period of time .....	03
Refused.....	04
Dwelling vacant / Address not a dwelling.....	05
Dwelling destroyed.....	06
Dwelling not found .....	07
Other ( <i>specify</i> ) _____	96

*After the household questionnaire has been completed, fill in the following information:*

**HH10.** Respondent to Household Questionnaire:  
Name \_\_\_\_\_

**HH11.** Total number of household members: \_\_\_\_\_

**HH12.** Number of women age 15-49 years: \_\_\_\_\_

**HH14.** Number of children under age 5: \_\_\_\_\_

**HH16.** Field editor's name and number:  
Name \_\_\_\_\_

*After all questionnaires for the household have been completed, fill in the following information:*

**HH13.** Number of women's questionnaires completed: \_\_\_\_\_

**HH15.** Number of under-5 questionnaires completed: \_\_\_\_\_

**HH17.** Main data entry clerk's name and number:  
Name \_\_\_\_\_

HH18. Record the time.

Hour ..... — —

Minutes..... — —

**LIST OF HOUSEHOLD MEMBERS**

**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?

If yes, complete listing for questions HL2-HL4. Then, ask questions starting with HL5 for each person at a time.

Use an additional questionnaire if all rows in the List of Household Members have been used.

HL1. Line no.	HL2. Name	HL3. WHAT IS THE RELATIONSHIP OF (name) TO THE HEAD OF HOUSEHOLD?	HL4. IS (name) MALE OR FEMALE?		HL5. WHAT IS (name)'S DATE OF BIRTH?		HL6. HOW OLD IS (name)?	For women age 15-49	For children age 0-4	For children age 0-17 years				For Children age 0-14
			1 Male	2 Female	98 DK	9998 DK		HL7. Circle line no. if woman age 15-49.	HL7B. Circle line no. if age 0-4.	HL11. IS (name)'S NATURAL MOTHER ALIVE?	HL12. DOES (name)'S NATURAL MOTHER LIVE IN THIS HOUSEHOLD?	HL13. IS (name)'S NATURAL FATHER ALIVE?	HL14. DOES (name)'S NATURAL FATHER LIVE IN THIS HOUSEHOLD?	HL15. Record line no. of mother from HL12 if indicated.  If HL12 is blank or '00' ask:  WHO IS THE PRIMARY CARETAKER OF (name)?
Line	Name	Relation*	M	F	Month	Year	Age	15-49	0-4	Y N DK	Mother	Y N DK	Father	Mother
01		0 1	1	2	___	_____	___	01	01	1 2 8	___	1 2 8	___	___
02		___	1	2	___	_____	___	02	02	1 2 8	___	1 2 8	___	___
03		___	1	2	___	_____	___	03	03	1 2 8	___	1 2 8	___	___
04		___	1	2	___	_____	___	04	04	1 2 8	___	1 2 8	___	___
05		___	1	2	___	_____	___	05	05	1 2 8	___	1 2 8	___	___
06		___	1	2	___	_____	___	06	06	1 2 8	___	1 2 8	___	___
07		___	1	2	___	_____	___	07	07	1 2 8	___	1 2 8	___	___
08		___	1	2	___	_____	___	08	08	1 2 8	___	1 2 8	___	___
09		___	1	2	___	_____	___	09	09	1 2 8	___	1 2 8	___	___
10		___	1	2	___	_____	___	10	10	1 2 8	___	1 2 8	___	___
11		___	1	2	___	_____	___	11	11	1 2 8	___	1 2 8	___	___
12		___	1	2	___	_____	___	12	12	1 2 8	___	1 2 8	___	___
13		___	1	2	___	_____	___	13	13	1 2 8	___	1 2 8	___	___
14		___	1	2	___	_____	___	14	14	1 2 8	___	1 2 8	___	___

							For women age 15-49	For children age 0-4	For children age 0-17 years				For Children age 0-14	
HL1. Line no.	HL2. Name	HL3. WHAT IS THE RELATIONSHIP OF (name) TO THE HEAD OF HOUSEHOLD?	HL4. IS (name) MALE OR FEMALE?		HL5. WHAT IS (name)'S DATE OF BIRTH?		HL6. HOW OLD IS (name)?	HL7. Circle line no. if woman age 15-49.	HL7B. Circle line no. if age 0-4.	HL11. IS (name)'S NATURAL MOTHER ALIVE?	HL12. DOES (name)'S NATURAL MOTHER LIVE IN THIS HOUSEHOLD?	HL13. IS (name)'S NATURAL FATHER ALIVE?	HL14. DOES (name)'S NATURAL FATHER LIVE IN THIS HOUSEHOLD?	HL15. Record line no. of mother from HL12 if indicated.  If HL12 is blank or '00' ask:  WHO IS THE PRIMARY CARETAKER OF (name)?
			1 Male 2 Female		98 DK    9998 DK	Record in completed years. If age is 95 or above, record '95'.				1 Yes 2 No ↘ 8 DK ↘	HL13 If "Yes", record line no. of mother. If "No", record 00.	1 Yes 2 No ↘ 8 DK ↘	HL15 If "Yes", record line no. of father. If "No", record 00.	
Line	Name	Relation*	M	F	Month	Year	Age	15-49	0-4	Y N DK	Mother	Y N DK	Father	Mother
15		__ __	1	2	__ __	__ __ __ __	__ __	15	15	1 2 8	__ __	1 2 8	__ __	__ __
Tick here if additional questionnaire used <input type="checkbox"/>														

Probe for additional household members.  
Probe especially for any infants or small children not listed, and others who may not be members of the family (such as servants, friends) but who usually live in the household. Insert names of additional members in the household list and complete form accordingly.

Now for each woman age 15-49 years, write her name and line number and other identifying information in the information panel of a separate Individual 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 a separate Under-5 Questionnaire.  
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             | 04 Son-In-Law / Daughter-In-Law | 07 Parent-In-Law                  | 10 Uncle / Aunt   | 13 Adopted / Foster/ Stepchild | 96 Other (Not related) |
|   | 02 Spouse / Partner | 05 Grandchild                   | 08 Brother / Sister               | 11 Niece / Nephew | 14 Servant (Live-in)           | 98 DK                  |
|   | 03 Son / Daughter   | 06 Parent                       | 09 Brother-In-Law / Sister-In-Law | 12 Other relative |                                |                        |

**EDUCATION** **ED**

			For household members age 5 and above					For household members age 5-24 years																												
ED1. Line number	ED2. Name and age  Copy from HL2 and HL6.		ED3. HAS (name) EVER ATTENDED SCHOOL OR PRE- SCHOOL?  1 Yes 2 No ↘ Next Line	ED4A. WHAT IS THE HIGHEST LEVEL OF SCHOOL (name) HAS ATTENDED?  Level: 0 Preschool 1 Primary (1-4) 2 Lower secondary (5-9) 3 Upper secondary (10-11) 4 Technical and Professional 5 Higher 8 DK  If level=0, skip to ED5.					ED4B. WHAT IS THE HIGHEST GRADE (name) COMPLETED AT THIS LEVEL?  Grade: 98 DK  If the first grade at this level is not completed, enter "00".	ED5. DURING THE CURRENT SCHOOL YEAR, THAT IS 2015-2016, DID (name) ATTEND SCHOOL OR PRESCHOOL AT ANY TIME?  1 Yes 2 No ↘ ED7		ED6. DURING THIS SCHOOL YEAR, WHICH LEVEL AND GRADE IS/WAS (name) ATTENDING?  Level: 0 Preschool 1 Primary (1-4) 2 Lower secondary (5-9) 3 Upper secondary (10-11) 4 Technical and Professional 5 Higher 8 DK  If level=0, skip to ED7.			Grade: 98 DK	ED7. DURING THE PREVIOUS SCHOOL YEAR, THAT IS 2014-2015, DID (name) ATTEND SCHOOL OR PRESCHOOL AT ANY TIME?  1 Yes 2 No ↘ 8 DK ↘ Next Line Next Line			ED8. DURING THAT PREVIOUS SCHOOL YEAR, WHICH LEVEL AND GRADE DID (name) ATTEND?  Level: 0 Preschool 1 Primary (1-4) 2 Lower secondary (5-9) 3 Upper secondary (10-11) 4 Technical and Professional 5 Higher 8 DK  If level=0, go to next line.					Grade: 98 DK												
				Yes	No	Level	Grade	Yes		No	Level	Grade	Yes	No		DK	Level	Grade																		
01			1	2	0	1	2	3	4	5	8			1	2	0	1	2	3	4	5	8			1	2	8	0	1	2	3	4	5	8		
02			1	2	0	1	2	3	4	5	8			1	2	0	1	2	3	4	5	8			1	2	8	0	1	2	3	4	5	8		
03			1	2	0	1	2	3	4	5	8			1	2	0	1	2	3	4	5	8			1	2	8	0	1	2	3	4	5	8		
04			1	2	0	1	2	3	4	5	8			1	2	0	1	2	3	4	5	8			1	2	8	0	1	2	3	4	5	8		
05			1	2	0	1	2	3	4	5	8			1	2	0	1	2	3	4	5	8			1	2	8	0	1	2	3	4	5	8		
06			1	2	0	1	2	3	4	5	8			1	2	0	1	2	3	4	5	8			1	2	8	0	1	2	3	4	5	8		
07			1	2	0	1	2	3	4	5	8			1	2	0	1	2	3	4	5	8			1	2	8	0	1	2	3	4	5	8		
08			1	2	0	1	2	3	4	5	8			1	2	0	1	2	3	4	5	8			1	2	8	0	1	2	3	4	5	8		
09			1	2	0	1	2	3	4	5	8			1	2	0	1	2	3	4	5	8			1	2	8	0	1	2	3	4	5	8		
10			1	2	0	1	2	3	4	5	8			1	2	0	1	2	3	4	5	8			1	2	8	0	1	2	3	4	5	8		
11			1	2	0	1	2	3	4	5	8			1	2	0	1	2	3	4	5	8			1	2	8	0	1	2	3	4	5	8		
12			1	2	0	1	2	3	4	5	8			1	2	0	1	2	3	4	5	8			1	2	8	0	1	2	3	4	5	8		
13			1	2	0	1	2	3	4	5	8			1	2	0	1	2	3	4	5	8			1	2	8	0	1	2	3	4	5	8		
14			1	2	0	1	2	3	4	5	8			1	2	0	1	2	3	4	5	8			1	2	8	0	1	2	3	4	5	8		
15			1	2	0	1	2	3	4	5	8			1	2	0	1	2	3	4	5	8			1	2	8	0	1	2	3	4	5	8		

**SELECTION OF ONE CHILD FOR CHILD DISCIPLINE**

**SL**

**SL1.** Check HL6 in the List of Household Members and write the total number of children age 1-14 years.

Total number ..... —

**SL2.** Check the number of children age 1-14 years in SL1:

- Zero ⇒ Go to HOUSEHOLD CHARACTERISTICS module.
- One ⇒ Go to SL9 and record the rank number as '1', enter the line number from HL1, child's name from HL2 and age from HL6.
- Two or more ⇒ Continue with SL2A.

**SL2A.** List each of the children age 1-14 years below in the order they appear in the List of Household Members. Do not include other household members outside of the age range 1-14 years. Record the line number, name, sex, and age for each child.

SL3. Rank number	SL4. Line number from HL1	SL5. Name from HL2	SL6. Sex from HL4		SL7. Age from HL6
Rank	Line	Name	M	F	Age
1	__ __		1	2	__ __
2	__ __		1	2	__ __
3	__ __		1	2	__ __
4	__ __		1	2	__ __
5	__ __		1	2	__ __
6	__ __		1	2	__ __
7	__ __		1	2	__ __
8	__ __		1	2	__ __

**SL8.** Check the last digit of the household number (HH2) from the cover page. This is the number of the row you should go to in the table below.

Check the total number of children age 1-14 years in SL1 above. This is the number of the column you should go to in the table below.

Find the box where the row and the column meet and circle the number that appears in the box. This is the rank number (SL3) of the selected child.

Last Digit of Household Number (from HH2)	Total Number of Eligible Children in the Household (from SL1)						
	2	3	4	5	6	7	8+
0	2	2	4	3	6	5	4
1	1	3	1	4	1	6	5
2	2	1	2	5	2	7	6
3	1	2	3	1	3	1	7
4	2	3	4	2	4	2	8
5	1	1	1	3	5	3	1
6	2	2	2	4	6	4	2
7	1	3	3	5	1	5	3
8	2	1	4	1	2	6	4
9	1	2	1	2	3	7	5

**SL9.** Record the rank number (SL3), line number (SL4), name (SL5) and age (SL7) of the selected child.

Rank number ..... —

Line number ..... —

Name .....

Age..... —



**CHILD DISCIPLINE**

**CD**

**CD3.** ADULTS USE CERTAIN WAYS TO TEACH CHILDREN THE RIGHT BEHAVIOUR OR TO ADDRESS A BEHAVIOUR PROBLEM. I WILL READ VARIOUS METHODS THAT ARE USED. PLEASE TELL ME IF YOU OR ANYONE ELSE IN YOUR HOUSEHOLD HAS USED THIS METHOD WITH *(name)* IN THE PAST MONTH.

Yes No

[A] TOOK AWAY PRIVILEGES, FORBADE SOMETHING *(name)* LIKED OR DID NOT ALLOW HIM/HER TO LEAVE THE HOUSE.

Took away privileges..... 1 2

[B] EXPLAINED WHY *(name)*'S BEHAVIOUR WAS WRONG.

Explained wrong behaviour..... 1 2

[C] SHOOK HIM/HER.

Shook him/her ..... 1 2

[D] SHOUTED, YELLED AT OR SCREAMED AT HIM/HER.

Shouted, yelled at or screamed at ... 1 2

[E] GAVE HIM/HER SOMETHING ELSE TO DO.

Gave something else to do ..... 1 2

[F] SPANKED, HIT OR SLAPPED HIM/HER ON THE BOTTOM WITH BARE HAND.

Spanked, hit or slapped on bottom with bare hand ..... 1 2

[G] HIT HIM/HER ON THE BOTTOM OR ELSEWHERE ON THE BODY WITH SOMETHING LIKE A BELT, HAIRBRUSH, STICK OR OTHER HARD OBJECT.

Hit with belt, hairbrush, stick, or other hard object ..... 1 2

[H] CALLED HIM/HER DUMB, LAZY, OR ANOTHER NAME LIKE THAT.

Called dumb, lazy, or another name ..... 1 2

[I] HIT OR SLAPPED HIM/HER ON THE FACE, HEAD OR EARS.

Hit / slapped on the face, head or ears ..... 1 2

[J] HIT OR SLAPPED HIM/HER ON THE HAND, ARM, OR LEG.

Hit / slapped on hand, arm or leg ..... 1 2

[K] BEAT HIM/HER UP, THAT IS HIT HIM/HER OVER AND OVER AS HARD AS ONE COULD.

Beat up, hit over and over as hard as one could..... 1 2

**CD4.** DO YOU BELIEVE THAT IN ORDER TO BRING UP, RAISE, OR EDUCATE A CHILD PROPERLY, THE CHILD NEEDS TO BE PHYSICALLY PUNISHED?

Yes .....1

No.....2

DK / No opinion .....8

HOUSEHOLD CHARACTERISTICS		HC
<b>HC1B.</b> WHAT IS THE MOTHER TONGUE/NATIVE LANGUAGE OF THE HEAD OF THIS HOUSEHOLD?	Kazakh Language..... 1 Russian Language..... 2 Other language ( <i>specify</i> ) _____ 6	
<b>HC1C.</b> TO WHAT ETHNICITY DOES THE HEAD OF THIS HOUSEHOLD BELONG?	Kazakhs..... 1 Russians..... 2 Other ethnic groups ( <i>specify</i> )_____ 6	
<b>HC2.</b> HOW MANY ROOMS IN THIS HOUSEHOLD ARE USED FOR SLEEPING?	Number of rooms.....	
<b>HC3.</b> <i>Main material of the dwelling floor.</i>  <i>Record observation.</i>	Rudimentary floor Wood planks .....21 Finished floor Parquet or polished wood.....31 Vinyl / linoleum or asphalt strips .....32 Ceramic tiles .....33 Cement .....34 Carpet .....35 Laminated flooring board.....36 Plywood / fibreboard .....37 Other ( <i>specify</i> ) _____ 96	
<b>HC4.</b> <i>Main material of the roof.</i>  <i>Record observation.</i>	Rudimentary roofing Wood planks .....23 Cardboard/wood chipboard .....24 Finished roofing Metal/profiled sheeting .....31 Wood .....32 Calamine / cement fiber mat / roofing slate .....33 Ceramic tiles .....34 Cement .....35 Roofing shingles .....36 Other ( <i>specify</i> ) _____ 96	
<b>HC5.</b> <i>Main material of the exterior walls.</i>  <i>Record observation.</i>	Rudimentary walls Stone with mud.....22 Uncovered adobe .....23 Plywood/wood chipboard.....24 Reused wood.....26 Finished walls Cement .....31 Stone with lime/cement .....32 Bricks .....33 Cement blocks .....34 Covered adobe .....35 Wood planks/shingles/lining boards .....36 Plastic panels/siding .....37 Wood .....38 Slag stone/concrete block .....39 Other ( <i>specify</i> ) _____ 96	

<p><b>HC6.</b> WHAT TYPE OF FUEL DOES YOUR HOUSEHOLD <u>MAINLY</u> USE FOR COOKING?</p>	<p>Electricity .....01  Liquefied Gas (in balloon) .....02  Natural gas .....03  Biogas.....04  Kerosene/diesel oil .....05    Coal/Lignite.....06  Charcoal .....07  Wood .....08  Animal dung.....10    No food cooked in household.....95  Other (<i>specify</i>) _____ 96</p>	<p>01⇒HC8  02⇒HC8  03⇒HC8  04⇒HC8  05⇒HC8            95⇒HC8</p>																																													
<p><b>HC7.</b> IS THE COOKING USUALLY DONE IN THE HOUSE, IN A SEPARATE BUILDING, OR OUTDOORS?   <i>If 'In the house', probe: IS IT DONE IN A SEPARATE ROOM USED AS A KITCHEN?</i></p>	<p>In the house  In a separate room used as kitchen ..... 1  Elsewhere in the house .....2  In a separate building .....3  Outdoors .....4    Other (<i>specify</i>) _____ 6</p>																																														
<p><b>HC8.</b> DOES YOUR HOUSEHOLD HAVE:</p> <p>[A] ELECTRICITY?  [B] A RADIO?  [C] A TELEVISION?  [D] A NON-MOBILE TELEPHONE?  [E] A REFRIGERATOR?  [F] A MICROWAVE?  [G] A TABLE?  [H] A SOFA?  [I] A BED?  [J] A WARDROBE?  [K] A DISHWASHER?  [L] A WASHING MACHINE?  [M] AN AIR CONDITIONER?  [N] A VACUUM CLEANER?</p>	<table border="0"> <thead> <tr> <th></th> <th style="text-align: center;">Yes</th> <th style="text-align: center;">No</th> </tr> </thead> <tbody> <tr> <td>Electricity .....1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Radio .....1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Television .....1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Non-mobile telephone .....1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Refrigerator.....1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Microwave .....1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Table.....1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Sofa .....1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Bed .....1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Wardrobe.....1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Dishwasher.....1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Washing machine .....1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Air conditioner.....1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Vacuum cleaner.....1</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </tbody> </table>		Yes	No	Electricity .....1	1	2	Radio .....1	1	2	Television .....1	1	2	Non-mobile telephone .....1	1	2	Refrigerator.....1	1	2	Microwave .....1	1	2	Table.....1	1	2	Sofa .....1	1	2	Bed .....1	1	2	Wardrobe.....1	1	2	Dishwasher.....1	1	2	Washing machine .....1	1	2	Air conditioner.....1	1	2	Vacuum cleaner.....1	1	2	
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<p><b>HC9.</b> DOES ANY MEMBER OF YOUR HOUSEHOLD OWN:</p> <p>[B] A MOBILE TELEPHONE OR SMARTPHONE?</p> <p>[C] A BICYCLE?</p> <p>[D] A MOTORCYCLE OR SCOOTER?</p> <p>[E] AN ANIMAL-DRAWN CART?</p> <p>[F] A CAR OR TRUCK?</p> <p>[J] A TRACTOR?</p> <p>[G] A BOAT WITH A MOTOR?</p> <p>[H] A PERSONAL COMPUTER OR LAPTOP?</p> <p>[I] A TABLET?</p>	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 10%; text-align: center;">Yes</th> <th style="width: 10%; text-align: center;">No</th> </tr> </thead> <tbody> <tr> <td>Mobile telephone / smartphone .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Bicycle .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Motorcycle / Scooter.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Animal-drawn cart.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Car / Truck .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Tractor .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Boat with motor.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Personal computer / laptop .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> <tr> <td>Tablet.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> </tr> </tbody> </table>		Yes	No	Mobile telephone / smartphone .....	1	2	Bicycle .....	1	2	Motorcycle / Scooter.....	1	2	Animal-drawn cart.....	1	2	Car / Truck .....	1	2	Tractor .....	1	2	Boat with motor.....	1	2	Personal computer / laptop .....	1	2	Tablet.....	1	2	
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<p><b>HC10.</b> DO YOU OR SOMEONE LIVING IN THIS HOUSEHOLD OWN THIS DWELLING?</p> <p><i>If “No”, then ask: DO YOU RENT THIS DWELLING FROM SOMEONE NOT LIVING IN THIS HOUSEHOLD?</i></p> <p><i>If “Rented from someone else”, circle “2”. For other responses, circle “6”.</i></p>	<p>Own ..... 1</p> <p>Rent ..... 2</p> <p>Other (<i>specify</i>) ..... 6</p>																															
<p><b>HC11.</b> DOES ANY MEMBER OF THIS HOUSEHOLD OWN ANY LAND THAT CAN BE USED FOR AGRICULTURE?</p>	<p>Yes ..... 1</p> <p>No ..... 2</p>	2⇒HC13																														
<p><b>HC12.</b> HOW MANY HECTARES OR ARES OF AGRICULTURAL LAND DO MEMBERS OF THIS HOUSEHOLD OWN?</p> <p><i>If 1 hectare or more, circle ‘1’ and record hectares.</i></p> <p><i>If 95 or more hectares, circle ‘1’ and record ‘95’.</i></p> <p><i>If less than 1 hectare, circle ‘2’ and record in ares.</i></p> <p><i>If less than 1 are, circle ‘2’ and record ‘00’.</i></p> <p><i>If unknown, circle ‘998’.</i></p>	<p>Hectares ..... 1 ____</p> <p>Ares ..... 2 ____</p> <p>DK..... 998</p>																															
<p><b>HC13.</b> DOES THIS HOUSEHOLD OWN ANY LIVESTOCK, HERDS, OTHER FARM ANIMALS, OR POULTRY?</p>	<p>Yes ..... 1</p> <p>No ..... 2</p>	2⇒HC15																														

<p><b>HC14.</b> HOW MANY OF THE FOLLOWING ANIMALS / POULTRY DOES THIS HOUSEHOLD HAVE?</p> <p>[A] COWS OR BULLS?</p> <p>[B] HORSES OR DONKEYS OR MULES?</p> <p>[C] GOATS?</p> <p>[D] SHEEP OR RAMS?</p> <p>[E] CHICKENS?</p> <p>[F] PIGS?</p> <p>[G] CAMELS?</p> <p>[H] GEESE OR DUCKS?</p> <p>[I] RABBITS?</p> <p><i>If none, record "00". If 95 or more, record "95". If unknown, record "98".</i></p>	<p>Cows or bulls .....__ __</p> <p>Horses or donkeys or mules.....__ __</p> <p>Goats .....__ __</p> <p>Sheep or rams .....__ __</p> <p>Chickens.....__ __</p> <p>Pigs.....__ __</p> <p>Camels .....__ __</p> <p>Geese or ducks .....__ __</p> <p>Rabbits .....__ __</p>	
<p><b>HC15.</b> DOES ANY MEMBER OF THIS HOUSEHOLD HAVE A BANK ACCOUNT?</p>	<p>Yes ..... 1</p> <p>No ..... 2</p>	



<p><b>WS5.</b> WHO USUALLY GOES TO THIS SOURCE TO COLLECT THE WATER FOR YOUR HOUSEHOLD?</p> <p><i>Probe:</i> IS THIS PERSON UNDER AGE 15? WHAT SEX?</p>	<p>Adult woman (age 15+ years) ..... 1          Adult man (age 15+ years) ..... 2          Female child (under 15) ..... 3          Male child (under 15) ..... 4            DK ..... 8</p>	
<p><b>WS6.</b> DO YOU DO ANYTHING TO THE WATER TO MAKE IT SAFER TO DRINK?</p>	<p>Yes ..... 1          No ..... 2            DK ..... 8</p>	<p>2⇒WS8          8⇒WS8</p>
<p><b>WS7.</b> WHAT DO YOU USUALLY DO TO MAKE THE WATER SAFER TO DRINK?</p> <p><i>Probe:</i> ANYTHING ELSE?</p> <p><i>Record all items mentioned.</i></p>	<p>Boil ..... A          Add bleach / chlorine ..... B          Strain it through a cloth/cotton ..... C          Use water filter (ceramic, sand, composite, etc.) ..... D          Solar disinfection ..... E          Let it stand and settle ..... F            Other (<i>specify</i>) ..... X          DK ..... Z</p>	
<p><b>WS8.</b> WHAT KIND OF TOILET FACILITY DO MEMBERS OF YOUR HOUSEHOLD USUALLY USE?</p> <p><i>If “flush” or “pour flush”, probe:</i> WHERE DOES IT FLUSH TO?</p> <p><i>If not possible to determine, ask permission to observe the facility.</i></p>	<p>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          Pit latrine          Ventilated Improved Pit latrine ..... 21          Pit latrine with slab ..... 22          Pit latrine without slab / Open pit ..... 23            No facility, Bush, Field ..... 95          Other (<i>specify</i>) ..... 96</p>	<p>95⇒Next Module</p>
<p><b>WS9.</b> DO YOU SHARE THIS FACILITY WITH OTHERS WHO ARE NOT MEMBERS OF YOUR HOUSEHOLD?</p>	<p>Yes ..... 1          No ..... 2</p>	<p>2⇒Next Module</p>
<p><b>WS10.</b> DO YOU SHARE THIS FACILITY ONLY WITH MEMBERS OF OTHER HOUSEHOLDS THAT YOU KNOW, OR IS THE FACILITY OPEN TO THE USE OF THE GENERAL PUBLIC?</p>	<p>Other households only (not public) ..... 1          Public facility ..... 2</p>	<p>2⇒Next Module</p>
<p><b>WS11.</b> HOW MANY HOUSEHOLDS IN TOTAL USE THIS TOILET FACILITY, INCLUDING YOUR OWN HOUSEHOLD?</p>	<p>Number of households (if less than 10) ..... 0 __            Ten or more households ..... 10            DK ..... 98</p>	

HANDWASHING		HW
<p><b>HW1.</b> WE WOULD LIKE TO LEARN ABOUT THE PLACES THAT HOUSEHOLDS USE TO WASH THEIR HANDS.</p> <p>CAN YOU PLEASE SHOW ME WHERE MEMBERS OF YOUR HOUSEHOLD <u>MOST OFTEN</u> WASH THEIR HANDS?</p>	<p>Observed..... 1</p> <p>Not observed</p> <p>Not in dwelling / plot / yard ..... 2</p> <p>No permission to see ..... 3</p> <p>Other reason _____ 6 (specify)</p>	<p>2 ⇨HW4</p> <p>3 ⇨HW4</p> <p>6 ⇨HW4</p>
<p><b>HW2.</b> <i>Observe presence of water at the place for handwashing.</i></p> <p><i>Verify by checking the tap/pump, or basin, bucket, water container or similar objects for presence of water.</i></p>	<p>Water is available..... 1</p> <p>Water is not available..... 2</p>	
<p><b>HW3A.</b> <i>Is soap or detergent present at the place for handwashing?</i></p>	<p>Yes, present..... 1</p> <p>No, not present ..... 2</p>	<p>2⇨HW4</p>
<p><b>HW3B.</b> <i>Record your observation.</i></p> <p><i>Circle all that apply.</i></p>	<p>Bar soap.....A</p> <p>Detergent (Powder / Liquid / Paste).....B</p> <p>Liquid soap.....C</p>	<p>A⇨HH19</p> <p>B⇨HH19</p> <p>C⇨HH19</p>
<p><b>HW4.</b> DO YOU HAVE ANY SOAP OR DETERGENT IN YOUR HOUSE FOR WASHING HANDS?</p>	<p>Yes..... 1</p> <p>No..... 2</p>	<p>2⇨HH19</p>
<p><b>HW5A.</b> CAN YOU PLEASE SHOW IT TO ME?</p>	<p>Yes, shown..... 1</p> <p>No, not shown ..... 2</p>	<p>2⇨HH19</p>
<p><b>HW5B.</b> <i>Record your observation.</i></p> <p><i>Circle all that apply.</i></p>	<p>Bar soap.....A</p> <p>Detergent (Powder / Liquid / Paste).....B</p> <p>Liquid soap.....C</p>	



<b>HH19.</b> Record the time.	Hour and minutes ..... : ..	
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<b>SALT IODIZATION</b>		<b>SI</b>
<p><b>SI1.</b> WE WOULD LIKE TO CHECK WHETHER THE SALT USED IN YOUR HOUSEHOLD IS IODIZED. MAY I HAVE A SAMPLE OF THE SALT USED <u>TO COOK MEALS</u> IN YOUR HOUSEHOLD?</p> <p><i>Once you have tested the salt, circle number that corresponds to test outcome.</i></p>	<p>Not iodized – 0 PPM ..... 1</p> <p>More than 0 PPM &amp; less than 15 PPM..... 2</p> <p>15 PPM or more ..... 3</p> <p>No salt in the house..... 4</p> <p>Salt not tested (specify reason) _____ 5</p>	

<p><b>HH20.</b> Thank the respondent for his/her cooperation and check the List of Household Members:</p> <p><input type="checkbox"/> A separate <i>QUESTIONNAIRE FOR INDIVIDUAL WOMEN</i> has been issued for each woman age 15-49 years in the List of Household Members (HL7).</p> <p><input type="checkbox"/> A separate <i>QUESTIONNAIRE FOR CHILDREN UNDER FIVE</i> has been issued for each child under age 5 years in the List of Household Members (HL7B).</p> <p><i>Return to the cover page and make sure that the result of the household interview (HH9), the name and line number of the respondent to the household questionnaire (HH10), and the number of eligible women (HH12), and under-5s (HH14) are entered.</i></p> <p><i>Make arrangements for the administration of the remaining questionnaire(s) in this household.</i></p>
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**Interviewer's Observations**

**Field Editor's Observations**

**Supervisor's Observations**

**F2. Questionnaire for Individual Women**



**QUESTIONNAIRE FOR INDIVIDUAL WOMEN  
Multiple Indicator Cluster Survey**

<b>WOMAN'S INFORMATION PANEL</b>		<b>WM</b>
<i>This questionnaire is to be administered to all women age 15 through 49 (see List of Household Members, column HL7). A separate questionnaire should be used for each eligible woman.</i>		
<b>WM1.</b> Cluster number: _____	<b>WM2.</b> Household number: _____	
<b>WM3.</b> Woman's name: Name _____	<b>WM4.</b> Woman's line number: _____	
<b>WM5.</b> Interviewer's name and number: Name _____	<b>WM6.</b> Day/Month/Year of interview: _____ / _____ / <b>2015</b>	

<p><i>Repeat greeting if not already read to this woman:</i></p> <p>WE ARE FROM THE STATISTICS COMMITTEE OF THE MINISTRY OF NATIONAL ECONOMY OF THE REPUBLIC OF KAZAKHSTAN. WE ARE CONDUCTING A SURVEY ABOUT THE SITUATION OF CHILDREN, FAMILIES AND HOUSEHOLDS. I WOULD LIKE TO TALK TO YOU ABOUT THESE SUBJECTS. THE INTERVIEW WILL TAKE ABOUT 25 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND ANONYMOUS.</p>	<p><i>If greeting at the beginning of the household questionnaire has already been read to this woman, then read the following:</i></p> <p>NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT YOUR HEALTH AND OTHER TOPICS. THIS INTERVIEW WILL TAKE ABOUT 25 MINUTES. AGAIN, ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND ANONYMOUS.</p>
<p>MAY I START NOW?</p> <p><input type="checkbox"/> <i>Yes, permission is given ⇒ Go to WM10 to record the time and then begin the interview.</i></p> <p><input type="checkbox"/> <i>No, permission is not given ⇒ Circle "03" in WM7. Discuss this result with your supervisor.</i></p>	

<b>WM7.</b> Result of woman's interview	Completed ..... 01 Not at home ..... 02 Refused ..... 03 Partly completed ..... 04 Incapacitated ..... 05  Other ( <i>specify</i> ) ..... 96
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<b>WM8.</b> Field editor's name and number: Name _____	<b>WM9.</b> Main data entry clerk's name and number: Name _____
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<b>WM10.</b> <i>Record the time.</i>	Hour and minutes ..... : ..	
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<b>WOMAN'S BACKGROUND</b>		<b>WB</b>
<b>WB1.</b> IN WHAT MONTH AND YEAR WERE YOU BORN?	Date of birth Month..... : .. DK month..... 98  Year ..... : .. DK year..... 9998	
<b>WB2.</b> HOW OLD ARE YOU?  <i>Probe: HOW OLD WERE YOU AT YOUR LAST BIRTHDAY?</i>  <i>Compare and correct WB1 and/or WB2 if inconsistent.</i>	Age (in completed years) ..... : ..	
<b>WB3.</b> HAVE YOU EVER ATTENDED SCHOOL OR PRESCHOOL?	Yes ..... 1 No ..... 2	2⇒WB7
<b>WB4.</b> WHAT IS THE HIGHEST LEVEL OF SCHOOL YOU ATTENDED?	Preschool ..... 0 Primary (1-4) ..... 1 Lower secondary (5-9) ..... 2 Upper secondary (10-11) ..... 3 Technical and Professional ..... 4 Higher ..... 5	0⇒WB7
<b>WB5.</b> WHAT IS THE HIGHEST GRADE YOU COMPLETED AT THAT LEVEL?  <i>If the first grade at this level is not completed, enter "00".</i>	Grade ..... : ..	
<b>WB6.</b> <i>Check WB4:</i>  <input type="checkbox"/> <i>Lower secondary, upper secondary, technical and professional or higher (WB4=2, 3, 4 or 5) ⇒ Go to Next Module.</i>  <input type="checkbox"/> <i>Primary (WB4= 1) ⇒ Continue with WB7.</i>		
<b>WB7.</b> NOW I WOULD LIKE YOU TO READ THIS SENTENCE TO ME.  <i>Show sentence on the card to the respondent.</i> <i>If respondent cannot read whole sentence, probe:</i>  CAN YOU READ PART OF THE SENTENCE TO ME?	Cannot read at all ..... 1 Able to read only parts or words of sentence ..... 2 Able to read whole sentence ..... 3  No sentence in required language ..... 4 <i>(specify language)</i>  Blind / visually impaired ..... 5	

**MT1. Check WB7:**

- Question left blank (Respondent has lower secondary, upper secondary, technical and professional or higher education) ⇒ Continue with MT2.
- Able to read or no sentence in required language (WB7 = 2, 3 or 4) ⇒ Continue with MT2.
- Cannot read at all or blind/visually impaired (WB7 = 1 or 5) ⇒ Go to MT3.

<b>MT2. HOW OFTEN DO YOU READ A NEWSPAPER OR MAGAZINE: ALMOST EVERY DAY, AT LEAST ONCE A WEEK, LESS THAN ONCE A WEEK OR NOT AT ALL?</b>	Almost every day ..... 1 At least once a week ..... 2 Less than once a week..... 3 Not at all ..... 4	
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<b>MT3. DO YOU LISTEN TO THE RADIO ALMOST EVERY DAY, AT LEAST ONCE A WEEK, LESS THAN ONCE A WEEK OR NOT AT ALL?</b>	Almost every day ..... 1 At least once a week ..... 2 Less than once a week..... 3 Not at all ..... 4	
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<b>MT4. HOW OFTEN DO YOU WATCH TELEVISION: WOULD YOU SAY THAT YOU WATCH ALMOST EVERY DAY, AT LEAST ONCE A WEEK, LESS THAN ONCE A WEEK OR NOT AT ALL?</b>	Almost every day ..... 1 At least once a week ..... 2 Less than once a week..... 3 Not at all ..... 4	
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**MT5. Check WB2: Age of respondent?**

- Age 15-24 ⇒ Continue with MT6.
- Age 25-49 ⇒ Go to Next Module.

<b>MT6. HAVE YOU EVER USED A COMPUTER?</b>	Yes ..... 1 No ..... 2	2 ⇒ MT9
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<b>MT7. HAVE YOU USED A COMPUTER FROM ANY LOCATION IN THE LAST 12 MONTHS?</b>	Yes ..... 1 No ..... 2	2 ⇒ MT9
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<b>MT8. DURING THE LAST ONE MONTH, HOW OFTEN DID YOU USE A COMPUTER: ALMOST EVERY DAY, AT LEAST ONCE A WEEK, LESS THAN ONCE A WEEK OR NOT AT ALL?</b>	Almost every day ..... 1 At least once a week ..... 2 Less than once a week..... 3 Not at all ..... 4	
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<b>MT9. HAVE YOU EVER USED THE INTERNET?</b>	Yes ..... 1 No ..... 2	2 ⇒ Next Module
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<b>MT10. IN THE LAST 12 MONTHS, HAVE YOU USED THE INTERNET?</b>  <i>If necessary, probe for use from any location, with any device.</i>	Yes ..... 1 No ..... 2	2 ⇒ Next Module
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<b>MT11. DURING THE LAST ONE MONTH, HOW OFTEN DID YOU USE THE INTERNET: ALMOST EVERY DAY, AT LEAST ONCE A WEEK, LESS THAN ONCE A WEEK OR NOT AT ALL?</b>	Almost every day ..... 1 At least once a week ..... 2 Less than once a week..... 3 Not at all ..... 4	
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FERTILITY		CM
<b>CM1.</b> NOW I WOULD LIKE TO ASK ABOUT ALL THE BIRTHS YOU HAVE HAD DURING YOUR LIFE. HAVE YOU EVER GIVEN BIRTH?	Yes ..... 1 No ..... 2	2⇒CM8
<b>CM2.</b> WHAT WAS THE DATE OF YOUR FIRST BIRTH?  I MEAN THE VERY FIRST TIME YOU GAVE BIRTH, EVEN IF THE CHILD IS NO LONGER LIVING, OR THE FATHER IS NOT YOUR CURRENT PARTNER.  <i>Skip to CM4 only if year of first birth is given. Otherwise, continue with CM3.</i>	Date of first birth  Month ..... __ __ DK month ..... 98  Year ..... __ __ __ __ DK year ..... 9998	⇒CM4
<b>CM3.</b> HOW MANY YEARS AGO DID YOU HAVE YOUR FIRST BIRTH?	Completed years since first birth ..... __ __	
<b>CM4.</b> DO YOU HAVE ANY SONS OR DAUGHTERS TO WHOM YOU HAVE GIVEN BIRTH WHO ARE NOW LIVING WITH YOU?	YES ..... 1 NO ..... 2	2⇒CM6
<b>CM5.</b> HOW MANY SONS LIVE WITH YOU?  HOW MANY DAUGHTERS LIVE WITH YOU?  <i>If none, record '00'.</i>	Sons at home ..... __ __  Daughters at home ..... __ __	
<b>CM6.</b> DO YOU HAVE ANY SONS OR DAUGHTERS TO WHOM YOU HAVE GIVEN BIRTH WHO ARE ALIVE BUT DO NOT LIVE WITH YOU?	YES ..... 1 NO ..... 2	2⇒CM8
<b>CM7.</b> HOW MANY SONS ARE ALIVE BUT DO NOT LIVE WITH YOU?  HOW MANY DAUGHTERS ARE ALIVE BUT DO NOT LIVE WITH YOU?  <i>If none, record '00'.</i>	Sons elsewhere ..... __ __  Daughters elsewhere ..... __ __	
<b>CM8.</b> HAVE YOU EVER GIVEN BIRTH TO A BOY OR GIRL WHO WAS BORN ALIVE BUT LATER DIED?  <i>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?</i>	YES ..... 1 NO ..... 2	2⇒CM10
<b>CM9.</b> HOW MANY BOYS HAVE DIED?  HOW MANY GIRLS HAVE DIED?  <i>If none, record '00'.</i>	Boys dead ..... __ __  Girls dead ..... __ __	
<b>CM10.</b> <i>Sum answers to CM5, CM7, and CM9.</i>	SUM ..... __ __	

<p><b>CM11.</b> JUST TO MAKE SURE THAT I HAVE THIS RIGHT, YOU HAVE HAD IN TOTAL (<i>total number in CM10</i>) LIVE BIRTHS DURING YOUR LIFE. IS THIS CORRECT?</p> <p><input type="checkbox"/> <i>Yes. Check below:</i></p> <p style="padding-left: 40px;"><input type="checkbox"/> <i>No live births</i> ⇒ <i>Go to CM12B</i></p> <p style="padding-left: 40px;"><input type="checkbox"/> <i>One or more live births</i> ⇒ <i>Continue with CM12</i></p> <p><input type="checkbox"/> <i>No.</i> ⇒ <i>Check responses to CM1–CM10 and make corrections as necessary before proceeding to CM12</i></p>		
<p><b>CM12.</b> OF THESE (<i>total number in CM10</i>) BIRTHS YOU HAVE HAD, WHEN DID YOU DELIVER THE LAST ONE (EVEN IF HE OR SHE HAS DIED)?</p> <p>Month and year must be recorded.</p>	<p>Date of last birth</p> <p>Month ..... __ __</p> <p>Year ..... __ __ __ __</p>	
<p><b>CM12B.</b> SOMETIMES WOMEN HAVE PREGNANCIES THAT MIGHT NOT END WITH A BIRTH.</p> <p>HAVE YOU EVER HAD ANY PREGNANCY THAT WAS ABORTED?</p> <p>BY ABORTION, I MEAN A PREGNANCY THAT WAS VOLUNTARILY TERMINATED WITHIN THE FIRST 5 MONTHS OF PREGNANCY.</p>	<p>Yes ..... 1</p> <p>No..... 2</p>	2⇒CM13
<p><b>CM12E.</b> HOW MANY ABORTIONS HAVE YOU HAD DURING YOUR LIFETIME?</p>	<p>Number of abortions..... __ __</p>	
<p><b>CM12F.</b> WHEN DID YOUR (LAST) ABORTION TAKE PLACE?</p> <p><i>Month and year must be recorded.</i></p>	<p>Date of (last) abortion</p> <p>Month..... __ __</p> <p>Year ..... __ __ __ __</p>	
<p><b>CM12G.</b> <i>Check CM12F: Last abortion occurred within the last 2 years, that is, since (month of interview) in 2013 (if the month of interview and the month the abortion took place are the same, and the year the abortion took place is 2013, consider this as an abortion within the last 2 years)</i></p> <p><input type="checkbox"/> <i>No abortion in last 2 years.</i> ⇒ <i>Go to CM13</i></p> <p><input type="checkbox"/> <i>The last abortion took place during the last 2 years, that is, since (the month of interviewing) in 2013,</i> ⇒ <i>Continue with CM12H</i></p>		
<p><b>CM12H.</b> HOW MANY MONTHS (WEEKS) WERE YOU PREGNANT WHEN YOUR PREGNANCY WAS ABORTED?</p> <p><i>If the respondent answers in weeks, write down on the appropriate line for weeks, otherwise just record the given months</i></p>	<p>Length of pregnancy at time of abortion</p> <p>Weeks.....1 __ __</p> <p>Month.....2 __ __</p>	
<p><b>CM12I.</b> <i>Check CM12E.</i></p> <p><input type="checkbox"/> <i>1 abortion (CM12E = 1)</i> ⇒ <i>Go to CM13</i></p> <p><input type="checkbox"/> <i>2 or more abortions (CM12E = 2 or more)</i> ⇒ <i>Continue with CM12J and ask questions CM12J to CM12L for each abortion at a time.</i></p>		

	PREVIOUS TO THE LAST ABORTION	SECOND LAST FROM THE LAST ABORTION	THIRD LAST FROM THE LAST ABORTION
<b>CM12J.</b> WHAT MONTH AND YEAR DID THE ABORTION PREVIOUS TO THIS LAST ONE YOU MENTIONED TAKE PLACE?	MONTH.....__ __ YEAR.... __ __ __ __	MONTH.....__ __ YEAR.... __ __ __ __	MONTH.....__ __ YEAR.... __ __ __ __
<b>CM12K.</b> Check CM12J. Abortion occurred within the last 2 years, that is, since (month of interview) in 2013.	Yes..... 1 No ..... 2 <i>If "No", go to CM13.</i>	Yes..... 1 No..... 2 <i>If "No", go to CM13.</i>	Yes ..... 1 No..... 2 <i>If "No", go to CM13.</i>
<b>CM12L.</b> HOW MANY MONTHS (WEEKS) WERE YOU PREGNANT WHEN YOUR PREGNANCY WAS ABORTED?  <i>the respondent answers in weeks, write down on the appropriate line for weeks, otherwise just record the given months</i>	Weeks ....1 __ __ Months ...2 __ __	Weeks ....1 __ __ Months .. 2 __ __	Weeks .... 1 __ __ Months.... 2 __ __
<b>CM12M.</b>	<i>Go back to CM12J for next abortion. If no more abortion, continue with CM13.</i>	<i>Go back to CM12J for next abortion. If no more abortion, continue with CM13.</i>	<i>Go back to CM12J for next abortion. If no more abortion, continue with CM13.</i>
<p><b>CM13.</b> Check CM12: Last birth occurred within the last 2 years, that is, since (month of interview) in 2013 (if the month of interview and the month of birth are the same, and the year of birth is 2013, consider this as a birth within the last 2 years).</p> <p><input type="checkbox"/> No live birth in last 2 years. ⇒ Go to ILLNESS SYMPTOMS Module.</p> <p><input type="checkbox"/> One or more live births in last 2 years. ⇒ Ask for the name of the last-born child and continue with Next Module.</p> <p style="text-align: center;">Name of last-born child _____</p> <p><i>If child has died, take special care when referring to this child by name in the following modules.</i></p>			



**DESIRE FOR LAST BIRTH**

**DB**

*This module is to be administered to all women with a live birth in the 2 years preceding the date of interview.  
Record name of last-born child from CM13 here \_\_\_\_\_.  
Use this child's name in the following questions, where indicated.*

<p><b>DB1.</b> WHEN YOU GOT PREGNANT WITH (<i>name</i>), DID YOU WANT TO GET PREGNANT AT THAT TIME?</p>	<p>Yes ..... 1 No ..... 2</p>	<p>1⇒Next Module</p>
<p><b>DB2.</b> DID YOU WANT TO HAVE A BABY LATER ON, OR DID YOU NOT WANT ANY (MORE) CHILDREN?</p>	<p>Later ..... 1 No more ..... 2</p>	<p>2⇒Next Module</p>
<p><b>DB3.</b> HOW MUCH LONGER DID YOU WANT TO WAIT?  <i>Record the answer as stated by respondent.</i></p>	<p>Months ..... 1 __ __ Years ..... 2 __ __ DK ..... 998</p>	

**MATERNAL AND NEWBORN HEALTH**

**MN**

*This module is to be administered to all women with a live birth in the 2 years preceding the date of interview.  
Record name of last-born child from CM13 here \_\_\_\_\_.  
Use this child's name in the following questions, where indicated.*

<p><b>MN1.</b> DID YOU SEE ANYONE FOR ANTENATAL CARE DURING YOUR PREGNANCY WITH (name)?</p>	<p>Yes ..... 1 No ..... 2</p>	<p>2⇒MN17</p>												
<p><b>MN2.</b> WHOM DID YOU SEE?</p> <p><i>Probe:</i> ANYONE ELSE?</p> <p><i>Probe for the type of person seen and circle all answers given.</i></p>	<p>Health professional: Doctor ..... A Nurse/Midwife ..... B Feldsher ..... D Other person Traditional birth attendant ..... F Other (specify) ..... X</p>													
<p><b>MN2A.</b> HOW MANY WEEKS OR MONTHS PREGNANT WERE YOU WHEN YOU FIRST RECEIVED ANTENATAL CARE FOR THIS PREGNANCY?</p> <p><i>Record the answer as stated by respondent.</i></p>	<p>Weeks ..... 1 __ __ Months ..... 2 0 __ DK ..... 998</p>													
<p><b>MN3.</b> HOW MANY TIMES DID YOU RECEIVE ANTENATAL CARE DURING THIS PREGNANCY?</p> <p><i>Probe to identify the number of times antenatal care was received. If a range is given, record the minimum number of times antenatal care received.</i></p>	<p>Number of times ..... __ __ DK ..... 98</p>													
<p><b>MN4.</b> AS PART OF YOUR ANTENATAL CARE DURING THIS PREGNANCY, WERE ANY OF THE FOLLOWING DONE AT LEAST ONCE:</p> <p>[A] WAS YOUR BLOOD PRESSURE MEASURED? [B] DID YOU GIVE A URINE SAMPLE? [C] DID YOU GIVE A BLOOD SAMPLE?</p>	<table border="0"> <tr> <td></td> <td style="text-align: right;">Yes</td> <td style="text-align: right;">No</td> </tr> <tr> <td>Blood pressure .....</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>Urine sample .....</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> <tr> <td>Blood sample .....</td> <td style="text-align: right;">1</td> <td style="text-align: right;">2</td> </tr> </table>		Yes	No	Blood pressure .....	1	2	Urine sample .....	1	2	Blood sample .....	1	2	
	Yes	No												
Blood pressure .....	1	2												
Urine sample .....	1	2												
Blood sample .....	1	2												
<p><b>MN17.</b> WHO ASSISTED WITH THE DELIVERY OF (name)?</p> <p><i>Probe:</i> ANYONE ELSE?</p> <p><i>Probe for the type of person assisting and circle all answers given.</i></p> <p><i>If respondent says no one assisted, probe to determine whether any adults were present at the delivery.</i></p>	<p>Health professional: Doctor ..... A Nurse / Midwife ..... B Feldsher ..... D Other person Traditional birth attendant ..... F Relative / Friend ..... H Other (specify) ..... X No one ..... Y</p>													

<p><b>MN18. WHERE DID YOU GIVE BIRTH TO (name)?</b></p> <p><i>Probe to identify the type of source.</i></p> <p><i>If unable to determine whether public or private, write the name of the place.</i></p> <p>_____</p> <p>(Name of place)</p>	<p>Home</p> <p>Respondent's home ..... 11</p> <p>Other home ..... 12</p> <p>Public sector</p> <p>Government hospital ..... 21</p> <p>Government clinic/health centre ..... 22</p> <p>Government health post..... 23</p> <p>Rural health post /</p> <p>Rural outpatient clinic..... 24</p> <p>Government maternity home/perinatal centre ..... 25</p> <p>Other public (<i>specify</i>) _____ 26</p> <p>Private Medical Sector</p> <p>Private hospital..... 31</p> <p>Private clinic/health centre ..... 32</p> <p>Private maternity home ..... 33</p> <p>Other private medical (<i>specify</i>) _____ 36</p> <p>Other (<i>specify</i>) _____ 96</p>	<p>11⇒MN20</p> <p>12⇒MN20</p> <p>96⇒MN20</p>
<p><b>MN19. WAS (name) DELIVERED BY CAESAREAN SECTION? THAT IS, DID THEY CUT YOUR BELLY OPEN TO TAKE THE BABY OUT?</b></p>	<p>Yes ..... 1</p> <p>No..... 2</p>	<p>2⇒MN20</p>
<p><b>MN19A. WHEN WAS THE DECISION MADE TO HAVE THE CAESAREAN SECTION?</b></p> <p>WAS IT BEFORE OR AFTER YOUR LABOUR PAINS STARTED?</p>	<p>Before..... 1</p> <p>After..... 2</p>	
<p><b>MN20. WHEN (name) WAS BORN, WAS HE/SHE VERY LARGE, LARGER THAN AVERAGE, AVERAGE, SMALLER THAN AVERAGE, OR VERY SMALL?</b></p>	<p>Very large..... 1</p> <p>Larger than average..... 2</p> <p>Average ..... 3</p> <p>Smaller than average ..... 4</p> <p>Very small ..... 5</p> <p>DK ..... 8</p>	
<p><b>MN21. WAS (name) WEIGHED AT BIRTH?</b></p>	<p>Yes ..... 1</p> <p>No..... 2</p> <p>DK ..... 8</p>	<p>2⇒MN23</p> <p>8⇒MN23</p>
<p><b>MN21A. HOW LONG AFTER DELIVERY WAS (name) WEIGHED?</b></p>	<p>Immediately after birth (less than 2 hours). 1</p> <p>2 hours or more after the birth ..... 2</p> <p>DK/Don't remember ..... 8</p>	
<p><b>MN22. HOW MUCH DID (name) WEIGH?</b></p> <p><i>If a card is available, record weight from card.</i></p>	<p>From card.....1 (kg) __ . __ __ __</p> <p>From recall .....2 (kg) __ . __ __ __</p> <p>DK ..... 99998</p>	
<p><b>MN23. HAS YOUR MENSTRUAL PERIOD RETURNED SINCE THE BIRTH OF (name)?</b></p>	<p>Yes ..... 1</p> <p>No..... 2</p>	
<p><b>MN24. DID YOU EVER BREASTFEED (name)?</b></p>	<p>Yes ..... 1</p> <p>No..... 2</p>	<p>2⇒Next Module</p>
<p><b>MN25. HOW LONG AFTER BIRTH DID YOU FIRST PUT (name) TO THE BREAST?</b></p> <p><i>If less than 1 hour, record "00" hours.</i></p>	<p>Immediately..... 000</p> <p>Hours ..... 1 __ __</p>	

<p><i>If less than 24 hours, record hours. Otherwise, record days.</i></p>	<p>Days .....2 __ __</p> <p>DK/Don't remember ..... 998</p>	
<p><b>MN26.</b> IN THE FIRST THREE DAYS AFTER DELIVERY, WAS (<i>name</i>) GIVEN ANYTHING TO DRINK OTHER THAN BREAST MILK?</p>	<p>Yes ..... 1</p> <p>No ..... 2</p>	<p>2⇒Next Module</p>
<p><b>MN27.</b> WHAT WAS (<i>name</i>) GIVEN TO DRINK?</p> <p><i>Probe:</i> ANYTHING ELSE?</p>	<p>Milk (other than breast milk).....A</p> <p>Plain water ..... B</p> <p>Sugar or glucose water ..... C</p> <p>Gripe water..... D</p> <p>Sugar-salt-water solution ..... E</p> <p>Fruit juice..... F</p> <p>Infant formula ..... G</p> <p>Tea / Infusions..... H</p> <p>Other (<i>specify</i>) _____ X</p>	

**POST-NATAL HEALTH CHECKS**

**PN**

*This module is to be administered to all women with a live birth in the 2 years preceding the date of interview.  
Record name of last-born child from CM13 here \_\_\_\_\_.  
Use this child's name in the following questions, where indicated.*

**PN1. Check MN18: Was the child delivered in a health facility?**

- Yes, the child was delivered in a health facility (MN18=21-26 or 31-36) ⇒ Continue with PN2.
- No, the child was not delivered in a health facility (MN18=11-12 or 96) ⇒ Go to PN6.

<p><b>PN2. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT WHAT HAPPENED IN THE HOURS AND DAYS AFTER THE BIRTH OF (name).</b></p> <p>YOU HAVE SAID THAT YOU GAVE BIRTH IN (name or type of facility in MN18). HOW LONG DID YOU STAY THERE AFTER THE DELIVERY?</p> <p><i>If less than one day, record hours. If less than one week, record days. Otherwise, record weeks.</i></p>	<p>Hours..... 1 __ __</p> <p>Days ..... 2 __ __</p> <p>Weeks ..... 3 __ __</p> <p>DK / Don't remember ..... 998</p>	
<p><b>PN3. I WOULD LIKE TO TALK TO YOU ABOUT CHECKS ON (name)'S HEALTH AFTER DELIVERY – FOR EXAMPLE, SOMEONE EXAMINING (name), CHECKING THE CORD, OR SEEING IF (name) IS OK.</b></p> <p>BEFORE YOU LEFT THE (name or type of facility in MN18), DID ANYONE CHECK ON (name)'S HEALTH?</p>	<p>Yes ..... 1</p> <p>No..... 2</p>	
<p><b>PN4. AND WHAT ABOUT CHECKS ON YOUR HEALTH – I MEAN, SOMEONE ASSESSING YOUR HEALTH, FOR EXAMPLE ASKING QUESTIONS ABOUT YOUR HEALTH OR EXAMINING YOU?</b></p> <p>DID ANYONE CHECK ON YOUR HEALTH BEFORE YOU LEFT (name or type or facility in MN18)?</p>	<p>Yes ..... 1</p> <p>No..... 2</p>	
<p><b>PN5. NOW I WOULD LIKE TO TALK TO YOU ABOUT WHAT HAPPENED AFTER YOU LEFT (name or type of facility in MN18).</b></p> <p>DID ANYONE CHECK ON (name)'S HEALTH AFTER YOU LEFT (name or type of facility in MN18)?</p>	<p>Yes ..... 1</p> <p>No..... 2</p>	<p>1⇒PN11</p> <p>2⇒PN16</p>

**PN6. Check MN17: Did a health professional or traditional birth attendant assist with the delivery?**

- Yes, delivery assisted by a health professional or traditional birth attendant (MN17=A-F) ⇒ Continue with PN7.
- No, delivery not assisted by a health professional or traditional birth attendant (A-F not circled in MN17) ⇒ Go to PN10.

<p><b>PN7.</b> YOU HAVE ALREADY SAID THAT (<i>person or persons in MN17</i>) ASSISTED WITH THE BIRTH. NOW I WOULD LIKE TO TALK TO YOU ABOUT CHECKS ON (<i>name</i>)’S HEALTH AFTER DELIVERY, FOR EXAMPLE EXAMINING (<i>name</i>), CHECKING THE CORD, OR SEEING IF (<i>name</i>) IS OK.</p> <p>AFTER THE DELIVERY WAS OVER AND BEFORE (<i>person or persons in MN17</i>) LEFT YOU, DID (<i>person or persons in MN17</i>) CHECK ON (<i>name</i>)’S HEALTH?</p>	<p>Yes ..... 1 No..... 2</p>	
<p><b>PN8.</b> AND DID (<i>person or persons in MN17</i>) CHECK ON <u>YOUR</u> HEALTH BEFORE LEAVING?</p> <p>BY CHECK ON <u>YOUR</u> HEALTH, I MEAN ASSESSING YOUR HEALTH, FOR EXAMPLE ASKING QUESTIONS ABOUT YOUR HEALTH OR EXAMINING YOU.</p>	<p>Yes ..... 1 No..... 2</p>	
<p><b>PN9.</b> AFTER THE (<i>person or persons in MN17</i>) LEFT YOU, DID ANYONE CHECK ON THE HEALTH OF (<i>name</i>)?</p>	<p>Yes ..... 1 No..... 2</p>	<p>1⇒PN11 2⇒PN18</p>
<p><b>PN10.</b> I WOULD LIKE TO TALK TO YOU ABOUT CHECKS ON (<i>name</i>)’S HEALTH AFTER DELIVERY – FOR EXAMPLE, SOMEONE EXAMINING (<i>name</i>), CHECKING THE CORD, OR SEEING IF THE BABY IS OK.</p> <p>AFTER (<i>name</i>) WAS DELIVERED, DID ANYONE CHECK ON HIS/HER HEALTH?</p>	<p>Yes ..... 1 No..... 2</p>	<p>2⇒PN19</p>
<p><b>PN11.</b> DID SUCH A CHECK HAPPEN ONLY ONCE, OR MORE THAN ONCE?</p>	<p>Once..... 1 More than once ..... 2</p>	<p>1⇒PN12A 2⇒PN12B</p>
<p><b>PN12A.</b> HOW LONG AFTER DELIVERY DID THAT CHECK HAPPEN?</p> <p><b>PN12B.</b> HOW LONG AFTER DELIVERY DID THE FIRST OF THESE CHECKS HAPPEN?</p> <p><i>If less than one day, record hours. If less than one week, record days. Otherwise, record weeks.</i></p>	<p>Hours..... 1 ___</p> <p>Days ..... 2 ___</p> <p>Weeks ..... 3 ___</p> <p>DK / Don’t remember ..... 998</p>	
<p><b>PN13.</b> WHO CHECKED ON (<i>name</i>)’S HEALTH AT THAT TIME?</p>	<p>Health professional</p> <p>Doctor.....A</p> <p>Nurse / Midwife .....B</p> <p>Feldsher .....D</p> <p>Other person</p> <p>Traditional birth attendant .....F</p> <p>Relative / Friend .....H</p> <p>Other (<i>specify</i>).....X</p>	

<p><b>PN14. WHERE DID THIS CHECK TAKE PLACE?</b></p> <p><i>Probe to identify the type of source.</i></p> <p><i>If unable to determine whether public or private, write the name of the place.</i></p> <p>_____</p> <p>(Name of place)</p>	<p>Home</p> <p>Respondent's home ..... 11</p> <p>Other home ..... 12</p> <p>Public sector</p> <p>Government hospital ..... 21</p> <p>Government clinic/health centre ..... 22</p> <p>Government health post..... 23</p> <p>Rural health post /</p> <p>Rural outpatient clinic ..... 24</p> <p>Government maternity home/perinatal centre ..... 25</p> <p>Other public (<i>specify</i>) _____ 26</p> <p>Private Medical Sector</p> <p>Private hospital..... 31</p> <p>Private clinic/health centre ..... 32</p> <p>Private maternity home ..... 33</p> <p>Other private medical (<i>specify</i>) _____ 36</p> <p>Other (<i>specify</i>) _____ 96</p>	
<p><b>PN15. Check MN18: Was the child delivered in a health facility?</b></p> <p><input type="checkbox"/> Yes, the child was delivered in a health facility (MN18=21-26 or 31-36) ⇒ Continue with PN16.</p> <p><input type="checkbox"/> No, the child was not delivered in a health facility (MN18=11-12 or 96) ⇒ Go to PN17.</p>		
<p><b>PN16. AFTER YOU LEFT (name or type of facility in MN18), DID ANYONE CHECK ON <u>YOUR</u> HEALTH?</b></p>	<p>Yes ..... 1</p> <p>No..... 2</p>	<p>1⇒PN20</p> <p>2⇒Next Module</p>
<p><b>PN17. Check MN17: Did a health professional or traditional birth attendant assist with the delivery?</b></p> <p><input type="checkbox"/> Yes, delivery assisted by a health professional or traditional birth attendant (MN17=A-F) ⇒ Continue with PN18</p> <p><input type="checkbox"/> No, delivery not assisted by a health professional or traditional birth attendant (A-F not circled in MN17) ⇒ Go to PN19</p>		
<p><b>PN18. AFTER THE DELIVERY WAS OVER AND (person or persons in MN17) LEFT, DID ANYONE CHECK ON <u>YOUR</u> HEALTH?</b></p>	<p>Yes ..... 1</p> <p>No..... 2</p>	<p>1⇒PN20</p> <p>2⇒Next Module</p>
<p><b>PN19. AFTER THE BIRTH OF (name), DID ANYONE CHECK ON <u>YOUR</u> HEALTH?</b></p> <p>I MEAN SOMEONE ASSESSING <u>YOUR</u> HEALTH, FOR EXAMPLE ASKING QUESTIONS ABOUT YOUR HEALTH OR EXAMINING YOU.</p>	<p>Yes ..... 1</p> <p>No..... 2</p>	<p>2⇒Next Module</p>
<p><b>PN20. DID SUCH A CHECK HAPPEN ONLY ONCE, OR MORE THAN ONCE?</b></p>	<p>Once..... 1</p> <p>More than once ..... 2</p>	<p>1⇒PN21A</p> <p>2⇒PN21B</p>
<p><b>PN21A. HOW LONG AFTER DELIVERY DID THAT CHECK HAPPEN?</b></p> <p><b>PN21B. HOW LONG AFTER DELIVERY DID THE FIRST OF THESE CHECKS HAPPEN?</b></p> <p><i>If less than one day, record hours.</i></p> <p><i>If less than one week, record days.</i></p> <p><i>Otherwise, record weeks.</i></p>	<p>Hours..... 1 ___</p> <p>Days ..... 2 ___</p> <p>Weeks ..... 3 ___</p> <p>DK / Don't remember ..... 998</p>	

<p><b>PN22.</b> WHO CHECKED ON <u>YOUR</u> HEALTH AT THAT TIME?</p>	<p>Health professional          Doctor.....A          Nurse / Midwife .....B          Feldsher .....D          Other person          Traditional birth attendant ..... F          Relative / Friend .....H            Other (<i>specify</i>).....X</p>	
<p><b>PN23.</b> WHERE DID THIS CHECK TAKE PLACE?</p> <p><i>Probe to identify the type of source.</i></p> <p><i>If unable to determine whether public or private, write the name of the place.</i></p> <p>_____</p> <p>(<i>Name of place</i>)</p>	<p>Home          Respondent's home ..... 11          Other home ..... 12            Public sector          Government hospital ..... 21          Government clinic/health centre ..... 22          Government health post..... 23          Rural health post /          Rural outpatient clinic ..... 24          Government maternity home/perinatal          centre ..... 25          Other public (<i>specify</i>) ..... 26            Private Medical Sector          Private hospital..... 31          Private clinic/health centre ..... 32          Private maternity home ..... 33          Other private medical (<i>specify</i>) ..... 36            Other (<i>specify</i>)..... 96</p>	



**IS1.** Check List of Household Members, columns HL7B and HL15:

Is the respondent the mother or caretaker of any child under age 5?

Yes ⇒ Continue with IS2.

No ⇒ Go to Next Module.

**IS2.** SOMETIMES CHILDREN HAVE SEVERE ILLNESSES AND SHOULD BE TAKEN IMMEDIATELY TO A HEALTH FACILITY. WHAT TYPES OF SYMPTOMS WOULD CAUSE YOU TO TAKE A CHILD UNDER THE AGE OF 5 TO A HEALTH FACILITY RIGHT AWAY?

*Probe:*  
ANY OTHER SYMPTOMS?

*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 difficulty breathing ..... E
- Child has blood in stool ..... F
- Child is drinking poorly ..... G
- Child has a convulsion ..... H
- Child has low body temperature..... I
- Child has change of skin integuments (cyanosis or jaundice, pallor, rash) ..... J
- Child has blood from an umbilical wound... K
  
- Other (specify) \_\_\_\_\_ X
- Other (specify) \_\_\_\_\_ Y
- Other (specify) \_\_\_\_\_ Z

**CP0.** I WOULD LIKE TO TALK WITH YOU ABOUT ANOTHER SUBJECT – FAMILY PLANNING.

COUPLES USE VARIOUS WAYS OR METHODS TO DELAY OR AVOID A PREGNANCY.

HAVE YOU HEARD OF :

[A] FEMALE STERILIZATION? YES ..... 1  
*Probe:* WOMEN CAN HAVE AN OPERATION TO AVOID HAVING ANY MORE CHILDREN. NO ..... 2

[B] MALE STERILIZATION? YES ..... 1  
*Probe:* MEN CAN HAVE AN OPERATION TO AVOID HAVING ANY MORE CHILDREN. NO ..... 2

[C] IUD? YES ..... 1  
*Probe:* WOMEN CAN HAVE A LOOP OR COIL PLACED INSIDE THEM BY A DOCTOR OR A NURSE. NO ..... 2

[D] INJECTABLES? YES ..... 1  
*Probe:* WOMEN CAN HAVE AN INJECTION BY A HEALTH PROVIDER THAT STOPS THEM FROM BECOMING PREGNANT FOR ONE OR MORE MONTHS. NO ..... 2

[E] IMPLANTS? YES ..... 1  
*Probe:* WOMEN CAN HAVE ONE OR MORE SMALL RODS PLACED IN THEIR UPPER ARM BY A DOCTOR OR NURSE WHICH CAN PREVENT PREGNANCY FOR ONE OR MORE YEARS. NO ..... 2

[F] PILL? YES ..... 1  
*Probe:* WOMEN CAN TAKE A PILL EVERY DAY TO AVOID BECOMING PREGNANT. NO ..... 2

[G] CONDOM? YES ..... 1  
*Probe:* MEN CAN PUT A RUBBER SHEATH ON THEIR PENIS BEFORE SEXUAL INTERCOURSE. NO ..... 2

[H] FEMALE CONDOM? YES ..... 1  
*Probe:* WOMEN CAN PLACE A SHEATH IN THEIR VAGINA BEFORE SEXUAL INTERCOURSE. NO ..... 2

[I] DIAPHRAGM? YES ..... 1  
*Probe:* WOMEN CAN INSERT A SOFT RUBBER CUP IN THEIR VAGINA TO BLOCK THE SPERM FROM ENTERING THEIR UTERUS OR FALLOPIAN TUBES. NO ..... 2

[J] FOAM / JELLY? YES ..... 1  
*Probe:* WOMEN MAY USE SPERMICIDAL PRODUCTS (E.G. FOAM, JELLY, CREAM) NO ..... 2

<p>THAT CAN KILL OR PREVENT THE SPERM FROM MOVING AND REACHING THE EGG.</p> <p>[K] LACTATION AMENORRHOEA METHOD (LAM)?</p> <p>[L] PERIODIC ABSTINENCE / RHYTHM METHOD?  <i>Probe: TO AVOID PREGNANCY, WOMEN DO NOT HAVE SEXUAL INTERCOURSE ON THE DAYS OF THE MONTH THEY THINK THEY CAN GET PREGNANT.</i></p> <p>[M] WITHDRAWAL?  <i>Probe: MEN CAN BE CAREFUL AND PULL OUT BEFORE CLIMAX.</i></p> <p>[N] EMERGENCY / POSTCOITAL CONTRACEPTION?  <i>Probe: AS AN EMERGENCY MEASURE, WITHIN THREE DAYS AFTER THEY HAVE UNPROTECTED SEXUAL INTERCOURSE, WOMEN CAN TAKE SPECIAL PILLS TO PREVENT PREGNANCY.</i></p> <p>[O] TRANSDERMAL PATCH?  <i>Probe: WOMEN CAN STICK THIS PATCH THAT DISCHARGES HORMONES, WHICH AFTER ATTACHING THE PATCH PENETRATE THROUGH THE SKIN INTO THE BLOODSTREAM AND BLOCK OVULATION.</i></p> <p>[X] HAVE YOU HEARD OF ANY OTHER WAYS OR METHODS THAT WOMEN OR MEN CAN USE TO AVOID PREGNANCY?</p> <p>_____</p> <p style="text-align: center;"><i>(specify)</i></p> <p>_____</p> <p style="text-align: center;"><i>(specify)</i></p>	<p>YES ..... 1</p> <p>NO ..... 2</p> <p>YES ..... 1</p> <p>NO ..... 2</p> <p>YES ..... 1</p> <p>NO ..... 2</p> <p>YES ..... 1</p> <p>NO ..... 2</p> <p>YES ..... 1</p> <p>NO ..... 2</p> <p>NO ..... 2</p>	
<b>CP1. ARE YOU PREGNANT NOW?</b>	<p>Yes, currently pregnant ..... 1</p> <p>No ..... 2</p> <p>Unsure or DK ..... 8</p>	1⇒CP2A
<b>CP2. ARE YOU CURRENTLY DOING SOMETHING OR USING ANY METHOD TO DELAY OR AVOID GETTING PREGNANT?</b>	<p>Yes ..... 1</p> <p>No ..... 2</p>	1⇒CP3
<b>CP2A. HAVE YOU EVER DONE SOMETHING OR USED ANY METHOD TO DELAY OR AVOID GETTING PREGNANT?</b>	<p>Yes ..... 1</p> <p>No ..... 2</p>	<p>1⇒ Next Module</p> <p>2⇒ Next Module</p>

<p><b>CP3. WHAT ARE YOU DOING TO DELAY OR AVOID A PREGNANCY?</b></p> <p><i>Do not prompt. If more than one method is mentioned, circle each one.</i></p>	<p>Female sterilization ..... A  Male sterilization ..... B  IUD ..... C  Injectables ..... D  Implants ..... E  Pill ..... F  Male condom ..... G  Female condom ..... H  Diaphragm ..... I  Foam/ Jelly ..... J  Lactational amenorrhoea method (LAM) .... K  Periodic abstinence/Rhythm ..... L  Withdrawal ..... M  Transdermal patch ..... N</p> <p>Other (<i>specify</i>) _____ X</p>	
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UNMET NEED		UN
<b>UN1. Check CP1: Currently pregnant?</b> <input type="checkbox"/> Yes, currently pregnant ⇒ Continue with UN2. <input type="checkbox"/> No, unsure or DK ⇒ Go to UN5.		
<b>UN2. NOW I WOULD LIKE TO TALK TO YOU ABOUT YOUR CURRENT PREGNANCY. WHEN YOU GOT PREGNANT, DID YOU WANT TO GET PREGNANT AT THAT TIME?</b>	Yes ..... 1 No ..... 2	1 ⇒ UN4
<b>UN3. DID YOU WANT TO HAVE A BABY LATER ON OR DID YOU NOT WANT ANY (MORE) CHILDREN?</b>	Later ..... 1 No more ..... 2	
<b>UN4. NOW I WOULD LIKE TO ASK SOME QUESTIONS ABOUT THE FUTURE. AFTER THE CHILD YOU ARE NOW EXPECTING, WOULD YOU LIKE TO HAVE ANOTHER CHILD, OR WOULD YOU PREFER NOT TO HAVE ANY MORE CHILDREN?</b>	Have another child ..... 1 No more / None ..... 2 Undecided / DK ..... 8	1 ⇒ UN7 2 ⇒ UN13 8 ⇒ UN13
<b>UN5. Check CP3: Currently using "Female sterilization"?</b> <input type="checkbox"/> Yes ⇒ Go to UN13. <input type="checkbox"/> No ⇒ Continue with UN6.		
<b>UN6. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE FUTURE. WOULD YOU LIKE TO HAVE (A/ANOTHER) CHILD, OR WOULD YOU PREFER NOT TO HAVE ANY (MORE) CHILDREN?</b>	Have (a/another) child ..... 1 No more / None ..... 2 Says she cannot get pregnant ..... 3 Undecided / DK ..... 8	2 ⇒ UN9 3 ⇒ UN11 8 ⇒ UN9
<b>UN7. HOW LONG WOULD YOU LIKE TO WAIT BEFORE THE BIRTH OF (A/ANOTHER) CHILD?</b>  <i>Record the answer as stated by respondent.</i>	Months ..... 1 ___ Years ..... 2 ___ Does not want to wait (soon/how) ..... 993 Says she cannot get pregnant ..... 994 After marriage ..... 995 Other ..... 996 DK ..... 998	994 ⇒ UN11
<b>UN8. Check CP1: Currently pregnant?</b> <input type="checkbox"/> Yes, currently pregnant ⇒ Go to UN13. <input type="checkbox"/> No, unsure or DK ⇒ Continue with UN9.		
<b>UN9. Check CP2: Currently using a method?</b> <input type="checkbox"/> Yes ⇒ Go to UN13. <input type="checkbox"/> No ⇒ Continue with UN10.		
<b>UN10. DO YOU THINK YOU ARE PHYSICALLY ABLE TO GET PREGNANT AT THIS TIME?</b>	Yes ..... 1 No ..... 2 DK ..... 8	1 ⇒ UN13 8 ⇒ UN13

<p><b>UN11.</b> WHY DO YOU THINK YOU ARE NOT PHYSICALLY ABLE TO GET PREGNANT?</p>	<p>Infrequent sex / No sex ..... A  Menopausal ..... B  Never menstruated ..... C  Hysterectomy (surgical removal of uterus) ..... D  Has been trying to get pregnant for 2 years or more without result ..... E  Postpartum amenorrheic ..... F  Breastfeeding ..... G  Too old ..... H  Fatalistic mood ..... I  Other (<i>specify</i>) ..... X  DK ..... Z</p>	
<p><b>UN12.</b> Check UN11: “Never menstruated” mentioned?</p> <p><input type="checkbox"/> <i>Mentioned</i> ⇒ <i>Go to Next Module.</i></p> <p><input type="checkbox"/> <i>Not mentioned</i> ⇒ <i>Continue with UN13.</i></p>		
<p><b>UN13.</b> WHEN DID YOUR LAST MENSTRUAL PERIOD START?</p> <p><i>Record the answer using the same unit stated by the respondent.</i></p>	<p>Days ago ..... 1 ___</p> <p>Weeks ago ..... 2 ___</p> <p>Months ago ..... 3 ___</p> <p>Years ago ..... 4 ___</p> <p>In menopause / Has had hysterectomy .. 994  Before last birth ..... 995  Never menstruated ..... 996</p>	

**ATTITUDES TOWARD DOMESTIC VIOLENCE**

**DV**

**DV1.** SOMETIMES A HUSBAND IS ANNOYED OR ANGERED BY THINGS THAT HIS WIFE DOES. IN YOUR OPINION, IS A HUSBAND JUSTIFIED IN HITTING OR BEATING HIS WIFE IN THE FOLLOWING SITUATIONS:

		Yes	No	DK
[A] IF SHE GOES OUT WITHOUT TELLING HIM?	Goes out without telling .....	1	2	8
[B] IF SHE NEGLECTS THE CHILDREN?	Neglects children .....	1	2	8
[C] IF SHE ARGUES WITH HIM?	Argues with him .....	1	2	8
[D] IF SHE REFUSES TO HAVE SEX WITH HIM?	Refuses sex.....	1	2	8
[E] IF SHE BURNS THE FOOD?	Burns food .....	1	2	8
[F] IF SHE NEGLECTS HOUSEWORK?	Neglects housework .....	1	2	8

MARRIAGE/UNION		MA
<b>MA1.</b> ARE YOU CURRENTLY MARRIED OR LIVING TOGETHER WITH A MAN AS IF MARRIED?	Yes, currently married .....1 Yes, living with a man.....2 No, not in union .....3	3⇒MA5
<b>MA2.</b> HOW OLD IS YOUR HUSBAND/PARTNER?  <i>Probe:</i> HOW OLD WAS YOUR HUSBAND/PARTNER ON HIS LAST BIRTHDAY?	Age in years..... _ _  DK..... 98	⇒MA7  ⇒MA7
<b>MA5.</b> HAVE YOU EVER BEEN MARRIED OR LIVED TOGETHER WITH A MAN AS IF MARRIED?	Yes, formerly married .....1 Yes, formerly lived with a man .....2 No .....3	3⇒Next Module
<b>MA6.</b> WHAT IS YOUR MARITAL STATUS NOW: ARE YOU WIDOWED, DIVORCED OR SEPARATED?	Widowed.....1 Divorced .....2 Separated.....3	
<b>MA7.</b> HAVE YOU BEEN MARRIED OR LIVED WITH A MAN ONLY ONCE OR MORE THAN ONCE?	Only once .....1 More than once.....2	1⇒MA8A 2⇒MA8B
<b>MA8A.</b> IN WHAT MONTH AND YEAR DID YOU MARRY OR START LIVING WITH A MAN AS IF MARRIED?  <b>MA8B.</b> IN WHAT MONTH AND YEAR DID YOU <u>FIRST</u> MARRY OR START LIVING WITH A MAN AS IF MARRIED?	Date of (first) marriage Month..... _ _ DK month..... 98  Year ..... _ _ _ _ DK year..... 9998	⇒Next Module
<b>MA9.</b> HOW OLD WERE YOU WHEN YOU FIRST STARTED LIVING WITH YOUR ( <u>FIRST</u> ) HUSBAND/PARTNER?	Age in years..... _ _	



<b>SEXUAL BEHAVIOUR</b>	<b>SB</b>
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*Check for the presence of others.  
Before continuing, ensure privacy.*

<p><b>SB1.</b> NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT SEXUAL ACTIVITY IN ORDER TO GAIN A BETTER UNDERSTANDING OF SOME IMPORTANT LIFE ISSUES.</p> <p>THE INFORMATION YOU SUPPLY WILL REMAIN STRICTLY CONFIDENTIAL.</p> <p>HOW OLD WERE YOU WHEN YOU HAD SEXUAL INTERCOURSE FOR THE VERY FIRST TIME?</p>	<p>Never had intercourse ..... 00</p> <p>Age in years..... _ _</p> <p>First time when started living with (first)husband/partner ..... 95</p>	<p>00⇒Next Module</p>
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<p><b>SB2.</b> THE FIRST TIME YOU HAD SEXUAL INTERCOURSE, WAS A CONDOM USED?</p>	<p>Yes.....1</p> <p>No .....2</p> <p>DK / Don't remember .....8</p>	
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<p><b>SB3.</b> WHEN WAS THE LAST TIME YOU HAD SEXUAL INTERCOURSE?</p> <p><i>Record answers in days, weeks or months if less than 12 months (one year). If 12 months (one year) or more, answer must be recorded in years.</i></p>	<p>Days ago..... 1 _ _</p> <p>Weeks ago..... 2 _ _</p> <p>Months ago ..... 3 _ _</p> <p>Years ago ..... 4 _ _</p>	<p>4⇒SB15</p>
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<p><b>SB4.</b> THE LAST TIME YOU HAD SEXUAL INTERCOURSE, WAS A CONDOM USED?</p>	<p>Yes.....1</p> <p>No .....2</p>	
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<p><b>SB5.</b> WHAT WAS YOUR RELATIONSHIP TO THIS PERSON WITH WHOM YOU LAST HAD SEXUAL INTERCOURSE?</p> <p><i>Probe to ensure that the response refers to the relationship at the time of sexual intercourse</i></p> <p><i>If "boyfriend", then ask: WERE YOU LIVING TOGETHER AS IF MARRIED? If "yes", circle "2".If "no", circle "3".</i></p>	<p>Husband .....1</p> <p>Cohabiting partner .....2</p> <p>Boyfriend.....3</p> <p>Casual acquaintance .....4</p> <p>Other (<i>specify</i>) ..... 6</p>	<p>3⇒SB7</p> <p>4⇒SB7</p> <p>6⇒SB7</p>
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**SB6.** Check MAI:

Currently married or living with a man (MAI = 1 or 2) ⇒ Go to SB8.

Not married / Not in union (MAI = 3) ⇒ Continue with SB7.

<p><b>SB7.</b> HOW OLD IS THIS PERSON?</p> <p><i>If response is "DK", probe: ABOUT HOW OLD IS THIS PERSON?</i></p>	<p>Age of sexual partner..... _ _</p> <p>DK..... 98</p>	
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<p><b>SB8.</b> HAVE YOU HAD SEXUAL INTERCOURSE WITH ANY OTHER PERSON IN THE LAST 12 MONTHS?</p>	<p>Yes.....1</p> <p>No .....2</p>	<p>2⇒SB15</p>
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<b>SB9.</b> THE LAST TIME YOU HAD SEXUAL INTERCOURSE WITH THIS OTHER PERSON, WAS A CONDOM USED?	Yes.....1 No .....2	
<b>SB10.</b> WHAT WAS YOUR RELATIONSHIP TO THIS PERSON?  <i>Probe to ensure that the response refers to the relationship at the time of sexual intercourse</i>  <i>If “boyfriend” then ask:</i> WERE YOU LIVING TOGETHER AS IF MARRIED? <i>If “yes”, circle “2”.If “no”, circle “3”.</i>	Husband .....1 Cohabiting partner .....2 Boyfriend.....3 Casual acquaintance .....4  Other ( <i>specify</i> ) ..... 6	3⇒SB12 4⇒SB12  6⇒SB12
<b>SB11.</b> Check MA1 and MA7:  <input type="checkbox"/> <i>Currently married or living with a man (MA1 = 1 or 2)  AND  Married only once or lived with a man only once (MA7 = 1) ⇒ Go to SB13.</i>  <input type="checkbox"/> <i>Else ⇒ Continue with SB12.</i>		
<b>SB12.</b> HOW OLD IS THIS PERSON?  <i>If response is DK, probe:</i> ABOUT HOW OLD IS THIS PERSON?	Age of sexual partner..... __ __  DK..... 98	
<b>SB13.</b> OTHER THAN THESE TWO PERSONS, HAVE YOU HAD SEXUAL INTERCOURSE WITH ANY OTHER PERSON IN THE LAST 12 MONTHS?	Yes.....1 No .....2	2⇒SB15
<b>SB14.</b> IN TOTAL, WITH HOW MANY DIFFERENT PEOPLE HAVE YOU HAD SEXUAL INTERCOURSE IN THE LAST 12 MONTHS?	Number of partners..... __ __	
<b>SB15.</b> IN TOTAL, WITH HOW MANY DIFFERENT PEOPLE HAVE YOU HAD SEXUAL INTERCOURSE IN YOUR LIFETIME?  <i>If a non-numeric answer is given, probe to get an estimate.</i>  <i>If number of partners is 95 or more, write “95”.</i>	Number of lifetime partners ..... __ __  DK..... 98	

HIV/AIDS		HA																
<b>HA1.</b> NOW I WOULD LIKE TO TALK WITH YOU ABOUT SOMETHING ELSE.  HAVE YOU EVER HEARD OF AN ILLNESS CALLED HIV/AIDS?	Yes ..... 1  No ..... 2  DK ..... 8	2⇒Next Module																
<b>HA2.</b> CAN PEOPLE REDUCE THEIR CHANCE OF GETTING THE HIV/AIDS VIRUS BY HAVING JUST ONE UNINFECTED SEX PARTNER WHO HAS NO OTHER SEX PARTNERS?	Yes ..... 1 No ..... 2  DK ..... 8																	
<b>HA3.</b> CAN PEOPLE GET THE HIV/AIDS VIRUS BECAUSE OF WITCHCRAFT OR OTHER SUPERNATURAL MEANS?	Yes ..... 1 No ..... 2  DK ..... 8																	
<b>HA3A.</b> CAN PEOPLE GET THE HIV/AIDS VIRUS BY HUGGING OR SHAKING HANDS WITH A PERSON WHO IS INFECTED WITH THE HIV/AIDS VIRUS?	Yes ..... 1 No ..... 2  DK ..... 8																	
<b>HA3B.</b> CAN PEOPLE GET THE HIV/AIDS VIRUS THROUGH SALIVA BY KISSING SOMEONE WHO IS INFECTED WITH THE HIV/AIDS VIRUS?	Yes ..... 1 No ..... 2  DK ..... 8																	
<b>HA4.</b> 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																	
<b>HA5.</b> CAN PEOPLE GET THE HIV/AIDS VIRUS THROUGH MOSQUITO BITES?	Yes ..... 1 No ..... 2  DK ..... 8																	
<b>HA6.</b> CAN PEOPLE GET THE HIV/AIDS VIRUS BY SHARING FOOD WITH A PERSON WHO HAS THE HIV/AIDS VIRUS?	Yes ..... 1 No ..... 2  DK ..... 8																	
<b>HA7.</b> IS IT POSSIBLE FOR A HEALTHY-LOOKING PERSON TO HAVE THE HIV/AIDS VIRUS?	Yes ..... 1 No ..... 2  DK ..... 8																	
<b>HA8.</b> CAN THE VIRUS THAT CAUSES HIV/AIDS BE TRANSMITTED FROM A MOTHER TO HER BABY:  [A] DURING PREGNANCY? [B] DURING DELIVERY? [C] BY BREASTFEEDING?	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th></th> <th style="text-align: center;">Yes</th> <th style="text-align: center;">No</th> <th style="text-align: center;">DK</th> </tr> </thead> <tbody> <tr> <td>During pregnancy .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> <tr> <td>During delivery .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> <tr> <td>By breastfeeding .....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> </tbody> </table>		Yes	No	DK	During pregnancy .....	1	2	8	During delivery .....	1	2	8	By breastfeeding .....	1	2	8	
	Yes	No	DK															
During pregnancy .....	1	2	8															
During delivery .....	1	2	8															
By breastfeeding .....	1	2	8															
<b>HA9.</b> IN YOUR OPINION, IF A FEMALE TEACHER HAS THE HIV/AIDS VIRUS BUT IS NOT SICK, SHOULD SHE BE ALLOWED TO CONTINUE TEACHING IN SCHOOL?	Yes ..... 1 No ..... 2  DK/Not sure/Depends ..... 8																	
<b>HA10.</b> WOULD YOU BUY FRESH VEGETABLES FROM A SHOPKEEPER OR VENDOR IF YOU KNEW THAT THIS PERSON HAD THE HIV/AIDS VIRUS?	Yes ..... 1 No ..... 2  DK/Not sure/Depends ..... 8																	

<b>HA11.</b> IF A MEMBER OF YOUR FAMILY GOT INFECTED WITH THE HIV/AIDS VIRUS, WOULD YOU WANT IT TO REMAIN A SECRET?	Yes ..... 1 No ..... 2  DK/Not sure/Depends ..... 8																					
<b>HA12.</b> IF A MEMBER OF YOUR FAMILY BECAME SICK WITH HIV/AIDS, WOULD YOU BE WILLING TO CARE FOR HER OR HIM IN YOUR OWN HOUSEHOLD?	Yes ..... 1 No ..... 2  DK/Not sure/Depends ..... 8																					
<b>HA12A.</b> DO YOU THINK CHILDREN LIVING WITH HIV SHOULD BE ABLE TO ATTEND SCHOOL WITH CHILDREN WHO ARE HIV NEGATIVE?	Yes ..... 1 No ..... 2  DK/Not sure/Depends ..... 8																					
<b>HA13.</b> Check CM13: Any live birth in last 2 years?  <input type="checkbox"/> No live birth in last 2 years (CM13= "No" or blank) ⇒ Go to HA24.  <input type="checkbox"/> One or more live births in last 2 years ⇒ Continue with HA14.																						
<b>HA14.</b> Check MN1: Received antenatal care?  <input type="checkbox"/> Received antenatal care ⇒ Continue with HA15.  <input type="checkbox"/> Did not receive antenatal care ⇒ Go to HA24.																						
<b>HA15.</b> DURING ANY OF THE ANTENATAL VISITS FOR YOUR PREGNANCY WITH ( <i>name</i> ),  WERE YOU GIVEN ANY INFORMATION ABOUT:  [A] BABIES GETTING THE HIV/ AIDS VIRUS FROM THEIR MOTHER?  [B] THINGS THAT YOU CAN DO TO PREVENT GETTING THE HIV/AIDS VIRUS?  [C] GETTING TESTED FOR THE HIV/AIDS VIRUS?  WERE YOU:  [D] OFFERED A TEST FOR THE HIV/AIDS VIRUS?	<table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 80%;"></th> <th style="width: 10%; text-align: center;">Y</th> <th style="width: 10%; text-align: center;">N</th> <th style="width: 10%; text-align: center;">DK</th> </tr> </thead> <tbody> <tr> <td>AIDS from mother.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> <tr> <td>Things to do.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> <tr> <td>Tested for AIDS.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> <tr> <td>Offered a test.....</td> <td style="text-align: center;">1</td> <td style="text-align: center;">2</td> <td style="text-align: center;">8</td> </tr> </tbody> </table>		Y	N	DK	AIDS from mother.....	1	2	8	Things to do.....	1	2	8	Tested for AIDS.....	1	2	8	Offered a test.....	1	2	8	
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<b>HA16.</b> I DON'T WANT TO KNOW THE RESULTS, BUT WERE YOU TESTED FOR THE HIV/AIDS VIRUS AS PART OF YOUR ANTENATAL CARE?	Yes ..... 1 No ..... 2  DK..... 8	2⇒HA19  8⇒HA19																				
<b>HA17.</b> I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?	Yes ..... 1 No ..... 2  DK..... 8	2⇒HA22  8⇒HA22																				
<b>HA18.</b> REGARDLESS OF THE RESULT, ALL WOMEN WHO ARE TESTED ARE SUPPOSED TO RECEIVE COUNSELLING AFTER GETTING THE RESULT.  AFTER YOU WERE TESTED, DID YOU RECEIVE COUNSELLING?	Yes ..... 1 No ..... 2  DK..... 8	1⇒HA22 2⇒HA22  8⇒HA22																				

<b>HA19. Check MN17: Birth delivered by health professional (A, B or D)?</b> <input type="checkbox"/> Yes, birth delivered by health professional (MN17 = A, B or D) ⇒ Continue with HA20. <input type="checkbox"/> No, birth not delivered by health professional (MN17 = else) ⇒ Go to HA24.		
<b>HA20. I DON'T WANT TO KNOW THE RESULTS, BUT WERE YOU TESTED FOR THE HIV/AIDS VIRUS BETWEEN THE TIME YOU WENT FOR DELIVERY BUT BEFORE THE BABY WAS BORN?</b>	Yes ..... 1 No ..... 2	2⇒HA24
<b>HA21. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?</b>	Yes ..... 1 No ..... 2	
<b>HA22. HAVE YOU BEEN TESTED FOR THE HIV/AIDS VIRUS SINCE THAT TIME YOU WERE TESTED DURING YOUR PREGNANCY?</b>	Yes ..... 1 No ..... 2	1⇒HA25
<b>HA23. WHEN WAS THE MOST RECENT TIME YOU WERE TESTED FOR THE HIV/AIDS VIRUS?</b>	Less than 12 months ago ..... 1 12-23 months ago ..... 2 2 or more years ago ..... 3	1⇒Next Module 2⇒Next Module 3⇒Next Module
<b>HA24. I DON'T WANT TO KNOW THE RESULTS, BUT HAVE YOU EVER BEEN TESTED TO SEE IF YOU HAVE THE HIV/AIDS VIRUS?</b>	Yes ..... 1 No ..... 2	2⇒HA27
<b>HA25. WHEN WAS THE MOST RECENT TIME YOU WERE TESTED?</b>	Less than 12 months ago ..... 1 12-23 months ago ..... 2 2 or more years ago ..... 3	
<b>HA26. I DON'T WANT TO KNOW THE RESULTS, BUT DID YOU GET THE RESULTS OF THE TEST?</b>	Yes ..... 1 No ..... 2 DK ..... 8	1⇒Next Module 2⇒Next Module 8⇒Next Module
<b>HA27. DO YOU KNOW OF A PLACE WHERE PEOPLE CAN GO TO GET TESTED FOR THE HIV/AIDS VIRUS?</b>	Yes ..... 1 No ..... 2	

TOBACCO AND ALCOHOL USE		TA
<b>TA1.</b> HAVE YOU EVER TRIED CIGARETTE SMOKING, EVEN ONE OR TWO PUFFS?	Yes ..... 1 No ..... 2	2⇒TA6
<b>TA2.</b> HOW OLD WERE YOU WHEN YOU SMOKED A WHOLE CIGARETTE FOR THE FIRST TIME?	Never smoked a whole cigarette ..... 00 Age ..... ____ ____	00⇒TA6
<b>TA3.</b> DO YOU CURRENTLY SMOKE CIGARETTES?	Yes ..... 1 No ..... 2	2⇒TA6
<b>TA4.</b> IN THE LAST 24 HOURS, HOW MANY CIGARETTES DID YOU SMOKE?	Number of cigarettes ..... ____ ____	
<b>TA5.</b> DURING THE LAST ONE MONTH, ON HOW MANY DAYS DID YOU SMOKE CIGARETTES?  <i>If less than 10 days, record the number of days. If 10 days or more but less than a month, circle "10". If "everyday" or "almost every day", circle "30".</i>	Number of days ..... 0 ____ 10 days or more but less than a month.... 10 Everyday / Almost every day..... 30	
<b>TA6.</b> HAVE YOU EVER TRIED ANY SMOKED TOBACCO PRODUCTS OTHER THAN CIGARETTES, SUCH AS CIGARS, WATER PIPE, CIGARILLOS OR PIPE?	Yes ..... 1 No ..... 2	2⇒TA10
<b>TA7.</b> DURING THE LAST ONE MONTH, DID YOU USE ANY SMOKED TOBACCO PRODUCTS?	Yes ..... 1 No ..... 2	2⇒TA10
<b>TA8.</b> WHAT TYPE OF SMOKED TOBACCO PRODUCT DID YOU USE OR SMOKE DURING THE LAST ONE MONTH?  <i>Circle all mentioned.</i>	Cigars ..... A Water pipe ..... B Cigarillos..... C Pipe ..... D Other ( <i>specify</i> ) ..... X	
<b>TA9.</b> DURING THE LAST ONE MONTH, ON HOW MANY DAYS DID YOU USE SMOKED TOBACCO PRODUCTS?  <i>If less than 10 days, record the number of days. If 10 days or more but less than a month, circle "10". If "everyday" or "almost every day", circle "30".</i>	Number of days ..... 0 ____ 10 days or more but less than a month.... 10 Everyday / Almost every day..... 30	
<b>TA10.</b> HAVE YOU EVER TRIED ANY FORM OF SMOKELESS TOBACCO PRODUCTS, SUCH AS CHEWING TOBACCO, SNUFF, OR DIP OR NASWAR?	Yes ..... 1 No ..... 2	2⇒TA14
<b>TA11.</b> DURING THE LAST ONE MONTH, DID YOU USE ANY SMOKELESS TOBACCO PRODUCTS?	Yes ..... 1 No ..... 2	2⇒TA14
<b>TA12.</b> WHAT TYPE OF SMOKELESS TOBACCO PRODUCT DID YOU USE DURING THE LAST ONE MONTH?  <i>Circle all mentioned.</i>	Chewing tobacco..... A Snuff ..... B Dip/naswar ..... C Other ( <i>specify</i> ) ..... X	

<p><b>TA13.</b> DURING THE LAST ONE MONTH, ON HOW MANY DAYS DID YOU USE SMOKELESS TOBACCO PRODUCTS?</p> <p><i>If less than 10 days, record the number of days. If 10 days or more but less than a month, circle "10".</i>  <i>If "everyday" or "almost every day", circle "30".</i></p>	<p>Number of days ..... 0 ____</p> <p>10 days or more but less than a month.... 10</p> <p>Everyday / Almost every day..... 30</p>	
<p><b>TA14.</b> NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT DRINKING ALCOHOL.</p> <p>HAVE YOU EVER DRUNK ALCOHOL?</p>	<p>Yes ..... 1</p> <p>No..... 2</p>	2⇒Next Module
<p><b>TA15.</b> WE COUNT ONE DRINK OF ALCOHOL AS ONE CAN OR BOTTLE OF BEER, ONE GLASS OF WINE OR ONE SHOT OF COGNAC, VODKA, WHISKEY OR RUM.</p> <p>HOW OLD WERE YOU WHEN YOU HAD YOUR FIRST DRINK OF ALCOHOL, OTHER THAN A FEW SIPS?</p>	<p>Never had one drink of alcohol ..... 00</p> <p>Age ..... ____ ____</p>	00⇒Next Module
<p><b>TA16.</b> DURING THE LAST ONE MONTH, ON HOW MANY DAYS DID YOU HAVE AT LEAST ONE DRINK OF ALCOHOL?</p> <p><i>If respondent did not drink, circle "00".</i>  <i>If less than 10 days, record the number of days. If 10 days or more but less than a month, circle "10".</i>  <i>If "everyday" or "almost every day", circle "30".</i></p>	<p>Did not have one drink in last one month. 00</p> <p>Number of days ..... 0 ____</p> <p>10 days or more but less than a month.... 10</p> <p>Every day / Almost every day..... 30</p>	00⇒Next Module
<p><b>TA17.</b> IN THE LAST ONE MONTH, ON THE DAYS THAT YOU DRANK ALCOHOL, HOW MANY DRINKS DID YOU USUALLY HAVE PER DAY?</p>	<p>Number of drinks ..... ____ ____</p>	

**LS1.** Check WB2: Age of respondent is between 15 and 24?

- Age 25-49 ⇒ Go to WM11.
- Age 15-24 ⇒ Continue with LS2.

**LS2.** I WOULD LIKE TO ASK YOU SOME SIMPLE QUESTIONS ON HAPPINESS AND SATISFACTION.

FIRST, TAKING ALL THINGS TOGETHER, WOULD YOU SAY YOU ARE VERY HAPPY, SOMEWHAT HAPPY, NEITHER HAPPY NOR UNHAPPY, SOMEWHAT UNHAPPY OR VERY UNHAPPY?

YOU CAN ALSO LOOK AT THESE PICTURES TO HELP YOU WITH YOUR RESPONSE.

*Show side 1 of response card and explain what each symbol represents. Circle the response code selected by the respondent.*

- Very happy .....1
- Somewhat happy .....2
- Neither happy nor unhappy.....3
- Somewhat unhappy .....4
- Very unhappy .....5

**LS3.** NOW I WILL ASK YOU QUESTIONS ABOUT YOUR LEVEL OF SATISFACTION IN DIFFERENT AREAS.

IN EACH CASE, WE HAVE FIVE POSSIBLE RESPONSES: PLEASE TELL ME, FOR EACH QUESTION, WHETHER YOU ARE VERY SATISFIED, SOMEWHAT SATISFIED, NEITHER SATISFIED NOR UNSATISFIED, SOMEWHAT UNSATISFIED OR VERY UNSATISFIED.

AGAIN, YOU CAN LOOK AT THESE PICTURES TO HELP YOU WITH YOUR RESPONSE.

*Show side 2 of response card and explain what each symbol represents. Circle the response code selected by the respondent, for questions LS3 to LS13.*

HOW SATISFIED ARE YOU WITH YOUR FAMILY LIFE?

- Very satisfied .....1
- Somewhat satisfied .....2
- Neither satisfied nor unsatisfied.....3
- Somewhat unsatisfied .....4
- Very unsatisfied .....5

**LS4.** HOW SATISFIED ARE YOU WITH YOUR FRIENDSHIPS?

- Very satisfied .....1
- Somewhat satisfied .....2
- Neither satisfied nor unsatisfied.....3
- Somewhat unsatisfied .....4
- Very unsatisfied .....5

**LS5.** DURING THE CURRENT SCHOOL YEAR, DID YOU ATTEND SCHOOL AT ANY TIME?

- Yes .....1
- No.....2

2⇒LS7

**LS6.** HOW SATISFIED (are/were) YOU WITH YOUR SCHOOL?

- Very satisfied .....1
- Somewhat satisfied .....2
- Neither satisfied nor unsatisfied.....3
- Somewhat unsatisfied .....4
- Very unsatisfied .....5



<p><b>LS7. HOW SATISFIED ARE YOU WITH YOUR CURRENT JOB?</b></p> <p><i>If the respondent says that she does not have a job, circle "0" and continue with the next question. Do not probe to find out how she feels about not having a job, unless she tells you herself.</i></p>	<p>Does not have a job .....0</p> <p>Very satisfied .....1</p> <p>Somewhat satisfied .....2</p> <p>Neither satisfied nor unsatisfied.....3</p> <p>Somewhat unsatisfied .....4</p> <p>Very unsatisfied .....5</p>	
<p><b>LS8. HOW SATISFIED ARE YOU WITH YOUR HEALTH?</b></p>	<p>Very satisfied .....1</p> <p>Somewhat satisfied .....2</p> <p>Neither satisfied nor unsatisfied.....3</p> <p>Somewhat unsatisfied .....4</p> <p>Very unsatisfied .....5</p>	
<p><b>LS9. HOW SATISFIED ARE YOU WITH THE PLACE WHERE YOU LIVE?</b></p> <p><i>If necessary, explain that the question refers to the living environment, including the neighbourhood and the dwelling.</i></p>	<p>Very satisfied .....1</p> <p>Somewhat satisfied .....2</p> <p>Neither satisfied nor unsatisfied.....3</p> <p>Somewhat unsatisfied .....4</p> <p>Very unsatisfied .....5</p>	
<p><b>LS10. HOW SATISFIED ARE YOU WITH HOW PEOPLE AROUND YOU GENERALLY TREAT YOU?</b></p>	<p>Very satisfied .....1</p> <p>Somewhat satisfied .....2</p> <p>Neither satisfied nor unsatisfied.....3</p> <p>Somewhat unsatisfied .....4</p> <p>Very unsatisfied .....5</p>	
<p><b>LS11. HOW SATISFIED ARE YOU WITH THE WAY YOU LOOK?</b></p>	<p>Very satisfied .....1</p> <p>Somewhat satisfied .....2</p> <p>Neither satisfied nor unsatisfied.....3</p> <p>Somewhat unsatisfied .....4</p> <p>Very unsatisfied .....5</p>	
<p><b>LS12. HOW SATISFIED ARE YOU WITH YOUR LIFE, OVERALL?</b></p>	<p>Very satisfied .....1</p> <p>Somewhat satisfied .....2</p> <p>Neither satisfied nor unsatisfied.....3</p> <p>Somewhat unsatisfied .....4</p> <p>Very unsatisfied .....5</p>	
<p><b>LS13. HOW SATISFIED ARE YOU WITH YOUR CURRENT INCOME?</b></p> <p><i>If the respondent says that she does not have any income, circle "0" and continue with the next question. Do not probe to find out how she feels about not having any income, unless she tells you herself.</i></p>	<p>Does not have any income .....0</p> <p>Very satisfied .....1</p> <p>Somewhat satisfied .....2</p> <p>Neither satisfied nor unsatisfied.....3</p> <p>Somewhat unsatisfied .....4</p> <p>Very unsatisfied .....5</p>	
<p><b>LS14. COMPARED TO THIS TIME LAST YEAR, WOULD YOU SAY THAT YOUR LIFE HAS IMPROVED, STAYED MORE OR LESS THE SAME, OR WORSENE, OVERALL?</b></p>	<p>Improved .....1</p> <p>More or less the same .....2</p> <p>Worsened.....3</p>	
<p><b>LS15. AND IN ONE YEAR FROM NOW, DO YOU EXPECT THAT YOUR LIFE WILL BE BETTER, WILL BE MORE OR LESS THE SAME, OR WILL BE WORSE, OVERALL?</b></p>	<p>Better.....1</p> <p>More or less the same .....2</p> <p>Worse.....3</p>	

<b>WM11.</b> <i>Record the time.</i>	Hour and minutes ..... : ..	
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**WM12.** *Check List of Household Members, columns HL7B and HL15:  
Is the respondent the mother or caretaker of any child age 0-4 living in this household?*

*Yes* ⇒ *Proceed to complete the result of woman's interview (WM7) on the cover page and then go to QUESTIONNAIRE FOR CHILDREN UNDER FIVE for that child and start the interview with this respondent.*

*No* ⇒ *End the interview with this respondent by thanking her for her cooperation and proceed to complete the result of woman's interview (WM7) on the cover page.*






**Interviewer's Observations**

**Field Editor's Observations**






**Supervisor's Observations**

**RESPONSE CARD:**

**SIDE 1**

<b>Very happy</b>	<b>Somewhat happy</b>	<b>Neither happy, nor unhappy</b>	<b>Somewhat unhappy</b>	<b>Very unhappy</b>
				

**SIDE 2**

<b>Very satisfied</b>	<b>Somewhat satisfied</b>	<b>Neither satisfied, nor unsatisfied</b>	<b>Somewhat unsatisfied</b>	<b>Very unsatisfied</b>
				

**F3. Questionnaire for Children Under Five**



**QUESTIONNAIRE FOR CHILDREN UNDER FIVE  
Multiple Indicator Cluster Survey**

<b>UNDER-FIVE CHILD INFORMATION PANEL</b>		<b>UF</b>
<p><i>This questionnaire is to be administered to all mothers or caretakers (see List of Household Members, column HL15) who care for a child that lives with them and is under the age of 5 years (see List of Household Members, column HL7B). A separate questionnaire should be used for each eligible child.</i></p>		
<p><b>UF1. Cluster number:</b> _____</p>	<p><b>UF2. Household number:</b> _____</p>	
<p><b>UF3. Child's name:</b> Name _____</p>	<p><b>UF4. Child's line number:</b> _____</p>	
<p><b>UF5. Mother's/Caretaker's name:</b> Name _____</p>	<p><b>UF6. Mother's/Caretaker's line number:</b> _____</p>	
<p><b>UF7. Interviewer's name and number:</b> Name _____</p>	<p><b>UF8. Day/Month/Year of interview:</b> _____ / _____ / <b>2015</b></p>	

<p><i>Repeat greeting if not already read to this respondent:</i></p> <p>WE ARE FROM THE STATISTICS COMMITTEE OF THE MINISTRY OF NATIONAL ECONOMY OF THE REPUBLIC OF KAZAKHSTAN. WE ARE CONDUCTING A SURVEY ABOUT THE SITUATION OF CHILDREN, FAMILIES AND HOUSEHOLDS. I WOULD LIKE TO TALK TO YOU ABOUT (<i>child's name from UF3</i>)'S HEALTH AND WELL-BEING. THE INTERVIEW WILL TAKE ABOUT 25 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND ANONYMOUS.</p>	<p><i>If greeting at the beginning of the household questionnaire has already been read to this person, then read the following:</i></p> <p>NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT (<i>child's name from UF3</i>)'S HEALTH AND OTHER TOPICS. THIS INTERVIEW WILL TAKE ABOUT 25 MINUTES. AGAIN, ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND ANONYMOUS.</p>
<p>MAY I START NOW?</p> <p><input type="checkbox"/> <i>Yes, permission is given ⇒ Go to UF12 to record the time and then begin the interview.</i></p> <p><input type="checkbox"/> <i>No, permission is not given ⇒ Circle '03' in UF9. Discuss this result with your supervisor.</i></p>	

<p><b>UF9. Result of interview for children under 5</b></p> <p><i>Codes refer to mother/caretaker.</i></p>	<p>Completed ..... 01</p> <p>Not at home ..... 02</p> <p>Refused ..... 03</p> <p>Partly completed ..... 04</p> <p>Incapacitated ..... 05</p> <p>Other (<i>specify</i>) _____ 96</p>
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<p><b>UF10. Field editor's name and number:</b> Name _____</p>	<p><b>UF11. Main data entry clerk's name and number:</b> Name _____</p>
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<p><b>UF12. Record the time.</b></p>	<p>Hour and minutes..... ____ : ____</p>
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AGE	AG	
<p><b>AG1.</b> NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE DEVELOPMENT AND HEALTH OF (<i>name</i>).</p> <p>ON WHAT DAY, MONTH AND YEAR WAS (<i>name</i>) BORN?</p> <p><i>Probe:</i> WHAT IS HIS/HER BIRTHDAY?</p> <p><i>If the mother/caretaker knows the exact birth date, also enter the day; otherwise, circle 98 for day.</i></p> <p><i>Month and year must be recorded.</i></p>	<p>Date of birth</p> <p>Day .....__ __</p> <p>DK day.....98</p> <p>Month.....__ __</p> <p>Year .....20__ __</p>	
<p><b>AG2.</b> HOW OLD IS (<i>name</i>)?</p> <p><i>Probe:</i> HOW OLD WAS (<i>name</i>) AT HIS/HER LAST BIRTHDAY?</p> <p><i>Record age in completed years.</i></p> <p><i>Record '0' if less than 1 year.</i></p> <p><i>Compare and correct AG1 and/or AG2 if inconsistent.</i></p>	<p>Age (in completed years) .....__</p>	

BIRTH REGISTRATION		BR
<b>BR1. DOES (name) HAVE A BIRTH CERTIFICATE?</b>  <i>If yes, ask:</i> <b>MAY I SEE IT?</b>	Yes, seen..... 1	1⇒Next Module  2⇒Next Module
	Yes, not seen..... 2	
	No ..... 3	
	DK..... 8	
<b>BR2. HAS (name)'S BIRTH BEEN REGISTERED WITH THE CIVIL AUTHORITIES?</b>	Yes ..... 1	1⇒Next Module
	No ..... 2	
	DK..... 8	
<b>BR3. DO YOU KNOW HOW TO REGISTER (name)'S BIRTH?</b>	Yes ..... 1	
	No ..... 2	

EARLY CHILDHOOD DEVELOPMENT		EC
<p><b>EC1.</b> HOW MANY CHILDREN'S BOOKS OR PICTURE BOOKS DO YOU HAVE FOR <i>(name)</i>?</p>	None ..... 00 Number of children's books ..... 0 __ Ten or more books ..... 10	
<p><b>EC2.</b> I AM INTERESTED IN LEARNING ABOUT THE THINGS THAT <i>(name)</i> PLAYS WITH WHEN HE/SHE IS AT HOME.</p> <p>DOES HE/SHE PLAY WITH:</p> <p>[A] HOMEMADE TOYS (SUCH AS DOLLS, CARS, OR OTHER TOYS MADE AT HOME)?</p> <p>[B] TOYS FROM A SHOP OR MANUFACTURED TOYS?</p> <p>[C] HOUSEHOLD OBJECTS (SUCH AS BOWLS OR POTS) OR OBJECTS FOUND OUTSIDE (SUCH AS STICKS, ROCKS, ANIMAL SHELLS OR LEAVES)?</p> <p><i>If the respondent says "YES" to the categories above, then probe to learn specifically what the child plays with to ascertain the response.</i></p>	<p style="text-align: right;">Y N DK</p> <p>Homemade toys..... 1 2 8</p> <p>Toys from a shop ..... 1 2 8</p> <p>Household objects or outside objects..... 1 2 8</p>	
<p><b>EC3.</b> SOMETIMES ADULTS TAKING CARE OF CHILDREN HAVE TO LEAVE THE HOUSE TO GO SHOPPING, WASH CLOTHES, OR FOR OTHER REASONS AND HAVE TO LEAVE YOUNG CHILDREN.</p> <p>ON HOW MANY DAYS IN THE PAST WEEK WAS <i>(name)</i>:</p> <p>[A] LEFT ALONE FOR MORE THAN AN HOUR?</p> <p>[B] LEFT IN THE CARE OF ANOTHER CHILD, THAT IS, SOMEONE LESS THAN 10 YEARS OLD, FOR MORE THAN AN HOUR?</p> <p><i>If 'none' enter '0'. If 'don't know' enter '8'.</i></p>	<p>Number of days left alone for more than an hour .....</p> <p>Number of days left with other child for more than an hour .....</p>	
<p><b>EC4.</b> Check AG2: Age of child.</p> <p><input type="checkbox"/> Child age 0, 1 or 2 ⇒ Go to Next Module.</p> <p><input type="checkbox"/> Child age 3 or 4 ⇒ Continue with EC5.</p>		
<p><b>EC5.</b> DOES <i>(name)</i> ATTEND ANY ORGANIZED LEARNING OR EARLY CHILDHOOD EDUCATION PROGRAMME, SUCH AS A PRIVATE OR GOVERNMENT FACILITY, INCLUDING KINDERGARTEN OR COMMUNITY CHILD CARE?</p>	Yes..... 1 No ..... 2 DK..... 8	



<p><b>EC7.</b> IN THE PAST 3 DAYS, DID YOU OR ANY HOUSEHOLD MEMBER AGE 15 OR OVER ENGAGE IN ANY OF THE FOLLOWING ACTIVITIES WITH <i>(name)</i>:</p> <p><i>If yes, ask: WHO ENGAGED IN THIS ACTIVITY WITH (name)?</i></p> <p><i>Circle all that apply.</i></p> <p>[A] READ BOOKS TO OR LOOKED AT PICTURE BOOKS WITH <i>(name)</i>?</p> <p>[B] TOLD STORIES TO <i>(name)</i>?</p> <p>[C] SANG SONGS TO <i>(name)</i> OR WITH <i>(name)</i>, INCLUDING LULLABIES?</p> <p>[D] TOOK <i>(name)</i> OUTSIDE THE HOME, COMPOUND, YARD OR ENCLOSURE?</p> <p>[E] PLAYED WITH <i>(name)</i>?</p> <p>[F] NAMED, COUNTED, OR DREW THINGS TO OR WITH <i>(name)</i>?</p>	<table border="1"> <thead> <tr> <th></th> <th>Mother</th> <th>Father</th> <th>Other</th> <th>No one</th> </tr> </thead> <tbody> <tr> <td>Read books</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> <tr> <td>Told stories</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> <tr> <td>Sang songs</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> <tr> <td>Took outside</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> <tr> <td>Played with</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> <tr> <td>Named/counted</td> <td>A</td> <td>B</td> <td>X</td> <td>Y</td> </tr> </tbody> </table>		Mother	Father	Other	No one	Read books	A	B	X	Y	Told stories	A	B	X	Y	Sang songs	A	B	X	Y	Took outside	A	B	X	Y	Played with	A	B	X	Y	Named/counted	A	B	X	Y	
	Mother	Father	Other	No one																																	
Read books	A	B	X	Y																																	
Told stories	A	B	X	Y																																	
Sang songs	A	B	X	Y																																	
Took outside	A	B	X	Y																																	
Played with	A	B	X	Y																																	
Named/counted	A	B	X	Y																																	
<p><b>EC8.</b> I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE HEALTH AND DEVELOPMENT OF <i>(name)</i>. CHILDREN DO NOT ALL DEVELOP AND LEARN AT THE SAME RATE. FOR EXAMPLE, SOME WALK EARLIER THAN OTHERS. THESE QUESTIONS ARE RELATED TO SEVERAL ASPECTS OF <i>(name)</i>'S DEVELOPMENT.</p> <p>CAN <i>(name)</i> IDENTIFY OR NAME AT LEAST TEN LETTERS OF THE ALPHABET?</p>	<p>Yes..... 1 No ..... 2 DK..... 8</p>																																				
<p><b>EC9.</b> CAN <i>(name)</i> READ AT LEAST FOUR SIMPLE, POPULAR WORDS?</p>	<p>Yes..... 1 No ..... 2 DK..... 8</p>																																				
<p><b>EC10.</b> DOES <i>(name)</i> KNOW THE NAME AND RECOGNIZE THE SYMBOL OF ALL NUMBERS FROM 1 TO 10?</p>	<p>Yes..... 1 No ..... 2 DK..... 8</p>																																				
<p><b>EC11.</b> CAN <i>(name)</i> PICK UP A SMALL OBJECT WITH TWO FINGERS, LIKE A STICK OR A ROCK FROM THE GROUND?</p>	<p>Yes..... 1 No ..... 2 DK..... 8</p>																																				
<p><b>EC12.</b> IS <i>(name)</i> SOMETIMES TOO SICK TO PLAY?</p>	<p>Yes..... 1 No ..... 2 DK..... 8</p>																																				
<p><b>EC13.</b> DOES <i>(name)</i> FOLLOW SIMPLE DIRECTIONS ON HOW TO DO SOMETHING CORRECTLY?</p>	<p>Yes..... 1 No ..... 2 DK..... 8</p>																																				
<p><b>EC14.</b> WHEN GIVEN SOMETHING TO DO, IS <i>(name)</i> ABLE TO DO IT INDEPENDENTLY?</p>	<p>Yes..... 1 No ..... 2 DK..... 8</p>																																				

<b>EC15.</b> DOES <i>(name)</i> GET ALONG WELL WITH OTHER CHILDREN?	Yes..... 1 No ..... 2  DK..... 8	
<b>EC16.</b> DOES <i>(name)</i> KICK, BITE, OR HIT OTHER CHILDREN OR ADULTS?	Yes..... 1 No ..... 2  DK..... 8	
<b>EC17.</b> DOES <i>(name)</i> GET DISTRACTED EASILY?	Yes..... 1 No ..... 2  DK..... 8	

**BREASTFEEDING AND DIETARY INTAKE**

**BD**

**BD1.** Check AG2: Age of child

- Child age 0, 1 or 2 ⇒ Continue with BD2.
- Child age 3 or 4 ⇒ UF13.

<b>BD2.</b> HAS (name) EVER BEEN BREASTFED?	Yes.....1 No .....2 DK.....8	2⇒BD4 8⇒BD4
<b>BD3.</b> IS (name) STILL BEING BREASTFED?	Yes.....1 No .....2 DK.....8	
<b>BD4.</b> YESTERDAY, DURING THE DAY OR NIGHT, DID (name) DRINK ANYTHING FROM A BOTTLE WITH A NIPPLE?	Yes.....1 No .....2 DK.....8	
<b>BD5.</b> DID (name) DRINK ORS (ORAL REHYDRATION SOLUTION) YESTERDAY, DURING THE DAY OR NIGHT?	Yes.....1 No .....2 DK.....8	
<b>BD6.</b> DID (name) DRINK OR EAT VITAMIN OR MINERAL SUPPLEMENTS OR ANY MEDICINES YESTERDAY, DURING THE DAY OR NIGHT?	Yes.....1 No .....2 DK.....8	
<b>BD7.</b> NOW I WOULD LIKE TO ASK YOU ABOUT (OTHER) LIQUIDS THAT (name) MAY HAVE HAD YESTERDAY DURING THE DAY OR THE NIGHT. I AM INTERESTED TO KNOW WHETHER (name) HAD THE ITEM EVEN IF COMBINED WITH OTHER FOODS.  PLEASE INCLUDE LIQUIDS CONSUMED OUTSIDE OF YOUR HOME.  DID (name) DRINK (Name of item) YESTERDAY DURING THE DAY OR THE NIGHT:		
[A] PLAIN WATER?	Plain water	Yes No DK 1 2 8
[B] JUICE OR JUICE DRINKS?	Juice or juice drinks	1 2 8
[C] CLEAR SOUP OR BROTH?	Clear soup or broth	1 2 8
[D] MILK SUCH AS TINNED, POWDERED, OR FRESH ANIMAL MILK?	Milk	1 2 8
<i>If yes:</i> HOW MANY TIMES DID (name) DRINK MILK? <i>If 7 or more times, record '7'.</i> <i>If unknown, record '8'.</i>	Number of times drank milk .....	___
[E] INFANT FORMULA SUCH AS MALYUTKA, NAN, NESTLE, NUTRILON, SIMILAC, MALYSH, HUMANA?	Infant formula	1 2 8
<i>If yes:</i> HOW MANY TIMES DID (name) DRINK INFANT FORMULA? <i>If 7 or more times, record '7'.</i> <i>If unknown, record '8'.</i>	Number of times drank infant formula.....	___
[F] ANY OTHER LIQUIDS?  (Specify)_____	Other liquids	1 2 8

<p><b>BD8.</b> NOW I WOULD LIKE TO ASK YOU ABOUT (OTHER) FOODS THAT (<i>name</i>) MAY HAVE HAD YESTERDAY DURING THE DAY OR THE NIGHT. AGAIN, I AM INTERESTED TO KNOW WHETHER (<i>name</i>) HAD THE ITEM EVEN IF COMBINED WITH OTHER FOODS.</p> <p>PLEASE INCLUDE FOODS CONSUMED OUTSIDE OF YOUR HOME.</p> <p>DID (<i>name</i>) EAT/DRINK (<i>Name of food</i>) YESTERDAY DURING THE DAY OR THE NIGHT:</p>				
		Yes	No	DK
[A] YOGURT, KEFIR, AIRAN OR KATYK?	Yogurt, kefir, airan or katyk	1	2	8
<i>If yes:</i> HOW MANY TIMES DID ( <i>name</i> ) DRINK OR EAT YOGURT, KEFIR, AIRAN OR KATYK? <i>If 7 or more times, record '7'. If unknown, record '8'.</i>	Number of times drank/ate yogurt, kefir, airan or katyk .....			—
[B] BABY FOOD, SUCH AS GERBER, FRUTONYANYA, HEINZ, AGUSHA, HIPPI, NESTLE OR OTHER <u>GRAIN CONTAINING</u> AND <u>FORTIFIED</u> BABY FOOD?  <i>If yes, probe:</i> WAS THERE ANYTHING OTHER THAN GRAIN IN THAT FOOD? <i>If yes, probe:</i> WHAT OTHER ITEMS? and circle other appropriate items on the list.	Baby food, such as Gerber, Frutonyanya, Heinz, Agusha, Hipp, Nestle	1	2	8
[C] BREAD, RICE, BUCKWHEAT, BARLEY, NOODLES, PORRIDGE OR OTHER FOODS MADE FROM GRAINS?	Foods made from grains	1	2	8
[D] PUMPKIN OR CARROTS?	Pumpkin or carrots	1	2	8
[E] ANY FOODS MADE FROM POTATOES, OR ANY OTHER FOODS MADE FROM ROOTS?	Foods made from roots	1	2	8
[F] ANY DARK GREEN, LEAFY VEGETABLES, SUCH AS SORREL OR SPINACH?	Dark green, leafy vegetables	1	2	8
[G] FRESH OR DRIED APRICOTS OR RIPE PERSIMMON?	Fresh or dried apricots or ripe persimmon	1	2	8
[H] ANY OTHER FRUITS OR VEGETABLES SUCH AS FRESH OR DRIED APPLES, PEARS, BANANAS, PEACHES, FRESH OR PICKLED TOMATOES, CUCUMBERS, CABBAGE, BEETROOT OR ONION?	Other fruits or vegetables	1	2	8
[I] LIVER, KIDNEY, HEART OR OTHER ORGAN MEATS?	Liver, kidney, heart or other organ meats	1	2	8
[J] MEAT, FOR EXAMPLE BEEF, HORSE MEAT, PORK, LAMB, GOAT, POULTRY, OR PROCESSED MEAT SUCH AS SAUSAGE AND CANNED MEAT PRODUCTS?	Meat or meat products	1	2	8
[K] EGGS?	Eggs	1	2	8
[L] FRESH OR DRIED FISH?	Fresh or dried fish	1	2	8
[M] ANY FOODS MADE FROM BEANS, PEAS, MUNG BEANS, LENTILS, OR NUTS?	Foods made from beans, peas, etc.	1	2	8
[N] CHEESE, COTTAGE CHEESE OR OTHER FOOD MADE FROM MILK?	Cheese, cottage cheese or other food made from milk	1	2	8
[P] ANY SUGARY FOODS SUCH AS CHOCOLATES, SWEETS, CANDIES, COOKIES, CAKES OR BISCUITS?	Sugary foods	1	2	8
[Q] ANY FRIED, SALTY SNACKS SUCH AS POTATO CHIPS?	Fried salty snacks	1	2	8
[O] ANY OTHER SOLID, SEMI-SOLID, OR SOFT FOOD THAT I HAVE NOT MENTIONED?  (Specify) _____	Other solid, semi-solid, or soft food	1	2	8

**BD9.** Check BD8 (Categories "A" through "O").

- At least one "Yes" or all "DK" ⇒ Go to BD11.
- Else (in all other cases) ⇒ Continue with BD10.

**BD10.** Probe to determine whether the child ate any solid, semi-solid or soft foods yesterday during the day or night.

- The child did not eat or the respondent does not know ⇒ Go to Next Module.
- The child ate at least one solid, semi-solid or soft food item mentioned by the respondent ⇒ Go back to BD8 and record food eaten yesterday [A to O]. When finished, continue with BD11.

**BD11.** HOW MANY TIMES DID (name) EAT ANY SOLID, SEMI-SOLID OR SOFT FOODS YESTERDAY DURING THE DAY OR NIGHT?

*If 7 or more times, record '7'.*

Number of times .....

DK.....8

**IMMUNIZATION**

**IM**

*If an immunization passport or card is available at home, copy the dates in IM3 for each type of immunization recorded on the card. IM6-IM16B will only be asked if a passport or card is not available.*

<b>IM1.</b> DO YOU HAVE AT HOME A PASSPORT OR CARD WHERE (name)'S VACCINATIONS ARE WRITTEN DOWN?  <i>If yes: MAY I SEE IT PLEASE?</i>	Yes, seen .....	1	1⇒IM3 2⇒IM6
	Yes, not seen .....	2	
	No passport/card.....	3	

<b>IM2.</b> DID YOU EVER HAVE A VACCINATION PASSPORT OR CARD FOR (name)?	Yes.....	1	1⇒IM6 2⇒IM6
	No .....	2	

<b>IM3.</b> (a) Copy dates for each vaccination from the passport / card. (b) Write '44' in day column if card shows that vaccination was given but no date recorded.	Date of Immunization							
	Day	Month		Year				

BCG	BCG																		
POLIO1	OPV/IPV1																		
POLIO2	OPV/IPV2																		
POLIO3	OPV/IPV3																		
POLIO4	OPV																		
POLIO5	OPV/IPV5																		
DPT1	DPT / DTAP1																		
DPT 2	DPT / DTAP2																		
DPT 3	DPT / DTAP3																		
DPT 4	DPT / DTAP4																		
HepB1 at birth	HEP / HBV1																		
HepB2	HEP / HBV2																		
HepB3	HEP / HBV3																		
HIB1	HIB1																		
HIB2	HIB2																		
HIB3	HIB3																		
HIB4	HIB4																		
MEASLES (MEASLES, MUMPS AND RUBELLA)	MMR																		
PNEUMOCOCCAL1	PCV1																		
PNEUMOCOCCAL2	PCV2																		
PNEUMOCOCCAL3	PCV3																		

**IM4.** Check IM3. Are all vaccines (BCG to PCV) recorded?

Yes ⇒ Go to IM20.

No ⇒ Continue with IM5.

<p><b>IM5.</b> IN ADDITION TO WHAT IS RECORDED ON THIS CARD, DID (<i>name</i>) RECEIVE ANY OTHER VACCINATIONS – INCLUDING VACCINATIONS RECEIVED IN CAMPAIGNS OR IMMUNIZATION DAYS OR CHILD HEALTH DAYS?</p> <p><input type="checkbox"/> <i>Yes</i> ⇒ Go back to IM3 and probe for these vaccinations and write ‘66’ in the corresponding day column for each vaccine mentioned. When finished, skip to IM20.</p> <p><input type="checkbox"/> <i>No/DK</i> ⇒ Go to IM20.</p>		
<p><b>IM6.</b> HAS (<i>name</i>) EVER RECEIVED ANY VACCINATIONS TO PREVENT HIM/HER FROM GETTING DISEASES, INCLUDING VACCINATIONS RECEIVED IN A CAMPAIGN OR IMMUNIZATION DAY OR CHILD HEALTH DAY?</p>	<p>Yes..... 1</p> <p>No ..... 2</p> <p>DK ..... 8</p>	<p>2⇒IM20</p> <p>8⇒IM20</p>
<p><b>IM7.</b> HAS (<i>name</i>) EVER RECEIVED A BCG VACCINATION AGAINST TUBERCULOSIS – THAT IS, AN INJECTION IN THE ARM OR SHOULDER THAT USUALLY CAUSES A SCAR?</p>	<p>Yes..... 1</p> <p>No ..... 2</p> <p>DK ..... 8</p>	
<p><b>IM8.</b> HAS (<i>name</i>) EVER RECEIVED ANY VACCINATION DROPS IN THE MOUTH TO PROTECT HIM/HER FROM POLIO?</p>	<p>Yes..... 1</p> <p>No ..... 2</p> <p>DK ..... 8</p>	<p>2⇒IM11</p> <p>8⇒IM11</p>
<p><b>IM10.</b> HOW MANY TIMES WAS THE POLIO VACCINE RECEIVED?</p>	<p>Number of times.....</p>	
<p><b>IM11.</b> HAS (<i>name</i>) EVER RECEIVED A DPT VACCINATION – THAT IS, AN INJECTION IN THE THIGH TO PREVENT HIM/HER FROM GETTING TETANUS, WHOOPING COUGH OR DIPHTHERIA?</p> <p><i>Probe by indicating that DPT vaccination is sometimes given combined with HIB, Hepatitis B and Polio (as Hexavalent vaccine) or combined with Polio and Hib (as Pentavalent vaccine).</i></p>	<p>Yes..... 1</p> <p>No ..... 2</p> <p>DK ..... 8</p>	<p>2⇒IM13</p> <p>8⇒IM13</p>
<p><b>IM12.</b> HOW MANY TIMES WAS THE DPT VACCINE RECEIVED?</p>	<p>Number of times.....</p>	
<p><b>IM13.</b> HAS (<i>name</i>) EVER RECEIVED A HEPATITIS B VACCINATION – THAT IS, AN INJECTION IN THE THIGH TO PREVENT HIM/HER FROM GETTING HEPATITIS B?</p> <p><i>Probe by indicating that the Hepatitis B vaccine is sometimes given combined with DPT, Polio and HIB (as Hexavalent vaccine).</i></p>	<p>Yes..... 1</p> <p>No ..... 2</p> <p>DK ..... 8</p>	<p>2⇒IM15A</p> <p>8⇒IM15A</p>
<p><b>IM14.</b> WAS THE FIRST HEPATITIS B VACCINE RECEIVED WITHIN 24 HOURS AFTER BIRTH?</p>	<p>Yes..... 1</p> <p>No ..... 2</p> <p>DK ..... 8</p>	
<p><b>IM15.</b> HOW MANY TIMES WAS THE HEPATITIS B RECEIVED?</p>	<p>Number of times.....</p>	
<p><b>IM15A.</b> HAS (<i>name</i>) EVER RECEIVED A HIB VACCINATION – THAT IS, AN INJECTION IN THE THIGH TO PREVENT HIM/HER FROM GETTING HAEMOPHILUS INFLUENZA TYPE B?</p> <p><i>Probe by indicating that the Hib vaccine is sometimes given combined with DPT, Polio and Hepatitis B (as Hexavalent vaccine) or combined with DPT and Polio (as Pentavalent vaccine).</i></p>	<p>Yes..... 1</p> <p>No ..... 2</p> <p>DK ..... 8</p>	<p>2⇒IM16</p> <p>8⇒IM16</p>
<p><b>IM15B.</b> HOW MANY TIMES WAS THE HIB VACCINE RECEIVED?</p>	<p>Number of times.....</p>	
<p><b>IM16.</b> HAS (<i>name</i>) EVER RECEIVED A MEASLES INJECTION (OR AN MMR OR MR)– THAT IS, A SHOT IN THE ARM AT THE AGE OF 12 MONTHS OR OLDER - TO PREVENT HIM/HER FROM GETTING MEASLES?</p>	<p>Yes..... 1</p> <p>No ..... 2</p> <p>DK ..... 8</p>	

<b>IM16A.</b> HAS ( <i>name</i> ) EVER RECEIVED A PNEUMOCOCCAL VACCINATION – THAT IS, AN INJECTION IN THE THIGH OR SHOULDER TO PREVENT HIM/HER FROM GETTING PNEUMONIA?	Yes..... 1	
	No .....2	2⇒IM20
	DK.....8	8⇒IM20
<b>IM16B.</b> HOW MANY TIMES WAS THE PNEUMOCOCCAL VACCINE RECEIVED?	Number of times.....	
<b>IM20.</b> Issue a <i>QUESTIONNAIRE FORM FOR VACCINATION RECORDS AT HEALTH FACILITY</i> for this child. Complete the Information Panel on that Questionnaire and go to Next Module.		

<b>UF13.</b> Record the time.	Hour and minutes..... : ____	
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**UF14.** Check List of Household Members, columns HL7B and HL15.  
 Is the respondent the mother or caretaker of another child age 0-4 living in this household?

Yes⇒ Indicate to the respondent that you will need to measure the weight and height of the child later. Go to the next *QUESTIONNAIRE FOR CHILDREN UNDER FIVE* to be administered to the same respondent.

No⇒ End the interview with this respondent by thanking her/him for her/his cooperation and tell her/him that you will need to measure the weight and height of the child before you leave the household.

Check to see if there are other woman's or under-5 questionnaires to be administered in this household.



<b>ANTHROPOMETRY</b>	<b>AN</b>
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After questionnaires for all children are complete, the measurer measures both the weight and height/length of each child.  
 Record weight and length/height below, taking care to record the measurements on the correct questionnaire for each child.  
 Check the child's name and line number in the List of Household Members before recording measurements.

<b>AN1.</b> Measurer's name and number:	Name _____	
<b>AN2.</b> Result of height/length and weight measurement:	Either or both measured ..... 1	
	Child not present ..... 2	2⇒AN6
	Child or mother/caretaker refused ..... 3	3⇒AN6
	Other (specify) _____ 6	6⇒AN6
<b>AN3.</b> Child's weight:	Kilograms (kg) ..... _ . _	
	Weight not measured ..... 99.9	
<b>AN3A.</b> Was the child undressed to the minimum?		
<input type="checkbox"/> Yes. <input type="checkbox"/> No, the child could not be undressed to the minimum.		
<b>AN3B.</b> Check age of child in AG2:		
<input type="checkbox"/> Child under 2 years old ⇒ Measure length (lying down). <input type="checkbox"/> Child age 2 or more years ⇒ Measure height (standing up).		
<b>AN4.</b> Child's length or height:	Length / Height (cm) ..... _ . _	
	Length/ Height not measured ..... 999.9	⇒AN6
<b>AN4A.</b> How was the child actually measured? Lying down or standing up?	Lying down ..... 1	
	Standing up ..... 2	

<b>AN6.</b> Is there another child in the household who is eligible for measurement?
<input type="checkbox"/> Yes ⇒ Record measurements for next child. <input type="checkbox"/> No ⇒ Check if there are any other individual questionnaires to be completed in the household.

**Interviewer's Observations**

**Field Editor's Observations**

**Supervisor's Observations**

**Measurer's Observations**

**F4. Appendix for Data Collection at Health Facility about Immunization to the Questionnaire for Children Under Five**



**APPENDIX FOR DATA COLLECTION AT HEALTH FACILITY ABOUT IMMUNIZATION TO THE QUESTIONNAIRE FOR CHILDREN UNDER FIVE**

<b>UNDER-THREE CHILD INFORMATION PANEL</b>		<b>HF</b>
<p><i>This appendix is to be used at health facilities to record information on the immunization for children age 0-2 years. A separate appendix form should be used for each eligible child.</i></p> <p><i>The QUESTIONNAIRE FOR CHILDREN UNDER FIVE must be completed for the child prior to completing this form. This panel should be completed before visiting the health facility.</i></p> <p><i>This appendix form must be appended to the QUESTIONNAIRE FOR CHILDREN UNDER FIVE for each child</i></p>		
<b>HF1.</b> Cluster number: _____	<b>HF2.</b> Household number: _____	
<b>HF3.</b> Child's name: Name _____	<b>HF4.</b> Child's line number: _____	
<b>HF3A.</b> Child's surname: Surname _____		
<b>HF5.</b> Mother's / Caretaker's name: Name _____	<b>HF6.</b> Mother's / Caretaker's line number: _____	
<b>HF9.</b> Day, month and year of birth (From AGI in Questionnaire for Children Under-5) ____ / ____ / ____	<b>HF10.</b> Name of health facility: _____	
<b>HF10A.</b> Address of health facility: _____	<b>HF10B.</b> District number in health facility: _____	
<b>HF7.</b> Interviewer's name and number: Name _____	<b>HF8.</b> Day / Month / Year of facility visit: ____ / ____ / 2015	
<b>HF11.</b> Result of health facility visit	Vaccination record seen ..... 01 Vaccination record not seen ..... 02  Other ( <i>specify</i> ) _____ 96	
<b>HF11A.</b> Field editor's name and number: Name _____	<b>HF11B.</b> Main data entry clerk's name and number: Name _____	

IMMUNIZATION										HF
HF12. Record day, month and year of birth as written on vaccination record		____ / ____ / ____								
HF13. (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				
BCG	BCG									
POLIO 1	OPV/IPV1									
POLIO 2	OPV/IPV2									
POLIO 3	OPV/IPV3									
POLIO 4	OPV									
POLIO 5	OPV/IPV5									
DPT 1	DPT / DTAP1									
DPT 2	DPT / DTAP2									
DPT 3	DPT / DTAP3									
DPT 4	DPT / DTAP4									
HEPB 1 AT BIRTH	HEP / HBV 1									
HEPB 2	HEP / HBV 2									
HEPB 3	HEP / HBV 3									
HIB 1	HIB1									
HIB 2	HIB2									
HIB 3	HIB3									
HIB 4	HIB4									
MEASLES (MEASLES, MUMPS AND RUBELLA)	MMR									
PNEUMOCOCCAL1	PCV1									
PNEUMOCOCCAL2	PCV2									
PNEUMOCOCCAL3	PCV3									