2017 DPR Korea MICS

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Multiple Indicator Cluster Survey 2017

Survey Findings Report

Central Bureau of Statistics

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MICS

MULTIPLE INDICATOR CLUSTER SURVEY 2017

SURVEY FINDINGS REPORT

DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA

June, 2018

DEMOCRATIC PEOPLE'S REPUBLIC OF KOREA
MULTIPLE INDICATOR CLUSTER SURVEY
2017

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The 2017 DPR Korea Multiple Indicator Cluster Survey (MICS) was carried out in 2017 by Central Bureau of Statistics of the DPR Korea, as part of the Global MICS Programme. Technical support was provided by the United Nations Children's Fund (UNICEF), with government funding and financial support of UNICEF.

The Global MICS Programme was developed by UNICEF in the 1990s as an international multi-purpose household survey programme to support countries in collecting internationally comparable data on a wide range of indicators on the situation of children and women. MICS surveys measure key indicators that allow countries to generate data for use in policies, programmes, and national development plans, and to monitor progress towards the Sustainable Development Goals (SDGs) and other internationally agreed upon commitments.

The objective of this report is to facilitate the timely dissemination and use of results from the 2017 DPR Korea MICS. The report contains detailed information on the methodology of the survey, and all standard MICS tables. The report is accompanied by a series of Statistical Snapshots of the main findings of the survey.

For more information on the Global MICS Programme, please go to mics.unicef.org.

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Summary table of survey implementation and the survey population,
DPR Korea, 2017

Survey sample and implementation			
Sample frame	2013 Mid-Census	**Questionnaires**	Household Women (age 15-49) Men (age 15-49) Children under five Children age 5-17 Water Quality Testing
Updated	April 2017		
Interviewer training	June – July 2017	**Fieldwork**	August – October 2017
Survey sample			
Households		Children under five	
» Sampled	8, 500	» Eligible	2, 275
» Occupied	8, 500	» Mothers/caretakers interviewed	2, 275
» Interviewed	8, 499	» Response rate (Percent)	100.0
» Response rate (Percent)	100.0		
Women (age 15-49)		Children age 5-17	
» Eligible for interviews	8, 766	» Eligible	4, 121
» Interviewed	8, 763	» Mothers/caretakers interviewed	4, 121
» Response rate (Percent)	100.0	» Response rate (Percent)	100.0
Men (age 15-49)		Water Quality Testing	
» Eligible for interviews	4, 183	» Eligible	1, 360
» Interviewed	4, 179	» Interviewed	1, 359
» Response rate (Percent)	99.9	» Response rate (Percent)	99.9

Survey population			
Average household size	3.8	**Percentage of population living in**	
Percentage of population under:		» Urban areas	60.9
» Age 5	7.0	» Rural areas	39.1
» Age 18	25.5		
Percentage of women age 15-49 years with at least one live birth in the last 2 years	10.6	» Ryanggang	3.1
		» North Hamgyong	9.9
		» South Hamgyong	13.2
		» Kangwon	6.4
		» Jagang	5.6
		» North Pyongan	11.7
		» South Pyongan	17.1
		» North Hwanghae	10.1
		» South Hwanghae	10.1
		» Pyongyang	12.7

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List of abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ARI	Acute Respiratory Infection
ASFR	Age Specific Fertility Rates
BCG	Bacillus Calmette-Guérin (Tuberculosis)
C-section	Caesarean section
CAPI	Computer-Assisted Personal Interviewing
CBR	Crude Birth Rate
CBS	Central Bureau of Statistic
CRC	Convention on the Rights of the Child
CSPro	Census and Survey Processing System
DPT	Diphtheria, Pertussis, and Tetanus
ECDI	Early Child Development Index
FCT	Field Check Tables
GAM	Global AIDS Monitoring
GFR	General Fertility Rate
GPI	Gender Parity Index
Hib	Haemophilus influenzae type B
HIV	Human Immunodeficiency Virus
ICT	Information and Communication Technology
IDD	Iodine Deficiency Disorders
IPV	Inactivated Polio Vaccine
IYCF	Infant and Young Child Feeding
JMP	WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene
LLECE	The Latin American Laboratory for Assessment of the Quality of Education
LPG	Liquefied Petroleum Gas
MDG	Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
MICS6	Sixth Round of Multiple Indicator Clusters Surveys Programme
MMR	Measles, Mumps, and Rubella
ORS	Oral Rehydration Salt Solution
OPV	Oral Polio Vaccine
ORT	Oral Rehydration Therapy
PASEC	The Programme for the Analysis of Education Systems
PNC	Post-natal Care
ppm	Parts Per Million
SACMEQ	The Southern and Eastern Africa Consortium for Monitoring Educational Quality
SDGs	Sustainable Development Goals
SDHS	Socio-Economic, Demographic and Health Survey
SPSS	Statistical Package for Social Sciences
TFR	Total Fertility Rate
TTC	Thermotolerant Coliform
UN	United Nations
UNICEF	United Nations Children's Fund
UN IGME	United Nation Interagency Group for Child Mortality Estimation
WASH	Water, Sanitation and Hygiene
WHO	World Health Organization

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The 2017 DPR Korea MICS was conducted 8 years after the 2009 DPRK Korea MICS. Owing to sustained close discussion between the Government and UNICEF it covered a significantly higher number of modules and indicators compared to previous surveys. All global MICS procedures and processes could not have been adhered to without support from the Ministry of Public Health, Ministry of City Management, Academy of Medical Science and UN agencies. The Local People's Committees and Provincial Statistics Offices also greatly contributed to its success.

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We express our profound gratitude to all the individuals and households of DPR Korea, who generously gave their precious time to answer our questions. Their voluntary and positive participation made this survey possible.

We hope that this report will provide a basis to further improve the living conditions of all children and women in DPR Korea, who responded to our questionnaires based on confidentiality.

1. INTRODUCTION

1.1. Background

This report is based on the 2017 DPR Korea Multiple Indicator Cluster Survey (MICS), conducted in 2017 by Central Bureau of Statistics that implemented the survey. The survey provides statistically sound and internationally comparable data essential for developing evidence-based policies and programmes, and for monitoring progress toward national goals and global commitments.

A Commitment to Action: National and International Reporting Responsibilities

More than two decades ago, the Plan of Action for Implementing the World Declaration on the Survival, Protection and Development of Children in the 1990s called for:

> "Each country should establish appropriate mechanisms for the regular and timely collection, analysis and publication of data required to monitor relevant social indicators relating to the well-being of children… Indicators of human development should be periodically reviewed by national leaders and decision makers, as is currently done with indicators of economic development…"

The Multiple Indicator Cluster Surveys programme was developed soon after, in the mid-1990s, to support countries in this endeavour.

Governments that signed the World Fit for Children Declaration and Plan of Action also committed themselves to monitoring progress towards the goals and objectives:

> "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" (A World Fit for Children, paragraph 60)

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

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

The General Assembly Resolution, adopted on 25 September 2015, "Transforming Our World: the 2030 Agenda for Sustainable Development" stipulates that for the success of the universal SDG agenda,

> "quality, accessible, timely and reliable disaggregated data will be needed to help with the measurement of progress and to ensure that no one is left behind" (paragraph 48); recognizes that "… baseline data for several of the targets remains unavailable…" and calls for "…strengthening data collection and capacity building in Member States…"

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

1.2. Survey objectives

The 2017 DPR Korea MICS has as its primary objectives:

- To provide high quality data for assessing the situation of children, adolescents, women and households in DPR Korea;
- To furnish data needed for monitoring progress toward national goals, as a basis for future action;
- To collect disaggregated data for the identification of disparities, to inform policies aimed at social inclusion of the most vulnerable;
- To validate data from other sources and the results of focused interventions;
- To generate data on national and global SDG indicators;
- To generate internationally comparable data for the assessment of the progress made in various areas, and to put additional efforts in those areas that require more attention;
- To generate behavioural and attitudinal data not available in other data sources.

2. SURVEY METHODOLOGY

2.1. Sample design

The sample for the 2017 DPR Korea Multiple Indicator Cluster Survey (MICS) was designed to provide estimates for a large number of indicators on the situation of children and women at the national level, for urban and rural areas, and for all 10 provinces: Ryanggang, North Hamgyong, South Hamgyong, Kangwon, Jagang, North Pyongan, South Pyongan, North Hwanghae, South Hwanghae and Pyongyang. The urban and rural areas within each province were identified as the main sampling strata and the sample of households was selected in two stages. Within each stratum, a specified number of census enumeration areas were selected systematically with probability proportional to size. A total of 340 sample enumeration areas were selected at the first stage. After a household listing was carried out within the selected enumeration areas, a systematic sample of 25 households was drawn, for a total sample size of 8,500 households. The 2017 DPR Korea MICS sample is not self-weighting. For reporting survey results, sample weights are used. A more detailed description of the sample design can be found in Appendix A, Sample Design.

2.2. Questionnaires

Six 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 water quality testing questionnaire administered in 4 households in each cluster of the sample; 3) a questionnaire for individual women administered in each household to all women age 15-49 years; 4) a questionnaire for individual men administered in every second household to all men age 15-49 years; 5) an under-5 questionnaire, administered to mothers (or caretakers) of all children under 5 living in the household; and 6) a questionnaire for children age 5-17 years, administered to the mother (or caretaker) of one randomly selected child age 5-17 years living in the household. The questionnaires included the following modules:

Household Questionnaire
List of Household Members
Education
Household Characteristics
Household Energy Use
Water and Sanitation
Salt Iodisation

Water Quality Testing Questionnaire

Questionnaire for Individual Women / Men
Woman's Background[M]
Mass Media and ICT[M]
Fertility[M]/Birth History
Desire for Last Birth
Maternal and Newborn Health
Post-natal Health Checks
Contraception
Unmet Need
Attitudes Toward Domestic Violence[M]
Marriage[M]

[M] The individual Questionnaire for Men only included those modules indicated.

Questionnaire for Children Age 5-17 Years
Child's Background
Child Labour
Child Discipline
Child Functioning
Parental Involvement
Foundational Learning Skills

Questionnaire for Children Under 5
Under-Five's Background
Early Childhood Development
Child Discipline
Child Functioning
Breastfeeding and Dietary Intake
Immunisation
Care of Illness
Anthropometry

Additionally, for all children age 0-2 years with a completed Questionnaire for Children Under Five the Questionnaire Form for Vaccination Records at Health Facility, was used to record vaccinations from the registers at health facilities.

The questionnaires were based on the MICS6 model questionnaire[1]. From the MICS6 model English version, the questionnaires were customised and translated into Korean and were pre-tested in Pyongyang during April 2017. Based on the results of the pre-test, modifications were made to the wording and translation of the questionnaires. A copy of the 2017 DPR Korea MICS questionnaires is provided in Appendix E.

In addition to the administration of questionnaires, fieldwork teams tested the salt used for cooking in the households for iodine content and measured the weights and heights of children age under 5 years, as well as tested household and source water for *Thermotolerant Coliform* (TTC) levels. Details and findings of these observations and measurements are provided in the respective sections of the report.

2.3. Ethical protocol

Verbal consent was obtained for each respondent participating and, for children age 15-17 years individually interviewed, adult consent was obtained in advance of the child's assent. All respondents were informed of the voluntary nature of participation and the confidentiality and anonymity of information. Additionally, respondents were informed of their right to refuse answering all or particular questions, as well as to stop the interview at any time.

2.4. Data processing

The data collection application was based on the CSPro (Census and Survey Processing System) software, Version 6.3, including a MICS dedicated data management platform. Procedures and standard programs[2] developed under the global MICS programme and adapted to the 2017 DPR Korea MICS questionnaire were used throughout. The CAPI application was tested in Pyongyang during May 2017. Based on the results of the CAPI-test, modifications were made to the questionnaires and application.

2.5. Training

Training for the fieldwork was conducted for 39 days in June and July 2017. Training included lectures on interviewing techniques and the contents of the questionnaires, and mock interviews between trainees to gain practice in asking questions. Participants first completed full training on paper questionnaires, followed by training on the CAPI application. The trainees spent 4 days in field practise and 3 days on a full pilot survey in Pyongyang. The training agenda was based on the standard MICS6 training agenda.[3]

Measurers received dedicated training on anthropometric measurements and water quality testing for a total of 4 days (each), including 7 days in field practise and pilot survey.

Field Supervisors attended additional training on the duties of team supervision and responsibilities.

2.6. Fieldwork

The data were collected by 20 teams; each was comprised of 4 interviewers, one driver, two measurers and a supervisor. Fieldwork began in August 2017 and concluded in October 2017.

Data was collected using tablet computers running the Windows 10 operating system, utilising a USB flash memory sticks for field operations, enabling transfer of assignments and completed questionnaires between supervisor's and interviewer's tablets.

1.– The model MICS6 questionnaires can be found at http://mics.unicef.org/tools#survey-design.
2.– The standard MICS6 data collection application can be found at http://mics.unicef.org/tools#data-processing.
3.– The template training agenda can be found at http://mics.unicef.org/tools#survey-design.

2.7. Fieldwork quality control measures

Team supervisors were responsible for daily monitoring of the fieldwork. Forced re-interviewing was implemented on one randomly selected household per cluster. Daily observations of interviewer skills and performance was conducted.

During the fieldwork period, each team was visited multiple times by survey management team members and field visits were arranged for UNICEF MICS Team members.

Throughout the fieldwork, Field check tables (FCTs), were being produced weekly for analysis and action with field teams. The FCTs were customised versions of the standard tables produced by the MICS Programme.[4]

2.8. Data management, editing and analysis

Data were received at the Central Bureau of Statistic (CBS) central office via country Intranet system from province level CBS offices. The central office communicated application updates through this system to field teams.

During data collection and following completion of fieldwork, data were edited according to editing process described in detail in the Guidelines for Secondary Editing, a customised version of the standard MICS6 documentation.[5]

Data were analysed using the Statistical Package for Social Sciences (SPSS) software, Version 22. Model syntax and tabulation plans developed by UNICEF were customized and used for this purpose.[6]

4.– The standard field check tables can be found at http://mics.unicef.org/tools#data-collection

5.– The standard guidelines can be found at http://mics.unicef.org/tools#data-processing.

6.– The standard tabulation plan and syntax files can be found at http://mics.unicef.org/tools#analysis.

3. INDICATORS AND DEFINITIONS

MICS INDICATOR		SDG[i]	Module[ii]	Definition[iii]	Value
SAMPLE COVERAGE AND CHARACTERISTICS OF THE RESPONDENTS					
SR.1	Access to electricity	7.1.1	HC	Percentage of household members with access to electricity	100.0
SR.2	Literacy rate (age 15-24 years)		WB	Percentage of women and men age 15-24 years who are able to read a short simple statement about everyday life or who attended secondary or higher education	
				Women	100.0
				Men	100.0
SR.3	Exposure to mass media		MT	Percentage of women and men age 15-49 years who, at least once a week, read a newspaper or magazine, listen to the radio, and watch television	
				Women	79.7
				Men	88.7
SR.4	Households with a radio		HC	Percentage of households that have a radio	94.1
SR.5	Households with a television		HC	Percentage of households that have a television	98.2
SR.6	Households with a telephone		HC – MT	Percentage of households that have a telephone (fixed line or mobile phone)	74.2
SR.7	Households with a computer		HC	Percentage of households that have a computer	18.7
SR.8	Households with intranet*		HC	Percentage of households that have access to the intranet by any device from home	1.4
SR.9	Use of computer		MT	Percentage of women and men age 15-49 years who used a computer during the last 3 months	
				Women	32.8
				Men	44.2
SR.10	Ownership of mobile phone	5.b.1	MT	Percentage of women and men age 15-49 years who own a mobile phone	
				Women	47.9
				Men	55.7
SR.11	Use of mobile phone		MT	Percentage of women and men age 15-49 who used a mobile telephone during the last 3 months	
				Women	82.5
				Men	88.8
SR.12a SR.12b	Use of intranet*	17.8.1	MT	Percentage of women age 15-49 years who used the intranet	
				(a) during the last 3 months	5.2
				(b) at least once a week during the last 3 months	3.7
				Percentage of men age 15-49 years who used the intranet	
				(a) during the last 3 months	11.6
				(b) at least once a week during the last 3 months	7.9
SR.13	ICT skills	4.4.1	MT	Percentage of women and men age 15-49 years who have carried out at least one of nine specific computer related activities	
				Women	30.1
				Men	41.0
SR.18	Children's living arrangements		HL	Percentage of children age 0-17 years living with neither biological parent	0.8
SR.19	Prevalence of children with one or both parents dead		HL	Percentage of children age 0-17 years with one or both biological parents dead	3.2
SR.20	Children with at least one parent living abroad		HL	Percentage of children age 0-17 years with at least one biological parent living abroad	0.3

* Although the standard SDG indicator 17.8.1 is referring to the use of internet, in DPR Korea context country intranet is approximating this concept

[i]. Sustainable Development Goal (SDG) Indicators, http://unstats.un.org/sdgs/indicators/indicators-list/. The Inter-agency Working Group on SDG Indicators is continuously updating the metadata of many SDG indicators and changes are being made to the list of SDG indicators. MICS covers many SDG indicators with an exact match of their definitions, while some indicators are only partially covered by MICS. The latter cases are included here as long as the current international methodology allows for only the way that the MICS indicator is defined, and/or a significant part of the SDG indicator can be generated by the MICS indicator. For more information on the metadata of the SDG indicators, see http://unstats.un.org/sdgs/metadata/

[ii]. Some indicators are constructed by using questions in several modules in the MICS questionnaires. In such cases, only the module(s) which contains most of the necessary information is indicated.

[iii]. All MICS indicators are or can be disaggregated, where relevant, by wealth groups, sex, age, and geographic location (as per the reporting domains), or other characteristics, as recommended by the Inter-agency Expert Group on SDG Indicators: http://unstats.un.org/sdgs/indicators/Official%20List%20of%20Proposed%20SDG%20Indicators.pdf

MICS INDICATOR		SDG[i]	Module[ii]	Description[iii]	Value
SURVIVE [iv]					
CS.1	Neonatal mortality rate	3.2.2	BH	Probability of dying within the first month of life	9
CS.2	Post-neonatal mortality rate		BH	Difference between infant and neonatal mortality rates	3
CS.3	Infant mortality rate		CM / BH	Probability of dying between birth and the first birthday	12
CS.4	Child mortality rate		BH	Probability of dying between the first and the fifth birthdays	3
CS.5	Under-five mortality rate	3.2.1	CM / BH	Probability of dying between birth and the fifth birthday	15
THRIVE - REPRODUCTIVE AND MATERNAL HEALTH					
TM.1	Adolescent birth rate	3.7.2	CM / BH	Age-specific fertility rate for women age 15-19 years	1
TM.2	Early childbearing		CM / BH	Percentage of women age 20-24 years who have had a live birth before age 18	0.0
TM.3	Contraceptive prevalence rate		CP	Percentage of women age 15-49 years currently married who are using (or whose partner is using) a (modern or traditional) contraceptive method	70.3
TM.4	Need for family planning satisfied with modern contraception [v]	3.7.1 & 3.8.1	UN	Percentage of women age 15-49 years currently married who have their need for family planning satisfied with modern contraceptive methods	89.7
TM.5a TM.5b TM.5c	Antenatal care coverage	3.8.1	MN	Percentage of women age 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 (c) at least eight times by any provider	 99.5 93.7 18.3
TM.6	Content of antenatal care		MN	Percentage of women age 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	87.8
TM.7	Neonatal tetanus protection		MN	Percentage of women age 15-49 years with a live birth in the last 2 years who were given at least two doses of tetanus toxoid vaccine within the appropriate interval[v] prior to the most recent birth	84.1
TM.8	Institutional deliveries		MN	Percentage of women age 15-49 years with a live birth in the last 2 years whose most recent live birth was delivered in a health facility	92.2
TM.9	Skilled attendant at delivery	3.1.2	MN	Percentage of women age 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	99.5
TM.10	Caesarean section		MN	Percentage of women age 15-49 years with a live birth in the last 2 years whose most recent live birth was delivered by caesarean section	12.9
TM.11	Children weighed at birth		MN	Percentage of most recent live births in the last 2 years who were weighed at birth	90.3
TM.12	Post-partum stay in health facility		PN	Percentage of women age 15-49 years with a live birth in the last 2 years who stayed in the health facility for 12 hours or more after the delivery of their most recent live birth	96.1
TM.13	Post-natal health check for the newborn		PN	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	98.6
TM.14	Newborns dried		MN	Percentage of last live births in the last 2 years where the newborn was dried after birth	87.3
TM.15	Skin-to-skin care		MN	Percentage of last live births in the last 2 years where the newborn was placed on the mother's bare chest after birth	26.9
TM.16	Delayed bathing		MN	Percentage of last live births in the last 2 years where the newborn was bathed more than 24 hours after birth	89.4
TM.19	Postnatal signal care functions [vi]		PN	Percentage of last live births in the last 2 years where the newborn received a least 2 postnatal signal care functions within 2 days after birth	97.7
TM.20	Post-natal health check for the mother		PN	Percentage of women age 15-49 years with a live birth 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 of their most recent live	98.4

[iv]. Mortality indicators are calculated for the last 5-year period.

[v]. See the MICS tabulation plan for a detailed description

[vi]. Signal functions are 1) Checking the cord, 2) Counseling on danger signs, 3) Assessing temperature,4) Observing/counseling on breastfeeding, and 5) Weighing the baby (where applicable).

MICS INDICATOR		SDG[i]	Module[ii]	Description[iii]	Value
THRIVE - CHILD HEALTH, NUTRITION AND DEVELOPMENT					
TC.1	Tuberculosis immunization coverage		IM	Percentage of children age 12-23 months who received BCG containing vaccine at any time before the survey	99.6
TC.2	Polio immunization coverage		IM	Percentage of children age 12-23 months who received the third dose of Oral Polio Vaccine (OPV3) vaccines at any time before the survey	98.9
TC.3	Diphtheria, pertussis and tetanus (DPT) immunization coverage	3.b.1 & 3.8.1	IM	Percentage of children age 12-23 months who received the third dose of DPT containing vaccine (DPT3) at any time before the survey	99.6
TC.4	Hepatitis B immunization coverage		IM	Percentage of children age 12-23 months who received the fourth dose of Hepatitis B containing vaccine (HepB3) at any time before the survey	99.6
TC.5	Haemophilus influenzae type B (Hib) immunization coverage		IM	Percentage of children age 12-23 months who received the third dose of Hib containing vaccine (Hib3) at any time before the survey	99.6
TC.10	Measles immunization coverage	3.b.1	IM	Percentage of children age 24-35 months who received the second measles containing vaccine at any time before the survey	98.6
TC.11	Full immunization coverage[vii]		IM	Percentage of children age 24-35 months who received all vaccinations recommended in the national immunization schedule at any time before the survey	97.3
TC.12	Care-seeking for diarrhoea		CA	Percentage of children under age 5 with diarrhoea in the last 2 weeks for whom advice or treatment was sought from a health facility or provider	79.6
TC.13a TC.13b	Diarrhoea treatment with oral rehydration salt solution (ORS) and zinc		CA	Percentage of children under age 5 with diarrhoea in the last 2 weeks who received (a) ORS (b) ORS and zinc	 74.1 45.0
TC.14	Diarrhoea treatment with oral rehydration therapy (ORT) and continued feeding		CA	Percentage of children under age 5 with diarrhoea in the last 2 weeks who received ORT (ORS packet or increased fluids) and continued feeding during the episode of diarrhoea	70.6
TC.15	Primary reliance on clean fuels and technologies for cooking		EU	Percentage of household members with primary reliance on clean fuels and technologies for cooking	10.1
TC.16	Primary reliance on clean fuels and technologies for space heating		EU	Percentage of household members with primary reliance on clean fuels and technologies for space heating	1.8
TC.17	Primary reliance on clean fuels and technologies for lighting		EU	Percentage of household members with primary reliance on clean fuels and technologies for lighting	99.9
TC.18	Primary reliance on clean fuels and technologies for cooking, space heating and lighting	7.1.2	EU	Percentage of household members with primary reliance on clean fuels and technologies for cooking, space heating and lighting	1.5
TC.19	Care-seeking for children with acute respiratory infection (ARI) symptoms	3.8.1	CA	Percentage of children under age 5 with ARI symptoms in the last 2 weeks for whom advice or treatment was sought from a health facility or provider	(*)
TC.20	Antibiotic treatment for children with ARI symptoms		CA	Percentage of children under age 5 with ARI symptoms in the last 2 weeks who received antibiotics	(*)
TC.26	Care-seeking for fever		CA	Percentage of children under age 5 with fever in the last 2 weeks for whom advice or treatment was sought from a health facility or provider	85.6
TC.30	Children ever breastfed		MN	Percentage of women with a live birth in the last 2 years who breastfed their last live-born child at any time	99.6
TC.31	Early initiation of breastfeeding		MN	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	42.5
TC.32	Exclusive breastfeeding under 6 months		BD	Percentage of infants under 6 months of age who are exclusively breastfed[viii]	71.4
TC.33	Predominant breastfeeding under 6 months		BD	Percentage of infants under 6 months of age who received breast milk as the predominant source of nourishment[ix] during the previous day	77.9
TC.34	Continued breastfeeding at 1 year		BD	Percentage of children age 12-15 months who received breast milk during the previous day	68.8
TC.35	Continued breastfeeding at 2 years		BD	Percentage of children age 20-23 months who received breast milk during the previous day	27.2

[vii]. In countries where the last dose of the vaccination is administered at or after 12 months of age according to the vaccination schedule, the indicator is calculated as the proportion of children age 24-35 months who received the vaccine by 24 months of age.

[viii]. Infants receiving breast milk, and not receiving any other fluids or foods, with the exception of oral rehydration solution, vitamins, mineral supplements and medicines

[ix]. Infants who receive breast milk and certain fluids (water and water-based drinks, fruit juice, oral rehydration solution, drops, vitamins, minerals, and medicines), but do not receive anything else (in particular, non-human milk and food-based fluids)

[x]. Infants age 0-5 months who are exclusively breastfed, and children age 6-23 months who are breastfed and ate solid, semi-solid or soft foods

MICS INDICATOR		SDG[i]	Module[ii]	Description[iii]	Value
THRIVE - CHILD HEALTH, NUTRITION AND DEVELOPMENT					
TC.36	Duration of breastfeeding		BD	The age in months when 50 percent of children age 0-35 months did not receive breast milk during the previous day	16.6
TC.37	Age-appropriate breast-feeding		BD	Percentage of children age 0-23 months appropriately fed[x] during the previous day	61.6
TC.38	Introduction of solid, semi-solid or soft foods		BD	Percentage of infants age 6-8 months who received solid, semi-solid or soft foods during the previous day	78.2
TC.39a TC.39b	Minimum acceptable diet		BD	Percentage of children age 6–23 months who had at least the minimum dietary diversity and the minimum meal frequency during the previous day (a) breastfed children (b) non-breastfed children	 34.1 17.7
TC.40	Milk feeding frequency for non-breastfed children		BD	Percentage of non-breastfed children age 6-23 months who received at least 2 milk feedings during the previous day	28.3
TC.41	Minimum dietary diversity		BD	Percentage of children age 6–23 months who received foods from 4 or more food groups[xi] during the previous day	46.7
TC.42	Minimum meal frequency		BD	Percentage of children age 6-23 months who received solid, semi-solid and soft foods (plus milk feeds for non-breastfed children) the minimum number of times[xii] or more during the previous day	75.0
TC.43	Bottle feeding		BD	Percentage of children age 0-23 months who were fed with a bottle during the previous day	8.7
TC.44a TC.44b	Underweight prevalence		AN	Percentage 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	 9.3 1.8
TC.45a TC.45b	Stunting prevalence	2.2.1	AN	Percentage 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	 19.1 4.8
TC.46a TC.46b	Wasting prevalence	2.2.2	AN	Percentage 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	 2.5 0.5
TC.47a TC.47b	Overweight prevalence		AN	Percentage of children under age 5 who are above (a) two standard deviations (moderate and severe) (b) three standard deviations (severe) of the median weight for height of the WHO standard	 2.3 0.4
TC.48	Iodized salt consumption		SA	Percentage of households with salt testing positive for any iodide among households in which salt was tested or where there was no salt	37.5
TC.49a TC.49b TC.49c	Early stimulation and responsive care		EC	Percentage of children age 24-59 months engaged in four or more activities to provide early stimulation and responsive care in the last 3 days with (a) Any adult household member (b) Father (c) Mother	 94.8 21.3 80.4
TC.50	Availability of children's books		EC	Percentage of children under age 5 who have three or more children's books	50.3
TC.51	Availability of playthings		EC	Percentage of children under age 5 who play with two or more types of playthings	59.4
TC.52	Inadequate supervision		EC	Percentage of children under age 5 left alone or under the supervision of another child younger than 10 years of age for more than one hour at least once in the last week	16.4
TC.53	Early child development index	4.2.1	EC	Percentage of children age 36-59 months who are developmentally on track in at least three of the following four domains: literacy-numeracy, physical, social-emotional, and learning	87.7

[xi]. The indicator is based on consumption of any amount of food from at least 5 out of the 8 following food groups: 1) breastmilk, 2) grains, roots and tubers, 3) legumes and nuts, 4) dairy products (milk, infant formula, yogurt, cheese), 5) flesh foods (meat, fish, poultry and liver/organ meats), 6) eggs, 7) vitamin-A rich fruits and vegetables, and 8) other fruits and vegetables

[xii]. Breastfeeding children: Solid, semi-solid, or soft foods, two times for infants age 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 age 6-23 months

MICS INDICATOR		SDG[i]	Module[ii]	Description[iii]	Value
LEARN					
LN.1	Attendance to early childhood education		UB	Percentage of children age 36-59 months who are attending an early childhood education programme	72.7
LN.2	Participation rate in organised learning (adjusted)	4.2.2	ED	Percentage of children in the relevant age group (one year before the official primary school entry age) who are attending an early childhood education programme or primary school	97.1
LN.3	School readiness		ED	Percentage of children attending the first grade of primary school who attended early childhood education programme during the previous school year	98.3
LN.4	Net intake rate in primary education		ED	Percentage of children of school-entry age who enter the first grade of primary school	87.4
LN.5a LN.5b LN.5c	Net attendance ratio (adjusted)		ED	Percentage of children of (a) primary school age currently attending primary or secondary school (b) lower secondary school age currently attending lower secondary school or higher (c) upper secondary school age currently attending upper secondary school or higher	 96.7 96.1 94.8
LN.6a LN.6b LN.6c	Out-of-school rate		ED	Percentage of children of (a) primary school age who are not attending primary or lower secondary school (b) lower secondary school age who are not attending primary school, lower or upper secondary school or higher (c) upper secondary school age who are not attending primary school, lower or upper secondary school or higher	 3.3 0.2 0.6
LN.7a LN.7b	Gross intake rate to the last grade		ED	Percentage of children of completion age (age appropriate to final grade) attending the last grade (excluding repeaters) (a) Primary school (b) Lower secondary school	 106.0 99.8
LN.8a LN.8b LN.8c	Completion rate		ED	Percentage of children age 3-5 years above the intended age for the last grade who have completed that grade (a) Primary school (b) Lower secondary school (c) Upper secondary school	 100.0 99.8 99.9
LN.9	Effective transition rate to lower secondary school		ED	Percentage of children attending the last grade of primary school during the previous school year who are not repeating the last grade of primary school and in the first grade of lower secondary school during the current school year	95.6
LN.10a LN.10b	Over-age for grade		ED	Percentage of students attending in each grade who are 2 or more years older than the official school age for grade (a) Primary school (b) Lower secondary school	 0.9 0.8
LN.11a LN.11b LN.11c	Education Parity Indices (c) Gender (d) Wealth (e) Area	4.5.1	ED	Net attendance ratio (adjusted) for girls divided by net attendance ratio (adjusted) for boys (a) primary school (b) lower secondary school (c) upper secondary school	 1.00 0.97 1.00
				Net attendance ratio (adjusted) for the 20 percent lowest divided by net attendance ratio (adjusted) for the 40 percent highest (a) primary school (b) lower secondary school (c) upper secondary school	 1.00 1.00 1.00
				Net attendance ratio (adjusted) for rural residents divided by net attendance ratio (adjusted) for urban residents (a) primary school (b) lower secondary school (c) upper secondary school	 1.00 0.99 1.00
LN.12	Availability of information on children's school performance		PR	Percentage of children age 7-14 attending schools who provided student report cards to parents	93.3
LN.16	Discussion with teachers regarding children's progress		PR	Percentage of children age 7-14 attending school for whom an adult household member discussed child's progress with teachers	87.4
LN.17	Contact with school concerning teacher absence		PR	Percentage of children age 7-14 attending school who could not attend class due to teacher absence and for whom an adult household member contacted school representatives when child could not attend class	(*)
LN.18	Availability of books at home		PR	Percentage of children age 7-14 years who have three or more books to read at home	81.9
LN.19	Reading habit at home		FL	Percentage of children age 7-14 years who read books or are read to at home	99.2
LN.21	Support with homework		PR	Percentage of children age 7-14 attending school who have homework and received help with homework	73.3
LN.22a LN.22b LN.22c LN.22d LN.22e LN.22f	Children with foundational reading and number skills	4.1.1	FL	Percentage of children who successfully completed three foundational reading tasks (a) Age 7-14 (b) Age for grade 2/3 (c) Attending grade 2/3 Percentage of children who successfully completed four foundational number tasks (a) Age 7-14 (b) Age for grade 2/3 (c) Attending grade 2/3	 94.8 88.2 93.5 81.9 71.2 83.4

MICS INDICATOR		SDG[i]	Module[ii]	Description[iii]	Value
PROTECTED FROM VIOLENCE AND EXPLOITATION					
PR.2	Violent discipline	16.2.1	UCD – FCD	Percentage of children age 1-14 years who experienced any physical punishment and/or psychological aggression by caregivers in the past one month	59.2
PR.3	Child labour	8.7.1	CL	Percentage of children age 5-17 years who are involved in child labour[xii]	5.1
PR.4a PR.4b	Child marriage*	5.3.1	MA	Percentage of women age 20-24 years who were first married (a) before age 15 (b) before age 18 Percentage of men age 20-24 years who were first married (a) before age 15 (b) before age 18	 0.0 0.1 0.0 0.0
PR.5	Young people age 15-19 years currently married		MA	Percentage of women and men age 15-19 years who are married Women Men	 0.0 0.0
PR.7a PR.7b	Spousal age difference		MA	Percentage of women who are married and whose spouse is 10 or more years older, (a) among women age 15-19 years, (b) among women age 20-24 years	 - 7.0
PR.15	Attitudes towards domestic violence		DV	Percentage of women and men age 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 Women Men	 9.6 7.6

[xii]. Children involved in child labour are defined as children involved in economic activities above the age-specific thresholds, children involved in household chores above the age-specific thresholds, and children involved in hazardous work. See the MICS tabulation plan for more detailed information on thresholds and classifications

* Selection of child marriage indicators for women and men was not shown in this report due to the low indicator value.

MICS INDICATOR		SDG[i]	Module[ii]	Description[iii]	Value
Live in a safe and clean environment					
WS.1	Use of improved drinking water sources		WS	Percentage of household members using improved sources of drinking water	93.7
WS.2	Use of basic drinking water services	1.4.1	WS	Percentage of household members using improved sources of drinking water either in their dwelling/yard/plot or within 30 minutes round trip collection time	93.2
WS.3	Availability of drinking water		WS	Percentage of household members with a water source that is available when needed	98.6
WS.4	Faecal contamination of source water		WQ	Percentage of household members whose source water was tested and with *Thermotolerant Coliform (TTC)* contamination in source water	23.5
WS.5	Faecal contamination of household drinking water		WQ	Percentage of household members whose household drinking water was tested and with *Thermotolerant Coliform (TTC)* contamination in household drinking water	36.6
WS.6	Use of safely managed drinking water services	6.1.1	WS – WQ	Percentage of household members with an improved drinking water source on premises, whose source water was tested and free of *Thermotolerant Coliform (TTC)* and available when needed	60.9
WS.8	Use of improved sanitation facilities	3.8.1	WS	Percentage of household members using improved sanitation facilities	84.1
WS.9	Use of basic sanitation services	1.4.1 & 6.2.1	WS	Percentage of household members using improved sanitation facilities which are not shared	81.5
WS.10	Safe disposal in situ of excreta from on-site sanitation facilities		WS	Percentage of household members with an improved sanitation facility that does not flush to a sewer and ever emptied	2.3
WS.11	Removal of excreta for treatment off-site	6.2.1	WS	Percentage of household members with an improved sanitation facility that does not flush to a sewer and with waste disposed in-situ or removed	2.0
WS.12	Menstrual hygiene management		UN	Percentage of ever married women age 15-49 years reporting menstruating in the last 12 months and using menstrual hygiene materials with a private place to wash and change while at home	98.1
WS.13	Exclusion from activities during menstruation		UN	Percentage of ever married women age 15-49 years reporting menstruating in the last 12 months who did not participate in social activities, school or work due to their last menstruation	1.7
EQUITABLE CHANCE IN LIFE					
EQ.1	Children with functional difficulty		UCF – FCF	Percentage of children age 2-17 years reported with functional difficulty in at least one domain	1.1

4. SAMPLE COVERAGE AND CHARACTERISTICS OF RESPONDENTS

4.1. Results of interviews

Of the 8,500 households selected for the sample, all were found to be occupied. Of these, 8,499 were successfully interviewed for a household response rate of almost 100.0 percent.

The Water Quality Testing Questionnaire was administered to 4 randomly selected households in each cluster (in total of 1,360 sample households). Of these, 1,359 were successfully tested for household drinking water yielding a response rate of 99.9 percent. Also, 1,341 were successfully tested for source drinking water quality yielding a response rate of 98.6 percent.

In the interviewed households, 8,766 women (age 15-49 years) were identified. Of these, 8,763 were successfully interviewed, yielding a response rate of almost 100.0 percent within the interviewed households.

The survey also sampled men (age 15-49), but required only a subsample. All men (age 15-49) were identified in every second household. 4,183 men (age 15-49 years) were listed in the household questionnaires. Questionnaires were completed for 4,179 eligible men, which corresponds to a response rate of 99.9 percent within eligible interviewed households.

There were 2,275 children under age five listed in the household questionnaires. Questionnaires were completed for 2,275 of these children, which corresponds to a response rate of 100.0 percent within interviewed households. One child age 5-17 years was identified from every household, 4,121 children were eligible and data for all eligible children were collected.

Overall response rates of 100.0, 99.9, 100.0, and 100.0 are calculated for the individual interviews of women, men, under-5s, and children age 5-17 years respectively (Table SR.1.1).

Table SR.1.1: Results of household, women's, men's, under-5's and children age 5-17's interviews

Number of households, women, men, children under 5, and children age 5-17 by interview results, DPR Korea, 2017

		Area		Province									
	Total	Urban	Rural	Ryang-gang	North Hamgyong	South Hamgyong	Kang-won	Jagang	North Pyongan	South Pyongan	North Hwanghae	South Hwanghae	Pyong-yang
Households													
Sampled	8,500	5,125	3,375	850	850	850	850	850	850	850	850	850	850
Occupied	8,500	5,125	3,375	850	850	850	850	850	850	850	850	850	850
Interviewed	8,499	5,124	3,375	850	850	850	849	850	850	850	850	850	850
Household completion rate	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0	100.0	100.0	100.0
Household response rate	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0	100.0	100.0	100.0
Water quality testing													
Eligible	1,360	820	540	136	136	136	136	136	136	136	136	136	136
Household water quality test													
Completed	1,359	819	540	135	136	136	136	136	136	136	136	136	136
Response rate	99.9	99.9	100.0	99.3	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Source water quality test													
Completed	1,341	802	539	134	136	136	135	136	136	130	136	129	133
Response rate	98.6	97.8	99.8	98.5	100.0	100.0	99.3	100.0	100.0	95.6	100.0	94.9	97.8
Women age 15-49 years													
Eligible	8,766	5,238	3,528	885	870	878	874	882	874	875	890	889	849
Interviewed	8,763	5,236	3,527	885	870	878	874	882	873	875	889	889	848
Women's response rate	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0	99.9	100.0	99.9
Women's overall response rate	100.0	99.9	100.0	100.0	100.0	100.0	99.9	100.0	99.9	100.0	99.9	100.0	99.9
Men age 15-49 years													
Number of men in interviewed households	8,183	4,852	3,331	827	818	823	824	820	821	808	822	844	776
Eligible	4,183	2,490	1,693	440	426	433	425	412	416	394	402	420	415
Interviewed	4,179	2,487	1,692	439	426	432	425	412	416	394	402	420	413
Men's response rate	99.9	99.9	99.9	99.8	100.0	99.8	100.0	100.0	100.0	100.0	100.0	100.0	99.5
Men's overall response rate	99.9	99.9	99.9	99.8	100.0	99.8	99.9	100.0	100.0	100.0	100.0	100.0	99.5
Children under 5 years													
Eligible	2,275	1,323	952	229	221	225	233	233	224	223	240	240	207
Mothers/caretakers interviewed	2,275	1,323	952	229	221	225	233	233	224	223	240	240	207
Under-5's response rate	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
Under-5's overall response rate	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0	100.0	100.0	100.0
Children age 5-17 years													
Number of children in interviewed households	6,052	3,466	2,586	608	599	604	618	607	601	596	619	635	565
Eligible	4,121	2,434	1,687	408	421	400	424	424	411	409	420	428	376
Mothers/caretakers interviewed	4,121	2,434	1,687	408	421	400	424	424	411	409	420	428	376
Children age 5-17's response rate	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
Children age 5-17's overall response rate	100.0	100.0	100.0	100.0	100.0	100.0	99.9	100.0	100.0	100.0	100.0	100.0	100.0

4.2. Housing and household characteristics

Tables SR.2.1, SR.2.2 and SR.2.3 provide further details on household level characteristics obtained in the Household Questionnaire. Most of the information collected on these housing characteristics have been used in the construction of the wealth index.

Table SR.2.1 presents characteristics of housing, disaggregated by area and province, distributed by whether the dwelling has electricity, energy used for cooking, intranet access, the main materials of the flooring, roof, and exterior walls, as well as the number of rooms used for sleeping.

Table SR.2.1: Housing characteristics

Percent distribution of households by selected housing characteristics, according to area of residence and provinces, DPR Korea, 2017

		Area		Province									
	Total	Urban	Rural	Ryang-gang	North Ham-gyong	South Ham-gyong	Kang-won	Jag-ang	North Pyon-gan	South Pyon-gan	North Hwang-hae	South Hwang-hae	Pyong-yang
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
Electricity													
Yes, interconnected grid	99.7	99.8	99.7	100.0	99.8	99.4	99.9	99.8	99.7	99.9	99.5	99.8	100.0
Yes, off-grid	0.3	0.2	0.3	0.0	0.2	0.6	0.1	0.2	0.3	0.1	0.5	0.2	0.0
No	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
Energy use for cooking [A]													
Clean fuels and technologies	10.3	15.8	1.5	5.3	15.0	5.4	1.7	14.0	5.5	3.5	1.7	1.8	41.6
Other fuels	89.7	84.2	98.5	94.7	85.0	94.6	98.3	86.0	94.5	96.5	98.3	98.2	58.4
No cooking done in the household	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
Intranet access at home													
Yes	1.4	1.8	0.8	0.6	0.4	0.4	1.0	3.0	1.7	0.4	0.8	0.4	5.2
No	98.6	98.2	99.2	99.3	99.4	99.6	99.0	97.0	98.3	99.5	99.2	99.6	94.8
DK/Missing	0.0	0.1	0.0	0.1	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Main material of flooring [B]													
Natural floor	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0
Rudimentary floor	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Finished floor	99.5	99.6	99.3	96.7	99.9	98.7	99.8	99.9	100.0	99.9	99.8	98.8	99.9
Other	0.4	0.4	0.6	3.3	0.0	1.3	0.2	0.1	0.0	0.0	0.2	1.2	0.1
Main material of roof [B]													
Natural roofing	0.0	0.0	0.1	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Rudimentary roofing	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
Finished roofing	100.0	100.0	99.9	100.0	100.0	99.8	100.0	99.9	100.0	100.0	99.9	100.0	100.0
Other	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
Main material of exterior walls [B]													
Natural walls	0.1	0.1	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.1	0.1	0.1
Rudimentary walls	0.2	0.1	0.2	0.0	0.5	0.1	0.0	0.7	0.1	0.1	0.0	0.2	0.0
Finished walls	99.5	99.6	99.5	100.0	99.4	97.9	100.0	99.3	99.9	99.9	99.9	99.7	99.9
Other	0.2	0.2	0.3	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Rooms used for sleeping													
1	50.5	48.8	53.2	61.9	63.6	55.5	58.5	39.0	49.9	54.0	50.6	50.3	29.9
2	47.6	48.8	45.7	37.6	36.3	43.2	40.4	60.1	48.4	45.0	47.6	49.0	62.8
3 or more	1.9	2.4	1.0	0.5	0.1	1.3	1.1	0.9	1.8	0.9	1.8	0.7	7.3
Number of households	8,499	5,252	3,247	262	848	1,118	535	474	993	1,461	852	835	1,121
Mean number of persons per room used for sleeping	2.73	2.66	2.85	2.99	3.00	2.84	2.92	2.58	2.71	2.80	2.76	2.80	2.20
Percentage of household members with access to electricity in the household[1]	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 household members	32,455	19,779	12,675	1,013	3,213	4,290	2,062	1,826	3,799	5,545	3,294	3,278	4,136

[1] MICS indicator SR.1 - Access to electricity; SDG Indicator 7.1.1

[A] Please refer to Table TC.4.1

[B] Please refer Household Questionnaire in Appendix E, questions HC4, HC5 and HC6 for definitions of natural, rudimentary, finished and other

In Table SR.2.2 households are distributed according to ownership of assets by households and by individual household members.

Table SR.2.2: Household and personal assets

Percentage of households by ownership of selected household and personal asset according to area of residence and provinces, DPR Korea, 2017

		Area		Province									
	Total	Urban	Rural	Ryang-gang	North Hamgyong	South Hamgyong	Kang-won	Jag-ang	North Pyongan	South Pyongan	North Hwanghae	South Hwanghae	Pyong-yang
Percentage of households that own a													
Television	98.2	98.7	97.3	97.8	98.3	98.4	97.4	96.4	98.7	98.2	96.8	97.9	100.0
Refrigerator	30.3	37.7	18.4	20.0	27.9	25.5	30.1	27.9	23.1	32.5	21.3	19.1	59.3
Freezer	21.6	26.8	13.2	12.4	19.3	14.5	17.8	17.7	17.1	21.5	15.0	12.5	52.1
Electric rice cooker	62.6	69.7	51.1	70.3	64.3	63.6	63.6	69.5	62.5	52.5	54.2	44.7	88.0
Washing machine	15.5	22.6	3.9	11.2	12.3	10.7	14.2	16.6	7.1	17.9	7.4	4.3	42.6
CD player	75.5	79.9	68.4	72.7	72.6	68.5	82.1	79.8	78.3	77.6	65.4	63.9	91.0
Percentage of households who have													
Agricultural land	53.7	29.7	92.5	54.8	48.1	64.8	54.4	59.7	62.5	53.4	62.6	68.5	18.8
Farm animals/Livestock	53.9	33.1	87.6	50.6	52.6	61.9	57.5	62.3	52.4	54.3	68.7	73.0	17.8
Percentage of households where at least one member owns or has a													
Wristwatch	66.1	70.4	59.1	80.1	65.8	72.0	68.9	71.8	63.9	53.0	54.2	58.6	87.0
Bicycle	83.1	81.4	85.7	72.6	81.9	88.8	89.4	77.7	83.1	87.5	87.4	86.3	68.4
Motorcycle or scooter	5.2	6.0	3.9	2.3	5.3	3.6	4.0	8.6	5.0	6.7	3.7	8.2	3.8
Animal-drawn cart	1.0	0.8	1.3	2.9	1.4	0.9	0.6	3.8	0.6	1.4	0.1	0.2	0.4
Computer or tablet	18.7	25.2	8.3	15.9	19.1	15.9	17.0	21.2	12.4	19.1	13.3	9.5	37.7
Mobile telephone	66.4	77.7	48.1	59.3	71.8	67.4	69.7	64.8	63.2	64.4	51.2	52.2	89.7
Number of households	8,499	5,252	3,247	262	848	1,118	535	474	993	1,461	852	835	1,121

Table SR.2.3 shows how the household populations in areas and provinces are distributed according to household wealth groups.

Table SR.2.3: Wealth index 20-40-40

Percent distribution of the household population by wealth index 20-40-40, according to area of residence and provinces, DPR Korea, 2017

	Wealth index 20-40-40				
	20 percent lowest	40 percent middle	40 percent highest	Total	Number of household members
Total	20.0	40.0	40.0	100.0	32,455
Area					
Urban	6.4	33.6	60.0	100.0	19,779
Rural	41.2	50.0	8.8	100.0	12,675
Province					
Ryanggang	63.2	18.9	17.8	100.0	1,013
North Hamgyong	17.3	41.3	41.4	100.0	3,213
South Hamgyong	28.9	39.4	31.7	100.0	4,290
Kangwon	21.8	39.1	39.1	100.0	2,062
Jagang	32.0	37.9	30.1	100.0	1,826
North Pyongan	15.6	44.0	40.4	100.0	3,799
South Pyongan	9.7	55.7	34.6	100.0	5,545
North Hwanghae	9.3	58.9	31.8	100.0	3,294
South Hwanghae	47.7	31.1	21.2	100.0	3,278
Pyogyang	0.4	13.4	86.2	100.0	4,136

4.3. Household composition

Table SR.3.1, as well as Tables SR.5.1-SR.5.3, provide basic information on the households, female respondents age 15-49, male respondents 15-49, children age 5-17, and children under-5. Both unweighted and weighted numbers are presented. Such information is essential for the interpretation of findings presented later in the report and provide background information on the representativeness of the survey sample. The remaining tables in this report are presented only with weighted numbers.[7]

Table SR.3.1, provides basic background information on the households, including the sex of the household head, province, area, number of household members and education of the household head are shown in the table. These background characteristics are used in subsequent tables in this report; the figures in the table are also intended to show the numbers of observations by major categories of analysis in the report.

7.– See Appendix A: Sample Design, for more details on sample weights.

Table SR.3.1: Household composition

Percent and frequency distribution of households by selected characteristics, DPR Korea, 2017

	Weighted percent	Number of households	
		Weighted	Unweighted
Total	100.0	8,499	8,499
Sex of household head			
Male	89.4	7,602	7,668
Female	10.6	897	831
Age of household head			
<18	-	-	-
18-34	14.4	1,220	1,228
35-64	75.9	6,452	6,491
65-84	9.7	822	776
85+	0.1	5	4
Area			
Urban	61.8	5,252	5,124
Rural	38.2	3,247	3,375
Province			
Ryanggang	3.1	262	850
North Hamgyong	10.0	848	850
South Hamgyong	13.2	1,118	850
Kangwon	6.3	535	849
Jagang	5.6	474	850
North Pyongan	11.7	993	850
South Pyongan	17.2	1,461	850
North Hwanghae	10.0	852	850
South Hwanghae	9.8	835	850
Pyongyang	13.2	1,121	850
Education of household head			
Nursery or Kindergarten or None	0.1	7	6
Primary	0.2	19	19
Lower secondary	0.2	14	21
Upper secondary	63.3	5,384	5,436
Higher	36.2	3,075	3,017
Number of household members			
1	0.8	69	59
2	11.1	940	923
3	25.2	2,141	2,169
4	38.5	3,270	3,215
5	18.4	1,563	1,614
6	5.2	446	452
7+	0.8	71	67
Households with a			
At least one child under age 5 years	23.1	1,960	1,952
At least one child age 5-17 years	48.2	4,094	4,121
At least one child age <18 years	63.4	5,387	5,409
At least one woman age 15-49 years	81.7	6,947	6,972
At least one man age 15-49 years	81.1	6,890	6,913
No member age <50	7.9	672	652
No adult (18+) member	-	-	-
Mean household size	3.8	8,499	8,499

[A] Each proportion is a separate characteristic based on the total number of households.

"-" denotes 0 unweighted cases in that cell

The weighted and unweighted total number of households are equal, since sample weights were normalized.[8] The table also shows the weighted mean household size estimated by the survey.

8.– See Appendix A: Sample Design, for more details on sample weights.

4.4. Age structure of household population

The weighted age and sex distribution of the survey population is provided in Table SR.4. In the households successfully interviewed in the survey, a weighted total of 32,455 household members were listed. Of these, 15,413 were males, and 17,042 were females.[9]

Table SR.4.1: Age distribution of household population by sex

Percent and frequency distribution of the household population by five-year age groups, dependency age groups, and by child (age 0-17 years) and adult populations (age 18 or more), by sex, DPR Korea, 2017

	Males		Females		Total	
	Number	Percent	Number	Percent	Number	Percent
Total	15,413	100.0	17,042	100.0	32,455	100.0
Age						
0-4	1,157	7.5	1,105	6.5	2,262	7.0
5-9	1,165	7.6	1,109	6.5	2,274	7.0
10-14	1,189	7.7	1,153	6.8	2,342	7.2
15-19	1,048	6.8	1,186	7.0	2,234	6.9
15-17	688	4.5	715	4.2	1,404	4.3
18-19	360	2.3	470	2.8	830	2.6
20-24	841	5.5	1,290	7.6	2,131	6.6
25-29	1,148	7.4	1,263	7.4	2,410	7.4
30-34	1,221	7.9	1,163	6.8	2,384	7.3
35-39	1,082	7.0	1,046	6.1	2,128	6.6
40-44	1,377	8.9	1,355	8.0	2,731	8.4
45-49	1,441	9.3	1,448	8.5	2,889	8.9
50-54	1,097	7.1	1,115	6.5	2,212	6.8
55-59	910	5.9	988	5.8	1,898	5.8
60-64	505	3.3	571	3.4	1,077	3.3
65-69	547	3.5	729	4.3	1,276	3.9
70-74	385	2.5	644	3.8	1,028	3.2
75-79	223	1.4	497	2.9	720	2.2
80-84	66	0.4	262	1.5	329	1.0
85+	13	0.1	117	0.7	130	0.4
Child and adult populations						
Children age 0-17 years	4,199	27.2	4,083	24.0	8,282	25.5
Adults age 18+ years	11,214	72.8	12,959	76.0	24,173	74.5

4.5. Respondents' background characteristics

Tables SR.5.1W, SR.5.1M, SR.5.2, and SR.5.3 provide information on the background characteristics of female and male respondents 15-49 years of age, children age 5-17 and of children under age 5. In all these tables, the total numbers of weighted and unweighted observations are equal, since sample weights have been normalized (standardized).[7] In addition to providing useful information on the background characteristics of women, men, children age 5-17, 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.

9.– The single year age distribution is provided in Table DQ.1.1 in Appendix 4, Data quality tables

Table SR.5.1W: Women's background characteristics

Percent and frequency distribution of women age 15-49 years by selected background characteristics, DPR Korea, 2017

	Weighted percent	Number of women	
		Weighted	Unweighted
Total	100.0	8,763	8,763
Area			
Urban	61.3	5,369	5,236
Rural	38.7	3,394	3,527
Province			
Ryanggang	3.1	273	885
North Hamgyong	9.9	868	870
South Hamgyong	13.2	1,157	878
Kangwon	6.3	552	874
Jagang	5.6	493	882
North Pyongan	11.6	1,020	873
South Pyongan	17.2	1,507	875
North Hwanghae	10.2	894	889
South Hwanghae	10.0	875	889
Pyongyang	12.8	1,123	848
Age			
15-19	13.5	1,184	1,188
15-17	8.2	716	719
18-19	5.3	469	469
20-24	14.7	1,292	1,293
25-29	14.4	1,265	1,262
30-34	13.3	1,165	1,162
35-39	12.0	1,048	1,050
40-44	15.5	1,357	1,360
45-49	16.6	1,451	1,448
Education			
Nursery or Kindergarten or None	-	-	-
Primary	0.0	2	2
Lower secondary	0.0	2	2
Upper secondary	80.1	7,017	7,093
Higher	19.9	1,742	1,666
Marital status			
Currently married	68.6	6,009	6,010
Widowed	1.9	167	164
Divorced	0.6	55	52
Separated	0.2	18	17
Never married	28.7	2,514	2,520
Motherhood and recent births			
Never gave birth	31.8	2,786	2,792
Ever gave birth	68.2	5,977	5,971
Gave birth in last two years	10.6	931	935
No birth in last two years	57.6	5,046	5,036
Wealth index 20-40-40			
20 percent lowest	19.9	1,748	2,174
40 percent middle	39.7	3,480	3,334
40 percent highest	40.3	3,535	3,255

"-" denotes 0 unweighted cases in that cell

Table SR.5.1M: Men's background characteristics

Percent and frequency distribution of men age 15-49 years by selected background characteristics, DPR Korea, 2017

	Weighted percent	Number of men	
		Weighted	Unweighted
Total	100.0	4,179	4,179
Area			
Urban	61.0	2,551	2,487
Rural	39.0	1,628	1,692
Province			
Ryanggang	3.3	136	439
North Hamgyong	10.2	427	426
South Hamgyong	13.7	573	432
Kangwon	6.4	269	425
Jagang	5.5	231	412
North Pyongan	11.7	489	416
South Pyongan	16.3	682	394
North Hwanghae	9.7	406	402
South Hwanghae	9.9	415	420
Pyongyang	13.2	551	413
Age			
15-19	12.3	513	514
15-17	8.3	345	344
18-19	4.0	168	170
20-24	10.2	425	414
25-29	13.9	579	580
30-34	16.0	670	665
35-39	13.1	546	554
40-44	16.8	701	710
45-49	17.8	745	742
Education			
Nursery or Kindergarten or None	-	-	-
Primary	-	-	-
Lower secondary	-	-	-
Upper secondary	62.7	2,620	2,653
Higher	37.3	1,559	1,526
Marital status			
Currently married	66.2	2,766	2,770
Widowed	0.3	12	12
Divorced	0.1	3	4
Separated	0.0	1	1
Never married	33.4	1,397	1,392
Fatherhood status			
Has at least one living child	63.6	2,659	2,662
Has no living children	36.4	1,520	1,517
Wealth index 20-40-40			
20 percent lowest	18.8	787	1,002
40 percent middle	39.3	1,644	1,558
40 percent highest	41.8	1,748	1,619

"-" denotes 0 unweighted cases in that cell

Tables SR.5.1W and SR.5.1M provide background characteristics of female and male respondents, age 15-49 years. The tables include information on the distribution of women and men according to area, province, age, education[10], marital status, motherhood/fatherhood status and wealth index groups.[11, 12]

Background characteristics of children age 5-17 and under 5 are presented in Tables SR.5.2 and SR.5.3. These include the distribution of children by several attributes: sex, area, province, age in months, mother's (or caretaker's) education, respondent type, functional difficulties (for age 2-4 only for children under age 5), and wealth index groups.

10.– Throughout this report, unless otherwise stated, "education" refers to highest educational level ever attended by the respondent when it is used as a background variable.

11.– 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 to highest. In 2017 DPR Korea MICS, the survey household population is ranked according to the wealth score of the household they are living in, and is divided into 3 parts: 20 percent lowest, 40 percent middle and 40 percent highest. The following assets were used in these calculations: main material of the dwelling floor, roof and exterior walls; presence in the household of electricity, fixed telephone line, radio, bedclothes chest, wardrobe and kitchen cupboard, a television, refrigerator, freezer, an electric rice cooker, washing machine and CD player, computer or tablet, mobile phone and intranet connection; presence in the household of a watch, bicycle, motorcycle/scooter, an animal drawn car; having land for agriculture; ownership of livestock: milk cows, goats, sheep, chickens, pigs, ducks and rabbits; type of household cook stove and fuel used; place of cooking; type of space heating and fuel used; type of light; source of drinking water; location of water source; type of sanitation facility; sharing of sanitation facilities. 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 lowest to highest. 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.*

12.– When describing survey results by wealth groups, appropriate terminology is used when referring to individual household members, such as for instance "women in the 40 percent highest wealth group", which is used interchangeably "women living in households in the 40 percent highest population wealth group", and similar.

Table SR.5.2: Children under 5's background characteristics

Percent and frequency distribution of children under five years of age by selected characteristics, DPR Korea, 2017

	Weighted percent	Number of under-5 children	
		Weighted	Unweighted
Total	100.0	2,275	2,275
Sex			
Male	51.2	1,164	1,160
Female	48.8	1,111	1,115
Area			
Urban	59.8	1,361	1,323
Rural	40.2	914	952
Province			
Ryanggang	3.1	71	229
North Hamgyong	9.7	221	221
South Hamgyong	13.1	298	225
Kangwon	6.5	148	233
Jagang	5.8	131	233
North Pyongan	11.6	264	224
South Pyongan	17.0	386	223
North Hwanghae	10.6	242	240
South Hwanghae	10.4	237	240
Pyogyang	12.2	278	207
Age in months			
0-5	7.5	170	178
6-11	12.5	285	278
12-23	20.0	456	457
24-35	19.8	451	451
36-47	19.9	454	454
48-59	20.2	459	457
Mother's education[A]			
Nursery or Kindergarten or None	-	-	-
Primary	0.0	1	1
Lower secondary	-	-	-
Upper secondary	81.5	1,854	1,876
Higher	18.5	420	398
Respondent to the under-5 questionnaire			
Mother	99.3	2,260	2,259
Other primary caretaker	0.7	15	16
Child's functional difficulties (age 2-4 years)[B,C]			
Has functional difficulty	1.9	26	26
Has no functional difficulty	98.1	1,339	1,337
Wealth index 20-40-40			
20 percent lowest	19.7	448	561
40 percent middle	40.1	912	870
40 percent highest	40.2	914	844

[A] 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.

[B] The results of the Child Functioning module are presented in Chapter 11.1.

[C] Children age 0-1 years are excluded, as functional difficulties are only collected for age 2-4 years.

"-" denotes 0 unweighted cases in that cell

Table SR.5.3: Children age 5-17's background characteristics

Percent and frequency distribution of children age 5-17 by selected characteristics, DPR Korea, 2017

	Weighted percent	Number of children age 5-17	
		Weighted	Unweighted
Total	100.0	4,121	4,121
Sex			
Male	50.9	2,099	2,105
Female	49.1	2,022	2,016
Area			
Urban	58.7	2,419	2,434
Rural	41.3	1,702	1,687
Province			
Ryanggang	3.1	128	408
North Hamgyong	9.9	408	421
South Hamgyong	13.2	544	400
Kangwon	6.5	267	424
Jagang	5.6	232	424
North Pyongan	11.6	479	411
South Pyongan	17.0	702	409
North Hwanghae	10.3	425	420
South Hwanghae	10.4	428	428
Pyongyang	12.3	508	376
Age			
5-9	38.5	1,585	1,583
10-14	35.5	1,464	1,453
15-17	26.0	1,072	1,085
Mother's education[A]			
Nursery or Kindergarten or None	-	-	-
Primary	0.0	1	1
Lower secondary	0.0	2	3
Upper secondary	80.4	3,313	3,347
Higher	19.5	804	769
No information	0.0	1	1
Respondent to the children age 5-17 questionnaire			
Mother	97.1	4,001	4,006
Other primary caretaker	2.9	118	114
Emancipated[B]	0.0	1	1
Child's functional difficulties[C]			
Has functional difficulty	1.0	40	43
Has no functional difficulty	99.0	4,081	4,078
Wealth index 20-40-40			
20 percent lowest	20.9	861	1,031
40 percent middle	40.3	1,661	1,576
40 percent highest	38.8	1,599	1,514

[A] In this table and throughout the report where applicable, mother's education refers to educational attainment of mothers as well as caretakers of children age 5-17, who are the respondents to the children age 5-17 questionnaire if the mother is deceased or is living elsewhere. For emancipated children this is the education status of the selected child.

[B] Children age 15-17 years were considered emancipated and individually interviewed if not living with his/her mother and the respondent to the Household Questionnaire indicated that the child does not have a primary caretaker.

[C] The results of the Child Functioning module are presented in Chapter 11.1.

"-" denotes 0 unweighted cases in that cell

4.6. Literacy

The literacy rate reflects the outcomes of primary education over the previous 30-40 years. As a measure of the effectiveness of the primary education system, it is often seen as a proxy measure of social progress and economic achievement. In MICS, literacy is assessed on the ability of the respondent to read a short simple statement or based on school attendance.

Tables SR.6.1W and SR.6.1M show the survey findings for the total number of interviewed women and men, respectively. The Youth Literacy Rate, MICS Indicator SR.2, is calculated for women and men age 15-24 years and presented in the Age disaggregate in the two tables.

Note that those who have ever attended secondary or higher education are immediately classified as literate, due to their education level and are therefore not asked to read the statement. All others who successfully read the statement are also classified as literate. The tables are designed as full distributions of the survey respondents, by level of education ever attended. The total percentage literate presented in the final column is the sum of literate individuals among those with 1) pre-primary or no education, 2) primary education and 3) those with at least some secondary education.

Table SR.6.1W: Literacy (women)

Percent distribution of women age 15-49 years by highest level of school attended and literacy, and the total percentage literate, DPR Korea, 2017

	Percent distribution of highest level attended and literacy										
	Primary		Lower secondary[A]		Upper secondary[A]		Higher[A]			Total percentage literate[1]	Number of women age 15-49 years
	Literate	Illiterate	Literate	Illiterate	Literate	Illiterate	Literate	Illiterate	Total		
Total	0.0	-	0.0	-	80.1	-	19.9	-	100.0	100.0	8,763
Area											
Urban	0.0	-	0.0	-	76.3	-	23.6	-	100.0	100.0	5,369
Rural	0.0	-	0.0	-	86.0	-	14.0	-	100.0	100.0	3,394
Province											
Ryanggang	0.0	-	0.0	-	86.5	-	13.5	-	100.0	100.0	273
North Hamgyong	0.0	-	0.0	-	80.7	-	19.3	-	100.0	100.0	868
South Hamgyong	0.0	-	0.0	-	79.8	-	20.2	-	100.0	100.0	1,157
Kangwon	0.1	-	0.0	-	83.0	-	16.9	-	100.0	100.0	552
Jagang	0.0	-	0.0	-	76.5	-	23.5	-	100.0	100.0	493
North Pyongan	0.0	-	0.0	-	86.2	-	13.8	-	100.0	100.0	1,020
South Pyongan	0.0	-	0.0	-	78.0	-	22.0	-	100.0	100.0	1,507
North Hwanghae	0.1	-	0.1	-	83.2	-	16.5	-	100.0	100.0	894
South Hwanghae	0.0	-	0.0	-	84.1	-	15.9	-	100.0	100.0	875
Pyongyang	0.0	-	0.1	-	70.0	-	29.9	-	100.0	100.0	1,123
Age											
15-24[1]	0.0	-	0.0	-	80.6	-	19.4	-	100.0	100.0	2,476
15-19	0.0	-	0.1	-	81.5	-	18.4	-	100.0	100.0	1,184
15-17	0.0	-	0.1	-	87.9	-	12.0	-	100.0	100.0	716
18-19	0.0	-	0.0	-	71.8	-	28.2	-	100.0	100.0	469
20-24	0.1	-	0.0	-	79.7	-	20.3	-	100.0	100.0	1,292
25-34	0.0	-	0.0	-	78.2	-	21.7	-	100.0	100.0	2,431
35-49	0.0	-	0.0	-	80.9	-	19.0	-	100.0	100.0	3,856
Wealth index 20-40-40											
20 percent lowest	0.0	-	0.0	-	90.0	-	10.0	-	100.0	100.0	1,748
40 percent middle	0.0	-	0.0	-	83.8	-	16.1	-	100.0	100.0	3,480
40 percent highest	0.0	-	0.0	-	71.5	-	28.5	-	100.0	100.0	3,535

[1] MICS indicator SR.2 - Literacy rate (age 15-24 years)

[A] Respondents who have attended secondary school or higher are considered literate and are not tested.

"-" denotes 0 unweighted cases in that cell

Table SR.6.1M: Literacy (men)

Percent distribution of men age 15-49 years by highest level of school attended and literacy, and the total percentage literate, DPR Korea, 2017

	Percent distribution of highest level attended and literacy						
	Upper secondary[A]		Higher[A]				
	Literate	Illiterate	Literate	Illiterate	Total	Total percentage literate[1]	Number of men age 15-49 years
Total	62.7	-	37.3	-	100.0	100.0	4,179
Area							
Urban	59.6	-	40.4	-	100.0	100.0	2,551
Rural	67.5	-	32.5	-	100.0	100.0	1,628
Province							
Ryanggang	69.4	-	30.6	-	100.0	100.0	136
North Hamgyong	59.7	-	40.3	-	100.0	100.0	427
South Hamgyong	58.7	-	41.3	-	100.0	100.0	573
Kangwon	68.0	-	32.0	-	100.0	100.0	269
Jagang	57.0	-	43.0	-	100.0	100.0	231
North Pyongan	67.7	-	32.3	-	100.0	100.0	489
South Pyongan	62.5	-	37.5	-	100.0	100.0	682
North Hwanghae	65.8	-	34.2	-	100.0	100.0	406
South Hwanghae	69.1	-	30.9	-	100.0	100.0	415
Pyongyang	56.0	-	44.0	-	100.0	100.0	551
Age							
15-24[1]	66.8	-	33.2	-	100.0	100.0	938
15-19	71.7	-	28.3	-	100.0	100.0	513
15-17	82.4	-	17.6	-	100.0	100.0	345
18-19	49.8	-	50.2	-	100.0	100.0	168
20-24	60.9	-	39.1	-	100.0	100.0	425
25-34	61.5	-	38.5	-	100.0	100.0	1,249
35-49	61.5	-	38.5	-	100.0	100.0	1,992
Wealth index 20-40-40							
20 percent lowest	74.3	-	25.7	-	100.0	100.0	787
40 percent middle	66.3	-	33.7	-	100.0	100.0	1,644
40 percent highest	54.1	-	45.9	-	100.0	100.0	1,748

[1] MICS indicator SR.2 - Literacy rate (age 15-24 years)

[A] Respondents who have attended secondary school or higher are considered literate and are not tested.

All the respondents to the men questionnaire were at least secondary school graduates and for none of them a test was applied.

"-" denotes 0 unweighted cases in that cell

4.7. Mass media and ICT

The 2017 DPR Korea MICS collected information on exposure to mass media and the use of computers and the intranet. Information was collected on exposure to newspapers/magazines, radio and television among women and men age 15-49 years.

Table SR.9.1W: Exposure to mass media (women)

Percentage of women age 15-49 years who are exposed to specific mass media on a weekly basis, DPR Korea, 2017

	Percentage of women age 15-49 years who:					
	Read a newspaper at least once a week	Listen to the radio at least once a week	Watch television at least once a week	All three media at least once a week[1]	Any media at least once a week	Number of women age 15-49 years
Total	83.6	94.6	97.7	79.7	99.7	8,763
Area						
Urban	85.1	96.0	98.3	82.2	99.8	5,369
Rural	81.1	92.3	96.7	75.7	99.5	3,394
Province						
Ryanggang	83.1	90.2	96.3	75.8	99.4	273
North Hamgyong	90.1	96.8	96.9	87.5	99.2	868
South Hamgyong	83.2	96.1	98.3	79.6	99.8	1,157
Kangwon	87.6	96.8	99.2	85.6	99.9	552
Jagang	81.7	94.9	97.7	78.3	99.8	493
North Pyongan	63.7	89.1	95.8	58.0	99.3	1,020
South Pyongan	85.3	95.9	97.7	82.0	99.9	1,507
North Hwanghae	81.3	89.7	96.9	73.6	99.7	894
South Hwanghae	83.1	95.3	97.7	78.3	100.0	875
Pyongyang	95.9	97.9	99.6	95.1	99.8	1,123
Age						
15-19	76.3	91.8	98.2	73.2	99.6	1,184
15-17	70.4	90.1	98.4	67.3	99.6	716
18-19	85.4	94.3	97.9	82.1	99.5	469
20-24	89.2	95.8	98.6	85.5	99.9	1,292
25-29	85.0	94.6	98.5	81.4	99.7	1,265
30-34	84.6	96.5	97.5	80.9	99.9	1,165
35-39	82.9	94.3	97.8	79.6	99.8	1,048
40-44	83.8	95.1	97.5	80.2	99.4	1,357
45-49	82.9	94.0	96.0	77.0	99.6	1,451
Education						
Primary	(*)	(*)	(*)	(*)	(*)	2
Lower secondary	(*)	(*)	(*)	(*)	(*)	2
Upper secondary	81.9	94.2	97.4	77.8	99.7	7,017
Higher	90.6	96.4	98.8	87.6	99.8	1,742
Wealth index 20-40-40						
20 percent lowest	78.8	91.8	96.2	73.1	99.4	1,748
40 percent middle	80.6	93.3	97.4	75.9	99.7	3,480
40 percent highest	89.0	97.3	98.7	86.7	99.8	3,535

[1] MICS indicator SR.3 - Exposure to mass media (women)

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

Table SR.9.1M: Exposure to mass media (men)

Percentage of men age 15-49 years who are exposed to specific mass media on a weekly basis, DPR Korea, 2017

	Percentage of men age 15-49 years who:			All three media at least once a week[1]	Any media at least once a week	Number of men age 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			
Total	**92.4**	**95.5**	**99.1**	**88.7**	**99.8**	**4,179**
Area						
Urban	93.0	96.4	99.4	90.3	99.8	2,551
Rural	91.3	94.0	98.7	86.3	99.9	1,628
Province						
Ryanggang	86.5	89.3	96.9	78.1	99.1	136
North Hamgyong	95.8	95.1	99.5	92.3	99.8	427
South Hamgyong	92.6	97.9	99.3	90.8	100.0	573
Kangwon	93.7	97.7	99.5	92.1	100.0	269
Jagang	85.2	96.1	99.8	83.8	100.0	231
North Pyongan	94.0	89.1	99.3	85.0	100.0	489
South Pyongan	91.6	95.9	98.7	88.3	99.5	682
North Hwanghae	86.9	93.3	98.5	81.5	99.8	406
South Hwanghae	90.2	96.5	98.5	86.8	99.7	415
Pyongyang	98.4	99.2	100.0	97.6	100.0	551
Age						
15-19	78.4	95.1	98.5	77.5	99.4	513
15-17	70.8	94.0	98.2	70.3	99.1	345
18-19	94.1	97.5	99.3	92.1	100.0	168
20-24	92.0	95.9	99.3	89.2	99.8	425
25-29	95.7	96.9	99.4	93.3	99.9	579
30-34	94.3	94.8	99.5	89.9	100.0	670
35-39	94.2	95.4	99.0	89.6	100.0	546
40-44	93.9	93.8	99.0	88.0	99.8	701
45-49	95.1	96.5	99.2	91.7	99.7	745
Education						
Upper secondary	89.6	94.2	98.9	85.1	99.8	2,620
Higher	97.0	97.5	99.5	94.9	99.8	1,559
Wealth index 20-40-40						
20 percent lowest	89.9	94.0	98.4	84.9	99.7	787
40 percent middle	91.0	93.2	98.8	85.6	99.8	1,644
40 percent highest	94.7	98.2	99.8	93.4	99.8	1,748

[1] MICS indicator SR.3 - Exposure to mass media (men)

In Table SR.9.2 presents information on the household ownership of Information and Communication Technology (ICT) equipment (radio, television, fixed telephone line or mobile telephone[13] and computer) and access to intranet.

Table SR.9.2: Household ownership of ICT equipment and access to intranet

Percentage of households with a radio, a television, a telephone and a computer, and have access to the intranet at home, DPR Korea, 2017

	Percentage of households with a:						Percentage of household that have access to the intranet at home[5, A]	Number of households
			Telephone					
	Radio[1]	Television[2]	Fixed line	Mobile phone	Any[3]	Computer[4]		
Total	94.1	98.2	45.2	69.0	74.2	18.7	1.4	8,499
Area								
Urban	95.7	98.7	61.9	80.4	86.5	25.2	1.8	5,252
Rural	91.7	97.3	18.1	50.6	54.3	8.3	0.8	3,247
Province								
Ryanggang	89.9	97.8	38.9	59.9	64.3	15.9	0.6	262
North Hamgyong	94.0	98.3	54.7	73.3	78.4	19.1	0.4	848
South Hamgyong	97.6	98.4	43.2	70.0	74.7	15.9	0.4	1,118
Kangwon	95.1	97.4	35.7	75.6	77.9	17.0	1.0	535
Jagang	95.0	96.4	39.5	71.5	77.3	21.2	3.0	474
North Pyongan	93.9	98.7	35.9	65.3	68.7	12.4	1.7	993
South Pyongan	92.2	98.2	44.6	67.0	75.3	19.1	0.4	1,461
North Hwanghae	94.3	96.8	33.6	55.8	62.2	13.3	0.8	852
South Hwanghae	89.9	97.9	23.2	52.7	55.5	9.5	0.4	835
Pyongyang	96.8	100.0	82.6	90.6	96.1	37.7	5.2	1,121
Education of household head								
Nursery or Kindergarten or None	(*)	(*)	(*)	(*)	(*)	(*)	(*)	7
Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	19
Lower secondary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	14
Upper secondary	93.4	98.1	39.2	64.2	69.3	13.9	0.9	5,384
Higher	95.5	98.5	55.9	77.7	83.1	27.2	2.3	3,075
Wealth index 20-40-40								
20 percent lowest	86.4	95.8	11.7	36.4	39.9	4.6	0.5	1,690
40 percent middle	94.3	97.8	32.3	66.1	72.1	11.0	0.8	3,410
40 percent highest	98.1	99.4	77.3	91.2	96.0	35.0	2.7	3,399

[1] MICS indicator SR.4 - Households with a radio
[2] MICS indicator SR.5 - Households with a television
[3] MICS indicator SR.6 - Households with a telephone
[4] MICS indicator SR.7 - Households with a computer
[5] MICS indicator SR.8 - Households with intranet
[A] Although the standard SDG indicator 17.8.1 is referring to the use of internet, in DPR Korea context country intranet is approximating this concept
(*) Figures that are based on fewer than 25 unweighted cases

13.– In addition to the specific question in the Household Questionnaire about whether any member of this household has a mobile phone, households are considered as owning mobile phone if any individual woman (or man) age 15-49 responded yes to the question about ownership of mobile telephones in the individual questionnaires for women and men age 15-49.

Tables SR.9.3W and SR.9.3M present the use of ICT by women and men age 15-49 based on the information about whether they have ever used computers, mobile phones or intranet and during the last three months while tables SR.9.4W and SR.9.4M present the ICT skills of women and men age 15-49 based on the information about whether they carried out computer related activities in the last 3 months.

Table SR.9.3W: Use of ICT (women)

Percentage of women age 15-49 years who have ever used a computer, the intranet and who own a mobile phone, percentage who have used during the last 3 months and percentage who have used at least once weekly during the last three months, DPR Korea, 2017

	Percentage of women age 15-49 years who:									
	Ever used a computer	Used a computer during the last 3 months[1]	Used a computer at least once a week during the last 3 months	Own a mobile phone[2]	Used a mobile phone during the last 3 months[3]	Used a mobile phone at least once a week during the last 3 months	Ever used the intranet	Used the intranet during the last 3 months[4, A]	Used the intranet at least once a week during the last three months[5]	Number of women age 15-49 years
Total	41.7	32.8	21.4	47.9	82.5	64.4	6.2	5.2	3.7	8,763
Area										
Urban	49.5	40.2	26.9	59.9	89.1	75.2	8.7	7.2	5.3	5,369
Rural	29.2	21.1	12.8	29.0	72.1	47.2	2.3	1.9	1.2	3,394
Province										
Ryanggang	38.9	22.4	13.2	35.3	63.5	46.0	2.7	2.3	1.4	273
North Hamgyong	46.3	38.9	20.1	52.8	90.2	71.2	5.5	4.0	2.1	868
South Hamgyong	38.3	30.4	20.6	40.4	81.4	60.1	2.3	1.9	1.4	1,157
Kangwon	31.9	25.9	20.3	53.7	86.9	66.4	2.8	2.3	1.0	552
Jagang	54.7	37.6	24.1	55.5	82.2	68.8	9.0	8.5	5.8	493
North Pyongan	32.4	21.2	7.9	40.5	68.7	51.0	2.0	1.4	0.5	1,020
South Pyongan	47.8	38.6	25.8	48.3	85.1	66.8	3.0	2.8	2.4	1,507
North Hwanghae	26.4	19.4	11.3	33.8	83.7	58.0	5.6	2.5	1.6	894
South Hwanghae	24.1	18.4	12.2	33.8	69.9	49.0	1.6	1.1	0.7	875
Pyongyang	67.4	58.7	46.5	77.3	98.3	91.0	24.7	21.8	17.2	1,123
Age										
15-19	72.6	63.9	43.9	23.7	73.6	50.1	10.6	8.9	6.2	1,184
15-17	75.6	68.4	48.0	13.1	68.0	42.5	8.5	6.6	4.5	716
18-19	68.1	56.9	37.5	39.8	82.2	61.7	13.9	12.3	8.9	469
20-24	59.2	46.6	32.9	52.0	88.5	69.7	11.6	9.9	7.7	1,292
25-29	47.3	34.9	24.3	54.0	85.2	68.9	8.0	6.7	4.8	1,265
30-34	39.4	30.5	18.3	50.7	85.0	68.6	4.8	3.5	2.4	1,165
35-39	31.7	23.4	14.9	52.9	80.9	66.1	4.6	4.2	3.0	1,048
40-44	26.5	20.2	11.3	51.6	81.3	63.8	3.1	2.6	1.6	1,357
45-49	19.1	13.6	7.2	49.6	82.4	63.1	1.6	1.0	0.7	1,451
Education										
Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2
Lower secondary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2
Upper secondary	35.3	27.2	17.1	43.4	80.3	60.4	3.4	2.6	1.8	7,017
Higher	67.1	55.4	39.0	66.3	91.5	80.4	17.7	15.4	11.6	1,742
Wealth index 20-40-40										
20 percent lowest	23.3	15.6	8.7	17.1	60.3	34.2	1.7	1.3	0.8	1,748
40 percent middle	35.0	26.5	16.5	40.1	81.9	58.7	3.3	2.9	1.9	3,480
40 percent highest	57.3	47.5	32.7	70.9	94.1	84.8	11.4	9.3	6.9	3,535

[1] MICS indicator SR.9 - Use of computer

[2] MICS indicator SR.10 - Ownership of mobile phone; SDG indicator 5.b.1

[3] MICS indicator SR.11 - Use of mobile phone

[4] MICS indicator SR.12a - Use of intranet (during the last 3 months); SDG indicator 17.8.1

[5] MICS indicator SR.12b - Use of intranet (at least once a week during the last 3 months)

[A] Although the standard SDG indicator 17.8.1 is referring to the internet, in DPR Korea context country intranet is approximating this concept

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

Table SR.9.3M: Use of ICT (men)

Percentage of men age 15-49 years who have ever used a computer, the intranet and who own a mobile phone, percentage who have used during the last 3 months and percentage who have used at least once weekly during the last three months, DPR Korea, 2017

	Percentage of men age 15-49 years who:									
	Ever used a computer	Used a computer during the last 3 months[1]	Used a computer at least once a week during the last 3 months	Own a mobile phone[2]	Used a mobile phone during the last 3 months[3]	Used a mobile phone at least once a week during the last 3 months	Ever used the intranet	Used the intranet during the last 3 months[4,A]	Used the intranet at least once a week during the last three months[5]	Number of men age 15-49 years
Total	**51.0**	**44.2**	**33.0**	**55.7**	**88.8**	**69.9**	**13.9**	**11.6**	**7.9**	**4,179**
Area										
Urban	59.9	53.2	41.1	66.1	93.1	78.9	19.3	16.6	11.4	2,551
Rural	37.1	30.0	20.4	39.4	82.0	55.9	5.5	3.8	2.3	1,628
Province										
Ryanggang	48.0	34.4	19.1	51.2	67.6	55.9	6.4	5.5	3.7	136
North Hamgyong	51.9	45.9	32.6	64.9	91.6	76.8	17.6	16.4	10.9	427
South Hamgyong	53.6	48.6	32.7	58.6	89.8	75.0	10.2	10.0	5.6	573
Kangwon	40.5	37.9	33.8	63.4	93.9	81.4	6.2	4.1	2.4	269
Jagang	60.8	49.7	38.2	59.3	84.0	66.8	11.9	11.9	5.1	231
North Pyongan	34.8	31.0	17.3	48.6	88.1	60.7	6.4	6.4	2.2	489
South Pyongan	51.7	42.0	30.9	42.5	83.1	60.5	6.8	5.5	3.5	682
North Hwanghae	39.5	30.5	18.3	47.4	94.6	66.0	19.2	4.7	3.5	406
South Hwanghae	38.6	30.0	22.9	40.1	81.4	52.9	3.8	2.8	1.7	415
Pyongyang	80.9	76.7	69.6	82.0	99.3	93.8	40.6	38.6	31.0	551
Age										
15-19	76.8	70.7	51.6	24.5	79.0	50.2	18.5	13.6	8.9	513
15-17	79.0	74.0	50.9	12.5	72.7	40.1	17.2	11.1	6.6	345
18-19	72.4	63.9	53.2	49.2	92.0	70.8	21.3	18.7	13.8	168
20-24	60.6	52.3	42.8	47.3	91.0	69.2	20.3	18.9	12.8	425
25-29	60.0	52.4	39.0	60.8	94.7	77.3	17.8	15.3	10.2	579
30-34	52.0	44.5	34.4	64.3	91.8	74.8	14.4	12.5	8.3	670
35-39	44.3	37.7	28.3	63.2	89.5	73.4	11.0	9.1	6.2	546
40-44	38.9	33.6	24.6	60.6	87.8	69.9	11.3	9.1	6.3	701
45-49	36.2	29.4	20.0	60.1	87.5	71.0	8.2	6.7	4.8	745
Education										
Upper secondary	36.4	30.4	19.9	45.7	85.5	62.5	5.4	4.0	2.4	2,620
Higher	75.5	67.4	55.0	72.5	94.4	82.3	28.2	24.5	17.0	1,559
Wealth index 20-40-40										
20 percent lowest	31.9	23.4	14.9	27.2	72.9	45.5	4.4	3.8	2.3	787
40 percent middle	42.8	35.8	25.3	50.3	88.9	65.8	8.0	5.9	3.2	1,644
40 percent highest	67.4	61.4	48.4	73.6	95.9	84.7	23.7	20.6	14.8	1,748

[1] MICS indicator SR.9 - Use of computer

[2] MICS indicator SR.10 - Ownership of mobile phone; SDG indicator 5.b.1

[3] MICS indicator SR.11 - Use of mobile phone

[4] MICS indicator SR.12a - Use of intranet (during the last 3 months); SDG indicator 17.8.

[5] MICS indicator SR.12b - Use of intranet (at least once a week during the last 3 months)

[A] Although the standard SDG indicator 17.8.1 is referring to the internet, in DPR Korea context country intranet is approximating this concept

Table SR.9.4W: ICT skills (women)

Percentage of women age 15-49 years who in the last 3 months have carried out computer related activities, DPR Korea, 2017

	Percentage of women age 15-49 years who in the last 3 months:										
	Copied or moved a file or folder	Used a copy and paste tool to duplicate or move information within a document	Sent e-mail with attached file, such as a document, picture or video	Used a basic arithmetic formula in a spreadsheet	Connected and installed a new device, such as a modem, camera or printer	Found, downloaded, installed and configured software	Created an electronic presentation with presentation software, including text, images, sound, video or charts	Transferred a file between a computer and other device	Wrote a computer program in any programming language	Performed at least one of the nine listed computer related activities[1]	Number of women age 15-49 years
Total	28.9	24.9	2.3	12.2	4.5	3.0	5.7	10.6	2.3	30.1	8,763
Area											
Urban	35.6	30.8	3.3	15.3	5.6	4.2	7.4	13.7	3.0	37.0	5,369
Rural	18.3	15.6	0.8	7.3	2.9	1.1	2.9	5.6	1.0	19.3	3,394
Province											
Ryanggang	21.1	18.4	0.5	4.1	2.5	1.3	0.8	7.1	0.5	21.2	273
North Hamgyong	34.9	27.8	2.0	12.7	2.9	1.8	4.6	8.2	1.3	35.2	868
South Hamgyong	24.6	20.5	0.8	9.6	3.3	1.6	2.8	10.8	1.2	26.6	1,157
Kangwon	24.1	18.3	0.4	7.9	1.2	1.3	1.6	8.8	0.2	25.1	552
Jagang	34.1	29.0	5.0	14.5	13.5	5.2	5.9	7.8	4.3	34.9	493
North Pyongan	17.0	15.1	0.2	5.7	1.0	0.7	1.3	9.9	0.8	18.3	1,020
South Pyongan	36.0	32.3	0.5	16.7	3.5	1.5	13.5	4.8	1.8	36.9	1,507
North Hwanghae	14.8	10.0	0.9	5.4	2.4	5.3	2.2	7.4	1.0	15.2	894
South Hwanghae	15.4	13.0	0.4	6.0	2.2	0.4	1.0	2.8	1.0	16.0	875
Pyongyang	54.0	50.3	11.4	27.7	13.3	9.9	12.5	31.9	8.6	56.9	1,123
Age											
15-19	59.1	52.0	3.7	28.8	5.7	5.1	11.6	19.6	6.9	61.6	1,184
15-17	62.0	55.4	2.2	30.6	5.3	3.9	11.9	18.8	7.0	65.9	716
18-19	54.7	46.9	6.2	26.0	6.4	7.0	11.2	20.9	6.7	54.9	469
20-24	42.1	37.7	5.2	20.4	9.5	7.2	9.6	17.5	4.5	43.5	1,292
25-29	30.3	27.1	3.0	13.5	6.1	3.3	6.0	11.9	2.3	31.8	1,265
30-34	26.2	21.4	1.4	10.0	4.3	2.4	5.4	8.8	1.1	27.3	1,165
35-39	19.8	16.4	2.0	6.1	2.2	1.1	3.7	6.7	0.6	20.5	1,048
40-44	17.2	13.6	1.0	5.3	2.3	1.1	2.3	6.6	0.3	18.2	1,357
45-49	11.1	9.0	0.3	2.8	1.8	0.9	2.0	3.9	0.3	11.6	1,451
Education											
Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2
Lower secondary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2
Upper secondary	23.7	19.9	1.1	8.6	2.7	1.3	4.1	7.4	1.0	24.7	7,017
Higher	50.2	45.2	7.4	26.9	12.0	10.0	12.3	23.2	7.1	52.1	1,742
Wealth index 20-40-40											
20 percent lowest	13.7	11.2	0.8	5.0	2.3	0.8	1.6	4.2	1.0	14.5	1,748
40 percent middle	23.0	19.4	0.8	8.8	2.9	1.8	4.5	6.6	0.9	23.9	3,480
40 percent highest	42.3	37.2	4.5	19.0	7.2	5.3	8.8	17.6	4.2	44.0	3,535

[1] MICS indicator SR.13 - ICT skills; SDG indicator 4.4.1

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

Table SR.9.4M: ICT skills (men)

Percentage of men age 15-49 years who in the last 3 months have carried out computer related activities, DPR Korea, 2017

	Percentage of men age 15-49 years who in the last 3 months:										
	Copied or moved a file or folder	Used a copy and paste tool to duplicate or move information within a document	Sent e-mail with attached file, such as a document, picture or video	Used a basic arithmetic formula in a spreadsheet	Connected and installed a new device, such as a modem, camera or printer	Found, downloaded, installed and configured software	Created an electronic presentation with presentation software, including text, images, sound, video or charts	Transferred a file between a computer and other device	Wrote a computer program in any programming language	Performed at least one of the nine listed computer related activities[1]	Number of men age 15-49 years
Total	39.8	36.0	6.0	22.7	10.4	8.6	11.0	18.7	6.7	41.0	4,179
Area											
Urban	47.8	43.7	8.9	27.6	13.6	11.7	14.2	23.1	8.7	49.1	2,551
Rural	27.4	24.0	1.5	14.9	5.4	3.7	6.0	11.8	3.6	28.5	1,628
Province											
Ryanggang	32.7	28.7	1.4	8.3	4.2	4.4	1.9	13.8	1.6	32.7	136
North Hamgyong	42.9	39.1	8.1	22.9	10.2	8.4	13.8	13.8	8.6	43.4	427
South Hamgyong	44.9	41.0	4.4	25.3	10.7	8.4	9.3	21.5	6.1	46.5	573
Kangwon	36.4	33.9	0.7	9.7	1.2	5.5	1.9	14.1	2.4	37.4	269
Jagang	44.8	41.6	5.6	22.2	16.9	7.8	10.9	13.6	9.5	45.3	231
North Pyongan	23.0	19.8	0.2	9.4	6.2	1.0	7.2	5.5	3.9	23.9	489
South Pyongan	40.2	32.8	1.8	25.9	6.3	4.6	10.5	17.3	5.8	41.5	682
North Hwanghae	26.0	21.0	3.2	16.4	6.2	17.4	7.5	17.6	1.7	26.5	406
South Hwanghae	28.1	26.4	0.0	14.5	5.0	1.2	3.8	7.8	3.1	29.5	415
Pyongyang	66.9	65.5	26.9	48.4	29.2	22.8	29.1	47.6	18.1	69.6	551
Age											
15-19	62.0	56.5	6.1	38.5	11.8	12.5	14.7	26.6	16.1	63.7	513
15-17	63.2	56.5	4.9	37.1	8.6	11.7	12.2	26.2	13.7	65.2	345
18-19	59.6	56.6	8.5	41.3	18.2	14.2	19.9	27.6	20.9	60.5	168
20-24	49.0	45.3	8.9	32.8	15.9	13.3	18.7	26.7	13.5	50.8	425
25-29	49.2	45.7	7.4	31.0	14.6	11.1	14.2	22.5	8.4	50.5	579
30-34	39.7	35.1	7.3	22.3	11.5	9.0	12.0	20.7	5.3	41.2	670
35-39	33.2	30.7	4.9	17.4	9.3	7.0	10.5	15.0	3.5	34.4	546
40-44	30.4	26.4	4.7	14.6	7.2	6.0	6.5	14.4	3.6	31.0	701
45-49	25.9	22.8	4.1	11.2	5.8	4.6	5.1	10.7	1.6	26.8	745
Education											
Upper secondary	25.5	21.8	2.2	11.2	3.8	2.6	4.4	10.3	2.1	26.4	2,620
Higher	63.9	59.9	12.4	42.0	21.5	18.8	22.0	32.7	14.4	65.7	1,559
Wealth index 20-40-40											
20 percent lowest	21.5	19.5	1.6	11.4	5.8	2.4	4.9	10.2	3.7	22.8	787
40 percent middle	32.3	27.8	1.7	16.7	5.1	5.2	7.0	12.3	4.3	33.3	1,644
40 percent highest	55.1	51.2	12.0	33.3	17.4	14.6	17.5	28.6	10.4	56.5	1,748

[1] MICS indicator SR.13 - ICT skills; SDG indicator 4.4.1

4.8. Children's living arrangements

The Convention on the Rights of the Child (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 with without the care of their parents for several reasons, including due to the premature death of the parents or their migration for work. 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. Understanding the children's living arrangements, including the composition of the households where they live and the relationships with their primary caregivers, is key to design targeted interventions aimed at promoting child's care and wellbeing.

Table SR.11.1 presents information on the living arrangements and orphanhood status and co-residence with parents of children under age 18.

Table SR.11.1: Children's living arrangements and orphanhood

Percent distribution of children age 0-17 years according to living arrangements, percentage of children age 0-17 years not living with a biological parent and percentage of children who have one or both parents dead, DPR Korea, 2017

	Living with both parents	Living with neither biological parent				Living with mother only		Living with father only		Missing information on father/mother	Total	Not living with biological mother	Living with neither biological parent[1]	One or both parents dead[2]	Number of children age 0-17 years
		Only father alive	Only mother alive	Both alive	Both dead	Father alive	Father dead	Mother alive	Mother dead						
Total	**93.9**	**0.0**	**0.0**	**0.7**	**0.1**	**1.5**	**2.4**	**0.7**	**0.6**	**0.0**	**100.0**	**2.1**	**0.8**	**3.2**	**8,282**
Sex															
Male	93.9	0.0	0.0	0.7	0.1	1.1	2.6	1.0	0.6	0.0	100.0	2.4	0.8	3.3	4,199
Female	94.0	0.0	0.0	0.7	0.1	1.9	2.3	0.4	0.5	0.0	100.0	1.8	0.9	3.0	4,083
Area															
Urban	93.6	0.0	0.0	0.7	0.2	1.4	2.4	0.9	0.8	0.0	100.0	2.6	0.9	3.4	4,888
Rural	94.4	0.0	0.0	0.7	0.0	1.6	2.6	0.4	0.2	0.0	100.0	1.4	0.8	2.8	3,395
Province															
Ryanggang	95.9	0.0	0.0	0.7	0.0	0.6	1.7	0.7	0.4	0.0	100.0	1.8	0.7	2.0	258
North Hamgyong	90.0	0.1	0.1	1.7	0.6	1.7	4.0	0.9	0.7	0.0	100.0	4.2	2.6	5.6	817
South Hamgyong	91.9	0.0	0.0	1.2	0.4	2.3	2.8	0.7	0.7	0.0	100.0	3.1	1.6	3.9	1,090
Kangwon	94.7	0.0	0.0	0.1	0.0	1.7	2.8	0.1	0.6	0.0	100.0	0.8	0.1	3.4	537
Jagang	96.1	0.0	0.0	0.4	0.0	1.3	1.8	0.2	0.2	0.0	100.0	0.8	0.4	2.0	469
North Pyongan	94.6	0.0	0.0	1.6	0.0	0.6	1.8	0.6	0.7	0.0	100.0	2.9	1.6	2.6	961
South Pyongan	95.3	0.0	0.0	0.2	0.0	1.4	2.1	0.6	0.4	0.1	100.0	1.2	0.2	2.4	1,410
North Hwanghae	91.5	0.0	0.0	0.3	0.0	3.4	2.2	2.1	0.5	0.0	100.0	2.9	0.3	2.7	861
South Hwanghae	96.0	0.0	0.0	0.1	0.1	0.2	3.2	0.1	0.2	0.0	100.0	0.6	0.2	3.5	861
Pyongyang	95.3	0.0	0.0	0.4	0.0	1.1	1.8	0.5	0.9	0.0	100.0	1.8	0.4	2.7	1,017
Age															
0-4	97.2	0.0	0.0	0.3	0.0	1.5	0.6	0.1	0.2	0.0	100.0	0.7	0.3	0.9	2,262
5-9	94.0	0.0	0.0	1.2	0.0	1.5	1.5	1.1	0.7	0.0	100.0	3.0	1.2	2.2	2,274
10-14	93.1	0.0	0.0	0.4	0.2	1.4	3.3	0.8	0.7	0.0	100.0	2.2	0.7	4.3	2,342
15-17	89.9	0.0	0.0	1.1	0.3	1.7	5.5	0.8	0.6	0.1	100.0	2.8	1.4	6.4	1,404
Wealth index 20-40-40															
20 percent lowest	93.7	0.1	0.0	1.1	0.2	1.8	2.6	0.4	0.2	0.0	100.0	2.0	1.3	3.0	1,730
40 percent middle	93.7	0.0	0.0	0.7	0.1	1.4	2.7	0.7	0.6	0.1	100.0	2.1	0.9	3.4	3,300
40 percent highest	94.3	0.0	0.0	0.5	0.1	1.4	2.1	0.8	0.8	0.0	100.0	2.1	0.6	2.9	3,251

[1] MICS indicator SR.18 - Children's living arrangements

[2] MICS indicator SR.19 - Prevalence of children with one or both parents dead

The 2017 DPR Korea MICS included a simple measure of one particular aspect of migration related to what is termed children left behind, i.e. for whom one or both parents have moved abroad. While the amount of literature is growing, the long-term effects of the benefits of remittances versus the potential adverse psycho-social effects are not yet conclusive, as there is somewhat conflicting evidence available as to the effects on children. Table SR.11.2 presents information on the living arrangements and co-residence with parents of children under age 18.

Table SR.11.2: Children's living arrangements and co-residence with parents

Percentage of children age 0-17 years by coresidence of parents, DPR Korea, 2017

	Percentage of children age 0-17 years with:								
	Only mother is living elsewhere[A]	Only father is living elsewhere[A]	Both mother and father are living elsewhere[A]	At least one parent living elsewhere[A]	Only mother living abroad	Only father living abroad	Both mother and father living abroad	At least one parent living abroad[1]	Number of children age 0-17 years
Total	**0.7**	**1.5**	**0.7**	**2.9**	**0.1**	**0.1**	**0.1**	**0.3**	**8,282**
Sex									
Male	1.0	1.1	0.7	2.8	0.1	0.1	0.1	0.4	4,199
Female	0.4	1.9	0.7	3.0	0.0	0.2	0.0	0.2	4,083
Area									
Urban	0.9	1.4	0.7	3.0	0.1	0.2	0.1	0.5	4,888
Rural	0.4	1.6	0.7	2.8	0.0	0.0	0.0	0.0	3,395
Province									
Ryanggang	0.7	0.6	0.7	2.0	0.0	0.0	0.0	0.0	258
North Hamgyong	0.9	1.7	1.7	4.3	0.0	0.0	0.1	0.1	817
South Hamgyong	0.7	2.3	1.2	4.2	0.4	0.1	0.1	0.6	1,090
Kangwon	0.1	1.7	0.1	1.9	0.0	0.0	0.0	0.0	537
Jagang	0.2	1.3	0.4	1.9	0.0	0.2	0.1	0.4	469
North Pyongan	0.6	0.6	1.6	2.8	0.1	0.0	0.0	0.1	961
South Pyongan	0.6	1.4	0.2	2.2	0.0	0.0	0.1	0.1	1,410
North Hwanghae	2.1	3.4	0.3	5.8	0.0	0.0	0.0	0.0	861
South Hwanghae	0.1	0.2	0.1	0.5	0.0	0.0	0.0	0.0	861
Pyongyang	0.5	1.1	0.4	2.0	0.1	0.8	0.0	1.0	1,017
Age									
0-4	0.1	1.5	0.3	1.9	0.0	0.1	0.1	0.2	2,262
5-9	1.1	1.5	1.2	3.8	0.2	0.2	0.0	0.4	2,274
10-14	0.8	1.4	0.4	2.6	0.1	0.1	0.0	0.2	2,342
15-17	0.8	1.7	1.1	3.5	0.0	0.1	0.2	0.3	1,404
Orphanhood status									
Both parents alive	0.7	1.5	0.7	3.0	0.1	0.1	0.1	0.3	8,019
Only mother alive	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	204
Only father alive	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	48
Both parents deceased	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	10
Unknown	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2
Wealth index 20-40-40									
20 percent lowest	0.4	1.8	1.1	3.3	0.0	0.0	0.0	0.0	1,730
40 percent middle	0.7	1.4	0.7	2.8	0.2	0.0	0.0	0.2	3,300
40 percent highest	0.8	1.4	0.5	2.7	0.0	0.3	0.1	0.5	3,251

[1] MICS indicator SR.20 - Children with at least one parent living abroad

[A] Includes parents living abroad as well as those living elsewhere in the country

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

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

Table SR.11.3 presents information on children under age 18 years not living with a biological parent according to relationship to head of household and those living in households headed by a family member.

Table SR.11.3: Children not in parental care

Percent distribution of children age 0-17 years not living with a biological parent according to relationship to head of household and percentage living in households headed by a family member, DPR Korea, 2017

	Percentage of children living with neither biological parent	Number of children age 0-17 years	Relationship to head of household								Total	Percentage of children living in households headed by a family member[A]	Number of children age 0-17 years not living with a biological parent
			Child is head of household	Spouse	Grandchild	Brother/ Sister	Other relative	Adopted/ Foster/ Stepchild	Other not related	Inconsistent/ Don't know/ Missing			
Total	**0.8**	**8,282**	**-**	**-**	**71.6**	**6.4**	**18.7**	**2.0**	**-**	**1.4**	**100.0**	**98.6**	**70**
Sex													
Male	0.8	4,199	-	-	(73.4)	(3.3)	(16.6)	(3.9)	-	(2.8)	100.0	(97.2)	35
Female	0.9	4,083	-	-	(69.8)	(9.5)	(20.7)	(0.0)	-	(0.0)	100.0	(100.0)	35
Area													
Urban	0.9	4,888	-	-	(63.1)	(7.3)	(24.1)	(3.2)	-	(2.3)	100.0	(97.7)	43
Rural	0.8	3,395	-	-	(85.4)	(4.9)	(9.7)	(0.0)	-	(0.0)	100.0	(100.0)	27
Province													
Ryanggang	0.7	258	-	-	(*)	(*)	(*)	(*)	-	(*)	100.0	(*)	2
North Hamgyong	2.6	817	-	-	(*)	(*)	(*)	(*)	-	(*)	100.0	(*)	21
South Hamgyong	1.6	1,090	-	-	(*)	(*)	(*)	(*)	-	(*)	100.0	(*)	17
Kangwon	0.1	537	-	-	(*)	(*)	(*)	(*)	-	(*)	100.0	(*)	1
Jagang	0.4	469	-	-	(*)	(*)	(*)	(*)	-	(*)	100.0	(*)	2
North Pyongan	1.6	961	-	-	(*)	(*)	(*)	(*)	-	(*)	100.0	(*)	15
South Pyongan	0.2	1,410	-	-	(*)	(*)	(*)	(*)	-	(*)	100.0	(*)	3
North Hwanghae	0.3	861	-	-	(*)	(*)	(*)	(*)	-	(*)	100.0	(*)	3
South Hwanghae	0.2	861	-	-	(*)	(*)	(*)	(*)	-	(*)	100.0	(*)	2
Pyongyang	0.4	1,017	-	-	(*)	(*)	(*)	(*)	-	(*)	100.0	(*)	4
Age													
0-4	0.3	2,262	-	-	(*)	(*)	(*)	(*)	-	(*)	100.0	(*)	7
5-9	1.2	2,274	-	-	(90.7)	(0.0)	(9.3)	(0.0)	-	(0.0)	100.0	(100.0)	28
10-14	0.7	2,342	-	-	(*)	(*)	(*)	(*)	-	(*)	100.0	(*)	15
15-17	1.4	1,404	-	-	(*)	(*)	(*)	(*)	-	(*)	100.0	(*)	19
Orphanhood status													
Both parents alive	0.7	8,019	-	-	82.9	3.7	11.6	0.0	-	1.7	100.0	98.3	58
Only mother alive	0.5	204	-	-	(*)	(*)	(*)	(*)	-	(*)	100.0	(*)	1
Only father alive	(2.1)	48	-	-	(*)	(*)	(*)	(*)	-	(*)	100.0	(*)	1
Both parents deceased	(*)	10	-	-	(*)	(*)	(*)	(*)	-	(*)	100.0	(*)	10
Unknown	(*)	2	-	-	(*)	(*)	(*)	(*)	-	(*)	100.0	-	0
Wealth index 20-40-40													
20 percent lowest	1.3	1,730	-	-	(*)	(*)	(*)	(*)	-	(*)	100.0	(*)	23
40 percent middle	0.9	3,300	-	-	(69.7)	(7.0)	(15.0)	(4.8)	-	(3.5)	100.0	(96.5)	28
40 percent highest	0.6	3,251	-	-	(*)	(*)	(*)	(*)	-	(*)	100.0	(*)	19

[A] Excludes households headed by the child and other not related

( ) 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

5. SURVIVE

With the SDG target (3.2) for child mortality, on ending preventable deaths of newborns and children under 5 years of age, the international community has retained the overarching goal of reducing child mortality. While the global target calls for reducing neonatal mortality to at least as low as 12 deaths per 1,000 live births and under-five mortality to at least as low as 25 deaths per 1,000 live births, reduction of child mortality continues to be one of the most important objectives in national plans and programmes in each and every country.

Mortality rates presented in this chapter are calculated from information collected in the birth histories of the Women's Questionnaires. All interviewed women were asked whether they had ever given birth, and those who had were asked to report the number of sons and daughters who live with them, the number who live elsewhere, and the number who have died. In addition, women were asked to provide detailed information on their live births, starting with the firstborn, in chronological order. This information included whether births were single or multiple, and for each live birth, sex, date of birth (month and year), and survival status. Further, for children alive at the time of survey, women were asked the current age of the child; for deceased children, the age at death was obtained. Childhood mortality rates are expressed by conventional age categories and are defined as follows:

- Neonatal mortality (NN): probability of dying within the first month of life
- Post-neonatal mortality (PNN): difference between infant and neonatal mortality rates
- Infant mortality (${}_1q_0$): probability of dying between birth and the first birthday
- Child mortality (${}_4q_1$): probability of dying between the first and the fifth birthdays
- Under-five mortality (${}_5q_0$): the probability of dying between birth and the fifth birthday

Neonatal, infant and under-five mortality rates are expressed as deaths per 1,000 live births. Child mortality is expressed as deaths per 1,000 children surviving to age one. Post-neonatal mortality is calculated as the difference between infant and neonatal mortality rates.

Table CS.1: Early childhood mortality rates

Neonatal, post-neonatal, infant, child and under-five mortality rates for five year periods preceding the survey, DPR Korea, 2017

	Neonatal mortality rate[1]	Post-neonatal mortality rate[2,A]	Infant mortality rate[3]	Child mortality rate[4]	Under-five mortality rate[5]
Years preceding the survey					
0-4	9	3	12	3	15
5-9	11	4	15	6	21
10-14	10	6	16	4	20

[1] MICS indicator CS.1 - Neonatal mortality rate; SDG indicator 3.2.2

[2] MICS indicator CS.2 - Post-neonatal mortality rate

[3] MICS indicator CS.3 - Infant mortality rate

[4] MICS indicator CS.4 - Child mortality rate

[5] MICS indicator CS.5 - Under-five mortality rate; SDG indicator 3.2.1

[A] Post-neonatal mortality rates are computed as the difference between the infant and neonatal mortality rates

Table CS.1 presents neonatal, post-neonatal, infant, child, and under-five mortality rates for the three most recent five-year periods before the survey. For each mortality rate in the table, it is possible to assess changes over time, during the last 15 years preceding the survey.

Table CS.2: Early childhood mortality rates by socioeconomic characteristics

Neonatal, post-neonatal, infant, child and under-five mortality rates for the five year period preceding the survey, by socioeconomic characteristics, DPR Korea, 2017

	Neonatal mortality rate[1]	Post-neonatal mortality rate[2,A]	Infant mortality rate[3]	Child mortality rate[4]	Under-five mortality rate[5]
Total	9	3	12	3	15
Area					
Urban	10	3	13	3	16
Rural	7	3	10	3	13
Mother's education					
Upper secondary	8	3	11	3	14
Higher	(14)	(4)	(18)	(1)	(20)
Wealth 20-40-40					
20 percent lowest	6	1	7	2	9
40 percent middle	15	5	19	4	23
40 percent highest	4	3	7	2	10

[1] MICS indicator CS.1 - Neonatal mortality rate; SDG indicator 3.2.2

[2] MICS indicator CS.2 - Post-neonatal mortality rate

[3] MICS indicator CS.3 - Infant mortality rate

[4] MICS indicator CS.4 - Child mortality rate

[5] MICS indicator CS.5 - Under-five mortality rate; SDG indicator 3.2.1

[A] Post-neonatal mortality rates are computed as the difference between the infant and neonatal mortality rates

The background characteristic "Province" is not shown in the table due to the small number of unweighted cases per disaggregation category.

( ) Figures that are based on 250-499 unweighted person-years of exposure to the risk of death.

Tables CS.2 and CS.3 provide estimates of child mortality by socioeconomic and demographic characteristics. Using the rates calculated for the 5-year period immediately preceding the survey, differentials in mortality rates by socioeconomic characteristics, such as mother's education and wealth, and by demographic characteristics such as sex and mother's age at birth are presented.

The Figure CS.1 compares the findings of this survey on under-5 mortality rates, with those from other data sources. Further qualification and analysis of the consistency and discrepancies of the findings of MICS with other data sources needs to be taken up in a more detailed and separate analysis.

Table CS.3: Early childhood mortality rates by demographic characteristics

Neonatal, post-neonatal, infant, child and under-five mortality rates for the five year period preceding the survey, by demographic characteristics, DPR Korea, 2017

	Neonatal mortality rate[1]	Post-neonatal mortality rate[2,A]	Infant mortality rate[3]	Child mortality rate[4]	Under-five mortality rate[5]
Total	9	3	12	3	15
Sex					
Male	9	3	12	5	17
Female	9	3	12	1	13
Mother's age at birth					
Less than 20	(*)	(*)	(*)	(*)	(*)
20-34	7	3	10	3	13
35-49	(*)	(*)	(*)	(*)	(*)
Birth order					
1	6	3	9	2	11
2-3	12	4	16	3	20
4-6	(*)	(*)	(*)	(*)	(*)
7+	(*)	(*)	(*)	(*)	(*)
Previous birth interval[B]					
< 2 years	(*)	(*)	(*)	(*)	(*)
2 years	(6)	(5)	(11)	(0)	(11)
3 years	(*)	(*)	(*)	(*)	(*)
4+ years	(18)	(7)	(26)	(9)	(35)

[1] MICS indicator CS.1 - Neonatal mortality rate; SDG indicator 3.2.2

[2] MICS indicator CS.2 - Post-neonatal mortality rate

[3] MICS indicator CS.3 - Infant mortality rate

[4] MICS indicator CS.4 - Child mortality rate

[5] MICS indicator CS.5 - Under-five mortality rate; SDG indicator 3.2.1

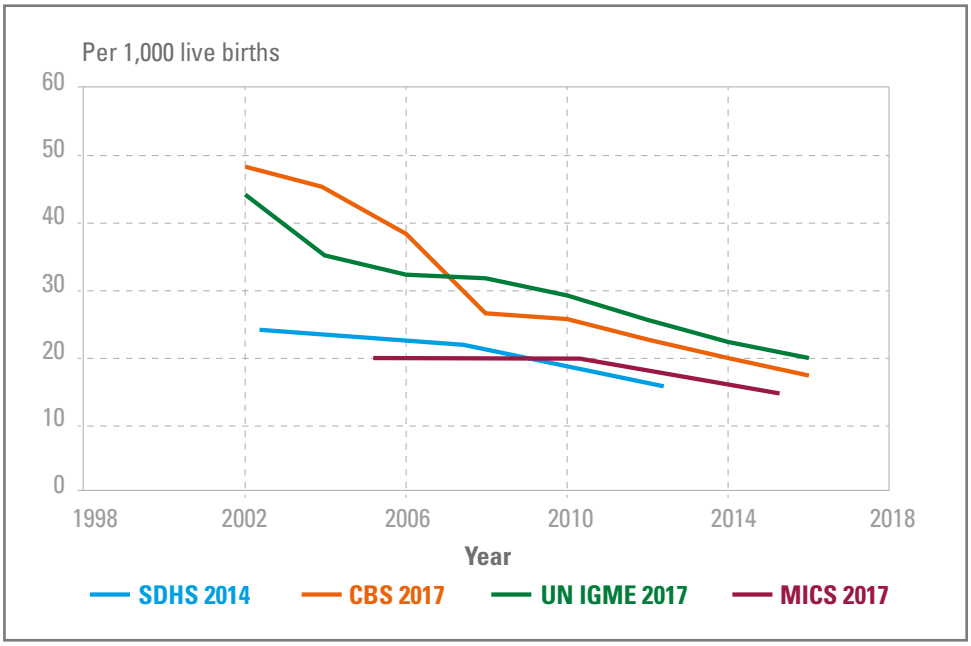
[A] Post-neonatal mortality rates are computed as the difference between the infant and neonatal mortality rates

[B] Excludes first order births

( ) Figures that are based on 250-499 unweighted person-years of exposure to the risk of death.

(*) Figures that are based on fewer than 250 unweighted person-years of exposure to the risk of death.

Figure CS.1: Early childhood mortality rates, DPR Korea, 2017



6. THRIVE – REPRODUCTIVE AND MATERNAL HEALTH

The enabling environment for safe motherhood and childbirth is critical and depends on the care and attention provided to pregnant women and newborns by communities and families, skilled health personnel and the availability of adequate health-care facilities.[14] This chapter summarizes the main findings of the survey on a range of reproductive and maternal health indicators, starting with levels of fertility and levels and trends in early childbearing. Tables on contraceptive use and unmet need for contraception are followed by a series of topics that depict main maternal health indicators, from antenatal care to postnatal care, including, antenatal care, neonatal tetanus, delivery care, birthweight, and postnatal care.

6.1. Fertility

Measures of current fertility are presented in Table TM.1.1 for the three-year period preceding the survey. A three-year period was chosen for calculating these rates to provide the most current information, while also allowing the rates to be calculated for a sufficient number of cases so as not to compromise the statistical precision of the estimates. The current fertility measures, presented in the table by urban and rural residence, are as follows:

- Age-specific fertility rates (ASFRs), expressed as the number of births per 1,000 women in a specified age group, show the age pattern of fertility. Numerators for ASFRs are calculated by identifying live births that occurred in the three-year period preceding the survey, classified according to the age of the mother (in five-year age groups) at the time of the child's birth. Denominators of the rates represent the number of woman-years lived by all interviewed women (or in simplified terms, the average number of women) in each of the five-year age groups during the specified period.
- The total fertility rate (TFR) is a synthetic measure that denotes the number of live births a woman would have if she were 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 age 15-49.
- The crude birth rate (CBR) is the number of live births per 1,000 population during the specified period.

14.– UNICEF. 2009. *State of World's Children Report. Maternal and Newborn Health.* UNICEF

Table TM.1.1: Fertility rates

Adolescent birth rate, age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the three-year period preceding the survey, by area, DPR Korea, 2017

	Urban	Rural	Total
Age[A]			
15-19[1]	1	1	1
20-24	89	105	95
25-29	169	205	182
30-34	80	91	84
35-39	21	13	18
40-44	2	2	2
45-49	0	0	0
TFR (15-49 years)[B]	1.8	2.1	1.9
GFR[C]	54.3	57.3	55.5
CBR[D]	14.2	15.0	14.5

[1] MICS indicator TM.1 - Adolescent birth rate (age 15-19 years); SDG indicator 3.7.2

[A] The age-specific fertility rates (ASFR) are the number of live births in the last 3 years, divided by the average number of women in that age group during the same period, expressed per 1,000 women. The age-specific fertility rate for women age 15-19 years is also termed as the adolescent birth rate

[B] TFR: The Total Fertility Rate is the sum of age-specific fertility rates of women age 15-49 years. 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. The rate is expressed per woman age 15-49 years

[C] GFR: The General Fertility Rate is the number of births in the last 3 years divided by the average number of women age 15-49 years during the same period, expressed per 1,000 women age 15-49 years

[D] CBR: The Crude Birth Rate is the number of births in the last 3 years, divided by the total population during the same period, expressed per 1,000 population

Table TM.2.1 presents the survey findings on adolescent birth rates and total fertility rates.

The adolescent birth rate (age-specific fertility rate for women age 15-19) is defined as the number of births to women age 15-19 years during the three-year period preceding the survey, divided by the average number of women age 15-19 (number of women-years lived between ages 15 through 19, inclusive) during the same period, expressed per 1,000 women. The adolescent birth rate is a Global SDG indicator (3.7.2) for ensuring universal access to sexual and reproductive health-care services (Target 3.7).

Table TM.2.1: Adolescent birth rate and total fertility rate

Adolescent birth rates and total fertility rates for the three-year period preceding the survey, DPR Korea, 2017

	Adolescent birth rate[1] (Age-specific fertility rate for women age 15-19 years)[A]	Total fertility rate (women age 15-49 years)[A]
Total	1	1.9
Area		
Urban	1	1.8
Rural	1	2.1
Province		
Ryanggang	0	1.9
North Hamgyong	0	1.8
South Hamgyong	0	1.9
Kangwon	0	1.9
Jagang	0	1.9
North Pyongan	6	2.0
South Pyongan	0	1.9
North Hwanghae	0	2.0
South Hwanghae	0	2.1
Pyongyang	0	1.8
Education		
Upper secondary	1	2.0
Higher	0	1.7
Wealth index 20-40-40		
20 percent lowest	0	2.1
40 percent middle	1	1.9
40 percent highest	1	1.9

[1] MICS indicator TM.1 - Adolescent birth rate (age 15-19 years); SDG indicator 3.7.2

[A] Please see Table TM.1.1 for definitions.

Selection of early childbearing indicators for women and early fatherhood indicators for men age 15-19 and 20-24 was not shown in this report due to the low indicator value (zero value for women and men, and for both age groups).

6.2. Contraception

Appropriate contraceptive use is important to the health of women and children by: 1) preventing pregnancies that are too early or too late; 2) extending the period between births; and 3) limiting the total number of children. 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.

Table TM.3.1 presents the current use of contraception for women who are currently married while table TM.3.2 presents the same information for women who are formerly married. In Table TM.3.1, use of specific methods of contraception are first presented; specific methods are then grouped into modern and traditional methods and presented as such. For women who are formerly married, in Table TM.3.2, contraceptive use is only presented by modern and traditional method categories.

Table TM.3.1: Use of contraception (currently married)

Percentage of women age 15-49 years currently married who are using (or whose partner is using) a contraceptive method, DPR Korea, 2017

	Percentage of women currently married who are using (or whose partner is using):																Number of women age 15-49 years currently married
		Modern method									Traditional method						
	No method	Female sterilization	Male sterilization	IUD	Injectables	Implants	Pill	Male condom	Female condom	Diaphragm/ Foam/ Jelly	Periodic abstinence	Withdrawal	Other	Any modern method	Any traditional method	Any method[1]	
Total	**29.7**	**1.3**	**0.0**	**65.4**	**0.2**	**0.0**	**0.3**	**0.2**	**0.6**	**0.8**	**1.3**	**0.1**	**0.0**	**69.0**	**1.3**	**70.3**	**6,009**
Area																	
Urban	30.3	1.5	0.0	63.9	0.3	0.0	0.4	0.4	0.8	1.0	1.3	0.1	0.0	68.3	1.3	69.7	3,661
Rural	28.7	1.0	0.0	67.7	0.1	0.0	0.1	0.1	0.4	0.4	1.3	0.1	0.0	69.9	1.4	71.3	2,348
Province																	
Ryanggang	19.0	2.1	0.0	75.5	0.2	0.0	0.2	0.0	1.8	0.0	1.0	0.2	0.0	79.8	1.2	81.0	187
North Hamgyong	33.4	2.7	0.0	61.5	0.2	0.0	0.0	0.0	1.5	0.0	0.7	0.0	0.0	65.9	0.7	66.6	563
South Hamgyong	37.1	1.3	0.0	55.4	0.3	0.0	0.5	0.2	0.7	3.8	0.7	0.0	0.0	62.2	0.7	62.9	800
Kangwon	22.7	1.0	0.0	73.4	0.0	0.0	0.2	0.0	0.2	2.4	0.2	0.0	0.0	77.1	0.2	77.3	382
Jagang	37.5	0.5	0.0	57.5	0.0	0.5	1.8	0.3	0.3	0.5	1.1	0.0	0.0	61.4	1.1	62.5	345
North Pyongan	30.8	1.9	0.0	65.0	0.5	0.0	0.0	0.0	1.0	0.0	0.8	0.0	0.0	68.4	0.8	69.2	721
South Pyongan	33.3	1.8	0.0	61.9	0.3	0.0	0.0	0.6	0.3	0.2	1.5	0.2	0.0	65.1	1.6	66.7	1,060
North Hwanghae	34.1	0.5	0.0	62.6	0.3	0.0	0.2	0.0	0.2	0.0	1.8	0.3	0.0	63.8	2.1	65.9	610
South Hwanghae	19.2	0.6	0.0	76.3	0.2	0.0	0.0	0.5	0.0	0.2	3.1	0.0	0.0	77.7	3.1	80.8	606
Pyongyang	20.2	0.5	0.2	74.9	0.0	0.0	0.8	0.4	1.2	0.4	1.4	0.0	0.0	78.4	1.4	79.8	735
Age																	
20-24	81.1	0.0	0.0	17.7	0.0	0.0	0.0	0.5	0.0	0.0	0.8	0.0	0.0	18.2	0.8	18.9	256
25-29	54.6	0.4	0.0	42.1	0.0	0.1	0.1	0.1	0.9	0.1	1.6	0.0	0.0	43.8	1.6	45.4	1,012
30-34	28.8	0.8	0.0	65.4	0.3	0.1	0.4	0.2	0.6	1.4	1.9	0.1	0.0	69.2	2.0	71.2	1,105
35-39	12.9	1.5	0.0	80.8	0.5	0.0	0.8	0.4	0.6	1.0	1.3	0.3	0.0	85.6	1.6	87.1	1,007
40-44	13.4	2.3	0.0	80.7	0.2	0.0	0.2	0.3	0.5	0.9	1.4	0.0	0.0	85.2	1.4	86.6	1,302
45-49	30.4	1.6	0.1	65.6	0.2	0.0	0.1	0.1	0.7	0.6	0.5	0.0	0.0	69.2	0.5	69.6	1,327
Education																	
Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1
Lower secondary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1
Upper secondary	29.2	1.2	0.0	65.9	0.2	0.0	0.3	0.3	0.7	0.8	1.3	0.1	0.0	69.4	1.4	70.8	4,848
Higher	31.8	1.7	0.0	63.3	0.2	0.0	0.5	0.2	0.5	0.6	1.1	0.0	0.0	67.1	1.1	68.2	1,159
Number of living children																	
0	98.7	0.4	0.0	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	0.0	1.3	271
1	37.4	1.3	0.0	58.0	0.2	0.0	0.3	0.2	0.4	0.7	1.4	0.0	0.0	61.2	1.5	62.6	2,256
2	19.1	1.5	0.1	75.2	0.3	0.0	0.4	0.2	0.9	0.9	1.4	0.1	0.0	79.4	1.5	80.9	2,918
3	20.0	0.8	0.0	76.4	0.2	0.0	0.1	0.5	0.6	0.9	0.6	0.0	0.0	79.4	0.6	80.0	545
4+	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	18
Wealth index 20-40-40																	
20 percent lowest	29.7	0.8	0.0	67.0	0.0	0.0	0.3	0.1	0.5	0.1	1.5	0.0	0.0	68.8	1.5	70.3	1,187
40 percent middle	32.5	1.4	0.0	62.9	0.3	0.0	0.1	0.2	0.3	1.0	1.1	0.2	0.0	66.2	1.3	67.5	2,416
40 percent highest	26.9	1.5	0.1	67.1	0.3	0.0	0.5	0.4	1.1	0.9	1.3	0.0	0.0	71.8	1.3	73.1	2,406

[1] MICS indicator TM.3 - Contraceptive prevalence rate

The category "15-19" from the background characteristic "Age" is not shown in the table because there were no recorded cases.

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

Table TM.3.2: Use of contraception (formerly married)

Percentage of women age 15-49 years formerly married who are using (or whose partner is using) a contraceptive method, DPR Korea, 2017

	Percentage of women formerly married who are using (or whose partner is using):			Number of women age 15-49 years formerly married
	Any modern method	Any traditional method	Any method	
Total	42.9	0.0	42.9	240
Area				
Urban	39.1	0.0	39.1	154
Rural	49.7	0.0	49.7	86
Province				
Ryanggang	(*)	(*)	(*)	4
North Hamgyong	(60.1)	(0.0)	(60.1)	38
South Hamgyong	(34.2)	(0.0)	(34.2)	36
Kangwon	(50.4)	(0.0)	(50.4)	18
Jagang	(*)	(*)	(*)	9
North Pyongan	(*)	(*)	(*)	28
South Pyongan	(*)	(*)	(*)	38
North Hwanghae	(*)	(*)	(*)	16
South Hwanghae	(44.2)	(0.0)	(44.2)	25
Pyongyang	(*)	(*)	(*)	28
Age				
20-24	(*)	(*)	(*)	3
25-29	(*)	(*)	(*)	12
30-34	(*)	(*)	(*)	21
35-39	(54.4)	(0.0)	(54.4)	32
40-44	(47.6)	(0.0)	(47.6)	50
45-49	42.0	0.0	42.0	122
Education				
Upper secondary	44.3	0.0	44.3	197
Higher	(36.7)	(0.0)	(36.7)	43
Number of living children				
0	(*)	(*)	(*)	17
1	41.7	0.0	41.7	92
2	51.5	0.0	51.5	113
3	(*)	(*)	(*)	17
4+	-	-	-	-
Wealth index 20-40-40				
20 percent lowest	45.8	0.0	45.8	48
40 percent middle	48.7	0.0	48.7	104
40 percent highest	34.5	0.0	34.5	88

The category "15-19" from the background characteristic "Age" is not shown in the table because there were no recorded 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

Unmet need for contraception refers to fecund women who are married 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, fecundity, and fertility preferences.

Table TM.3.3 shows the levels of unmet need and met need for contraception, and the demand for contraception satisfied for women who are currently married. The same table is reproduced in Table 3.4 for women who are not currently married.

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

- are not pregnant, and not postpartum amenorrheic[15], and are fecund[16], 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 and are not using a 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.

Met need for limiting includes women married who are using (or whose partner is using) a contraceptive method[17], 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. Summing the met need for spacing and limiting results in the total met need for contraception.

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 satisfied is defined as the proportion of women currently married who are currently using contraception, 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 contraception.

Percentage of demand for family planning satisfied with modern methods is one of the indicators used to track progress toward the Sustainable Development Goal, Target 3.7, on ensuring universal access to sexual and reproductive health-care services, including for family planning, information and education, and the integration of reproductive health into national strategies and programmes.

15.– 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

16.– 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.

17.– 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).

Table TM.3.3: Need for contraception (currently married)

Percentage of women age 15-49 years who are currently married with met and unmet need for contraception, total demand for contraception and percentage of women currently married with need for contraception who are using a modern method, DPR Korea, 2017

	Unmet need for family planning			Met need for family planning (currently using contraception)			Total demand for family planning			Percentage of demand for family planning satisfied with:		Number of women currently married	Percentage of demand for family planning satisfied with:		Number of women currently married with need for family planning
	For spacing births	For limiting births	Total	For spacing births	For limiting births	Total	For spacing births	For limiting births	Total	Any method	Modern methods		Any method	Modern methods[1]	
Total	**3.0**	**3.6**	**6.6**	**5.2**	**65.1**	**70.3**	**8.2**	**68.7**	**76.9**	**70.3**	**69.0**	**6,009**	**91.5**	**89.7**	**4,619**
Area															
Urban	3.1	3.7	6.8	6.1	63.6	69.7	9.2	67.3	76.5	69.7	68.3	3,661	91.1	89.4	2,800
Rural	2.8	3.3	6.2	3.8	67.5	71.3	6.6	70.8	77.5	71.3	69.9	2,348	92.0	90.3	1,819
Province															
Ryanggang	2.3	1.5	3.8	2.3	78.7	81.0	4.6	80.2	84.8	81.0	79.8	187	95.5	94.1	158
North Hamgyong	3.8	6.0	9.8	4.0	62.5	66.6	7.9	68.5	76.4	66.6	65.9	563	87.2	86.3	430
South Hamgyong	5.5	4.4	9.9	7.4	55.4	62.9	12.9	59.9	72.8	62.9	62.2	800	86.4	85.5	582
Kangwon	2.1	2.2	4.3	1.6	75.7	77.3	3.7	77.8	81.6	77.3	77.1	382	94.8	94.6	312
Jagang	3.4	6.0	9.5	2.4	60.1	62.5	5.8	66.1	72.0	62.5	61.4	345	86.9	85.3	248
North Pyongan	2.6	4.8	7.4	3.2	66.0	69.2	5.8	70.9	76.7	69.2	68.4	721	90.3	89.2	553
South Pyongan	2.8	2.9	5.7	8.1	58.6	66.7	10.8	61.5	72.4	66.7	65.1	1,060	92.2	89.9	767
North Hwanghae	2.8	3.9	6.7	5.5	60.5	65.9	8.3	64.4	72.6	65.9	63.8	610	90.8	87.8	443
South Hwanghae	1.8	1.6	3.4	2.7	78.1	80.8	4.5	79.7	84.3	80.8	77.7	606	96.0	92.3	510
Pyongyang	2.1	1.8	3.9	7.2	72.6	79.8	9.2	74.4	83.6	79.8	78.4	735	95.4	93.7	614
Age															
20-24	9.2	1.5	10.7	8.3	10.6	18.9	17.5	12.1	29.7	18.9	18.2	256	63.8	61.3	76
25-29	11.5	3.0	14.5	15.6	29.8	45.4	27.1	32.8	60.0	45.4	43.8	1,012	75.8	73.0	607
30-34	3.4	6.1	9.5	9.5	61.8	71.2	12.9	67.8	80.7	71.2	69.2	1,105	88.3	85.8	892
35-39	0.2	4.1	4.3	2.0	85.1	87.1	2.2	89.2	91.4	87.1	85.6	1,007	95.3	93.6	920
40-44	0.0	3.0	3.0	0.5	86.1	86.6	0.5	89.1	89.7	86.6	85.2	1,302	96.6	95.0	1,167
45-49	0.1	2.4	2.5	0.1	69.5	69.6	0.2	71.9	72.1	69.6	69.2	1,327	96.6	96.0	956
Education															
Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1	(*)	(*)	1
Lower secondary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1	(*)	(*)	1
Upper secondary	3.1	3.1	6.2	5.0	65.8	70.8	8.1	69.0	77.0	70.8	69.4	4,848	91.9	90.1	3,735
Higher	2.6	5.3	7.9	6.1	62.1	68.2	8.7	67.4	76.1	68.2	67.1	1,159	89.6	88.2	882
Wealth index 20-40-40															
20 percent lowest	2.3	3.6	5.9	3.4	66.9	70.3	5.7	70.5	76.2	70.3	68.8	1,187	92.3	90.3	905
40 percent middle	3.0	3.8	6.8	5.2	62.3	67.5	8.2	66.1	74.3	67.5	66.2	2,416	90.9	89.1	1,795
40 percent highest	3.3	3.3	6.7	6.1	67.0	73.1	9.4	70.3	79.8	73.1	71.8	2,406	91.6	90.0	1,920

[1] MICS indicator TM.4 - Need for family planning satisfied with modern contraception; SDG indicator 3.7.1 & 3.8.1

The category "15-19" from the background characteristic "Age" is not shown in the table because there were no recorded cases.

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

Table TM.3.4: Need for contraception (formerly married)

Percentage of women age 15-49 years who are formerly married with met and unmet need for contraception, total demand for contraception and percentage with need for contraception who are using a modern method, DPR Korea, 2017

	Unmet need for family planning			Met need for family planning (currently using contraception)			Total demand for family planning			Percentage of demand for family planning satisfied with:		Number of women formerly married	Percentage of demand for family planning satisfied with:		Number of women formerly married with need for family planning
	For spacing births	For limiting births	Total	For spacing births	For limiting births	Total	For spacing births	For limiting births	Total	Any method	Modern methods		Any method	Modern methods	
Total	**0.0**	**0.0**	**0.0**	**1.9**	**41.0**	**42.9**	**1.9**	**41.0**	**42.9**	**42.9**	**42.9**	**240**	**100.0**	**100.0**	**103**
Area															
Urban	0.0	0.0	0.0	1.5	37.6	39.1	1.5	37.6	39.1	39.1	39.1	154	100.0	100.0	60
Rural	0.0	0.0	0.0	2.7	47.0	49.7	2.7	47.0	49.7	49.7	49.7	86	(100.0)	(100.0)	43
Wealth index 20-40-40															
20 percent lowest	0.0	0.0	0.0	1.2	44.7	45.8	1.2	44.7	45.8	45.8	45.8	48	(100.0)	(100.0)	22
40 percent middle	0.0	0.0	0.0	3.3	45.4	48.7	3.3	45.4	48.7	48.7	48.7	104	100.0	100.0	51
40 percent highest	0.0	0.0	0.0	0.8	33.7	34.5	0.8	33.7	34.5	34.5	34.5	88	(100.0)	(100.0)	30

The background characteristics "Province", "Age" and "Education" are not shown in the table due to the small number of unweighted cases per disaggregation category.

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

6.3. Antenatal care

The antenatal period presents important opportunities for reaching pregnant women with a number of interventions that may be vital to their health and well-being and that of their infants. 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, and therefore it may provide the route for ensuring that pregnant women do, in practice, deliver with the assistance of a skilled health care provider. Antenatal visits also provide an opportunity to supply information on birth spacing, which is recognized as an important factor in improving infant survival.

WHO recommends a minimum of eight 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 and ideally have the first visit during the first trimester 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.

Antenatal care is a tracer indicator of the Reproductive and Maternal Health Dimension of SDG 3.8 Universal Health Coverage. The type of personnel providing antenatal care to women age 15-49 years who gave birth in the two years preceding is presented in Table TM.4.1.

Table TM.4.1: Antenatal care coverage

Percent distribution of women age 15-49 years with a live birth in the last two years by antenatal care provider during the pregnancy for the last birth, DPR Korea, 2017

	Provider of antenatal care[A]					
	Doctor/ assistant doctor	Nurse/ Midwife	No antenatal care	Total	Percentage of women age 15-49 years who were attended at least once by skilled health personnel[1,B]	Number of women with a live birth in the last two years
Total	**91.7**	**7.9**	**0.5**	**100.0**	**99.5**	**931**
Area						
Urban	97.0	3.0	0.1	100.0	99.9	559
Rural	83.6	15.2	1.1	100.0	98.9	372
Province						
Ryanggang	97.8	1.1	1.1	100.0	98.9	28
North Hamgyong	100.0	0.0	0.0	100.0	100.0	87
South Hamgyong	82.8	17.2	0.0	100.0	100.0	121
Kangwon	83.1	16.9	0.0	100.0	100.0	63
Jagang	92.9	7.1	0.0	100.0	100.0	55
North Pyongan	96.9	2.1	1.0	100.0	99.0	111
South Pyongan	88.0	12.0	0.0	100.0	100.0	158
North Hwanghae	87.6	11.4	1.0	100.0	99.0	98
South Hwanghae	92.7	5.2	2.1	100.0	97.9	96
Pyongyang	100.0	0.0	0.0	100.0	100.0	113
Education						
Upper secondary	91.2	8.2	0.6	100.0	99.4	752
Higher	93.6	6.4	0.0	100.0	100.0	179
Age at birth						
Less than 20	-	-	-	100.0	-	-
20-34	91.6	7.9	0.5	100.0	99.5	893
35-49	(92.0)	(8.0)	(0.0)	100.0	(100.0)	38
Wealth index 20-40-40						
20 percent lowest	83.3	16.2	0.5	100.0	99.5	181
40 percent middle	89.3	9.8	0.9	100.0	99.1	373
40 percent highest	98.0	2.0	0.0	100.0	100.0	376

[1] MICS indicator TM.5a - Antenatal care coverage (at least once by skilled health personnel)

[A] Only the most qualified provider is considered in cases where more than one provider was reported.

[B] Skilled providers include Doctor/assistant doctor and Nurse/Midwife.

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

"–" denotes 0 unweighted case in that cell or in the denominator

Table TM.4.2 shows the number of antenatal care visits during the latest pregnancy that took place within the two years preceding the survey, regardless of provider, by selected characteristics. Table TM.4.2 also provides information about the timing of the first antenatal care visit.

Table TM.4.2: Number of antenatal care visits and timing of first visit

Percentage of women age 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, DPR Korea, 2017

	Percentage of women by number of antenatal care visits:					Percent distribution of women by number of months pregnant at the time of first antenatal care visit									
	No visits	1-3 visits to any provider	4 or more visits to any provider[1]	8 or more visits to any provider[2]	DK/Missing	No antenatal care visits	Less than 4 months	4-5 months	6-7 months	8+ months	DK/Missing	Total	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
Total	**0.5**	**5.0**	**93.7**	**18.3**	**0.8**	**0.5**	**85.2**	**10.6**	**3.1**	**0.4**	**0.2**	**100.0**	**931**	**3**	**924**
Area															
Urban	0.1	4.3	94.2	18.3	1.4	0.1	88.9	8.4	2.1	0.3	0.2	100.0	559	3	558
Rural	1.1	6.0	92.9	18.3	0.0	1.1	79.8	13.8	4.5	0.5	0.3	100.0	372	3	367
Province															
Ryanggang	1.1	4.4	94.4	1.1	0.0	1.1	86.8	8.7	3.3	0.0	0.0	100.0	28	3	28
North Hamgyong	0.0	9.0	91.0	9.7	0.0	0.0	86.4	11.5	2.1	0.0	0.0	100.0	87	3	87
South Hamgyong	0.0	6.4	93.6	25.1	0.0	0.0	92.5	4.3	3.2	0.0	0.0	100.0	121	3	121
Kangwon	0.0	7.0	93.0	17.2	0.0	0.0	84.1	6.9	5.0	4.1	0.0	100.0	63	3	63
Jagang	0.0	6.1	89.9	13.0	4.0	0.0	82.8	9.1	6.1	2.0	0.0	100.0	55	3	55
North Pyongan	1.0	2.1	95.7	25.6	1.1	1.0	81.9	13.8	2.2	0.0	1.1	100.0	111	3	108
South Pyongan	0.0	4.3	93.5	41.3	2.2	0.0	82.6	14.1	3.3	0.0	0.0	100.0	158	3	158
North Hwanghae	1.0	6.0	93.0	2.0	0.0	1.0	76.5	21.5	1.0	0.0	0.0	100.0	98	3	97
South Hwanghae	2.1	7.1	89.8	3.9	1.0	2.1	80.5	9.2	7.1	0.0	1.1	100.0	96	3	93
Pyongyang	0.0	0.0	100.0	12.2	0.0	0.0	96.7	3.3	0.0	0.0	0.0	100.0	113	3	113
Education															
Upper secondary	0.6	5.1	93.3	17.3	1.0	0.6	84.4	10.6	3.6	0.5	0.3	100.0	752	3	745
Higher	0.0	4.6	95.4	22.6	0.0	0.0	88.7	10.6	0.7	0.0	0.0	100.0	179	3	179
Age at birth															
Less than 20	-	-	-	-	-	-	-	-	-	-	-	100.0	-	-	-
20-34	0.5	5.0	93.7	18.4	0.8	0.5	84.9	10.7	3.2	0.4	0.2	100.0	893	3	887
35-49	(0.0)	(4.8)	(92.6)	(15.5)	(2.6)	(0.0)	(93.2)	(6.8)	(0.0)	(0.0)	(0.0)	100.0	38	(3)	38
Wealth index 20-40-40															
20 percent lowest	0.5	6.4	93.0	13.8	0.0	0.5	76.9	14.0	7.3	0.6	0.6	100.0	181	3	179
40 percent middle	0.9	5.8	92.6	22.1	0.6	0.9	83.5	13.2	2.1	0.0	0.3	100.0	373	3	369
40 percent highest	0.0	3.5	95.0	16.7	1.5	0.0	91.0	6.3	2.0	0.7	0.0	100.0	376	3	376

[1] MICS indicator TM.5b - Antenatal care coverage (at least four times by any provider); SDG indicator 3.8.1

[2] MICS indicator TM.5c - Antenatal care coverage (at least eight times by any provider)

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

"–" denotes 0 unweighted case in that cell or in the denominator

The coverage of key services that pregnant women are expected to receive during antenatal care are shown in Table TM.4.3.

Table TM.4.3: Content of antenatal care

Percentage of women age 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, DPR Korea, 2017

	Percentage of women who, during the pregnancy of their last birth, had:				
	Blood pressure measured	Urine sample taken	Blood sample taken	Blood pressure measured, urine and blood sample taken[1]	Number of women with a live birth in the last two years
Total	96.2	91.3	90.2	87.8	931
Area					
Urban	97.5	92.0	89.2	87.2	559
Rural	94.3	90.3	91.7	88.7	372
Province					
Ryanggang	98.9	97.8	96.6	96.6	28
North Hamgyong	95.4	95.4	94.3	92.0	87
South Hamgyong	97.9	97.9	97.9	97.9	121
Kangwon	96.0	96.0	94.9	90.9	63
Jagang	95.0	88.9	88.9	82.9	55
North Pyongan	91.5	73.5	72.4	69.2	111
South Pyongan	95.7	87.0	81.7	79.5	158
North Hwanghae	97.0	91.9	96.0	91.9	98
South Hwanghae	95.9	93.7	90.7	87.7	96
Pyongyang	100.0	98.8	98.8	98.8	113
Education					
Upper secondary	95.7	90.7	90.4	88.1	752
Higher	98.3	93.6	89.2	86.6	179
Age at birth					
Less than 20	-	-	-	-	-
20-34	96.1	91.3	90.1	87.9	893
35-49	(98.5)	(91.3)	(91.1)	(86.5)	38
Wealth index 20-40-40					
20 percent lowest	94.8	90.8	91.7	87.9	181
40 percent middle	94.2	88.2	86.5	83.9	373
40 percent highest	98.8	94.6	93.1	91.7	376

[1] MICS indicator TM.6 - Content of antenatal care

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

"–" denotes 0 unweighted case in that cell or in the denominator

6.4. Neonatal tetanus

Tetanus immunization during pregnancy can be life-saving for both the mother and the infant.

SDG 3.1 aims at reducing by 2030 the global maternal mortality ratio to less than 70 per 100,000 live births. Eliminating maternal tetanus is one affected strategy to achieve SDG target.

The strategy for preventing maternal and neonatal tetanus is to ensure that all pregnant women receive at least two doses of tetanus toxoid vaccine. If a woman has not received at least two doses of tetanus toxoid during a particular pregnancy, she (and her newborn) are also considered to be protected against tetanus if the woman:

- Received at least two doses of tetanus toxoid vaccine, the last within the previous 3 years;
- Received at least 3 doses, the last within the previous 5 years;
- Received at least 4 doses, the last within the previous 10 years;
- Received 5 or more doses anytime during her life.[18]

To assess the status of tetanus vaccination coverage, women who had a live birth during the two years before the survey were asked if they had received tetanus toxoid injections during the pregnancy for their most recent birth, and if so, how many. Women who did not receive two or more tetanus toxoid vaccinations during this recent pregnancy were then asked about tetanus toxoid vaccinations they may have previously received.

Table TM.5.1 shows the protection status from tetanus of women who have had a live birth within the last 2 years.

Table TM.5.1: Neonatal tetanus protection

Percentage of women age 15-49 years with a live birth in the last 2 years protected against neonatal tetanus, DPR Korea, 2017

	Percentage of women who received at least 2 doses during last pregnancy	Percentage of women who did not receive two or more doses during last pregnancy but received:				Protected against tetanus[1]	Number of women with a live birth in the last 2 years
		2 doses, the last within prior 3 years	3 doses, the last within prior 5 years	4 doses, the last within prior 10 years	5 or more doses during lifetime		
Total	80.3	3.8	0.0	0.0	0.0	84.1	931
Area							
Urban	81.3	2.9	0.0	0.0	0.0	84.3	559
Rural	78.8	5.0	0.0	0.0	0.0	83.9	372
Province							
Ryanggang	48.3	11.1	0.0	0.0	0.0	59.4	28
North Hamgyong	83.9	1.3	0.0	0.0	0.0	85.2	87
South Hamgyong	85.0	1.1	0.0	0.0	0.0	86.0	121
Kangwon	69.2	6.0	0.0	0.0	0.0	75.2	63
Jagang	53.8	21.2	0.0	0.0	0.0	75.0	55
North Pyongan	69.1	9.6	0.0	0.0	0.0	78.6	111
South Pyongan	83.7	1.1	0.0	0.0	0.0	84.8	158
North Hwanghae	84.8	1.0	0.0	0.0	0.0	85.8	98
South Hwanghae	82.8	1.0	0.0	0.0	0.0	83.8	96
Pyongyang	100.0	0.0	0.0	0.0	0.0	100.0	113
Mother's education							
Upper secondary	80.9	3.3	0.0	0.0	0.0	84.2	752
Higher	77.8	6.0	0.0	0.0	0.0	83.8	179
Wealth index 20-40-40							
20 percent lowest	74.3	5.4	0.0	0.0	0.0	79.7	181
40 percent middle	79.6	2.3	0.0	0.0	0.0	81.9	373
40 percent highest	84.0	4.5	0.0	0.0	0.0	88.5	376

[1] MICS indicator TM.7 - Neonatal tetanus protection

"–" denotes 0 unweighted case in that cell or in the denominator

18.– Deming, M.S. et al. 2002. *Tetanus toxoid coverage as an indicator of serological protection against neonatal tetanus.* Bulletin of the World Health Organization 80(9):696-703

6.5. Delivery care

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 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 TM.6.1 presents the percent distribution of women age 15-49 who had a live birth in the two years preceding the survey by place of delivery, and the percentage of births delivered in a health facility, according to background characteristics.

Table TM.6.1: Place of delivery

Percent distribution of women age 15-49 years with a live birth in the last two years by place of delivery of their last birth, DPR Korea, 2017

	Place of delivery				
	Public sector health facility	Home	Total	Delivered in health facility[1]	Number of women with a live birth in the last two years
Total	92.2	7.8	100.0	92.2	931
Area					
Urban	95.4	4.6	100.0	95.4	559
Rural	87.3	12.7	100.0	87.3	372
Province					
Ryanggang	93.5	6.5	100.0	93.5	28
North Hamgyong	94.4	5.6	100.0	94.4	87
South Hamgyong	94.6	5.4	100.0	94.6	121
Kangwon	90.9	9.1	100.0	90.9	63
Jagang	92.0	8.0	100.0	92.0	55
North Pyongan	90.5	9.5	100.0	90.5	111
South Pyongan	88.0	12.0	100.0	88.0	158
North Hwanghae	93.0	7.0	100.0	93.0	98
South Hwanghae	86.6	13.4	100.0	86.6	96
Pyongyang	100.0	0.0	100.0	100.0	113
Education					
Upper secondary	92.1	7.9	100.0	92.1	752
Higher	92.6	7.4	100.0	92.6	179
Age at birth					
Less than 20	-	-	100.0	-	-
20-34	92.1	7.9	100.0	92.1	893
35-49	(92.8)	(7.2)	100.0	(92.8)	38
Number of antenatal care visits					
None	(*)	(*)	100.0	(*)	4
1-3 visits	67.5	32.5	100.0	67.5	47
4+ visits	93.6	6.4	100.0	93.6	872
8+ visits	91.5	8.5	100.0	91.5	170
DK/Missing	(*)	(*)	100.0	(*)	8
Wealth index 20-40-40					
20 percent lowest	82.7	17.3	100.0	82.7	181
40 percent middle	91.3	8.7	100.0	91.3	373
40 percent highest	97.6	2.4	100.0	97.6	376

[1] MICS indicator TM.8 - Institutional deliveries

( ) 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

About three quarters of all maternal deaths occur due to direct obstetric causes.[19] 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 transport is available to a referral facility for obstetric care. The skilled attendant at delivery indicator is used to track progress toward the Sustainable Development Goal 3.1 of reducing maternal mortality and it is SDG indicator 3.1.2.

The MICS included a number of questions to assess the proportion of births attended by a skilled attendant. According to the revised definition[20], skilled health personnel, as referenced by SDG indicator 3.1.2, are competent maternal and newborn health professionals educated, trained and regulated to national and international standards. They are competent to: (i) provide and promote evidence-based, human-rights-based, quality, socio-culturally sensitive and dignified care to women and their newborns; (ii) facilitate physiological processes during labour to ensure clean and safe birth; and (iii) identify and manage or refer women and/or newborns with complications. In addition, as part of an integrated team of maternal and newborn health professionals (including midwives, nurses, obstetricians, paediatricians and anaesthesiologists), they perform all signal functions of emergency maternal and newborn care to optimize the health and well-being of mothers and newborns. Within an enabling environment, midwives trained to International Confederation of Midwives standards can provide almost all of the essential care needed for women and newborns.

Table TM.6.2 presents information on assistance during delivery. Table TM.6.2 also shows information on women who delivered by caesarean 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.

19.– 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

20.– *Defining competent maternal and newborn health professionals.* Background document to the joint statement by WHO, UNFPA, UNICEF, ICM, ICN, FIGO and IPA: Definition of skilled health personnel providing care during childbirth. 2018

Table TM.6.2: Assistance during delivery and caesarean section

Percent distribution of women age 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, DPR Korea, 2017

	Person assisting at delivery					Percent delivered by C-section			Number of women who had a live birth in the last two years
	Skilled attendant								
	Doctor/ assistant doctor	Nurse/ Midwife	Relative/Friend	Total	Delivery assisted by any skilled attendant[1]	Decided before onset of labour pains	Decided after onset of labour pains	Total[2]	
Total	**89.5**	**10.0**	**0.5**	**100.0**	**99.5**	**10.4**	**2.6**	**12.9**	**931**
Area									
Urban	95.3	4.7	0.0	100.0	100.0	13.1	3.2	16.3	559
Rural	80.8	18.0	1.3	100.0	98.7	6.2	1.7	7.9	372
Province									
Ryanggang	98.9	1.1	0.0	100.0	100.0	4.3	3.4	7.7	28
North Hamgyong	100.0	0.0	0.0	100.0	100.0	16.1	3.7	19.8	87
South Hamgyong	94.6	5.4	0.0	100.0	100.0	11.9	2.1	14.0	121
Kangwon	83.2	16.8	0.0	100.0	100.0	9.1	4.1	13.1	63
Jagang	95.0	5.0	0.0	100.0	100.0	9.2	7.1	16.3	55
North Pyongan	88.6	11.4	0.0	100.0	100.0	11.7	0.0	11.7	111
South Pyongan	80.4	18.5	1.1	100.0	98.9	8.6	2.1	10.8	158
North Hwanghae	75.5	22.5	2.0	100.0	98.0	4.1	4.1	8.1	98
South Hwanghae	89.8	9.2	1.1	100.0	98.9	6.1	2.0	8.1	96
Pyongyang	100.0	0.0	0.0	100.0	100.0	17.4	1.2	18.6	113
Education									
Upper secondary	89.1	10.3	0.6	100.0	99.4	8.1	2.3	10.5	752
Higher	91.3	8.7	0.0	100.0	100.0	19.8	3.5	23.4	179
Age at birth									
Less than 20	-	-	-	100.0	-	-	-	-	-
20-34	89.3	10.3	0.4	100.0	99.6	10.4	2.2	12.5	893
35-49	(94.7)	(2.6)	(2.6)	100.0	(97.4)	(11.0)	(11.3)	(22.3)	38
Number of antenatal care visits									
None	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	4
1-3 visits	78.9	15.2	5.9	100.0	94.1	9.8	4.8	14.6	47
4+ visits	90.0	9.9	0.1	100.0	99.9	10.4	2.4	12.8	872
8+ visits	87.9	12.1	0.0	100.0	100.0	10.4	2.0	12.4	170
DK/Missing	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	8
Place of delivery									
Home	51.0	42.4	6.6	100.0	93.4	0.0	0.0	0.0	73
Public Health facility	92.8	7.2	0.0	100.0	100.0	11.3	2.8	14.0	858
Wealth index 20-40-40									
20 percent lowest	82.9	16.0	1.1	100.0	98.9	5.4	2.0	7.4	181
40 percent middle	85.2	14.0	0.8	100.0	99.2	8.3	2.9	11.2	373
40 percent highest	96.9	3.1	0.0	100.0	100.0	14.8	2.5	17.3	376

[1] MICS indicator TM.9 - Skilled attendant at delivery; SDG indicator 3.1.2

[2] MICS indicator TM.10 - Caesarean section

( ) 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

6.6. Birthweight

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. Those who survive may have impaired immune function and increased risk of disease; they are likely to remain undernourished, with reduced muscle strength, throughout their lives, and suffer a higher incidence of diabetes and heart disease in later life. Children born with low birth weight also risk a lower IQ and cognitive disabilities, affecting their performance in school and their job opportunities as adults.

In the developing world, low birth weight stems primarily from the mother's poor health and nutrition. Three factors have most impact: the mother's poor nutritional status before conception, short stature (due mostly to under nutrition and infections during her childhood), and poor nutrition during pregnancy. Inadequate weight gain during pregnancy is particularly important since it accounts for a large proportion of foetal growth retardation. Moreover, diseases such as diarrhoea and malaria, which are common in many developing countries, can significantly impair foetal growth if the mother becomes infected while pregnant.

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

One of the major challenges in measuring the incidence of low birth weight is that more than half of infants in the developing world are not weighed at birth. In the past, most estimates of low birth weight for developing countries were based on data compiled from health facilities. However, these estimates are biased for most developing countries because the majority of newborns are not delivered in facilities, and those who are represent only a selected sample of all births.

The percentage of births weighing below 2,500 grams is presented in table TM.7.1 and it is only estimated from the mother's recall of the child's weight at birth. Card information was not included in the questionnaire in DPR Korea because children's health cards are kept in the health facilities and not available at home.

Table TM.7.1: Infants weighed at birth

Percentage of last live-born children in the last two years weighed at birth and percentage of those weighed at birth estimated to have weighed below 2,500 grams at birth, DPR Korea, 2017

	Percentage of live births weighed at birth from recall[1,A]	Number of last live-born children in the last two years	Percentage of weighed live births recorded below 2,500 grams (crude low birth-weight) from recall[B]	Number of last live-born children in the last two years with recalled birthweight
Total	90.3	931	3.1	840
Area				
Urban	92.9	559	2.0	519
Rural	86.4	372	4.9	321
Province				
Ryanggang	95.6	28	2.3	27
North Hamgyong	98.9	87	4.6	86
South Hamgyong	94.6	121	2.3	115
Kangwon	91.9	63	2.1	58
Jagang	70.4	55	4.4	38
North Pyongan	75.5	111	9.9	84
South Pyongan	95.6	158	1.2	151
North Hwanghae	86.8	98	1.2	85
South Hwanghae	86.6	96	5.9	84
Pyongyang	100.0	113	0.0	113
Mother's education				
Upper secondary	89.3	752	3.5	671
Higher	94.3	179	1.7	169
Mother's age at birth				
Less than 20 years	-	0	-	0
20-34 years	90.4	893	3.1	807
35-49 years	(88.1)	38	(3.5)	33
Place of delivery				
Home	40.3	73	(0.0)	29
Public Health facility	94.6	858	3.2	811
Birth order				
1	90.4	528	2.4	477
2-3	90.3	400	4.1	361
4-5	(*)	2	(*)	2
6+	-	0	-	0
Wealth index 20-40-40				
20 percent lowest	81.7	181	6.4	148
40 percent middle	90.4	373	2.3	338
40 percent highest	94.3	376	2.5	355

[1] MICS indicator TM.11 - Infants weighed at birth

[A] The indicator includes children that were reported weighed at birth, but with no actual birthweight recalled

[B] The values here are as reported by respondent. The total crude low birth-weight typically requires adjustment for missing birth-weights, as well as heaping, particularly at exactly 2,500 gram. The results presented here cannot be considered to represent the precise rate of low birth-weight (very likely an underestimate) and therefore not reported as a MICS indicator.

( ) 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

6.7. Postnatal care

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[21] and the majority of these deaths occur within a day or two of birth[22], which is also the time when the majority of maternal deaths occur[23].

The Post-natal Health Checks (PNC) module includes information on newborns' and mothers' contact with a provider, and specific questions on content of care. Measuring contact alone is important 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 more difficult to measure, particularly because the respondent is asked to recall services delivered up to two years preceding the interview.

In DPR Korea, Government health system is universal and free of charge and all women are enjoying antenatal, at delivery and postnatal medical services. The Government pay special care to pregnant and lactating women and protect women and children from negative effect due to fecundity and frequent delivery. By DPR Korea health policy, the number of visits for antenatal care for pregnant women in clinics or hospitals is 6 times during the pregnancy (17 times during the pregnancy before 2015) and 5 times for postnatal visits.

Table TM.8.1 presents the percent distribution of women age 15-49 who gave 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.

21.– UN Interagency Group for Child Mortality Estimation. 2013. *Levels and Trends in Child Mortality: Report 2013*

22.– Lawn, JE et al. 2005. *4 million neonatal deaths: When? Where? Why?* Lancet 2005; 365:891–900.

23.– WHO, UNICEF, UNFPA, The World Bank. 2012. *Trends in Maternal Mortality: 1990-2010.* World Health Organization.

Table TM.8.1: Post-partum stay in health facility

Percent distribution of women age 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, DPR Korea, 2017

	Duration of stay in health facility							
	Less than 6 hours	6-11 hours	12-23 hours	1-2 days	3 days or more	Total	12 hours or more[1]	Number of women who had their last birth delivered in a health facility in the last 2 years
Total	**3.2**	**0.6**	**0.8**	**10.1**	**85.2**	**100.0**	**96.1**	**858**
Area								
Urban	3.7	0.7	1.3	9.0	85.2	100.0	95.6	534
Rural	2.5	0.4	0.0	11.9	85.1	100.0	97.1	324
Province								
Ryanggang	1.2	1.2	0.0	9.3	88.4	100.0	97.7	26
North Hamgyong	0.0	0.0	2.4	7.3	90.3	100.0	100.0	82
South Hamgyong	4.7	0.0	0.0	3.5	91.9	100.0	95.3	115
Kangwon	1.1	0.0	0.0	3.3	95.6	100.0	98.9	57
Jagang	11.7	1.1	0.0	2.2	85.0	100.0	87.2	51
North Pyongan	7.1	3.5	0.0	14.2	75.2	100.0	89.4	100
South Pyongan	2.4	0.0	3.7	25.9	68.0	100.0	97.6	139
North Hwanghae	3.3	0.0	0.0	21.9	74.7	100.0	96.7	92
South Hwanghae	1.2	1.1	0.0	1.2	96.5	100.0	97.7	84
Pyongyang	1.0	0.0	0.0	0.0	99.0	100.0	99.0	113
Education								
Upper secondary	3.6	0.8	0.7	10.2	84.7	100.0	95.6	692
Higher	1.8	0.0	1.2	9.7	87.4	100.0	98.2	166
Age at birth								
Less than 20	-	-	-	-	-	100.0	-	-
20-34	3.4	0.6	0.9	10.0	85.2	100.0	96.0	823
35-49	(0.0)	(0.0)	(0.0)	(13.6)	(86.4)	100.0	(100.0)	35
Type of health facility								
Public	3.2	0.6	0.8	10.1	85.2	100.0	96.1	858
Type of delivery								
Vaginal birth	3.5	0.7	1.0	11.4	83.4	100.0	95.8	738
C-section	1.5	0.3	0.0	1.8	96.4	100.0	98.2	120
Wealth index 20-40-40								
20 percent lowest	3.1	0.8	0.0	3.7	92.3	100.0	96.1	150
40 percent middle	2.5	0.8	1.3	15.4	79.9	100.0	96.6	341
40 percent highest	4.0	0.3	0.7	7.7	87.2	100.0	95.7	367

[1] MICS indicator TM.12 - Post-partum stay in health facility

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

"–" denotes 0 unweighted case in that cell or in the denominator

Safe motherhood programmes recommend 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 TM.8.2 shows the percentage of newborns born in the last two years who received health checks and post-natal care visits from any health provider after birth.

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 health check after birth received while in the health facility and at home (column 1), regardless of timing, as well as PNC visits within two days of delivery[24] (columns 2, 3, and 4).

24.– PNC visits, for mothers and for babies, within two days of delivery, is a WHO recommendation that has been identified as a priority indicator for the Global Strategy for Women's, Children's and Adolescents' Health (2016-2030) and other related global monitoring frameworks like Every Newborn Action Plan and Ending Preventable Maternal Mortality.

Table TM.8.2: Post-natal health checks for newborns

Percentage of women age 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, DPR Korea, 2017

	Health check following birth while in facility or at home[A]	PNC visit for newborns[B]							Total	Post-natal health check for the newborn[1,C]	Number of last live births in the last two years
		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	DK/ Missing			
Total	98.2	0.7	1.8	2.3	35.1	49.5	10.1	0.5	100.0	98.6	931
Sex of newborn											
Male	98.0	0.4	2.3	1.8	34.9	47.8	12.6	0.2	100.0	98.4	481
Female	98.5	0.9	1.1	2.9	35.4	51.3	7.5	0.9	100.0	98.8	450
Area											
Urban	98.8	0.9	1.3	1.5	32.2	53.0	10.4	0.6	100.0	98.9	559
Rural	97.4	0.3	2.4	3.5	39.5	44.1	9.7	0.5	100.0	98.1	372
Province											
Ryanggang	100.0	0.0	0.0	1.1	47.3	49.4	2.2	0.0	100.0	100.0	28
North Hamgyong	98.9	0.0	0.0	1.1	32.2	57.5	9.2	0.0	100.0	98.9	87
South Hamgyong	100.0	2.2	2.1	0.0	24.1	59.6	12.0	0.0	100.0	100.0	121
Kangwon	98.0	2.1	1.2	3.9	51.5	36.5	4.9	0.0	100.0	99.0	63
Jagang	98.0	0.0	1.0	1.0	12.3	80.7	3.0	2.0	100.0	98.0	55
North Pyongan	97.7	1.1	1.0	2.1	26.7	40.3	27.7	1.0	100.0	97.7	111
South Pyongan	97.8	0.0	6.6	4.4	47.8	29.3	10.8	1.1	100.0	98.9	158
North Hwanghae	94.9	1.0	1.0	3.1	42.0	38.7	13.2	1.0	100.0	94.9	98
South Hwanghae	97.8	0.0	0.0	5.2	56.2	35.5	3.1	0.0	100.0	98.9	96
Pyongyang	100.0	0.0	0.0	0.0	14.7	83.0	2.3	0.0	100.0	100.0	113
Mother's education											
Upper secondary	97.9	0.5	1.8	2.1	35.6	49.4	10.0	0.5	100.0	98.3	752
Higher	99.7	1.3	1.4	3.2	33.3	49.7	10.5	0.6	100.0	99.7	179
Mother's age at birth											
Less than 20	-	-	-	-	-	-	-	-	100.0	-	-
20-34	98.5	0.6	1.6	2.4	35.0	50.0	9.9	0.6	100.0	98.8	893
35-49	(92.8)	(3.1)	(4.6)	(1.5)	(38.4)	(36.3)	(16.2)	(0.0)	100.0	(92.8)	38
Place of delivery											
Home	88.9	5.7	12.4	23.7	23.7	10.7	22.2	1.6	100.0	93.7	73
Public Health facility	99.0	0.2	0.9	0.5	36.1	52.8	9.1	0.4	100.0	99.0	858
Wealth index 20-40-40											
20 percent lowest	98.4	0.0	1.4	3.6	44.0	42.2	7.9	0.9	100.0	98.9	181
40 percent middle	97.0	0.9	2.7	2.9	35.6	45.9	12.0	0.1	100.0	97.6	373
40 percent highest	99.4	0.8	1.0	1.2	30.4	56.5	9.3	0.7	100.0	99.4	376

[1] MICS indicator TM.13 - Post-natal health check for the newborn

[A] Health checks by any health provider following facility births (before discharge from facility) or following home births (before departure of provider from home).

[B] 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[a] above).

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

In Table TM.8.3, newborns who received the first PNC visit within one week of birth are distributed by location and type of provider of service. As defined above, a visit does not include a check in the facility or at home following birth.

Table TM.8.3: Post-natal care visits for newborns within one week of birth

Percent distribution of women age 15-49 years with a live birth in the last two years whose last live birth received a post-natal care (PNC) visit within one week of birth, by location and provider of the first PNC visit, DPR Korea, 2017

	Location of first PNC visit for newborns			Provider of first PNC visit for newborns			
	Home	Public Sector	Total	Doctor/ assistant doctor	Nurse/ midwife	Total	Number of last live births in the last two years with a PNC visit within the first week of life
Total	**69.1**	**30.9**	**100.0**	**87.2**	**12.8**	**100.0**	**371**
Sex of newborn							
Male	66.0	34.0	100.0	87.4	12.6	100.0	190
Female	72.4	27.6	100.0	87.0	13.0	100.0	182
Area							
Urban	59.8	40.2	100.0	92.4	7.6	100.0	201
Rural	80.2	19.8	100.0	81.0	19.0	100.0	170
Province							
Ryanggang	(93.1)	(6.9)	100.0	(100.0)	(0.0)	100.0	14
North Hamgyong	(89.7)	(10.3)	100.0	(100.0)	(0.0)	100.0	29
South Hamgyong	(88.7)	(11.3)	100.0	(92.6)	(7.4)	100.0	34
Kangwon	65.4	34.6	100.0	77.9	22.1	100.0	37
Jagang	(*)	(*)	100.0	(*)	(*)	100.0	8
North Pyongan	(41.1)	(58.9)	100.0	(96.6)	(3.4)	100.0	34
South Pyongan	37.4	62.6	100.0	77.6	22.4	100.0	93
North Hwanghae	(91.4)	(8.6)	100.0	(86.8)	(13.2)	100.0	46
South Hwanghae	98.4	1.6	100.0	91.8	8.2	100.0	59
Pyongyang	(*)	(*)	100.0	(*)	(*)	100.0	17
Mother's education							
Upper secondary	71.8	28.2	100.0	86.4	13.6	100.0	301
Higher	57.8	42.2	100.0	90.8	9.2	100.0	70
Mother's age at birth							
Less than 20	-	-	100.0	-	-	100.0	-
20-34	69.9	30.1	100.0	86.8	13.2	100.0	353
35-49	(*)	(*)	100.0	(*)	(*)	100.0	18
Place of delivery							
Home	(87.8)	(12.2)	100.0	(64.4)	(35.6)	100.0	48
Public Health facility	66.4	33.6	100.0	90.6	9.4	100.0	324
Wealth index 20-40-40							
20 percent lowest	86.1	13.9	100.0	83.4	16.6	100.0	89
40 percent middle	69.9	30.1	100.0	82.6	17.4	100.0	157
40 percent highest	56.2	43.8	100.0	95.6	4.4	100.0	126

( ) 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

Thermal care is essential elements of newborn care which contributes to keeping the baby stable and preventing hypothermia. Table TM.8.4 presents the percentage of last-born children in the last 2 years who were dried after birth, percentage who were given skin to skin contact and percent distribution of timing of first bath.

Table TM.8.4: Thermal care for newborns

Percentage of last-born children in the last 2 years who were dried after birth, percentage who were given skin to skin contact and percent distribution of timing of first bath, DPR Korea, 2017

	Percentage of children who were:		Timing of first bath						
	Dried (wiped) after birth[1]	Given skin-to-skin contact with mother[2]	Less than 6 hours after birth	6-23 hours after birth	More than 24 hours after birth[3]	Never bathed[A]	DK/Don't remember	Total	Number of last-born children in the last two years
Total	**87.3**	**26.9**	**6.3**	**1.4**	**89.4**	**0.8**	**2.1**	**100.0**	**931**
Sex of newborn									
Male	85.1	26.9	6.7	1.3	89.8	0.8	1.5	100.0	481
Female	89.7	27.0	5.8	1.5	89.1	0.9	2.7	100.0	450
Area									
Urban	85.9	29.1	6.0	1.4	88.9	1.0	2.7	100.0	559
Rural	89.4	23.7	6.7	1.4	90.2	0.6	1.2	100.0	372
Province									
Ryanggang	77.9	30.7	2.2	2.2	95.6	0.0	0.0	100.0	28
North Hamgyong	88.5	14.0	3.4	0.0	95.4	0.0	1.2	100.0	87
South Hamgyong	91.2	47.8	12.1	0.0	85.7	0.0	2.2	100.0	121
Kangwon	83.5	13.2	6.1	0.0	90.8	1.0	2.1	100.0	63
Jagang	89.9	20.3	18.3	4.1	76.6	0.0	1.0	100.0	55
North Pyongan	92.4	28.7	16.1	3.2	75.6	3.0	2.1	100.0	111
South Pyongan	90.3	16.6	0.0	2.2	91.4	1.1	5.3	100.0	158
North Hwanghae	87.9	33.6	2.1	0.0	96.9	0.0	1.0	100.0	98
South Hwanghae	90.8	12.1	4.1	1.0	90.9	2.0	2.0	100.0	96
Pyongyang	72.8	44.1	2.2	2.1	95.7	0.0	0.0	100.0	113
Mother's education									
Upper secondary	88.1	27.6	6.1	1.2	89.9	0.8	2.0	100.0	752
Higher	84.1	24.0	7.1	2.2	87.5	1.0	2.3	100.0	179
Mother's age at birth									
Less than 20	-	-	-	-	-	-	-	100.0	-
20-34	87.2	27.1	6.2	1.5	89.6	0.7	2.0	100.0	893
35-49	(90.8)	(23.8)	(9.1)	(0.0)	(83.8)	(2.7)	(4.4)	100.0	38
Place of delivery									
Home	97.1	12.8	7.7	4.0	86.7	0.0	1.6	100.0	73
Public Health facility	86.5	28.1	6.2	1.2	89.6	0.9	2.1	100.0	858
Wealth index 20-40-40									
20 percent lowest	91.7	25.2	7.5	1.4	88.8	1.7	0.6	100.0	181
40 percent middle	87.4	21.4	7.1	1.3	88.4	1.1	2.1	100.0	373
40 percent highest	85.1	33.3	4.9	1.5	90.7	0.2	2.7	100.0	376

[1] MICS indicator TM.14 - Newborns dried

[2] MICS indicator TM.15 - Skin-to-skin care

[3] MICS indicator TM.16 - Delayed bathing

[A] Children never bathed includes children who at the time of the survey had not yet been bathed because they were very young and children dying so young that they were never bathed

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

"–" denotes 0 unweighted case in that cell or in the denominator

Table TM.8.6 presents indicators related to the content of PNC visits, specifically the percent of last live births in the last two years for which within 2 days after birth the umbilical cord was examined, the temperature of the newborn was assessed, breastfeeding counselling was done or breastfeeding observed, the newborn was weighed and counselling on danger signs for newborns was done.

Table TM.8.6: Content of postnatal care for newborns

Percent of last live births in the last two years for which within 2 days after birth the umbilical cord was examined, the temperature of the newborn was assessed, breastfeeding counseling was done or breastfeeding observed, the newborn was weighed and counseling on danger signs for newborns was done, DPR Korea, 2017

	Percentage of newborns receiving postnatal signal care function of:							Percentage of newborns who received a least 2 of the preceding postnatal signal care functions within 2 days after birth[1]	Number of lastborn children in the last two years
			Breastfeeding						
	Cord examination	Temperature assessment	Counseling	Observation	Counseling or observation	Weight assessment	Receiving information on the symptoms requiring care-seeking		
Total	**92.4**	**90.6**	**93.3**	**94.9**	**96.5**	**92.0**	**92.0**	**97.7**	**931**
Sex of newborn									
Male	92.1	90.7	93.0	94.1	96.3	89.5	89.5	96.9	481
Female	92.8	90.5	93.5	95.7	96.8	94.7	94.7	98.5	450
Area									
Urban	92.1	91.4	93.2	95.1	96.8	92.0	92.0	98.0	559
Rural	92.9	89.4	93.4	94.5	96.1	92.1	92.1	97.2	372
Province									
Ryanggang	96.6	100.0	98.9	95.5	100.0	98.9	98.9	100.0	28
North Hamgyong	89.7	95.4	97.7	95.6	98.9	93.1	93.1	98.9	87
South Hamgyong	97.8	90.2	100.0	100.0	100.0	99.0	99.0	100.0	121
Kangwon	93.0	93.0	94.0	88.9	93.0	99.0	99.0	99.0	63
Jagang	92.9	90.9	92.0	95.0	97.0	91.9	91.9	97.0	55
North Pyongan	79.9	75.7	86.3	86.3	87.3	84.2	84.2	88.4	111
South Pyongan	88.1	84.9	86.0	96.8	97.9	82.7	82.7	100.0	158
North Hwanghae	94.0	90.9	88.0	91.0	95.0	88.8	88.8	97.0	98
South Hwanghae	99.0	99.0	99.0	97.9	99.0	95.9	95.9	99.0	96
Pyongyang	98.5	98.5	98.5	98.5	98.5	98.5	98.5	98.5	113
Mother's education									
Upper secondary	92.5	90.2	93.2	95.1	96.6	91.8	91.8	97.6	752
Higher	92.1	91.9	93.6	93.9	96.2	92.9	92.9	97.8	179
Mother's age at birth									
Less than 20	-	-	-	-	-	-	-	-	-
20-34	92.7	90.9	93.6	94.9	96.6	92.0	92.0	97.7	893
35-49	(85.3)	(83.9)	(85.6)	(93.9)	(95.6)	(92.8)	(92.8)	(97.4)	38
Place of delivery									
Home	73.2	67.1	73.1	78.9	82.6	74.5	74.5	89.6	73
Public Health facility	94.0	92.6	95.0	96.2	97.7	93.5	93.5	98.3	858
Wealth index 20-40-40									
20 percent lowest	95.2	91.1	94.6	94.3	94.9	95.3	95.3	96.5	181
40 percent middle	90.0	88.1	91.6	95.1	97.2	89.6	89.6	98.3	373
40 percent highest	93.5	92.8	94.3	94.9	96.6	92.8	92.8	97.6	376

[1] MICS indicator TM.19 - Postnatal signal care functions

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

"–" denotes 0 unweighted case in that cell or in the denominator

Tables TM.8.7 and TM.8.8 present information collected on post-natal health checks and visits of the mother and are identical to Tables TM.8.2 and TM.8.3 that presented the data collected for newborns.

Table TM.8.7: Post-natal health checks for mothers

Percentage of women age 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, by timing of visit, and percentage who received post natal health checks, DPR Korea, 2017

	Health check following birth while in facility or at home[A]	PNC visit for mothers[B]							Total	Post-natal health check for the mother[1,C]	Number of women with a live birth in the last two years
		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	DK/ Missing			
Total	**98.2**	**0.3**	**1.4**	**2.1**	**33.6**	**49.2**	**12.9**	**0.4**	**100.0**	**98.4**	**931**
Sex of newborn											
Male	98.0	0.0	1.2	1.4	34.1	48.2	15.0	0.2	100.0	98.4	481
Female	98.4	0.6	1.7	2.9	33.1	50.4	10.8	0.5	100.0	98.4	450
Area											
Urban	98.2	0.2	1.2	1.5	30.7	52.1	14.0	0.4	100.0	98.2	559
Rural	98.1	0.5	1.8	3.1	38.0	44.9	11.4	0.3	100.0	98.6	372
Province											
Ryanggang	100.0	0.0	0.0	1.1	47.3	48.3	3.3	0.0	100.0	100.0	28
North Hamgyong	98.9	0.0	0.0	1.1	27.6	58.7	12.6	0.0	100.0	98.9	87
South Hamgyong	100.0	0.0	2.2	0.0	24.1	56.2	17.5	0.0	100.0	100.0	121
Kangwon	97.0	0.0	1.2	3.9	47.3	34.5	13.1	0.0	100.0	97.0	63
Jagang	95.0	1.0	0.0	0.0	12.3	78.6	6.1	2.0	100.0	95.0	55
North Pyongan	100.0	1.1	1.0	2.1	24.5	39.3	30.9	1.0	100.0	100.0	111
South Pyongan	96.7	0.0	5.5	5.5	44.6	31.5	12.9	0.0	100.0	97.8	158
North Hwanghae	94.9	1.0	0.0	1.0	41.0	40.8	15.2	1.0	100.0	94.9	98
South Hwanghae	98.9	0.0	0.0	4.2	56.2	34.5	5.1	0.0	100.0	98.9	96
Pyongyang	100.0	0.0	0.0	0.0	15.7	83.1	1.2	0.0	100.0	100.0	113
Education											
Upper secondary	97.9	0.2	1.3	1.8	34.1	49.3	13.1	0.3	100.0	98.1	752
Higher	99.3	0.9	2.0	3.6	31.6	49.0	12.4	0.6	100.0	99.3	179
Age at birth											
Less than 20	-	-	-	-	-	-	-	-	100.0	-	-
20-34	98.4	0.2	1.3	2.2	33.6	49.7	12.6	0.4	100.0	98.6	893
35-49	(92.8)	(3.1)	(4.6)	(0.0)	(33.7)	(38.0)	(20.5)	(0.0)	100.0	(92.8)	38
Place of delivery											
Home	88.8	3.7	12.5	20.2	25.8	9.9	26.3	1.6	100.0	91.3	73
Public Health facility	99.0	0.0	0.5	0.6	34.3	52.6	11.8	0.2	100.0	99.0	858
Type of delivery											
Vaginal birth	98.1	0.3	1.6	2.4	37.2	45.9	12.1	0.4	100.0	98.3	810
C-section	98.5	0.0	0.0	0.0	9.6	71.8	18.6	0.0	100.0	98.5	120
Wealth index 20-40-40											
20 percent lowest	98.6	0.3	1.3	3.3	43.7	41.8	8.7	0.9	100.0	98.6	181
40 percent middle	97.3	0.3	2.4	2.1	32.1	47.4	15.5	0.1	100.0	97.8	373
40 percent highest	98.8	0.3	0.5	1.6	30.2	54.7	12.5	0.3	100.0	98.8	376

[1] MICS indicator TM.20 - Post-natal health check for the mother

[A] Health checks by any health provider following facility births (before discharge from facility) or following home births (before departure of provider from home).

[B] 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[a] above).

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

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

"–" denotes 0 unweighted case in that cell or in the denominator

Table TM.8.8: Post-natal care visits for mothers within one week of birth

Percent distribution of women age 15-49 years with a live birth in the last two years who received a post-natal care (PNC) visit within one week of birth, by location and provider of the first PNC visit, DPR Korea, 2017

	Location of first PNC visit for mothers			Provider of first PNC visit for mothers			Number of ever married women with a live birth in the last two years who received a PNC visit within one week of birth
	Home	Public Sector	Total	Doctor/ assistant doctor	Nurse/ midwife	Total	
Total	71.8	28.2	100.0	88.4	11.6	100.0	349
Sex of newborn							
Male	70.8	29.2	100.0	88.2	11.8	100.0	176
Female	72.8	27.2	100.0	88.6	11.4	100.0	173
Area							
Urban	63.0	37.0	100.0	92.2	7.8	100.0	187
Rural	82.1	17.9	100.0	84.0	16.0	100.0	161
Province							
Ryanggang	(93.1)	(6.9)	100.0	(100.0)	(0.0)	100.0	14
North Hamgyong	(96.0)	(4.0)	100.0	(100.0)	(0.0)	100.0	25
South Hamgyong	(*)	(*)	100.0	(*)	(*)	100.0	32
Kangwon	71.2	28.8	100.0	75.2	24.8	100.0	33
Jagang	(*)	(*)	100.0	(*)	(*)	100.0	7
North Pyongan	(52.0)	(48.0)	100.0	(100.0)	(0.0)	100.0	32
South Pyongan	37.7	62.3	100.0	82.2	17.8	100.0	88
North Hwanghae	(94.9)	(5.1)	100.0	(85.5)	(14.5)	100.0	42
South Hwanghae	98.4	1.6	100.0	91.6	8.4	100.0	58
Pyongyang	(*)	(*)	100.0	(*)	(*)	100.0	18
Education							
Upper secondary	73.7	26.3	100.0	88.1	11.9	100.0	281
Higher	64.1	35.9	100.0	89.8	10.2	100.0	68
Age at birth							
Less than 20	-	-	100.0	-	-	100.0	-
20-34	72.9	27.1	100.0	88.2	11.8	100.0	333
35-49	(*)	(*)	100.0	(*)	(*)	100.0	16
Place of delivery							
Home	(84.6)	(15.4)	100.0	(76.6)	(23.4)	100.0	45
Public Health facility	69.9	30.1	100.0	90.2	9.8	100.0	303
Type of delivery							
Vaginal birth	72.7	27.3	100.0	88.3	11.7	100.0	337
C-section	(*)	(*)	100.0	(*)	(*)	100.0	12
Wealth index 20-40-40							
20 percent lowest	87.3	12.7	100.0	85.4	14.6	100.0	88
40 percent middle	73.3	26.7	100.0	84.0	16.0	100.0	138
40 percent highest	59.0	41.0	100.0	95.5	4.5	100.0	123

( ) 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 TM.8.8 matches Table TM.8.3, but now deals with PNC visits for mothers by location and type of provider. As defined above, a visit does not include a check in the facility or at home following birth.

Table TM.8.9 presents the 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 for the mother and the newborn, thus combining the indicators presented in Tables TM.8.2 and TM.8.7.

Table TM.8.9: Post-natal health checks for mothers and newborns

Percentage of women age 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, DPR Korea, 2017

	Percentage of post-natal health checks within two days of birth for:					Number of women with a live birth in the last two years
	Newborns[1]	Mothers[2]	Both mothers and newborns	Neither mother nor newborn	DK/Missing	
Total	98.6	98.4	97.6	0.9	0.3	931
Sex of newborn						
Male	98.4	98.4	97.8	1.2	0.1	481
Female	98.8	98.4	97.3	0.6	0.5	450
Area						
Urban	98.9	98.2	97.5	0.7	0.3	559
Rural	98.1	98.6	97.7	1.3	0.3	372
Province						
Ryanggang	100.0	100.0	100.0	0.0	0.0	28
North Hamgyong	98.9	98.9	98.9	1.1	0.0	87
South Hamgyong	100.0	100.0	100.0	0.0	0.0	121
Kangwon	99.0	97.0	97.0	1.0	0.0	63
Jagang	98.0	95.0	92.0	0.0	1.0	55
North Pyongan	97.7	100.0	96.7	0.0	1.0	111
South Pyongan	98.9	97.8	97.8	1.1	0.0	158
North Hwanghae	94.9	94.9	92.8	4.1	1.0	98
South Hwanghae	98.9	98.9	98.9	1.1	0.0	96
Pyongyang	100.0	100.0	100.0	0.0	0.0	113
Mother's education						
Upper secondary	98.3	98.1	97.4	1.1	0.2	752
Higher	99.7	99.3	98.4	0.0	0.6	179
Mother's age at birth						
Less than 20	-	-	-	-		-
20-34	98.8	98.6	97.8	0.6	0.3	893
35-49	(92.8)	(92.8)	(92.8)	(7.2)	(0.0)	38
Place of delivery						
Home	93.7	91.3	89.7	6.3	1.6	73
Public Health facility	99.0	99.0	98.2	0.4	0.2	858
Type of delivery						
Vaginal birth	98.4	98.3	97.4	1.0	0.3	810
C-section	100.0	98.5	98.5	0.0	0.0	120
Wealth index 20-40-40						
20 percent lowest	98.9	98.6	98.0	1.1	0.6	181
40 percent middle	97.6	97.8	96.7	1.5	0.1	373
40 percent highest	99.4	98.8	98.3	0.3	0.3	376

[1] MICS indicator TM.13 - Post-natal health check for the newborn

[2] MICS indicator TM.20 - Post-natal health check for the mother

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

"–" denotes 0 unweighted case in that cell or in the denominator

7. THRIVE – CHILD HEALTH, NUTRITION AND DEVELOPMENT

In order to survive and develop to their full potential, children need health care, appropriate nutrition, education that nurtures their minds and equips them with useful knowledge and skills and the time and space to play. This chapter summarizes the main findings of the survey on a range of child health, nutrition and development indicators. Tables on immunisation coverage are followed by a series of topics related to children's health indicators related to disease episodes including diarrhoea and acute respiratory infection. A number of nutrition indicators are presented under Infant and Young Child Feeding topic that depict main findings on breastfeeding and other feeding practices indicators, as well as, malnutrition which highlights the main findings on underweight, stunting, wasting and overweight indicators. Main findings of salt iodisation are also presented in this chapter. The last part of the chapter presents the main findings related to child development and early childhood development.

7.1. Immunisation

Immunisation is a proven tool for controlling and eliminating life-threatening infectious diseases and is estimated to avert between 2 and 3 million deaths each year. It is one of the most cost-effective health investments, with proven strategies that make it accessible to even the most hard-to-reach and vulnerable populations.

The WHO Recommended Routine Immunisations for Children[25] recommends all children to be vaccinated against tuberculosis, diphtheria, pertussis, tetanus, polio, measles, hepatitis B, haemophilus influenzae type b, pneumococcal bacteria/disease, rotavirus, and rubella.

At the global level, SDG indicator 3.b.1 is used to monitor the progress of the vaccination of children at the national level. The proportion of the target population covered by all vaccines included in their national programme is presented in Table TC.1.1.

All doses in the primary series are recommended to be completed before the child's first birthday, although depending on the epidemiology of disease 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 with local epidemiology and may include booster doses later in childhood.

The vaccination schedule followed by the DPR Korea National Immunisation Programme provides vaccinations with birth doses of BCG and Hepatitis B vaccines (within 24 hours of birth), three doses of the Pentavalent vaccine containing DPT, Hepatitis B, and *Haemophilus influenzae* type b (Hib) antigens, three doses of Polio vaccine and two doses of the measles vaccine. All vaccinations should be received during the first year of life except the second dose of measles at 15 months. Taking into consideration this vaccination schedule, the estimates for full immunisation coverage from the 2017 DPR Korea MICS are based on children age 24-35 months.

Information on vaccination coverage was collected for all children under three years of age. All mothers or caretakers were asked to recall whether or not the child had received each of the vaccinations, and for Polio, Pentavalent and Measles, how many doses were received. Information was also obtained from vaccination records at health facilities. The final vaccination coverage estimates are based on information obtained from the vaccination card from health facilities and the mother's report of vaccinations received by the child.

Table TC.1.2 presents vaccination coverage estimates among children age 12-23 and 24-35 months by background characteristics. The figures indicate children receiving the vaccinations at any time up to the date of the survey, and are based on information from health facility records and mothers'/caretakers' reports.

25.– http://www.who.int/immunization/policy/immunization_tables/en/

Table TC.1.1: Vaccinations in the first years of life

Percentage of children age 12-23 months and 24-35 months vaccinated against vaccine preventable childhood diseases at any time before the survey (Crude coverage) and by their first birthday, DPR Korea, 2017

	Children age 12-23 months:				Children age 24-35 months:			
	Vaccinated at any time before the survey according to:			Vaccinated by 12 months of age	Vaccinated at any time before the survey according to:			Vaccinated by 12 months of age (Measles 2 by 24 months)
	Vaccination records[A]	Mother's report	Either (Crude coverage)[B]		Vaccination records[A]	Mother's report	Either (Crude coverage)[B]	
Antigen								
BCG[1]	99.4	0.1	99.6	99.3	99.0	0.1	99.1	99.0
HepB								
At birth	99.9	0.0	99.9	100.0	99.4	0.0	99.4	99.3
Polio								
OPV1	99.4	0.4	99.7	99.3	98.6	0.6	99.1	98.9
OPV2	99.4	0.3	99.7	99.3	98.6	0.7	99.3	99.0
OPV3[2]	98.5	0.4	98.9	98.5	98.7	0.3	99.0	98.9
IPV	24.6	27.8	52.4	52.4	78.8	9.0	87.9	87.9
Pentavalent (DPTHibHepB)								
Penta1	99.4	0.3	99.7	99.3	99.5	0.1	99.6	99.3
Penta2	98.7	1.1	99.7	99.3	98.8	0.8	99.6	99.3
Penta3[3,4,5]	99.0	0.6	99.6	99.2	98.3	0.1	98.4	98.0
Measles 1	99.3	0.5	99.7	99.3	98.8	0.7	99.6	98.4
Measles 2[10]	na	na	na	na	97.4	1.2	98.6	97.9
Fully vaccinated[11,C]	na	na	na	na	97.3	0.0	97.3	95.5
No vaccinations	0.0	0.0	0.0	0.0	0.0	0.4	0.4	0.4
Number of children	456	456	456	456	451	451	451	451

[1] MICS indicator TC.1 - Tuberculosis immunization coverage

[2] MICS indicator TC.2 - Polio immunization coverage

[3] MICS indicator TC.3 - Diphtheria, pertussis and tetanus (DPT) immunization coverage; SDG indicator 3.b.1 & 3.8.1

[4] MICS indicator TC.4 - Hepatitis B immunization coverage

[5] MICS indicator TC.5 - Haemophilus influenzae type B (Hib) immunization coverage

[10] MICS indicator TC.10 - Measles immunization coverage; SDG indicator 3.b.1

[11] MICS indicator TC.11 - Full immunization coverage; SDG indicator 3.b.1

na: not applicable

[A] Health facility record where the vaccinations are written down

[B] MICS indicators TC.1, TC.2, TC.3, TC.4 and TC.5 refer to children age 12-23 months; MICS indicators TC.10 and TC.11 refers to children age 24-35 months

[C] Includes: BCG, Polio3, Penta3 and Measles2 as per the vaccination schedule in DPR Korea

Table TC.1.2: Vaccinations by background characteristics

Percentage of children age 12-23 months and 24-35 months currently vaccinated against vaccine preventable childhood diseases, DPR Korea, 2017

	Percentage of children age 12-23 months who received:												Percentage with:		Number of children age 12-23 months
		HepB	Polio				Pentavalent								
	BCG[1]	At birth	OPV 1	OPV 2	OPV 3[2]	IPV	1	2	3[3,4,5]	Measles 1	Measles 2	None	Vaccination cards[A]	Vaccination cards seen[B]	
Total	**99.6**	**99.9**	**99.7**	**99.7**	**98.9**	**52.4**	**99.7**	**99.7**	**99.6**	**99.7**	**77.3**	**0.0**	**100.0**	**100.0**	**456**
Sex															
Male	100.0	99.9	99.5	99.5	98.3	52.3	99.5	99.5	99.5	100.0	75.7	0.0	100.0	100.0	235
Female	99.1	100.0	100.0	100.0	99.5	52.5	100.0	100.0	99.8	99.5	79.0	0.0	100.0	100.0	221
Area															
Urban	99.7	100.0	99.6	99.6	98.8	55.6	99.6	99.6	99.4	100.0	77.7	0.0	100.0	100.0	283
Rural	99.4	99.8	100.0	100.0	99.1	47.2	100.0	100.0	100.0	99.3	76.6	0.0	100.0	100.0	173
Province															
Ryanggang	(100.0)	(97.8)	(100.0)	(100.0)	(97.8)	(62.3)	(100.0)	(100.0)	(100.0)	(100.0)	(82.0)	(0.0)	(100.0)	(100.0)	14
North Hamgyong	(95.6)	(100.0)	(100.0)	(100.0)	(97.7)	(30.9)	(100.0)	(100.0)	(100.0)	(100.0)	(66.7)	(0.0)	(100.0)	(100.0)	45
South Hamgyong	(100.0)	(100.0)	(100.0)	(100.0)	(97.7)	(59.3)	(100.0)	(100.0)	(100.0)	(100.0)	(75.4)	(0.0)	(100.0)	(100.0)	58
Kangwon	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(38.0)	(100.0)	(100.0)	(100.0)	(100.0)	(70.2)	(0.0)	(100.0)	(100.0)	30
Jagang	(100.0)	(100.0)	(100.0)	(100.0)	(95.9)	(62.3)	(100.0)	(100.0)	(98.0)	(100.0)	(87.4)	(0.0)	(100.0)	(100.0)	27
North Pyongan	(100.0)	(100.0)	(97.8)	(97.8)	(97.8)	(75.9)	(97.8)	(97.8)	(97.8)	(97.9)	(78.0)	(0.0)	(100.0)	(100.0)	54
South Pyongan	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(64.3)	(100.0)	(100.0)	(100.0)	(100.0)	(88.8)	(0.0)	(100.0)	(100.0)	78
North Hwanghae	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(40.1)	(100.0)	(100.0)	(100.0)	(100.0)	(80.9)	(0.0)	(100.0)	(100.0)	47
South Hwanghae	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(32.5)	(100.0)	(100.0)	(100.0)	(100.0)	(78.2)	(0.0)	(100.0)	(100.0)	45
Pyongyang	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(50.5)	(100.0)	(100.0)	(100.0)	(100.0)	(65.4)	(0.0)	(100.0)	(100.0)	58
Mother's education															
Upper secondary	99.5	99.9	100.0	100.0	99.0	52.8	100.0	100.0	99.9	99.7	77.6	0.0	100.0	100.0	384
Higher	100.0	100.0	98.3	98.3	98.3	50.5	98.3	98.3	98.3	100.0	75.8	0.0	100.0	100.0	72
Wealth index 20-40-40															
20 percent lowest	98.9	99.7	100.0	100.0	99.0	49.6	100.0	100.0	100.0	98.7	71.5	0.0	100.0	100.0	91
40 percent middle	100.0	100.0	99.3	99.3	98.0	51.7	99.3	99.3	99.0	100.0	81.7	0.0	100.0	100.0	181
40 percent highest	99.5	100.0	100.0	100.0	99.7	54.5	100.0	100.0	100.0	100.0	75.8	0.0	100.0	100.0	185

(Continued…)

Table TC.1.2 (continued): Vaccinations by background characteristics

Percentage of children age 12-23 months and 24-35 months currently vaccinated against vaccine preventable childhood diseases, DPR Korea, 2017

	Percentage of children age 24-35 months who received:			Percentage with:		
	Measles 2[10]	Full[11,C]	None	Vaccination cards[A]	Vaccination cards seen[B]	Number of children age 24-35 months
Total	98.6	97.3	0.4	99.6	99.6	451
Sex						
Male	98.4	97.6	0.6	99.4	99.4	231
Female	98.8	97.0	0.3	99.7	99.7	220
Area						
Urban	99.0	97.6	0.5	99.5	99.5	270
Rural	98.0	97.0	0.3	99.7	99.7	180
Province						
Ryanggang	(95.7)	(89.2)	(0.0)	(100.0)	(100.0)	15
North Hamgyong	(100.0)	(93.1)	(0.0)	(100.0)	(100.0)	44
South Hamgyong	(97.8)	(95.6)	(2.2)	(97.8)	(97.8)	61
Kangwon	(97.9)	(93.2)	(0.0)	(100.0)	(100.0)	28
Jagang	(93.5)	(89.0)	(2.2)	(97.8)	(97.8)	25
North Pyongan	(97.8)	(100.0)	(0.0)	(100.0)	(100.0)	53
South Pyongan	(100.0)	(100.0)	(0.0)	(100.0)	(100.0)	76
North Hwanghae	(97.9)	(100.0)	(0.0)	(100.0)	(100.0)	47
South Hwanghae	(100.0)	(100.0)	(0.0)	(100.0)	(100.0)	46
Pyongyang	(100.0)	(100.0)	(0.0)	(100.0)	(100.0)	55
Mother's education						
Upper secondary	98.3	96.7	0.5	99.5	99.5	368
Higher	100.0	100.0	0.0	100.0	100.0	83
Wealth index 20-40-40						
20 percent lowest	96.7	95.1	0.6	99.4	99.4	90
40 percent middle	100.0	97.0	0.0	100.0	100.0	172
40 percent highest	98.2	98.7	0.7	99.3	99.3	189

[1] MICS indicator TC.1 - Tuberculosis immunization coverage

[2] MICS indicator TC.2 - Polio immunization coverage

[3] MICS indicator TC.3 - Diphtheria, pertussis and tetanus (DPT) immunization coverage; SDG indicator 3.b.1 & 3.8.1

[4] MICS indicator TC.4 - Hepatitis B immunization coverage

[5] MICS indicator TC.5 - Haemophilus influenzae type B (Hib) immunization coverage

[10] MICS indicator TC.10 - Measles immunization coverage; SDG indicator 3.b.1

[11] MICS indicator TC.11 - Full immunization coverage; SDG indicator 3.b.1

[A] Vaccination card where the vaccinations are written down

[B] Includes children for whom vaccination cards were observed with at least one vaccination dose recorded (Card availability)

[C] Includes: BCG, Polio3, Penta3 and Measles2 as per the vaccination schedule in DPR Korea

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

7.2. Disease episodes

A key strategy for achieving progress toward SDG 3.2 (end preventable deaths of newborns and children under 5 years of age) is to tackle the diseases such as diarrhoea, pneumonia, and malaria that are the leading killers of children under 5.

Table TC.2.1 presents the percentage of children under 5 years of age who were reported to have had an episode of diarrhoea, symptoms of acute respiratory infection (ARI), or fever during the 2 weeks preceding the survey. These results are not measures of true prevalence, and should not be used as such, but rather the period-prevalence of those illnesses over a two-week time window.

The definition of a case of diarrhoea or fever, in this survey, was the mother's (or caretaker's) report that the child had such symptoms over the specified period; no other evidence were sought beside the opinion of the mother. A child was considered to have had an episode of ARI if the mother or caretaker reported that the child had, over the specified period, an illness with a cough with rapid or difficult breathing, and whose symptoms were perceived to be due to a problem in the chest or both a problem in the chest and a blocked or runny nose. While this approach is reasonable in the context of a MICS survey, these basically simple case definitions must be kept in mind when interpreting the results, as well as the potential for reporting and recall biases. Further, diarrhoea, fever and ARI are not only seasonal but are also characterized by the often rapid spread of localized outbreaks from one area to another at different points in time. The timing of the survey and the location of the teams might thus considerably affect the results, which must consequently be interpreted with caution. For these reasons, although the period-prevalence over a two-week time window is reported, these data should not be used to assess the epidemiological characteristics of these diseases but rather to obtain denominators for the indicators related to use of health services and treatment.

Table TC.2.1: Reported disease episodes

Percentage of children age 0-59 months for whom the mother/caretaker reported an episode of diarrhoea, symptoms of acute respiratory infection (ARI), and/or fever in the last two weeks, DPR Korea, 2017

	Percentage of children who in the last two weeks had:			Number of children age 0-59 months
	An episode of diarrhoea	Symptoms of ARI	An episode of fever	
Total	11.4	0.5	6.8	2,275
Sex				
Male	12.3	0.4	6.0	1,164
Female	10.5	0.6	7.6	1,111
Area				
Urban	10.1	0.6	6.9	1,361
Rural	13.4	0.4	6.6	914
Province				
Ryanggang	10.5	0.9	8.3	71
North Hamgyong	12.7	1.3	5.8	221
South Hamgyong	10.6	0.0	9.2	298
Kangwon	9.9	2.2	6.5	148
Jagang	12.8	0.4	7.3	131
North Pyongan	10.3	0.9	7.1	264
South Pyongan	14.3	0.0	6.3	386
North Hwanghae	11.7	0.0	5.4	242
South Hwanghae	13.4	0.4	8.3	237
Pyongyang	6.8	0.5	5.0	278
Age (in months)				
0-11	8.9	0.1	5.1	455
12-23	16.4	0.7	8.4	456
24-35	15.3	0.5	9.1	451
36-47	10.6	0.6	7.6	454
48-59	6.1	0.7	3.9	459
Mother's education				
Primary	(*)	(*)	(*)	1
Upper secondary	12.0	0.6	6.7	1,854
Higher	9.1	0.3	7.5	420
Wealth index 20-40-40				
20 percent lowest	15.6	0.5	8.3	448
40 percent middle	11.9	0.8	7.4	912
40 percent highest	8.9	0.3	5.5	914

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

7.3. Diarrhoea

Diarrhoea is one of the leading cause of death among children under five worldwide. Most diarrhoea-related deaths in children are due to dehydration from loss of large quantities of water and electrolytes from the body in liquid stools. Management of diarrhoea – through oral rehydration salt solution (ORS) – can prevent many of these deaths. In addition, provision of zinc supplements has been shown to reduce the duration and severity of the illness as well as the risk of future episodes within the next two or three months. While provision of safe water and sanitation facilities is an important strategy for the prevention of diarrhoea, preventing dehydration and malnutrition by increasing fluid intake and continuing to feed the child are also important strategies for managing diarrhoea.

In the MICS, mothers or caretakers were asked whether their child under age five years had an episode of diarrhoea in the two weeks prior to the survey. In cases where mothers reported that the child had diarrhoea, a series of questions were asked about the treatment of the illness, including what the child had been given to drink and eat during the episode and whether this was more or less than what was usually given to the child.

Table TC.3.1 shows the percentage of children age 0-59 months with diarrhoea in the two weeks preceding the survey for whom advice or treatment was sought and where.

Table TC.3.2 shows patterns on drinking and feeding practices during diarrhoea among children age 0-59 months.

Table TC.3.3 shows the percentage of children age 0-59 months receiving ORS and zinc during the episode of diarrhoea. Since children may have been given more than one type of liquid, the percentages do not necessarily add to 100.

Table TC3.4 provides the proportion of children age 0-59 months with diarrhoea in the last two weeks who received oral rehydration therapy with continued feeding, and the percentage of children with diarrhoea who received other treatments.

Table TC.3.5 provides information on the source of ORS and zinc for children age 0-59 months who benefitted from these treatments.

Table TC.3.1: Care-seeking during diarrhoea

Percentage of children age 0-59 months with diarrhoea in the last two weeks for whom advice or treatment was sought, by source of advice or treatment, DPR Korea, 2017

	Percentage of children with diarrhoea for whom:			
	Advice or treatment was sought from:			
	Public health facilities or providers[1]	Other source	No advice or treatment sought	Number of children age 0-59 months with diarrhoea in the last two weeks
Total	**79.6**	**10.1**	**16.9**	**260**
Sex				
Male	78.2	7.0	20.5	143
Female	81.2	14.0	12.6	117
Area				
Urban	81.9	13.2	14.0	137
Rural	76.9	6.7	20.3	123
Province				
Ryanggang	(*)	(*)	(*)	7
North Hamgyong	(78.3)	(7.2)	(21.7)	28
South Hamgyong	(*)	(*)	(*)	32
Kangwon	(*)	(*)	(*)	15
Jagang	(90.3)	(3.3)	(6.4)	17
North Pyongan	(*)	(*)	(*)	27
South Pyongan	(81.3)	(9.3)	(12.4)	55
North Hwanghae	(68.0)	(0.0)	(32.0)	28
South Hwanghae	(87.3)	(21.6)	(9.6)	32
Pyongyang	(*)	(*)	(*)	19
Age (in months)				
0-11	(80.1)	(12.8)	(16.2)	40
12-23	82.8	5.3	15.5	75
24-35	77.8	13.2	15.5	69
36-47	(80.0)	(6.4)	(20.0)	48
48-59	(73.9)	(17.8)	(20.0)	28
Mother's education				
Upper secondary	79.3	10.4	17.0	222
Higher	(80.9)	(8.7)	(16.5)	38
Wealth index 20-40-40				
20 percent lowest	79.6	4.6	17.3	70
40 percent middle	79.0	14.1	17.3	109
40 percent highest	80.3	9.6	16.1	81

[1] MICS indicator TC.12 - Care-seeking for diarrhoea

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

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

Table TC.3.2: Feeding practices during diarrhoea

Percent distribution of children age 0-59 months with diarrhoea in the last two weeks by amount of liquids and food given during episode of diarrhoea, DPR Korea, 2017

	Drinking practices during diarrhoea						Eating practices during diarrhoea						Number of children age 0-59 months with diarrhoea in the last two weeks
	Child was given to drink:						Child was given to eat:						
	Much less	Somewhat less	About the same	More	Nothing	Total	Much less	Somewhat less	About the same	More	Nothing	Total	
Total	**4.2**	**17.7**	**33.3**	**44.1**	**0.8**	**100.0**	**11.7**	**32.8**	**40.9**	**12.8**	**1.8**	**100.0**	**260**
Sex													
Male	4.3	16.4	35.4	42.4	1.4	100.0	9.8	31.3	41.4	17.5	0.0	100.0	143
Female	4.1	19.2	30.6	46.1	0.0	100.0	14.2	34.6	40.2	7.2	3.9	100.0	117
Area													
Urban	4.5	15.5	34.4	45.5	0.0	100.0	11.7	29.2	43.2	14.3	1.6	100.0	137
Rural	3.9	20.1	31.9	42.4	1.7	100.0	11.8	36.9	38.2	11.2	1.9	100.0	123
Province													
Ryanggang	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	7
North Hamgyong	(10.9)	(14.2)	(42.5)	(28.6)	(3.7)	100.0	(10.5)	(21.4)	(57.4)	(7.1)	(3.6)	100.0	28
South Hamgyong	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	32
Kangwon	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	15
Jagang	(0.0)	(23.4)	(36.4)	(40.2)	(0.0)	100.0	(3.3)	(40.1)	(32.9)	(23.7)	(0.0)	100.0	17
North Pyongan	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	27
South Pyongan	(3.1)	(15.8)	(18.7)	(62.3)	(0.0)	100.0	(28.0)	(37.7)	(21.9)	(12.4)	(0.0)	100.0	55
North Hwanghae	(3.5)	(25.1)	(50.0)	(17.8)	(3.6)	100.0	(7.1)	(17.8)	(64.6)	(10.5)	(0.0)	100.0	28
South Hwanghae	(0.0)	(15.5)	(40.8)	(43.7)	(0.0)	100.0	(0.0)	(65.6)	(34.4)	(0.0)	(0.0)	100.0	32
Pyongyang	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	19
Age (in months)													
0-11	(8.4)	(19.8)	(28.8)	(40.5)	(2.5)	100.0	(23.3)	(25.7)	(31.8)	(13.8)	(5.4)	100.0	40
12-23	1.3	13.3	39.7	44.4	1.4	100.0	8.5	33.5	47.2	10.8	0.0	100.0	75
24-35	8.3	20.0	28.8	42.9	0.0	100.0	9.5	38.4	32.3	19.8	0.0	100.0	69
36-47	(2.1)	(21.6)	(36.7)	(39.6)	(0.0)	100.0	(8.0)	(36.8)	(43.0)	(9.7)	(2.4)	100.0	48
48-59	(0.0)	(13.6)	(27.5)	(58.9)	(0.0)	100.0	(15.6)	(20.5)	(54.2)	(5.4)	(4.3)	100.0	28
Mother's education													
Upper secondary	4.0	16.1	35.6	43.5	0.9	100.0	11.7	33.4	42.4	10.8	1.6	100.0	222
Higher	(5.9)	(26.9)	(20.0)	(47.3)	(0.0)	100.0	(12.1)	(29.1)	(31.8)	(24.5)	(2.6)	100.0	38
Wealth index 20-40-40													
20 percent lowest	2.8	20.9	37.3	37.6	1.4	100.0	5.9	37.3	48.8	8.0	0.0	100.0	70
40 percent middle	1.5	17.0	33.1	48.4	0.0	100.0	12.8	32.3	40.0	11.8	3.1	100.0	109
40 percent highest	9.1	15.9	29.9	43.9	1.3	100.0	15.4	29.6	35.2	18.4	1.4	100.0	81

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

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

Table TC.3.3: Oral rehydration solutions and zinc

Percentage of children age 0-59 months with diarrhoea in the last two weeks, and treatment with oral rehydration salts solution (ORS) and zinc, DPR Korea, 2017

	Percentage of children with diarrhoea who received:			Number of children age 0-59 months with diarrhoea in the last two weeks
	Fluid from packet (ORS)[1]	Zinc tablets or syrup	ORS and zinc[2]	
Total	**74.1**	**50.7**	**45.0**	**260**
Sex				
Male	68.0	47.1	40.8	143
Female	81.5	55.0	50.0	117
Area				
Urban	77.2	57.1	52.0	137
Rural	70.7	43.6	37.1	123
Province				
Ryanggang	(*)	(*)	(*)	7
North Hamgyong	(74.5)	(49.8)	(49.8)	28
South Hamgyong	(*)	(*)	(*)	32
Kangwon	(*)	(*)	(*)	15
Jagang	(90.3)	(76.9)	(76.9)	17
North Pyongan	(*)	(*)	(*)	27
South Pyongan	(65.8)	(43.6)	(31.1)	55
North Hwanghae	(75.2)	(49.9)	(43.1)	28
South Hwanghae	(87.3)	(65.5)	(62.3)	32
Pyongyang	(*)	(*)	(*)	19
Age (in months)				
0-11	(73.8)	(48.0)	(42.8)	42
12-23	76.6	57.3	50.2	74
24-35	72.9	56.3	50.1	64
36-47	(84.9)	(51.6)	(51.6)	47
48-59	(81.0)	(60.5)	(57.3)	26
Mother's education				
Upper secondary	73.4	49.4	42.7	222
Higher	(78.4)	(57.9)	(57.9)	38
Wealth index 20-40-40				
20 percent lowest	72.8	50.9	42.8	70
40 percent middle	73.7	50.9	46.7	109
40 percent highest	75.7	50.2	44.6	81

[1] MICS indicator TC.13a - Diarrhoea treatment with oral rehydration salts solution (ORS)

[2] MICS indicator TC.13b - Diarrhoea treatment with oral rehydration salts solution (ORS) and zinc

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

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

Table TC.3.4: Oral rehydration therapy with continued feeding and other treatments

Percentage of children age 0-59 months with diarrhoea in the last two weeks who were given oral rehydration therapy with continued feeding and percentage who were given other treatments, DPR Korea, 2017

	Children with diarrhoea who were given:															
				Other treatments												
				Pill or syrup				Injection								
	Zinc	ORS or increased fluids	ORS or increased fluids with continued feeding[1]	Antibiotic	Antimotility	Other	Unknown	Antibiotic	Non-antibiotic	Unknown	Intravenous	Home remedy, herbal medicine	Other	No other treatment	Not given any treatment or drug	Number of children age 0-59 months with diarrhoea in the last two weeks
Total	**50.7**	**82.1**	**70.6**	**37.6**	**2.4**	**8.6**	**2.8**	**3.5**	**0.0**	**0.0**	**6.1**	**12.3**	**4.0**	**40.9**	**5.7**	**260**
Sex																
Male	47.1	77.0	68.8	41.6	3.4	8.0	3.6	5.6	0.0	0.0	6.0	10.9	3.8	40.7	8.0	143
Female	55.0	88.3	72.8	32.7	1.1	9.2	1.9	0.9	0.0	0.0	6.3	14.1	4.3	41.1	3.0	117
Area																
Urban	57.1	82.9	71.3	47.6	1.7	8.7	4.4	3.9	0.0	0.0	6.8	12.1	5.5	34.9	4.1	137
Rural	43.6	81.2	69.8	26.4	3.1	8.4	1.1	3.0	0.0	0.0	5.3	12.6	2.3	47.6	7.5	123
Province																
Ryanggang	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	7
North Hamgyong	(49.8)	(85.4)	(75.0)	(21.2)	(0.0)	(3.6)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(3.6)	(0.0)	(75.2)	(18.2)	28
South Hamgyong	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	32
Kangwon	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	15
Jagang	(76.9)	(90.3)	(86.9)	(63.4)	(0.0)	(10.1)	(0.0)	(6.8)	(0.0)	(0.0)	(6.9)	(19.8)	(0.0)	(26.8)	(3.3)	17
North Pyongan	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	27
South Pyongan	(43.6)	(81.2)	(53.3)	(43.7)	(0.0)	(6.2)	(6.2)	(9.4)	(0.0)	(0.0)	(0.0)	(21.7)	(6.2)	(28.4)	(6.4)	55
North Hwanghae	(49.9)	(78.6)	(71.5)	(21.6)	(0.0)	(10.9)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(14.4)	(0.0)	(53.2)	(3.6)	28
South Hwanghae	(65.5)	(87.3)	(87.3)	(27.7)	(3.0)	(6.4)	(3.2)	(3.2)	(0.0)	(0.0)	(18.5)	(6.3)	(0.0)	(41.0)	(0.0)	32
Pyongyang	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	19
Age (in months)																
0-11	(46.9)	(81.7)	(58.4)	(20.8)	(0.0)	(12.4)	(0.0)	(4.3)	(0.0)	(0.0)	(5.4)	(7.5)	(7.2)	(53.2)	(14.9)	40
12-23	53.2	81.2	72.6	38.8	1.3	12.6	4.6	3.7	0.0	0.0	6.2	14.8	3.8	38.0	4.4	75
24-35	55.6	76.7	69.8	37.6	3.8	4.0	3.7	2.9	0.0	0.0	6.3	16.8	6.9	36.9	3.4	69
36-47	(44.4)	(86.5)	(78.5)	(48.2)	(2.7)	(10.6)	(0.6)	(4.0)	(0.0)	(0.0)	(6.1)	(7.8)	(0.0)	(40.3)	(3.1)	48
48-59	(48.3)	(90.9)	(70.9)	(39.9)	(4.6)	(0.0)	(3.6)	(2.1)	(0.0)	(0.0)	(6.4)	(9.6)	(0.0)	(42.0)	(6.2)	28
Mother's education																
Upper secondary	49.4	81.0	69.1	35.8	2.8	8.7	2.7	3.8	0.0	0.0	6.6	12.8	3.2	41.5	5.8	222
Higher	(57.9)	(88.1)	(79.3)	(47.6)	(0.0)	(7.7)	(3.2)	(1.5)	(0.0)	(0.0)	(3.5)	(9.5)	(8.9)	(37.6)	(5.3)	38
Wealth index 20-40-40																
20 percent lowest	50.9	81.7	75.7	28.8	3.6	9.9	0.4	3.5	0.0	0.0	5.1	12.8	2.1	48.6	4.5	70
40 percent middle	50.9	83.0	69.7	38.9	2.1	10.6	2.8	1.6	0.0	0.0	6.5	13.9	4.0	37.3	5.8	109
40 percent highest	50.2	81.2	67.4	43.4	1.7	4.7	4.8	5.9	0.0	0.0	6.5	10.0	5.7	39.2	6.7	81

[1] MICS indicator TC.14 - Diarrhoea treatment with oral rehydration therapy (ORT) and continued feeding

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

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

Table TC.3.5: Source of ORS and zinc

Percentage of children age 0-59 months with diarrhoea in the last two weeks who were given ORS, and percentage given zinc, by the source of ORS and zinc, DPR Korea, 2017

	Percentage of children for whom the source of ORS was:		Number of children age 0-59 months who were given ORS as treatment for diarrhoea in the last two weeks	Percentage of children for whom the source of zinc was:		Number of children age 0-59 months who were given zinc as treatment for diarrhoea in the last two weeks
	A public health facility or provider	Other source		A public health facility or provider	Other source	
Total	95.6	8.4	193	95.5	9.7	132
Sex						
Male	96.0	9.3	97	95.5	12.2	67
Female	95.2	7.4	95	95.6	7.2	64
Area						
Urban	95.8	10.2	106	94.9	11.5	78
Rural	95.4	5.7	87	96.3	7.6	54
Age (in months)						
0-11	(92.1)	(7.9)	30	(*)	(*)	19
12-23	93.2	11.2	52	(93.1)	(10.5)	40
24-35	(96.7)	(7.4)	48	(98.7)	(8.0)	38
36-47	(100.0)	(9.3)	40	(*)	(*)	21
48-59	(*)	(*)	21	(*)	(*)	14
Mother's education						
Upper secondary	94.7	8.2	163	94.7	9.5	110
Higher	(100.0)	(9.0)	30	(*)	(*)	25
Wealth index 20-40-40						
20 percent lowest	97.4	2.6	51	(97.5)	(9.4)	36
40 percent middle	95.5	10.4	80	93.0	10.3	55
40 percent highest	94.2	10.6	62	(97.2)	(9.3)	41

The background characteristic "Province" is not shown in the table due to the small number of unweighted cases per disaggregation category.

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

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

7.4. Household energy use

There is a global consensus and an ever-growing body of evidence that expanding access to clean household energy for cooking, heating, and lighting is key to achieving a range of global priorities such as improving health, gender equality, equitable economic development and environmental protection. Goal 7 of the Sustainable Development Goals seeks to ensure access to affordable, reliable sustainable and modern energy for all by 2030 and would be measured as the percentage of the population relying on clean fuels and technology.[26]

The 2017 DPR Korea MICS included a module with questions to assess the main technologies and fuels used for cooking, heating, and lighting. Information was also collected about the use of technologies with chimneys or other venting mechanisms which can improve indoor air quality through moving a fraction of the pollutants outdoors.

Households that use clean fuels and technologies for cooking are those mainly using electric stove, LPG (Liquefied Petroleum Gas) / cooking gas stove or biogas stove. Table TC.4.1 presents the percent distribution of household members according to type of cookstove mainly used by the household and percentage of household members living in households using clean fuels and technologies for cooking.

Table TC.4.1: Primary reliance on clean fuels and technologies for cooking

Percent distribution of household members according to type of cookstove mainly used by the household and percentage of household members living in households using clean fuels and technologies for cooking, DPR Korea, 2017

	Percentage of household members in households with primary reliance on:										
	Clean fuels and technologies for cooking and using			Other fuels for cooking and using							
	Electric stove	Liquefied Petroleum Gas (LPG) / Cooking gas stove	Biogas stove	Liquid fuel stove not using alcohol / ethanol	Manufactured solid fuel stove	Traditional solid fuel stove	Other fuel for cooking	No food cooked in the household	Total	Primary reliance on clean fuels and technologies for cooking[1]	Number of household members
Total	**2.7**	**7.3**	**0.1**	**0.1**	**4.4**	**85.3**	**0.0**	**-**	**100.0**	**10.1**	**32,455**
Area											
Urban	3.7	12.0	0.1	0.1	6.0	78.1	0.0	-	100.0	15.8	19,779
Rural	1.1	0.0	0.2	0.0	2.0	96.6	0.0	-	100.0	1.4	12,675
Province											
Ryanggang	0.4	4.8	0.0	0.0	0.0	94.8	0.0	-	100.0	5.2	1,013
North Hamgyong	2.0	12.4	0.0	0.1	11.6	73.9	0.0	-	100.0	14.4	3,213
South Hamgyong	4.4	1.0	0.0	0.4	8.1	85.9	0.1	-	100.0	5.5	4,290
Kangwon	0.3	1.3	0.2	0.0	1.3	96.9	0.0	-	100.0	1.9	2,062
Jagang	12.3	1.5	0.0	0.0	0.5	85.7	0.0	-	100.0	13.8	1,826
North Pyongan	3.0	1.9	0.7	0.0	0.6	93.8	0.0	-	100.0	5.6	3,799
South Pyongan	0.0	3.3	0.2	0.0	0.2	96.3	0.0	-	100.0	3.5	5,545
North Hwanghae	0.2	1.2	0.0	0.1	0.3	98.2	0.0	-	100.0	1.4	3,294
South Hwanghae	0.2	1.6	0.0	0.0	1.6	96.6	0.0	-	100.0	1.7	3,278
Pyongyang	6.2	35.9	0.0	0.0	14.1	43.7	0.0	-	100.0	42.1	4,136
Education of household head											
Nursery or Kindergarten or None	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)	-	100.0	(0.0)	30
Primary	0.0	0.0	0.0	0.0	0.0	100.0	0.0	-	100.0	0.0	74
Lower secondary	0.0	9.9	0.0	0.0	0.0	90.1	0.0	-	100.0	9.9	40
Upper secondary	2.8	4.7	0.1	0.0	4.8	87.5	0.0	-	100.0	7.6	20,407
Higher	2.5	11.8	0.2	0.1	3.8	81.5	0.0	-	100.0	14.5	11,904
Wealth index 20-40-40											
20 percent lowest	0.0	0.1	0.0	0.0	1.1	98.9	0.0	-	100.0	0.1	6,491
40 percent middle	2.0	0.5	0.2	0.0	3.5	93.7	0.0	-	100.0	2.7	12,981
40 percent highest	4.7	17.8	0.1	0.1	7.1	70.2	0.0	-	100.0	22.6	12,983

[1] MICS indicator TC.15 - Primary reliance on clean fuels and technologies for cooking

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

"–" denotes 0 unweighted case in that cell or in the denominator

26.– WHO. 2016. *Burning Opportunity: Clean Household Energy for Health, Sustainable Development, and Wellbeing of Women and Children.*

Table TC.4.2 further presents the percent distribution of household members using polluting fuels and technologies for cooking according to type of cooking fuel mainly used by the household, and percentage of household members living in households using polluting fuels and technologies for cooking while Table TC.4.3 presents the percent distribution of household members in households using polluted fuels for cooking by characteristics of cookstove and by place of cooking.

Table TC.4.2: Primary reliance on solid fuels for cooking

Percentage of household members living in households using clean fuels and technology for cooking and percent distribution of household members using polluting fuels and technologies for cooking according to type of cooking fuel mainly used by the household, and percentage of household members living in households using polluting fuels and technologies for cooking, DPR Korea, 2017

	Percentage of household members in households with primary reliance on:																
				Solid fuels for cooking													
	Clean fuels and technologies[1]	Gasoline/ Diesel	Kerosene/ Paraffin	Coal/ Lignite	Charcoal	Wood	Crop residue /Grass/ Straw/ Shrubs	Animal dung/ waste	Processed biomass (pellets) or woodchips	Garbage/ Plastic	Sawdust	Other fuel for cooking	No food cooked in the household	Missing	Total	Solid fuels and technology for cooking	Number of household members
Total	10.1	0.0	0.1	62.0	0.2	20.5	6.5	0.0	0.0	0.0	0.4	0.0	0.0	0.0	100.0	89.7	32,455
Area																	
Urban	15.8	0.0	0.1	70.7	0.3	11.3	1.4	0.0	0.0	0.0	0.3	0.1	0.0	0.0	100.0	84.0	19,779
Rural	1.4	0.0	0.0	48.6	0.2	34.8	14.3	0.0	0.0	0.0	0.6	0.0	0.0	0.0	100.0	98.6	12,675
Province																	
Ryanggang	5.2	0.0	0.0	1.8	0.1	92.8	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	100.0	94.8	1,013
North Hamgyong	14.4	0.0	0.2	52.0	0.3	30.4	2.5	0.0	0.0	0.0	0.1	0.0	0.0	0.0	100.0	85.4	3,213
South Hamgyong	5.5	0.0	0.1	49.1	0.7	34.8	6.6	0.0	0.0	0.0	2.9	0.3	0.0	0.0	100.0	94.1	4,290
Kangwon	1.9	0.0	0.0	75.1	0.2	19.6	3.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	98.1	2,062
Jagang	13.8	0.0	0.0	20.9	0.3	61.9	2.5	0.1	0.0	0.1	0.3	0.0	0.0	0.0	100.0	86.2	1,826
North Pyongan	5.6	0.0	0.0	80.1	0.4	2.3	11.4	0.0	0.1	0.0	0.0	0.0	0.0	0.0	100.0	94.4	3,799
South Pyongan	3.5	0.0	0.1	78.9	0.2	1.6	15.6	0.1	0.0	0.0	0.0	0.0	0.0	0.0	100.0	96.4	5,545
North Hwanghae	1.4	0.1	0.0	93.9	0.0	4.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	98.5	3,294
South Hwanghae	1.7	0.0	0.1	45.9	0.3	42.3	9.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	98.1	3,278
Pyongyang	42.1	0.0	0.0	57.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	57.9	4,136
Education of household head																	
Nursery or Kindergarten or None	(0.0)	(0.0)	(0.0)	(23.4)	(0.0)	(47.0)	(29.6)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	(100.0)	30
Primary	0.0	0.0	0.0	39.9	0.0	49.2	11.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	74
Lower secondary	9.9	0.0	0.0	35.1	0.0	50.1	4.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	90.1	40
Upper secondary	7.6	0.0	0.0	62.1	0.2	22.0	7.4	0.0	0.0	0.0	0.4	0.0	0.0	0.0	100.0	92.3	20,407
Higher	14.5	0.0	0.1	62.2	0.3	17.6	4.7	0.0	0.0	0.0	0.4	0.1	0.0	0.0	100.0	85.2	11,904
Wealth index 20-40-40																	
20 percent lowest	0.1	0.0	0.0	10.7	0.1	66.3	21.9	0.0	0.0	0.0	0.9	0.0	0.0	0.0	100.0	99.9	6,491
40 percent middle	2.7	0.0	0.1	75.4	0.5	15.8	5.2	0.1	0.0	0.0	0.3	0.0	0.0	0.0	100.0	97.2	12,981
40 percent highest	22.6	0.0	0.1	74.4	0.1	2.4	0.0	0.0	0.0	0.0	0.2	0.1	0.0	0.0	100.0	77.2	12,983

[1] MICS indicator TC.15 - Primary reliance on clean fuels and technologies for cooking

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

Table TC.4.3: Polluting fuels and technologies for cooking by characteristics of cookstove and place of cooking

Percent distribution of household members in households using polluted fuels for cooking by characteristics of cookstove and by place of cooking, DPR Korea, 2017

	Percentage of household members in households with primary reliance on polluting fuels and technology for cooking	Number of household members	Percentage of household members cooking with polluting fuels and								Percentage of household members cooking with polluting fuels and technology in poorly ventilated locations	Number of household members in households using polluting fuels and technology for cooking
			Cookstove has		Place of cooking is:							
					In main house			Outdoors				
			Chimney	Fan	No separate room	In a separate room	In a separate building	Open air	On veranda or covered porch	Total		
Total	89.8	32455	88.9	6.9	0.7	99.1	0.1	0.1	0.0	100.0	1.0	29,139
Area												
Urban	84.1	19779	82.7	6.6	0.6	99.2	0.1	0.1	0.0	100.0	1.6	16,641
Rural	98.6	12675	98.5	7.4	0.8	99.0	0.0	0.1	0.0	100.0	0.1	12,497
Province												
Ryanggang	94.8	1013	94.7	4.8	0.1	99.7	0.2	0.0	0.0	100.0	0.1	960
North Hamgyong	85.5	3213	85.2	16.3	1.3	98.6	0.1	0.0	0.0	100.0	0.4	2,748
South Hamgyong	94.1	4290	93.8	8.7	0.4	99.1	0.0	0.5	0.0	100.0	0.2	4,037
Kangwon	98.1	2062	98.0	3.4	1.3	98.6	0.0	0.0	0.1	100.0	0.2	2,023
Jagang	86.2	1826	85.3	2.3	1.1	98.6	0.0	0.3	0.0	100.0	0.9	1,573
North Pyongan	94.4	3799	94.2	7.6	0.7	99.2	0.1	0.0	0.0	100.0	0.2	3,585
South Pyongan	96.5	5545	96.3	0.4	1.1	98.6	0.2	0.0	0.0	100.0	0.2	5,352
North Hwanghae	98.5	3294	98.4	0.3	0.0	99.9	0.0	0.0	0.1	100.0	0.1	3,245
South Hwanghae	98.3	3278	97.9	17.0	0.2	99.7	0.0	0.0	0.1	100.0	0.3	3,221
Pyongyang	57.9	4136	52.7	7.4	0.3	99.7	0.0	0.0	0.0	100.0	8.9	2,394
Education of household head												
Nursery or Kindergarten or None	(100.0)	30	(100.0)	(0.0)	(0.0)	(100.0)	(0.0)	(0.0)	(0.0)	100.0	(0.0)	30
Primary	100.0	74	100.0	10.8	0.0	100.0	0.0	0.0	0.0	100.0	0.0	74
Lower secondary	90.1	40	90.1	1.5	0.0	100.0	0.0	0.0	0.0	100.0	0.0	36
Upper secondary	92.3	20407	91.3	7.1	0.8	99.0	0.1	0.1	0.0	100.0	1.1	18,839
Higher	85.3	11904	84.6	6.5	0.4	99.5	0.0	0.0	0.0	100.0	0.8	10,160
Wealth index 20-40-40												
20 percent lowest	99.9	6491	99.7	9.5	1.2	98.7	0.0	0.1	0.0	100.0	0.2	6,487
40 percent middle	97.2	12981	96.9	6.5	0.5	99.3	0.1	0.1	0.0	100.0	0.3	12,619
40 percent highest	77.3	12983	75.4	6.0	0.6	99.2	0.1	0.1	0.0	100.0	2.3	10,032

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

Households that use clean fuels and technologies for space heating are those mainly relying on central heating, electricity, LPG/cooking gas or biogas. Table TC.4.4 presents the percent distribution of household members according to type of fuel mainly used for space heating by the household, and percentage of household members living in households using clean fuels and technologies for space heating. Table TC.4.5 presents the percent distribution of household members by the type of space heating mainly used in the household and presence of chimney.

Table TC.4.4: Primary reliance on clean fuels and technologies for space heating

Percent distribution of household members according to type of fuel mainly used for space heating by the household, and percentage of household members living in households using clean fuels and technologies for space heating, DPR Korea, 2017

	Percentage of household members in households with primary reliance on															
		Clean fuels for space heating:			Polluting fuels for space heating:											
	Central heating	Electricity	Liquefied Petroleum Gas (LPG) / Cooking gas	Biogas	Gasoline/ Diesel	Kerosene/ Paraffin	Coal/ Lignite	Charcoal	Wood	Crop residue / Grass/ Straw/ Shrubs	Sawdust	Other	No space heating in the household	Total	Primary reliance on clean fuels and technologies for space heating[1]	Number of household members
Total	1.0	0.6	0.2	0.0	0.0	0.3	69.9	0.0	21.4	6.4	0.1	0.0	0.0	100.0	1.8	32,455
Area																
Urban	1.2	0.9	0.2	0.0	0.0	0.4	83.2	0.0	12.4	1.4	0.1	0.0	0.0	100.0	2.4	19,779
Rural	0.8	0.1	0.1	0.1	0.0	0.2	49.0	0.0	35.4	14.1	0.2	0.0	0.0	100.0	1.0	12,675
Province																
Ryanggang	0.0	0.1	0.0	0.0	0.2	0.1	2.4	0.0	97.2	0.0	0.0	0.0	0.0	100.0	0.1	1,013
North Hamgyong	0.1	0.0	0.0	0.0	0.0	0.3	62.9	0.2	34.7	1.8	0.0	0.0	0.0	100.0	0.1	3,213
South Hamgyong	0.0	3.5	0.0	0.0	0.0	0.4	52.0	0.0	36.9	5.9	1.1	0.0	0.1	100.0	3.5	4,290
Kangwon	0.0	0.1	0.1	0.2	0.0	0.6	76.0	0.0	19.9	3.0	0.0	0.0	0.0	100.0	0.4	2,062
Jagang	0.2	1.0	0.1	0.0	0.0	0.4	33.4	0.5	62.0	2.5	0.0	0.0	0.0	100.0	1.3	1,826
North Pyongan	2.7	0.0	0.2	0.0	0.0	0.1	83.0	0.0	2.5	11.4	0.0	0.0	0.0	100.0	3.0	3,799
South Pyongan	0.0	0.0	0.3	0.1	0.0	0.4	81.0	0.0	1.5	16.7	0.0	0.0	0.0	100.0	0.4	5,545
North Hwanghae	0.0	0.1	0.0	0.0	0.0	0.1	95.5	0.0	4.3	0.1	0.0	0.0	0.0	100.0	0.1	3,294
South Hwanghae	0.0	0.2	0.0	0.0	0.0	0.4	48.1	0.0	42.4	9.0	0.0	0.0	0.0	100.0	0.2	3,278
Pyongyang	5.5	0.3	0.5	0.0	0.0	0.4	93.1	0.0	0.0	0.0	0.0	0.1	0.0	100.0	6.4	4,136
Education of household head																
Nursery or Kindergarten or None	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(43.5)	(0.0)	(26.9)	(29.6)	(0.0)	(0.0)	(0.0)	100.0	(0.0)	30
Primary	0.0	0.0	0.0	0.0	0.0	0.0	39.9	0.0	49.2	11.0	0.0	0.0	0.0	100.0	0.0	74
Lower secondary	0.0	0.0	0.0	0.0	0.0	0.0	45.0	0.0	50.1	4.9	0.0	0.0	0.0	100.0	0.0	40
Upper secondary	1.1	0.5	0.1	0.1	0.0	0.3	67.7	0.0	22.8	7.2	0.2	0.0	0.0	100.0	1.8	20,407
Higher	1.0	0.7	0.2	0.0	0.0	0.4	74.0	0.0	18.6	5.0	0.1	0.0	0.0	100.0	1.9	11,904
Wealth index 20-40-40																
20 percent lowest	0.0	0.1	0.0	0.1	0.0	0.0	11.1	0.1	67.2	21.0	0.3	0.0	0.1	100.0	0.2	6,491
40 percent middle	0.2	1.0	0.1	0.0	0.0	0.5	76.0	0.1	16.6	5.4	0.1	0.0	0.0	100.0	1.3	12,981
40 percent highest	2.4	0.5	0.3	0.0	0.0	0.3	93.1	0.0	3.2	0.0	0.1	0.0	0.0	100.0	3.2	12,983

[1] MICS indicator TC.16 - Primary reliance on clean fuels and technologies for space heating

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

Table TC.4.5: Type of space heater mainly used and presence of chimney

Percent distribution of household members by the type of space heating mainly used in the household and presence of chimney, DPR Korea, 2017

	Percentage of household members mainly using:													
		Space heater				Cookstove for space heating								
		Manufactured		Traditional		Manufactured		Traditional						
	Central heating	With chimney	Without chimney	With chimney	Without chimney	With chimney	Without chimney	With chimney	Without chimney	Other	No space heating in the household	DK/Missing	Total	Number of household members
Total	**1.0**	**0.7**	**0.0**	**10.0**	**0.1**	**2.0**	**0.0**	**85.3**	**0.3**	**0.5**	**0.0**	**0.0**	**100.0**	**32,455**
Area														
Urban	1.2	1.2	0.0	12.9	0.1	2.7	0.0	80.7	0.3	0.8	0.0	0.0	100.0	19,779
Rural	0.8	0.0	0.0	5.4	0.0	1.0	0.0	92.5	0.3	0.0	0.0	0.0	100.0	12,675
Province														
Ryanggang	0.0	0.2	0.2	1.4	0.0	0.0	0.0	97.5	0.6	0.1	0.0	0.0	100.0	1,013
North Hamgyong	0.1	0.0	0.0	52.4	0.1	0.1	0.0	46.9	0.3	0.0	0.0	0.0	100.0	3,213
South Hamgyong	0.0	0.1	0.0	12.1	0.0	0.6	0.0	83.7	0.1	3.4	0.1	0.0	100.0	4,290
Kangwon	0.0	0.2	0.0	1.3	0.2	2.6	0.0	95.3	0.4	0.0	0.0	0.0	100.0	2,062
Jagang	0.2	0.0	0.0	0.8	0.0	1.0	0.1	96.1	1.2	0.6	0.0	0.0	100.0	1,826
North Pyongan	2.7	0.3	0.0	1.6	0.0	0.9	0.0	93.9	0.6	0.0	0.0	0.0	100.0	3,799
South Pyongan	0.0	0.0	0.0	2.0	0.0	0.7	0.0	97.0	0.3	0.0	0.0	0.0	100.0	5,545
North Hwanghae	0.0	0.0	0.0	1.0	0.0	0.9	0.0	97.8	0.2	0.0	0.0	0.0	100.0	3,294
South Hwanghae	0.0	0.1	0.0	4.3	0.1	0.5	0.0	94.6	0.3	0.0	0.0	0.0	100.0	3,278
Pyongyang	5.5	5.2	0.2	15.2	0.1	10.6	0.1	63.1	0.0	0.0	0.0	0.0	100.0	4,136
Education of household head														
Nursery or Kindergarten or None	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	30
Primary	0.0	0.0	0.0	0.0	0.0	0.0	0.0	96.5	3.5	0.0	0.0	0.0	100.0	74
Lower secondary	0.0	0.0	0.0	9.9	0.0	0.0	0.0	90.1	0.0	0.0	0.0	0.0	100.0	40
Upper secondary	1.1	0.5	0.0	9.4	0.1	2.0	0.0	86.2	0.3	0.4	0.0	0.0	100.0	20,407
Higher	1.0	1.1	0.1	11.1	0.0	2.2	0.0	83.5	0.4	0.6	0.0	0.0	100.0	11,904
Wealth index 20-40-40														
20 percent lowest	0.0	0.0	0.0	3.1	0.0	0.3	0.0	96.1	0.4	0.0	0.1	0.0	100.0	6,491
40 percent middle	0.2	0.0	0.0	8.1	0.0	0.8	0.0	89.7	0.3	0.9	0.0	0.0	100.0	12,981
40 percent highest	2.4	1.8	0.1	15.3	0.1	4.2	0.0	75.5	0.4	0.3	0.0	0.0	100.0	12,983

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

Households that use clean fuels and technologies for lighting are those mainly using electricity, solar lantern, rechargeable or battery powered flashlight, torch or lantern, or biogas lamp. Table TC.4.6 presents the percent distribution of household members according to type of lighting fuel mainly used for lighting by the household, and percentage of household members living in households using clean fuels and technologies for lighting.

Table TC.4.6: Primary reliance on clean fuels and technologies for lighting

Percent distribution of household members according to type of lighting fuel mainly used for lighting by the household, and percentage of household members living in households using clean fuels and technologies for lighting, DPR Korea, 2017

	Percentage of household members in households with primary reliance on														
	Clean fuels for lighting:					Polluting fuels for lighting:									
	Electricity	Solar lantern	Rechargeable flashlight, torch or lantern	Battery powered flashlight, torch or lantern	Biogas lamp	Gasoline lamp	Wood	Crop residue/ Grass/ Straw/ Shrubs	Candle	Other fuel for lighting	No lighting in the household	Missing	Total	Primary reliance on clean fuels and technologies for lighting[1]	Number of household members
Total	**97.9**	**1.1**	**0.9**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**100.0**	**99.9**	**32,455**
Area															
Urban	98.0	0.7	1.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	19,779
Rural	97.7	1.7	0.4	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	100.0	99.9	12,675
Province															
Ryanggang	100.0	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	1,013
North Hamgyong	99.8	0.1	0.1	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	100.0	99.9	3,213
South Hamgyong	99.5	0.3	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	100.0	99.9	4,290
Kangwon	98.9	0.9	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	2,062
Jagang	96.0	1.4	2.2	0.0	0.0	0.0	0.2	0.1	0.1	0.0	0.0	0.0	100.0	99.6	1,826
North Pyongan	97.2	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	3,799
South Pyongan	94.8	1.2	3.8	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	5,545
North Hwanghae	96.4	3.4	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	3,294
South Hwanghae	98.8	0.5	0.6	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	100.0	99.9	3,278
Pyongyang	99.7	0.2	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.1	100.0	99.9	4,136
Education of household head															
Nursery or Kindergarten or None	(100.0)	(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)	30
Primary	100.0	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	74
Lower secondary	100.0	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	40
Upper secondary	98.0	1.0	0.9	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	99.9	20,407
Higher	97.7	1.4	0.9	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	100.0	99.9	11,904
Wealth index 20-40-40															
20 percent lowest	97.5	1.6	0.7	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	100.0	99.8	6,491
40 percent middle	97.8	1.1	1.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	12,981
40 percent highest	98.1	1.0	0.8	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	99.9	12,983

[1] MICS indicator TC.17 - Primary reliance on clean fuels and technologies for lighting

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

The questions asked about cooking, space heating and lighting help to monitor SDG indicator 7.1.2, "Proportion of population with primary reliance on clean fuels and technology" for cooking, space heating and lighting. Table TC.4.7 presents the percentage of household members living in households using clean fuels and technologies for cooking, space heating, and lighting.

Table TC.4.7: Primary reliance on clean fuels and technologies for cooking, space heating, and lighting

Percentage of household members living in households using clean fuels and technologies for cooking, space heating, and lighting, DPR Korea, 2017

	Primary reliance on clean fuels and technologies for cooking[1]	Primary reliance on clean fuels and technologies for space heating[2]	Primary reliance on clean fuels and technologies for lighting[3]	Primary reliance on clean fuels and technologies for cooking, space heating and lighting[4]	Number of household members
Total	10.1	1.8	99.9	1.5	32,455
Area					
Urban	15.8	2.4	100.0	2.0	19,779
Rural	1.4	1.0	99.9	0.9	12,675
Province					
Ryanggang	5.2	0.1	100.0	0.0	1,013
North Hamgyong	14.4	0.1	99.9	0.0	3,213
South Hamgyong	5.5	3.5	99.9	3.4	4,290
Kangwon	1.9	0.4	100.0	0.0	2,062
Jagang	13.8	1.3	99.6	0.8	1,826
North Pyongan	5.6	3.0	100.0	2.9	3,799
South Pyongan	3.5	0.4	100.0	0.0	5,545
North Hwanghae	1.4	0.1	100.0	0.0	3,294
South Hwanghae	1.7	0.2	99.9	0.0	3,278
Pyongyang	42.1	6.4	99.9	5.5	4,136
Education of household head					
Nursery or Kindergarten or None	(0.0)	(0.0)	(100.0)	(0.0)	30
Primary	0.0	0.0	100.0	0.0	74
Lower secondary	9.9	0.0	100.0	0.0	40
Upper secondary	7.6	1.8	99.9	1.5	20,407
Higher	14.5	1.9	99.9	1.6	11,904
Wealth index 20-40-40					
20 percent lowest	0.1	0.2	99.8	0.0	6,491
40 percent middle	2.7	1.3	100.0	1.2	12,981
40 percent highest	22.6	3.2	99.9	2.7	12,983

[1] MICS indicator TC.15 - Primary reliance on clean fuels and technologies for cooking

[2] MICS indicator TC.16 - Primary reliance on clean fuels and technologies for space heating

[3] MICS indicator TC.17 - Primary reliance on clean fuels and technologies for lighting

[4] MICS indicator TC.18 - Primary reliance on clean fuels and technologies for cooking, space heating, and lighting; SDG Indicator 7.1.2

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

7.5. Symptoms of acute respiratory infection and fever

Symptoms of ARI are collected during the 2017 DPR Korea MICS to capture symptoms related to pneumonia, the leading cause of death in children under five. Once diagnosed, pneumonia is treated effectively with antibiotics. Studies have shown a limitation in the survey approach of measuring pneumonia because many of the cases reported in surveys by the mothers or caretakers with symptoms of pneumonia are in fact, not true pneumonia.[27] While this limitation does not affect the level and patterns of care-seeking for symptoms of pneumonia, it limits the validity of the level of treatment of pneumonia with antibiotics, as reported through household surveys. The treatment indicator described in this report must therefore be taken with caution.

Table TC.5.1 (presenting the percentage of children with symptoms of ARI, which is also generally referred to as symptoms of pneumonia, in the two weeks preceding the survey for whom care was sought, by source of care and the percentage who received antibiotics) cannot be shown because of the low number of unweighted cases of children with symptoms of ARI in the last two weeks.

In the 2017 DPR Korea MICS, data were collected for children with fever in the last two weeks and for treatment of children with fever.

Table TC.6.10 presents the percentage of children under age five with fever in the last two weeks for whom advice or treatment was sought by source of advice or treatment. Table TC.6.11 provide further insight on treatment of children with fever.

Table TC.6.10: Care-seeking during fever

Percentage of children age 0-59 months with fever in the last two weeks for whom advice or treatment was sought, by source of advice or treatment, DPR Korea, 2017

	Percentage of children for whom:				
	Advice or treatment was sought from:				
	Public health facilities or providers	Other source	A health facility or provider[1,A]	No advice or treatment sought	Number of children with fever in last two weeks
Total	83.1	10.8	85.6	12.3	155
Sex					
Male	80.1	10.6	82.2	14.9	70
Female	85.6	10.9	88.4	10.2	85
Area					
Urban	84.8	7.0	87.7	11.6	94
Rural	80.4	16.6	82.4	13.4	60
Age (in months)					
0-11	(87.6)	(29.5)	(94.1)	(0.0)	23
12-23	(77.7)	(6.2)	(82.1)	(16.2)	38
24-35	(77.7)	(10.1)	(79.3)	(17.8)	41
36-47	(94.8)	(6.7)	(94.8)	(5.2)	34
48-59	(*)	(*)	(*)	(*)	18
Mother's education					
Upper secondary	83.4	11.0	86.5	11.5	123
Higher	(82.2)	(9.9)	(82.2)	(15.7)	32
Wealth index 20-40-40					
20 percent lowest	(82.6)	(13.9)	(83.5)	(12.8)	37
40 percent middle	82.1	9.7	84.8	13.4	67
40 percent highest	(84.8)	(9.8)	(88.2)	(10.5)	51

[1] MICS indicator TC.26 - Care-seeking for fever

[A] Includes all public health facilities and providers as well as shops

The background characteristic "Province" is not shown in the table due to the small number of unweighted cases per disaggregation category.

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

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

27.– Campbell, H. et al. 2013. *Measuring Coverage in MNCH: Challenges in Monitoring the Proportion of Young Children with Pneumonia Who Receive Antibiotic Treatment.* PLoS Med 10(5): e1001421. doi:10.1371/journal.pmed.1001421

Table TC.6.11: Treatment of children with fever

Percentage of children age 0-59 months who had a fever in the last two weeks, by type of medicine given for the illness, DPR Korea, 2017

	Children with a fever in the last two weeks who were given:								Number of children with fever in last two weeks
	Antibiotics				Other medications				
	Amoxicillin	Cotrimoxazole	Other anti-biotic pill or syrup	Other antibiotic injection	Paracetamol/ Panadol/ Acetaminophen	Aspirin	Ibuprofen	Other	
Total	**39.5**	**31.0**	**15.5**	**11.1**	**54.8**	**6.0**	**3.1**	**11.0**	**155**
Sex									
Male	42.8	34.5	13.3	13.0	55.4	7.2	5.2	14.0	70
Female	36.7	28.1	17.3	9.5	54.3	5.1	1.4	8.5	85
Area									
Urban	41.7	26.7	19.1	12.2	62.9	4.2	2.8	10.9	94
Rural	36.0	37.7	9.9	9.5	42.2	8.9	3.6	11.1	60
Age (in months)									
0-11	(30.3)	(28.7)	(21.6)	(7.2)	(64.5)	(0.0)	(0.0)	(10.3)	23
12-23	(42.9)	(20.6)	(23.1)	(15.2)	(60.1)	(0.0)	(6.1)	(11.0)	38
24-35	(42.2)	(35.4)	(8.7)	(11.5)	(62.0)	(3.1)	(2.9)	(14.9)	41
36-47	(38.6)	(39.4)	(16.3)	(12.8)	(35.7)	(16.7)	(3.8)	(5.8)	34
48-59	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	18
Mother's education									
Upper secondary	34.8	31.7	16.0	11.6	53.5	7.6	3.9	11.4	123
Higher	(57.7)	(28.2)	(13.5)	(9.4)	(60.0)	(0.0)	(0.0)	(9.6)	32
Wealth index 20-40-40									
20 percent lowest	(33.3)	(28.3)	(17.1)	(12.1)	(45.6)	(7.0)	(2.7)	(11.0)	37
40 percent middle	37.4	26.8	14.4	9.3	49.2	10.1	3.7	11.2	67
40 percent highest	(46.7)	(38.5)	(15.9)	(12.8)	(69.0)	(0.0)	(2.6)	(10.7)	51

The background characteristic "Province" is not shown in the table due to the small number of unweighted cases per disaggregation category.

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

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

7.6. 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 window from birth to 2 years of age. Breastfeeding for the first few years of life protects children from infection, provides an ideal source of nutrients, and is economical and safe.[28] However, many mothers don't start to breastfeed early enough, do not breastfeed exclusively for the recommended 6 months or stop breastfeeding too soon.[29] There are often pressures to switch to infant formula, which can contribute to growth faltering and micronutrient malnutrition and can be unsafe if hygienic conditions, including safe drinking water are not readily available. In some cases it can be unsafe even with proper and hygienic preparation in the home due to food adulteration or other contamination that can affect unaware consumers.[30] Studies have shown that, in addition to continued breastfeeding, consumption of appropriate, adequate and safe solid, semi-solid and soft foods from the age of 6 months onwards leads to better health and growth outcomes, with potential to reduce stunting during the first two years of life.[31]

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.[32] Starting at 6 months, breastfeeding should be combined with safe, age-appropriate feeding of solid, semi-solid and soft foods.[33] A summary of key guiding principles[34, 35] for feeding 6-23 month olds is provided in the table below along with proximate measures for these guidelines collected in this survey.

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

(i) continued breastfeeding;
(ii) appropriate frequency of meals (but not energy density); and
(iii) appropriate nutrient content of food.

Feeding frequency is used as proxy for energy intake, requiring children to receive a minimum number of meals/snacks (and milk feeds 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, eight food groups were created for which a child consuming at least five of these is considered to have a better quality diet.[36] In most populations, consumption of at least five 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).

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;
(ii) food items form at least 5 out of 8 food groups for breastfed children and 4 out of 6 food groups for non-breastfed children; and
(iii) breastmilk or at least 2 milk feeds (for non-breastfed children).

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Guiding Principle (age 6-23 months)	Indicators /proximate measures	Table
Continue frequent, on-demand breastfeeding for two years and beyond	% of children aged 12-15 months and 20-23 months breastfed in the last 24 hours	TC.7.3
Appropriate frequency and energy density of meals	**Minimum Meal Frequency for 6-23 month olds** Breastfed children Depending on age, two or three meals/snacks provided in the last 24 hours Non-breastfed children Four meals/snacks and/or milk feeds provided in the last 24 hours	TC.7.5
Appropriate nutrient content of food	**Minimum Diet Diversity** Five food groups* eaten in the last 24 hours	TC.7.5
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	TC.7.8
Practice responsive feeding, applying the principles of psy-cho-social care	No standard indicator exists	na

* Food groups used for assessment of this indicator are 1) Breastmilk; 2) Grains, roots and tubers, 3) legumes and nuts, 4) dairy products (milk, yogurt, cheese), 5) flesh foods (meat, fish, poultry and liver/organ meats), 6) eggs, 7) vitamin-A rich fruits and vegetables, and 8) other fruits and vegetables.

Table TC.7.1 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 of birth, and those who received a prelacteal feed.[37]

37.– 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).

Table TC.7.1: Initial breastfeeding

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, by type of feed, DPR Korea, 2017

	Percentage who were ever breast-fed[1]	Percentage who were first breastfed:		Number of last live-born children in the last two years	Percent-age of chil-dren who received a prelacteal feed[A]	Number of last live born children in last two years ever breast-fed	Type of prelacteal feed			Number of last live born children in last two years ever breastfed who received a prelacteal feed
		Within one hour of birth[2]	Within one day of birth				Non-milk based liq-uids	Milk-based liq-uids	Both	
Total	**99.6**	**42.5**	**83.2**	**931**	**10.4**	**927**	**80.1**	**19.9**	**100.0**	**97**
Area										
Urban	99.5	44.4	81.5	559	14.8	556	78.9	21.1	100.0	82
Rural	99.8	39.5	85.7	372	3.9	371	(*)	(*)	(*)	14
Province										
Ryanggang	100.0	30.8	93.3	28	2.2	28	(*)	(*)	(*)	1
North Hamgyong	98.9	40.3	83.6	87	7.1	86	(*)	(*)	(*)	6
South Hamgyong	100.0	34.8	78.3	121	11.9	121	(*)	(*)	(*)	14
Kangwon	99.0	54.1	91.9	63	7.2	62	(*)	(*)	(*)	4
Jagang	100.0	26.3	64.8	55	12.1	55	(*)	(*)	(*)	7
North Pyongan	98.9	36.0	84.0	111	7.6	110	(*)	(*)	(*)	8
South Pyongan	100.0	49.1	81.6	158	14.0	158	(*)	(*)	(*)	22
North Hwanghae	99.0	42.7	83.7	98	4.1	97	(*)	(*)	(*)	4
South Hwanghae	100.0	33.4	83.7	96	3.1	96	(*)	(*)	(*)	3
Pyongyang	100.0	61.1	90.3	113	23.6	113	(*)	(*)	(*)	27
Months since last birth										
0-11 months	99.6	44.1	84.7	430	11.2	429	(75.8)	(24.2)	(100.0)	48
12-23 months	99.6	41.1	81.9	500	9.8	498	(84.3)	(15.7)	(100.0)	49
Mother's education										
Upper secondary	99.5	43.9	84.2	752	8.6	748	82.3	17.7	100.0	64
Higher	100.0	36.5	78.9	179	18.1	179	(75.7)	(24.3)	(100.0)	32
Assistance at delivery										
Skilled attendant	99.6	42.5	83.3	926	10.5	922	80.1	19.9	100.0	97
Other	(*)	(*)	(*)	3	(*)	5	-	-	-	0
Place of delivery										
Home	100.0	19.6	77.5	73	7.1	73	-	-	-	5
Public health facility	99.6	44.4	83.7	858	10.7	854	78.9	21.1	100.0	91
Type of delivery										
Vaginal birth	99.5	44.4	86.1	810	7.0	807	(83.2)	(16.8)	(100.0)	56
C-Section	100.0	29.4	63.7	120	33.4	120	(75.8)	(24.2)	(100.0)	40
Wealth index 20-40-40										
20 percent lowest	100.0	35.8	85.4	181	5.1	181	(*)	(*)	(*)	9
40 percent middle	99.5	40.1	82.8	373	6.4	371	(*)	(*)	(*)	24
40 percent highest	99.5	48.0	82.5	376	17.0	374	74.5	25.5	100.0	63

[1] MICS indicator TC.30 - Children ever breastfed

[2] MICS indicator TC.31 - Early initiation of breastfeeding

[A] Children receiving a prelacteal feed are those ever breastfed who consumed something other than breastmilk in the first 3 days of life.

( ) 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 TC.7.2 presents the percentage of last live-born children who consumed breastmilk as well as other liquids and items in the first 3 days of life. The data are disaggregated by various background characteristics including whether the child was ever breastfed or not.

Table TC.7.2: Newborn feeding

Percentage of last live-born children ever breastfed by consumption of breastmilk and other items, percentage receiving a prelacteal feed, and percentage of child never breastfed by consumption of other items in the first 3 days after birth, DPR Korea, 2017

	Percentage of children who in the first three days:											
		Consumed other than breastmilk:										
	Were exclusively breastfed[A]	Animal milk	Plain water	Sugar or glucose water	Fruit juice	Infant formula	Tea/Infusions/ Traditional herbal preparations	Honey	Prescribed medicine/ ORS	Other	Were not given anything to drink	Number of last live-born children in the last two years[B]
Total	**89.2**	**2.2**	**0.2**	**2.2**	**0.1**	**6.1**	**0.0**	**0.4**	**0.5**	**0.2**	**0.0**	**931**
Area												
Urban	84.8	3.4	0.1	3.4	0.0	8.5	0.0	0.3	0.9	0.1	0.0	559
Rural	95.9	0.5	0.5	0.3	0.2	2.4	0.0	0.6	0.0	0.4	0.0	372
Province												
Ryanggang	97.8	0.0	0.0	0.0	0.0	2.2	0.0	0.0	0.0	0.0	0.0	28
North Hamgyong	91.9	0.0	0.0	3.4	0.0	5.8	0.0	0.0	3.4	0.0	0.0	87
South Hamgyong	88.1	4.4	0.0	0.0	0.0	7.6	0.0	0.0	1.1	0.0	0.0	121
Kangwon	91.9	1.0	1.0	2.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0	63
Jagang	87.9	1.0	3.1	2.0	1.0	1.0	0.0	7.1	1.0	2.0	0.0	55
North Pyongan	91.4	4.3	0.0	1.1	0.0	3.2	0.0	0.0	0.0	0.0	0.0	111
South Pyongan	86.0	1.1	0.0	8.6	0.0	5.4	0.0	0.0	0.0	0.0	0.0	158
North Hwanghae	94.9	1.0	0.0	0.0	0.0	4.1	0.0	0.0	0.0	0.0	0.0	98
South Hwanghae	96.9	0.0	0.0	0.0	0.0	2.1	0.0	0.0	0.0	1.0	0.0	96
Pyongyang	76.4	6.1	0.0	0.0	0.0	17.5	0.0	0.0	0.0	0.0	0.0	113
Months since last birth												
0-11 months	88.5	3.1	0.3	2.2	0.0	6.1	0.0	0.4	0.5	0.4	0.0	430
12-23 months	89.9	1.5	0.2	2.1	0.1	6.0	0.0	0.4	0.6	0.1	0.0	500
Breastfeeding status												
Ever breastfed	89.6	2.1	0.2	2.2	0.1	5.8	0.0	0.4	0.5	0.2	0.0	927
Never breastfed	na	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	4
Assistance at delivery												
Skilled attendant	89.2	2.3	0.2	2.2	0.1	6.1	0.0	0.4	0.5	0.2	0.0	926
Other	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	5
Place of delivery												
Home	92.9	0.0	0.0	4.0	0.0	1.6	0.0	0.0	0.0	1.5	0.0	73
Public health facility	88.9	2.4	0.3	2.0	0.1	6.4	0.0	0.5	0.6	0.1	0.0	858
Mother's education												
Upper secondary	91.0	1.7	0.3	1.7	0.1	5.2	0.0	0.4	0.2	0.3	0.0	752
Higher	81.9	4.4	0.0	4.0	0.0	9.6	0.0	0.6	1.8	0.0	0.0	179
Wealth index 20-40-40												
20 percent lowest	94.9	0.7	0.3	0.6	0.3	2.5	0.0	0.9	0.3	0.3	0.0	181
40 percent middle	93.1	0.7	0.5	2.1	0.0	3.2	0.0	0.6	0.3	0.3	0.0	373
40 percent highest	82.6	4.5	0.0	3.0	0.0	10.7	0.0	0.0	0.9	0.1	0.0	376

[A] Includes children consuming prescribed medications and ORS

[B] Excludes children born in the 3 days before the survey

na: not applicable

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

The set of Infant and Young Child Feeding indicators reported in tables TC.7.3 through TC.7.6 are based on the mother's report of consumption of food and fluids during the day or night prior to being interviewed. Data are subject to a number of limitations, some related to the respondent's ability to provide a full report on the child's liquid and food intake due to recall errors as well as lack of knowledge in cases where the child was fed by other individuals.

In Table TC.7.3, breastfeeding status is presented for both *Exclusively breastfed* and *Predominantly breastfed;* referring to infants age less than 6 months who are breastfed, distinguished by *the former* only allowing vitamins, mineral supplements, and medicine and *the latter* allowing also plain water and non-milk liquids. The table also shows continued breastfeeding of children at 12-15 and 20-23 months of age.

Table TC.7.3: Breastfeeding status

Percentage of living children according to breastfeeding status at selected age groups, DPR Korea, 2017

	Children age 0-5 months			Children age 12-15 months		Children age 20-23 months	
	Percent exclusively breastfed[1]	Percent predominantly breastfed[2]	Number of children	Percent breastfed (Continued breastfeeding at 1 year)[3]	Number of children	Percent breastfed (Continued breastfeeding at 2 years)[4]	Number of children
Total	**71.4**	**77.9**	**170**	**68.8**	**145**	**27.2**	**150**
Sex							
Male	62.8	72.2	85	70.3	80	24.4	69
Female	80.0	83.6	86	67.0	66	29.5	81
Area							
Urban	70.8	75.5	111	66.6	87	26.1	100
Rural	72.6	82.4	59	72.0	58	29.2	49
Mother's education							
Upper secondary	70.5	77.5	127	67.8	121	27.1	127
Higher	(74.1)	(79.2)	43	(73.9)	24	(*)	23
Wealth index 20-40-40							
20 percent lowest	(68.0)	(78.9)	37	(71.3)	35	(19.6)	25
40 percent middle	76.8	81.1	56	(75.5)	47	25.4	62
40 percent highest	69.2	75.2	77	62.4	63	32.1	62

[1] MICS indicator TC.32 - Exclusive breastfeeding under 6 months

[2] MICS indicator TC.33 - Predominant breastfeeding under 6 months

[3] MICS indicator TC.34 - Continued breastfeeding at 1 year

[4] MICS indicator TC.35 - Continued breastfeeding at 2 years

The background characteristic "Province" is not shown in the table due to the small number of unweighted cases per disaggregation category.

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

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

Table TC.7.4 shows the median duration of any breastfeeding characteristics among children age 0-35 months and the median duration of exclusive breastfeeding and predominant breastfeeding among children age 0-23 months.

Table TC.7.4: Duration of breastfeeding

Median duration of any breastfeeding among children age 0-35 months and median duration of exclusive breastfeeding and predominant breastfeeding among children age 0-23 months, DPR Korea, 2017

	Median duration (in months) of any breast-feeding[1]	Number of children age 0-35 months	Median duration (in months) of:		Number of children age 0-23 months
			Exclusive breastfeeding	Predominant breast-feeding	
Median	**16.6**	**1,362**	**4.2**	**4.8**	**911**
Sex					
Male	17.1	697	3.6	4.4	466
Female	16.1	665	4.7	5.1	446
Area					
Urban	16.3	819	4.4	4.8	549
Rural	17.2	543	4.0	4.8	362
Province					
Ryanggang	12.1	43	4.7	5.0	28
North Hamgyong	22.6	131	3.9	4.1	87
South Hamgyong	18.5	178	4.2	4.9	118
Kangwon	18.1	88	2.9	3.8	60
Jagang	20.0	79	3.0	5.0	54
North Pyongan	15.6	158	3.8	4.5	105
South Pyongan	17.7	230	5.0	5.6	154
North Hwanghae	15.0	145	5.0	5.0	98
South Hwanghae	13.7	143	4.4	4.4	97
Pyongyang	14.4	166	3.6	4.6	111
Mother's education					
Upper secondary	16.7	1,106	4.1	4.8	738
Higher	16.2	256	4.4	5.0	173
Wealth index 20-40-40					
20 percent lowest	16.1	267	3.8	5.0	177
40 percent middle	16.8	532	4.3	4.7	359
40 percent highest	16.9	563	4.4	4.9	374
Mean	17.3	1,362	4.5	5.0	911

[1] MICS indicator TC.36 - Duration of breastfeeding

The age-appropriateness of breastfeeding of children under age 24 months is provided in Table TC.7.5. Different criteria of feeding are used depending on the age of the child. For infants age 0-5 months, exclusive breastfeeding is considered as age-appropriate feeding, while children age 6-23 months are considered to be appropriately fed if they are receiving breastmilk and solid, semi-solid or soft food.

Table TC.7.5: Age-appropriate breastfeeding

Percentage of children age 0-23 months who were appropriately breastfed during the previous day, DPR Korea, 2017

	Children age 0-5 months		Children age 6-23 months		Children age 0-23 months	
	Percent exclusively breastfed[1]	Number of children	Percent currently breast-feeding and receiving solid, semi-solid or soft foods	Number of children	Percent appropri-ately breastfed[2]	Number of children
Total	**71.4**	**170**	**59.3**	**741**	**61.6**	**911**
Sex						
Male	62.8	85	60.7	381	61.1	466
Female	80.0	86	57.8	360	62.1	446
Area						
Urban	70.8	111	57.5	438	60.2	549
Rural	72.6	59	62.0	303	63.7	362
Province						
Ryanggang	(*)	6	34.3	22	41.6	28
North Hamgyong	(*)	11	83.1	76	84.1	87
South Hamgyong	(*)	19	66.5	99	68.4	118
Kangwon	(*)	12	58.9	48	57.6	60
Jagang	(55.7)	15	68.2	39	64.7	54
North Pyongan	(*)	16	37.2	90	41.9	105
South Pyongan	(*)	24	61.6	130	62.0	154
North Hwanghae	(*)	24	58.7	73	66.9	98
South Hwanghae	(*)	16	56.2	81	60.3	97
Pyongyang	(*)	27	55.5	84	56.8	111
Mother's education						
Upper secondary	70.5	127	58.0	611	60.1	738
Higher	(74.1)	43	65.6	130	67.7	173
Wealth index 20-40-40						
20 percent lowest	(68.0)	37	56.3	140	58.7	177
40 percent middle	76.8	56	59.4	304	62.1	359
40 percent highest	69.2	77	60.7	297	62.4	374

[1] MICS indicator TC.32 - Exclusive breastfeeding under 6 months

[2] MICS indicator TC.37 - Age-appropriate breastfeeding

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

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

Table TC.7.6 further looks into the introduction of solid, semi-solid, or soft foods for infants age 6-8 months while Table TC.7.7 presents the percentage of children age 6-23 months who received the minimum number of meals/snacks, referring to solid, semi-solid, or soft food, but also milk feeds for non-breastfed children, during the previous day, by breastfeeding status.

Table TC.7.6: Introduction of solid, semi-solid, or soft foods

Percentage of infants age 6-8 months who received solid, semi-solid, or soft foods during the previous day, DPR Korea, 2017

	Currently breastfeeding		Currently not breastfeeding		All	
	Percent receiving solid, semi-solid or soft foods	Number of children age 6-8 months	Percent receiving solid, semi-solid or soft foods	Number of children age 6-8 months	Percent receiving solid, semi-solid or soft foods[1]	Number of children age 6-8 months
Total	77.8	141	(*)	3	78.2	144
Sex						
Male	83.1	75	(*)	0	83.1	75
Female	71.9	66	(*)	2	72.8	69
Area						
Urban	80.9	75	(*)	3	81.5	77
Rural	74.4	67	-	0	74.4	67

[1] MICS indicator TC.38 - Introduction of solid, semi-solid or soft foods

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

"–" denotes 0 unweighted case in that cell or in the denominator

Table TC.7.7: Infant and young child feeding (IYCF) practices

Percentage of children age 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, DPR Korea, 2017

	Currently breastfeeding				Currently not breastfeeding					All			
	Percent of children who received:			Number of children age 6-23 months	Percent of children who received:				Number of children age 6-23 months	Percent of children who received:			Number of children age 6-23 months
	Minimum dietary diversity[A]	Minimum meal frequency[B]	Minimum acceptable diet[1,C]		Minimum dietary diversity[A]	Minimum meal frequency[B]	Minimum acceptable diet[2,C]	At least 2 milk feeds[3]		Minimum dietary diversity[4,A]	Minimum meal frequency[5,B]	Minimum acceptable diet[C]	
Total	**39.5**	**74.9**	**34.1**	**482**	**60.2**	**47.7**	**17.7**	**28.3**	**259**	**46.7**	**75.0**	**28.6**	**741**
Sex													
Male	41.8	76.7	36.5	252	62.8	74.1	15.5	22.1	129	48.9	75.8	29.4	381
Female	37.0	73.0	31.6	230	57.5	75.3	20.0	34.4	130	44.4	74.1	27.8	360
Area													
Urban	45.9	76.6	40.1	269	65.3	76.7	21.2	34.0	169	53.4	77.0	33.1	438
Rural	31.4	72.8	26.7	214	50.5	71.0	11.2	17.6	90	37.1	72.2	22.2	303
Province													
Ryanggang	(46.3)	(65.3)	(38.5)	8	(50.0)	(61.3)	(18.1)	(36.3)	14	48.6	62.8	25.6	22
North Hamgyong	34.9	62.2	24.1	66	(*)	(*)	(*)	(*)	10	39.5	62.0	26.2	76
South Hamgyong	55.0	81.0	49.2	70	(*)	(*)	(*)	(*)	29	53.5	76.8	40.7	99
Kangwon	(40.5)	(80.8)	(36.2)	30	(71.4)	(82.6)	(10.6)	(21.3)	18	52.0	81.5	26.7	48
Jagang	62.7	60.7	47.1	29	(*)	(*)	(*)	(*)	10	66.1	60.7	37.8	39
North Pyongan	(17.5)	(52.3)	(15.3)	54	(60.6)	(90.0)	(13.6)	(27.0)	35	34.4	68.0	14.8	90
South Pyongan	27.9	72.0	23.9	87	(43.7)	(75.7)	(16.0)	(24.0)	43	33.1	73.3	21.3	130
North Hwanghae	(24.7)	(82.1)	(22.6)	44	(45.2)	(72.7)	(6.9)	(34.8)	29	32.9	77.2	17.1	73
South Hwanghae	(32.9)	(95.8)	(32.9)	48	(64.6)	(79.1)	(11.8)	(14.7)	34	46.0	88.9	24.2	81
Pyongyang	(74.5)	(94.3)	(68.9)	46	(85.9)	(74.8)	(36.1)	(42.7)	37	79.6	85.7	54.3	84
Age (in months)													
6-8	22.1	71.1	22.1	141	(*)	(*)	(*)	(*)	2	21.7	71.4	21.9	144
9-11	46.9	72.9	38.3	129	(*)	(*)	(*)	(*)	12	44.6	72.9	35.7	141
12-17	48.2	78.6	40.3	137	62.9	74.5	19.4	30.1	81	53.7	76.9	32.7	219
18-23	43.5	79.0	38.2	75	62.8	74.6	18.0	27.2	162	56.7	76.7	24.7	237
Mother's education													
Upper secondary	37.4	74.9	33.0	391	56.3	74.9	15.8	25.3	219	44.2	75.2	27.0	611
Higher	48.6	75.0	39.2	91	(81.7)	(73.7)	(28.7)	(44.8)	39	58.6	74.4	36.3	130
Wealth index 20-40-40													
20 percent lowest	33.5	78.9	26.8	86	45.0	76.0	9.9	13.9	54	37.9	77.6	20.4	140
40 percent middle	35.5	73.2	30.4	202	51.2	69.6	13.8	28.2	102	40.8	72.2	25.0	304
40 percent highest	46.2	75.0	41.2	194	77.1	79.1	25.8	36.0	103	56.9	76.7	36.1	297

[1] MICS indicator TC.39a - Minimum acceptable diet (breastfed children)

[2] MICS indicator TC.39b - Minimum acceptable diet (non-breastfed children)

[3] MICS indicator TC.40 - Milk feeding frequency for non-breastfed children

[4] MICS indicator TC.41 - Minimum dietary diversity

[5] MICS indicator TC.42 - Minimum meal frequency

[A] Minimum dietary diversity is defined as receiving foods from at least 5 of 8 food groups: 1) breastmilk, 2) grains, roots and tubers, 3) legumes and nuts, 4) dairy products (milk, infant formula, yogurt, cheese), 5) flesh foods (meat, fish, poultry and liver/organ meats), 6) eggs, 7) vitamin-A rich fruits and vegetables, and 8) other fruits and vegetables.

[B] 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 age 6-8 months and 3 times or more daily for children age 9-23 months. For non-breastfeeding children age 6-23 months it is defined as receiving solid, semi-solid or soft foods, or milk feeds, at least 4 times.

[C] The minimum acceptable diet for breastfed children age 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

The continued practice of bottle-feeding is a concern because of the possible contamination if the bottle and/or nipple are not properly cleaned or sterilized but also due to possible interference with breastfeeding, especially at the youngest ages due to nipple confusion[38]. Table TC.7.8 presents the percentage of children age 0-23 months who were fed with a bottle with a nipple during the previous day.

Table TC.7.8: Bottle feeding

Percentage of children age 0-23 months who were fed with a bottle with a nipple during the previous day, DPR Korea, 2017

	Percentage of children age 0-23 months fed with a bottle with a nipple[1]	Number of children age 0-23 months
Total	8.7	911
Sex		
Male	8.6	466
Female	8.7	446
Area		
Urban	9.3	549
Rural	7.7	362
Province		
Ryanggang	11.0	28
North Hamgyong	15.0	87
South Hamgyong	4.4	118
Kangwon	18.1	60
Jagang	5.2	54
North Pyongan	3.3	105
South Pyongan	4.5	154
North Hwanghae	7.3	98
South Hwanghae	13.2	97
Pyongyang	12.1	111
Age (in months)		
0-5	8.3	170
6-11	11.6	285
12-23	6.9	456
Mother's education		
Upper secondary	8.3	738
Higher	10.1	173
Wealth index 20-40-40		
20 percent lowest	5.9	177
40 percent middle	7.7	359
40 percent highest	10.9	374

[1] MICS indicator TC.43 - Bottle feeding

38.– Zimmerman E., and Thopmson, K. 2015. *Clarifying Nipple confusion.* J Perinatol 2015 Nov;35(11):895-9

7.7. Malnutrition

Children's nutritional status is a reflection of their overall health. When children have access to an adequate food supply, are not exposed to repeated illness, and are well cared for, they reach their growth potential and are considered well nourished.

Undernutrition is associated with more than half of all child deaths worldwide. Undernourished children are more likely to die from common childhood ailments, and for those who survive, have recurring sicknesses and faltering growth. Three-quarters of children who die from causes related to malnutrition were only mildly or moderately malnourished – showing no outward sign of their vulnerability. The Sustainable Development Goal target is to reduce by 40 percent the prevalence of stunting among under five year olds between 2012 and 2025 as well as to reduce wasting to <5 percent and have no increase in overweight over the same time period. A reduction in the prevalence of malnutrition will also assist in the goal to reduce child mortality as well as a number of other goals.

In a well-nourished population, there is a reference distribution of height and weight for how children under age five years should grow. Under-nutrition in a population can be gauged by comparing children to this reference population. The reference population used in this report is based on the WHO growth standards[39]. 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 as a result 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*. Wasting is usually the result of a recent nutritional deficiency. The indicator of wasting may exhibit significant seasonal shifts associated with changes in the availability of food and/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.

In the 2017 DPR Korea MICS, weights and heights of all children under 5 years of age were measured using the anthropometric equipment recommended[40] by UNICEF. Findings in this section are based on the results of these measurements in conjunction with the age in months data based on birth dates collected during the survey interview.

Table TC.8.1 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.

39.– http://www.who.int/childgrowth/standards/technical_report
40.– See MICS Supply Procurement Instructions: http://mics.unicef.org/tools#survey-design

Table TC.8.1: 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, DPR Korea, 2017

	Weight for age				Height for age				Weight for height					
	Underweight				Stunted				Wasted		Overweight			
	Percent below		Mean Z-Score (SD)	Number of children under age 5	Percent below		Mean Z-Score (SD)	Number of children under age 5	Percent below		Percent above		Mean Z-Score (SD)	Number of children under age 5
	- 2 SD[1]	- 3 SD[2]			- 2 SD[3]	- 3 SD[4]			- 2 SD[5]	- 3 SD[6]	+ 2 SD[7]	+ 3 SD[8]		
Total	**9.3**	**1.8**	**-0.7**	**2,271**	**19.1**	**4.8**	**-1.0**	**2,270**	**2.5**	**0.5**	**2.3**	**0.4**	**-0.2**	**2,270**
Sex														
Male	9.6	2.2	-0.7	1,161	18.4	4.6	-1.0	1,161	3.0	0.5	2.3	0.6	-0.2	1,161
Female	8.9	1.4	-0.7	1,110	19.9	5.0	-1.0	1,109	2.0	0.5	2.3	0.1	-0.1	1,109
Area														
Urban	7.0	1.2	-0.6	1,358	15.6	3.8	-0.9	1,357	1.7	0.4	2.6	0.4	-0.1	1,358
Rural	12.6	2.7	-0.9	913	24.4	6.3	-1.2	913	3.7	0.7	1.9	0.2	-0.3	913
Province														
Ryanggang	14.8	4.0	-1.0	71	31.8	10.5	-1.5	71	4.4	0.9	1.8	0.0	-0.3	71
North Hamgyong	7.1	1.4	-0.8	221	21.5	5.3	-1.1	221	2.2	0.5	1.4	0.0	-0.3	221
South Hamgyong	11.3	2.2	-0.9	294	19.4	5.4	-1.1	294	3.2	0.9	0.9	0.5	-0.4	294
Kangwon	10.9	3.0	-0.8	148	21.4	6.9	-1.1	148	3.5	0.0	0.9	0.0	-0.2	148
Jagang	11.1	1.7	-0.7	131	23.0	5.7	-1.2	130	2.1	0.4	3.0	0.0	0.0	130
North Pyongan	8.5	1.3	-0.7	264	19.6	4.9	-1.1	264	1.3	0.0	2.6	0.5	-0.1	264
South Pyongan	8.1	1.8	-0.6	386	19.3	4.1	-1.1	386	2.2	0.9	3.6	0.9	0.0	386
North Hwanghae	11.2	2.5	-1.0	242	19.2	5.4	-1.2	242	2.9	0.4	0.4	0.0	-0.4	242
South Hwanghae	11.3	1.3	-0.7	237	18.8	5.0	-1.0	237	3.4	0.4	3.0	0.4	-0.2	237
Pyongyang	4.8	0.9	-0.1	278	10.1	1.1	-0.3	278	1.4	0.4	4.2	0.4	0.1	278
Age (in months)														
0-5	0.3	0.0	-0.1	168	3.1	0.4	-0.3	168	0.0	0.0	1.8	0.0	0.2	168
6-11	6.6	1.6	-0.4	285	7.7	2.3	-0.6	285	1.7	0.5	2.1	0.4	-0.1	285
12-17	6.8	1.3	-0.5	219	12.1	2.7	-0.7	218	2.6	0.4	3.1	0.0	-0.3	219
18-23	11.2	0.8	-0.8	237	18.9	5.8	-1.1	237	4.2	0.0	1.7	0.0	-0.3	237
24-35	12.3	2.1	-0.8	451	22.9	4.6	-1.2	451	2.8	0.8	2.1	0.4	-0.2	451
36-47	12.8	2.9	-0.9	453	24.7	6.6	-1.3	452	3.3	0.8	2.5	0.6	-0.3	453
48-59	8.0	1.9	-0.8	459	26.3	6.9	-1.3	459	1.8	0.4	2.7	0.5	-0.1	459
Mother's education														
Primary	(*)	(*)	(*)	1	(*)	(*)	(*)	1	(*)	(*)	(*)	(*)	(*)	1
Upper secondary	9.7	2.0	-0.7	1,851	19.3	5.3	-1.1	1,851	2.6	0.5	2.2	0.3	-0.2	1,851
Higher	7.5	0.9	-0.6	419	18.2	2.7	-0.9	418	2.2	0.3	2.9	0.4	-0.1	419
Mother's age at birth														
Less than 20	(*)	(*)	(*)	8	(*)	(*)	(*)	7	(*)	(*)	(*)	(*)	(*)	8
20-34	9.1	1.7	-0.7	2,153	19.1	4.7	-1.0	2,152	2.3	0.4	2.3	0.4	-0.2	2,152
35-49	8.1	1.0	-0.6	101	19.4	5.0	-1.0	101	2.0	1.0	2.3	0.0	-0.1	101
No information on biological mother	(*)	(*)	(*)	9	(*)	(*)	(*)	9	(*)	(*)	(*)	(*)	(*)	9
Wealth index 20-40-40														
20 percent lowest	12.7	2.5	-0.9	447	27.0	6.8	-1.3	447	4.1	0.9	1.6	0.2	-0.3	447
40 percent middle	10.2	1.8	-0.8	912	20.4	5.0	-1.1	912	2.5	0.2	2.2	0.1	-0.2	912
40 percent highest	6.7	1.5	-0.5	912	13.9	3.6	-0.8	911	1.7	0.6	2.7	0.7	-0.1	912

[1] MICS indicator TC.44a - Underweight prevalence (moderate and severe)

[2] MICS indicator TC.44b - Underweight prevalence (severe)

[3] MICS indicator TC.45a - Stunting prevalence (moderate and severe); SDG indicator 2.2.1

[4] MICS indicator TC.45b - Stunting prevalence (severe)

[5] MICS indicator TC.46a - Wasting prevalence (moderate and severe); SDG indicator 2.2.2

[6] MICS indicator TC.46b - Wasting prevalence (severe)

[7] MICS indicator TC.47a - Overweight prevalence (moderate and severe); SDG indicator 2.2.2

[8] MICS indicator TC.47b - Overweight prevalence (severe)

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

Children whose measurements were not taken due to absence from the home during interviews or other reasons, or whose measurements are outside a plausible range are excluded from Table TC.8.1. Children are excluded from one or more of the anthropometric indicators when their weights and heights have not been measured, or their age is not available, whichever applicable. For example, if a child has been weighed but his/her height has not been measured, the child is included in underweight calculations, but not in the calculations for stunting and wasting. Percentages of children by age and reasons for exclusion are shown in the data quality tables DQ.3.4, DQ.3.5, and DQ.3.6 in Appendix D. The tables show that due to incomplete dates of birth, implausible measurements, and/or missing weight and/or height, 0.2 percent of children have been excluded from calculations of the weight-for-age indicator, 0.2 percent from the height-for-age indicator, and 0.2 percent for the weight-for-height indicator.

7.8. Salt iodisation

Iodine Deficiency Disorders (IDD) is the world's leading cause of preventable mental retardation and impaired psychomotor development in young children. 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 goitre. 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. The indicator reported in MICS is the percentage of households consuming adequately iodized salt (>15 parts per million) as assessed using rapid test kits.

In DPRK, government policy was formulated on salt iodization in October 1994, followed by development and implementation of salt iodization program with UNICEF support since July 1996 till 2016 when the country embraced new strategy to achieve Universal salt iodization. Over that period, UNICEF provided the needed equipment, packaging materials, lab. Supplies and Potassium Iodate for salt iodization. Over the stated above period, there were five salt factories in the country producing iodized salt. However, the output could not cover national needs for households' use.

In 2016, the DPRK government established multi-sectoral coordination committee to develop and implement the national strategy and action plan (2018-2021) in order to produce at least 45,000 MT of iodized salt with aim of ensuring 100µg/L of urinary iodine concentration. The new strategy once fully implemented will contribute to prevention and elimination of IDD in DPRK.

In 2017 DPR Korea MICS, salt used for cooking in the household was tested for iodine content by using rapid test kits and testing for the presence of indicate whether salt was tested for potassium iodide. Table TC.9.1 presents the percent distribution of households by consumption of iodized salt.

Table TC.9.1: Iodized salt consumption

Percent distribution of households by consumption of iodized salt, DPR Korea, 2017

	Percentage of households in which salt was tested	Number of households	Percent of households with:				Total	Percentage of households with iodised salt[1]	Number of households in which salt was tested or with no salt
				Salt test result					
			No salt	Not iodized 0 ppm	>0 and <15 ppm	15+ ppm			
Total	**100.0**	**8499**	**0.0**	**62.5**	**16.9**	**20.5**	**100.0**	**37.5**	**8,498**
Area									
Urban	100.0	5252	0.0	55.6	19.0	25.4	100.0	44.4	5,252
Rural	99.9	3247	0.0	73.7	13.6	12.7	100.0	26.2	3,246
Province									
Ryanggang	100.0	262	0.0	73.7	10.9	15.4	100.0	26.3	262
North Hamgyong	100.0	848	0.0	69.5	13.7	16.8	100.0	30.5	848
South Hamgyong	99.9	1118	0.0	76.8	10.5	12.7	100.0	23.2	1,117
Kangwon	100.0	535	0.0	59.0	21.4	19.6	100.0	41.0	535
Jagang	99.9	474	0.1	76.0	16.1	7.8	100.0	23.9	474
North Pyongan	100.0	993	0.0	66.3	19.8	14.0	100.0	33.7	993
South Pyongan	100.0	1461	0.0	61.1	18.3	20.6	100.0	38.9	1,461
North Hwanghae	100.0	852	0.0	71.1	16.9	11.9	100.0	28.9	852
South Hwanghae	100.0	835	0.0	69.1	17.9	13.0	100.0	30.9	835
Pyongyang	100.0	1121	0.0	23.5	20.2	56.2	100.0	76.5	1,121
Wealth index 20-40-40									
20 percent lowest	99.9	1692	0.0	81.9	10.0	8.1	100.0	18.1	1,691
40 percent middle	100.0	3398	0.0	69.4	15.7	14.9	100.0	30.6	3,398
40 percent highest	100.0	3409	0.0	46.1	21.6	32.4	100.0	53.9	3,409

[1] MICS indicator TC.48 - Iodized salt consumption

7.9. Early childhood development

It is well recognized that a period of rapid brain development occurs in the first years of life, and the quality of children's home environment and their interactions with caregivers is a major determinant of their development during this period.[41] Children's early experiences with responsive caregiving serves an important neurological function and these interactions can boost cognitive, physical, social and emotional development.[42] In this context, engagement of adults in activities with children, presence of books and playthings in the home for the child, and the conditions of care are important indicators.

Information on a number of activities that provide children with early stimulation and responsive care was collected in the survey. These included the involvement of adults in the household 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.

41.– Black, Maureen M., et al., *Early Childhood Development Coming of Age: Science through the life course,* The Lancet, series 0140-6736, no. 16, 4 October 2016; Shonkoff, Jack P., et al., *The Lifelong Effects of Early Childhood Adversity and Toxic Stress,* Pediatrics, vol. 129, no. 1, January 2012, pp. 232–246.

42.– Britto, Pia R., et al., *Nurturing Care: Promoting early childhood development,* The Lancet, vol. 389, no. 10064, January 2017, pp. 91–102; Milteer, Regina M., et al., *The Importance of Play in Promoting Healthy Child Development and Maintaining Strong Parent-Child Bond: Focus on children in poverty'* American Academy of Pediatrics, vol. 1129, no. 1, January 2012, pp. 183–191.

Table TC.10.1: Support for learning

Percentage of children age 2-4 years 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 fathers and mothers, DPR Korea, 2017

	Adult household members			Percentage of children living with their:		Father		Mother		
	Percentage of children with whom adult household members have engaged in four or more activities[1]	Mean number of activities with adult household members	Percentage of children with whom no adult household member have engaged in any activity	Father	Mother	Percentage of children with whom fathers have engaged in four or more activities[2]	Mean number of activities with fathers	Percentage of children with whom mothers have engaged in four or more activities[3]	Mean number of activities with mothers	Number of children age 2-4 years
Total	**94.8**	**5.6**	**0.3**	**97.1**	**98.9**	**21.3**	**2.1**	**80.4**	**4.7**	**1,364**
Sex										
Male	94.4	5.5	0.4	97.3	98.7	20.0	2.1	80.7	4.7	698
Female	95.2	5.6	0.2	96.8	99.1	22.7	2.2	80.2	4.7	666
Area										
Urban	94.9	5.6	0.2	97.0	98.4	21.8	2.1	81.0	4.7	813
Rural	94.6	5.5	0.4	97.2	99.6	20.7	2.1	79.7	4.7	552
Province										
Ryanggang	99.3	5.5	0.0	98.5	98.5	13.8	2.2	68.2	4.2	43
North Hamgyong	100.0	6.0	0.0	95.5	97.0	30.2	2.4	88.2	5.2	134
South Hamgyong	91.1	5.5	0.8	97.1	100.0	22.0	2.2	75.0	4.6	180
Kangwon	98.6	5.7	0.0	96.4	99.3	27.7	2.4	91.3	5.1	88
Jagang	97.2	5.6	0.0	98.6	100.0	36.2	2.6	83.5	5.1	78
North Pyongan	83.8	4.9	0.0	97.0	97.8	18.4	2.2	73.5	4.4	159
South Pyongan	94.9	5.4	0.0	96.2	99.3	13.5	1.6	80.6	4.6	232
North Hwanghae	93.1	5.5	1.4	95.1	98.6	27.3	2.3	66.3	4.0	144
South Hwanghae	97.2	5.6	0.7	98.6	99.3	9.1	1.7	90.0	5.1	140
Pyongyang	100.0	5.9	0.0	99.2	99.2	24.0	2.4	86.6	5.1	167
Age										
2	94.1	5.5	0.2	97.3	99.5	18.2	2.0	82.0	4.8	451
3	95.2	5.6	0.5	97.3	98.9	20.9	2.1	79.4	4.7	457
4	95.0	5.6	0.2	96.7	98.2	24.7	2.3	79.9	4.6	457
Mother's education[A]										
Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1
Upper secondary	94.0	5.5	0.4	96.7	98.9	20.9	2.1	79.5	4.7	1,116
Higher	98.2	5.7	0.0	98.8	98.8	23.2	2.2	84.6	4.9	248
Father's education										
Nursery or Kindergarten or None	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1
Upper secondary	94.8	5.5	0.4	100.0	99.4	22.1	2.2	79.7	4.7	810
Higher	94.3	5.6	0.3	100.0	99.5	21.4	2.2	82.8	4.8	513
Biological father not in the household	(100.0)	(5.8)	(0.0)	(0.0)	(82.0)	(4.9)	(0.4)	(64.1)	(4.1)	40
Functional difficulties										
Has functional difficulty	(80.4)	(5.0)	(0.0)	(100.0)	(100.0)	(11.6)	(2.1)	(70.1)	(4.5)	26
Has no functional difficulty	95.1	5.6	0.3	97.0	98.9	21.5	2.1	80.6	4.7	1,339
Wealth index 20-40-40										
20 percent lowest	94.7	5.5	0.5	98.3	98.9	21.5	2.2	78.8	4.7	271
40 percent middle	94.8	5.6	0.4	96.8	99.3	20.9	2.0	79.5	4.7	553
40 percent highest	94.7	5.5	0.2	96.8	98.5	21.7	2.1	82.3	4.8	540

[1] MICS indicator TC.49a - Early stimulation and responsive care by any adult household member

[2] MICS Indicator TC.49b - Early stimulation and responsive care by father

[3] MICS Indicator TC.49c - Early stimulation and responsive care by mother

[A] 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

na: not applicable

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

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

Exposure to books in early years not only provides children with greater understanding of the nature of print, but may also give them opportunities to see others reading, such as older siblings doing school work. Presence of books is important for later school performance. The mothers/caretakers of all children under 5 were asked about the number of children's books or picture books they have for the child, and the types of playthings that are available at home.

Table TC.10.2: Learning materials

Percentage of children under age 5 by the number of children's books present in the household, and by the type and number of playthings that child plays with, DPR Korea, 2017

	Percentage of children living in households that have for the child:		Percentage of children who play with:				
	3 or more children's books[1]	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[2]	Number of children under age 5
Total	**50.3**	**2.3**	**41.9**	**89.8**	**39.6**	**59.4**	**2,275**
Sex							
Male	50.0	2.4	42.3	89.8	40.4	60.3	1,164
Female	50.6	2.3	41.4	89.8	38.7	58.4	1,111
Area							
Urban	55.0	3.2	40.0	91.6	36.5	56.9	1,361
Rural	43.1	1.0	44.6	87.2	44.1	63.1	914
Province							
Ryanggang	35.2	3.1	43.5	86.9	39.6	57.5	71
North Hamgyong	62.1	1.4	52.9	95.5	62.3	76.9	221
South Hamgyong	47.5	1.8	41.3	89.3	43.7	60.2	298
Kangwon	50.8	0.9	40.9	93.2	29.3	55.8	148
Jagang	63.6	3.0	46.3	85.4	32.8	56.3	131
North Pyongan	40.7	0.5	18.5	78.2	29.1	35.5	264
South Pyongan	47.9	1.8	47.6	90.1	35.0	67.3	386
North Hwanghae	47.1	2.1	41.3	90.4	52.3	67.8	242
South Hwanghae	40.6	2.9	58.8	89.1	53.1	74.2	237
Pyongyang	64.4	6.3	31.9	97.6	19.3	39.9	278
Age							
0-1	29.0	1.0	31.0	82.0	20.3	40.0	911
2-4	64.4	3.2	49.1	95.1	52.4	72.3	1,364
Mother's education							
Primary	(*)	(*)	(*)	(*)	(*)	(*)	1
Upper secondary	49.1	2.0	43.3	89.0	40.2	60.1	1,854
Higher	55.3	4.0	35.8	93.2	36.6	56.4	420
Functional difficulties (age 2-4 years)							
Has functional difficulty	(40.3)	(4.0)	(25.6)	(95.5)	(60.4)	(66.4)	26
Has no functional difficulty	64.9	3.2	49.6	95.1	52.3	72.4	1,339
Wealth index 20-40-40							
20 percent lowest	43.3	0.8	46.5	87.0	45.7	63.6	448
40 percent middle	48.2	1.7	42.7	88.9	43.3	62.4	912
40 percent highest	55.7	3.7	38.8	92.2	32.8	54.3	914

[1] MICS indicator TC.50 - Availability of children's books

[2] MICS indicator TC.51 - Availability of playthings

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

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

Some research has found that leaving children without adequate supervision is a risk factor for unintentional injuries.[43] In MICS, two questions were asked to find out whether children age 0-59 months were left alone during the week preceding the interview, and whether children were left in the care of other children under 10 years of age.

Table TC.10.3: Inadequate supervision

Percentage of children under age 5 left alone or under the supervision of another child younger than 10 years of age for more than one hour at least once during the past week, DPR Korea, 2017

	Percentage of children under age 5:			
	Left alone in the past week	Left under the supervision of another child younger than 10 years of age in the past week	Left with inadequate supervision in the past week[1]	Number of children under age 5
Total	**12.0**	**14.9**	**16.4**	**2,275**
Sex				
Male	11.8	15.1	16.5	1,164
Female	12.2	14.7	16.3	1,111
Residence				
Urban	11.1	13.8	15.4	1,361
Rural	13.3	16.6	18.0	914
Province				
Ryanggang	6.7	7.9	10.6	71
North Hamgyong	6.3	9.5	10.4	221
South Hamgyong	15.2	18.3	20.5	298
Kangwon	9.3	12.8	14.5	148
Jagang	27.6	32.0	38.0	131
North Pyongan	21.8	22.7	24.0	264
South Pyongan	4.9	11.2	12.1	386
North Hwanghae	16.5	16.0	17.3	242
South Hwanghae	12.5	14.5	15.4	237
Pyongyang	4.8	7.7	8.2	278
Age				
0-1	8.8	10.3	11.0	911
2-4	14.1	18.0	20.1	1,364
Mother's education				
Primary	(*)	(*)	(*)	1
Upper secondary	12.1	15.5	16.8	1,854
Higher	11.7	12.3	15.0	420
Functional difficulties (age 2-4 years)				
Has functional difficulty	(34.1)	(37.7)	(41.6)	26
Has no functional difficulty	13.8	17.6	19.7	1,339
Wealth index 20-40-40				
20 percent lowest	12.6	15.7	17.9	448
40 percent middle	11.8	15.3	16.3	912
40 percent highest	11.9	14.2	15.8	914

[1] MICS indicator TC.52 - Inadequate supervision

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

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

43.– L. D. Howe, S. R. A. Huttly and T. Abramsky, *Risk Factors for Injuries in Young Children in Four Developing Countries: The Young Lives Study,* Tropical Medicine and International Health, vol. 11, No. 10, October 2006, pp. 1557-1566; Morrongiello Barbara A., Michael Corbett, Meghan McCourt, and Natalie Johnston, *Understanding Unintentional Injury Risk in Young Children II. The Contribution of Caregiver Supervision, Child Attributes, and Parent Attributes,* Journal of Pediatric Psychology, vol. 31, No. 6, 2006, pp. 540-551.

7.10. Early childhood development index

Early childhood development is multidimensional and involves an ordered progression of motor, cognitive, language, socio-emotional and regulatory skills and capacities across the first few years of life.[44] Physical growth, literacy and numeracy skills, socio-emotional development and readiness to learn are vital domains of a child's overall development, which build the foundation for later life and set the trajectory for health, learning and well-being.[45]

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 DPR Korea. 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 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.
- 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.

44.– The Lancet, *Advancing Early Childhood Development: From Science to Scale. Executive Summary,* The Lancet, October 2016.

45.– 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; United Nations Children's Fund, *Early Moments Matter,* UNICEF, New York, September 2017.

Table TC.11.1: Early child development index

Percentage of children age 3-4 years who are developmentally on track in literacy-numeracy, physical, social-emotional, and learning domains, and the early child development index score, DPR Korea, 2017

	Percentage of children age 3-4 years who are developmentally on track for indicated domains				Early child development index score[1]	Number of children age 3-4 years
	Literacy-numeracy	Physical	Social-Emotional	Learning		
Total	**28.6**	**99.7**	**86.4**	**97.7**	**87.7**	**914**
Sex						
Male	28.4	99.8	84.9	98.0	86.2	468
Female	28.8	99.5	88.1	97.3	89.2	446
Area						
Urban	29.9	99.7	88.0	98.0	88.9	542
Rural	26.8	99.6	84.2	97.1	85.9	372
Province						
Ryanggang	37.5	100.0	91.2	100.0	94.6	28
North Hamgyong	25.5	100.0	70.1	98.9	80.1	90
South Hamgyong	37.2	100.0	88.0	98.9	92.3	120
Kangwon	26.7	100.0	93.7	100.0	94.8	60
Jagang	30.3	97.8	82.8	96.8	84.9	52
North Pyongan	23.9	100.0	79.1	94.6	78.0	105
South Pyongan	22.0	100.0	92.3	98.9	91.2	156
North Hwanghae	36.5	99.0	89.6	97.0	90.7	97
South Hwanghae	25.2	99.0	76.7	92.6	72.6	94
Pyongyang	29.6	100.0	98.8	100.0	98.8	112
Age						
3	14.9	99.7	86.2	96.7	85.0	457
4	42.3	99.7	86.7	98.6	90.4	457
Attendance to early childhood education						
Attending	32.0	99.7	88.5	97.6	89.9	665
Not attending	19.6	99.6	80.9	97.7	81.9	248
Mother's education						
Primary	(*)	(*)	(*)	(*)	(*)	1
Upper secondary	29.4	99.6	86.9	97.4	87.8	749
Higher	25.1	100.0	84.3	99.0	87.3	164
Functional difficulties						
Has functional difficulty	(*)	(*)	(*)	(*)	(*)	18
Has no functional difficulty	28.9	99.7	86.7	97.7	87.9	896
Wealth index 20-40-40						
20 percent lowest	28.7	99.1	79.0	95.3	80.9	182
40 percent middle	26.0	99.8	87.6	97.1	87.9	379
40 percent highest	31.4	99.7	89.1	99.5	91.0	353

[1] MICS indicator TC.53- Early child development index; SDG Indicator 4.2.1

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

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

8. LEARN

Every child has a right to an education. Education is more than just a fundamental right; it helps pave the way to a successful and productive future. Evidence suggests that quality education is a driver of economic growth – contributing to higher income, decreased poverty levels, and individual empowerment. While it is crucial to expand the education system, there is a need for dual focus on improving the quality of learning and reaching the most vulnerable.

Despite remarkable progress made over the past years, the world missed the target for universal primary education by 2015. The new 2030 emerging agenda for Sustainable Development sets a higher level ambition, focusing on maximizing equity, quality and learning outcomes of education at all levels.

This chapter summarizes the main findings of the survey on a range of education indicators, including early childhood education, school attendance and parental involvement in children's education.

8.1. Early childhood education

Readiness of children for primary school can be improved through attendance to early childhood education programmes or through pre-school. Early childhood education programmes include programmes for children that have organised learning components as opposed to baby-sitting and day-care which do not typically have organised education and learning.

DPR Korea started to run 11-year compulsory universal education system since 1975 and as per the law adopted in 6th session of 12th Supreme People's Assembly on 25th of September 2012, from the 1st of April 2014, the 12-year universal compulsory education system is being enforced (11 years according to previous Education Law with 4 years of primary school).

The education system of DPR Korea has developed continuously according to the new environment and development of the society and consists of elementary education, lower secondary, upper secondary, high education, and special education. The education system involves 5 years of nursery, 2 years of kindergarten, 5 years of primary school, 3 years of lower secondary and 3 years of upper secondary school. The 12 year universal compulsory education is practiced through 1 year of pre-school education at senior class of kindergarten and 11 year of school education till end of upper secondary school. The special education serves for population with disabilities age 9-18 years in special schools for 9 years.

Data presented in this chapter are related to children who are attending school in line with both compulsory universal education systems (primary education 4 and 5 years).

Table LN.1.1 shows the percent of children age 3 and 4 currently attending early childhood education among children who are 36-59 months old: MICS indicator LN.1. This is based on question UB8 in the Questionnaire for Children Under 5. If the child was currently on a school break, but regularly attends, the interviewer is asked to record this as currently attending.

Table LN.1.2 is similar to Table LN.1.1, but looks only at children who were 6 years old at the current school year. In DPR Korea, the school year begins in April.

Specifically, the table presents the percent distribution of children age one year younger than the official primary school entry age, by attendance to education. This table utilises question UB7 for attendance. The indicator captured is the adjust net attendance ratio, which corresponds to SDG indicator 4.2.2: Participation rate in organised learning (adjusted[46]). The official primary school entry age in DPR Korea is age 7 years.

46.– The ratio is termed "adjusted" since it includes children in primary education. All children age one year before official primary school entry age (at the current school year) are included in the denominator.

Table LN.1.1: Early childhood education

Percentage of children age 36-59 months who are attending early childhood education, DPR Korea, 2017

	Percentage of children age 36-59 months attending early childhood education[1]	Number of children age 36-59 months
Total	72.7	913
Sex		
Male	72.7	467
Female	72.8	446
Area		
Urban	72.8	542
Rural	72.6	371
Province		
Ryanggang	64.9	28
North Hamgyong	53.3	90
South Hamgyong	67.5	119
Kangwon	68.7	60
Jagang	88.1	52
North Pyongan	77.8	106
South Pyongan	77.8	156
North Hwanghae	70.1	97
South Hwanghae	76.9	94
Pyongyang	77.7	112
Age (in months)		
36-47	66.8	454
48-59	78.5	459
Mother's education		
Primary	(*)	1
Upper secondary	71.8	748
Higher	76.8	164
Child's functional difficulties		
Has functional difficulty	(*)	18
Has no functional difficulty	72.7	895
Wealth index 20-40-40		
20 percent lowest	75.1	182
40 percent middle	70.4	380
40 percent highest	74.0	351

[1] MICS indicator LN.1 - Attendance to early childhood education

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

Table LN.1.2: Participation rate in organised learning

Percent distribution of children age one year younger than the official primary school entry age at the beginning of the school year, by attendance to education, and attendance to an early childhood education programme or primary education (adjusted net attendance ratio), DPR Korea, 2017

	Percent of children:					
	Attending an early childhood education programme	Attending primary education	Not attending an early childhood education programme or primary education	Total	Net attendance ratio[1]	Number of children age 6 years at the current school year
Total	**92.6**	**4.5**	**2.9**	**100.0**	**97.1**	**450**
Sex						
Male	94.6	3.3	2.1	100.0	97.9	227
Female	90.5	5.8	3.7	100.0	96.3	223
Area						
Urban	92.5	5.2	2.2	100.0	97.8	283
Rural	92.7	3.3	4.0	100.0	96.0	166
Province						
Ryanggang	(93.7)	(2.1)	(4.2)	100.0	(95.8)	15
North Hamgyong	(95.9)	(4.1)	(0.0)	100.0	(100.0)	48
South Hamgyong	71.5	20.8	7.6	100.0	92.4	70
Kangwon	(92.8)	(0.0)	(7.2)	100.0	(92.8)	27
Jagang	(92.8)	(4.8)	(2.4)	100.0	(97.6)	23
North Pyongan	(88.7)	(2.2)	(9.0)	100.0	(91.0)	52
South Pyongan	(100.0)	(0.0)	(0.0)	100.0	(100.0)	81
North Hwanghae	(100.0)	(0.0)	(0.0)	100.0	(100.0)	38
South Hwanghae	(100.0)	(0.0)	(0.0)	100.0	(100.0)	42
Pyongyang	(97.6)	(2.4)	(0.0)	100.0	(100.0)	55
Mother's education						
Upper secondary	91.7	4.9	3.5	100.0	96.5	376
Higher	97.1	2.9	0.0	100.0	100.0	74
Wealth index 20-40-40						
20 percent lowest	91.3	3.9	4.8	100.0	95.2	95
40 percent middle	93.1	4.4	2.5	100.0	97.5	168
40 percent highest	92.7	4.9	2.3	100.0	97.7	188

[1] MICS indicator LN.2- Participation rate in organised learning (adjusted); SDG indicator 4.2.2

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

8.2. Attendance

Attendance to pre-primary education is important for the readiness of children to school. Table LN.2.1 shows the proportion of children in the first grade of primary school (regardless of age) who attended any early childhood education (kindergarten) the previous year[47].

Ensuring that all girls and boys complete primary and secondary education is a target of the of the 2030 Agenda for Sustainable Development. Education is a vital prerequisite for combating poverty, empowering women, economic growth, protecting children from hazardous and exploitative labour and sexual exploitation, promoting human rights and democracy, protecting the environment, and influencing population growth.

In DPR Korea, children enter primary school at age 7, lower secondary at age 11 (12 under the new Law) and enter upper secondary school at age 13 (14 under the new Law). There are 5 grades in primary school and 3 + 3 grades in secondary school. In primary school, grades are referred to as year 1 to year 5. For lower secondary school, grades are referred to as year 1 to year 3 and in upper secondary to year 1 to year 3. The school year typically runs from April of one year to March of the following year.

Table LN.2.2 presents the percentage of children of primary school entry age entering year 1.

Table LN.2.1: School readiness

Percentage of children attending first grade of primary school who attended pre-school the previous year, DPR Korea, 2017

	Percentage of children attending first grade who attended preschool in previous year[1]	Number of children attending first grade of primary school
Total	98.3	464
Sex		
Male	97.9	233
Female	98.8	230
Area		
Urban	98.3	287
Rural	98.4	177
Province		
Ryanggang	(95.8)	15
North Hamgyong	98.0	50
South Hamgyong	(100.0)	59
Kangwon	(97.8)	30
Jagang	(93.9)	27
North Pyongan	(97.9)	55
South Pyongan	(100.0)	81
North Hwanghae	(100.0)	44
South Hwanghae	(100.0)	42
Pyongyang	(95.5)	59
Mother's education		
Upper secondary	98.0	380
Higher	100.0	84
Wealth index 20-40-40		
20 percent lowest	96.2	84
40 percent middle	98.5	191
40 percent highest	99.1	189

[1] MICS indicator LN.3 - School readiness

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

47.– 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-primary education 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.

Table LN.2.2: Primary school entry

Percentage of children of primary school entry age entering grade 1 (net intake rate), DPR Korea, 2017

	Percentage of children of primary school entry age entering grade 1[1]	Number of children of primary school entry age
Total	87.4	472
Sex		
Male	88.1	244
Female	86.7	228
Area		
Urban	88.1	286
Rural	86.4	185
Province		
Ryanggang	(85.4)	15
North Hamgyong	88.7	52
South Hamgyong	(94.9)	51
Kangwon	(95.3)	27
Jagang	(85.3)	27
North Pyongan	77.2	62
South Pyongan	(91.8)	85
North Hwanghae	88.1	50
South Hwanghae	(80.3)	45
Pyongyang	(86.9)	57
Mother's education		
Upper secondary	87.3	385
Higher	88.0	87
Wealth index 20-40-40		
20 percent lowest	85.2	87
40 percent middle	88.1	204
40 percent highest	87.7	180

[1] MICS indicator LN.4 - Net intake rate in primary education

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

LN.2.3 provides the percentage of children of primary school age 7 to 11 years who are attending primary or secondary school[48], and those who are out of school. Similarly, the lower secondary school adjusted net attendance ratio is presented in Table LN.2.4[49] for children age 11 to 13 years.

In Table LN.2.5, children are distributed according to their age against current grade of attendance (age-for-grade), e.g. a child age 9 years (at the current school year) currently attending year 1 was to be year 3, the official age-for-grade. This child will be classified age over-age by 2 or more years. The table includes both primary and lower secondary levels.

48.– Ratios presented in this table are "adjusted" since they include not only primary school attendance, but also secondary school attendance in the numerator.

49.– Ratios presented in this table are "adjusted" since they include not only lower secondary school attendance, but also attendance to higher levels in the numerator.

Table LN.2.3: 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 early childhood education, and percentage out of school, DPR Korea, 2017

	Male					Female					Total				
		Percentage of children:					Percentage of children:					Percentage of children:			
	Net attendance ratio (adjusted)	Not attending school or early childhood education	Attending early childhood education	Out of school[A]	Number of children	Net attendance ratio (adjusted)	Not attending school or early childhood education	Attending early childhood education	Out of school[A]	Number of children	Net attendance ratio (adjusted)[1]	Not attending school or early childhood education	Attending early childhood education	Out of school[A]	Number of children
Total	96.7	0.3	3.0	3.3	1,034	96.6	0.2	3.1	3.4	988	96.7	0.3	3.1	3.3	2,023
Area															
Urban	96.6	0.5	3.0	3.4	624	97.0	0.4	2.6	3.0	611	96.8	0.4	2.8	3.2	1,235
Rural	97.0	0.0	3.0	3.0	411	96.0	0.0	4.0	4.0	377	96.5	0.0	3.5	3.5	788
Province															
Ryanggang	98.1	0.0	1.9	1.9	32	96.1	0.0	3.9	3.9	31	97.1	0.0	2.9	2.9	64
North Hamgyong	96.2	1.0	2.9	3.8	104	98.0	0.0	2.0	2.0	94	97.0	0.5	2.5	3.0	197
South Hamgyong	99.0	0.0	1.0	1.0	128	97.0	1.0	2.0	3.0	130	98.0	0.5	1.5	2.0	258
Kangwon	99.0	0.0	1.0	1.0	67	99.0	0.0	1.0	1.0	64	99.0	0.0	1.0	1.0	131
Jagang	96.2	0.0	3.8	3.8	59	96.2	0.0	3.8	3.8	60	96.2	0.0	3.8	3.8	119
North Pyongan	93.3	0.0	6.7	6.7	124	94.5	1.1	4.4	5.5	109	93.9	0.5	5.6	6.1	233
South Pyongan	98.0	0.0	2.0	2.0	176	98.0	0.0	2.0	2.0	172	98.0	0.0	2.0	2.0	348
North Hwanghae	94.5	0.9	4.5	5.5	111	97.0	0.0	3.0	3.0	98	95.7	0.5	3.8	4.3	209
South Hwanghae	96.5	0.9	2.7	3.5	110	92.9	0.0	7.1	7.1	97	94.8	0.5	4.7	5.2	207
Pyongyang	97.1	0.0	2.9	2.9	124	97.0	0.0	3.0	3.0	133	97.1	0.0	2.9	2.9	257
Age[B]															
7	88.5	0.4	11.1	11.5	244	86.8	0.5	12.7	13.2	228	87.7	0.5	11.9	12.3	472
8	98.2	0.4	1.4	1.8	213	99.6	0.0	0.4	0.4	222	98.9	0.2	0.9	1.1	435
9	99.6	0.0	0.4	0.4	247	99.5	0.0	0.5	0.5	212	99.6	0.0	0.4	0.4	459
10	99.5	0.5	0.0	0.5	223	99.4	0.6	0.0	0.6	212	99.5	0.5	0.0	0.5	435
11	100.0	0.0	0.0	0.0	106	100.0	0.0	0.0	0.0	115	100.0	0.0	0.0	0.0	222
Mother's education															
Lower secondary	-	-	-	-	0	(*)	(*)	(*)	(*)	2	(*)	(*)	(*)	(*)	2
Upper secondary	96.5	0.4	3.2	3.5	840	96.8	0.1	3.1	3.2	811	96.6	0.2	3.1	3.4	1,651
Higher	97.7	0.0	2.3	2.3	195	95.8	0.7	3.4	4.2	176	96.8	0.4	2.8	3.2	371
Wealth index 20-40-40															
20 percent lowest	96.7	0.0	3.3	3.3	216	96.7	0.0	3.3	3.3	199	96.7	0.0	3.3	3.3	416
40 percent middle	96.6	0.7	2.7	3.4	424	96.6	0.0	3.4	3.4	382	96.6	0.4	3.1	3.4	806
40 percent highest	96.9	0.0	3.1	3.1	394	96.7	0.6	2.7	3.3	407	96.8	0.3	2.9	3.2	802

[1] MICS indicator LN.5a - Primary school net attendance ratio (adjusted)

[2] MICS indicator LN.6a - Out-of-school rate for children of primary school age

[A] The percentage of children out of school are those not attending school and further includes those attending early childhood education

[B] Age for school is calculated to take into account age eligibility criteria for starting primary school, the appropriate age at the start of primary school refers to the age in the 2017 calendar year

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

"–" denotes 0 unweighted case in that cell or in the denominator

Table LN.2.4: Lower secondary school attendance and out of school adolescents

Percentage of children of secondary school age attending secondary school or higher (adjusted net attendance ratio), percentage attending primary school, and percentage out of school, DPR Korea, 2017

	Male				Female				Total			
	Net attendance ratio (adjusted)	Percentage of children: Attending primary school	Percentage of children: Out of school[A]	Number of children	Net attendance ratio (adjusted)	Percentage of children: Attending primary school	Percentage of children: Out of school[A]	Number of children	Net attendance ratio (adjusted)[1]	Percentage of children: Attending primary school	Percentage of children: Out of school[2,A]	Number of children
Total	**97.8**	**2.1**	**-**	**591**	**94.4**	**5.2**	**0.3**	**581**	**96.1**	**3.6**	**0.2**	**1,172**
Area												
Urban	98.3	1.7	-	334	95.1	4.9	0.0	302	96.8	3.2	0.0	636
Rural	97.2	2.6	-	257	93.7	5.6	0.7	278	95.4	4.2	0.4	536
Province												
Ryanggang	86.3	13.7	-	18	85.7	14.3	0.0	17	86.0	14.0	0.0	35
North Hamgyong	100.0	0.0	-	67	98.2	1.8	0.0	55	99.2	0.8	0.0	121
South Hamgyong	97.0	3.0	-	88	95.2	4.8	0.0	80	96.1	3.9	0.0	168
Kangwon	95.0	5.0	-	38	98.6	1.4	0.0	42	96.9	3.1	0.0	80
Jagang	94.7	3.5	-	32	100.0	0.0	0.0	31	97.3	1.8	0.0	62
North Pyongan	100.0	0.0	-	64	92.4	7.6	0.0	77	95.8	4.2	0.0	141
South Pyongan	100.0	0.0	-	91	94.5	5.5	0.0	95	97.2	2.8	0.0	186
North Hwanghae	98.4	1.6	-	63	93.2	3.4	3.4	58	95.9	2.5	1.6	121
South Hwanghae	98.2	1.8	-	57	88.7	11.3	0.0	60	93.3	6.7	0.0	117
Pyongyang	96.8	3.2	-	75	96.3	3.7	0.0	66	96.6	3.4	0.0	140
Age[B]												
11	93.7	5.8	-	127	82.9	17.1	0.0	125	88.4	11.4	0.0	251
12	98.2	1.8	-	243	95.9	3.7	0.5	212	97.1	2.7	0.2	455
13	99.7	0.3	-	222	99.1	0.5	0.4	244	99.4	0.4	0.2	465
Mother's education												
Lower secondary	-	-	-	0	(*)	(*)	(*)	0	(*)	(*)	(*)	0
Upper secondary	97.7	2.2	-	483	94.5	5.3	0.2	476	96.1	3.7	0.1	959
Higher	98.2	1.8	-	108	94.1	4.9	0.9	104	96.2	3.3	0.5	212
No information[C]												
Wealth index 20-40-40												
20 percent lowest	99.1	0.9	-	128	96.0	4.0	0.0	150	97.4	2.6	0.0	278
40 percent middle	97.1	2.6	-	236	92.7	6.5	0.9	232	94.9	4.5	0.4	468
40 percent highest	97.8	2.2	-	227	95.4	4.6	0.0	199	96.7	3.3	0.0	426

[1] MICS indicator LN.5b - Lower secondary school net attendance ratio (adjusted)

[2] MICS indicator LN.6b - Out-of-school rate for adolescents of lower secondary school age

[A] The percentage of children of lower secondary school age out of school are those who are not attending primary, secondary or higher education

[B] Age for school is calculated to take into account age eligibility criteria for starting primary school, the appropriate age at the start of primary school refers to the age in the 2017 calendar year

[C] Children age 15 or higher identified as emancipated

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

"–" denotes 0 unweighted case in that cell or in the denominator

Table LN.2.5: Age for grade

Percentage of children attending primary and lower secondary school who are underage, at age and overage for grade, DPR Korea, 2017

	Primary school						Lower secondary school					
	Percent of children by grade of attendance:						Percent of children by grade of attendance:					
	Underage	At official age	Overage by 1 year	Over-age by 2 or more years[1]	Total	Number of children attending primary school	Underage	At official age	Overage by 1 year	Over-age by 2 or more years[2]	Total	Number of children attending lower secondary school
Total	**1.1**	**96.5**	**1.4**	**0.9**	**100.0**	**1,988**	**3.0**	**90.9**	**5.3**	**0.8**	**100.0**	**1,227**
Sex												
Male	0.7	97.7	0.7	0.9	100.0	1,004	3.2	90.5	5.5	0.7	100.0	632
Female	1.4	95.4	2.2	1.0	100.0	984	2.8	91.3	5.2	0.8	100.0	596
Area												
Urban	1.2	96.9	1.1	0.8	100.0	1,214	2.9	90.8	5.3	0.9	100.0	671
Rural	0.9	96.0	2.0	1.2	100.0	774	3.1	91.0	5.3	0.6	100.0	556
Province												
Ryanggang	0.5	91.5	5.6	2.4	100.0	65	6.3	89.1	3.7	0.9	100.0	33
North Hamgyong	1.0	98.4	0.0	0.5	100.0	191	2.4	95.1	2.5	0.0	100.0	125
South Hamgyong	5.9	91.7	1.9	0.5	100.0	268	4.4	90.5	3.6	1.5	100.0	179
Kangwon	0.0	97.6	0.9	1.5	100.0	131	2.4	96.0	1.6	0.0	100.0	79
Jagang	1.0	97.5	0.5	1.0	100.0	111	8.1	84.7	7.2	0.0	100.0	70
North Pyongan	0.5	96.3	1.1	2.1	100.0	223	2.3	88.5	8.4	0.8	100.0	152
South Pyongan	0.0	98.5	1.5	0.0	100.0	344	0.8	94.5	4.6	0.0	100.0	187
North Hwanghae	0.0	98.0	1.5	0.5	100.0	203	0.8	90.0	6.9	2.3	100.0	129
South Hwanghae	0.0	95.6	1.9	2.5	100.0	200	4.0	86.7	8.6	0.7	100.0	125
Pyongyang	0.5	97.5	1.4	0.5	100.0	251	3.5	90.5	5.1	0.9	100.0	148
Mother's education												
Lower secondary	(*)	(*)	(*)	(*)	100.0	0	(*)	(*)	(*)	(*)	100.0	2
Upper secondary	1.2	96.5	1.4	0.9	100.0	1,620	3.3	91.0	5.1	0.6	100.0	1,002
Higher	0.6	97.2	1.6	0.6	100.0	366	1.2	90.9	6.4	1.5	100.0	223
No information[A]	(*)	(*)	(*)	(*)	100.0	2	(*)	(*)	(*)	(*)	100.0	0
Grade												
1 (primary/lower secondary)	4.4	95.5	0.0	0.1	100.0	464	10.5	89.5	0.0	0.0	100.0	309
2 (primary/lower secondary)	0.0	99.5	0.0	0.5	100.0	449	0.4	98.1	0.8	0.7	100.0	450
3 (primary/lower secondary)	0.0	99.1	0.0	0.9	100.0	445	0.6	84.9	13.2	1.3	100.0	468
4 (primary)	0.0	98.3	1.2	0.6	100.0	417	na	na	na	na	na	na
5 (primary)	0.6	83.7	11.2	4.5	100.0	213	na	na	na	na	na	na
Wealth index 20-40-40												
20 percent lowest	0.9	97.0	1.2	0.8	100.0	400	4.6	89.7	5.3	0.4	100.0	299
40 percent middle	1.1	96.0	1.8	1.2	100.0	797	2.7	91.9	4.2	1.1	100.0	477
40 percent highest	1.2	96.8	1.2	0.8	100.0	791	2.2	90.6	6.6	0.6	100.0	451

[1] MICS indicator LN.10a - Over-age for grade (Primary)

[2] MICS indicator LN.10b - Over-age for grade (Lower secondary)

[A] Includes children age 15-17 identified as emancipated and children age 18 or higher at the time of the interview.

na: not applicable

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

The upper secondary school adjusted net attendance ratio, and out of school children ratio are presented in Table LN.2.6[50].

The gross intake rate to the last grade of primary school, primary school completion rate and transition rate to secondary education are presented in Table LN.2.7. The gross intake 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 graduation during the current (or most recent) school year.

Completion rate of primary education represents the percentage of a cohort of children aged 3 to 5 years above the official age of the last grade of primary education. That is, the percentage of children who are 13 to 15 years old who completed primary education in DPR Korea.

The table also provides "effective" transition rate which takes account of the presence of repeaters in the final grade of primary school. This indicator better reflects situations in which pupils repeat the last grade of primary education but eventually make the transition to the secondary level. The simple transition rate tends to underestimate pupils' progression to secondary school as it assumes that the repeaters never reach secondary school.

Table LN.2.8 focusses on the ratio of girls to boys attending primary and secondary education. These ratios are better known as the Gender Parity Index (GPI). Note 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.

50.– Ratios presented in this table are "adjusted" since they include not only upper secondary school attendance, but also attendance to higher levels in the numerator.

Table LN.2.6: Upper secondary school attendance and out of school youth

Percentage of children of upper secondary school age attending upper secondary school or higher (adjusted net attendance ratio), percentage attending lower secondary school, and percentage out of school, DPR Korea, 2017

	Male					Female					Total				
	Net attendance ratio (adjusted)	Percentage of children: Attending lower secondary school	Percentage of children: Attending primary school	Percentage of children: Out of school[A]	Number of children	Net attendance ratio (adjusted)	Percentage of children: Attending lower secondary school	Percentage of children: Attending primary school	Percentage of children: Out of school[A]	Number of children	Net attendance ratio (adjusted)[1]	Percentage of children: Attending lower secondary school	Percentage of children: Attending primary school	Percentage of children: Out of school[2,A]	Number of children
Total	94.7	5.1	0.2	0.7	766	94.9	4.7	0.1	0.5	730	94.8	4.9	0.1	0.6	1,496
Area															
Urban	95.3	4.6	0.1	0.6	428	94.6	5.0	0.1	0.5	427	95.0	4.8	0.1	0.6	856
Rural	93.8	5.8	0.3	0.8	338	95.3	4.3	0.0	0.3	303	94.5	5.1	0.2	0.6	641
Province															
Ryanggang	95.9	2.7	1.4	0.0	23	96.0	4.0	0.0	0.0	23	96.0	3.4	0.7	0.0	46
North Hamgyong	97.3	2.7	0.0	0.0	72	98.4	1.6	0.0	0.0	71	97.8	2.2	0.0	0.0	143
South Hamgyong	94.8	5.2	0.0	4.0	98	95.7	4.3	0.0	1.5	91	95.2	4.8	0.0	2.8	189
Kangwon	100.0	0.0	0.0	0.0	49	95.7	2.9	1.4	0.0	44	98.0	1.3	0.7	0.0	93
Jagang	96.4	3.6	0.0	0.0	46	91.7	8.3	0.0	0.0	41	94.2	5.8	0.0	0.0	87
North Pyongan	86.7	12.0	1.3	0.0	86	95.9	4.1	0.0	0.0	86	91.3	8.0	0.7	0.0	172
South Pyongan	96.1	3.9	0.0	0.0	136	97.4	2.6	0.0	0.0	129	96.7	3.3	0.0	0.0	265
North Hwanghae	93.7	6.3	0.0	0.0	79	90.3	7.3	0.0	2.4	82	92.0	6.8	0.0	1.2	161
South Hwanghae	93.5	6.5	0.0	0.0	89	92.7	7.3	0.0	0.0	80	93.1	6.9	0.0	0.0	168
Pyongyang	95.8	4.2	0.0	1.5	88	94.0	6.0	0.0	0.0	84	94.9	5.1	0.0	0.8	172
Age[B]															
14	86.5	13.3	0.1	0.0	260	86.4	13.2	0.0	0.4	234	86.5	13.3	0.1	0.2	494
15	98.6	1.4	0.0	0.0	259	97.9	1.5	0.3	0.4	250	98.2	1.4	0.1	0.2	509
16	99.1	0.4	0.5	2.1	247	100.0	0.0	0.0	0.5	246	99.6	0.2	0.2	1.3	493
Mother's education															
Upper secondary	94.3	5.5	0.2	0.6	611	95.7	4.0	0.1	0.2	572	95.0	4.8	0.2	0.4	1,184
Higher	96.0	4.0	0.0	0.9	154	92.1	7.3	0.0	1.5	158	94.1	5.6	0.0	1.2	311
No information[C]	(*)	(*)	(*)	(*)	1	-	-	-	-	0	(*)	(*)	(*)	(*)	1
Wealth index 20-40-40															
20 percent lowest	92.2	7.8	0.0	0.8	162	97.1	2.9	0.0	0.0	157	94.6	5.4	0.0	0.4	319
40 percent middle	95.9	3.8	0.4	1.2	320	95.2	4.5	0.0	0.4	279	95.6	4.1	0.2	0.8	600
40 percent highest	94.7	5.2	0.1	0.0	284	93.5	5.9	0.2	0.8	294	94.1	5.6	0.2	0.4	578

[1] MICS indicator LN.5c - Upper secondary school net attendance ratio (adjusted)

[2] MICS indicator LN.6c - Out-of-school rate for youth of upper secondary school age

[A] The percentage of children of upper secondary school age out of school are those who are not attending primary, secondary or higher education

[B] Age for school is calculated to take into account age eligibility criteria for starting primary school, the appropriate age at the start of primary school refers to the age in the 2017 calendar year

[C] Includes children age 15-17 identified as emancipated and children age 18 or higher at the time of the interview.

"–" denotes 0 unweighted case in that cell or in the denominator

Table LN.2.7: Gross intake, school completion and effective transition rates

Gross intake rate and completion rate for primary school, effective transition rate to secondary school, gross intake rate and completion rate for lower secondary school and completion rate for upper secondary school, DPR Korea, 2017

	Gross intake rate to the last grade of primary school[1]	Number of children of primary school completion age	Primary school completion rate[2]	Total number of children age 13-15 years[A]	Effective transition rate to lower secondary school[3]	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	Gross intake rate to the last grade of lower secondary school[4]	Number of children of lower secondary school completion age	Lower secondary completion rate[5]	Total number of adolescents age 16-18 years[A]	Upper secondary completion rate[6]	Total number of youth age 19-21 years[A]
Total	**106.0**	**176**	**100.0**	**1,469**	**95.6**	**250**	**99.8**	**465**	**99.8**	**1,326**	**99.9**	**1,247**
Sex												
Male	103.4	82	100.0	741	98.4	121	103.5	222	99.8	628	99.7	501
Female	108.3	94	100.0	728	93.0	129	96.5	244	99.9	698	100.0	746
Area												
Urban	103.4	96	100.0	806	97.5	156	103.6	231	99.9	747	99.8	744
Rural	109.2	80	100.0	663	92.4	94	96.2	234	99.8	579	100.0	503
Province												
Ryanggang	(*)	5	100.0	47	(85.2)	8	82.2	17	100.0	43	100.0	41
North Hamgyong	(*)	12	100.0	144	(*)	20	(93.7)	45	100.0	130	100.0	121
South Hamgyong	(*)	21	100.0	203	(93.2)	38	92.5	75	100.0	172	100.0	163
Kangwon	(*)	19	100.0	89	(*)	14	(94.0)	31	100.0	89	100.0	79
Jagang	(*)	11	100.0	79	(*)	12	(100.1)	24	100.0	78	100.0	68
North Pyongan	(*)	19	100.0	171	(94.1)	38	(106.0)	56	100.0	153	100.0	145
South Pyongan	(*)	26	100.0	241	(100.0)	45	(108.5)	59	100.0	222	99.2	217
North Hwanghae	(*)	19	100.0	157	(*)	22	105.5	56	98.6	147	100.0	124
South Hwanghae	(*)	20	100.0	161	(*)	19	(99.7)	47	100.0	137	100.0	131
Pyongyang	(*)	25	100.0	175	(100.0)	33	(102.3)	56	100.0	155	100.0	158
Mother's education												
Lower secondary	-	1	(*)	0	-	0	(*)	0	na	na	na	na
Upper secondary	105.3	150	100.0	1,165	96.0	209	98.9	377	99.8	816	na	na
Higher	(112.1)	25	100.0	302	(93.5)	40	103.8	88	100.0	221	na	na
No information[B]	na	na	(*)	1	na	na	na	na	100.0	289	99.9	1,247
Wealth index 20-40-40												
20 percent lowest	99.1	42	100.0	326	95.5	51	98.3	117	99.6	283	100.0	274
40 percent middle	122.7	64	100.0	591	94.6	90	94.9	191	99.8	529	100.0	479
40 percent highest	95.0	70	100.0	551	96.5	109	107.0	157	100.0	514	99.7	494

[1] MICS indicator LN.7a - Gross intake rate to the last grade (Primary)

[2] MICS indicator LN.8a - Completion rate (Primary)

[3] MICS indicator LN.9 - Effective transition rate to lower secondary school

[4] MICS indicator LN.7b - Gross intake rate to the last grade (Lower secondary)

[5] MICS indicator LN.8b - Completion rate (Lower secondary)

[6] MICS indicator LN.8c - Completion rate (Upper secondary)

[A] Total number of children age 3-5 years above the intended age for the last grade, for primary, lower and upper secondary, respectively

[B] Includes emancipated children age 15-17 years and children age 18 or higher at the time of the interview

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

Table LN.2.8: Parity indices

Ratio of adjusted net attendance ratios of girls to boys, in primary, lower and upper secondary school, DPR Korea, 2017

	Primary school				Lower secondary school				Upper secondary school			
	Primary school adjusted net attendance ratio (NAR), girls	Primary school adjusted net attendance ratio (NAR), boys	Primary school adjusted net attendance ratio (NAR), total[1,2]	Gender parity index (GPI) for primary school adjusted NAR[3]	Lower secondary school adjusted net attendance ratio (NAR), girls	Lower secondary school adjusted net attendance ratio (NAR), boys	Lower secondary school adjusted net attendance ratio (NAR), total[1,2]	Gender parity index (GPI) for lower secondary school adjusted NAR[3]	Upper secondary school adjusted net attendance ratio (NAR), girls	Upper secondary school adjusted net attendance ratio (NAR), boys	Upper secondary school adjusted net attendance ratio (NAR), total[1,2]	Gender parity index (GPI) for upper secondary school adjusted NAR[3]
Total[3]	**96.6**	**96.7**	**96.7**	**1.00**	**94.4**	**97.8**	**96.1**	**0.97**	**94.9**	**94.7**	**94.8**	**1.00**
Area												
Urban	97.0	96.6	96.8	1.00	95.1	98.3	96.8	0.97	94.6	95.3	95.0	0.99
Rural	96.0	97.0	96.5	0.99	93.7	97.2	95.4	0.96	95.3	93.8	94.5	1.02
Province												
Ryanggang	96.1	98.1	97.1	0.98	85.7	86.3	86.0	0.99	96.0	95.9	96.0	1.00
North Hamgyong	98.0	96.2	97.0	1.02	98.2	100.0	99.2	0.98	98.4	97.3	97.8	1.01
South Hamgyong	97.0	99.0	98.0	0.98	95.2	97.0	96.1	0.98	95.7	94.8	95.2	1.01
Kangwon	99.0	99.0	99.0	1.00	98.6	95.0	96.9	1.04	95.7	100.0	98.0	0.96
Jagang	96.2	96.2	96.2	1.00	100.0	94.7	97.3	1.06	91.7	96.4	94.2	0.95
North Pyongan	94.5	93.3	93.9	1.01	92.4	100.0	95.8	0.92	95.9	86.7	91.3	1.11
South Pyongan	98.0	98.0	98.0	1.00	94.5	100.0	97.2	0.94	97.4	96.1	96.7	1.01
North Hwanghae	97.0	94.5	95.7	1.03	93.2	98.4	95.9	0.95	90.3	93.7	92.0	0.96
South Hwanghae	92.9	96.5	94.8	0.96	88.7	98.2	93.3	0.90	92.7	93.5	93.1	0.99
Pyongyang	97.0	97.1	97.1	1.00	96.3	96.8	96.6	1.00	94.0	95.8	94.9	0.98
Mother's education												
Upper secondary	96.8	96.5	96.6	1.00	94.5	97.7	96.1	0.97	95.7	94.3	95.0	1.01
Higher	95.8	97.7	96.8	0.98	94.1	98.2	96.2	0.96	92.1	96.0	94.1	0.96
No information[A]	na	na	na	na	na	na	na	na	-	(*)	(*)	-
Wealth index 20-40-40												
20 percent lowest	96.7	96.7	96.7	1.00	96.0	99.1	97.4	0.97	97.1	92.2	94.6	1.05
40 percent middle	96.6	96.6	96.6	1.00	92.7	97.1	94.9	0.95	95.2	95.9	95.6	0.99
40 percent highest	96.7	96.9	96.8	1.00	95.4	97.8	96.7	0.98	93.5	94.7	94.1	1.0
Orphanhood status												
Having a parent alive but not living with biological parent	(96.6)	(92.2)	(94.7)	(1.05)	(*)	(100.0)	(*)	(*)	(90.7)	100.0	(96.0)	(0.9)
Orphans	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
Non-orphans	96.6	96.8	96.7	1.00	94.2	97.7	96.0	0.97	95.2	94.2	94.7	1.0
Parity indices												
Wealth												
20 percent lowest/40 percent highest[1]	1.00	1.00	1.00	na	1.00	1.00	1.00	na	1.00	1.00	1.00	na
Area												
Rural/Urban[2]	0.99	1.00	1.00	na	0.99	0.99	0.99	na	1.01	0.98	1.00	na
Orphanhood												
Orphans/non-orphans	(1.00)	(0.95)	(0.98)	na	(*)	(1.02)	(*)	na	(0.95)	1.06	(1.01)	na

[1] MICS indicator LN.11b - Parity indices (wealth); SDG indicator 4.5.1

[2] MICS indicator LN.11c - Parity indices (area); SDG indicator 4.5.1

[3] MICS indicator LN.11a - Parity indices (gender); SDG indicator 4.5.1

[A] Includes emancipated children age 15-17 years and children age 18 or higher at the time of the interview

na: not applicable

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

"–" denotes 0 unweighted case in that cell or in the denominator

8.3. Parental involvement

Parental involvement in their children's education is widely accepted to have a positive effect on their child's learning performance. For instance, reading activities at home have significant positive influences on reading achievement, language comprehension and expressive language skills.[51] Research also shows that parental involvement in their child's literacy practices is a positive long-term predictor of later educational attainment.[52]

Beyond learning activities at home, parental involvement that occurs in school (like participating in school meetings, talking with teachers, attending school meetings and volunteering in schools) can also benefit a student's performance.[53] Research studies have shown that, in the primary school age range, the impact of parental involvement in school activities can even be much bigger than differences associated with variations in the quality of schools, regardless of social class and ethnic group.[54]

The PR module included in the Questionnaire for children age 5-17 years was developed and tested for inclusion in MICS6. The work is described in detail in MICS Methodological Papers (Paper No. 5).[55]

Table LN.3.1 represents percentages of children aged between 7 and 14, whose household adult member received a report card and parental involvement in school activities such as school celebration, sports event, and discussion with teachers on children's progress.

In Table LN.3.2, reasons for children who are aged between 7 and 14 who are unable to attend class due to a school-related reasons are presented including natural and man-made disaster and teacher absenteeism.

Lastly, Table LN.3.3 shows learning environment at home among children aged between 7 and 14 i.e., percentage of children with 3 or more books to read, percentage of children who have homework and percentage of children who receive help with homework.

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52.– Flouri E, Buchanan A. *Early father's and mother's involvement and child's later educational outcomes.* Br J Educ Psychol. 2004;74: 141–153. doi:10.1348/000709904773839806

53.– Pomerantz EM, Moorman EA, Litwack SD. *The How, Whom, and Why of Parents' Involvement in Children's Academic Lives: More Is Not Always Better.* Rev Educ Res. 2007;77: 373–410. doi:10.3102/003465430305567

54.– Desforges C, Abouchaar A. *The Impact of Parental Involvement, Parental Support and Family Education on Pupil Achievements and Adjustment: A Literature Review.* [Internet]. 2003. Report No.: 433.

55.– Hattori H., Cardoso M., and Ledoux B. (2017). *Collecting data on foundational learning skills and parental involvement in education.* MICS Methodological Papers, No. 5, Data and Analytics Section, Division of Data, Research and Policy, UNICEF New York.

Table LN.3.1: Support for child learning at school

Percentage of children attending school and, among those, percentage of children for whom an adult member of the household received a report card for the child, and involvement in school activities in the last year, DPR Korea, 2017

	Percentage of children attending school[A]	Number of children age 7-14	Percentage of children for whom an adult household member in the last year received a report card for the child[1]	Involvement by adult in school activities in last year		Number of children age 7-14 years attending school
				Attended school celebration or a sport event	Met with teachers to discuss child's progress[2]	
Total	**99.7**	**3,723**	**93.3**	**96.3**	**87.4**	**3,714**
Sex						
Male	99.7	1,889	93.2	95.7	87.8	1,884
Female	99.7	1,834	93.4	97.0	87.0	1,830
Area						
Urban	99.6	2,108	93.4	96.8	90.3	2,101
Rural	99.9	1,615	93.2	95.7	83.5	1,613
Province						
Ryanggang	100.0	113	97.8	95.8	96.4	113
North Hamgyong	99.7	357	98.9	98.1	96.7	356
South Hamgyong	99.3	514	95.3	93.5	85.6	510
Kangwon	100.0	234	85.5	99.2	86.0	234
Jagang	100.0	201	78.4	93.6	86.5	201
North Pyongan	100.0	425	95.0	94.6	68.6	425
South Pyongan	100.0	640	87.7	97.1	86.5	640
North Hwanghae	99.1	360	95.0	92.3	81.8	357
South Hwanghae	99.6	403	94.8	98.3	92.3	401
Pyongyang	100.0	476	99.4	99.7	99.2	476
Age[B]						
6	99.7	351	81.2	96.5	80.4	350
7	99.5	397	96.4	98.3	83.5	395
8	100.0	501	93.9	96.2	90.2	501
9	99.2	465	95.0	96.7	85.8	461
10	100.0	466	91.6	96.5	90.5	466
11	99.5	449	95.7	98.2	89.8	447
12	99.7	490	94.4	95.6	87.0	489
13	100.0	469	95.4	95.9	89.9	469
14	100.0	136	93.4	86.7	85.7	136
School attendance[A]						
Nursery or Kindergarten	(*)	10	(*)	(*)	(*)	10
Primary	100.0	1,936	92.4	96.9	85.9	1,936
Lower secondary	100.0	1,211	93.9	97.0	88.9	1,211
Upper secondary	100.0	555	95.2	92.9	88.9	555
Higher	(*)	1	(*)	(*)	(*)	1
Out-of-school	(*)	10	na	na	na	na
Mother's education						
Lower secondary	(*)	2	(*)	(*)	(*)	2
Upper secondary	99.8	3,008	93.7	96.3	86.6	3,003
Higher	99.4	714	91.5	96.3	90.8	709
Child's functional difficulties						
Has functional difficulty	(97.8)	43	(89.8)	(92.2)	(84.8)	42
Has no functional difficulty	99.8	3,680	93.3	96.4	87.4	3,672
Wealth index 20-40-40						
20 percent lowest	100.0	845	92.4	94.6	84.1	845
40 percent middle	99.6	1,466	92.2	95.3	84.1	1,461
40 percent highest	99.7	1,412	94.9	98.4	92.8	1,408

[1] MICS indicator LN.12 - Availability of information on children's school performance

[2] MICS indicator LN.16 - Discussion with teachers regarding children's progress

[A] Attendance to school here is not directly comparable to net attendance ratios reported in preceding tables, which utilise information on all children in the sample. This and subsequent tables present results of the Parental Participation and Foundational Learning Skills modules administered to mothers of a randomly selected subsample of children age 7-14 years.

[B] Age for school is calculated to take into account age eligibility criteria for starting primary school, the appropriate age at the start of primary school refers to the age in the 2017 calendar year.

na: not applicable

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

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

Table LN.3.2: School-related reasons for inability to attend class[A]

Percentage of children not able to attend class due to absence of teacher or school closure, by reason for inability, and percentage of adult household members contacting school officials or governing body representatives on instances of teacher absence, DPR Korea, 2017

	Percentage of children who in the last year could not attend class due to absence of teacher or school closure	Number of children age 7-14 years attending school
Total	0.9	3,714
Sex		
Male	1.2	1,884
Female	0.7	1,830
Area		
Urban	0.7	2,101
Rural	1.2	1,613
Province		
Ryanggang	0.5	113
North Hamgyong	1.1	356
South Hamgyong	0.8	510
Kangwon	1.6	234
Jagang	0.9	201
North Pyongan	1.1	425
South Pyongan	0.3	640
North Hwanghae	2.6	357
South Hwanghae	0.5	401
Pyongyang	0.5	476
Age[B]		
6	0.0	350
7	1.4	395
8	0.9	501
9	0.5	461
10	2.1	466
11	0.4	447
12	1.1	489
13	0.6	469
14	1.8	136
School attendance[C]		
Nursery or Kindergarten	(*)	10
Primary	0.9	1,936
Lower secondary	1.0	1,211
Upper secondary	0.9	555
Higher	(*)	1
Mother's education		
Lower secondary	(*)	2
Upper secondary	1.0	3,003
Higher	0.6	709
Child's functional difficulties		
Has functional difficulty	(1.5)	42
Has no functional difficulty	0.9	3,672
Wealth index 20-40-40		
20 percent lowest	0.7	845
40 percent middle	1.3	1,461
40 percent highest	0.7	1,408

[A] Data for reason for inability to attend class are not shown in the table due to small number of unweighted cases of children who in the last year could not attend class due to absence of teacher or school closure

[B] Age for school is calculated to take into account age eligibility criteria for starting primary school, the appropriate age at the start of primary school refers to the age in the 2017 calendar year.

[C] Attendance to school here is not directly comparable to net attendance ratios reported in preceding tables, which utilise information on all children in the sample. This and subsequent tables present results of the Parental Participation and Foundational Learning Skills modules administered to mothers of a randomly selected subsample of children age 7-14 years.

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

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

Table LN.3.3: Learning environment at home

Percentage of children age 7-14 years with 3 or more books to read and percentage who read or are read to at home, percentage of children age 7-14 years who have homework among children who attend school, and percentage of children who receive help with homework among those who have homework, DPR Korea, 2017

	Percentage of children with 3 or more books to read at home[1]	Number of children age 7-14 years old	Percentage of children who read books or are read to at home[2]	Number of children age 7-14 years old	Percentage of children who have homework	Number of children age 7-14 years attending school	Percentage of children who receive help with homework[3]	Number of children age 7-14 attending school and have homework
Total	81.9	3,723	99.2	3,723	99.6	3,714	73.3	3,698
Sex								
Male	82.4	1,889	98.8	1,889	99.3	1,884	73.1	1,870
Female	81.4	1,834	99.5	1,834	99.9	1,830	73.5	1,828
Area								
Urban	85.7	2,108	99.2	2,108	99.5	2,101	75.2	2,091
Rural	76.8	1,615	99.1	1,615	99.7	1,613	70.9	1,608
Province								
Ryanggang	59.1	113	99.5	113	100.0	113	67.8	113
North Hamgyong	93.3	357	99.7	357	100.0	356	93.8	356
South Hamgyong	70.6	514	98.4	514	100.0	510	76.5	510
Kangwon	87.0	234	100.0	234	99.3	234	62.8	233
Jagang	87.3	201	97.9	201	100.0	201	74.3	201
North Pyongan	55.3	425	98.1	425	99.3	425	61.0	422
South Pyongan	89.0	640	99.2	640	98.9	640	68.6	633
North Hwanghae	84.1	360	99.4	360	99.7	357	79.2	356
South Hwanghae	83.3	403	99.5	403	100.0	401	77.6	401
Pyongyang	97.2	476	100.0	476	99.4	476	69.7	473
Age[A]								
7	79.1	351	99.1	351	100.0	350	88.9	350
8	83.2	397	99.6	397	100.0	395	88.1	395
9	84.5	501	98.4	501	98.8	501	85.4	495
10	72.8	465	98.6	465	99.3	461	80.7	458
11	83.4	466	99.5	466	99.8	466	71.5	465
12	86.1	449	99.4	449	98.8	447	67.8	441
13	81.7	490	99.1	490	100.0	489	60.7	489
14	83.3	469	99.9	469	100.0	469	56.6	469
15	82.5	136	98.4	136	100.0	136	48.7	136
School attendance[B]								
Nursery or Kindergarten	(*)	10	(*)	10	(*)	10	(*)	10
Primary	81.2	1,936	99.1	1,936	99.5	1,936	84.1	1,927
Lower secondary	82.0	1,211	99.2	1,211	99.6	1,211	64.8	1,206
Upper secondary	84.3	555	99.5	555	99.7	555	53.9	554
Higher	(*)	1	(*)	1	(*)	1	(*)	1
Out-of-school	(*)	9	(*)	9	na	na	na	na
Mother's education								
Lower secondary	(*)	2	(*)	2	(*)	2	(*)	2
Upper secondary	80.7	3,008	99.2	3,008	99.6	3,003	72.9	2,991
Higher	86.8	714	99.0	714	99.5	709	75.1	706
Child's functional difficulties								
Has functional difficulty	(77.5)	43	(90.1)	43	(92.2)	42	(62.2)	39
Has no functional difficulty	81.9	3,680	99.3	3,680	99.7	3,672	73.4	3,660
Wealth index 20-40-40								
20 percent lowest	68.8	845	98.5	845	99.6	845	72.1	842
40 percent middle	80.8	1,466	99.3	1,466	99.6	1,461	72.8	1,455
40 percent highest	90.8	1,412	99.5	1,412	99.5	1,408	74.6	1,402

[1] MICS indicator LN.18 - Availability of books at home

[2] MICS indicator LN.19 - Reading habit at home

[3] MICS indicator LN.21 - Support with homework

[A] Age for school is calculated to take into account age eligibility criteria for starting primary school, the appropriate age at the start of primary school refers to the age in the 2017 calendar year.

[B] Attendance to school here is not directly comparable to net attendance ratios reported in preceding tables, which utilise information on all children in the sample. This and subsequent tables present results of the Parental Participation and Foundational Learning Skills modules administered to mothers of a randomly selected subsample of children age 7-14 years.

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

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

8.4. Foundational learning skills

The ability to read and understand a simple text is one of the most fundamental skills a child can learn. Yet in many countries, students enrolled in school for as many as 6 years are unable to read and understand simple texts, as shown for instance by regional assessments such as LLECE, PASEC and SACMEQ.[56] Acquiring literacy in the early grades of primary is crucial because doing so becomes more difficult in later grades, for those who are lagging behind.[57]

A strong foundation in basic numeracy skills during the early grades is crucial for success in mathematics in the later years. Mathematics is a skill very much in demand and most competitive jobs require some level of skill in mathematics. Early mathematical knowledge is a primary predictor of later academic achievement and future success in mathematics is related to an early and strong conceptual foundation.[58]

There are a number of existing tools for measuring learning outcomes[59] with each approach having their own strengths and limitations as well as varying levels of applicability to household surveys such as MICS. For some international assessments, it may just be too late: "Even though international testing programs like PISA and TIMSS are steadily increasing their coverage to also cover developing countries, (…) much of the divergence in test scores happens before the points in the educational trajectories of children where they are tested by international assessments", according to longitudinal surveys like the Young Lives Study.[60] National assessments such as the Early Grade Reading Assessment, which happens earlier and is more context specific, will however be less appropriate for cross-country analysis; although it may be possible to compare children who do not complete an exercise (zero scores) set at a level which reflects each national target for children by a certain age or grade. Additionally, it is recognized that some assessments only capture children in school. However, given that many children do not attend school, further data on these out-of-school children is needed and these can be adequately captured in household surveys.

Tables LN.4.1 and LN.4.2 represent percentages of children aged 7 and 14 who correctly answered foundational reading tasks and numeracy skills, respectively, by age, sex, location, province, Wealth index groups and other disaggregation. These MICS indicators are designed and developed for both national policy development and SDG reporting for SDG4.1.1(a): Proportion of children in grade 2/3 achieving a minimum proficiency in (i) reading and (ii) mathematics by sex.

The assessment score of reading tasks is further disaggregated by initial three literal questions and two inferential questions. The disaggregation of numeracy skills such as number reading, number discrimination, addition, pattern recognitions are also available.

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Table LN.4.1: Reading skills

Percentage of children aged 7-14 who demonstrate foundational reading skills by successfully completing three foundational reading tasks, by sex, DPR Korea, 2017

	Male					Female				
	Percentage who correctly read 90% of words in a story	Percentage who correctly answered comprehension questions		Percentage who demonstrated foundational reading skills	Number of children age 7-14 years	Percentage who correctly read 90% of words in a story	Percentage who correctly answered comprehension questions		Percentage who demonstrated foundational reading skills	Number of children age 7-14 years
		Three literal	Two inferential				Three literal	Two inferential		
Total[1]	**97.7**	**98.7**	**97.0**	**94.7**	**1,885**	**97.3**	**98.9**	**97.2**	**94.8**	**1,833**
Area										
Urban	97.0	99.1	96.7	93.4	1,064	96.9	99.0	97.0	94.1	1,039
Rural	98.6	98.2	97.4	96.4	820	97.8	98.7	97.4	95.7	795
Province										
Ryanggang	100.0	100.0	99.4	99.4	56	99.4	100.0	98.9	98.9	57
North Hamgyong	98.8	98.4	92.0	90.2	183	100.0	96.7	92.1	90.5	173
South Hamgyong	100.0	100.0	100.0	100.0	266	99.5	100.0	100.0	99.5	247
Kangwon	96.7	97.3	98.4	94.0	119	93.1	100.0	100.0	93.1	116
Jagang	96.9	95.5	94.5	91.5	110	95.8	97.6	95.8	91.6	91
North Pyongan	95.8	93.5	88.6	85.7	205	96.9	99.5	93.0	92.0	220
South Pyongan	100.0	100.0	98.5	98.5	321	100.0	98.8	97.8	97.8	316
North Hwanghae	99.4	100.0	100.0	99.4	179	93.2	100.0	99.5	92.6	181
South Hwanghae	100.0	100.0	97.8	97.8	188	97.2	96.8	95.8	94.5	216
Pyongyang	90.6	100.0	99.5	90.1	258	95.3	99.5	99.5	94.7	218
Age[A]										
7-8[2]	95.9	97.1	91.8	87.8	383	96.0	97.5	90.5	88.6	364
7	94.9	96.6	87.2	82.9	168	94.2	97.7	85.9	84.1	182
8	96.6	97.4	95.4	91.6	215	97.9	97.3	95.1	93.1	182
9	96.3	98.1	97.6	94.8	264	97.8	99.0	97.3	94.3	234
10	98.2	98.1	97.2	95.0	225	98.1	98.5	98.5	96.5	240
11	98.0	100.0	98.6	96.6	232	96.6	100.0	99.6	96.2	234
12	98.5	99.5	98.7	97.2	221	98.4	100.0	100.0	98.4	228
13	99.2	100.0	99.3	98.6	243	96.7	100.0	100.0	96.7	247
14	98.7	99.0	98.6	96.9	255	98.0	99.7	99.5	97.5	214
15	99.0	100.0	97.9	96.9	62	98.7	93.5	93.5	92.1	74
School attendance[B]										
Nursery or Kindergarten	(*)	(*)	(*)	(*)	5	(*)	(*)	(*)	(*)	5
Primary	96.7	97.8	95.2	92.1	964	96.8	98.4	95.4	92.8	969
Grade 1	93.3	96.7	89.5	83.5	175	94.4	96.6	85.6	83.7	188
Grade 2-3[3]	96.8	97.4	95.3	92.7	470	97.9	98.7	97.0	94.4	420
Grade 2	97.0	96.3	93.0	90.5	248	98.7	98.4	95.0	93.8	182
Grade 3	96.5	98.7	98.0	95.1	222	97.2	99.0	98.5	94.9	238
Grade 4	98.5	98.6	97.2	94.6	218	96.9	98.4	97.9	94.9	223
Grade 5	98.8	100.0	100.0	98.8	101	96.7	100.0	100.0	96.7	138
Lower secondary	98.7	99.6	98.7	97.3	616	98.3	100.0	99.8	98.1	594
Grade 1	97.7	100.0	98.3	96.0	167	100.0	100.0	99.3	99.3	133
Grade 2	98.4	99.5	99.5	97.9	207	98.2	100.0	100.0	98.2	231
Grade 3	99.7	99.5	98.3	97.5	242	97.4	100.0	100.0	97.4	230
Upper secondary	98.7	99.6	99.1	97.8	294	97.7	97.9	97.7	95.5	261
Higher	(*)	(*)	(*)	(*)	1	(*)	(*)	(*)	(*)	0
Out-of-school	(*)	(*)	(*)	(*)	4	(*)	(*)	(*)	(*)	5
Mother's education										
Lower secondary	-	-	-	-	0	(*)	(*)	(*)	(*)	2
Upper secondary	97.8	98.5	96.9	94.7	1,561	97.1	98.9	97.4	94.9	1,445
Higher	97.2	99.6	97.2	94.8	323	98.1	98.8	96.4	94.4	386
Child's functional difficulties										
Has functional difficulty	(*)	(*)	(*)	(*)	24	(*)	(*)	(*)	(*)	15
Has no functional difficulty	97.7	98.7	97.0	94.7	1,861	97.3	98.9	97.2	94.8	1,818
Wealth index 20-40-40										
20 percent lowest	99.4	99.3	97.9	97.3	422	98.7	98.5	98.2	97.5	421
40 percent middle	97.5	97.9	96.9	94.3	729	96.8	98.5	96.4	93.2	726
40 percent highest	96.9	98.9	96.5	93.4	707	97.1	99.5	97.4	94.9	686

(Continued...)

Table LN.4.1 (continued): Reading skills

	Total				
	Percentage who correctly read 90% of words in a story	Percentage who correctly answered comprehension questions		Percentage of children who demonstrate foundational reading skills[1,2,3]	Number of children age 7-14 years
		Three literal	Two inferential		
Total[1]	**97.5**	**98.8**	**97.1**	**94.8**	**3,718**
Area					
Urban	97.0	99.0	96.8	93.8	2,103
Rural	98.2	98.5	97.4	96.1	1,615
Province					
Ryanggang	99.7	100.0	99.2	99.2	113
North Hamgyong	99.4	97.6	92.1	90.4	356
South Hamgyong	99.7	100.0	100.0	99.7	513
Kangwon	94.9	98.6	99.2	93.6	234
Jagang	96.4	96.4	95.1	91.5	201
North Pyongan	96.4	96.6	90.9	89.0	425
South Pyongan	100.0	99.4	98.1	98.1	637
North Hwanghae	96.3	100.0	99.7	96.0	360
South Hwanghae	98.5	98.3	96.8	96.1	403
Pyongyang	92.8	99.8	99.5	92.2	476
Age[A]					
7-8[2]	96.0	97.2	91.2	88.2	747
7	94.6	97.2	86.5	83.5	350
8	97.2	97.3	95.3	92.3	397
9	97.0	98.5	97.4	94.5	498
10	98.1	98.3	97.9	95.8	465
11	97.3	100.0	99.1	96.4	466
12	98.4	99.8	99.4	97.8	449
13	98.0	100.0	99.7	97.6	489
14	98.4	99.4	99.0	97.1	469
15	98.8	96.4	95.5	94.3	136
School attendance[B]					
Nursery or Kindergarten	(*)	(*)	(*)	(*)	10
Primary	96.8	98.1	95.3	92.4	1,933
Grade 1	93.9	96.7	87.5	83.6	363
Grade 2-3[3]	97.3	98.0	96.1	93.5	890
Grade 2	97.7	97.2	93.8	91.9	430
Grade 3	96.9	98.8	98.2	95.0	460
Grade 4	97.7	98.5	97.6	94.7	441
Grade 5	97.5	100.0	100.0	97.5	239
Lower secondary	98.5	99.8	99.3	97.7	1,210
Grade 1	98.7	100.0	98.7	97.5	300
Grade 2	98.3	99.8	99.8	98.1	438
Grade 3	98.6	99.8	99.1	97.5	472
Upper secondary	98.3	98.8	98.5	96.7	555
Higher	(*)	(*)	(*)	(*)	1
Out-of-school	(*)	(*)	(*)	(*)	9
Mother's education					
Lower secondary	(*)	(*)	(*)	(*)	2
Upper secondary	97.5	98.7	97.2	94.8	3,007
Higher	97.7	99.2	96.7	94.6	709
Child's functional difficulties					
Has functional difficulty	(100.0)	(100.0)	(100.0)	(100.0)	39
Has no functional difficulty	97.5	98.8	97.1	94.7	3,679
Wealth index 20-40-40					
20 percent lowest	99.1	99.0	98.0	97.3	845
40 percent middle	97.3	98.1	96.4	93.8	1,464
40 percent highest	96.8	99.4	97.3	94.2	1,409

[1] MICS indicator LN.22a - Foundational reading and number skills (reading, age 7-14)
[2] MICS indicator LN.22b - Foundational reading and number skills (reading, age for grade 2/3)
[3] MICS indicator LN.22c - Foundational reading and number skills (reading, attending grade 2/3); SDG indicator 4.1.1

[A] Age for school is calculated to take into account age eligibility criteria for starting primary school, the appropriate age at the start of primary school refers to the age in the 2017 calendar year.

[B] Attendance to school here is not directly comparable to net attendance ratios reported in preceding tables, which utilise information on all children in the sample. This and subsequent tables present results of the Parental Participation and Foundational Learning Skills modules administered to mothers of a randomly selected subsample of children age 7-14 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

Table LN.4.2: Numeracy skills

Percentage of children aged 7-14 who demonstrate foundational numeracy skills by successfully completing three foundational numeracy tasks, by sex, DPR Korea, 2017

	Male						Female					
	Percentage of children who successfully completed tasks of:				Percentage of children who demonstrate foundational numeracy skills	Number of children age 7-14 years	Percentage of children who successfully completed tasks of:				Percentage of children who demonstrate foundational numeracy skills	Number of children age 7-14 years
	Number reading	Number discrimination	Addition	Pattern recognition and completion			Number reading	Number discrimination	Addition	Pattern recognition and completion		
Total[1]	**96.8**	**93.2**	**92.9**	**86.0**	**80.1**	**1,885**	**96.6**	**93.9**	**93.5**	**89.1**	**83.8**	**1,833**
Area												
Urban	96.8	93.1	92.8	84.5	78.4	1,064	96.0	94.2	92.5	87.9	82.4	1,039
Rural	97.0	93.3	93.1	87.9	82.2	820	97.5	93.5	94.9	90.5	85.6	795
Province												
Ryanggang	100.0	93.8	99.4	93.7	87.0	56	99.4	95.5	96.0	95.5	88.2	57
North Hamgyong	90.3	87.1	93.4	66.0	59.1	183	93.2	90.4	93.3	83.1	73.7	173
South Hamgyong	100.0	97.0	94.2	87.0	82.0	266	100.0	97.7	96.1	92.2	88.7	247
Kangwon	99.5	95.3	97.9	93.4	90.3	119	98.4	98.9	90.5	89.3	85.2	116
Jagang	98.0	86.6	91.1	76.9	63.9	110	95.3	87.8	92.7	76.9	67.3	91
North Pyongan	89.0	85.7	74.7	71.5	63.1	205	90.9	84.0	80.2	78.0	72.8	220
South Pyongan	97.8	96.2	98.4	94.2	91.0	321	97.3	96.2	96.7	96.2	90.8	316
North Hwanghae	99.4	98.1	96.7	91.6	87.5	179	100.0	93.6	97.3	90.1	84.0	181
South Hwanghae	95.6	92.0	93.0	89.3	85.2	188	94.4	95.7	92.8	92.0	86.8	216
Pyongyang	100.0	95.2	93.2	93.1	84.9	258	98.8	97.0	98.2	90.5	89.3	218
Age[A]												
7-8[2]	89.0	86.7	88.6	78.0	73.2	383	88.3	84.9	88.3	76.6	69.2	364
7	78.8	77.7	81.1	69.7	62.6	168	81.8	77.1	82.5	67.8	57.6	182
8	97.1	93.7	94.4	84.5	81.4	215	94.8	92.7	94.2	85.4	80.7	182
9	96.6	92.5	93.4	87.4	82.9	264	95.8	95.2	94.2	90.0	86.4	234
10	98.4	94.6	93.6	87.5	79.3	225	97.8	93.7	98.2	92.4	85.1	240
11	99.6	98.3	94.7	90.9	88.3	232	99.0	95.5	95.7	91.5	89.4	234
12	98.2	96.4	95.2	88.2	79.3	221	99.3	97.9	96.2	90.6	88.1	228
13	100.0	94.4	93.3	89.3	80.9	243	100.0	97.9	95.2	95.2	90.5	247
14	100.0	92.5	94.3	84.3	78.4	255	100.0	95.5	92.1	94.6	86.5	214
15	100.0	99.5	93.0	91.9	89.1	62	100.0	100.0	84.6	87.5	82.9	74
School attendance[B]												
Nursery or Kindergarten	(*)	(*)	(*)	(*)	(*)	5	(*)	(*)	(*)	(*)	(*)	5
Primary	94.3	91.2	91.8	84.3	79.0	964	94.1	91.5	93.2	86.3	81.1	969
Grade 1	81.4	79.9	81.5	72.2	62.7	175	81.5	76.6	82.4	66.6	55.8	188
Grade 2-3[3]	95.8	92.2	93.2	85.3	81.8	470	96.6	94.9	94.6	88.0	85.2	420
Grade 2	93.5	90.0	91.9	81.5	80.7	248	95.0	94.6	93.2	86.0	84.0	182
Grade 3	98.4	94.6	94.7	89.4	82.9	222	97.8	95.1	95.7	89.5	86.2	238
Grade 4	98.9	96.0	96.3	88.4	84.2	218	97.1	93.3	96.8	94.1	86.8	223
Grade 5	100.0	96.1	93.6	91.9	82.8	101	99.3	98.8	97.6	95.4	93.5	138
Lower secondary	99.2	95.1	93.7	88.2	81.0	616	99.7	96.9	95.2	90.7	87.1	594
Grade 1	98.3	97.4	94.4	89.5	84.3	167	100.0	94.9	96.3	86.7	83.5	133
Grade 2	99.0	96.8	95.0	87.7	80.8	207	99.3	98.0	95.2	91.0	88.6	231
Grade 3	100.0	92.1	92.0	87.8	79.0	242	100.0	97.0	94.6	92.7	87.7	230
Upper secondary	100.0	95.7	95.2	87.0	82.0	294	100.0	96.9	90.6	95.5	87.6	261
Higher	(*)	(*)	(*)	(*)	(*)	1	(*)	(*)	(*)	(*)	(*)	0
Out-of-school	(*)	(*)	(*)	(*)	(*)	4	(*)	(*)	(*)	(*)	(*)	5
Mother's education												
Lower secondary	-	-	-	-	-	0	(*)	(*)	(*)	(*)	(*)	2
Upper secondary	96.6	93.1	92.6	85.8	79.8	1,561	96.4	93.6	93.4	89.8	84.0	1,445
Higher	97.9	93.8	94.6	86.9	81.7	323	97.4	95.2	93.8	86.2	83.0	386
Child's functional difficulties												
Has functional difficulty	(*)	(*)	(*)	(*)	(*)	24	(*)	(*)	(*)	(*)	(*)	15
Has no functional difficulty	96.8	93.1	92.8	86.0	80.0	1,861	96.6	94.0	93.6	89.0	83.9	1,818
Wealth index 20-40-40												
20 percent lowest	98.6	92.7	94.9	84.2	77.8	423	97.6	95.1	95.8	91.2	84.7	421
40 percent middle	95.3	92.5	91.5	86.8	81.8	738	96.4	94.4	92.8	90.0	84.9	726
40 percent highest	97.4	94.3	93.1	86.2	79.7	723	96.3	92.7	92.8	86.8	82.1	686

(Continued...)

Table LN.4.2 (continued): Numeracy skills

	Total					
	Percentage of children who successfully completed tasks of:				Percentage of children who demonstrate foundational numeracy skills[1,2,3]	Number of children age 7-14 years
	Number reading	Number discrimination	Addition	Pattern recognition and completion		
Total[1]	**96.7**	**93.6**	**93.2**	**87.5**	**81.9**	**3,718**
Area						
Urban	96.4	93.7	92.6	86.2	80.4	2,103
Rural	97.2	93.4	94.0	89.2	83.9	1,615
Province						
Ryanggang	99.7	94.7	97.7	94.6	87.6	113
North Hamgyong	91.7	88.7	93.4	74.3	66.2	356
South Hamgyong	100.0	97.4	95.1	89.5	85.2	513
Kangwon	98.9	97.1	94.3	91.4	87.8	234
Jagang	96.8	87.1	91.8	76.9	65.5	201
North Pyongan	90.0	84.8	77.6	74.9	68.1	425
South Pyongan	97.6	96.2	97.6	95.2	90.9	637
North Hwanghae	99.7	95.8	97.0	90.8	85.7	360
South Hwanghae	95.0	94.0	92.9	90.7	86.1	403
Pyongyang	99.4	96.0	95.5	91.9	86.9	476
Age[A]						
7-8[2]	88.7	85.8	88.5	77.3	71.2	747
7	80.4	77.4	81.8	68.7	60.0	350
8	96.0	93.3	94.3	84.9	81.1	397
9	96.3	93.8	93.8	88.6	84.5	498
10	98.1	94.2	96.0	90.0	82.3	465
11	99.3	96.9	95.2	91.2	88.9	466
12	98.8	97.2	95.7	89.4	83.8	449
13	100.0	96.1	94.3	92.3	85.8	489
14	100.0	93.9	93.3	89.0	82.1	469
15	100.0	99.8	88.4	89.5	85.7	136
School attendance[B]						
Nursery or Kindergarten	(*)	(*)	(*)	(*)	(*)	10
Primary	94.2	91.4	92.5	85.3	80.0	1,933
Grade 1	81.5	78.2	82.0	69.3	59.1	363
Grade 2-3[3]	96.2	93.4	93.9	86.5	83.4	890
Grade 2	94.1	92.0	92.5	83.4	82.1	430
Grade 3	98.1	94.8	95.2	89.4	84.6	460
Grade 4	98.0	94.6	96.5	91.3	85.5	441
Grade 5	99.6	97.7	95.9	93.9	89.0	239
Lower secondary	99.5	96.0	94.4	89.4	84.0	1,210
Grade 1	99.1	96.3	95.3	88.3	83.9	300
Grade 2	99.2	97.4	95.1	89.4	84.9	438
Grade 3	100.0	94.5	93.3	90.2	83.2	472
Upper secondary	100.0	96.2	93.0	91.0	84.6	555
Higher	(*)	(*)	(*)	(*)	(*)	1
Out-of-school	(*)	(*)	(*)	(*)	(*)	9
Mother's education						
Lower secondary	(*)	(*)	(*)	(*)	(*)	2
Upper secondary	96.5	93.3	93.0	87.7	81.8	3,007
Higher	97.6	94.6	94.2	86.5	82.4	709
Child's functional difficulties						
Has functional difficulty	(100.0)	(94.6)	(94.5)	(88.6)	(80.7)	39
Has no functional difficulty	96.7	93.6	93.2	87.5	81.9	3,679
Wealth index 20-40-40						
20 percent lowest	98.1	93.9	95.4	87.7	81.2	845
40 percent middle	95.9	93.4	92.2	88.4	83.3	1,464
40 percent highest	96.8	93.5	93.0	86.5	80.9	1,409

[1] MICS indicator LN.22d - Foundational reading and number skills (numeracy, age 7-14)
[2] MICS indicator LN.22e - Foundational reading and number skills (numeracy, age for grade 2/3)
[3] MICS indicator LN.22f - Foundational reading and number skills (numeracy, attending grade 2/3); SDG indicator 4.1.1

[A] Age for school is calculated to take into account age eligibility criteria for starting primary school, the appropriate age at the start of primary school refers to the age in the 2017 calendar year.

[B] Attendance to school here is not directly comparable to net attendance ratios reported in preceding tables, which utilise information on all children in the sample. This and subsequent tables present results of the Parental Participation and Foundational Learning Skills modules administered to mothers of a randomly selected subsample of children age 7-14 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

9. PROTECTION FROM VIOLENCE AND EXPLOITATION

The protection of children from all forms of violence is a fundamental right enshrined in the UN Convention on the Rights of the Child (CRC). Evidence suggests that exposure to violence at an early age in life can impair brain development and has serious and long lasting consequences for its victims with major impact on the health, development and school performance of children. It also slows social progress by generating huge economic costs, hindering sustainable development and eroding human capital.

The inclusion of a specific target within the 2030 Agenda for Sustainable Development provides a unique opportunity to place the protection of children at the heart of policy actions and to ensure all children have their rights realised and gives renewed impetus towards the realization of the rights of children to live free from violence, abuse and exploitation. Several other SDG targets address specific forms of protection and violence towards children, including child marriage, the eradication of child labour and registration of children at birth.

This chapter summarizes the main findings of the survey on a range of protection indicators, including child discipline, child labour, early marriage and attitudes toward domestic violence.

9.1. Child discipline

Teaching children self-control and acceptable behavior is an integral part of child discipline in all cultures. 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[61] have found that exposing children to violent discipline has 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.

In the 2017 DPR Korea MICS, mothers or caretakers of children under age five and those of one randomly selected child aged 5-17 for individual interview were asked a series of questions on the methods adults in the household used to discipline the child during the past month and if the respondent believes that physical punishment is a necessary part of child-rearing. Tables PR.2.1 and PR.2.2 present the results.

61.– Straus, MA and Paschall MJ. 2009. *Corporal Punishment by Mothers and Development of Children's Cognitive Ability: A 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.

Table PR.2.1: Child discipline

Percentage of children age 1-14 years by child disciplining methods experienced during the last one month, DPR Korea, 2017

	Percentage of children age 1-14 years who experienced:					Number of children age 1-14 years
	Only non-violent discipline	Psychological aggression	Physical punishment		Any violent discipline method[1]	
			Any	Severe		
Total	**36.9**	**43.2**	**43.4**	**2.8**	**59.2**	**6,449**
Sex						
Male	33.4	46.2	47.1	3.0	62.9	3,279
Female	40.5	40.1	39.6	2.5	55.4	3,170
Area						
Urban	38.1	41.3	43.1	3.0	58.3	3,765
Rural	35.3	45.9	43.8	2.4	60.6	2,684
Province						
Ryanggang	19.7	62.0	55.2	13.5	78.0	198
North Hamgyong	39.6	39.4	44.9	3.0	58.4	620
South Hamgyong	27.6	60.6	48.8	5.7	71.2	876
Kangwon	55.5	25.7	33.5	1.8	41.6	414
Jagang	47.6	33.2	35.5	2.8	48.6	358
North Pyongan	27.2	46.7	49.4	1.4	66.4	734
South Pyongan	31.3	58.0	44.2	2.5	67.1	1,092
North Hwanghae	41.2	43.3	36.4	0.9	54.8	656
South Hwanghae	27.6	42.0	54.5	2.8	66.6	682
Pyongyang	55.7	14.2	31.8	0.4	36.6	818
Age						
1-2	38.7	31.0	41.0	1.3	50.7	908
3-4	35.9	37.7	53.4	2.9	60.4	914
5-9	35.6	46.3	46.1	3.3	62.4	2,270
10-14	38.0	47.0	37.9	2.7	59.1	2,358
Mother's education						
Primary	(*)	(*)	(*)	(*)	(*)	2
Lower secondary	(*)	(*)	(*)	(*)	(*)	2
Upper secondary	35.6	44.6	44.6	2.7	60.7	5,274
Higher	42.7	37.2	38.1	2.9	52.9	1,172
Child's functional difficulty (age 2-14 years)[A]						
Has functional difficulty	37.9	48.1	46.4	9.9	60.6	75
Has no functional difficulty	36.8	44.3	43.9	2.8	60.4	5,917
Wealth index 20-40-40						
20 percent lowest	35.6	46.7	44.1	4.1	60.5	1,395
40 percent middle	33.1	47.8	45.1	2.6	63.0	2,554
40 percent highest	41.6	36.6	41.3	2.2	54.7	2,500

[1] MICS indicator PR.2 - Violent discipline; SDG 16.2.1

[A] Children age 1 year are excluded, as functional difficulties are only collected for age 2-14 years.

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

Table PR.2.2: Attitudes toward physical punishment

Percentage of mothers/caretakers of children age 1-14 years who believe that physical punishment is needed to bring up, raise, or educate a child properly, DPR Korea, 2017

	Percentage of mothers/caretakers who believe that a child needs to be physically punished	Number of mothers/ caretakers responding to a child discipline module
Total	20.8	4,202
Sex		
Male	(16.3)	42
Female	20.8	4,160
Area		
Urban	19.7	2,544
Rural	22.5	1,657
Province		
Ryanggang	39.1	130
North Hamgyong	15.1	414
South Hamgyong	24.2	577
Kangwon	23.5	260
Jagang	16.1	243
North Pyongan	21.7	479
South Pyongan	24.1	721
North Hwanghae	26.1	411
South Hwanghae	23.8	428
Pyongyang	6.3	539
Age		
<25	19.5	89
25-34	21.4	1,880
35-49	20.3	2,151
50+	22.4	81
Education		
Primary	(*)	2
Lower secondary	(*)	2
Upper secondary	21.1	3,393
Higher	19.7	804
Wealth index 20-40-40		
20 percent lowest	23.5	858
40 percent middle	23.3	1,673
40 percent highest	16.9	1,670

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

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

9.2. Child labour

Children around the world are routinely engaged in paid and unpaid forms of work that are not harmful to them. However, they are classified as child labourers when they are either too young to work or are involved in hazardous activities that may compromise their physical, mental, social or educational development. Article 32 (1) of the Convention on the Rights of the Child states: "States Parties recognize the right of the child to be protected from economic exploitation and from performing any work that is likely to be hazardous or to interfere with the child's education, or to be harmful to the child's health or physical, mental, spiritual, moral or social development".

The Socialist Labor Law of the Democratic People's Republic of Korea was adopted in 1978 and revised and supplemented in respectively 1986 and 1999.

In the DPRK the minimum working age is 16 (as per the DPR Korea Civil Registration Law, children are those age 0 – 16 years); those who have not reached this age are prohibited from labour. The standard working day counts 8 hours, but this can be reduced to 7 or 6 hours depending on the intensity of the labour to be performed and on eventually applicable special conditions.

The child labour module was administered for children age 5-17 and includes questions on the type of work a child does and the number of hours he or she is engaged in it. Data are collected on both economic activities (paid or unpaid work for someone who is not a member of the household, work for a family farm or business) and domestic work (household chores such as cooking, cleaning or caring for children, as well as collecting firewood or fetching water). The module also collects information on hazardous working conditions.[62, 63]

62.– UNICEF. 2012. *How Sensitive Are Estimates of Child Labour to Definitions?* MICS Methodological Paper No. 1. UNICEF.

63.– The Child Labour module was administered in the Questionnaire for Children Age 5-17 (See Appendix E: Questionnaires). In households with at least one child age 5-17, one child was randomly selected. To account for the random selection, the household sample weight is multiplied by the total number of children age 5-17 in each household; this weight is used when producing the relevant tables.

Table PR.3.1: Children's involvement in economic activities

Percentage of children by involvement in economic activities during the last week, according to age groups, DPR Korea, 2017

	Percentage of children age 5-11 years involved in economic activity for at least one hour	Number of children age 5-11 years	Percentage of children age 12-14 years involved in:		Number of children age 12-14 years	Percentage of children age 15-17 years involved in:		Number of children age 15-17 years
			Economic activity less than 14 hours	Economic activity for 14 hours or more		Economic activity less than 43 hours	Economic activity for 43 hours or more	
Total	**6.6**	**3,211**	**34.7**	**2.1**	**1,417**	**40.4**	**0.1**	**1,444**
Sex								
Male	7.0	1,631	34.3	2.1	714	41.6	0.2	724
Female	6.1	1,580	35.1	2.2	702	39.2	0.1	720
Area								
Urban	4.2	1,960	19.7	0.9	710	24.7	0.0	786
Rural	10.3	1,250	49.8	3.4	707	59.2	0.3	659
Province								
Ryanggang	5.6	101	24.4	0.0	40	40.0	0.0	50
North Hamgyong	3.1	313	21.7	0.0	128	36.3	0.0	141
South Hamgyong	13.9	443	49.1	4.1	194	50.8	0.8	188
Kangwon	1.2	204	10.9	0.0	92	21.3	0.0	94
Jagang	6.3	180	50.7	1.5	74	52.9	0.7	79
North Pyongan	14.9	344	48.5	5.3	177	49.6	0.0	179
South Pyongan	0.9	530	30.2	0.0	252	26.1	0.0	242
North Hwanghae	7.7	324	41.7	3.7	141	57.6	0.0	163
South Hwanghae	10.7	337	50.8	4.0	159	65.1	0.0	141
Pyongyang	0.6	434	6.3	0.0	160	10.8	0.0	168
School attendance								
Attending	6.7	3,155	34.7	2.1	1,415	37.4	0.0	1,152
Not attending	0.0	56	(*)	(*)	1	52.3	0.7	292
Mother's education								
Primary	(*)	1	(*)	(*)	0	-	-	0
Lower secondary	(*)	2	(*)	(*)	0	-	-	0
Upper secondary	6.5	2,637	36.6	2.2	1,136	41.5	0.2	1,143
Higher	6.8	571	26.9	1.9	281	36.6	0.0	300
No information[A]	na	0	na	na	0	(*)	(*)	1
Child's functional difficulty								
Has functional difficulty	(*)	32	(*)	(*)	17	(*)	(*)	8
Has no functional difficulty	6.6	3,179	34.9	2.1	1,399	40.4	0.1	1,436
Wealth index 20-40-40								
20 percent lowest	13.0	673	48.5	5.8	359	60.7	0.2	306
40 percent middle	8.0	1,234	42.3	1.5	587	50.9	0.2	597
40 percent highest	1.9	1,304	14.7	0.0	472	17.4	0.0	540

[A] Children age 15 or higher identified as emancipated

na: not applicable

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

"–" denotes 0 unweighted case in that cell or in the denominator

Table PR.3.1 presents children's involvement in economic activities. The methodology of the MICS Indicator on Child Labour uses three age-specific thresholds for the number of hours children can perform economic activity without being classified as child labourers. A child that performed economic activities during the last week for more than the age-specific number of hours is classified as in child labour:

(i) age 5-11: 1 hour or more
(ii) age 12-14: 14 hours or more
(iii) age 15-17: 43 hours or more

Table PR.3.2: Children's involvement in household chores

Percentage of children by involvement in household chores during the last week, according to age groups, DPR Korea, 2017

	Percentage of children age 5-11 years involved in:		Number of children age 5-11 years	Percentage of children age 12-14 years involved in:		Number of children age 12-14 years	Percentage of children age 15-17 years involved in:		Number of children age 15-17 years
	Household chores less than 28 hours	Household chores for 28 hours or more		Household chores less than 28 hours	Household chores for 28 hours or more		Household chores less than 43 hours	Household chores for 43 hours or more	
Total	**39.7**	**0.1**	**3,211**	**76.2**	**0.4**	**1,417**	**84.4**	**0.0**	**1,444**
Sex									
Male	36.0	0.1	1,631	69.7	0.5	714	78.9	0.0	724
Female	43.4	0.0	1,580	82.7	0.4	702	90.0	0.1	720
Area									
Urban	38.1	0.0	1,960	76.4	0.0	710	83.5	0.1	786
Rural	42.0	0.2	1,250	75.9	0.9	707	85.6	0.0	659
Province									
Ryanggang	47.8	0.0	101	72.6	0.0	40	80.5	0.0	50
North Hamgyong	48.1	0.0	313	95.0	0.0	128	84.7	0.0	141
South Hamgyong	47.1	0.0	443	76.1	1.5	194	90.3	0.0	188
Kangwon	24.6	0.0	204	47.1	0.0	92	66.7	0.0	94
Jagang	48.0	0.0	180	75.2	0.0	74	74.0	0.7	79
North Pyongan	32.8	0.7	344	81.4	2.0	177	88.5	0.0	179
South Pyongan	42.8	0.0	530	80.6	0.0	252	88.7	0.0	242
North Hwanghae	31.5	0.0	324	65.1	0.0	141	85.5	0.0	163
South Hwanghae	56.4	0.0	337	96.9	0.0	159	91.6	0.0	141
Pyongyang	22.4	0.0	434	55.7	0.0	160	76.1	0.0	168
School attendance									
Attending	40.1	0.1	3,155	76.1	0.4	1,415	83.3	0.0	1,152
Not attending	(11.5)	(0.0)	56	(*)	(*)	1	88.8	0.2	292
Mother's education									
Primary	(*)	(*)	1	(*)	(*)	0	(*)	(*)	0
Lower secondary	(*)	(*)	2	(*)	(*)	0	(*)	(*)	0
Upper secondary	39.3	0.1	2,637	76.0	0.6	1,136	84.5	0.0	1,143
Higher	41.0	0.0	571	76.9	0.0	281	84.4	0.0	300
No information[A]	na	na	0	na	na	0	(*)	(*)	1
Child's functional difficulty									
Has functional difficulty	(*)	(*)	32	(*)	(*)	17	(*)	(*)	8
Has no functional difficulty	39.8	0.1	3,179	76.3	0.5	1,399	84.3	0.0	1,436
Wealth index 20-40-40									
20 percent lowest	47.2	0.3	673	77.6	1.8	359	83.6	0.0	306
40 percent middle	41.2	0.0	1,234	77.7	0.0	587	86.5	0.1	597
40 percent highest	34.3	0.0	1,304	73.1	0.0	472	82.6	0.0	540

[A] Children age 15 or higher identified as emancipated

na: not applicable

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

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

Table PR.3.2 presents children's involvement in household chores. As for economic activity above, the methodology also uses age-specific thresholds for the number of hours children can perform household chores without being classified as child labourers. A child that performed household chores during the last week for more than the age-specific number of hours is classified as in child labour:

(i) age 5-11 and age 12-14: 28 hours or more
(ii) age 15-17: 43 hours or more

SDG Target 8.7 aims to "take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms." The SDG indicator 8.7.1 provides the proportion of children aged 5-17 years who are engaged in child labour. Table PR.3.3 combines the children working and performing economic activities and household chores at or above and below the age-specific thresholds as detailed in the previous tables, as well as

those children reported working under hazardous conditions, into the total child labour indicator.[64]

Table PR.3.3: Child labour

Percentage of children age 5-17 years by involvement in economic activities or household chores during the last week, percentage working under hazardous conditions during the last week, and percentage engaged in child labour during the last week, DPR Korea, 2017

	Children involved in economic activities for a total number of hours during last week:		Children involved in household chores for a total number of hours during last week:		Children working under hazardous conditions	Total child labour[1]	Number of children age 5-17 years
	Below the age specific threshold	At or above the age specific threshold	Below the age specific threshold	At or above the age specific threshold			
Total	19.9	4.0	58.8	0.2	1.4	5.1	6,072
Sex							
Male	20.3	4.3	54.0	0.2	1.3	5.5	3,070
Female	19.4	3.7	63.8	0.1	1.4	4.7	3,002
Area							
Urban	11.4	2.5	56.3	0.0	0.7	3.1	3,456
Rural	31.0	5.9	62.1	0.3	2.2	7.9	2,616
Province							
Ryanggang	18.4	3.0	61.5	0.0	1.5	4.4	191
North Hamgyong	15.0	1.7	67.2	0.0	0.2	1.9	582
South Hamgyong	26.4	8.6	63.8	0.3	0.8	9.1	825
Kangwon	8.5	0.6	40.0	0.0	1.1	1.6	390
Jagang	29.5	3.9	60.2	0.2	0.6	4.7	332
North Pyongan	25.9	8.7	59.3	0.8	1.8	10.9	700
South Pyongan	16.0	0.5	63.0	0.0	0.8	1.1	1,025
North Hwanghae	27.1	4.8	53.0	0.0	0.0	4.8	628
South Hwanghae	29.5	6.7	74.3	0.0	7.0	11.7	637
Pyongyang	4.1	0.3	41.3	0.0	0.0	0.3	762
Age							
5-11	4.1	6.6	39.7	0.1	0.6	6.7	3,211
12-14	34.7	2.1	76.2	0.4	2.1	4.4	1,417
15-17	40.4	0.1	84.4	0.0	2.3	2.4	1,444
School attendance							
Attending	18.4	4.2	57.7	0.2	1.3	5.2	5,722
Not attending	43.8	0.6	76.5	0.2	2.9	3.6	349
Mother's education							
Primary	(*)	(*)	(*)	(*)	(*)	(*)	1
Lower secondary	(*)	(*)	(*)	(*)	(*)	(*)	2
Upper secondary	20.5	4.0	58.3	0.2	1.5	5.3	4,916
Higher	17.3	3.8	61.1	0.0	0.9	4.5	1,151
No information[A]	(*)	(*)	(*)	(*)	(*)	(*)	1
Child's functional difficulty							
Has functional difficulty	(18.4)	(1.1)	(49.8)	(0.0)	(0.5)	(1.6)	57
Has no functional difficulty	19.9	4.0	58.9	0.2	1.4	5.2	6,015
Wealth index 20-40-40							
20 percent lowest	30.2	8.2	63.7	0.6	3.2	10.9	1,338
40 percent middle	25.0	4.5	61.3	0.0	1.3	5.6	2,418
40 percent highest	8.5	1.1	53.5	0.0	0.3	1.3	2,316

[1] MICS indicator PR.3 - Child labour; SDG indicator 8.7.1

[A] Children age 15 or higher identified as emancipated

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

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

64.– Note that the definition of child labour, hence the MICS indicator PR.3 presented in this report, also includes working in activities that are hazardous in nature. However, to ensure comparability of estimates, it has been decided by UNICEF and ILO to exclude engagement in hazardous occupations or under hazardous working conditions from the estimates of child labour for the purpose of reporting on SDG 8.7.1 in 2018. Another reason for exclusion of hazardous conditions in the reporting is the further methodological work needed to validate questions aimed at identifying children engaged in hazardous activities.

9.3. Attitudes toward domestic violence

2017 DPR Korea MICS assessed the attitudes of women and men age 15-49 years towards wife beating by asking the respondents whether they think that husbands are justified to hit or beat their wives in a variety of situations. The purpose of these questions is to capture the social justification of violence (in contexts where women have a lower status in society) as a disciplinary action when a woman does not comply with certain expected gender roles. The responses to these questions can be found in Table PR.8.1W for women and in Table PR.8.1M for men.

Table PR.8.1W: Attitudes toward domestic violence (women)

Percentage of women age 15-49 years who believe a husband is justified in beating his wife in various circumstances, DPR Korea, 2017

	Percentage of women age 15-49 years who believe a husband is justified in beating his wife:						
	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[1]	Number of women age 15-49 years
Total	**1.9**	**7.4**	**2.0**	**0.8**	**1.2**	**9.6**	**8,763**
Area							
Urban	2.1	8.4	2.2	0.9	1.6	10.8	5,369
Rural	1.6	6.0	1.7	0.8	0.7	7.7	3,394
Province							
Ryanggang	2.7	14.6	6.3	3.5	0.6	18.0	273
North Hamgyong	2.1	19.3	1.7	0.1	1.2	21.2	868
South Hamgyong	2.3	10.4	1.9	1.5	1.6	12.8	1,157
Kangwon	1.7	5.6	3.7	3.1	2.1	9.2	552
Jagang	3.3	10.6	3.4	1.2	2.0	13.3	493
North Pyongan	4.2	8.7	3.2	0.2	0.9	11.7	1,020
South Pyongan	2.6	6.7	2.5	0.8	1.6	9.6	1,507
North Hwanghae	0.5	2.4	0.7	0.7	0.3	3.5	894
South Hwanghae	0.2	1.0	0.3	0.2	0.2	1.4	875
Pyongyang	0.2	1.9	0.5	0.1	1.6	3.2	1,123
Age							
15-17	0.2	3.3	0.9	0.1	0.2	3.8	716
18-19	0.5	3.3	0.3	0.2	0.3	3.7	469
20-24	1.0	4.6	1.7	0.5	0.8	6.0	1,292
25-29	2.3	7.2	2.3	0.7	1.7	9.6	1,265
30-34	2.8	9.1	2.7	1.1	1.6	11.8	1,165
35-39	2.9	10.7	2.6	1.3	1.3	12.8	1,048
40-44	1.6	8.8	1.5	1.1	1.4	11.0	1,357
45-49	2.6	8.6	2.5	1.2	1.7	12.1	1,451
Education							
Primary	(*)	(*)	(*)	(*)	(*)	(*)	2
Lower secondary	(*)	(*)	(*)	(*)	(*)	(*)	2
Upper secondary	1.9	7.4	2.1	0.9	1.2	9.6	7,017
Higher	2.0	7.7	1.5	0.8	1.3	9.5	1,742
Marital status							
Currently married	2.5	8.8	2.4	1.1	1.5	11.4	6,009
Formerly married	1.8	6.6	2.5	0.8	1.3	10.9	240
Never married	0.6	4.3	1.2	0.2	0.7	5.1	2,514
Wealth index 20-40-40							
20 percent lowest	1.6	7.6	2.6	1.7	0.9	10.0	1,748
40 percent middle	2.4	8.0	2.3	0.8	1.2	10.5	3,480
40 percent highest	1.6	6.8	1.5	0.5	1.4	8.5	3,535

[1] MICS indicator PR.15 - Attitudes towards domestic violence

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

Table PR.8.1M: Attitudes toward domestic violence (men)

Percentage of men age 15-49 years who believe a husband is justified in beating his wife in various circumstances, DPR Korea, 2017

	Percentage of men age 15-49 years who believe a husband is justified in beating his wife:						
	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[1]	Number of men age 15-49 years
Total	**1.2**	**5.2**	**1.8**	**0.8**	**1.7**	**7.6**	**4,179**
Area							
Urban	1.3	5.6	1.9	0.9	1.9	8.3	2,551
Rural	1.0	4.5	1.5	0.6	1.5	6.5	1,628
Province							
Ryanggang	1.6	12.1	8.5	1.4	0.9	17.4	136
North Hamgyong	2.1	16.5	2.1	0.2	0.7	18.6	427
South Hamgyong	1.4	5.5	1.1	1.8	0.7	6.4	573
Kangwon	2.3	3.3	1.9	0.2	0.5	5.0	269
Jagang	2.7	10.6	2.7	0.5	0.5	11.6	231
North Pyongan	0.0	1.1	1.6	0.4	0.5	2.0	489
South Pyongan	1.8	6.4	2.5	1.5	4.6	12.0	682
North Hwanghae	0.0	0.5	0.8	0.5	0.0	1.3	406
South Hwanghae	0.5	1.2	0.7	0.0	0.0	1.9	415
Pyongyang	0.7	1.4	0.7	0.5	4.9	6.1	551
Age							
15-17	0.5	1.5	0.5	0.0	0.9	2.7	345
18-19	1.3	4.4	1.0	0.0	1.7	6.3	168
20-24	0.7	2.1	0.7	0.7	2.1	5.1	425
25-29	1.1	4.8	0.9	0.3	0.9	6.0	579
30-34	1.8	6.6	2.1	1.1	1.6	9.1	670
35-39	1.1	6.7	2.3	1.2	2.9	10.1	546
40-44	1.2	4.9	2.1	0.5	1.6	8.0	701
45-49	1.3	7.0	2.7	1.4	1.9	9.5	745
Education							
Upper secondary	1.4	5.2	1.9	0.7	1.7	7.5	2,620
Higher	0.8	5.1	1.4	0.9	1.7	7.8	1,559
Marital status							
Currently married	1.2	5.8	2.0	1.0	1.8	8.5	2,766
Formerly married	(*)	(*)	(*)	(*)	(*)	(*)	16
Never married	1.1	3.8	1.2	0.4	1.5	5.9	1,397
Wealth index 20-40-40							
20 percent lowest	1.2	7.0	2.8	1.4	1.2	9.3	787
40 percent middle	1.4	5.9	1.7	0.6	1.7	8.3	1,644
40 percent highest	1.0	3.6	1.3	0.7	2.0	6.3	1,748

[1] MICS indicator PR.15 - Attitudes towards domestic violence

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

10. LIVE IN A SAFE AND CLEAN ENVIRONMENT

Access to safe drinking water, sanitation and hygiene (WASH) is essential for good health, welfare and productivity and is widely recognised as a human right.[65] Inadequate WASH is primarily responsible for the transmission of diseases such as cholera, diarrhoea, dysentery, hepatitis A, typhoid and polio. Diarrhoeal diseases exacerbate malnutrition and remain a leading global cause of child deaths.

Drinking water may be contaminated with human or animal faeces containing pathogens, or with chemical and physical contaminants with harmful effects on child health and development. While improving water quality is critical to prevent disease, improving the accessibility and availability of drinking water is equally important, particularly for women and girls who usually bear the primary responsibility for carrying water, often for long distances.[66]

Unsafe management of human excreta and poor personal hygiene are closely associated with diarrhoea as well as parasitic infections, such as soil transmitted helminths (worms). Improved sanitation and hygiene can reduce diarrhoeal disease by more than a third[67], and can substantially reduce the health impact of soil-transmitted helminth infection and a range of other neglected tropical diseases which affect over 1 billion people worldwide.[68]

The SDG targets relating to drinking water, sanitation and hygiene are much more ambitious than the Millennium Development Goals (MDGs) and variously aim to end open defecation (SDG 6.2), to achieve universal access to basic services (SDG 1.4), and to achieve universal access to safely managed services (SDG 6.1 and 6.2).

For more details on drinking water, sanitation and hygiene, please visit data.unicef.org[69] or the website of the WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene.[70]

10.1. Drinking water

The distribution of the population by main source of drinking water is shown in Table WS.1.1. 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 dug well, protected spring, rainwater collection, and packaged or delivered water.[71]

65.– The human rights to water and sanitation were explicitly recognised by the UN General Assembly and Human Rights Council in 2010 and in 2015.

66.– WHO/UNICEF. 2017. *Safely Managed Drinking Water: thematic report on drinking water.* 2017.

67.– Cairncross, S et al. 2010. *Water, sanitation and hygiene for the prevention of diarrhoea.* International Journal of Epidemiology 39: i193-i205.

68.– WHO. 2015. *Water, sanitation and hygiene for accelerating and sustaining progress on Neglected Tropical Diseases.* A Global Strategy 2015-2020.

69.– http://data.unicef.org/water-sanitation

70.– https://washdata.org/

71.– Packaged water (bottled water and sachet water) and delivered water (tanker truck and cart with small drum/tank) are treated as improved based in new SDG definition.

Table WS.1.1: Use of improved and unimproved water sources

Percent distribution of household population according to main source of drinking water and percentage of household population using improved drinking water sources, DPR Korea, 2017

	Main source of drinking water																
	Improved sources											Unimproved sources					
	Piped water																
	Into dwelling	Into yard/ plot	To neighbour	Public tap/ standpipe	Tubewell/ borehole	Protected well	Protected spring	Tanker truck	Cart with small tank	Water kiosk	Bottled water[A]	Unprotected well	Unprotected spring	Surface water	Total	Percentage using improved sources of drinking water[1]	Number of household members
Total	**55.6**	**0.8**	**0.2**	**1.9**	**15.8**	**8.6**	**2.7**	**0.0**	**0.0**	**7.8**	**0.3**	**4.8**	**1.2**	**0.3**	**100.0**	**93.7**	**32,455**
Area																	
Urban	66.4	0.7	0.2	2.3	7.9	5.0	1.7	0.0	0.1	12.8	0.4	2.0	0.5	0.0	100.0	97.5	19,779
Rural	38.7	1.0	0.3	1.1	28.1	14.2	4.2	0.0	0.0	0.1	0.0	9.3	2.3	0.7	100.0	87.8	12,675
Province																	
Ryanggang	49.5	2.3	0.1	1.9	14.7	19.0	4.1	0.1	0.0	2.1	0.6	4.6	1.2	0.0	100.0	94.3	1,013
North Hamgyong	68.1	0.0	0.5	0.0	16.0	2.8	1.5	0.0	0.2	2.7	0.3	5.4	2.4	0.0	100.0	92.1	3,213
South Hamgyong	56.2	0.4	0.2	0.7	25.1	2.5	1.2	0.0	0.0	8.7	0.0	2.6	1.0	1.2	100.0	95.1	4,290
Kangwon	56.7	1.7	0.1	2.7	10.9	9.6	5.4	0.0	0.0	5.3	0.0	6.9	0.6	0.0	100.0	92.5	2,062
Jagang	60.6	0.5	0.1	0.9	14.4	11.0	6.7	0.0	0.0	0.2	1.9	1.6	2.0	0.0	100.0	96.4	1,826
North Pyongan	58.0	0.5	0.0	0.1	27.1	3.0	1.3	0.0	0.0	1.2	0.0	8.0	0.7	0.0	100.0	91.3	3,799
South Pyongan	45.9	1.6	0.7	8.2	7.8	12.0	1.4	0.0	0.0	17.7	0.0	3.5	0.6	0.6	100.0	95.3	5,545
North Hwanghae	48.8	0.6	0.0	0.1	23.2	7.8	7.1	0.0	0.1	2.7	0.3	6.1	3.3	0.0	100.0	90.6	3,294
South Hwanghae	39.1	1.7	0.1	0.5	15.4	25.8	2.9	0.0	0.0	2.2	0.0	11.0	1.2	0.0	100.0	87.8	3,278
Pyongyang	72.9	0.1	0.0	0.0	4.0	2.9	0.9	0.0	0.1	18.3	0.7	0.0	0.1	0.0	100.0	99.9	4,136
Education of household head																	
Nursery or Kindergarten or None	(60.8)	(0.0)	(0.0)	(0.0)	(39.2)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	(100.0)	30
Primary	53.4	0.0	0.0	0.0	17.1	0.0	0.0	0.0	0.0	0.0	0.0	20.3	9.2	0.0	100.0	70.5	74
Lower secondary	57.1	0.0	0.0	1.5	19.8	20.1	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	40
Upper secondary	55.5	0.8	0.2	1.7	16.9	9.4	2.3	0.0	0.0	5.7	0.1	5.7	1.4	0.2	100.0	92.7	20,407
Higher	55.8	0.9	0.3	2.1	13.9	7.2	3.4	0.0	0.1	11.5	0.5	3.2	0.8	0.3	100.0	95.6	11,904
Wealth index 20-40-40																	
20 percent lowest	23.6	1.4	0.5	2.1	27.0	22.3	5.4	0.0	0.0	0.1	0.0	13.4	3.1	1.2	100.0	82.3	6,491
40 percent middle	50.9	1.1	0.3	2.9	23.4	9.2	3.0	0.0	0.0	2.2	0.1	5.2	1.5	0.0	100.0	93.3	12,981
40 percent highest	76.2	0.2	0.0	0.6	2.5	1.1	1.0	0.0	0.1	17.4	0.5	0.1	0.0	0.0	100.0	99.8	12,983

[1] MICS indicator WS.1 - Use of improved drinking water sources

[A] Delivered and packaged water considered improved sources of drinking water based on new SDG definition.

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

Table WS 1.2 shows the amount of time taken per round trip to collect water for users of improved and unimproved sources. Household members using improved water sources located on premises or requiring up to and including 30 minutes per trip for water collection meet the SDG criteria for a 'basic' drinking water service.

Table WS.1.2: Use of basic and limited drinking water services

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 and percentage using basic drinking water services, DPR Korea, 2017

	Time to source of drinking water									
	Users of improved drinking water sources				Users of unimproved drinking water sources					
	Water on premises	Up to and including 30 minutes[A]	More than 30 minutes	DK/ Missing	Water on premises	Up to and including 30 minutes[A]	More than 30 minutes	Total	Percentage using basic drinking water services[1]	Number of household members
Total	**76.6**	**16.6**	**0.5**	**0.0**	**2.1**	**4.0**	**0.2**	**100.0**	**93.2**	**32,455**
Area										
Urban	78.1	18.6	0.8	0.0	0.6	1.8	0.1	100.0	96.7	19,779
Rural	74.4	13.3	0.1	0.0	4.4	7.5	0.3	100.0	87.7	12,675
Province										
Ryanggang	74.6	19.5	0.1	0.0	1.4	4.4	0.0	100.0	94.1	1,013
North Hamgyong	85.6	6.2	0.3	0.1	2.4	5.5	0.0	100.0	91.8	3,213
South Hamgyong	84.6	10.5	0.0	0.0	1.3	3.1	0.5	100.0	95.1	4,290
Kangwon	74.8	17.4	0.3	0.0	4.4	3.1	0.0	100.0	92.2	2,062
Jagang	83.2	13.0	0.2	0.0	0.9	2.7	0.0	100.0	96.2	1,826
North Pyongan	87.2	4.2	0.0	0.0	4.0	4.4	0.2	100.0	91.3	3,799
South Pyongan	61.3	33.1	0.9	0.0	0.8	3.6	0.3	100.0	94.4	5,545
North Hwanghae	72.0	18.4	0.3	0.0	2.2	7.2	0.0	100.0	90.4	3,294
South Hwanghae	72.9	14.2	0.7	0.0	4.9	7.1	0.2	100.0	87.1	3,278
Pyongyang	77.5	21.0	1.4	0.0	0.0	0.1	0.0	100.0	98.5	4,136
Education of household head										
Nursery or Kindergarten or None	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	(100.0)	30
Primary	70.5	0.0	0.0	0.0	2.6	26.9	0.0	100.0	70.5	74
Lower secondary	78.4	21.6	0.0	0.0	0.0	0.0	0.0	100.0	100.0	40
Upper secondary	77.9	14.4	0.4	0.0	2.6	4.6	0.1	100.0	92.3	20,407
Higher	74.5	20.4	0.7	0.0	1.2	3.0	0.2	100.0	94.9	11,904
Wealth index 20-40-40										
20 percent lowest	63.7	18.5	0.1	0.0	6.1	11.1	0.5	100.0	82.2	6,491
40 percent middle	79.4	13.6	0.3	0.0	2.2	4.4	0.1	100.0	93.0	12,981
40 percent highest	80.3	18.6	0.9	0.0	0.0	0.1	0.0	100.0	98.9	12,983

[1] MICS indicator WS.2 - Use of basic drinking water services; SDG Indicator 1.4.1

[A] Includes cases where household members do not collect

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

Table WS.1.3 shows the sex and age of the household member usually responsible for water collection among household members without water sources on premises. Table WS 1.4 shows the average time spent each day by the household member mainly responsible for collecting drinking water.

Table WS.1.3: Person collecting water

Percentage of household members without drinking water on premises, and percent distribution of household members without drinking water on premises according to the person usually collecting drinking water used in the household, DPR Korea, 2017

	Percentage of household members without drinking water on premises	Number of household members	Person usually collecting drinking water						Number of household members without drinking water on premises
			Woman (15+)	Man (15+)	Female child under age 15	Male child under age 15	DK/Missing/ Members do not collect	Total	
Total	**21.3**	**32,455**	**65.2**	**29.9**	**1.6**	**1.4**	**2.0**	**100.0**	**6,901**
Area									
Urban	21.3	19,779	61.2	31.9	2.0	1.7	3.2	100.0	4,214
Rural	21.2	12,675	71.6	26.6	0.9	0.9	0.0	100.0	2,688
Province									
Ryanggang	24.0	1,013	91.5	6.8	0.5	0.0	1.2	100.0	243
North Hamgyong	12.1	3,213	62.1	32.3	1.0	1.0	3.6	100.0	388
South Hamgyong	14.1	4,290	63.6	30.9	2.4	3.1	0.0	100.0	603
Kangwon	20.8	2,062	79.8	19.0	1.1	0.0	0.0	100.0	430
Jagang	16.0	1,826	72.0	23.6	1.7	2.7	0.0	100.0	291
North Pyongan	8.8	3,799	74.4	21.9	1.6	0.0	2.1	100.0	334
South Pyongan	37.9	5,545	59.8	34.1	2.2	2.4	1.5	100.0	2,102
North Hwanghae	25.9	3,294	64.6	32.2	2.0	0.5	0.7	100.0	852
South Hwanghae	22.2	3,278	57.0	33.8	1.4	1.3	6.5	100.0	729
Pyongyang	22.5	4,136	67.9	29.3	0.0	0.0	2.7	100.0	930
Education of household head									
Nursery or Kindergarten or None	(0.0)	30	-	-	-	-	-	100.0	-
Primary	26.9	74	(*)	(*)	(*)	(*)	(*)	100.0	20
Lower secondary	21.6	40	(*)	(*)	(*)	(*)	(*)	100.0	9
Upper secondary	19.5	20,407	67.0	29.1	1.4	1.1	1.4	100.0	3,976
Higher	24.3	11,904	62.9	30.9	1.8	1.8	2.7	100.0	2,897
Source of drinking water									
Improved	18.2	30,413	64.4	29.7	1.8	1.6	2.4	100.0	5,540
Unimproved	66.7	2,041	68.5	30.5	0.4	0.5	0.0	100.0	1,361
Wealth index 20-40-40									
20 percent lowest	30.1	6,491	73.4	23.9	1.6	1.1	0.0	100.0	1,956
40 percent middle	18.4	12,981	61.3	35.4	1.2	1.3	0.8	100.0	2,387
40 percent highest	19.7	12,983	62.6	29.3	1.9	1.6	4.6	100.0	2,558

( ) 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 WS.1.4: Time spent collecting water

Average time spent collecting water by person usually responsible for water collection, DPR Korea, 2017

	Average time spent collecting water per day						Number of household members without drinking water on premises and where household members are primarily responsible for collecting water
	Up to 30 minutes	From 31 mins to 1 hour	Over 1 hour to 3 hours	Over 3 hours	DK/Missing	Total	
Total	**94.0**	**4.6**	**1.0**	**0.4**	**0.1**	**100.0**	**6,766**
Area							
Urban	96.2	2.7	1.0	0.0	0.0	100.0	4,078
Rural	90.5	7.4	0.9	1.0	0.2	100.0	2,688
Province							
Ryanggang	95.3	4.7	0.0	0.0	0.0	100.0	240
North Hamgyong	73.8	21.4	4.3	0.0	0.5	100.0	374
South Hamgyong	93.1	2.2	1.9	2.9	0.0	100.0	603
Kangwon	95.6	3.6	0.8	0.0	0.0	100.0	430
Jagang	92.9	5.2	1.9	0.0	0.0	100.0	291
North Pyongan	87.9	9.3	0.0	2.8	0.0	100.0	327
South Pyongan	97.8	1.3	0.8	0.0	0.0	100.0	2,069
North Hwanghae	95.5	4.1	0.4	0.0	0.0	100.0	846
South Hwanghae	86.5	11.5	1.3	0.0	0.7	100.0	681
Pyongyang	99.6	0.4	0.0	0.0	0.0	100.0	905
Education							
Nursery or Kindergarten or None	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	26
Primary	(92.8)	(7.2)	(0.0)	(0.0)	(0.0)	100.0	43
Lower secondary	98.0	2.0	0.0	0.0	0.0	100.0	81
Upper secondary	93.4	5.2	0.9	0.4	0.1	100.0	4,834
Higher	95.2	3.0	1.3	0.5	0.0	100.0	1,775
DK/Missing	(*)	(*)	(*)	(*)	(*)	100.0	7
Age							
<15	93.5	1.5	5.0	0.0	0.0	100.0	203
15-17	94.0	6.0	0.0	0.0	0.0	100.0	134
15-49	93.3	5.2	1.0	0.6	0.0	100.0	4,505
50+	95.5	3.6	0.6	0.0	0.2	100.0	2,058
Sex							
Male	94.4	3.8	1.3	0.4	0.1	100.0	2,156
Female	93.7	5.0	0.8	0.4	0.1	100.0	4,610
Source of drinking water							
Improved	96.3	2.9	0.7	0.0	0.1	100.0	5,405
Unimproved	84.8	11.1	2.1	2.0	0.0	100.0	1,361
Wealth index 20-40-40							
20 percent lowest	88.7	7.8	2.1	1.2	0.3	100.0	1,956
40 percent middle	93.5	5.5	0.7	0.1	0.1	100.0	2,369
40 percent highest	98.6	1.1	0.3	0.0	0.0	100.0	2,441

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

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

Table WS.1.5 shows the proportion of household members with sufficient water available when needed from their main source of drinking water and the main reasons household members are unable to access water in sufficient quantities when needed.

Table WS.1.5: Availability of sufficient drinking water when needed

Percentage of household members with drinking water available when needed and percent distribution of the main reasons household members unable to access water in sufficient quantities when needed, DPR Korea, 2017

	Percentage of household population with drinking water available in sufficient quantities[1]	Number of household members	Main reason that the household members are unable to access water in sufficient quantities					Number of household members unable to access water in sufficient quantities when needed
			Water not available from source	Water too expensive	Source not accessible	Other	Total	
Total	**98.6**	**32,455**	**74.8**	**13.0**	**1.5**	**10.7**	**100.0**	**438**
Area								
Urban	98.7	19,779	76.6	7.3	0.0	16.0	100.0	265
Rural	98.6	12,675	72.0	21.6	3.9	2.6	100.0	174
Province								
Ryanggang	99.9	1,013	(*)	(*)	(*)	(*)	100.0	1
North Hamgyong	99.9	3,213	(*)	(*)	(*)	(*)	100.0	3
South Hamgyong	99.0	4,290	(90.7)	(0.0)	(0.0)	(9.3)	100.0	43
Kangwon	99.4	2,062	(*)	(*)	(*)	(*)	100.0	13
Jagang	96.8	1,826	8.5	77.3	0.0	14.2	100.0	59
North Pyongan	96.3	3,799	96.8	0.0	0.0	3.2	100.0	140
South Pyongan	97.7	5,545	74.0	0.0	5.2	20.9	100.0	129
North Hwanghae	99.5	3,294	(*)	(*)	(*)	(*)	100.0	14
South Hwanghae	99.0	3,278	(76.2)	(23.8)	(0.0)	(0.0)	100.0	32
Pyongyang	99.9	4,136	(*)	(*)	(*)	(*)	100.0	4
Education of household head								
Nursery or Kindergarten or None	(100.0)	30	-	-	-	-	100.0	-
Primary	100.0	74	-	-	-	-	100.0	-
Lower secondary	100.0	40	-	-	-	-	100.0	-
Upper secondary	98.7	20,407	73.7	10.0	2.6	13.8	100.0	261
Higher	98.5	11,904	76.4	17.4	0.0	6.2	100.0	177
Source of drinking water								
Improved	98.6	30,413	74.1	13.3	1.6	11.0	100.0	427
Unimproved	99.4	2,041	(*)	(*)	(*)	(*)	100.0	12
Wealth index 20-40-40								
20 percent lowest	97.8	6,491	64.5	26.4	4.7	4.4	100.0	142
40 percent middle	98.5	12,981	88.4	2.4	0.0	9.2	100.0	185
40 percent highest	99.1	12,983	65.3	13.4	0.0	21.3	100.0	111

[1] MICS indicator WS.3 - Availability of drinking water

( ) 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 WS.1.6 shows the proportion of household members with an indicator of faecal contamination[72] detected in their drinking water source. The risk of faecal contamination is shown based on the number of *Thermotolerant*

72.– The Wagtech kits were used for water quality testing in the 2017 DPR Korea MICS. The Wagtech kits use classical laboratory techniques and equipment that have been adapted for use in the field. They conform fully with guidelines issued by WHO on accepted field-based methods for the microbiological analysis of drinking water. The testing of water samples for coliform bacteria Thermotolerant Coliform (TTC) uses a method called Membrane Filtration. TTC is a faecal indicator bacteria, meaning that it is likely to be present when faeces or raw sewage has entered the water supply. The presence of TTC in drinking water does not necessarily mean that the person drinking it will become sick, but it indicates that over time the household is at a higher risk for waterborne diseases. The World Health Organization recommends as a guideline that there should be no TTC present in a 100 mL sample of water.

Coliform (TTC) bacteria detected, ranging from low (<1 *TTC* per 100 mL), to moderate (1-10 *TTC* per 100 mL), high (11-100 *TTC* per 100 mL) and very high risk (>100 *TTC* per 100 mL). Table WS.1.7 shows the proportion of household members with *TTC* detected in their household drinking water. Contamination may occur between the source and the household during transport, handling and storage.

Table WS.1.6: Quality of source drinking water

Percentage of household population at risk of faecal contamination based on number of *Thermotolerant Coliform (TTC)* detected in source drinking, DPR Korea, 2017

	Risk level based on number of *TTC* per 100 mL						
	Low (<1 per 100 mL)	Moderate (1-10 per 100 mL)	High (11-100 per 100 mL)	Very high (>100 per 100 mL)	Total	Percentage of household population with *TTC* in source water[1]	Number of household members
Total	**76.5**	**8.1**	**11.6**	**3.8**	**100.0**	**23.5**	**5,150**
Area							
Urban	90.3	4.1	4.7	1.0	100.0	9.7	3,143
Rural	54.8	14.4	22.6	8.2	100.0	45.2	2,007
Province							
Ryanggang	74.2	3.4	16.9	5.5	100.0	25.8	159
North Hamgyong	84.0	3.8	9.9	2.2	100.0	16.0	511
South Hamgyong	74.0	8.7	13.4	3.9	100.0	26.0	688
Kangwon	71.9	16.2	8.1	3.9	100.0	28.1	328
Jagang	79.9	6.1	10.5	3.6	100.0	20.1	283
North Pyongan	72.1	7.8	16.1	4.0	100.0	27.9	601
South Pyongan	80.9	8.5	8.0	2.6	100.0	19.1	896
North Hwanghae	66.5	6.7	20.3	6.5	100.0	33.5	513
South Hwanghae	63.7	14.5	15.1	6.7	100.0	36.3	533
Pyongyang	90.9	4.3	3.3	1.5	100.0	9.1	639
Education of household head							
Nursery or Kindergarten or None	(*)	(*)	(*)	(*)	100.0	(*)	10
Primary	(*)	(*)	(*)	(*)	100.0	(*)	21
Lower secondary	(*)	(*)	(*)	(*)	100.0	(*)	11
Upper secondary	75.1	8.9	12.5	3.5	100.0	24.9	3,235
Higher	79.1	6.4	10.1	4.4	100.0	20.9	1,873
Improved sources of drinking water							
Piped water	84.9	6.3	6.9	1.9	100.0	15.1	3,058
Tube well/Borehole	62.3	11.6	19.5	6.5	100.0	37.7	850
Protected well or spring	66.9	7.3	20.4	5.4	100.0	33.1	529
Rainwater collection	-	-	-	-	100.0	-	-
Water kiosk	91.0	7.0	1.9	0.0	100.0	9.0	363
Tanker-truck/Cart with small tank	(*)	(*)	(*)	(*)	100.0	(*)	1
Bottled water	(*)	(*)	(*)	(*)	100.0	(*)	8
Unimproved sources of drinking water							
Unprotected well or spring	36.0	18.7	29.8	15.5	100.0	64.0	337
Surface water/Other	(*)	(*)	(*)	(*)	100.0	(*)	5
Wealth index 20-40-40							
20 percent lowest	54.8	12.0	25.6	7.7	100.0	45.2	1,017
40 percent middle	73.1	10.5	11.7	4.7	100.0	26.9	2,009
40 percent highest	90.0	4.0	4.9	1.1	100.0	10.0	2124

[1] MICS indicator WS.4 - Faecal contamination of source water

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

"–" denotes 0 unweighted case in that cell or in the denominator

Table WS.1.7: Quality of household drinking water

Percentage of household population at risk of faecal contamination based on number of *Thermotolerant Coliform (TTC)* detected in household drinking water, DPR Korea, 2017

	Risk level based on number of *TTC* per 100 mL						
	Low (<1 per 100 mL)	Moderate (1-10 per 100 mL)	High (11-100 per 100 mL)	Very high (>100 per 100 mL)	Total	Percentage of household population with *TTC* in household drinking water[1]	Number of household members
Total	**63.4**	**9.5**	**19.0**	**8.1**	**100.0**	**36.6**	**5,218**
Area							
Urban	74.6	9.3	11.3	4.9	100.0	25.4	3,189
Rural	45.9	9.8	31.2	13.0	100.0	54.1	2,029
Province							
Ryanggang	62.5	2.1	23.7	11.6	100.0	37.5	161
North Hamgyong	68.9	3.6	21.1	6.4	100.0	31.1	518
South Hamgyong	64.5	1.1	27.1	7.3	100.0	35.5	697
Kangwon	62.5	22.7	5.8	9.0	100.0	37.5	333
Jagang	64.5	11.5	15.0	8.9	100.0	35.5	286
North Pyongan	58.5	2.4	28.6	10.5	100.0	41.5	609
South Pyongan	60.9	22.5	12.0	4.6	100.0	39.1	905
North Hwanghae	56.2	4.1	24.8	14.9	100.0	43.8	519
South Hwanghae	51.6	15.6	19.8	13.0	100.0	48.4	535
Pyongyang	81.6	5.0	11.8	1.6	100.0	18.4	655
Education of household head							
Nursery or Kindergarten or None	(*)	(*)	(*)	(*)	100.0	(*)	10
Primary	(*)	(*)	(*)	(*)	100.0	(*)	22
Lower secondary	(*)	(*)	(*)	(*)	100.0	(*)	11
Upper secondary	62.3	9.6	20.1	8.0	100.0	37.7	3,252
Higher	65.9	9.1	16.9	8.1	100.0	34.1	1,923
Improved sources of drinking water							
Piped water	69.4	8.7	17.3	4.7	100.0	30.6	3,056
Tube well/Borehole	53.3	9.4	25.6	11.7	100.0	46.7	866
Protected well or spring	56.1	11.9	17.4	14.6	100.0	43.9	552
Rainwater collection	-	-	-	-	100.0	-	-
Water kiosk	80.4	11.5	6.4	1.7	100.0	19.6	391
Tanker-truck/Cart with small tank	(*)	(*)	(*)	(*)	100.0	(*)	1
Bottled water	(*)	(*)	(*)	(*)	100.0	(*)	8
Unimproved sources of drinking water					100.0		
Unprotected well or spring	28.1	11.1	34.8	26.0	100.0	71.9	340
Surface water/Other	(*)	(*)	(*)	(*)	100.0	(*)	5
Wealth index 20-40-40							
20 percent lowest	45.1	8.7	31.5	14.7	100.0	54.9	1,024
40 percent middle	57.3	11.9	22.1	8.8	100.0	42.7	2,020
40 percent highest	77.8	7.6	10.4	4.2	100.0	22.2	2,174

[1] MICS indicator WS.5 - Faecal contamination of household drinking water

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

"–" denotes 0 unweighted case in that cell or in the denominator

Table WS.1.8 shows the proportion of household population with improved and unimproved drinking water sources located on premises, available when needed, and free from contamination. Households with improved sources accessible on premises, with sufficient quantities of water available when needed, and free from contamination meet the SDG criteria for 'safely managed' drinking water services.

Table WS.1.8: Safely managed drinking water services

Percent distribution of household population with drinking water on premises, available when needed, and free from faecal contamination, for users of improved and unimproved drinking water sources and percentage of household members with an improved drinking water source located on premises, free of *Thermotolerant Coliform (TTC)* and available when needed, DPR Korea, 2017

	Main source of drinking water						Percentage of household members with an improved drinking water source located on premises, free of *TTC* and available when needed[1]	Number of household members with information on water quality
	Improved sources			Unimproved sources				
	Without *TTC* in drinking water source	With sufficient drinking water available when needed	Drinking water accessible on premises	Without *TTC* in drinking water source	With sufficient drinking water available when needed	Drinking water accessible on premises		
Total	79.4	98.5	83.5	35.5	98.4	39.1	60.9	5,150
Area								
Urban	91.0	98.3	82.2	62.6	100.0	27.7	71.3	3,143
Rural	59.0	98.9	85.8	27.1	97.9	42.6	44.5	2,007
Province								
Ryanggang	75.9	99.4	78.8	40.3	100.0	52.1	57.7	159
North Hamgyong	85.3	100.0	94.6	51.1	100.0	46.3	77.4	511
South Hamgyong	77.4	100.0	91.4	24.3	100.0	17.7	66.4	688
Kangwon	71.4	100.0	79.7	76.8	100.0	72.9	52.0	328
Jagang	80.0	97.4	85.0	75.6	100.0	36.5	66.3	283
North Pyongan	73.7	96.3	95.8	57.0	90.5	43.1	61.0	601
South Pyongan	85.9	95.9	66.0	18.6	100.0	33.4	50.0	896
North Hwanghae	71.8	99.2	81.3	0.0	100.0	38.3	55.1	513
South Hwanghae	68.3	99.1	83.2	33.8	100.0	37.9	48.3	533
Pyongyang	90.9	100.0	83.4	-	-	-	74.7	639
Education of household head								
Nursery or kindergarten or none	(*)	(*)	(*)	-	-	-	(*)	10
Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	21
Lower secondary	(*)	(*)	(*)	-	-	-	(*)	11
Upper secondary	79.0	99.2	85.4	30.6	100.0	37.5	61.6	3,235
Higher	80.2	97.5	80.4	50.2	91.7	51.2	60.0	1,873
Improved sources of drinking water								
Piped water	84.9	97.8	98.2	na	na	na	81.8	3,058
Tube-well/bore-hole	62.3	99.6	94.6	na	na	na	59.4	850
Protected well or spring	66.9	100.0	37.8	na	na	na	23.4	529
Unprotected well or spring	-	-	-	na	na	na	-	-
Rainwater collection	-	-	-	na	na	na	-	-
Water kiosk	91.0	100.0	0.0	na	na	na	0.0	363
Tanker truck/Cart with tank/drum	(*)	(*)	(*)	na	na	na	(*)	8
Bottled water	(*)	(*)	(*)	na	na	na	(*)	1
Unimproved sources of drinking water								
Unprotected well or spring	na	na	na	36.0	98.3	39.7	0.0	337
Surface water/Other	na	na	na	(*)	(*)	(*)	(*)	5
Wealth index 20-40-40								
20 percent lowest	59.7	97.8	75.8	32.2	96.9	46.5	38.5	1,017
40 percent middle	76.2	98.8	86.3	35.4	100.0	32.7	58.5	2,009
40 percent highest	89.9	98.6	84.0	100.0	100.0	0.0	73.8	2,124

[1] MICS indicator WS.6 - Use of safely managed drinking water services; SDG indicator 6.1.1

na: not applicable

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

"–" denotes 0 unweighted case in that cell or in the denominator

Table WS.1.9 shows the main methods by which households report treating water in order to make it safer to drink. Boiling water, using a water filter, using water purification tablets, and using solar disinfection are considered appropriate methods of water.

Table WS.1.9: Household water treatment

Percentage of household population by drinking water treatment method used in the household and the percentage who are using an appropriate treatment method, DPR Korea, 2017

	Water treatment method used in the household									Percentage of household members in households using an appropriate water treatment method	Number of household members
	None	Boil	Strain through a cloth	Use water filter	Solar disinfection	Let it stand and settle	Use water purification tablets	Other	DK/ Missing		
Total	83.2	14.2	0.1	2.4	0.0	0.1	1.1	0.2	0.0	16.5	32,455
Area											
Urban	80.9	15.5	0.1	3.7	0.0	0.1	1.4	0.3	0.0	18.7	19,779
Rural	86.7	12.3	0.1	0.5	0.0	0.1	0.6	0.0	0.0	13.0	12,675
Province											
Ryanggang	70.9	28.0	0.0	1.7	0.0	0.4	2.7	0.0	0.0	28.8	1,013
North Hamgyong	81.2	15.3	0.0	2.5	0.0	0.0	1.3	0.0	0.0	18.8	3,213
South Hamgyong	79.9	18.7	0.0	1.2	0.0	0.1	0.5	0.0	0.0	20.0	4,290
Kangwon	85.6	14.1	0.0	0.5	0.0	0.0	0.0	0.0	0.0	14.4	2,062
Jagang	89.8	9.0	0.0	0.2	0.0	0.8	0.3	0.1	0.0	9.4	1,826
North Pyongan	88.7	10.0	0.2	0.9	0.0	0.3	0.6	0.0	0.0	11.0	3,799
South Pyongan	88.0	9.8	0.2	0.7	0.0	0.1	1.7	0.4	0.0	11.3	5,545
North Hwanghae	88.9	8.7	0.0	2.5	0.0	0.0	0.1	0.0	0.0	11.1	3,294
South Hwanghae	81.3	16.5	0.2	0.7	0.0	0.1	0.8	0.6	0.0	17.8	3,278
Pyongyang	72.5	20.1	0.0	10.8	0.0	0.0	2.9	0.4	0.0	27.3	4,136
Education of household head											
Nursery or Kindergarten or None	(73.1)	(5.8)	(0.0)	(21.1)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(26.9)	30
Primary	66.4	24.7	0.0	9.0	0.0	0.0	0.0	0.0	0.0	33.6	74
Lower secondary	87.3	12.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.7	40
Upper secondary	84.9	13.2	0.1	1.9	0.0	0.1	0.8	0.1	0.0	14.9	20,407
Higher	80.4	15.9	0.1	3.2	0.0	0.3	1.7	0.4	0.0	19.0	11,904
Source of drinking water											
Improved	83.3	13.9	0.1	2.5	0.0	0.1	1.1	0.2	0.0	16.3	30,413
Unimproved	80.6	18.3	0.0	0.7	0.0	0.0	0.6	0.0	0.0	19.4	2,041
Wealth index 20-40-40											
20 percent lowest	85.9	13.5	0.0	0.2	0.0	0.1	0.4	0.2	0.0	13.8	6,491
40 percent middle	86.2	11.9	0.2	1.0	0.0	0.1	0.8	0.1	0.0	13.4	12,981
40 percent highest	78.8	16.9	0.0	4.9	0.0	0.1	1.8	0.3	0.0	20.9	12,983

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

10.2. Sanitation

An improved sanitation facility is defined as one that hygienically separates human excreta from human contact. Improved sanitation facilities include flush or pour flush to a piped sewer systems, septic tanks, or pit latrines; ventilated improved pit latrines, pit latrines with slabs, and composting toilets. Table WS.3.1 shows the population using improved and unimproved sanitation facilities. It also shows the proportion who dispose of faeces in fields, forests, bushes, open water bodies of water, beaches or other open spaces, or with solid waste, a practice known as 'open defecation'.

Table WS.3.1: Use of improved and unimproved sanitation facilities

Percent distribution of household population according to type of sanitation facility used by the household, DPR Korea, 2017

	Type of sanitation facility used by household									
	Improved sanitation facility					Unimproved sanitation facility				
	Flush/Pour flush to:									
	Piped sewer system	Septic tank	Pit latrine	Ventilated improved pit latrine	Pit latrine with slab	Open drain	Pit latrine without slab/ open pit	Total	Percentage using improved sanitation[1]	Number of household members
Total	**44.6**	**9.6**	**2.7**	**0.4**	**26.8**	**0.1**	**15.8**	**100.0**	**84.1**	**32,455**
Area										
Urban	67.2	6.4	1.9	0.4	15.8	0.1	8.3	100.0	91.6	19,779
Rural	9.5	14.5	3.9	0.4	44.1	0.1	27.6	100.0	72.3	12,675
Province										
Ryanggang	23.9	25.7	0.0	0.0	35.1	0.0	15.3	100.0	84.7	1,013
North Hamgyong	45.1	18.2	0.4	0.6	23.8	0.0	11.8	100.0	88.2	3,213
South Hamgyong	35.9	18.0	1.0	0.1	29.7	0.0	15.2	100.0	84.8	4,290
Kangwon	33.9	10.9	3.7	0.2	33.6	0.2	17.4	100.0	82.4	2,062
Jagang	57.4	5.2	0.1	4.2	12.8	0.1	20.2	100.0	79.8	1,826
North Pyongan	45.9	5.0	0.0	0.0	28.8	0.0	20.3	100.0	79.7	3,799
South Pyongan	43.4	2.9	4.3	0.1	30.2	0.0	19.0	100.0	81.0	5,545
North Hwanghae	29.9	10.8	13.0	0.0	31.2	0.0	15.0	100.0	85.0	3,294
South Hwanghae	28.2	5.5	1.4	0.0	38.2	0.6	26.1	100.0	73.2	3,278
Pyongyang	83.2	6.7	0.4	0.3	8.2	0.0	1.3	100.0	98.7	4,136
Education of household head										
Nursery or Kindergarten or None	(21.1)	(0.0)	(10.0)	(0.0)	(48.8)	(0.0)	(20.1)	100.0	(79.9)	30
Primary	38.4	11.0	0.0	0.0	23.6	0.0	27.0	100.0	73.0	74
Lower secondary	35.1	1.5	0.0	0.0	34.9	0.0	28.5	100.0	71.5	40
Upper secondary	41.2	10.1	2.5	0.4	28.3	0.1	17.4	100.0	82.5	20,407
Higher	50.7	8.6	3.0	0.3	24.3	0.1	13.0	100.0	86.9	11,904
Location of sanitation facility										
In dwelling	82.2	12.0	4.1	0.0	0.8	0.1	0.7	100.0	99.1	16,995
In plot/yard	3.1	7.4	1.2	0.8	56.2	0.0	31.3	100.0	68.7	14,230
Elsewhere	5.1	1.2	0.0	0.4	47.5	0.0	45.8	100.0	54.2	1,230
Wealth index 20-40-40										
20 percent lowest	1.9	11.6	0.8	0.7	51.5	0.0	33.4	100.0	66.6	6,491
40 percent middle	21.3	13.4	3.5	0.6	38.9	0.1	22.1	100.0	77.7	12,981
40 percent highest	89.3	4.7	2.7	0.0	2.4	0.0	0.8	100.0	99.2	12,983

[1] MICS indicator WS.8 - Use of improved sanitation facilities; SDG indicator 3.8.1

The category "No facility/Bush/Field" from the background characteristic "Location of sanitation facility" is not shown in the table because there were no recorded cases.

na: not applicable

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

Table WS. 3.2 shows the distribution of household population using improved and unimproved sanitation facilities which are private, shared with other households or public facilities. Those using shared or public improved sanitation facilities are classed as having a 'limited' service for the purpose of SDG monitoring. Households using improved sanitation facilities that are not shared with other households meet the SDG criteria for a 'basic' sanitation service, and may be considered 'safely managed' depending on how excreta are managed.

Table WS.3.3 shows the methods used for emptying and removal of excreta from improved pit latrines and septic tanks. Excreta from improved pit latrines and septic tanks that is never emptied (or don't know if ever emptied) or is emptied and buried in a covered pit is classed as 'safely disposed in situ' and meets the SDG criteria for a 'safely managed' sanitation service. Excreta from improved pit latrines and septic tanks that is removed by a service provider to treatment may also be safely managed, depending on the type of treatment received. Other methods of emptying and removal are not considered 'safely managed'.

Table WS.3.4 summarises the main ways in which excreta is managed from households with improved on-site sanitation systems (improved pit latrines and septic tanks) and compares these with the proportion with sewer connections, unimproved sanitation or practicing open defecation.

Table WS.3.2: Use basic and limited sanitation services

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, DPR Korea, 2017

	Users of improved sanitation facilities				Users of unimproved sanitation facilities					
		Shared by				Shared by				
	Not shared[1]	5 households or less	More than 5 households	Public facility	Not shared	5 households or less	More than 5 households	Public facility	Total	Number of household members
Total	**81.5**	**0.9**	**0.3**	**1.3**	**14.0**	**0.2**	**0.4**	**1.4**	**100.0**	**32,455**
Area										
Urban	88.0	1.4	0.5	1.8	5.8	0.2	0.6	1.8	100.0	19,779
Rural	71.5	0.1	0.1	0.6	26.8	0.1	0.1	0.7	100.0	12,675
Province										
Ryanggang	84.7	0.0	0.0	0.0	13.7	0.0	0.0	1.7	100.0	1,013
North Hamgyong	85.3	0.9	0.5	1.5	10.8	0.4	0.0	0.6	100.0	3,213
South Hamgyong	83.3	0.3	0.9	0.3	14.4	0.2	0.3	0.4	100.0	4,290
Kangwon	78.1	0.3	0.0	4.0	14.2	0.0	0.0	3.4	100.0	2,062
Jagang	79.2	0.4	0.0	0.2	19.5	0.2	0.3	0.2	100.0	1,826
North Pyongan	79.4	0.1	0.0	0.3	19.7	0.0	0.0	0.6	100.0	3,799
South Pyongan	75.5	3.1	0.6	1.7	15.8	0.4	1.8	1.1	100.0	5,545
North Hwanghae	83.6	0.0	0.3	1.0	12.8	0.4	0.3	1.5	100.0	3,294
South Hwanghae	69.3	0.0	0.3	3.6	21.1	0.2	0.0	5.4	100.0	3,278
Pyongyang	96.8	1.3	0.0	0.6	1.2	0.0	0.0	0.1	100.0	4,136
Education of household head										
Nursery or Kindergarten or None	(79.9)	(0.0)	(0.0)	(0.0)	(20.1)	(0.0)	(0.0)	(0.0)	100.0	30
Primary	73.0	0.0	0.0	0.0	24.4	0.0	0.0	2.6	100.0	74
Lower secondary	71.5	0.0	0.0	0.0	25.3	0.0	0.0	3.1	100.0	40
Upper secondary	79.8	1.0	0.3	1.4	15.6	0.2	0.4	1.4	100.0	20,407
Higher	84.5	0.7	0.4	1.2	11.1	0.2	0.4	1.4	100.0	11,904
Location of sanitation facility										
In dwelling	98.9	0.1	0.0	0.1	0.8	0.0	0.0	0.0	100.0	16,995
In plot/yard	67.2	1.1	0.0	0.3	30.4	0.2	0.2	0.4	100.0	14,230
Elsewhere	7.8	8.4	7.6	30.3	4.9	2.7	7.3	30.9	100.0	1,230
Wealth index 20-40-40										
20 percent lowest	65.5	0.2	0.0	0.9	32.0	0.4	0.0	1.1	100.0	6,491
40 percent middle	73.1	1.5	0.5	2.6	18.4	0.3	0.9	2.6	100.0	12,981
40 percent highest	98.0	0.6	0.3	0.3	0.5	0.0	0.0	0.3	100.0	12,983

[1] MICS indicator WS.9 - Use of basic sanitation services; SDG indicators 1.4.1 & 6.2.1

The category "No facility/Bush/Field" from the background characteristic "Location of sanitation facility" is not shown in the table because there were no recorded cases.

na: not applicable

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

Table WS.3.3: Emptying and removal of excreta from improved pit latrines and septic tanks

Percent distribution of household members in households with improved pit latrines and septic tanks by method of emptying, DPR Korea, 2017

	Emptying of septic tanks								
	Where were the contents emptied to?								
	Removed by a service provider to treatment	Removed by a service provider to DK	Buried in a covered pit	To uncovered pit, open ground, water body or elsewhere	To agricultural field[A]	Other	Don't know where wastes were taken	Never emptied	DK if ever emptied
Total	**1.3**	**0.1**	**0.3**	**0.1**	**21.6**	**0.7**	**0.0**	**0.2**	**0.0**
Area									
Urban	1.9	0.3	0.2	0.0	23.1	0.2	0.0	0.5	0.0
Rural	0.9	0.0	0.3	0.2	20.7	1.0	0.0	0.0	0.0
Province									
Ryanggang	0.2	0.5	0.0	0.0	41.4	0.0	0.0	0.2	0.0
North Hamgyong	0.6	0.0	0.0	0.0	41.7	0.0	0.0	0.0	0.0
South Hamgyong	1.0	0.5	0.0	0.0	35.3	0.0	0.0	0.0	0.0
Kangwon	0.0	0.3	0.0	0.0	22.2	0.0	0.0	0.0	0.0
Jagang	0.0	0.0	0.7	0.0	22.7	0.0	0.0	0.0	0.0
North Pyongan	2.8	0.0	0.0	0.4	10.0	0.0	0.0	1.7	0.0
South Pyongan	0.4	0.0	0.0	0.2	7.2	0.0	0.0	0.0	0.0
North Hwanghae	0.0	0.0	0.0	0.2	14.7	4.7	0.0	0.0	0.0
South Hwanghae	4.4	0.0	2.1	0.0	5.4	0.3	0.0	0.0	0.0
Pyongyang	3.2	0.0	0.0	0.0	39.6	0.0	0.0	0.0	0.0
Education of household head									
Nursery or Kindergarten or None	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)
Lower secondary	(0.0)	(0.0)	(0.0)	(0.0)	(4.2)	(0.0)	(0.0)	(0.0)	(0.0)
Upper secondary	0.9	0.1	0.3	0.0	22.3	0.7	0.0	0.2	0.0
Higher	2.0	0.2	0.2	0.3	20.3	0.8	0.0	0.2	0.0
Type of onsite sanitation facility									
Flush to septic tank	5.2	0.5	1.1	0.4	89.1	2.9	0.0	0.7	0.0
Latrines and other improved	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Type of sanitation facility									
Flush to septic tank	5.2	0.5	1.1	0.4	89.1	2.9	0.0	0.7	0.0
Flush to pit latrine	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ventilated Improved Pit Latrine (VIP)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pit latrine with slab	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Wealth index 20-40-40									
20 percent lowest	0.5	0.0	0.1	0.0	16.8	0.2	0.0	0.3	0.0
40 percent middle	1.1	0.1	0.4	0.2	20.9	1.0	0.0	0.1	0.0
40 percent highest	4.7	0.8	0.0	0.0	41.2	0.8	0.0	0.0	0.0

(Continued . . .)

Table WS.3.3 (continued): Emptying and removal of excreta from improved pit latrines and septic tanks

Percent distribution of household members in households with improved pit latrines and septic tanks by method of emptying, DPR Korea, 2017

	Emptying of other improved on-site sanitation facilities													
	Where were the contents emptied to?													
	Removed by a service provider to treatment	Removed by a service provider to DK	Buried in a covered pit	To uncovered pit, open ground, water body or elsewhere	To agricultural field[A]	Other	Don't know where wastes were taken	Never emptied	DK if ever emptied	Total	Safe disposal in situ of excreta from on-site sanitation facilities[1]	Unsafe disposal of excreta from on-site sanitation facilities	Removal of excreta for treatment from on-site sanitation facilities	Number of household members in households with improved on-site sanitation facilities
Total	**2.7**	**1.0**	**0.8**	**1.2**	**68.7**	**0.2**	**0.0**	**0.9**	**0.1**	**100.0**	**2.3**	**92.5**	**5.2**	**12,806**
Area														
Urban	6.0	1.8	2.0	1.5	60.3	0.0	0.1	1.8	0.2	100.0	4.7	85.2	10.1	4,841
Rural	0.7	0.5	0.1	1.0	73.8	0.3	0.0	0.3	0.1	100.0	0.8	97.0	2.2	7,965
Province														
Ryanggang	0.0	3.4	4.5	0.3	49.3	0.0	0.0	0.1	0.2	100.0	4.9	91.0	4.0	615
North Hamgyong	5.5	0.0	0.0	0.0	48.3	0.0	0.0	3.8	0.0	100.0	3.8	90.0	6.2	1,383
South Hamgyong	2.1	2.0	0.3	0.4	58.4	0.0	0.0	0.0	0.0	100.0	0.3	94.1	5.7	2,096
Kangwon	0.0	2.6	3.7	0.0	71.3	0.0	0.0	0.0	0.0	100.0	3.7	93.4	2.9	999
Jagang	0.0	0.0	1.7	0.4	70.0	4.0	0.0	0.5	0.0	100.0	2.9	97.1	0.0	408
North Pyongan	2.5	0.6	0.2	7.1	74.6	0.0	0.0	0.0	0.0	100.0	1.9	92.1	6.0	1,285
South Pyongan	3.0	0.0	0.3	0.5	86.4	0.0	0.0	1.6	0.4	100.0	2.3	94.3	3.4	2,084
North Hwanghae	0.6	0.7	0.6	1.8	74.9	0.7	0.0	1.1	0.2	100.0	1.8	96.9	1.3	1,813
South Hwanghae	5.8	0.7	0.8	0.7	79.0	0.0	0.3	0.0	0.4	100.0	3.4	85.4	11.2	1,478
Pyongyang	5.9	1.8	0.0	0.0	49.5	0.0	0.0	0.0	0.0	100.0	0.0	89.1	10.9	644
Education of household head														
Nursery or Kindergarten or None	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	17
Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	26
Lower secondary	(0.0)	(13.0)	(0.0)	(0.0)	(82.8)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	(0.0)	(87.0)	(13.0)	15
Upper secondary	2.1	1.0	1.0	1.2	69.0	0.2	0.0	1.0	0.1	100.0	2.5	93.4	4.1	8,436
Higher	4.0	1.1	0.6	1.2	68.0	0.4	0.0	0.5	0.3	100.0	1.7	91.0	7.3	4,313
Type of onsite sanitation facility														
Flush to septic tank	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1.8	92.4	5.8	3,103
Latrines and other improved	3.6	1.4	1.1	1.6	90.7	0.3	0.0	1.1	0.2	100.0	2.4	92.6	5.0	9,703
Type of sanitation facility														
Flush to septic tank	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	1.8	92.4	5.8	3,103
Flush to pit latrine	3.0	0.0	0.0	1.6	94.7	0.0	0.4	0.2	0.0	100.0	0.2	96.3	3.4	865
Ventilated Improved Pit Latrine (VIP)	5.3	0.0	4.4	0.0	88.1	2.2	0.0	0.0	0.0	100.0	4.4	90.3	5.3	124
Pit latrine with slab	3.6	1.5	1.2	1.6	90.3	0.3	0.0	1.2	0.2	100.0	2.6	92.2	5.2	8,714
Wealth index 20-40-40														
20 percent lowest	0.7	0.7	0.8	1.0	78.2	0.4	0.0	0.3	0.0	100.0	1.6	96.6	1.8	4,196
40 percent middle	3.6	1.2	1.0	1.5	67.5	0.2	0.1	1.1	0.2	100.0	2.8	91.2	6.1	7,327
40 percent highest	4.6	1.1	0.0	0.5	44.6	0.0	0.0	1.5	0.3	100.0	1.8	87.0	11.2	1,283

[1] MICS indicator WS.10 - Safe disposal in situ of excreta from on-site sanitation facilities

[A] Excreta is mixed with different crop residues and left to stand for several months before use on agricultural field for fertilising purpose.

The category "Pit latrine without slab/ Open pit" from the background characteristic "Type of sanitation facility" is not shown in the table because there were no recorded cases.

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

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

Table WS.3.4: Management of excreta from household sanitation facilities

Percent distribution of household population by management of excreta from household sanitation facilities, DPR Korea, 2017

	Using improved on-site sanitation systems (including shared)								
	Safe disposal in situ of excreta from on-site sanitation facilities	Unsafe disposal of excreta from on-site sanitation facilities	Removal of excreta for treatment from on-site sanitation facilities[1]	Con-nected to sewer	Using un-improved sanitation facilities	Practis-ing open defeca-tion	Missing	Total	Number of household members
Total	**0.9**	**36.5**	**2.0**	**44.6**	**15.9**	**0.0**	**0.0**	**100.0**	**32,455**
Area									
Urban	1.1	20.8	2.5	67.2	8.4	0.0	0.0	100.0	19,779
Rural	0.5	61.0	1.4	9.5	27.7	0.0	0.0	100.0	12,675
Province									
Ryanggang	3.0	55.3	2.5	23.9	15.3	0.0	0.0	100.0	1,013
North Hamgyong	1.7	38.7	2.7	45.1	11.8	0.0	0.0	100.0	3,213
South Hamgyong	0.1	46.0	2.8	35.9	15.2	0.0	0.0	100.0	4,290
Kangwon	1.8	45.3	1.4	33.9	17.6	0.0	0.0	100.0	2,062
Jagang	0.6	21.7	0.0	57.4	20.2	0.0	0.0	100.0	1,826
North Pyongan	0.7	31.1	2.0	45.9	20.3	0.0	0.0	100.0	3,799
South Pyongan	0.9	35.4	1.3	43.4	19.0	0.0	0.0	100.0	5,545
North Hwanghae	1.0	53.3	0.7	29.9	15.0	0.0	0.0	100.0	3,294
South Hwanghae	1.5	38.5	5.1	28.2	26.8	0.0	0.0	100.0	3,278
Pyongyang	0.0	13.9	1.7	83.2	1.3	0.0	0.0	100.0	4,136
Education of household head									
Nursery or Kindergarten or None	(29.6)	(29.2)	(0.0)	(21.1)	(20.1)	(0.0)	(0.0)	100.0	30
Primary	0.0	34.6	0.0	38.4	27.0	0.0	0.0	100.0	74
Lower secondary	0.0	31.7	4.7	35.1	28.5	0.0	0.0	100.0	40
Upper secondary	1.0	38.6	1.7	41.2	17.5	0.0	0.0	100.0	20,407
Higher	0.6	33.0	2.6	50.7	13.1	0.0	0.0	100.0	11,904
Type of sanitation facility									
Improved	1.1	43.4	2.4	53.1	na	na	0.0	100.0	27,287
Unimproved	na	na	na	na	100.0	na	0.0	100.0	5,168
Wealth index 20-40-40									
20 percent lowest	1.0	62.4	1.2	1.9	33.4	0.0	0.0	100.0	6,491
40 percent middle	1.6	51.5	3.4	21.3	22.3	0.0	0.0	100.0	12,981
40 percent highest	0.2	8.6	1.1	89.3	0.8	0.0	0.0	100.0	12,983

[1] MICS indicator WS.11 - Removal of excreta for treatment off-site; SDG indicator 6.2.1

The category "Open defecation (no facility, bush, field)" from the background characteristic "Type of sanitation facility" is not shown in the table because there were no recorded cases.

na: not applicable

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

Table WS.3.5 shows the main methods used for disposal of child faeces among households with children aged 0-2 years. Appropriate methods for disposing of the stool include the child using a toilet or latrine and putting or rinsing the stool into a toilet or latrine. Putting disposable diapers with solid waste, a very common practice throughout the world, is only considered an appropriate means of disposal if there is also a system in place for hygienic collection and disposal of the solid waste itself. This classification is currently under review.

Table WS.3.5: Disposal of child's faeces

Percent distribution of children age 0-2 years according to place of disposal of child's faeces, and the percentage of children age 0-2 years whose stools were disposed of safely the last time the child passed stools, DPR Korea, 2017

	Place of disposal of child's faeces										
	Child used toilet/latrine	Put/rinsed into toilet or latrine	Put/rinsed into drain or ditch	Thrown into garbage	Buried	Left in the open	Other	DK/ Missing	Total	Percentage of children whose last stools were disposed of safely[A]	Number of children age 0-2 years
Total	**16.1**	**58.1**	**18.6**	**3.3**	**2.6**	**0.7**	**0.5**	**0.0**	**100.0**	**74.2**	**1,361**
Area											
Urban	19.3	59.3	16.7	2.1	1.6	0.5	0.5	0.1	100.0	78.6	819
Rural	11.2	56.3	21.5	5.1	4.2	1.2	0.5	0.0	100.0	67.5	542
Province											
Ryanggang	8.9	79.5	4.4	0.0	7.2	0.0	0.0	0.0	100.0	88.4	43
North Hamgyong	13.7	78.7	6.1	0.0	0.8	0.0	0.8	0.0	100.0	92.4	131
South Hamgyong	18.0	45.5	17.9	5.0	7.5	3.0	3.0	0.0	100.0	63.6	177
Kangwon	25.1	42.3	28.3	1.4	2.8	0.0	0.0	0.0	100.0	67.5	88
Jagang	18.0	61.4	15.0	0.0	5.0	0.0	0.0	0.7	100.0	79.4	79
North Pyongan	11.9	51.6	21.0	11.8	0.8	2.9	0.0	0.0	100.0	63.5	159
South Pyongan	19.5	50.3	24.1	3.0	3.1	0.0	0.0	0.0	100.0	69.8	230
North Hwanghae	12.4	63.4	18.6	3.5	2.1	0.0	0.0	0.0	100.0	75.8	145
South Hwanghae	2.8	55.7	38.0	2.8	0.7	0.0	0.0	0.0	100.0	58.5	143
Pyongyang	25.8	71.2	3.0	0.0	0.0	0.0	0.0	0.0	100.0	97.0	166
Mother's education											
Upper secondary	15.3	58.0	19.1	3.4	2.9	0.8	0.4	0.0	100.0	73.4	1,105
Higher	19.3	58.6	16.6	2.9	1.4	0.5	0.5	0.2	100.0	77.8	256
Type of sanitation facility											
Improved	17.7	59.0	17.2	3.0	1.8	0.8	0.5	0.0	100.0	76.8	1,163
Unimproved	6.3	52.8	27.1	5.4	7.5	0.6	0.0	0.3	100.0	59.2	199
Wealth index 20-40-40											
20 percent lowest	11.6	53.3	23.8	3.0	6.0	1.5	1.0	0.0	100.0	64.8	266
40 percent middle	15.4	55.9	18.5	5.3	3.5	1.1	0.3	0.1	100.0	71.3	533
40 percent highest	18.8	62.5	16.3	1.6	0.3	0.0	0.4	0.0	100.0	81.4	562

[A] In many countries disposal of children's faeces with solid waste is a common. The risks will vary between and within countries depending on whether solid waste is regularly collected and well managed. For the purposes of international comparability solid waste is not considered safely disposed.

The category "Open defecation (no facility, bush, field)" from the background characteristic "Type of sanitation facility" is not shown in the table because there were no recorded cases.

The WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (JMP) has produced regular estimates of national, regional and global progress on drinking water, sanitation and hygiene (WASH) since 1990. The JMP service 'ladders' enable benchmarking and comparison of progress across countries at different stages of development. As of 2015, updated water and sanitation ladders have been introduced which build on established indicators and establish new rungs with additional criteria relating to service levels. A third ladder has also been introduced for handwashing hygiene.[73] Table WS.3.6 summarises the percentages of household population meeting the SDG criteria for 'basic' drinking water and sanitation services.

Table WS.3.6: Drinking water and sanitation ladders

Percentage of household population by drinking water and sanitation ladders, DPR Korea, 2017

	Percentage of household population using:										
	Drinking water					Sanitation					
	Basic service[1]	Limited service	Unimproved	Surface water	Total	Basic service[2]	Limited service	Unimproved	Total	Basic drinking water and sanitation service	Number of household members
Total	**93.2**	**0.5**	**6.0**	**0.3**	**100.0**	**81.5**	**2.5**	**15.9**	**100.0**	**77.7**	**32,455**
Area											
Urban	96.7	0.8	2.5	0.0	100.0	88.0	3.7	8.4	100.0	85.7	19,779
Rural	87.7	0.1	11.6	0.7	100.0	71.5	0.8	27.7	100.0	65.0	12,675
Province											
Ryanggang	94.1	0.1	5.7	0.0	100.0	84.7	0.0	15.3	100.0	81.2	1,013
North Hamgyong	91.8	0.4	7.9	0.0	100.0	85.3	2.9	11.8	100.0	82.4	3,213
South Hamgyong	95.1	0.0	3.7	1.2	100.0	83.3	1.5	15.2	100.0	79.7	4,290
Kangwon	92.2	0.3	7.5	0.0	100.0	78.1	4.3	17.6	100.0	73.6	2,062
Jagang	96.2	0.2	3.6	0.0	100.0	79.2	0.6	20.2	100.0	77.2	1,826
North Pyongan	91.3	0.0	8.7	0.0	100.0	79.4	0.3	20.3	100.0	75.2	3,799
South Pyongan	94.4	0.9	4.1	0.6	100.0	75.5	5.5	19.0	100.0	71.6	5,545
North Hwanghae	90.4	0.3	9.4	0.0	100.0	83.6	1.3	15.0	100.0	77.5	3,294
South Hwanghae	87.1	0.7	12.2	0.0	100.0	69.3	3.9	26.8	100.0	63.0	3,278
Pyongyang	98.5	1.4	0.1	0.0	100.0	96.8	1.9	1.3	100.0	95.3	4,136
Education of household head											
Nursery or Kindergarten or None	(100.0)	(0.0)	(0.0)	(0.0)	100.0	(79.9)	(0.0)	(20.1)	100.0	(79.9)	30
Primary	70.5	0.0	29.5	0.0	100.0	73.0	0.0	27.0	100.0	67.8	74
Lower secondary	100.0	0.0	0.0	0.0	100.0	71.5	0.0	28.5	100.0	71.5	40
Upper secondary	92.3	0.4	7.1	0.2	100.0	79.8	2.7	17.5	100.0	75.6	20,407
Higher	94.9	0.7	4.1	0.3	100.0	84.5	2.4	13.1	100.0	81.3	11,904
Wealth index 20-40-40											
20 percent lowest	82.2	0.1	16.5	1.2	100.0	65.5	1.1	33.4	100.0	56.7	6,491
40 percent middle	93.0	0.3	6.7	0.0	100.0	73.1	4.6	22.3	100.0	68.9	12,981
40 percent highest	98.9	0.9	0.2	0.0	100.0	98.0	1.2	0.8	100.0	96.9	12,983

[1] MICS indicator WS.2 - Use of basic drinking water services; SDG Indicator 1.4.1

[2] MICS indicator WS.9 - Use of basic sanitation services; SDG indicators 1.4.1 & 6.2.1

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

73.– WHO, UNICEF and JMP. 2017. *Progress on Drinking Water, Sanitation and Hygiene.*

10.3. Menstrual hygiene

The ability of women and adolescent girls to safely manage their monthly menstrual cycle in privacy and with dignity is fundamental to their health, psychosocial well-being and mobility. Women and girls who lack access to adequate menstrual hygiene management facilities and supplies experience stigma and social exclusion while also forgoing important educational, social and economic opportunities.

Table WS.4.1 shows the percentage of women and girls aged 15-49 who menstruated in the last 12 months reporting having a private place to wash and change while at home. It also records whether they used appropriate materials including reusable and non-reusable materials during last menstruation. Table WS.4.2 shows the percentage of women who reported not being able to participate in social activities, school or work during their last menstruation.

Table WS.4.1: Menstrual hygiene management

Percentage of ever married women with a private place to wash and change while at home and using reusable or non-reusable materials during last menstruation, DPR Korea, 2017

	Percentage with a private place to wash and change while at home	Percentage using appropriate[A] materials for menstrual management during last menstruation			Percentage using appropriate menstrual hygiene materials with a private place to wash and change while at home[1]	Number of ever married women age 15-49 who reported menstruating in the last 12 months
		Used reusable materials	Not using reusable materials	DK/Missing		
Total	**99.0**	**55.4**	**43.4**	**0.1**	**98.1**	**5,443**
Area						
Urban	98.9	43.3	55.2	0.1	97.8	3,311
Rural	99.1	74.1	25.0	0.0	98.5	2,132
Province						
Ryanggang	97.4	38.9	56.4	0.2	92.9	177
North Hamgyong	98.8	32.1	67.3	0.0	98.5	516
South Hamgyong	99.6	80.8	19.0	0.2	99.6	725
Kangwon	97.5	78.5	18.8	0.2	96.8	354
Jagang	98.9	65.9	32.7	0.0	98.0	310
North Pyongan	99.3	81.0	17.7	0.0	98.4	663
South Pyongan	99.1	47.4	52.2	0.0	98.7	948
North Hwanghae	98.7	55.7	41.1	0.0	95.5	524
South Hwanghae	99.0	69.0	29.8	0.2	98.1	568
Pyongyang	99.3	6.3	93.0	0.0	98.9	658
Age						
20-24	98.4	56.9	42.2	0.0	98.4	199
25-29	98.9	53.5	45.7	0.0	98.3	853
30-39	98.8	53.4	45.0	0.2	97.7	2,085
40-49	99.2	57.8	41.2	0.0	98.3	2,306
Education						
Primary	(*)	(*)	(*)	(*)	(*)	1
Lower secondary	(*)	(*)	(*)	(*)	(*)	1
Upper secondary	99.2	57.0	41.9	0.1	98.3	4,397
Higher	98.2	48.6	49.6	0.1	96.9	1,044
Wealth index 20-40-40						
20 percent lowest	99.0	79.6	19.6	0.0	98.4	1,076
40 percent middle	99.0	62.0	36.8	0.0	98.1	2,169
40 percent highest	98.9	37.0	61.5	0.1	97.9	2,198

[1]MICS indicator WS.12 - Menstrual hygiene management

[A] Appropriate materials include sanitary pads, tampons or cloth

The category "15-19" from the background characteristic "Age" is not shown in the table because there were no recorded cases.

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

Table WS.4.2: Exclusion from activities during menstruation

Percentage of ever married women who did not participate in social activities, school, or work due to their last menstruation in the last 12 months, DPR Korea, 2017

	Percentage of ever married women who did not participate in social activities, school or work due to their last menstruation in the last 12 months[1]	Number of ever married women age 15-49 who reported menstruating in the last 12 months
Total	1.7	5,443
Area		
Urban	2.2	3,311
Rural	0.9	2,132
Province		
Ryanggang	1.1	177
North Hamgyong	2.7	516
South Hamgyong	1.5	725
Kangwon	1.4	354
Jagang	3.8	310
North Pyongan	1.2	663
South Pyongan	1.4	948
North Hwanghae	1.7	524
South Hwanghae	0.9	568
Pyongyang	1.8	658
Age		
15-19	-	-
20-24	1.2	199
25-29	1.8	853
30-39	1.8	2,085
40-49	1.5	2,306
Education		
Primary	(*)	1
Lower secondary	(*)	1
Upper secondary	1.6	4,397
Higher	2.1	1,044
Wealth index 20-40-40		
20 percent lowest	1.6	1,076
40 percent middle	1.7	2,169
40 percent highest	1.7	2,198

[1]MICS indicator WS.13 - Exclusion from activities during menstruation

The category "15-19" from the background characteristic "Age" is not shown in the table because there were no recorded cases.

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

11. EQUITABLE CHANCE IN LIFE

Fifteen years of concerted effort towards the Millennium Development Goals (MDG) have yielded tremendous progresses in tackling some of the world's greatest development challenges. However, despite the overall progress, achievements have been uneven and advances did not always lead to greater opportunities for all.

Inequitable opportunities are leaving children at the margins of society and undermine the realisation of their rights, with certain groups of children being left behind. Recently, unequal development outcomes have rightfully captured the world's attention with equity placing the central role within the 2030 Agenda for Sustainable Development.

11.1. Child functioning

The Convention on the Rights of Persons with Disabilities (UN, 2006) outlines States Parties' obligations to ensure the full realization of rights for children with disabilities on an equal basis with other children. The presence of functional difficulties may place children at risk of experiencing limited participation in an unaccommodating environment, and limit the fulfilment of their rights.

2017 DPR Korea MICS included child functioning modules intended to provide an estimate of the number/proportion of children with functional difficulties as reported by their mothers or primary caregivers. The module included in the Questionnaire for Children Under Five covered children between 2 and 4 years of age while a similar module is also included in the Questionnaire for Children Age 5-17.

Functional domains covered in Questionnaire for Children Under Five are as follows: Seeing, hearing, walking, fine motor, communication, learning, playing, and controlling behaviour while functional domains covered in Questionnaire for Children Age 5-17 are as follows: Seeing, hearing, walking, self-care, communication, learning, remembering, concentrating, accepting change, controlling behaviour, making friends, anxiety, and depression.

Tables EQ.1.1 and EQ.1.2 present the percentage of children by age group with functional difficulty by domain.

Table EQ.1.3 presents the percentage of children age 2-17 who use assistive devices and still have difficulty within the relevant functional domains.

Table EQ.1.4 is a summary table presenting the percentage of children by age group with functional difficulty.

Table EQ.1.1: Child functioning (children age 2-4 years)

Percentage of children age 2-4 years who have functional difficulty, by domain, DPR Korea, 2017

	Percentage of children aged 2-4 years with functional difficulty[A] in the domain of:								Percentage of children age 2-4 years with functional difficulty in at least one domain	Number of children age 2-4 years
	Seeing	Hearing	Walking	Fine motor	Communication	Learning	Playing	Controlling behaviour		
Total	**0.1**	**0.0**	**0.1**	**0.1**	**0.0**	**0.0**	**0.0**	**1.7**	**1.9**	**1,364**
Sex										
Male	0.2	0.0	0.2	0.2	0.0	0.0	0.0	1.9	2.3	698
Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	666
Area										
Urban	0.2	0.0	0.0	0.2	0.0	0.0	0.0	1.5	1.6	813
Rural	0.0	0.0	0.2	0.0	0.0	0.0	0.0	2.0	2.2	552
Province										
Ryanggang	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	3.6	43
North Hamgyong	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	134
South Hamgyong	0.8	0.0	0.0	0.8	0.0	0.0	0.0	4.5	5.3	180
Kangwon	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	1.5	88
Jagang	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	78
North Pyongan	0.0	0.0	0.7	0.0	0.0	0.0	0.0	2.2	2.9	159
South Pyongan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	232
North Hwanghae	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	2.8	144
South Hwanghae	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	0.7	140
Pyongyang	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.6	1.6	167
Age										
2	0.3	0.0	0.3	0.3	0.0	0.0	0.0	1.1	1.6	451
3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.0	3.0	457
4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	1.0	457
Early childhood education attendance[B]										
Attending	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	2.0	665
Not attending	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.1	2.1	248
Mother's education										
Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1
Upper secondary	0.1	0.0	0.1	0.1	0.0	0.0	0.0	1.8	2.0	1,116
Higher	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.3	1.3	248
Wealth index 20-40-40										
20 percent lowest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.5	2.5	271
40 percent middle	0.2	0.0	0.2	0.2	0.0	0.0	0.0	2.1	2.6	553
40 percent highest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.9	540

[A] Functional difficulty for children age 2-4 years are defined as having responded "A lot of difficulty" or "Cannot at all" to questions within all listed domains, except the last domain of controlling behaviour, for which the response category "A lot more" is considered a functional difficulty.

[B] Children age 2 are excluded, as early childhood education attendance is only collected for age 3-4 years.

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

Table EQ.1.2: Child functioning (children age 5-17 years)

Percentage of children age 5-17 years who have functional difficulty, by domain, DPR Korea, 2017

	Percentage of children aged 5-17 years with functional difficulty[A] in the domain of:													Percentage of children age 5-17 years with functional difficulty in at least one domain	Number of children age 5-17 years
	Seeing	Hearing	Walking	Self-care	Communication	Learning	Remembering	Concentrating	Accepting change	Controlling behaviour	Making friends	Anxiety	Depression		
Total	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.0**	**0.1**	**0.0**	**0.0**	**0.0**	**0.0**	**0.8**	**0.6**	**0.9**	**6,072**
Sex															
Male	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.9	0.7	1.1	3,070
Female	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7	0.5	0.8	3,002
Area															
Urban	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	0.7	0.6	0.9	3,456
Rural	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.8	0.5	0.9	2,616
Province															
Ryanggang	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.6	1.1	191
North Hamgyong	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.3	0.5	582
South Hamgyong	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	1.7	1.0	2.0	825
Kangwon	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.5	390
Jagang	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	1.3	2.0	332
North Pyongan	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.5	0.5	700
South Pyongan	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.3	0.3	0.6	1,025
North Hwanghae	0.0	0.0	0.0	0.0	0.0	0.2	0.2	0.2	0.0	0.0	0.0	0.8	0.8	1.0	628
South Hwanghae	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.8	0.3	1.0	637
Pyongyang	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	0.6	0.6	762
Age															
5-9	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	1.0	0.7	1.3	2,270
10-14	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7	0.6	0.9	2,358
15-17	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.1	0.0	0.0	0.0	0.5	0.4	0.5	1,444
School attendance															
Attending	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.8	0.6	0.9	5,722
Not attending	0.0	0.0	0.3	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.5	0.4	1.1	349
Mother's education															
Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1
Lower secondary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2
Upper secondary	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.7	0.5	0.8	4,916
Higher	0.1	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	1.0	0.9	1.3	1,151
No information[B]	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1
Wealth index 20-40-40															
20 percent lowest	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	0.6	1.0	1,338
40 percent middle	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.1	0.7	0.5	0.9	2,418
40 percent highest	0.1	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.7	0.6	0.9	2,316

[A] Functional difficulty for children age 5-17 years are defined as having responded "A lot of difficulty" or "Cannot at all" to questions within all listed domains, except the last domains of anxiety and depression, for which the response category "Daily" is considered a functional difficulty.

[B] Children age 15 or higher identified as emancipated

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

Table EQ.1.3: Use of assistive devices (children age 2-17 years)

Percentage of children age 2-17 years who use assistive devices and have functional difficulty within domain of assistive devices, DPR Korea, 2017

	Percentage of children age 2-17 years who:					
	Wear glasses	Use hearing aid	Use equipment or receive assistance for walking	Number of children age 2-17 years	Percentage of children with difficulties seeing when wearing glasses	Number of children age 2-17 years who wear glasses
Total	0.9	0.1	0.1	7,436	0.0	68
Sex						
Male	0.9	0.2	0.1	3,768	(*)	35
Female	0.9	0.1	0.1	3,668	(*)	33
Area						
Urban	0.9	0.2	0.1	4,269	(*)	40
Rural	0.9	0.1	0.1	3,168	(*)	28
Province						
Ryanggang	0.4	0.0	0.0	234	(*)	1
North Hamgyong	1.2	0.0	0.4	716	(*)	9
South Hamgyong	2.8	0.0	0.0	1,005	(*)	28
Kangwon	0.1	0.0	0.0	478	(*)	1
Jagang	0.7	0.1	0.1	410	(*)	3
North Pyongan	0.5	0.1	0.1	859	(*)	5
South Pyongan	0.4	0.5	0.1	1,257	(*)	5
North Hwanghae	0.4	0.1	0.0	772	(*)	3
South Hwanghae	0.1	0.1	0.0	777	(*)	1
Pyongyang	1.5	0.0	0.0	929	(*)	14
Age						
2-4	0.1	0.1	0.2	1,364	(*)	2
5-9	0.1	0.1	0.0	2,270	(*)	2
10-14	1.0	0.0	0.1	2,358	(*)	24
15-17	2.8	0.5	0.1	1,444	(*)	40
Early childhood education attendance[A]						
Attending	1.1	0.1	0.1	6,388	(0.0)	68
Not attending	0.0	0.3	0.0	322	-	0
Mother's education						
Primary	(*)	(*)	(*)	2	-	0
Lower secondary	(*)	(*)	(*)	2	(*)	0
Upper secondary	0.8	0.1	0.1	6,033	(0.0)	47
Higher	1.5	0.4	0.1	1,399	(*)	21
No information[B]	(*)	(*)	(*)	1	-	0
Wealth index 20-40-40						
20 percent lowest	1.2	0.1	0.1	1,609	(*)	19
40 percent middle	0.7	0.1	0.1	2,971	(*)	21
40 percent highest	1.0	0.2	0.0	2,855	(*)	27

[A] Children age 2 are excluded, as early childhood education attendance is only collected for age 3-4 years.

[B] Children age 15 or higher identified as emancipated

Due to the low number of unweighted cases, data for children with difficulties hearing when using hearing aid and for children with difficulties walking when using equipment or receiving assistance were not shown in this table

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

"–" denotes 0 unweighted case in that cell or in the denominator

Table EQ.1.4: Child functioning (children age 2-17 years)

Percentage of children age 2-4, 5-17 and 2-17 years with functional difficulty, DPR Korea, 2017

	Percentage of children age 2-4 years with functional difficulty in at least one domain	Number of children age 2-4 years	Percentage of children age 5-17 years with functional difficulty in at least one domain	Number of children age 5-17 years	Percentage of children age 2-17 years with functional difficulty in at least one domain[1]	Number of children age 2-17 years
Total	1.9	1,364	0.9	6,072	1.1	7,436
Sex						
Male	2.3	698	1.1	3,070	1.3	3,768
Female	1.5	666	0.8	3,002	0.9	3,668
Area						
Urban	1.6	813	0.9	3,456	1.1	4,269
Rural	2.2	552	0.9	2,616	1.2	3,168
Province						
Ryanggang	3.6	43	1.1	191	1.6	234
North Hamgyong	0.7	134	0.5	582	0.6	716
South Hamgyong	5.3	180	2.0	825	2.6	1,005
Kangwon	1.5	88	0.5	390	0.7	478
Jagang	0.0	78	2.0	332	1.6	410
North Pyongan	2.9	159	0.5	700	0.9	859
South Pyongan	0.0	232	0.6	1,025	0.5	1,257
North Hwanghae	2.8	144	1.0	628	1.3	772
South Hwanghae	0.7	140	1.0	637	0.9	777
Pyongyang	1.6	167	0.6	762	0.8	929
Age						
2-4	1.9	1,364	na	na	1.9	1,364
5-9	na	na	1.3	2,270	1.3	2,270
10-14	na	na	0.9	2,358	0.9	2,358
15-17	na	na	0.5	1,444	0.5	1,444
Mother's education						
Primary	(*)	1	(*)	1	(*)	2
Lower secondary	-	0	(*)	2	(*)	2
Upper secondary	2.0	1,116	0.8	4,916	1.1	6,033
Higher	1.3	248	1.3	1,151	1.3	1,399
No information[A]	na	na	(*)	1	(*)	1
Wealth index 20-40-40						
20 percent lowest	2.5	271	1.0	1,338	1.2	1,609
40 percent middle	2.6	553	0.9	2,418	1.2	2,971
40 percent highest	0.9	540	0.9	2,316	0.9	2,855

[1] MICS indicator EQ.1 - Children with functional difficulty

[A] Children age 15 or higher identified as emancipated

na: not applicable

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

"–" denotes 0 unweighted case in that cell or in the denominator

APPENDIX A. SAMPLE DESIGN

The major features of the sample design are described in this appendix. Sample design features include defining the sampling frame, target sample size, sample allocation, listing in sample clusters, choice of domains, sampling stages, stratification, and the calculation of sample weights.

The primary objective of the sample design for the 2017 DPR Korea MICS was to produce statistically reliable estimates of most indicators, at the national level, for urban and rural areas, and for the ten provinces of the country: Ryanggang, North Hamgyong, South Hamgyong, Kangwon, Jagang, North Pyongan, South Pyongan, North Hwanghae, South Hwanghae and Pyongyang (note that North Hamgyong and Rason provinces as well as South Pyongan and Nampho have been combined into one domain). Urban and rural areas in each of the ten provinces were defined as the sampling strata. In designing the sample for the 2017 DPR Korea MICS, it was useful to review the sample design and results of the MICS conducted in 2009, documented in the Final Report of that survey.

A multi-stage, stratified cluster sampling approach was used for the selection of the survey sample. The sampling frame was based on the 2013 DPR Korea Mid-Census of Population and Housing. The primary sampling units (PSUs) selected at the first stage were the enumeration areas (EAs) defined for the census enumeration. A listing of households was conducted in each sample EA (is same as the 'cluster' if no segmentation is done), and a sample of households was selected at the second stage.

A.1. Sample size and sample allocation

Since the overall sample size for the 2017 DPR Korea MICS partly depends on the geographic domains of analysis that are defined for the survey tables, the distribution of EAs and households in the DPR Korea from the 2013 Mid-Census sampling frame was first examined by province, urban and rural strata, shown in Table SD.1.

Table SD.1: Distribution of Enumeration Areas and households in sampling frame

Distribution of EAs and households, by province, urban and rural strata, Mid-Census 2013

	Number of EAs			Number of Households (2013 Mid-Census)		
	Total	Urban	Rural	Total	Urban	Rural
Total	35,171	19,167	16,004	6,209,933	3,831,214	2,378,719
Province						
Ryanggang	1,027	596	431	192,383	125,642	66,741
North Hamgyong/Rason	3,432	2,350	1,082	620,174	453,724	166,450
South Hamgyong	4,430	2,405	2,025	813,962	485,751	328,211
Kangwon	2,289	948	1341	389,840	188,908	200,932
Jagang	2,015	1,154	861	344,794	222,390	122,404
North Pyongan	4,401	1,912	2,489	729,593	392,867	336,726
South Pyongan/Nampho	6,099	3,710	2,389	1,076,003	717,911	358,092
North Hwanghae	3,439	1,362	2,077	622,011	291,670	330,341
South Hwanghae	3,693	1,124	2,569	612,445	226,164	386,281
Pyongyang	4,346	3,606	740	808,728	726,187	82,541

The overall sample size for the 2017 DPR Korea MICS was calculated as 8,500 households. For the calculation of the sample size, the key indicator used was the underweight prevalence among children age 0-4 years. Since the survey results are tabulated at the province level, it was necessary to determine the minimum sample size for each province. The following formula was used to estimate the required sample size for this indicator:

$$n = \frac{[4(r)(1-r)(deff)]}{[(RME \times r)^2 (pb)(AveSize)(RR)]},$$

where:

n = the required sample size, expressed as number of households

4 = a factor to achieve the 95 percent level of confidence

r = the predicted or anticipated value of the indicator, expressed in the form of a proportion

deff = the design effect for the indicator, estimated from a previous survey of 1.4

RME = the relative margin of error of *r* to be tolerated at the 95 percent level of confidence; it is generally not more that 0.12 (12 percent) for national-level estimates

pb = the proportion of the total population upon which the indicator, *r,* is based

AveSize = the average household size (mean number of persons per household)

RR = the predicted response rate

For the calculation, *r* (underweight prevalence) was assumed to be 15 percent based on the national estimate from the National Nutrition Survey 2012. The value of *deff* (design effect) was taken as 1.4 based on the estimate from the National Nutrition Survey 2012, *pb* (percentage of children age 0-4 years in the total population) was taken as 7 percent, *AveSize* (mean household size) was taken as 4 persons per households, and the response rate was assumed to be 99.7 percent, based on experience from previous surveys. Although a *RME* of 12 percent is needed for the national-level estimates and the resulting number of sample households from this exercise was 7,900, it was decided to keep the sample size at the previously proposed level of 8,500 households which will give a sample of approximately 2,600 children under five years of age. Therefore, the total sample size at the national level was 8,500 households.

The number of households selected per cluster for the 2017 DPR Korea MICS was determined as 25 households, based on several considerations, including the design effect, the budget available, and the time that would be needed per team to complete one cluster. Dividing the total number of households by the number of sample households per cluster, it was calculated that 34 sample clusters would need to be selected in each province.

Since a similar level of precision was needed for the estimates from each province, equal allocation of the total sample size to the ten provinces was used. Therefore, 34 clusters were allocated to each province, with the final sample size calculated as 8,500 households (34 clusters * 10 provinces * 25 sample households per cluster).

In each province, the EAs (primary sampling units) were distributed to the urban and rural strata proportionally to the number of households in the census frame for each stratum within that province. Table SD.2 shows the allocation of the EAs and households to the sampling strata.

Table SD.2: Sample allocation

Allocation of sample clusters (EAs) and sample households to sampling strata, 2017 DPR Korea MICS

	Sample EAs			Sample Households		
	Total	Urban	Rural	Total	Urban	Rural
Total	340	205	135	8,500	5,125	3,375
Province						
Ryanggang	34	22	12	850	550	300
North Hamgyong/Rason	34	25	9	850	625	225
South Hamgyong	34	20	14	850	500	350
Kangwon	34	16	18	850	400	450
Jagang	34	22	12	850	550	300
North Pyongan	34	18	16	850	450	400
South Pyongan /Nampho	34	23	11	850	575	275
North Hwanghae	34	16	18	850	400	450
South Hwanghae	34	13	21	850	325	525
Pyongyang	34	30	4	850	750	100

A.2. Selection of enumeration areas (clusters)

Census enumeration areas were selected from each of the sampling strata by using systematic probability proportional to size (pps) sampling procedures, based on the number of households in each enumeration area from the 2013 Mid-Census frame. The first stage of sampling was thus completed by selecting the required number of sample EAs (specified in Table SD.2) from each of the ten provinces, separately for the urban and rural strata.

A.3. Listing activities

Given that there had been many changes in the households enumerated in the 2013 Mid-Census, a new listing of households was conducted in all the sample enumeration areas prior to the selection of households. For this purpose, listing teams were trained to visit all the selected enumeration areas and list all households in each enumeration area. The training for mapping and listing was done for 5 days including a pilot for 60 participants (20 supervisors, 20 listers and 20 mappers). Following that, starting from 13th March to 13th April 2017, 20 teams went to the field to finish mapping and listing of enumeration areas for one month. When the mappers and listers arrived in the field, they started with mapping first. Mapping was conducted by updating the 2013 Mid-Census maps in sample EAs keeping the old boundaries as they are, and listing all households without any omission. If the number of households in a selected enumeration area was more than 300, in order to achieve good quality and reduce the required time for the listing process, only a randomly selected part (segment) of the enumeration area was subject to listing. The boundaries of the segments were defined in the field in accordance with the configuration of the EA and existing address system, by dividing the enumeration area into parts/segments of approximately equal sizes (within the range of 100-200 households). For each enumeration area, one segment was randomly selected, and within the boundaries of the segment, all occupied households were listed.

A.4. Selection of households

Lists of households were prepared by the listing teams in the field for each enumeration area. The households were then sequentially numbered from 1 to M_{hi} (the total number of households in each enumeration area) at the Central Bureau of Statistics, where the selection of 25 households in each enumeration area was carried out using random systematic selection procedures. The MICS6

spreadsheet template for systematic random selection of households was adapted for this purpose.[74]

The survey also included a questionnaire for individual men that was administered in half of the sample households. The MICS household selection template includes an option to specify the proportion of households to be selected for administering the individual questionnaire for men, and the spreadsheet automatically selected the corresponding subsample of households.[74] All men age 15 to 49 years in the selected households were eligible for interview.

The 2017 DPR Korea MICS also included water quality testing for a subsample of households within each sample cluster. A subsample of 4 of the 25 selected households was selected in each sample cluster using random systematic sampling for conducting water quality testing, for both water in the household and at the source. The MICS household selection template includes an option to specify the number of households to be selected for the water quality testing, and the spreadsheet automatically selected the corresponding subsample of households.[74]

A.5. Calculation of sample weights

The 2017 DPR Korea MICS sample is not self-weighting. Essentially, by allocating equal numbers of households to each of the provinces, different sampling fractions were used in each province since the number of households in the Census frame varies by province. 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)*:

$$W_{hi} \times \frac{1}{f_{hi}}$$

The term f_{hi}, the sampling probability for the *i*-th sample PSU in the *h*-th stratum, is the product of the 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 2013 Mid-Census frame for the *i*-th sample PSU in stratum *h*

M_h = total number of households in the 2013 Mid-Census frame for stratum *h*

p_{2hi} = proportion of the PSU listed in the *i*-th sample PSU in stratum *h* (in the case of PSUs that were segmented); for non-segmented PSUs, $p_{2hi} = 1$

$$p_{3hi} = \frac{25}{M'_{hi}}$$

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 2013 Mid-Census frame used for the first stage selection and the updated number of households in the EA from the listing are generally different, individual overall probabilities of selection for households in each sample EA (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 weight adjustment factor for household non-response in each stratum is equal to:

$$\frac{1}{RR_h}$$

74.– Available here: http://mics.unicef.org/tools#survey-design

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, men, and under-5 children) for each stratum is equal to:

$$\frac{1}{RR_{qh}}$$

where RR_{qh} is the response rate for the individual questionnaires in stratum *h*, defined as the proportion of eligible individuals (women, men, 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 2017 DPR Korea MICS are shown in Table SR.1.1 in this report.

The non-response adjustment factors for the individual women and under-5 questionnaires were applied to the adjusted household weights. Numbers of eligible women and under-5 children were obtained from the list of household members in the Household Questionnaire for households where interviews were completed.

The weights for the questionnaire for individual men were calculated in a similar way. In this case the number of eligible men in the list of household members in all the MICS sample households in the stratum was used as the numerator of the non-response adjustment factor, while the number of completed questionnaires for men in the stratum was obtained from the 50% subsample of households. Therefore, this adjustment factor includes an implicit subsampling weighting factor of 2 in addition to the adjustment for the non-response to the individual questionnaire for men.

In the case of the questionnaire for children age 5-17 years, in each sample household, one child was randomly selected from all the children in this age group recorded in the list of household members. The household weight for the children age 5-17 years is first adjusted based on the response rate for this questionnaire at the stratum level. Once this adjusted household weight is normalised as described below, it is multiplied by the number of children age 5-17 years recorded in the list of household members. Therefore, the weights for the individual children age 5-17 years will vary by sample household. This weighting of the data for the children age 5-17 years old is implemented in the tabulation programs for the corresponding tables.

For the water quality testing (both in household and at source) a subsample of 4 households was selected from the 25 MICS sample households in each sample cluster. Therefore, the basic (unadjusted) household weight would be multiplied by the inverse of this subsampling rate as follows:

$$W_{wqhi} = \frac{1}{f_{hi}} \times \frac{25}{4} = \frac{25}{4 \times f_{hi}}$$

where:

W_{wqhi} = basic weight for the subsample of households selected for the water quality testing in the *i*-th sample EA in stratum *h*

Since the response rate may be different for the water quality testing for home consumption and at the source, the basic weights for each were adjusted separately for non-response at the stratum level as follows:

$$W'_{wqhi} = W_{wqhi} \times \frac{m_{wqh}}{m'_{wqh}} ,$$

where:

W'_{wqhi} = adjusted weight for the subsample of households selected for the water quality testing in the *i*-th sample EA in stratum *h* (separately for water quality testing in the household and at the source)

m_{wqh} = number of valid (occupied) sample households selected for water quality testing in stratum *h*

m'_{wqh} = number of sample households with completed water quality testing in stratum *h* (separately for water quality testing in the household and at the source)

The 2017 DPR Korea MICS full (raw) weights for the households were calculated by multiplying the inverse of the probabilities of selection by the non-response adjustment factor for each stratum. These weights were then standardised (or normalised), one purpose of which is to make the weighted sum of the interviewed sample units equal to the total sample size at the national level. Normalisation is achieved by dividing the full sample weights (adjusted for nonresponse) by the average of these weights across all households 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 standardisation procedure was followed in obtaining standardised weights for the individual women, men, under-5 questionnaires, questionnaire for children 5-17 and water quality testing. Adjusted (normalised) household weights varied between 0.288075 and 1.801452 in the 340 sample enumeration areas (clusters).

Sample weights were appended to all data sets and analyses were performed by weighting the data for households, women, men, under-5s, 5-17-year olds and water quality testing with these sample weights.

APPENDIX B. LIST OF PERSONNEL INVOLVED IN THE SURVEY

Project Director
» Pak Yong Suk – Deputy Director General

Technical and Field Coordinators
» Jang Myong Son – Director, CBS
» Ri Un Hui – Officer, CBS

Questionnaire Design and Survey Methodology (Trainers)
» Jang Myong Son – Director, CBS
» Ri Un Hui – Officer, CBS
» Kim Sol Rim – National MICS Consultant
» Tatjana Karaulac – MICS Specialist, UNICEF

Sampling
» Jang Myong Son – Director, CBS
» Ri Un Hui – Officer, CBS

Data Processing/Programming
» Ri Un Hui – Officer, CBS
» Ju Un Hui – Officer, CBS,
» Kang Ok Ju – Officer, CBS
» Tatjana Karaulac – MICS Specialist, UNICEF

Technical Committee
» Pak Yong Suk – Deputy Director General, CBS
» Jang Myong Son – Director, Data Dissemination Department
» Paek Ki Chon – Director, Department of External Affairs
» Jang Myong Son – Director, Data Dissemination Department
» Jo Gyu Sung – Director, IT Department
» Song Chol Jun – Senior Official, Data Dissemination
» Ri Un Hui – Officer, Data Dissemination Department
» Jong Kang Il – Official, Population and Labour Department
» Jo Won Ryong – Section Chief, Ministry of Public Health
» Han Yong Chol – Section Chief, Institute of Child Nutrition
» Ri Hye Ryon – Senior Officer, Education Committee
» Kim Hui Yong – Senior Officer, IT Department
» Ju Un Hui – Officer, Data Dissemination Department
» Kang Ok Ju – Officer, Data Dissemination Department
» Kim Sol Rim – National MICS consultant
» Tatjana Karaulac – MICS Specialist, UNICEF
» Jang Won Gun – M&E Officer, UNICEF
» Yun Hyok Choe – M&E Officer, UNICEF

Steering Committee
» Pak Yong Suk – Deputy Director General of Central Bureau of Statistics
» Jang Myong Son – Director, Department of Data Dissemination, CBS
» Paek Ki Chon – Director, Department of External Affairs, CBS
» Kim Chol Man – Director, Department of External Affairs, Ministry of City Management
» Choe Suk Hyon – Deputy Director, Department of External Affairs, Ministry of Public Health
» Choe Dok Hun – Senior Officer, Department of External Education, Education Commission
» O Hye Ran – Senior Officer, Academy of Medical Science
» Oyunsaihan Dendevnorov – Representative, UNICEF

UNICEF Headquarters and Regional Office In-country Technical Support
» Caetano Dorea – Water Quality Testing Consultant, UNICEF Headquarters
» Hans Pettersson – Sampling Consultant, UNICEF Regional Office
» Munkhzul Zookhuu – Data Processing Consultant, UNICEF Headquarters
» Yadigar Coskun – Data Processing Specialist, UNICEF Headquarters

Field Monitoring Personnel – CBS
» Jang Myong Son – Director, CBS
» Ri Un Hui – Officer, CBS
» Kim Sol Rim – National MICS Consultant

Field Monitoring Personnel – UNICEF

- Munkhzul Zookhuu
- Tatjana Karaulac
- Oyunsaikhan Dendevnorov
- Anil Pokhrel
- Elena Cerdan
- Eugene Barasukana
- Silas Rapold
- Wisam Hazem
- Kim Kwang Hyok
- Kim Won Sul
- Jong Song Gap
- Ri Pyong Ju
- Jang Won Gun
- Choe Yun Hyok
- Ri Chol Yong
- Jong Hyon Chol

Supervisors

- Choe Yong Su
- Won Song Guk
- Jong Bok Sun
- Kim Il Hyok
- Hwang Won Jun
- Kim Chol Ung
- Yun Yong Sik
- Han Chol Kyu
- Pak Kyong Il
- Kang Chol Jun
- Choe Song Kun
- Kim Kyong Su
- Jon Chol Hyok
- An Kum Sok
- Song Chol Jun
- Pak Song Hun
- Kim Chol
- Jo Chol
- Kim Jin Sam
- Hong Ui Hyong

Measurers (Anthropometry)

- Song Ki Jom
- Bang Yu Il
- Song Jong Su
- Jo Kwang Hun
- Yu Chung Sang
- O Hyon Wu
- Kim Hyong Nam
- Ri Kwang Se
- Ri Kyong Su
- Hwang Jun Hong
- Ri Chung Ryol
- Kim Yong Sok
- Jong Un Chol
- Ri Jong Chol
- Han Myong Chol
- Ri Kwang Hyok
- Kim Ho Chol
- Ri Chol
- Kim Jong Su
- Ri Byong Hak

Water Quality Measurer

- An Song Hyok
- Kim Un Hui
- Kim Yong Chol
- Ri Sun Hui
- Choe Bok Nam
- Choe Ung Ryol
- Pang Mi Ok
- Ri Sun Yong
- Kim Kang Chol
- Ri Sol Ju
- Jang Jin Ho
- Song Jong Sik
- Ri Jong Ryong
- Ri Il Won
- Jong Chol Hun
- Ko Jong Song
- Sin Hyok
- Kim Song Chol
- Ju Hyok Chol
- Ri Kang Rim

Interviewers

- Ri Hye Song
- Han Yong Chol
- Kang Ok Ju
- Jang Un Hye
- Yang Myong Suk
- Kim Kyong Sun
- Ryang Un Hui
- Cha Myong Sim
- Choe Ok Son
- Ryu Kwang Song
- Kim Jong Sun
- Sim Chol Ok
- Han Myong Bok
- Kim Son Ok
- Kim Mok Ran
- Kim Jin Hyang
- Ri So Hyang
- Kim So Yon
- Ho Yong Hui
- Mun Jong Hwa
- Kim Un A
- Ri Su Hyang
- Paek Ki Chon
- Ju Ok
- Kim Jin Ju
- Ju Un Hui
- Ko Un Kyong
- Jang Hye Ran
- Pak Son Ok
- Kwak Un Ju
- Ri Kum Sil
- Sim Un A
- Kim Kyong Ok
- Jang Yong Hui
- Choe Un Hui
- Ri Jong Ok
- Kim Jong Hyok
- Ho Sun Ok
- Jo Yong Hyok
- Jo Hyang Sim
- An Myong Ae
- Kim Chol Hui
- O Jong Ran
- Kim Un Ha
- Ryu Chol Hwan
- Kang Ok Ju
- Pak Jong Chol
- Ri Hyon Kyong
- Hong Il Su
- Jo Myong Il
- Jang Yong Ran
- Jong Un Hyang
- Ri Jong Rim
- Kim Bok Rim
- Ri Un Hyang
- Sin Un Jong
- Kim Yong Ran
- Jang Yong Hwa
- Ko Yong Hwa
- Kim Sun Yong
- Kim Yong Ok
- Kim Jong Sun
- Sim Un Yong
- Choe Un Ju
- Choe Ryon Ju
- Jong Un Sun
- Do Un Ha
- Pak Hyang Mi
- Jang Mi Song
- Jang Dong Guk
- Ri Kyong Yong
- Pak Pyong Jin
- Ri Yun Chol
- Mun Sang Hyon
- Choe Ho Chol
- Kim Yong Chol
- Kim Chang Chol
- Choe Su Nam
- Ri Pyong Hak
- Kim Chol Ho

APPENDIX C. ESTIMATES OF SAMPLING ERRORS

The sample of respondents selected in the 2017 DPR Korea Multiple Indicator Cluster Survey is only one of the samples that could have been selected from the same population, using the same design and size. Each of these samples would yield results that differ somewhat from the results based on the actual sample selected. Sampling errors are a measure of the variability between the estimates from all possible samples. The extent of 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 which contains the true value of the indicator for the population, with a specified level of confidence. For MICS results 95% confidence intervals are used, which is the standard for this type of survey. The concept of the 95% confidence interval can be understood in this way: if many repeated samples of identical size and design were taken and the confidence interval computed for each sample, then 95% of these intervals would contain the true value of the indicator.

For the calculation of sampling errors from MICS data, programs developed in CSPro Version 6.3 and SPSS Version 22 Complex Samples module have been used.

The results are shown in the tables that follow. Sampling errors are calculated for SDG indicators for which SEs can be calculated, and several other MICS indicators. Definitions, numerators and denominators of each of these indicators are provided in Chapter III. Results are presented for the national level (Table SE.1), for urban and rural areas (Tables SE.2 and SE.3), and for all provinces (Tables SE.4 to SE.13).

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 domain had been over-sampled.

For the following indicators, however, the unweighted count represents the number of sample households, and the weighted counts reflect the total population living in these households.

- Access to electricity
- Primary reliance on clean fuels and technologies for cooking, space heating and lighting
- Use of basic drinking water services
- Use of safely managed drinking water services
- Use of basic sanitation services
- Safe disposal in situ of excreta from on-site sanitation facilities

Table SE.1: Sampling errors: Total sample

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected SDG and MICS indicators, DPR Korea, 2017

	MICS 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	Confidence limits: Upper bound r + 2se
Sample coverage and characteristics of the respondents										
Access to electricity	SR.1	1.0000	0.0000	0.000	na	na	32,455	8,499	1.000	1.000
Ownership of mobile phone (women)	SR.10	0.4792	0.0096	0.020	3.265	1.807	8,763	8,763	0.460	0.498
Ownership of mobile phone (men)	SR.10	0.5570	0.0102	0.018	1.752	1.324	4,179	4,179	0.537	0.577
Use of intranet (during last three months) (women)	SR.12a	0.0515	0.0038	0.074	2.574	1.604	8,763	8,763	0.044	0.059
Use of intranet (during last three months) (men)	SR.12a	0.1163	0.0083	0.071	2.807	1.675	4,179	4,179	0.100	0.133
ICT skills (women)	SR.13	0.3015	0.0088	0.029	3.245	1.801	8,763	8,763	0.284	0.319
ICT skills (men)	SR.13	0.4104	0.0123	0.030	2.611	1.616	4,179	4,179	0.386	0.435
Survive										
Neonatal mortality rate	CS.1	8.7907	2.0218	0.230	na	na	na	na	4.749	12.832
Infant mortality rate	CS.3	11.9822	2.3553	0.197	na	na	na	na	7.272	16.693
Under-five mortality rate	CS.5	14.7839	2.6100	0.177	na	na	na	na	9.564	20.004
Thrive - Reproductive and maternal health										
Total fertility rate	-	1.8860	0.0016	0.040	na	na	na	na	1.806	1.966
Adolescent birth rate	TM.1	0.5227	0.1530	0.391	na	na	na	na	0.000	1.305
Contraceptive prevalence rate	TM.3	0.7031	0.0083	0.012	1.979	1.407	6,009	6,010	0.687	0.720
Need for family planning satisfied with modern contraception	TM.4	0.8972	0.0055	0.006	1.556	1.247	4,619	4,666	0.886	0.908
Antenatal care coverage (at least four times by any provider)	TM.5b	0.9367	0.0081	0.009	1.046	1.023	931	935	0.920	0.953
Skilled attendant at delivery	TM.9	0.9949	0.0027	0.003	1.296	1.139	931	935	0.990	1.000
Thrive - Child health, nutrition and development										
Diphtheria, pertussis and tetanus (DPT) immunization coverage	TC.3	0.9962	0.0001	0.000	0.001	0.034	456	457	0.996	0.996
Measles immunization coverage	TC.10	0.9859	0.0050	0.005	0.820	0.906	451	451	0.976	0.996
Primary reliance on clean fuels and technologies for cooking, space heating and lighting	TC.18	0.0153	0.0068	0.448	26.470	5.145	32,455	8,499	0.002	0.029
Exclusive breastfeeding under 6 months	TC.32	0.7143	0.0239	0.033	0.495	0.704	170	178	0.666	0.762
Stunting prevalence (moderate and severe)	TC.45a	0.1912	0.0088	0.046	1.144	1.070	2,270	2,270	0.174	0.209
Wasting prevalence (moderate and severe)	TC.46a	0.0248	0.0034	0.139	1.114	1.055	2,270	2,271	0.018	0.032
Overweight prevalence (moderate and severe)	TC.47a	0.0230	0.0036	0.155	1.285	1.134	2,270	2,271	0.016	0.030
Early child development index	TC.53	0.8768	0.0117	0.013	1.152	1.073	914	912	0.853	0.900
Learn										
Participation rate in organised learning (adjusted)	LN.2	0.9710	0.0079	0.008	0.995	0.998	450	445	0.955	0.987
Children with foundational reading and number skills (reading, attending grade 2/3)	LN.22c	0.9350	0.0110	0.012	1.132	1.064	890	571	0.913	0.957
Children with foundational reading and number skills (numeracy, attending grade 2/3)	LN.22f	0.8341	0.0150	0.018	0.924	0.961	890	571	0.804	0.864
Protected from violence and exploitation										
Violent discipline	PR.2	0.5924	0.0122	0.021	2.983	1.727	6,449	4,857	0.568	0.617
Child labour	PR.3	0.0514	0.0052	0.100	2.256	1.502	6,072	4,121	0.041	0.062
Live in a safe and clean environment										
Use of basic drinking water services	WS.2	0.9320	0.0051	0.005	3.511	1.874	32,455	8,499	0.922	0.942
Use of safely managed drinking water services	WS.6	0.6085	0.0145	0.024	1.589	1.261	5,150	1,341	0.580	0.637
Use of improved sanitation facilities	WS.8	0.8408	0.0095	0.011	5.737	2.395	32,455	8,499	0.822	0.860
Use of basic sanitation services	WS.9	0.8153	0.0107	0.013	6.477	2.545	32,455	8,499	0.794	0.837
Safe disposal in situ of excreta from on-site sanitation facilities	WS.10	0.0229	0.0058	0.254	5.264	2.294	12,806	3,491	0.011	0.034
Equitable chance in life										
Children with functional difficulty	EQ.1	0.0111	0.0016	0.146	1.306	1.143	7,436	5,484	0.008	0.014

na: not applicable

Table SE.2: Sampling errors: Urban

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected SDG and MICS indicators, DPR Korea, 2017

	MICS 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	Confidence limits: Upper bound r + 2se
Sample coverage and characteristics of the respondents										
Access to electricity	SR.1	1.0000	0.0000	0.000	na	na	19,779	5,124	1.000	1.000
Ownership of mobile phone (women)	SR.10	0.5986	0.0143	0.024	4.464	2.113	5,369	5,236	0.570	0.627
Ownership of mobile phone (men)	SR.10	0.6610	0.0128	0.019	1.813	1.347	2,551	2,487	0.635	0.687
Use of intranet (during last three months) (women)	SR.12a	0.0719	0.0058	0.081	2.648	1.627	5,369	5,236	0.060	0.084
Use of intranet (during last three months) (men)	SR.12a	0.1663	0.0130	0.078	3.010	1.735	2,551	2,487	0.140	0.192
ICT skills (women)	SR.13	0.3702	0.0125	0.034	3.504	1.872	5,369	5,236	0.345	0.395
ICT skills (men)	SR.13	0.4905	0.0170	0.035	2.891	1.700	2,551	2,487	0.456	0.525
Survive										
Neonatal mortality rate	CS.1	10.2772	2.8852	0.281	na	na	na	na	5.076	16.114
Infant mortality rate	CS.3	13.3215	3.2913	0.247	na	na	na	na	7.152	19.224
Under-five mortality rate	CS.5	15.8942	2.8541	0.288	na	na	na	na	8.856	22.880
Thrive - Reproductive and maternal health										
Total fertility rate	-	1.8036	0.0030	0.055	na	na	na	na	1.694	1.913
Adolescent birth rate	TM.1	0.5493	0.3024	0.550	na	na	na	na	0.000	1.649
Contraceptive prevalence rate	TM.3	0.6968	0.0100	0.014	1.674	1.294	3,661	3,573	0.677	0.717
Need for family planning satisfied with modern contraception	TM.4	0.8936	0.0078	0.009	1.759	1.326	2,800	2,758	0.878	0.909
Antenatal care coverage (at least four times by any provider)	TM.5b	0.9420	0.0110	0.012	1.201	1.096	559	547	0.920	0.964
Skilled attendant at delivery	TM.9	1.0000	0.0000	0.000	na	na	559	547	1.000	1.000
Thrive - Child health, nutrition and development										
Diphtheria, pertussis and tetanus (DPT) immunization coverage	TC.3	0.9938	0.0002	0.000	0.002	0.043	283	275	0.993	0.994
Measles immunization coverage	TC.10	0.9899	0.0057	0.006	0.842	0.917	270	262	0.978	1.000
Primary reliance on clean fuels and technologies for cooking, space heating and lighting	TC.18	0.0195	0.0099	0.507	26.249	5.123	19,779	5,124	0.000	0.039
Exclusive breastfeeding under 6 months	TC.32	0.7081	0.0320	0.045	0.544	0.737	111	111	0.644	0.772
Stunting prevalence (moderate and severe)	TC.45a	0.1557	0.0105	0.068	1.112	1.055	1,357	1,319	0.135	0.177
Wasting prevalence (moderate and severe)	TC.46a	0.0166	0.0039	0.238	1.254	1.120	1,358	1,320	0.009	0.024
Overweight prevalence (moderate and severe)	TC.47a	0.0258	0.0050	0.192	1.293	1.137	1,358	1,320	0.016	0.036
Early child development index	TC.53	0.8890	0.0160	0.018	1.365	1.168	542	526	0.857	0.921
Learn										
Participation rate in organised learning (adjusted)	LN.2	0.9776	0.0078	0.008	0.757	0.870	283	275	0.962	0.993
Protected from violence and exploitation										
Violent discipline	PR.2	0.5830	0.0152	0.026	2.735	1.654	3,765	2,887	0.553	0.613
Child labour	PR.3	0.0306	0.0047	0.154	1.827	1.352	3,456	2,434	0.021	0.040
Live in a safe and clean environment										
Use of basic drinking water services	WS.2	0.9673	0.0062	0.006	6.209	2.492	19,779	5,124	0.955	0.980
Use of safely managed drinking water services	WS.6	0.7132	0.0198	0.028	2.051	1.432	3,143	802	0.674	0.753
Use of improved sanitation facilities	WS.8	0.9163	0.0097	0.011	6.342	2.518	19,779	5,124	0.897	0.936
Use of basic sanitation services	WS.9	0.8795	0.0126	0.014	7.667	2.769	19,779	5,124	0.854	0.905
Safe disposal in situ of excreta from on-site sanitation facilities	WS.10	0.0469	0.0149	0.318	6.905	2.628	4,841	1,388	0.017	0.077
Equitable chance in life										
Children with functional difficulty	EQ.1	0.0108	0.0021	0.195	1.333	1.154	4,269	3,223	0.007	0.015

na: not applicable

Table SE.3: Sampling errors: Rural

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected SDG and MICS indicators, DPR Korea, 2017

	MICS 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	Confidence limits: Upper bound r + 2se
Sample coverage and characteristics of the respondents										
Access to electricity	SR.1	1.0000	0.0000	0.000	na	na	12,675	3,375	1.000	1.000
Ownership of mobile phone (women)	SR.10	0.2902	0.0117	0.040	2.349	1.533	3,394	3,527	0.267	0.314
Ownership of mobile phone (men)	SR.10	0.3939	0.0160	0.041	1.811	1.346	1,628	1,692	0.362	0.426
Use of intranet (during last three months) (women)	SR.12a	0.0193	0.0028	0.145	1.455	1.206	3,394	3,527	0.014	0.025
Use of intranet (during last three months) (men)	SR.12a	0.0378	0.0057	0.150	1.493	1.222	1,628	1,692	0.026	0.049
ICT skills (women)	SR.13	0.1927	0.0108	0.056	2.656	1.630	3,394	3,527	0.171	0.214
ICT skills (men)	SR.13	0.2850	0.0160	0.056	2.126	1.458	1,628	1,692	0.253	0.317
Survive										
Neonatal mortality rate	CS.1	6.5705	2.6058	0.397	na	na	na	na	1.359	11.782
Infant mortality rate	CS.3	9.9922	3.2110	0.321	na	na	na	na	3.570	16.414
Under-five mortality rate	CS.5	13.2162	3.8793	0.294	na	na	na	na	5.458	20.975
Thrive - Reproductive and maternal health										
Total fertility rate	-	2.0809	0.0058	0.076	na	na	na	na	1.929	2.233
Adolescent birth rate	TM.1	0.7600	0.5790	0.761	na	na	na	na	0.000	2.282
Contraceptive prevalence rate	TM.3	0.7129	0.0145	0.020	2.502	1.582	2,348	2,437	0.684	0.742
Need for family planning satisfied with modern contraception	TM.4	0.9027	0.0074	0.008	1.186	1.089	1,819	1,908	0.888	0.918
Antenatal care coverage (at least four times by any provider)	TM.5b	0.9288	0.0121	0.013	0.849	0.922	372	388	0.905	0.953
Skilled attendant at delivery	TM.9	0.9871	0.0066	0.007	1.343	1.159	372	388	0.974	1.000
Thrive - Child health, nutrition and development										
Diphtheria, pertussis and tetanus (DPT) immunization coverage	TC.3	1.0000	0.0000	0.000	na	na	173	182	1.000	1.000
Measles immunization coverage	TC.10	0.9799	0.0093	0.009	0.821	0.906	180	189	0.961	0.998
Primary reliance on clean fuels and technologies for cooking, space heating and lighting	TC.18	0.0087	0.0083	0.951	26.733	5.170	12,675	3,375	0.000	0.025
Exclusive breastfeeding under 6 months	TC.32	0.7259	0.0337	0.046	0.377	0.614	59	67	0.658	0.793
Stunting prevalence (moderate and severe)	TC.45a	0.2441	0.0157	0.064	1.267	1.126	913	951	0.213	0.275
Wasting prevalence (moderate and severe)	TC.46a	0.0370	0.0062	0.169	1.038	1.019	913	951	0.025	0.050
Overweight prevalence (moderate and severe)	TC.47a	0.0189	0.0050	0.262	1.259	1.122	913	951	0.009	0.029
Early child development index	TC.53	0.8591	0.0167	0.019	0.887	0.942	372	386	0.826	0.892
Learn										
Participation rate in organised learning (adjusted)	LN.2	0.9598	0.0169	0.018	1.254	1.120	166	170	0.926	0.994
Protected from violence and exploitation										
Violent discipline	PR.2	0.6056	0.0200	0.033	3.307	1.819	2,684	1,970	0.566	0.646
Child labour	PR.3	0.0789	0.0102	0.129	2.402	1.550	2,616	1,687	0.059	0.099
Live in a safe and clean environment										
Use of basic drinking water services	WS.2	0.8769	0.0088	0.010	2.428	1.558	12,675	3,375	0.859	0.895
Use of safely managed drinking water services	WS.6	0.4446	0.0206	0.046	1.270	1.127	2,007	539	0.403	0.486
Use of improved sanitation facilities	WS.8	0.7230	0.0192	0.027	6.208	2.492	12,675	3,375	0.685	0.761
Use of basic sanitation services	WS.9	0.7152	0.0193	0.027	6.151	2.480	12,675	3,375	0.677	0.754
Safe disposal in situ of excreta from on-site sanitation facilities	WS.10	0.0083	0.0024	0.285	1.422	1.192	7,965	2,103	0.004	0.013
Equitable chance in life										
Children with functional difficulty	EQ.1	0.0116	0.0025	0.218	1.265	1.125	3,168	2,261	0.007	0.017

na: not applicable

Table SE.4: Sampling errors: Ryanggang

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected SDG and MICS indicators, DPR Korea, 2017

	MICS 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	Confidence limits: Upper bound r + 2se
Sample coverage and characteristics of the respondents										
Access to electricity	SR.1	1.0000	0.0000	0.000	na	na	1,013	850	1.000	1.000
Ownership of mobile phone (women)	SR.10	0.3530	0.0218	0.062	1.845	1.358	273	885	0.309	0.397
Ownership of mobile phone (men)	SR.10	0.5116	0.0317	0.062	1.765	1.329	136	439	0.448	0.575
Use of intranet (during last three months) (women)	SR.12a	0.0226	0.0045	0.199	0.811	0.901	273	885	0.014	0.032
Use of intranet (during last three months) (men)	SR.12a	0.0550	0.0148	0.269	1.850	1.360	136	439	0.025	0.085
ICT skills (women)	SR.13	0.2122	0.0222	0.104	2.599	1.612	273	885	0.168	0.256
ICT skills (men)	SR.13	0.3274	0.0346	0.106	2.387	1.545	136	439	0.258	0.397
Survive										
Neonatal mortality rate	CS.1	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Infant mortality rate	CS.3	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Under-five mortality rate	CS.5	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Thrive - Reproductive and maternal health										
Total fertility rate	-	1.8839	0.0100	0.100	na	na	na	na	1.684)	2.084
Adolescent birth rate	TM.1	0.0000	0.0000	0.000	na	na	na	na	0.000)	0.000
Contraceptive prevalence rate	TM.3	0.8098	0.0199	0.025	1.550	1.245	187	605	0.770	0.850
Need for family planning satisfied with modern contraception	TM.4	0.9412	0.0113	0.012	1.173	1.083	158	513	0.919	0.964
Antenatal care coverage (at least four times by any provider)	TM.5b	0.9444	0.0180	0.019	0.554	0.744	28	91	0.908	0.980
Skilled attendant at delivery	TM.9	1.0000	0.0000	0.000	na	na	28	91	1.000	1.000
Thrive - Child health, nutrition and development										
Diphtheria, pertussis and tetanus (DPT) immunization coverage	TC.3	(1.0000)	(0.0000)	(0.000)	na	na	14	45	(1.000)	(1.000)
Measles immunization coverage	TC.10	(0.9574)	(0.0216)	(0.023)	(0.529)	(0.727)	15	47	(0.914)	(1.000)
Primary reliance on clean fuels and technologies for cooking, space heating and lighting	TC.18	0.0000	0.0000	0.000	na	na	1,013	850	0.000	0.000
Exclusive breastfeeding under 6 months	TC.32	(*)	(*)	(*)	(*)	(*)	6	21	(*)	(*)
Stunting prevalence (moderate and severe)	TC.45a	0.3183	0.0328	0.103	1.128	1.062	71	229	0.253	0.384
Wasting prevalence (moderate and severe)	TC.46a	0.0435	0.0106	0.243	0.611	0.782	71	229	0.022	0.065
Overweight prevalence (moderate and severe)	TC.47a	0.0176	0.0087	0.494	0.994	0.997	71	229	0.000	0.035
Early child development index	TC.53	0.9457	0.0183	0.019	0.588	0.767	28	91	0.909	0.982
Learn										
Participation rate in organised learning (adjusted)	LN.2	(0.9583)	(0.0284)	(0.030)	(0.930)	(0.964)	15	47	(0.901)	(1.000)
Protected from violence and exploitation										
Violent discipline	PR.2	0.7804	0.0185	0.024	0.954	0.977	198	479	0.743	0.817
Child labour	PR.3	0.0443	0.0157	0.354	2.371	1.540	191	408	0.013	0.076
Live in a safe and clean environment										
Use of basic drinking water services	WS.2	0.9415	0.0158	0.017	3.825	1.956	1,013	850	0.910	0.973
Use of safely managed drinking water services	WS.6	0.5771	0.0425	0.074	6.223	2.495	159	134	0.492	0.662
Use of improved sanitation facilities	WS.8	0.8467	0.0248	0.029	4.033	2.008	1,013	850	0.797	0.896
Use of basic sanitation services	WS.9	0.8467	0.0248	0.029	4.033	2.008	1,013	850	0.797	0.896
Safe disposal in situ of excreta from on-site sanitation facilities	WS.10	0.0493	0.0170	0.346	3.235	1.799	615	523	0.015	0.083
Equitable chance in life										
Children with functional difficulty	EQ.1	0.0158	0.0070	0.441	1.705	1.306	234	546	0.002	0.030

na: not applicable

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

(*) Figures that are based on fewer than 25 unweighted cases and on fewer than 250 unweighted person-years of exposure to the risk of death for mortality rates

Table SE.5: Sampling errors: North Hamgyong

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected SDG and MICS indicators, DPR Korea, 2017

	MICS 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	Confidence limits: Upper bound r + 2se
Sample coverage and characteristics of the respondents										
Access to electricity	SR.1	1.0000	0.0000	0.000	na	na	3,213	850	1.000	1.000
Ownership of mobile phone (women)	SR.10	0.5278	0.0306	0.058	3.271	1.809	868	870	0.467	0.589
Ownership of mobile phone (men)	SR.10	0.6493	0.0312	0.048	1.812	1.346	427	426	0.587	0.712
Use of intranet (during last three months) (women)	SR.12a	0.0396	0.0084	0.212	1.607	1.268	868	870	0.023	0.056
Use of intranet (during last three months) (men)	SR.12a	0.1639	0.0276	0.169	2.366	1.538	427	426	0.109	0.219
ICT skills (women)	SR.13	0.3523	0.0199	0.056	1.506	1.227	868	870	0.313	0.392
ICT skills (men)	SR.13	0.4341	0.0341	0.079	2.013	1.419	427	426	0.366	0.502
Survive										
Neonatal mortality rate	CS.1	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Infant mortality rate	CS.3	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Under-five mortality rate	CS.5	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Thrive - Reproductive and maternal health										
Total fertility rate	-	1.7979	0.0174	0.132	na	na	na	na	1.534	2.062
Adolescent birth rate	TM.1	0.0000	0.0000	0.000	na	na	na	na	0.000	0.000
Contraceptive prevalence rate	TM.3	0.6658	0.0216	0.032	1.180	1.086	563	566	0.623	0.709
Need for family planning satisfied with modern contraception	TM.4	0.8630	0.0127	0.015	0.589	0.768	430	432	0.838	0.888
Antenatal care coverage (at least four times by any provider)	TM.5b	0.9103	0.0362	0.040	1.379	1.174	87	87	0.838	0.983
Skilled attendant at delivery	TM.9	1.0000	0.0000	0.000	na	na	87	87	1.000	1.000
Thrive - Child health, nutrition and development										
Diphtheria, pertussis and tetanus (DPT) immunization coverage	TC.3	(1.0000)	(0.0000)	(0.000)	na	na	45	45	(1.000)	(1.000)
Measles immunization coverage	TC.10	(1.0000)	(0.0000)	(0.000)	na	na	44	44	(1.000)	(1.000)
Primary reliance on clean fuels and technologies for cooking, space heating and lighting	TC.18	0.0000	0.0000	0.000	na	na	3,213	850	0.000	0.000
Exclusive breastfeeding under 6 months	TC.32	(*)	(*)	(*)	(*)	(*)	11	11	(*)	(*)
Stunting prevalence (moderate and severe)	TC.45a	0.2151	0.0254	0.118	0.844	0.919	221	221	0.164	0.266
Wasting prevalence (moderate and severe)	TC.46a	0.0224	0.0089	0.397	0.794	0.891	221	221	0.005	0.040
Overweight prevalence (moderate and severe)	TC.47a	0.0136	0.0080	0.587	1.044	1.022	221	221	0.000	0.030
Early child development index	TC.53	0.8011	0.0544	0.068	1.656	1.287	90	90	0.692	0.910
Learn										
Participation rate in organised learning (adjusted)	LN.2	(1.0000)	(0.0000)	(0.000)	na	na	48	48	(1.000)	(1.000)
Protected from violence and exploitation										
Violent discipline	PR.2	0.5845	0.0361	0.062	2.616	1.617	620	488	0.512	0.657
Child labour	PR.3	0.0186	0.0086	0.461	1.689	1.300	582	421	0.001	0.036
Live in a safe and clean environment										
Use of basic drinking water services	WS.2	0.9177	0.0155	0.017	2.716	1.648	3,213	850	0.887	0.949
Use of safely managed drinking water services	WS.6	0.7737	0.0458	0.059	2.201	1.484	511	136	0.682	0.865
Use of improved sanitation facilities	WS.8	0.8820	0.0360	0.041	10.582	3.253	3,213	850	0.810	0.954
Use of basic sanitation services	WS.9	0.8533	0.0356	0.042	8.594	2.932	3,213	850	0.782	0.924
Safe disposal in situ of excreta from on-site sanitation facilities	WS.10	0.0385	0.0379	0.985	14.323	3.785	1,383	370	0.000	0.114
Equitable chance in life										
Children with functional difficulty	EQ.1	0.0055	0.0034	0.619	1.174	1.084	716	555	0.000	0.012

na: not applicable

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

(*) Figures that are based on fewer than 25 unweighted cases and on fewer than 250 unweighted person-years of exposure to the risk of death for mortality rates

Table SE.6: Sampling errors: South Hamgyong

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected SDG and MICS indicators, DPR Korea, 2017

	MICS 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	Confidence limits: Upper bound r + 2se
Sample coverage and characteristics of the respondents										
Access to electricity	SR.1	1.0000	0.0000	0.000	na	na	4,290	850	1.000	1.000
Ownership of mobile phone (women)	SR.10	0.4042	0.0280	0.069	2.850	1.688	1,157	878	0.348	0.460
Ownership of mobile phone (men)	SR.10	0.5858	0.0267	0.046	1.262	1.124	573	432	0.533	0.639
Use of intranet (during last three months) (women)	SR.12a	0.0193	0.0051	0.264	1.205	1.098	1,157	878	0.009	0.030
Use of intranet (during last three months) (men)	SR.12a	0.0998	0.0144	0.144	0.995	0.997	573	432	0.071	0.129
ICT skills (women)	SR.13	0.2665	0.0156	0.059	1.094	1.046	1,157	878	0.235	0.298
ICT skills (men)	SR.13	0.4648	0.0213	0.046	0.786	0.886	573	432	0.422	0.507
Survive										
Neonatal mortality rate	CS.1	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Infant mortality rate	CS.3	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Under-five mortality rate	CS.5	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Thrive - Reproductive and maternal health										
Total fertility rate	-	1.8737	0.0150	0.122	na	na	na	na	1.629	2.118
Adolescent birth rate	TM.1	0.0000	0.0000	0.000	na	na	na	na	0.000	0.000
Contraceptive prevalence rate	TM.3	0.6288	0.0268	0.043	1.870	1.368	800	607	0.575	0.682
Need for family planning satisfied with modern contraception	TM.4	0.8550	0.0203	0.024	1.460	1.208	582	442	0.815	0.896
Antenatal care coverage (at least four times by any provider)	TM.5b	0.9358	0.0218	0.023	0.716	0.846	121	92	0.892	0.979
Skilled attendant at delivery	TM.9	1.0000	0.0000	0.000	na	na	121	92	1.000	1.000
Thrive - Child health, nutrition and development										
Diphtheria, pertussis and tetanus (DPT) immunization coverage	TC.3	(1.0000)	(0.0000)	(0.000)	na	na	58	44	(1.000)	(1.000)
Measles immunization coverage	TC.10	(0.9781)	(0.0215)	(0.022)	(0.970)	(0.985)	61	46	(0.935)	(1.000)
Primary reliance on clean fuels and technologies for cooking, space heating and lighting	TC.18	0.0338	0.0337	0.9990	29.601	5.441	4,290	850	0.000	0.101
Exclusive breastfeeding under 6 months	TC.32	(*)	(*)	(*)	(*)	(*)	19	14	(*)	(*)
Stunting prevalence (moderate and severe)	TC.45a	0.1944	0.0266	0.137	0.998	0.999	294	222	0.141	0.248
Wasting prevalence (moderate and severe)	TC.46a	0.0318	0.0130	0.409	1.217	1.103	294	222	0.006	0.058
Overweight prevalence (moderate and severe)	TC.47a	0.0091	0.0064	0.699	0.994	0.997	294	222	0.000	0.022
Early child development index	TC.53	0.9230	0.0288	0.031	1.051	1.025	120	91	0.865	0.981
Learn										
Participation rate in organised learning (adjusted)	LN.2	0.9238	0.0401	0.043	1.187	1.089	70	53	0.844	1.000
Protected from violence and exploitation										
Violent discipline	PR.2	0.7115	0.0275	0.039	1.779	1.334	876	483	0.656	0.767
Child labour	PR.3	0.0913	0.0192	0.210	1.766	1.329	825	400	0.053	0.130
Live in a safe and clean environment										
Use of basic drinking water services	WS.2	0.9515	0.0088	0.009	1.434	1.197	4,290	850	0.934	0.969
Use of safely managed drinking water services	WS.6	0.6643	0.0360	0.054	0.977	0.988	688	136	0.592	0.736
Use of improved sanitation facilities	WS.8	0.8480	0.0141	0.017	1.309	1.144	4,290	850	0.820	0.876
Use of basic sanitation services	WS.9	0.8331	0.0159	0.019	1.543	1.242	4,290	850	0.801	0.865
Safe disposal in situ of excreta from on-site sanitation facilities	WS.10	0.0025	0.0026	1.033	1.082	1.040	2,096	403	0.000	0.008
Equitable chance in life										
Children with functional difficulty	EQ.1	0.0258	0.0067	0.261	0.964	0.982	1,005	536	0.012	0.039

na: not applicable

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

(*) Figures that are based on fewer than 25 unweighted cases and on fewer than 250 unweighted person-years of exposure to the risk of death for mortality rates

Table SE.7: Sampling errors: Kangwon

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected SDG and MICS indicators, DPR Korea, 2017

	MICS 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	Confidence limits: Upper bound r + 2se
Sample coverage and characteristics of the respondents										
Access to electricity	SR.1	1.0000	0.0000	0.000	na	na	2,062	849	1.000	1.000
Ownership of mobile phone (women)	SR.10	0.5369	0.0238	0.044	1.983	1.408	552	874	0.489	0.584
Ownership of mobile phone (men)	SR.10	0.6337	0.0292	0.046	1.561	1.249	269	425	0.575	0.692
Use of intranet (during last three months) (women)	SR.12a	0.0231	0.0051	0.223	1.025	1.012	552	874	0.013	0.033
Use of intranet (during last three months) (men)	SR.12a	0.0407	0.0091	0.225	0.907	0.953	269	425	0.022	0.059
ICT skills (women)	SR.13	0.2513	0.0314	0.125	4.569	2.137	552	874	0.189	0.314
ICT skills (men)	SR.13	0.3738	0.0460	0.123	3.826	1.956	269	425	0.282	0.466
Survive										
Neonatal mortality rate	CS.1	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Infant mortality rate	CS.3	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Under-five mortality rate	CS.5	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Thrive - Reproductive and maternal health										
Total fertility rate	-	1.9334	0.0117	0.108	na	na	na	na	1.717	2.150
Adolescent birth rate	TM.1	0.0000	0.0000	0.000	na	na	na	na	0.000	0.000
Contraceptive prevalence rate	TM.3	0.7729	0.0217	0.028	1.614	1.271	382	604	0.730	0.816
Need for family planning satisfied with modern contraception	TM.4	0.9457	0.0147	0.016	2.079	1.442	312	492	0.916	0.975
Antenatal care coverage (at least four times by any provider)	TM.5b	0.9300	0.0276	0.030	1.145	1.070	63	99	0.875	0.985
Skilled attendant at delivery	TM.9	1.0000	0.0000	0.000	na	na	63	99	1.000	1.000
Thrive - Child health, nutrition and development										
Diphtheria, pertussis and tetanus (DPT) immunization coverage	TC.3	(1.0000)	(0.0000)	(0.000)	na	na	30	47	(1.000)	(1.000)
Measles immunization coverage	TC.10	(0.9787)	(0.0214)	(0.022)	(0.966)	(0.983)	28	45	(0.936)	(1.000)
Primary reliance on clean fuels and technologies for cooking, space heating and lighting	TC.18	0.0000	0.0000	0.000	na	na	2,062	849	0.000	0.000
Exclusive breastfeeding under 6 months	TC.32	(*)	(*)	(*)	(*)	(*)	12	19	(*)	(*)
Stunting prevalence (moderate and severe)	TC.45a	0.2142	0.0337	0.157	1.567	1.252	148	233	0.147	0.282
Wasting prevalence (moderate and severe)	TC.46a	0.0353	0.0114	0.324	0.891	0.944	148	233	0.012	0.058
Overweight prevalence (moderate and severe)	TC.47a	0.0086	0.0062	0.725	1.053	1.026	148	233	0.000	0.021
Early child development index	TC.53	0.9476	0.0201	0.021	0.758	0.871	60	94	0.907	0.988
Learn										
Participation rate in organised learning (adjusted)	LN.2	(0.9279)	(0.0331)	(0.036)	(0.671)	(0.819)	27	42	(0.862)	(0.994)
Protected from violence and exploitation										
Violent discipline	PR.2	0.4159	0.0482	0.116	4.721	2.173	414	494	0.319	0.512
Child labour	PR.3	0.0160	0.0082	0.511	1.798	1.341	390	424	0.000	0.032
Live in a safe and clean environment										
Use of basic drinking water services	WS.2	0.9215	0.0165	0.018	3.198	1.788	2,062	849	0.889	0.955
Use of safely managed drinking water services	WS.6	0.5202	0.0502	0.097	2.301	1.517	328	135	0.420	0.621
Use of improved sanitation facilities	WS.8	0.8237	0.0210	0.025	2.570	1.603	2,062	849	0.782	0.866
Use of basic sanitation services	WS.9	0.7808	0.0321	0.041	5.114	2.261	2,062	849	0.716	0.845
Safe disposal in situ of excreta from on-site sanitation facilities	WS.10	0.0366	0.0314	0.859	11.656	3.414	999	417	0.000	0.099
Equitable chance in life										
Children with functional difficulty	EQ.1	0.0066	0.0024	0.368	0.509	0.713	478	563	0.002	0.012

na: not applicable

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

(*) Figures that are based on fewer than 25 unweighted cases and on fewer than 250 unweighted person-years of exposure to the risk of death for mortality rates

Table SE.8: Sampling errors: Jagang

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected SDG and MICS indicators, DPR Korea, 2017

	MICS 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	Confidence limits: Upper bound r + 2se
Sample coverage and characteristics of the respondents										
Access to electricity	SR.1	1.0000	0.0000	0.000	na	na	1,826	850	1.000	1.000
Ownership of mobile phone (women)	SR.10	0.5550	0.0310	0.056	3.422	1.850	493	882	0.493	0.617
Ownership of mobile phone (men)	SR.10	0.5928	0.0357	0.060	2.172	1.474	231	412	0.521	0.664
Use of intranet (during last three months) (women)	SR.12a	0.0851	0.0242	0.284	6.620	2.573	493	882	0.037	0.133
Use of intranet (during last three months) (men)	SR.12a	0.1189	0.0242	0.203	2.296	1.515	231	412	0.071	0.167
ICT skills (women)	SR.13	0.3488	0.0340	0.098	4.488	2.118	493	882	0.281	0.417
ICT skills (men)	SR.13	0.4533	0.0275	0.061	1.258	1.122	231	412	0.398	0.508
Survive										
Neonatal mortality rate	CS.1	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Infant mortality rate	CS.3	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Under-five mortality rate	CS.5	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Thrive - Reproductive and maternal health										
Total fertility rate	-	1.8811	0.0122	0.110	na	na	na	na	1.661	2.102
Adolescent birth rate	TM.1	0.0000	0.0000	0.000	na	na	na	na	0.000	0.000
Contraceptive prevalence rate	TM.3	0.6254	0.0334	0.053	2.926	1.710	345	617	0.559	0.692
Need for family planning satisfied with modern contraception	TM.4	0.8529	0.0188	0.022	1.248	1.117	248	444	0.815	0.890
Antenatal care coverage (at least four times by any provider)	TM.5b	0.8988	0.0346	0.038	1.288	1.135	55	99	0.830	0.968
Skilled attendant at delivery	TM.9	1.0000	0.0000	0.000	na	na	55	99	1.000	1.000
Thrive - Child health, nutrition and development										
Diphtheria, pertussis and tetanus (DPT) immunization coverage	TC.3	(0.9796)	(0.0011)	(0.001)	(0.003)	(0.055)	27	48	(0.977)	(0.982)
Measles immunization coverage	TC.10	(0.9347)	(0.0351)	(0.038)	(0.887)	(0.942)	25	45	(0.865)	(1.000)
Primary reliance on clean fuels and technologies for cooking, space heating and lighting	TC.18	0.0079	0.0079	0.9963	6.750	2.598	1,826	850	0.000	0.024
Exclusive breastfeeding under 6 months	TC.32	(0.5571)	(0.0877)	(0.157)	(0.810)	(0.900)	15	27	(0.382)	(0.732)
Stunting prevalence (moderate and severe)	TC.45a	0.2296	0.0275	0.120	0.983	0.992	130	231	0.175	0.285
Wasting prevalence (moderate and severe)	TC.46a	0.0213	0.0096	0.448	1.012	1.006	130	232	0.002	0.040
Overweight prevalence (moderate and severe)	TC.47a	0.0300	0.0093	0.309	0.683	0.826	130	232	0.011	0.049
Early child development index	TC.53	0.8493	0.0376	0.044	1.017	1.008	52	93	0.774	0.925
Learn										
Participation rate in organised learning (adjusted)	LN.2	(0.9761)	(0.0240)	(0.025)	(0.987)	(0.993)	23	41	(0.928)	(1.000)
Protected from violence and exploitation										
Violent discipline	PR.2	0.4863	0.0264	0.054	1.377	1.174	358	496	0.434	0.539
Child labour	PR.3	0.0471	0.0117	0.248	1.286	1.134	332	424	0.024	0.070
Live in a safe and clean environment										
Use of basic drinking water services	WS.2	0.9618	0.0088	0.009	1.807	1.344	1,826	850	0.944	0.979
Use of safely managed drinking water services	WS.6	0.6634	0.0485	0.073	2.740	1.655	283	136	0.566	0.760
Use of improved sanitation facilities	WS.8	0.7977	0.0317	0.040	5.298	2.302	1,826	850	0.734	0.861
Use of basic sanitation services	WS.9	0.7916	0.0336	0.042	5.799	2.408	1,826	850	0.724	0.859
Safe disposal in situ of excreta from on-site sanitation facilities	WS.10	0.0288	0.0078	0.270	0.404	0.635	408	188	0.013	0.044
Equitable chance in life										
Children with functional difficulty	EQ.1	0.0162	0.0061	0.376	1.299	1.140	410	562	0.004	0.028

na: not applicable

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

(*) Figures that are based on fewer than 25 unweighted cases and on fewer than 250 unweighted person-years of exposure to the risk of death for mortality rates

Table SE.9: Sampling errors: North Pyongan

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected SDG and MICS indicators, DPR Korea, 2017

	MICS 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	Confidence limits: Upper bound r + 2se
Sample coverage and characteristics of the respondents										
Access to electricity	SR.1	1.0000	0.0000	0.000	na	na	3,799	850	1.000	1.000
Ownership of mobile phone (women)	SR.10	0.4051	0.0329	0.081	3.914	1.978	1,020	873	0.339	0.471
Ownership of mobile phone (men)	SR.10	0.4856	0.0260	0.054	1.126	1.061	489	416	0.434	0.538
Use of intranet (during last three months) (women)	SR.12a	0.0139	0.0031	0.226	0.626	0.791	1,020	873	0.008	0.020
Use of intranet (during last three months) (men)	SR.12a	0.0636	0.0253	0.397	4.451	2.110	489	416	0.013	0.114
ICT skills (women)	SR.13	0.1835	0.0215	0.117	2.697	1.642	1,020	873	0.140	0.227
ICT skills (men)	SR.13	0.2394	0.0272	0.113	1.683	1.297	489	416	0.185	0.294
Survive										
Neonatal mortality rate	CS.1	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Infant mortality rate	CS.3	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Under-five mortality rate	CS.5	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Thrive - Reproductive and maternal health										
Total fertility rate	-	1.9829	0.0266	0.163	na	na	na	na	1.657	2.309
Adolescent birth rate	TM.1	5.5071	14.5034	3.808	na	na	na	na	0.000	13.124
Contraceptive prevalence rate	TM.3	0.6923	0.0267	0.039	2.063	1.436	721	617	0.639	0.746
Need for family planning satisfied with modern contraception	TM.4	0.8922	0.0186	0.021	1.698	1.303	553	473	0.855	0.929
Antenatal care coverage (at least four times by any provider)	TM.5b	0.9573	0.0191	0.020	0.828	0.910	111	94	0.919	0.995
Skilled attendant at delivery	TM.9	1.0000	0.0000	0.000	na	na	111	94	1.000	1.000
Thrive - Child health, nutrition and development										
Diphtheria, pertussis and tetanus (DPT) immunization coverage	TC.3	(0.9779)	(0.0014)	(0.001)	(0.004)	(0.064)	54	46	(0.975)	(0.981)
Measles immunization coverage	TC.10	(0.9781)	(0.0224)	(0.023)	(1.031)	(1.016)	53	45	(0.933)	(1.000)
Primary reliance on clean fuels and technologies for cooking, space heating and lighting	TC.18	0.0290	0.0277	0.9553	23.119	4.808	3,799	850	0.000	0.084
Exclusive breastfeeding under 6 months	TC.32	(*)	(*)	(*)	(*)	(*)	16	13	(*)	(*)
Stunting prevalence (moderate and severe)	TC.45a	0.1957	0.0287	0.147	1.168	1.081	264	224	0.138	0.253
Wasting prevalence (moderate and severe)	TC.46a	0.0134	0.0045	0.332	0.335	0.579	264	224	0.004	0.022
Overweight prevalence (moderate and severe)	TC.47a	0.0259	0.0098	0.379	0.851	0.923	264	224	0.006	0.046
Early child development index	TC.53	0.7801	0.0374	0.048	0.717	0.847	105	89	0.705	0.855
Learn										
Participation rate in organised learning (adjusted)	LN.2	(0.9095)	(0.0409)	(0.045)	(0.876)	(0.936)	52	44	(0.828)	(0.991)
Protected from violence and exploitation										
Violent discipline	PR.2	0.6644	0.0366	0.055	2.876	1.696	734	480	0.591	0.738
Child labour	PR.3	0.1094	0.0294	0.269	3.637	1.907	700	411	0.051	0.168
Live in a safe and clean environment										
Use of basic drinking water services	WS.2	0.9134	0.0296	0.032	9.393	3.065	3,799	850	0.854	0.973
Use of safely managed drinking water services	WS.6	0.6101	0.0273	0.045	0.548	0.740	601	136	0.555	0.665
Use of improved sanitation facilities	WS.8	0.7973	0.0343	0.043	6.176	2.485	3,799	850	0.729	0.866
Use of basic sanitation services	WS.9	0.7939	0.0329	0.041	5.632	2.373	3,799	850	0.728	0.860
Safe disposal in situ of excreta from on-site sanitation facilities	WS.10	0.0195	0.0196	1.009	5.938	2.437	1,285	295	0.000	0.059
Equitable chance in life										
Children with functional difficulty	EQ.1	0.0094	0.0046	0.490	1.243	1.115	859	546	0.000	0.019

na: not applicable

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

(*) Figures that are based on fewer than 25 unweighted cases and on fewer than 250 unweighted person-years of exposure to the risk of death for mortality rates

Table SE.10: Sampling errors: South Pyongan

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected SDG and MICS indicators, DPR Korea, 2017

	MICS 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	Confidence limits: Upper bound r + 2se
Sample coverage and characteristics of the respondents										
Access to electricity	SR.1	1.0000	0.0000	0.000	na	na	5,545	850	1.000	1.000
Ownership of mobile phone (women)	SR.10	0.4828	0.0313	0.065	3.419	1.849	1,507	875	0.420	0.545
Ownership of mobile phone (men)	SR.10	0.4248	0.0316	0.074	1.611	1.269	682	394	0.361	0.488
Use of intranet (during last three months) (women)	SR.12a	0.0284	0.0064	0.223	1.278	1.130	1,507	875	0.016	0.041
Use of intranet (during last three months) (men)	SR.12a	0.0555	0.0089	0.161	0.597	0.772	682	394	0.038	0.073
ICT skills (women)	SR.13	0.3689	0.0356	0.096	4.752	2.180	1,507	875	0.298	0.440
ICT skills (men)	SR.13	0.4148	0.0479	0.116	3.722	1.929	682	394	0.319	0.511
Survive										
Neonatal mortality rate	CS.1	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Infant mortality rate	CS.3	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Under-five mortality rate	CS.5	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Thrive - Reproductive and maternal health										
Total fertility rate	-	1.8645	0.0197	0.141	na	na	na	na	1.583	2.146
Adolescent birth rate	TM.1	0.0000	0.0000	0.000	na	na	na	na	0.000	0.000
Contraceptive prevalence rate	TM.3	0.6671	0.0253	0.038	1.767	1.329	1,060	616	0.617	0.718
Need for family planning satisfied with modern contraception	TM.4	0.8995	0.0172	0.019	1.464	1.210	767	446	0.865	0.934
Antenatal care coverage (at least four times by any provider)	TM.5b	0.9351	0.0274	0.029	1.123	1.060	158	92	0.880	0.990
Skilled attendant at delivery	TM.9	0.9887	0.0111	0.011	1.000	1.000	158	92	0.967	1.000
Thrive - Child health, nutrition and development										
Diphtheria, pertussis and tetanus (DPT) immunization coverage	TC.3	(1.0000)	(0.0000)	(0.000)	na	na	78	45	(1.000)	(1.000)
Measles immunization coverage	TC.10	(1.0000)	(0.0000)	(0.000)	na	na	76	44	(1.000)	(1.000)
Primary reliance on clean fuels and technologies for cooking, space heating and lighting	TC.18	0.0000	0.0000	0.000	na	na	5,545	850	0.000	0.000
Exclusive breastfeeding under 6 months	TC.32	(*)	(*)	(*)	(*)	(*)	24	14	(*)	(*)
Stunting prevalence (moderate and severe)	TC.45a	0.1931	0.0234	0.121	0.777	0.882	386	223	0.146	0.240
Wasting prevalence (moderate and severe)	TC.46a	0.0222	0.0098	0.443	0.991	0.995	386	223	0.003	0.042
Overweight prevalence (moderate and severe)	TC.47a	0.0356	0.0142	0.400	1.307	1.143	386	223	0.007	0.064
Early child development index	TC.53	0.9119	0.0293	0.032	0.954	0.977	156	90	0.853	0.971
Learn										
Participation rate in organised learning (adjusted)	LN.2	(1.0000)	(0.0000)	(0.000)	na	na	81	47	(1.000)	(1.000)
Protected from violence and exploitation										
Violent discipline	PR.2	0.6708	0.0446	0.066	4.370	2.090	1,092	486	0.582	0.760
Child labour	PR.3	0.0114	0.0059	0.515	1.250	1.118	1,025	409	0.000	0.023
Live in a safe and clean environment										
Use of basic drinking water services	WS.2	0.9437	0.0118	0.012	2.208	1.486	5,545	850	0.920	0.967
Use of safely managed drinking water services	WS.6	0.4997	0.0477	0.095	1.371	1.171	896	130	0.404	0.595
Use of improved sanitation facilities	WS.8	0.8100	0.0375	0.046	7.777	2.789	5,545	850	0.735	0.885
Use of basic sanitation services	WS.9	0.7551	0.0446	0.059	9.121	3.020	5,545	850	0.666	0.844
Safe disposal in situ of excreta from on-site sanitation facilities	WS.10	0.0230	0.0084	0.367	0.998	0.999	2,084	316	0.006	0.040
Equitable chance in life										
Children with functional difficulty	EQ.1	0.0052	0.0038	0.716	1.464	1.210	1,257	543	0.000	0.013

na: not applicable

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

(*) Figures that are based on fewer than 25 unweighted cases and on fewer than 250 unweighted person-years of exposure to the risk of death for mortality rates

Table SE.11: Sampling errors: North Hwanghae

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected SDG and MICS indicators, DPR Korea, 2017

	MICS 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	Confidence limits: Upper bound r + 2se
Sample coverage and characteristics of the respondents										
Access to electricity	SR.1	1.0000	0.0000	0.000	na	na	3,294	850	1.000	1.000
Ownership of mobile phone (women)	SR.10	0.3375	0.0241	0.071	2.312	1.520	894	889	0.289	0.386
Ownership of mobile phone (men)	SR.10	0.4735	0.0313	0.066	1.573	1.254	406	402	0.411	0.536
Use of intranet (during last three months) (women)	SR.12a	0.0246	0.0050	0.203	0.919	0.959	894	889	0.015	0.035
Use of intranet (during last three months) (men)	SR.12a	0.0473	0.0080	0.169	0.568	0.754	406	402	0.031	0.063
ICT skills (women)	SR.13	0.1520	0.0183	0.121	2.317	1.522	894	889	0.115	0.189
ICT skills (men)	SR.13	0.2649	0.0166	0.063	0.567	0.753	406	402	0.232	0.298
Survive										
Neonatal mortality rate	CS.1	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Infant mortality rate	CS.3	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Under-five mortality rate	CS.5	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Thrive - Reproductive and maternal health										
Total fertility rate	-	1.9960	0.0140	0.118	na	na	na	na	1.760	2.232
Adolescent birth rate	TM.1	0.0000	0.0000	0.000	na	na	na	na	0.000	0.000
Contraceptive prevalence rate	TM.3	0.6593	0.0209	0.032	1.174	1.083	610	607	0.618	0.701
Need for family planning satisfied with modern contraception	TM.4	0.8781	0.0118	0.013	0.572	0.756	443	441	0.855	0.902
Antenatal care coverage (at least four times by any provider)	TM.5b	0.9300	0.0195	0.021	0.564	0.751	98	98	0.891	0.969
Skilled attendant at delivery	TM.9	0.9802	0.0144	0.015	1.034	1.017	98	98	0.951	1.000
Thrive - Child health, nutrition and development										
Diphtheria, pertussis and tetanus (DPT) immunization coverage	TC.3	(1.0000)	(0.0000)	(0.000)	na	na	47	47	(1.000)	(1.000)
Measles immunization coverage	TC.10	(0.9790)	(0.0201)	(0.021)	(0.908)	(0.953)	47	47	(0.939)	(1.000)
Primary reliance on clean fuels and technologies for cooking, space heating and lighting	TC.18	0.0000	0.0000	0.000	na	na	3,294	850	0.000	0.000
Exclusive breastfeeding under 6 months	TC.32	(*)	(*)	(*)	(*)	(*)	24	24	(*)	(*)
Stunting prevalence (moderate and severe)	TC.45a	0.1918	0.0283	0.147	1.234	1.111	242	240	0.135	0.248
Wasting prevalence (moderate and severe)	TC.46a	0.0291	0.0111	0.383	1.051	1.025	242	240	0.007	0.051
Overweight prevalence (moderate and severe)	TC.47a	0.0041	0.0041	1.006	0.998	0.999	242	240	0.000	0.012
Early child development index	TC.53	0.9074	0.0209	0.023	0.493	0.702	97	96	0.866	0.949
Learn										
Participation rate in organised learning (adjusted)	LN.2	(1.0000)	(0.0000)	(0.000)	na	na	38	38	(1.000)	(1.000)
Protected from violence and exploitation										
Violent discipline	PR.2	0.5483	0.0396	0.072	3.097	1.760	656	489	0.469	0.628
Child labour	PR.3	0.0482	0.0158	0.328	2.279	1.510	628	420	0.017	0.080
Live in a safe and clean environment										
Use of basic drinking water services	WS.2	0.9036	0.0122	0.014	1.454	1.206	3,294	850	0.879	0.928
Use of safely managed drinking water services	WS.6	0.5512	0.0417	0.076	1.291	1.136	513	136	0.468	0.635
Use of improved sanitation facilities	WS.8	0.8495	0.0243	0.029	3.929	1.982	3,294	850	0.801	0.898
Use of basic sanitation services	WS.9	0.8361	0.0252	0.030	3.920	1.980	3,294	850	0.786	0.886
Safe disposal in situ of excreta from on-site sanitation facilities	WS.10	0.0184	0.0117	0.636	3.422	1.850	1,813	453	0.000	0.042
Equitable chance in life										
Children with functional difficulty	EQ.1	0.0131	0.0055	0.422	1.329	1.153	772	563	0.002	0.024

na: not applicable

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

(*) Figures that are based on fewer than 25 unweighted cases and on fewer than 250 unweighted person-years of exposure to the risk of death for mortality rates

Table SE.12: Sampling errors: South Hwanghae

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected SDG and MICS indicators, DPR Korea, 2017

	MICS 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	Confidence limits: Upper bound r + 2se
Sample coverage and characteristics of the respondents										
Access to electricity	SR.1	1.0000	0.0000	0.000	na	na	4,136	850	1.000	1.000
Ownership of mobile phone (women)	SR.10	0.3381	0.0255	0.075	2.576	1.605	875	889	0.287	0.389
Ownership of mobile phone (men)	SR.10	0.4013	0.0354	0.088	2.186	1.478	415	420	0.331	0.472
Use of intranet (during last three months) (women)	SR.12a	0.0111	0.0035	0.316	0.997	0.998	875	889	0.004	0.018
Use of intranet (during last three months) (men)	SR.12a	0.0284	0.0098	0.345	1.460	1.208	415	420	0.009	0.048
ICT skills (women)	SR.13	0.1604	0.0148	0.092	1.435	1.198	875	889	0.131	0.190
ICT skills (men)	SR.13	0.2953	0.0354	0.120	2.520	1.588	415	420	0.225	0.366
Survive										
Neonatal mortality rate	CS.1	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Infant mortality rate	CS.3	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Under-five mortality rate	CS.5	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Thrive - Reproductive and maternal health										
Total fertility rate	-	2.0576	0.0253	0.159	na	na	na	na	1.739	2.376
Adolescent birth rate	TM.1	0.0000	0.0000	0.000	na	na	na	na	0.000	0.000
Contraceptive prevalence rate	TM.3	0.8084	0.0197	0.024	1.541	1.241	606	615	0.769	0.848
Need for family planning satisfied with modern contraception	TM.4	0.9227	0.0131	0.014	1.237	1.112	510	518	0.897	0.949
Antenatal care coverage (at least four times by any provider)	TM.5b	0.8975	0.0258	0.029	0.702	0.838	96	98	0.846	0.949
Skilled attendant at delivery	TM.9	0.9892	0.0107	0.011	1.043	1.021	96	98	0.968	1.000
Thrive - Child health, nutrition and development										
Diphtheria, pertussis and tetanus (DPT) immunization coverage	TC.3	(1.0000)	(0.0000)	(0.000)	na	na	45	46	(1.000)	(1.000)
Measles immunization coverage	TC.10	(1.0000)	(0.0000)	(0.000)	na	na	46	47	(1.000)	(1.000)
Primary reliance on clean fuels and technologies for cooking, space heating and lighting	TC.18	0.0000	0.0000	0.000	na	na	3,278	850	0.000	0.000
Exclusive breastfeeding under 6 months	TC.32	(*)	(*)	(*)	(*)	(*)	16	16	(*)	(*)
Stunting prevalence (moderate and severe)	TC.45a	0.1884	0.0260	0.138	1.060	1.029	237	240	0.136	0.240
Wasting prevalence (moderate and severe)	TC.46a	0.0336	0.0130	0.387	1.245	1.116	237	240	0.008	0.060
Overweight prevalence (moderate and severe)	TC.47a	0.0298	0.0117	0.394	1.141	1.068	237	240	0.006	0.053
Early child development index	TC.53	0.7255	0.0489	0.067	1.131	1.063	94	95	0.628	0.823
Learn										
Participation rate in organised learning (adjusted)	LN.2	(1.0000)	(0.0000)	(0.000)	na	na	42	43	(1.000)	(1.000)
Protected from violence and exploitation										
Violent discipline	PR.2	0.6664	0.0255	0.038	1.490	1.221	682	510	0.615	0.717
Child labour	PR.3	0.1174	0.0173	0.147	1.229	1.109	637	428	0.083	0.152
Live in a safe and clean environment										
Use of basic drinking water services	WS.2	0.9854	0.0051	0.005	1.528	1.236	4,136	850	0.975	0.996
Use of safely managed drinking water services	WS.6	0.4830	0.0529	0.109	1.891	1.375	533	129	0.377	0.589
Use of improved sanitation facilities	WS.8	0.7325	0.0221	0.030	2.124	1.457	3,278	850	0.688	0.777
Use of basic sanitation services	WS.9	0.6933	0.0270	0.039	2.920	1.709	3,278	850	0.639	0.747
Safe disposal in situ of excreta from on-site sanitation facilities	WS.10	0.0336	0.0096	0.285	1.056	1.028	1,478	376	0.014	0.053
Equitable chance in life										
Children with functional difficulty	EQ.1	0.0092	0.0028	0.310	0.504	0.710	777	570	0.003	0.015

na: not applicable

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

(*) Figures that are based on fewer than 25 unweighted cases and on fewer than 250 unweighted person-years of exposure to the risk of death for mortality rates

Table SE.13: Sampling errors: Pyongyang

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected SDG and MICS indicators, DPR Korea, 2017

	MICS 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	Confidence limits: Upper bound r + 2se
Sample coverage and characteristics of the respondents										
Access to electricity	SR.1	1.0000	0.0000	0.000	na	na	4,136	850	1.000	1.000
Ownership of mobile phone (women)	SR.10	0.7729	0.0226	0.029	2.473	1.572	1,123	848	0.728	0.818
Ownership of mobile phone (men)	SR.10	0.8196	0.0214	0.026	1.276	1.130	551	413	0.777	0.862
Use of intranet (during last three months) (women)	SR.12a	0.2181	0.0201	0.092	2.003	1.415	1,123	848	0.178	0.258
Use of intranet (during last three months) (men)	SR.12a	0.3863	0.0467	0.121	3.786	1.946	551	413	0.293	0.480
ICT skills (women)	SR.13	0.5692	0.0213	0.037	1.565	1.251	1,123	848	0.527	0.612
ICT skills (men)	SR.13	0.6961	0.0408	0.059	3.250	1.803	551	413	0.614	0.778
Survive										
Neonatal mortality rate	CS.1	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Infant mortality rate	CS.3	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Under-five mortality rate	CS.5	(*)	(*)	(*)	na	na	na	na	(*)	(*)
Thrive - Reproductive and maternal health										
Total fertility rate	-	1.7931	0.0133	0.116	na	na	na	na	1.562	2.024
Adolescent birth rate	TM.1	0.0000	0.0000	0.000	na	na	na	na	0.000	0.000
Contraceptive prevalence rate	TM.3	0.7977	0.0216	0.027	1.599	1.265	735	556	0.755	0.841
Need for family planning satisfied with modern contraception	TM.4	0.9372	0.0157	0.017	1.947	1.395	614	465	0.906	0.969
Antenatal care coverage (at least four times by any provider)	TM.5b	1.0000	0.0000	0.000	na	na	113	85	1.000	1.000
Skilled attendant at delivery	TM.9	1.0000	0.0000	0.000	na	na	113	85	1.000	1.000
Thrive - Child health, nutrition and development										
Diphtheria, pertussis and tetanus (DPT) immunization coverage	TC.3	(1.0000)	(0.0000)	(0.000)	na	na	58	44	(1.000)	(1.000)
Measles immunization coverage	TC.10	(1.0000)	(0.0000)	(0.000)	na	na	55	41	(1.000)	(1.000)
Primary reliance on clean fuels and technologies for cooking, space heating and lighting	TC.18	0.0549	0.0315	0.574	16.263	4.033	4,136	850	0.000	0.118
Exclusive breastfeeding under 6 months	TC.32	(*)	(*)	(*)	(*)	(*)	27	19	(*)	(*)
Stunting prevalence (moderate and severe)	TC.45a	0.1013	0.0222	0.219	1.115	1.056	278	207	0.057	0.146
Wasting prevalence (moderate and severe)	TC.46a	0.0136	0.0077	0.565	0.906	0.952	278	207	0.000	0.029
Overweight prevalence (moderate and severe)	TC.47a	0.0416	0.0113	0.272	0.662	0.814	278	207	0.019	0.064
Early child development index	TC.53	0.9882	0.0116	0.012	0.941	0.970	112	83	0.965	1.000
Learn										
Participation rate in organised learning (adjusted)	LN.2	(1.0000)	(0.0000)	(0.000)	na	na	55	42	(1.000)	(1.000)
Protected from violence and exploitation										
Violent discipline	PR.2	0.3656	0.0242	0.066	1.134	1.065	818	452	0.317	0.414
Child labour	PR.3	0.0033	0.0024	0.713	0.638	0.799	762	376	0.000	0.008
Live in a safe and clean environment										
Use of basic drinking water services	WS.2	0.9854	0.0051	0.005	1.528	1.236	4,136	850	0.975	0.996
Use of safely managed drinking water services	WS.6	0.7471	0.0356	0.048	1.121	1.059	639	133	0.676	0.818
Use of improved sanitation facilities	WS.8	0.9874	0.0027	0.003	0.487	0.698	4,136	850	0.982	0.993
Use of basic sanitation services	WS.9	0.9681	0.0130	0.013	4.634	2.153	4,136	850	0.942	0.994
Safe disposal in situ of excreta from on-site sanitation facilities	WS.10	0.0000	0.0000	0.000	na	na	644	150	0.000	0.000
Equitable chance in life										
Children with functional difficulty	EQ.1	0.0080	0.0043	0.538	1.172	1.083	929	500	0.000	0.017

na: not applicable

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

(*) Figures that are based on fewer than 25 unweighted cases and on fewer than 250 unweighted person-years of exposure to the risk of death for mortality rates

APPENDIX D. DATA QUALITY

D.1. Age distribution

Table DQ.1.1: Age distribution of household population

Single-year age distribution of household population, by sex, DPR Korea, 2017

	Males		Females			Males		Females	
	Number	Percent	Number	Percent		Number	Percent	Number	Percent
Age					Age				
0	230	1.5	221	1.3	45	300	1.9	297	1.7
1	233	1.5	221	1.3	46	298	1.9	294	1.7
2	228	1.5	220	1.3	47	285	1.8	293	1.7
3	233	1.5	221	1.3	48	308	2.0	308	1.8
4	233	1.5	222	1.3	49	249	1.6	256	1.5
5	229	1.5	227	1.3	50	239	1.5	239	1.4
6	234	1.5	219	1.3	51	232	1.5	233	1.4
7	234	1.5	216	1.3	52	239	1.5	235	1.4
8	234	1.5	225	1.3	53	209	1.4	215	1.3
9	234	1.5	223	1.3	54	178	1.2	193	1.1
10	227	1.5	222	1.3	55	188	1.2	203	1.2
11	230	1.5	227	1.3	56	178	1.2	193	1.1
12	234	1.5	227	1.3	57	207	1.3	221	1.3
13	241	1.6	233	1.4	58	209	1.4	224	1.3
14	257	1.7	244	1.4	59	129	0.8	147	0.9
15	251	1.6	250	1.5	60	137	0.9	153	0.9
16	249	1.6	247	1.5	61	119	0.8	133	0.8
17	189	1.2	218	1.3	62	97	0.6	112	0.7
18	171	1.1	226	1.3	63	80	0.5	87	0.5
19	189	1.2	245	1.4	64	72	0.5	87	0.5
20	147	1.0	251	1.5	65	125	0.8	149	0.9
21	154	1.0	252	1.5	66	112	0.7	150	0.9
22	167	1.1	252	1.5	67	109	0.7	149	0.9
23	187	1.2	269	1.6	68	104	0.7	142	0.8
24	186	1.2	265	1.6	69	97	0.6	139	0.8
25	232	1.5	264	1.5	70	87	0.6	134	0.8
26	242	1.6	268	1.6	71	77	0.5	124	0.7
27	219	1.4	242	1.4	72	77	0.5	122	0.7
28	225	1.5	243	1.4	73	79	0.5	140	0.8
29	230	1.5	246	1.4	74	64	0.4	123	0.7
30	249	1.6	236	1.4	75	55	0.4	111	0.7
31	252	1.6	242	1.4	76	48	0.3	103	0.6
32	238	1.5	227	1.3	77	51	0.3	115	0.7
33	246	1.6	233	1.4	78	37	0.2	89	0.5
34	236	1.5	225	1.3	79	32	0.2	79	0.5
35	233	1.5	224	1.3	80	22	0.1	68	0.4
36	230	1.5	220	1.3	81	15	0.1	59	0.3
37	216	1.4	208	1.2	82	12	0.1	57	0.3
38	192	1.2	188	1.1	83	11	0.1	45	0.3
39	212	1.4	205	1.2	84	6	0.0	34	0.2
40	253	1.6	243	1.4	85+	13	0.1	117	0.7
41	252	1.6	250	1.5					
42	264	1.7	259	1.5	DK/Missing	0	0.0	0	0.0
43	315	2.0	314	1.8					
44	293	1.9	290	1.7	Total	**15,413**	**100.0**	**17,042**	**100.0**

Table DQ.1.2W: Age distribution of eligible and interviewed women

Household population of women age 10-54 years, interviewed women age 15-49 years, and percentage of eligible women who were interviewed, by five-year age groups, DPR Korea, 2017

	Household population of women age 10-54 years	Interviewed women age 15-49 years		Percentage of eligible women interviewed (Completion rate)
	Number	Number	Percent	
Age				
10-14	1,153	na	na	na
15-19	1,186	1,182	13.5	99.7
20-24	1,290	1,290	14.7	100.0
25-29	1,263	1,263	14.4	100.0
30-34	1,163	1,163	13.3	100.0
35-39	1,046	1,046	12.0	100.0
40-44	1,355	1,355	15.5	100.0
45-49	1,448	1,448	16.6	100.0
50-54	1,115	na	na	na
Total (15-49)	8,750	8,747	100.0	100.0
Ratios				
10-14 to 15-19	0.97	na	na	na
50-54 to 45-49	0.77	na	na	na

na: not applicable

Table DQ.1.2M: Age distribution of eligible and interviewed men

Household population of men age 10-54 years, in all households and in households selected for men's interviews, interviewed men age 15-49 years, and percentage of eligible men who were interviewed, by five-year age groups, DPR Korea, 2017

	Household population of men age 10-54 years		Interviewed men age 15-49 years		Percentage of eligible men interviewed (Completion rate)
	In all households	In selected households			
	Number	Number	Number	Percent	
Age					
10-14	1,189	618	na	na	na
15-19	1,048	510	510	12.3	100.0
20-24	841	422	422	10.2	100.0
25-29	1,148	577	576	13.9	99.8
30-34	1,221	666	666	16.0	100.0
35-39	1,082	542	542	13.0	100.0
40-44	1,377	697	697	16.8	100.0
45-49	1,441	743	740	17.8	99.6
50-54	1,097	527	na	na	na
Total (15-49)	8,157	4,157	4,153	100.0	99.9
Ratios					
10-14 to 15-19	1.13	1.21	na	na	na
50-54 to 45-49	0.76	0.71	na	na	na

na: not applicable

Table DQ.1.3: Age distribution of young children in households and under-5 questionnaires

Household population of children age 0-7 years, children age 0-4 years whose mothers/caretakers were interviewed, and percentage of under-5 children whose mothers/caretakers were interviewed, by single years of age, DPR Korea, 2017

	Household population of children 0-7 years	Under-5s with completed interviews		Percentage of eligible under-5s with completed interviews (Completion rate)
	Number	Number	Percent	
Age				
0	451	451	19.9	100.0
1	454	454	20.1	100.0
2	448	448	19.8	100.0
3	454	454	20.1	100.0
4	454	454	20.1	100.0
5	456	na	na	na
6	452	na	na	na
7	450	na	na	na
Total (0-4)	2,262	2,262	100.0	100.0
Ratios				
Ratio of 2 to 1	0.99	na	na	na
Ratio of 5 to 4	1.00	na	na	na

na: not applicable

Table DQ.1.4: Age distribution of children age 3-20 in households and 5-17 questionnaires

Number of households with at least one member age 3-20 years, percent distribution of children selected for interview and number and percent of children age 5-17 years whose mothers/caretakers were interviewed, by single years of age, DPR Korea, 2017

	Number of households with at least one household member age 3-20 years	Percent distribution of children selected for interview[A]	5-17s with completed interviews		Percentage of eligible 5-17s with completed interviews (Completion rate)
			Number	Percent	
Age					
3	453	na	na	na	na
4	457	na	na	na	na
5	457	8.6	351	8.6	100.0
6	448	8.3	341	8.3	100.0
7	450	7.4	304	7.4	100.0
8	456	6.9	283	6.9	100.0
9	456	7.3	300	7.3	100.0
10	452	7.1	291	7.1	100.0
11	460	6.6	270	6.6	100.0
12	464	6.8	278	6.8	100.0
13	476	7.4	305	7.4	100.0
14	498	7.5	307	7.5	100.0
15	503	8.6	352	8.6	100.0
16	499	9.8	402	9.8	100.0
17	404	7.5	309	7.5	100.0
18	398	na	na	na	na
19	431	na	na	na	na
20	401	na	na	na	na
Total (5-17)	6,023	100.0	4,094	100.0	100
Ratios					
Ratio of 4 to 5	1.00	na	na	na	na
Ratio of 6 to 7	1.00	1.12	na	na	na
Ratio of 15 to14	1.01	1.15	na	na	na
Ratio of 18 to 17	0.99	na	na	na	na

na: not applicable

[A] Number of cases are used to calculate the 'Ratio of 6 to 7' and 'Ratio of 15 to14'

D.2. Birth date reporting

Table DQ.2.1: Birth date reporting (household population)

Percent distribution of household population by completeness of date of birth information, DPR Korea, 2017

	Completeness of reporting of date of birth and age						
	Year and month of birth	Year of birth and age	Year of birth only	Age only	Other/DK/Missing	Total	Number of household members
Total	100.0	0.0	0.0	0.0	0.0	100.0	32,455
Area							
Urban	100.0	0.0	0.0	0.0	0.0	100.0	19,779
Rural	100.0	0.0	0.0	0.0	0.0	100.0	12,675
Province							
Ryanggang	100.0	0.0	0.0	0.0	0.0	100.0	1,013
North Hamgyong	100.0	0.0	0.0	0.0	0.0	100.0	3,213
South Hamgyong	100.0	0.0	0.0	0.0	0.0	100.0	4,290
Kangwon	100.0	0.0	0.0	0.0	0.0	100.0	2,062
Jagang	100.0	0.0	0.0	0.0	0.0	100.0	1,826
North Pyongan	100.0	0.0	0.0	0.0	0.0	100.0	3,799
South Pyongan	100.0	0.0	0.0	0.0	0.0	100.0	5,545
North Hwanghae	100.0	0.0	0.0	0.0	0.0	100.0	3,294
South Hwanghae	100.0	0.0	0.0	0.0	0.0	100.0	3,278
Pyongyang	100.0	0.0	0.0	0.0	0.0	100.0	4,136
Age							
0-4	100.0	0.0	0.0	0.0	0.0	100.0	2,262
5-14	100.0	0.0	0.0	0.0	0.0	100.0	4,616
15-24	100.0	0.0	0.0	0.0	0.0	100.0	4,365
25-49	100.0	0.0	0.0	0.0	0.0	100.0	12,543
50-64	100.0	0.0	0.0	0.0	0.0	100.0	5,186
65-84	100.0	0.0	0.0	0.0	0.0	100.0	3,353
85+	100.0	0.0	0.0	0.0	0.0	100.0	130
DK/Missing	na	na	-	na	-	100.0	-

na: not applicable

Table DQ.2.2W: Birth date and age reporting (women)

Percent distribution of women age 15-49 years by completeness of date of birth/age information, DPR Korea, 2017

	Completeness of reporting of date of birth and age					Total	Number of women age 15-49 years
	Year and month of birth	Year of birth and age	Year of birth only	Age only	Other/DK/Missing		
Total	**100.0**	**0.0**	**0.0**	**0.0**	**0.0**	**100.0**	**8,763**
Area							
Urban	100.0	0.0	0.0	0.0	0.0	100.0	5,369
Rural	100.0	0.0	0.0	0.0	0.0	100.0	3,394
Province							
Ryanggang	100.0	0.0	0.0	0.0	0.0	100.0	273
North Hamgyong	100.0	0.0	0.0	0.0	0.0	100.0	868
South Hamgyong	100.0	0.0	0.0	0.0	0.0	100.0	1,157
Kangwon	100.0	0.0	0.0	0.0	0.0	100.0	552
Jagang	100.0	0.0	0.0	0.0	0.0	100.0	493
North Pyongan	100.0	0.0	0.0	0.0	0.0	100.0	1,020
South Pyongan	100.0	0.0	0.0	0.0	0.0	100.0	1,507
North Hwanghae	100.0	0.0	0.0	0.0	0.0	100.0	894
South Hwanghae	100.0	0.0	0.0	0.0	0.0	100.0	875
Pyongyang	100.0	0.0	0.0	0.0	0.0	100.0	1,123
Age							
15-19	100.0	0.0	0.0	0.0	0.0	100.0	1,184
20-24	100.0	0.0	0.0	0.0	0.0	100.0	1,292
25-29	100.0	0.0	0.0	0.0	0.0	100.0	1,265
30-34	100.0	0.0	0.0	0.0	0.0	100.0	1,165
35-39	100.0	0.0	0.0	0.0	0.0	100.0	1,048
40-44	100.0	0.0	0.0	0.0	0.0	100.0	1,357
45-49	100.0	0.0	0.0	0.0	0.0	100.0	1,451

Table DQ.2.2M: Birth date and age reporting (men)

Percent distribution of men age 15-49 years by completeness of date of birth/age information, DPR Korea, 2017

	Completeness of reporting of date of birth and age					Total	Number of men age 15-49 years
	Year and month of birth	Year of birth and age	Year of birth only	Age only	Other/DK/Missing		
Total	**100.0**	**0.0**	**0.0**	**0.0**	**0.0**	**100.0**	**4,179**
Area							
Urban	100.0	0.0	0.0	0.0	0.0	100.0	2,551
Rural	100.0	0.0	0.0	0.0	0.0	100.0	1,628
Province							
Ryanggang	100.0	0.0	0.0	0.0	0.0	100.0	136
North Hamgyong	100.0	0.0	0.0	0.0	0.0	100.0	427
South Hamgyong	100.0	0.0	0.0	0.0	0.0	100.0	573
Kangwon	100.0	0.0	0.0	0.0	0.0	100.0	269
Jagang	100.0	0.0	0.0	0.0	0.0	100.0	231
North Pyongan	100.0	0.0	0.0	0.0	0.0	100.0	489
South Pyongan	100.0	0.0	0.0	0.0	0.0	100.0	682
North Hwanghae	100.0	0.0	0.0	0.0	0.0	100.0	406
South Hwanghae	100.0	0.0	0.0	0.0	0.0	100.0	415
Pyongyang	100.0	0.0	0.0	0.0	0.0	100.0	551
Age							
15-19	100.0	0.0	0.0	0.0	0.0	100.0	513
20-24	100.0	0.0	0.0	0.0	0.0	100.0	425
25-29	100.0	0.0	0.0	0.0	0.0	100.0	579
30-34	100.0	0.0	0.0	0.0	0.0	100.0	670
35-39	100.0	0.0	0.0	0.0	0.0	100.0	546
40-44	100.0	0.0	0.0	0.0	0.0	100.0	701
45-49	100.0	0.0	0.0	0.0	0.0	100.0	745

Table DQ.2.3: Birth date reporting (first and last births)

Percent distribution of first and last births to women age 15-49 years by completeness of date of birth (unimputed), DPR Korea, 2017

	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/Miss-ing	Total	Number of first births	Year and month of birth	Year of birth only	Other/DK/Miss-ing	Total	Number of last births
Total	100.0	0.0	0.0	0.0	100.0	5,977	100.0	0.0	0.0	100.0	3,698
Area											
Urban	100.0	0.0	0.0	0.0	100.0	3,652	100.0	0.0	0.0	100.0	2,127
Rural	100.0	0.0	0.0	0.0	100.0	2,324	99.9	0.1	0.0	100.0	1,571
Province											
Ryanggang	100.0	0.0	0.0	0.0	100.0	182	100.0	0.0	0.0	100.0	115
North Hamgyong	100.0	0.0	0.0	0.0	100.0	577	100.0	0.0	0.0	100.0	359
South Hamgyong	100.0	0.0	0.0	0.0	100.0	792	100.0	0.0	0.0	100.0	478
Kangwon	100.0	0.0	0.0	0.0	100.0	384	100.0	0.0	0.0	100.0	238
Jagang	100.0	0.0	0.0	0.0	100.0	342	100.0	0.0	0.0	100.0	194
North Pyongan	100.0	0.0	0.0	0.0	100.0	704	99.7	0.3	0.0	100.0	414
South Pyongan	100.0	0.0	0.0	0.0	100.0	1,054	100.0	0.0	0.0	100.0	638
North Hwanghae	100.0	0.0	0.0	0.0	100.0	596	100.0	0.0	0.0	100.0	397
South Hwanghae	100.0	0.0	0.0	0.0	100.0	606	100.0	0.0	0.0	100.0	396
Pyongyang	100.0	0.0	0.0	0.0	100.0	740	100.0	0.0	0.0	100.0	467

Table DQ.2.4: Birth date and age reporting (children under age 5 years)

Percent distribution children under 5 by completeness of date of birth/age information, DPR Korea, 2017

	Completeness of reporting of date of birth and age						
	Year and month of birth	Year of birth and age	Year of birth only	Age only	Other/DK/ Missing	Total	Number of under-5 children
Total	100.0	0.0	0.0	0.0	0.0	100.0	2,275
Area							
Urban	100.0	0.0	0.0	0.0	0.0	100.0	1,361
Rural	100.0	0.0	0.0	0.0	0.0	100.0	914
Province							
Ryanggang	100.0	0.0	0.0	0.0	0.0	100.0	71
North Hamgyong	100.0	0.0	0.0	0.0	0.0	100.0	221
South Hamgyong	100.0	0.0	0.0	0.0	0.0	100.0	298
Kangwon	100.0	0.0	0.0	0.0	0.0	100.0	148
Jagang	100.0	0.0	0.0	0.0	0.0	100.0	131
North Pyongan	100.0	0.0	0.0	0.0	0.0	100.0	264
South Pyongan	100.0	0.0	0.0	0.0	0.0	100.0	386
North Hwanghae	100.0	0.0	0.0	0.0	0.0	100.0	242
South Hwanghae	100.0	0.0	0.0	0.0	0.0	100.0	237
Pyongyang	100.0	0.0	0.0	0.0	0.0	100.0	278
Age							
0	100.0	0.0	0.0	0.0	0.0	100.0	454
1	100.0	0.0	0.0	0.0	0.0	100.0	457
2	100.0	0.0	0.0	0.0	0.0	100.0	451
3	100.0	0.0	0.0	0.0	0.0	100.0	457
4	100.0	0.0	0.0	0.0	0.0	100.0	457

Table DQ.2.5: Birth date reporting (children age 5-17 years)

Percent distribution of selected children age 5-17 years by completeness of date of birth information, DPR Korea, 2017

	Completeness of reporting of date of birth and age					Total	Number of selected children age 5-17 years
	Year and month of birth	Year of birth and age	Year of birth only	Age only	Other/DK/ Missing		
Total	100.0	0.0	0.0	0.0	0.0	100.0	4,121
Area							
Urban	100.0	0.0	0.0	0.0	0.0	100.0	2,419
Rural	100.0	0.0	0.0	0.0	0.0	100.0	1,702
Province							
Ryanggang	100.0	0.0	0.0	0.0	0.0	100.0	128
North Hamgyong	100.0	0.0	0.0	0.0	0.0	100.0	408
South Hamgyong	100.0	0.0	0.0	0.0	0.0	100.0	544
Kangwon	100.0	0.0	0.0	0.0	0.0	100.0	267
Jagang	100.0	0.0	0.0	0.0	0.0	100.0	232
North Pyongan	100.0	0.0	0.0	0.0	0.0	100.0	479
South Pyongan	100.0	0.0	0.0	0.0	0.0	100.0	702
North Hwanghae	100.0	0.0	0.0	0.0	0.0	100.0	425
South Hwanghae	100.0	0.0	0.0	0.0	0.0	100.0	428
Pyongyang	100.0	0.0	0.0	0.0	0.0	100.0	508
Age							
5-9	100.0	0.0	0.0	0.0	0.0	100.0	1,585
10-14	100.0	0.0	0.0	0.0	0.0	100.0	1,464
15-17	100.0	0.0	0.0	0.0	0.0	100.0	1,072

D.3. Completeness and measurements

Table DQ.3.1: Completeness of salt iodisation testing

Percent distribution of households by completion of test for salt iodisation, DPR Korea, 2017

	Salt was tested			Salt was not tested, by reason			
	1st test >0 ppm	2nd test >0 ppm	2nd test 0 ppm	No salt in household	Other[A]	Total	Number of households
Total	**37.5**	**6.5**	**56.0**	**0.0**	**0.0**	**100.0**	**8,499**
Area							
Urban	44.4	7.6	48.0	0.0	0.0	100.0	5,252
Rural	26.2	4.9	68.8	0.0	0.0	100.0	3,247
Province							
Ryanggang	26.3	5.1	68.6	0.0	0.0	100.0	262
North Hamgyong	30.5	4.2	65.3	0.0	0.0	100.0	848
South Hamgyong	23.2	13.7	62.9	0.0	0.1	100.0	1,118
Kangwon	41.0	8.8	50.2	0.0	0.0	100.0	535
Jagang	23.9	5.0	70.9	0.1	0.1	100.0	474
North Pyongan	33.7	5.1	61.2	0.0	0.0	100.0	993
South Pyongan	38.9	6.1	55.0	0.0	0.0	100.0	1,461
North Hwanghae	28.9	5.0	66.1	0.0	0.0	100.0	852
South Hwanghae	30.9	5.5	63.6	0.0	0.0	100.0	835
Pyongyang	76.5	5.0	18.5	0.0	0.0	100.0	1,121
Wealth index 20-40-40							
20 percent lowest	18.1	5.4	76.4	0.0	0.0	100.0	1,692
40 percent middle	30.6	6.2	63.2	0.0	0.0	100.0	3,398
40 percent highest	53.9	7.5	38.6	0.0	0.0	100.0	3,409

[A] Includes those tests indicating 0 ppm in first test where a second test was not performed

Table DQ.3.2: Completeness and quality of information of water quality testing

Percentage of households selected and completed household and source water quality testing and percentage of positive blank tests by area, DPR Korea, 2017

	Percentage of households:							
	Selected for Water Quality Testing questionnaire	With completed Water Quality Testing questionnaire	With complete water quality test for:		Total number of households in sample	Percentage of positive blank tests	Number of blank tests completed	Number of households selected for blank test[A]
			Household	Source				
Total	**16.0**	**16.0**	**16.0**	**15.7**	**8,499**	**98.9**	**336**	**340**
Area								
Urban	16.0	16.0	16.0	15.6	5,252	98.8	208	210
Rural	16.0	16.0	16.0	15.9	3,247	99.1	129	130

[A] One blank test (a test of uncontaminated water) was designed to be performed in each cluster. For practical reasons, the blank test was assigned to one of the households selected for water quality testing.

Table DQ.3.3W: Completeness of information on dates of marriage (women)

Percentage of women with missing or incomplete information on date of and age at first marriage, DPR Korea, 2017

	Percent with missing/ incomplete information[A]	Number of women
Ever married (age 15-49 years)		
Date of first marriage missing	0.0	6,249
Only month missing	0.0	6,249
Both month and year missing	0.0	6,249
Age at first marriage missing	0.0	6,249

[A] Includes "Don't know" responses

Table DQ.3.3M: Completeness of information on dates of marriage (men)

Percentage of men with missing or incomplete information on date of and age at first marriage, DPR Korea, 2017

	Percent with missing/ incomplete information[A]	Number of men
Ever married (age 15-49 years)		
Date of first marriage missing	0.1	2,782
Only month missing	0.0	2,782
Both month and year missing	0.1	2,782
Age at first marriage missing	0.0	2,782

[A] Includes "Don't know" responses

Table DQ.3.4: Completeness of information for anthropometric indicators: Underweight

Percent distribution of children under 5 by completeness of information on date of birth and weight, DPR Korea, 2017

		Reason for exclusion from analysis						
	Valid weight and date of birth	Weight not measured	Incomplete date of birth	Weight not measured and incomplete date of birth	Flagged cases (outliers)	Total	Percent of children excluded from analysis	Number of children under 5
Total	99.8	0.2	0.0	0.0	0.0	100.0	0.2	2,275
Age (in months)								
<6	98.4	1.6	0.0	0.0	0.0	100.0	1.6	170
6-11	100.0	0.0	0.0	0.0	0.0	100.0	0.0	285
12-23	100.0	0.0	0.0	0.0	0.0	100.0	0.0	456
24-35	100.0	0.0	0.0	0.0	0.0	100.0	0.0	451
36-47	99.7	0.3	0.0	0.0	0.0	100.0	0.3	454
48-59	100.0	0.0	0.0	0.0	0.0	100.0	0.0	459

Table DQ.3.5: 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, DPR Korea, 2017

		Reason for exclusion from analysis						
	Valid length/ height and date of birth	Length/ Height not measured	Incomplete date of birth	Length/Height not measured, incomplete date of birth	Flagged cases (outliers)	Total	Percent of children excluded from analysis	Number of children under 5
Total	99.8	0.1	0.0	0.0	0.1	100.0	0.2	2,275
Age (in months)								
<6	98.4	1.6	0.0	0.0	0.0	100.0	1.6	170
6-11	100.0	0.0	0.0	0.0	0.0	100.0	0.0	285
12-23	99.9	0.0	0.0	0.0	0.1	100.0	0.1	456
24-35	100.0	0.0	0.0	0.0	0.0	100.0	0.0	451
36-47	99.6	0.0	0.0	0.0	0.4	100.0	0.4	454
48-59	100.0	0.0	0.0	0.0	0.0	100.0	0.0	459

Table DQ.3.6: Completeness of information for anthropometric indicators: Wasting and overweight

Percent distribution of children under 5 by completeness of information on weight and length or height, DPR Korea, 2017

	Valid weight and length/ height	Reason for exclusion from analysis				Total	Percent of children excluded from analysis	Number of children under 5
		Weight not measured	Length/ Height not measured	Weight and length/ height not measured	Flagged cases (outliers)			
Total	99.8	0.0	0.0	0.1	0.1	100.0	0.2	2,275
Age (in months)								
<6	98.4	0.0	0.0	1.6	0.0	100.0	1.6	170
6-11	100.0	0.0	0.0	0.0	0.0	100.0	0.0	285
12-23	100.0	0.0	0.0	0.0	0.0	100.0	0.0	456
24-35	100.0	0.0	0.0	0.0	0.0	100.0	0.0	451
36-47	99.7	0.0	0.0	0.0	0.3	100.0	0.3	454
48-59	99.9	0.0	0.0	0.0	0.1	100.0	0.1	459

Table DQ.3.7: Heaping in anthropometric measurements

Distribution of weight and height/length measurements by decimal digit recorded, DPR Korea, 2017

	Weight		Height or length	
	Number	Percent	Number	Percent
Total	2,271	100.0	2,271	100.0
Digit				
0	178	7.8	235	10.3
1	226	9.9	251	11.1
2	233	10.3	229	10.1
3	235	10.4	235	10.4
4	252	11.1	242	10.6
5	231	10.2	210	9.2
6	244	10.8	219	9.7
7	236	10.4	220	9.7
8	254	11.2	207	9.1
9	183	8.1	223	9.8

Table DQ.3.8: Completeness of information for foundational learning skills indicators

Percent distribution of selected children age 7-14 years by completion of the foundational learning skills (FL) module, those with insufficuent number recognition skils for testing, and percentage children age 7-9 years who did not complete the reading and comprehension practise, DPR Korea, 2017

	Percent distribution of children with:						Number of selected children age 7-14 years	Percentage of children with insufficient number recognition skill for testing	Number of children age 7-14 years with completed FL module	Percentage of children who did complete reading and comprehension practise	Number of children age 7-9 years with completed FL module
	Completed foundational learning skills (FL) module	Incomplete FL modules, by reason:									
		Mother refused	Child refused	Child not available	Other	Total					
Total	**99.8**	**0.1**	**0.0**	**0.1**	**0.0**	**100.0**	**2,354**	**0.0**	**2,350**	**0.8**	**887**
Area											
Urban	99.7	0.2	0.0	0.1	0.0	100.0	1,378	0.0	1,374	0.8	558
Rural	100.0	0.0	0.0	0.0	0.0	100.0	977	0.0	977	0.9	329
Province											
Ryanggang	100.0	0.0	0.0	0.0	0.0	100.0	69	0.0	69	0.0	27
North Hamgyong	99.6	0.4	0.0	0.0	0.0	100.0	236	0.0	235	2.9	97
South Hamgyong	99.6	0.0	0.0	0.4	0.0	100.0	320	0.0	319	0.0	117
Kangwon	100.0	0.0	0.0	0.0	0.0	100.0	149	0.0	149	0.0	54
Jagang	100.0	0.0	0.0	0.0	0.0	100.0	131	0.0	131	2.3	49
North Pyongan	100.0	0.0	0.0	0.0	0.0	100.0	267	0.0	267	1.1	105
South Pyongan	99.6	0.4	0.0	0.0	0.0	100.0	409	0.0	407	0.0	151
North Hwanghae	100.0	0.0	0.0	0.0	0.0	100.0	233	0.0	233	0.0	85
South Hwanghae	100.0	0.0	0.0	0.0	0.0	100.0	251	0.0	251	1.1	87
Pyongyang	100.0	0.0	0.0	0.0	0.0	100.0	287	0.0	287	1.0	116
Age											
7	99.7	0.3	0.0	0.0	0.0	100.0	306	0.0	305	2.0	305
8	99.4	0.6	0.0	0.0	0.0	100.0	283	0.0	282	0.4	282
9	100.0	0.0	0.0	0.0	0.0	100.0	301	0.0	301	0.0	301
10	100.0	0.0	0.0	0.0	0.0	100.0	293	0.0	293	na	na
11	100.0	0.0	0.0	0.0	0.0	100.0	272	0.0	272	na	na
12	99.5	0.0	0.0	0.5	0.0	100.0	281	0.0	280	na	na
13	100.0	0.0	0.0	0.0	0.0	100.0	308	0.0	308	na	na
14	100.0	0.0	0.0	0.0	0.0	100.0	310	0.0	310	na	na

D.4. Observations

Table DQ.4.4: Observation of vaccination records

Percent distribution of children age 0-35 months by presence of vaccination records, and the percentage of vaccination records seen by the interviewers, DPR Korea, 2017

	Child has vaccination records						
	Seen by the interviewer (1)	Not seen by the interviewer (2)	DK/Missing	Vaccination records not available at health facility	Total	Percentage of vaccination records seen by the interviewer (1)/(1+2)*100	Number of children age 0-35 months
Total	99.9	0.0	0.1	0.0	100.0	100.0	1,362
Area							
Urban	99.8	0.0	0.2	0.0	100.0	100.0	819
Rural	99.9	0.0	0.1	0.0	100.0	100.0	543
Province							
Ryanggang	100.0	0.0	0.0	0.0	100.0	100.0	43
North Hamgyong	100.0	0.0	0.0	0.0	100.0	100.0	131
South Hamgyong	99.3	0.0	0.7	0.0	100.0	100.0	178
Kangwon	100.0	0.0	0.0	0.0	100.0	100.0	88
Jagang	99.3	0.0	0.7	0.0	100.0	100.0	79
North Pyongan	100.0	0.0	0.0	0.0	100.0	100.0	158
South Pyongan	100.0	0.0	0.0	0.0	100.0	100.0	230
North Hwanghae	100.0	0.0	0.0	0.0	100.0	100.0	145
South Hwanghae	100.0	0.0	0.0	0.0	100.0	100.0	143
Pyongyang	100.0	0.0	0.0	0.0	100.0	100.0	166
Age (in months)							
0-5	100.0	0.0	0.0	0.0	100.0	100.0	170
6-11	100.0	0.0	0.0	0.0	100.0	100.0	285
12-23	100.0	0.0	0.0	0.0	100.0	100.0	456
24-35	99.6	0.0	0.4	0.0	100.0	100.0	451

D.5. School attendance

Table DQ.5.1: School attendance by single age

Distribution of household population age 3-24 years by educational level and grade attended in the current (or most recent) school year, DPR Korea, 2017

		Currently attending														
			Primary school					Lower secondary school			Upper secondary school					
			Grade					Grade			Grade					
	Not attending school	Early Childhood Education	1	2	3	4	5	1	2	3	1	2	3	Higher than secondary	Total	Number of household members
Age[B]																
3	29.8	70.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	431
4	23.1	76.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	468
5	13.4	86.3	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	457
6	2.6	92.6	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	100.0	450
7	0.5	11.9	82.6	4.8	0.0	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	100.0	472
8	0.2	0.9	11.3	81.0	5.7	0.5	0.0	0.1	0.3	0.0	0.0	0.0	0.0	0.0	100.0	435
9	0.0	0.4	0.9	14.9	76.6	6.3	0.2	0.0	0.1	0.6	0.0	0.0	0.0	0.0	100.0	459
10	0.5	0.0	0.0	0.7	14.2	77.0	7.3	0.3	0.0	0.0	0.0	0.0	0.0	0.0	100.0	435
11	0.0	0.0	0.0	0.1	0.5	10.1	35.8	51.4	1.7	0.2	0.0	0.0	0.0	0.1	100.0	473
12	0.2	0.0	0.0	0.3	0.0	0.3	2.1	13.0	82.1	1.3	0.1	0.6	0.0	0.0	100.0	455
13	0.2	0.0	0.0	0.1	0.3	0.0	0.0	0.9	12.9	83.9	1.6	0.1	0.0	0.0	100.0	465
14	0.2	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.7	12.6	85.4	0.1	0.9	0.0	100.0	494
15	0.2	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.5	1.0	14.3	82.4	1.5	0.0	100.0	509
16	1.3	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.2	0.0	0.3	11.3	83.2	3.4	100.0	493
17	49.9	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.2	0.0	0.1	16.6	33.0	100.0	448
18	65.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	32.4	100.0	385
19	69.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	29.6	100.0	438
20	81.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.4	100.0	406
21	85.9	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.9	100.0	403
22	88.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.1	100.0	389
23	91.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.2	100.0	464
24[A]	92.6	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.3	100.0	422

[A] 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

[B] Age for school is calculated to take into account age eligibility criteria for starting primary school, the appropriate age at the start of primary school refers to the age in the 2017 calendar year

D.6. Birth history

Table DQ.6.1: Sex ratio at birth among children ever born and living

Sex ratio (number of males per 100 females) among children ever born (at birth), children living, and deceased children, by age of women, DPR Korea, 2017

	Children Ever Born			Children Living			Children Deceased			
	Sons	Daughters	Sex ratio at birth	Sons	Daughters	Sex ratio	Sons	Daughters	Sex ratio	Number of women
Total	5,357	5,021	1.07	5,231	4,941	1.06	126	80	1.56	8,763
Age										
15-19	0	0	-	0	0	-	0	0	-	1,184
20-24	97	85	1.14	94	83	1.12	3	2	1.68	1,292
25-29	593	540	1.10	588	534	1.10	5	5	1.01	1,265
30-34	894	881	1.01	874	876	1.00	20	6	3.48	1,165
35-39	963	930	1.04	938	914	1.03	25	16	1.59	1,048
40-44	1,297	1,275	1.02	1,265	1,252	1.01	32	23	1.41	1,357
45-49	1,513	1,310	1.15	1,473	1,282	1.15	40	29	1.38	1,451

Table DQ.6.2: Births by periods preceding the survey

Number of births, sex ratio at birth, and period ratio by periods preceding the survey, according to living, deceased, and total children (imputed), as reported in the birth histories, DPR Korea, 2017

	Number of births			Percent with complete birth date[A]			Sex ratio at birth[B]			Period ratio[C]		
	Living	Deceased	Total	Living	Deceased	Total	Living	Deceased	Total	Living	Deceased	Total
Total	10,172	206	10,378	100.0	100.0	100.0	105.9	156.1	106.7	na	na	na
Years preceding survey												
0	427	7	434	100.0	100.0	100.0	108.0	923.4	110.5	na	na	na
1	469	5	474	100.0	100.0	100.0	102.2	28.3	100.9	107.4	69.1	106.7
2	446	9	455	100.0	100.0	100.0	105.5	171.2	106.5	97.3	141.7	97.9
3	447	8	455	100.0	100.0	100.0	106.1	342.8	108.0	100.0	110.7	100.2
4	449	5	453	100.0	100.0	100.0	99.9	78.6	99.7	101.1	56.6	100.3
5	441	8	449	100.0	100.0	100.0	101.7	200.3	103.0	99.0	129.1	99.5
6	441	8	449	100.0	100.0	100.0	103.4	168.6	104.3	99.6	102.0	99.7
7	444	8	453	99.7	100.0	99.7	111.3	127.2	111.5	100.4	74.4	99.8
8	444	13	458	100.0	100.0	100.0	99.1	153.4	100.4	101.7	159.7	102.8
9	430	9	438	100.0	100.0	100.0	110.3	213.2	111.7	13.9	12.5	13.9
10+	5,735	126	5,860	100.0	100.0	100.0	106.8	149.7	107.6	na	na	na
Five-year periods preceding survey												
0-4	2,238	33	2,271	100.0	100.0	100.0	104.3	165.9	105.0	na	na	na
5-9	2,200	47	2,247	99.9	100.0	99.9	105.0	167.6	106.0	na	na	na
10-14	2,277	55	2,331	100.0	100.0	100.0	101.5	128.9	102.1	na	na	na
15-19	2,103	49	2,152	100.0	100.0	100.0	100.9	215.1	102.6	na	na	na
20+	1,355	22	1,377	100.0	100.0	100.0	127.3	102.7	126.9	na	na	na

na: not applicable

[A] Both month and year of birth given. The inverse of the percent reported is the percent with incomplete and therefore imputed date of birth

[B] $(B_m/B_f) \times 100$, where B_m and B_f are the numbers of male and female births, respectively

[C] $(2 \times B_t/(B_{t-1} + B_{t+1})) \times 100$, where B_t is the number of births in year t preceding the survey

Table DQ.6.3: Reporting of age at death in days

Distribution of reported deaths under one month of age by age at death in days and the percentage of neonatal deaths reported to occur at ages 0–6 days, by 5-year periods preceding the survey (imputed), DPR Korea, 2017

	Number of years preceding the survey				Total for the 20 years preceding the survey
	0–4	5–9	10–14	15–19	
Age at death (in days)					
0	0	1	0	0	1
1	0	1	0	0	1
2	1	1	1	1	4
3	4	4	1	5	14
4	3	0	1	0	4
5	1	1	4	1	7
6	1	2	1	3	8
7	3	5	6	4	18
8	1	2	0	1	4
9	0	0	1	0	1
10	1	3	1	0	4
11	-	-	-	-	-
12	0	0	0	0	0
13	1	0	0	0	1
14	0	1	0	0	1
15	3	0	1	0	4
16	-	-	-	-	-
17	-	-	-	-	-
18	-	-	-	-	-
19	-	-	-	-	-
20	3	0	2	3	7
21	0	0	1	1	2
22	0	0	0	1	1
23	-	-	-	-	-
24	0	0	0	3	3
25	0	0	2	1	3
26	-	-	-	-	-
27	-	-	-	-	-
28	0	1	1	0	2
29	0	0	0	0	0
30	0	0	0	1	1
Total 0–30 days	21	22	25	26	93
Percent early neonatal[A]	50.9	43.1	38.0	40.0	42.7

[A] Deaths during the first 7 days (0-6), divided by deaths during the first month (0-30 days)

Table DQ.6.4: Reporting of age at death in months

Distribution of reported deaths under two years of age by age at death in months and the percentage of infant deaths reported to occur at age under one month, for the 5-year periods of birth preceding the survey (imputed), DPR Korea, 2017

	Number of years preceding the survey				Total for the 20 years preceding the survey
	0–4	5–9	10–14	15–19	
Age at death (in months)					
0[A]	21	22	25	26	93
1	1	1	3	0	5
2	2	1	2	3	7
3	1	2	1	1	6
4	2	0	4	0	6
5	0	0	0	1	1
6	1	3	1	3	8
7	0	1	0	1	3
8	0	0	1	2	2
9	0	1	2	0	3
10	0	0	1	0	1
11	0	1	0	1	2
12	0	1	2	0	2
13	1	0	1	0	2
14	0	1	0	1	2
15	1	4	1	0	7
16	0	0	0	1	1
17	0	0	0	1	1
18	0	1	0	0	1
19	-	-	-	-	-
20	-	-	-	-	-
21	-	-	-	-	-
22	-	-	-	-	-
23	-	-	-	-	-
Total 0–11 months	28	32	39	38	136
Percent neonatal[B]	75.4	69.1	63.8	68.1	68.6

[A] Includes deaths under one month reported in days

[B] Deaths under one month, divided by deaths under one year

APPENDIX E. 2017 DPR KOREA QUESTIONNAIRES

The questionnaires of the 2017 DPR Korea MICS are presented in Appendix E:

- Household Questionnaire
- Water Quality Testing Questionnaire
- Questionnaire for Individual Women
- Questionnaire for Individual Men
- Questionnaire for Children Under Five
- Questionnaire Form for Vaccination Records at Health Facility
- Questionnaire for Children Age 5-17

MICS

HOUSEHOLD QUESTIONNAIRE

2017 DPRK Multiple Indicator Cluster Survey

HOUSEHOLD INFORMATION PANEL			HH
HH1. *Cluster number:* ___ ___ ___		**HH2**. *Household number:* ___ ___	
HH3. *Interviewer's name and number:* NAME _____ ___ ___ ___		**HH4**. *Supervisor's name and number:* NAME _____ ___ ___ ___	
HH5. *Day / Month / Year of interview:* ___ ___ / ___ ___ / 2 0 1 ___		**HH7**. *Province:* RYANGGANG..... 01 NORTH HAMGYONG ..... 02 SOUTH HAMGYONG..... 03 KANGWON..... 04 JAGANG..... 05 NORTH PHYONGAN..... 06 SOUTH PHYONGAN ..... 07 NORTH HWANGHAE..... 08 SOUTH HWANGHAE..... 09 PYONGYANG..... 10	
HH6. *Area:*	URBAN..... 1 RURAL 2		
HH8. *Is the household selected for Questionnaire for Men?*	YES ..... 1 NO..... 2		
HH9. *Is the household selected for Water Quality Testing?*	YES ..... 1 NO..... 2	**HH10**. *Is the household selected for blank testing?*	YES.....1 NO.....2

Before starting interview, check whether the respondent is knowledgeable person to answer the question and age at least 18. Only when there are no adult member or no eligible household members, you can interview a child age 15-17. You may not interview a child under age 15.	**HH11**. *Record the time.* HOURS : MINUTES __ __ : __ __

HH12. Hello, my name is (***name of the interviewer***). We are from the Central Bureau of Statistics and we are conducting a survey to collect information about the situation of children, families and households and I would like to talk to you about these things. This interview usually takes about ***20*** minutes. After completing the questionnaire, I may ask to conduct additional interviews with you or other household members. All the information we collect will remain strictly confidential and anonymous. If you do not wish to answer a question or stop the interview, please let me know. Can I start now?

YES, PERMISSION IS GIVEN.....1 NO / NOT ASKED.....2	1 ⇨*LIST OF HOUSEHOLD MEMBERS* 2 ⇨*HH46*

HH46. *Result of Household Questionnaire interview:* *Discuss any result not completed with Supervisor.*	COMPLETED..... 01 NO HOUSEHOLD MEMBER AT HOME OR NO COMPETENT RESPONDENT AT HOME AT TIME OF VISIT..... 02 ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME ..... 03 REFUSED..... 04 DWELLING VACANT OR ADDRESS NOT A DWELLING ..... 05 DWELLING DESTROYED ..... 06 DWELLING NOT FOUND..... 07 OTHER (*specify*) _____ 96

HH47. *Name and line number of the respondent for Household Questionnaire interview:* NAME _____ ___ ___	*Record after completing Household Questionnaire* TOTAL NUMBER		*Record after all the questionnaires are completed* COMPLETED NUMBER	
NUMBER OF HOUSEHOLD MEMBERS	**HH48**	__ __		
NUMBER OF WOMEN AGE 15-49	**HH49**	__ __	**HH53**	__ __
If household is selected for Questionnaire for Men: NUMBER MEN AGE 15-49	**HH50**	__ __	**HH54**	__ __
NUMBER HILDREN UNDER AGE 5	**HH51**	__ __	**HH55**	__ __
NUMBER CHILDREN AGE 5-17	**HH52**	__ __	**HH56**	ZERO ..... 0 ONE 1

LIST OF HOUSEHOLD MEMBERS — HL

First complete HL2 for all members of the household. Then go to the next column and complete HL3 and HL4 vertically. Once HL2-HL4 have been completed for all household members, make sure to probe for additional members: Those that are not currently at home, such as any infants or small children and any others who may not be family but who usually live in the household.

Then, ask questions HL5-HL20 for each member one at a time. If additional questionnaires are used, indicate by ticking this box: ..... ☐

HL1. *Line number*	**HL2**. Please tell me the name of each person who usually lives here, starting with the head of the household. *Probe for additional household members.*	**HL3**. What is the relationship of (***name***) to the (***name of head of household***)?	**HL4**. Is (***name***) male or female? 1 MALE 2 FEMALE	**HL5**. What is (***name***)'s date of birth? 98 DK 9998 DK		**HL6**. How old is (***name***)? *Record in completed years. If age is 95 or above, record '95'.* **0**	**HL7**. Did (***name***) stay here last night? 1 YES 2 NO **0**	**HL8**. *Record line number if the respondent is women and age 15-49.*	**HL9**. *Record line number if the respondent is man and age 15-49 and HH8 is yes.*	**HL10**. *Record line number if age 0-4.*	**HL11**. *Age 0-17?* 1 YES 2 NO ✩ *Next Line* **0**	**HL12**. Is (***name***)'s biological mother alive? 1 YES 2 NO ✩ *HL16* 8 DK ✩ *HL16* **0**	**HL13**. Does (***name***)'s biological mother live in this household? 1 YES 2 NO ✩ *HL15* **0**	**HL14**. *Record the line number of biological mother and go to HL16.*	**HL15**. Where does (***name***)'s biological mother live? 1 ABROAD 2 IN ANOTHER HOUSEHOLD IN THE SAME PROVINCE 3 IN ANOTHER HOUSEHOLD IN ANOTHER PROVINCE 4 INSTITUTION IN THIS COUNTRY 8 DK **0**	**HL16**. Is (***name***)'s biological father alive? 1 YES 2 NO ✩ *HL20* 8 DK ✩ *HL20*	**HL17**. Does (***name***)'s biological father live in this household? 1 YES 2 NO ✩ *HL19* **0**	**HL18**. *Record the line number of biological father and go to HL20.*	**HL19**. Where does (***name***)'s biological father live? 1 ABROAD 2 IN ANOTHER HOUSEHOLD IN THE SAME PROVINCE 3 IN ANOTHER HOUSEHOLD IN ANOTHER PROVINCE 4 INSTITUTION IN THIS COUNTRY 8 DK **0**	**HL20**. *Copy the line number of mother from HL14. If blank, ask:* Who is the primary caretaker of (***name***)? *If 'No one' for a child age 15-17, record '90'.*
LINE	NAME	RELATION*	M F	MONTH	YEAR	AGE	Y N	W 15-49	M 15-49	0-4	Y N	Y N DK	Y N	MOTHER		Y N DK	Y N	FATHER		
01		0 1	1 2	__ __	__ __ __ __	__ __	1 2	01	01	01	1 2	1 2 8	1 2	__ __	1 2 3 4 8	1 2 8	1 2	__ __	1 2 3 4 8	___ ___
02		__ __	1 2	__ __	__ __ __ __	__ __	1 2	02	02	02	1 2	1 2 8	1 2	__ __	1 2 3 4 8	1 2 8	1 2	__ __	1 2 3 4 8	___ ___
03		__ __	1 2	__ __	__ __ __ __	__ __	1 2	03	03	03	1 2	1 2 8	1 2	__ __	1 2 3 4 8	1 2 8	1 2	__ __	1 2 3 4 8	___ ___
04		__ __	1 2	__ __	__ __ __ __	__ __	1 2	04	04	04	1 2	1 2 8	1 2	__ __	1 2 3 4 8	1 2 8	1 2	__ __	1 2 3 4 8	___ ___
05		__ __	1 2	__ __	__ __ __ __	__ __	1 2	05	05	05	1 2	1 2 8	1 2	__ __	1 2 3 4 8	1 2 8	1 2	__ __	1 2 3 4 8	___ ___
06		__ __	1 2	__ __	__ __ __ __	__ __	1 2	06	06	06	1 2	1 2 8	1 2	__ __	1 2 3 4 8	1 2 8	1 2	__ __	1 2 3 4 8	___ ___
07		__ __	1 2	__ __	__ __ __ __	__ __	1 2	07	07	07	1 2	1 2 8	1 2	__ __	1 2 3 4 8	1 2 8	1 2	__ __	1 2 3 4 8	___ ___
08		__ __	1 2	__ __	__ __ __ __	__ __	1 2	08	08	08	1 2	1 2 8	1 2	__ __	1 2 3 4 8	1 2 8	1 2	__ __	1 2 3 4 8	___ ___
09		__ __	1 2	__ __	__ __ __ __	__ __	1 2	09	09	09	1 2	1 2 8	1 2	__ __	1 2 3 4 8	1 2 8	1 2	__ __	1 2 3 4 8	___ ___
10		__ __	1 2	__ __	__ __ __ __	__ __	1 2	10	10	10	1 2	1 2 8	1 2	__ __	1 2 3 4 8	1 2 8	1 2	__ __	1 2 3 4 8	___ ___
11		__ __	1 2	__ __	__ __ __ __	__ __	1 2	11	11	11	1 2	1 2 8	1 2	__ __	1 2 3 4 8	1 2 8	1 2	__ __	1 2 3 4 8	___ ___
12		__ __	1 2	__ __	__ __ __ __	__ __	1 2	12	12	12	1 2	1 2 8	1 2	__ __	1 2 3 4 8	1 2 8	1 2	__ __	1 2 3 4 8	___ ___
13		__ __	1 2	__ __	__ __ __ __	__ __	1 2	13	13	13	1 2	1 2 8	1 2	__ __	1 2 3 4 8	1 2 8	1 2	__ __	1 2 3 4 8	___ ___
14		__ __	1 2	__ __	__ __ __ __	__ __	1 2	14	14	14	1 2	1 2 8	1 2	__ __	1 2 3 4 8	1 2 8	1 2	__ __	1 2 3 4 8	___ ___
15		__ __	1 2	__ __	__ __ __ __	__ __	1 2	15	15	15	1 2	1 2 8	1 2	__ __	1 2 3 4 8	1 2 8	1 2	__ __	1 2 3 4 8	___ ___

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

01 HEAD
02 SPOUSE / PARTNER
03 SON / DAUGHTER
04 SON-IN-LAW / DAUGHTER-IN-LAW
05 GRANDCHILD
06 PARENT
07 PARENT-IN-LAW
08 BROTHER / SISTER
09 BROTHER-IN-LAW / SISTER-IN-LAW
10 UNCLE/AUNT
11 NIECE / NEPHEW
12 OTHER RELATIVE
13 ADOPTED / FOSTER / STEPCHILD
96 OTHER (NOT RELATED)
98 DK

EDUCATION 1 **ED**

ED1. *Line number*	**ED2**. *Name and age.* *Copy names and ages of all members of the household from HL2 and HL6 to below and to next page of the module.*		**ED3**. *Age 3 or above?* 1 YES 2 NO ✩ *Next Line*		**ED4**. Has (***name***) ever attended school, nursery or kindergarten? 1 YES 2 NO ✩ *Next Line*		**ED5**. What is the highest level and grade of school (***name***) has ever attended? LEVEL: 0 NURSERY OR KINDERGARTEN ✩ *ED7* 1 PRIMARY 2 LOWER SECONDARY 3 UPPER SECONDARY 4 HIGHER 8 DK						GRADE: 98 DK ✩ *ED7*	**ED6**. Did (***name***) ever complete that grade? 1 YES 2 NO 8 DK			**ED7**. *Age 3-24?* 1 YES 2 NO ✩ *Next Line*		**ED8**. *Check ED4: Ever attended school, nursery or kindergarten?* 1 YES 2 NO ✩ *Next Line*	
LINE	NAME	AGE	YES	NO	YES	NO	LEVEL						GRADE/YEAR	Y	N	DK	YES	NO	YES	NO
01		___ ___	1	2	1	2	0	1	2	3	4	8	___ ___	1	2	8	1	2	1	2
02		___ ___	1	2	1	2	0	1	2	3	4	8	___ ___	1	2	8	1	2	1	2
03		___ ___	1	2	1	2	0	1	2	3	4	8	___ ___	1	2	8	1	2	1	2
04		___ ___	1	2	1	2	0	1	2	3	4	8	___ ___	1	2	8	1	2	1	2
05		___ ___	1	2	1	2	0	1	2	3	4	8	___ ___	1	2	8	1	2	1	2
06		___ ___	1	2	1	2	0	1	2	3	4	8	___ ___	1	2	8	1	2	1	2
07		___ ___	1	2	1	2	0	1	2	3	4	8	___ ___	1	2	8	1	2	1	2
08		___ ___	1	2	1	2	0	1	2	3	4	8	___ ___	1	2	8	1	2	1	2
09		___ ___	1	2	1	2	0	1	2	3	4	8	___ ___	1	2	8	1	2	1	2
10		___ ___	1	2	1	2	0	1	2	3	4	8	___ ___	1	2	8	1	2	1	2
11		___ ___	1	2	1	2	0	1	2	3	4	8	___ ___	1	2	8	1	2	1	2
12		___ ___	1	2	1	2	0	1	2	3	4	8	___ ___	1	2	8	1	2	1	2
13		___ ___	1	2	1	2	0	1	2	3	4	8	___ ___	1	2	8	1	2	1	2
14		___ ___	1	2	1	2	0	1	2	3	4	8	___ ___	1	2	8	1	2	1	2
15		___ ___	1	2	1	2	0	1	2	3	4	8	___ ___	1	2	8	1	2	1	2

ED1. *Line number*	**ED2**. *Name and age.*		**ED9**. At any time during the 2017-2018 school year did (***name***) attend school, nursery or kindergarten? 1 YES 2 NO ✩ *ED15*		**ED10**. During this 2017-2018 school year, which level and grade is (***name***) attending? LEVEL: 0 NURSERY OR KINDERGARTEN ✩ *ED15* 1 PRIMARY 2 LOWER SEC. 3 UPPER SEC. 4 HIGHER 8 DK						GRADE: 98 DK	**ED15**. At any time during the 2016-2017 school year did (***name***) attend school, nursery or kindergarten? 1 YES 2 NO ✩ *Next Line* 8 DK ✩ *Next Line*			**ED16**. During that 2016-2017 school year, which level and grade did (***name***) attend? LEVEL: 0 NURSERY OR KINDERGARTEN ✩ *Next Line* 1 PRIMARY 2 LOWER SEC. 3 UPPER SEC. 4 HIGHER 8 DK						GRADE: 98 DK
LINE	NAME	AGE	YES	NO	LEVEL						GRADE/YEAR	YES	NO	DK	LEVEL						GRADE/YEAR
01		___ ___	1	2	0	1	2	3	4	8	___ ___	1	2	8	0	1	2	3	4	8	___ ___
02		___ ___	1	2	0	1	2	3	4	8	___ ___	1	2	8	0	1	2	3	4	8	___ ___
03		___ ___	1	2	0	1	2	3	4	8	___ ___	1	2	8	0	1	2	3	4	8	___ ___
04		___ ___	1	2	0	1	2	3	4	8	___ ___	1	2	8	0	1	2	3	4	8	___ ___
05		___ ___	1	2	0	1	2	3	4	8	___ ___	1	2	8	0	1	2	3	4	8	___ ___
06		___ ___	1	2	0	1	2	3	4	8	___ ___	1	2	8	0	1	2	3	4	8	___ ___
07		___ ___	1	2	0	1	2	3	4	8	___ ___	1	2	8	0	1	2	3	4	8	___ ___
08		___ ___	1	2	0	1	2	3	4	8	___ ___	1	2	8	0	1	2	3	4	8	___ ___
09		___ ___	1	2	0	1	2	3	4	8	___ ___	1	2	8	0	1	2	3	4	8	___ ___
10		___ ___	1	2	0	1	2	3	4	8	___ ___	1	2	8	0	1	2	3	4	8	___ ___
11		___ ___	1	2	0	1	2	3	4	8	___ ___	1	2	8	0	1	2	3	4	8	___ ___
12		___ ___	1	2	0	1	2	3	4	8	___ ___	1	2	8	0	1	2	3	4	8	___ ___
13		___ ___	1	2	0	1	2	3	4	8	___ ___	1	2	8	0	1	2	3	4	8	___ ___
14		___ ___	1	2	0	1	2	3	4	8	___ ___	1	2	8	0	1	2	3	4	8	___ ___
15		___ ___	1	2	0	1	2	3	4	8	___ ___	1	2	8	0	1	2	3	4	8	___ ___

HOUSEHOLD CHARACTERISTICS		HC
HC3. How many rooms do members of this household usually use for sleeping?	NUMBER OF ROOMS.....__ __	
HC4. *Main material of the dwelling floor.* *Record observation.* *If observation is not possible, ask the respondent to determine the material of the dwelling floor.*	**NATURAL FLOOR** EARTH / SAND ..... 11 DUNG ..... 12 **RUDIMENTARY FLOOR** WOOD PLANKS..... 21 **FINISHED FLOOR** PARQUET OR POLISHED WOOD..... 31 VINYL ..... 32 CERAMIC TILES..... 33 CEMENT..... 34 CARPET..... 35 FLOOR PAINTED PAPER..... 36 OTHER (*specify*) _____ 96	
HC5. *Main material of the roof.* *Record observation.*	**NATURAL ROOFING** NO ROOF..... 11 THATCH..... 12 SOD..... 13 **RUDIMENTARY ROOFING** RUSTIC MAT ..... 21 WOOD PLANKS..... 23 CARDBOARD ..... 24 **FINISHED ROOFING** METAL / TIN..... 31 WOOD ..... 32 CALAMINE / CEMENT FIBRE..... 33 CERAMIC TILES..... 34 CEMENT / CEMENT TILES..... 35 ROOFING SHINGLES..... 36 CLAY TILES..... 37 STONE TILES..... 38 OTHER (*specify*) _____ 96	

HC6. *Main material of the exterior walls.* *Record observation.*	**NATURAL WALLS** NO WALLS ..... 11 CANE ..... 12 DIRT ..... 13 **RUDIMENTARY WALLS** WOODEN PLANKS WITH MUD ..... 21 STONE WITH MUD ..... 22 UNCOVERED ADOBE ..... 23 PLYWOOD ..... 24 CARDBOARD ..... 25 REUSED WOOD ..... 26 **FINISHED WALLS** CEMENT ..... 31 STONE WITH LIME / CEMENT ..... 32 BRICKS ..... 33 CEMENT BLOCKS ..... 34 COVERED ADOBE ..... 35 WOOD PLANKS / SHINGLES ..... 36 CERAMIC TILES ..... 37 OTHER (*specify*) _____ 96	
HC7. Does your household have the following items:	YES NO	
[A] A fixed telephone line?	FIXED TELEPHONE LINE 1 2	
[B] A radio?	RADIO 1 2	
[C] Bedclothes chest?	BEDCLOTHES CHEST 1 2	
[D] Wardrobe?	WARDROBE 1 2	
[E] Kitchen cupboard?	KITCHEN CUPBOARD 1 2	
HC8. Does your household have electricity?	YES, INTERCONNECTED GRID ..... 1 YES, OFF-GRID (GENERATOR/ISOLATED SYSTEM) ..... 2 NO 3	 3 ⇨*HC10*
HC9. Does your household have the following items:	YES NO	
[A] A television?	TELEVISION 1 2	
[B] A refrigerator?	REFRIGERATOR 1 2	
[C] A freezer?	FREEZER 1 2	
[D] An electric rice cooker?	ELECTRIC RICE COOKER 1 2	
[E] Washing machine?	WASHING MASHINE 1 2	
[F] CD player?	CD PLAYER 1 2	

HC10. Does any member of your household own the following items: [A] A watch? [B] A bicycle? [C] A motorcycle or scooter? [D] An animal-drawn cart?	YES NO WATCH ..... 1 2 BICYCLE ..... 1 2 MOTORCYCLE / SCOOTER ..... 1 2 ANIMAL-DRAWN CART 1 2	
HC11. Does any member of your household have a computer or a tablet?	YES ..... 1 NO 2	
HC12. Does any member of your household have a mobile telephone?	YES ..... 1 NO 2	
HC13A. Does your household have access to intranet at home?	YES ..... 1 NO 2	
HC15. Does this household have any land that can be used for agriculture?	YES ..... 1 NO 2	2 ⇨*HC17*
HC16. How many pyongs of agricultural land this household have? *If less than 1, record '00'.*	PYONGS ..... ___ ___ 95 OR MORE ..... 95 DK 98	
HC17. Does this household own any livestock or poultry?	YES ..... 1 NO 2	2 ⇨*End*
HC18. How many of the following animals does this household have? [A] Milk cows or bulls? [D] Goats? [E] Sheeps? [F] Chickens? [G] Pigs? [H] Ducks or gooses? [I] Rabbits? *If none, record '00'. If 95 or more, record '95'. If unknown, record '98'.*	MILK COWS OR BULLS ..... ___ ___ GOATS ..... ___ ___ SHEEP ..... ___ ___ CHICKENS ..... ___ ___ PIGS ..... ___ ___ DUCKS OR GOOSES ..... ___ ___ RABBITS ..... ___ ___	

HOUSEHOLD ENERGY USE		EU
EU1. In your household, what type of cookstove is mainly used for cooking?	ELECTRIC STOVE ....01 LIQUEFIED PETROLEUM GAS (LPG)/ COOKING GAS STOVE ....03 BIOGAS STOVE ....05 LIQUID FUEL STOVE....06 MANUFACTURED SOLID FUEL STOVE....07 TRADITIONAL SOLID FUEL STOVE....08 OTHER (*specify*) _____ 96 NO FOOD COOKED IN HOUSEHOLD 97	01 ⇨*EU5* 03 ⇨*EU5* 05 ⇨*EU5* 06 ⇨*EU4* 96 ⇨*EU4* 97 ⇨*EU6*
EU2. Does it have a chimney?	YES .... 1 NO .... 2 DK 8	
EU3. Does it have a fan?	YES .... 1 NO .... 2 DK 8	
EU4. What type of fuel or energy source is used in this cookstove? *If more than one, record the main energy source for this cookstove.*	GASOLINE / DIESEL ....02 KEROSENE / PARAFFIN ....03 COAL / LIGNITE ....04 CHARCOAL ....05 WOOD ....06 CROP RESIDUE / GRASS / STRAW / SHRUBS....07 ANIMAL DUNG / WASTE ....08 PROCESSED BIOMASS (PELLETS) OR WOODCHIPS ....09 GARBAGE / PLASTIC....10 SAWDUST ....11 OTHER (*specify*) _____ 96	
EU5. Is the cooking usually done in the house, in a separate building, or outdoors? *If in main house, probe to determine if cooking is done in a separate room.* *If outdoors, probe to determine if cooking is done on veranda, covered porch, or open air.*	IN MAIN HOUSE NO SEPARATE ROOM .... 1 IN A SEPARATE ROOM .... 2 IN A SEPARATE BUILDING .... 3 OUTDOORS OPEN AIR .... 4 ON VERANDA OR COVERED PORCH .... 5 OTHER (*specify*) _____ 6	

EU6. What does your household mainly use for space heating when needed?	CENTRAL HEATING .....01 MANUFACTURED SPACE HEATER .....02 TRADITIONAL SPACE HEATER .....03 MANUFACTURED COOKSTOVE.....04 TRADITIONAL COOKSTOVE.....05 OTHER (*specify*) _____ 96 NO SPACE HEATING IN HOUSEHOLD 97	01 ⇨*EU8* 96 ⇨*EU8* 97 ⇨*EU9*
EU7. Does it have a chimney?	YES ..... 1 NO..... 2 DK..... 8	
EU8. What type of fuel and energy source is used in this heater? *If more than one, record the main energy source for this heater.*	ELECTRICITY .....02 LIQUEFIED PETROLEUM GAS (LPG)/ COOKING GAS.....04 BIOGAS .....05 GASOLINE / DIESEL .....07 KEROSENE / PARAFFIN .....08 COAL / LIGNITE.....09 CHARCOAL .....10 WOOD .....11 CROP RESIDUE / GRASS / STRAW / SHRUBS.....12 PROCESSED BIOMASS (PELLETS) OR WOODCHIPS .....14 GARBAGE / PLASTIC.....15 SAWDUST .....16 OTHER (*specify*) _____ 96 DK.....98	
EU9. At night, what does your household mainly use to light the household?	ELECTRICITY .....01 SOLAR LANTERN .....02 RECHARGEABLE FLASHLIGHT, TORCH OR LANTERN.....03 BATTERY POWERED FLASHLIGHT, TORCH OR LANTERN.....04 BIOGAS LAMP.....05 GASOLINE LAMP.....06 KEROSENE OR PARAFFIN LAMP.....07 WOOD .....09 CROP RESIDUE / GRASS / STRAW / SHRUBS.....10 OIL LAMP .....12 CANDLE.....13 OTHER (*specify*) _____ 96 NO LIGHTING IN HOUSEHOLD.....97	

WATER AND SANITATION		WS
WS1. What is the main source of drinking water used by members of your household? *If not clear, probe to identify the place from which members of this household most often collect drinking water (water collection point).*	**PIPED WATER** PIPED INTO DWELLING ..... 11 PIPED TO YARD / PLOT ..... 12 PIPED TO NEIGHBOUR ..... 13 PUBLIC TAP / STANDPIPE ..... 14 TUBE WELL / BOREHOLE ..... 21 **DUG WELL** PROTECTED WELL ..... 31 UNPROTECTED WELL ..... 32 **SPRING** PROTECTED SPRING ..... 41 UNPROTECTED SPRING ..... 42 RAINWATER ..... 51 TANKER-TRUCK ..... 61 CART WITH SMALL TANK ..... 71 WATER KIOSK (WATER DISTRIBUTION CENTER/POINT) ..... 72 SURFACE WATER (RIVER, DAM, LAKE, POND, STREAM, CANAL, IRRIGATION CHANNEL) ..... 81 **PACKAGED WATER** BOTTLED WATER ..... 91 OTHER (*specify*) _____ 96	11 ⇨*WS7* 12 ⇨*WS7* 13 ⇨*WS3* 14 ⇨*WS3* 21 ⇨*WS3* 31 ⇨*WS3* 32 ⇨*WS3* 41 ⇨*WS3* 42 ⇨*WS3* 51 ⇨*WS3* 61 ⇨*WS4* 71 ⇨*WS4* 72 ⇨*WS4* 81 ⇨*WS3* 96 ⇨*WS3*
WS2. What is the main source of water used by members of your household for other purposes such as cooking and handwashing? *If not clear, probe to identify the place from which members of this household most often collect water for other purposes.*	**PIPED WATER** PIPED INTO DWELLING ..... 11 PIPED TO YARD / PLOT ..... 12 PIPED TO NEIGHBOUR ..... 13 PUBLIC TAP / STANDPIPE ..... 14 TUBE WELL / BOREHOLE ..... 21 **DUG WELL** PROTECTED WELL ..... 31 UNPROTECTED WELL ..... 32 **SPRING** PROTECTED SPRING ..... 41 UNPROTECTED SPRING ..... 42 RAINWATER ..... 51 TANKER-TRUCK ..... 61 CART WITH SMALL TANK ..... 71 WATER KIOSK (WATER DISTRIBUTION CENTER/POINT) ..... 72 SURFACE WATER (RIVER, DAM, LAKE, POND, STREAM, CANAL, IRRIGATION CHANNEL) ..... 81 OTHER (*specify*) _____ 96	11 ⇨*WS7* 12 ⇨*WS7* 61 ⇨*WS4* 71 ⇨*WS4* 72 ⇨*WS4*

WS3. Where is that water source located?	IN OWN DWELLING.....1 IN OWN YARD / PLOT .....2 ELSEWHERE.....3	1⇨*WS7* 2⇨*WS7*
WS4. How long does it take for members of your household to go there, get water, and come back?	MEMBERS DO NOT COLLECT..... 000 NUMBER OF MINUTES.....__ __ __ DK 998	000 ⇨*WS7*
WS5. Who usually goes to this water source to collect the water for your household? *Record the name of the person and copy the line number of this person from the LIST OF HOUSEHOLD MEMBERS Module.*	NAME _____ LINE NUMBER..... __ __	
WS6. Since last (***day of the week***), how many times has this person collected water?	NUMBER OF TIMES ..... __ __ DK 98	
WS7. In the last month, has there been any time when your household did not have sufficient quantities of drinking water?	YES, AT LEAST ONCE .....1 NO, ALWAYS SUFFICIENT.....2 DK 8	 2⇨*WS9* 8⇨*WS9*
WS8. What was the main reason that you were unable to access water in sufficient quantities when needed?	WATER NOT AVAILABLE FROM SOURCE ...1 WATER TOO EXPENSIVE.....2 SOURCE NOT ACCESSIBLE .....3 OTHER (*specify*) _____ 6 DK 8	
WS9. Do you or any other member of this household do anything to the water to make it safer to drink?	YES .....1 NO .....2 DK 8	 2⇨*WS11* 8⇨*WS11*

WS10. What do you usually do to make the water safer to drink? *Probe:* Anything else? *Record all methods mentioned.*	BOIL ..... A STRAIN IT THROUGH A CLOTH ..... C USE WATER FILTER (CERAMIC, SAND, COMPOSITE, ETC.) ..... D SOLAR DISINFECTION ..... E LET IT STAND AND SETTLE ..... F WATER PURIFICATION TABLETS ..... G OTHER (*specify*) _____ X DK ..... Z	
WS11. What kind of toilet facility do members of your household usually use? *If 'Flush' or 'Pour flush', probe:* Where does it flush to? *If not possible to identify, ask permission to observe the facility.*	**FLUSH / POUR FLUSH** FLUSH TO PIPED SEWER SYSTEM ..... 11 FLUSH TO SEPTIC TANK ..... 12 FLUSH TO PIT LATRINE ..... 13 FLUSH TO OPEN DRAIN ..... 14 FLUSH TO DK WHERE ..... 18 **PIT LATRINE** VENTILATED IMPROVED PIT LATRINE ..... 21 PIT LATRINE WITH SLAB ..... 22 PIT LATRINE WITHOUT SLAB / OPEN PIT ..... 23 BUCKET ..... 41 NO FACILITY / BUSH / FIELD ..... 95 OTHER (*specify*) _____ 96	11 ⇨*WS14* 14 ⇨*WS14* 18 ⇨*WS14* 41 ⇨*WS14* 95 ⇨*End* 96 ⇨*WS14*
WS12. Has your (***answer from WS11***) ever been emptied?	YES, EMPTIED WITHIN THE LAST 5 YEARS ..... 1 MORE THAN 5 YEARS AGO ..... 2 DON'T KNOW WHEN ..... 3 NO, NEVER EMPTIED ..... 4 DK 8	 4 ⇨*WS14* 8 ⇨*WS14*
WS13. The last time it was emptied, where were the contents emptied to? *Probe:* Was it removed by a service provider?	**REMOVED BY SERVICE PROVIDER** TO A TREATMENT PLANT ..... 01 BURIED IN A COVERED PIT ..... 02 TO DON'T KNOW WHERE ..... 03 **EMPTIED BY HOUSEHOLD** BURIED IN A COVERED PIT ..... 04 TO UNCOVERED PIT, OPEN GROUND OR ELSEWHERE ..... 05 TO AGRICULTURAL FIELD ..... 06 OTHER (*specify*) _____ 96 DK 98	
WS14. Where is this toilet facility located?	IN OWN DWELLING ..... 1 IN OWN YARD / PLOT ..... 2 ELSEWHERE 3	

WS15. Do you share this toilet with others who are not members of your household?	YES ..... 1 NO 2	 2 ⇨*End*
WS16. Do you share this toilet only with members of other households that you know, or is it open to the use of the general public?	SHARED WITH KNOWN HOUSEHOLDS (NOT PUBLIC) ..... 1 SHARED WITH GENERAL PUBLIC..... 2	 2 ⇨*End*
WS17. How many households in total use this toilet facility, including your own household?	NUMBER OF HOUSEHOLDS (IF LESS THAN 10)..... 0 __ TEN OR MORE HOUSEHOLDS..... 10 DK 98	

SALT IODIZATION		SA
SA1. I would like to check whether the salt used in your household is iodized. May I have a sample of the salt used to cook meals in your household? *Apply 2 drops of test solution, observe the darkest reaction within 30 seconds. Than compare to the colour chart and then record the response (1, 2 or 3) that corresponds to test outcome.*	**SALT TESTED** 0 PPM (NO REACTION).....1 BELOW 15 PPM (BETWEEN 0 AND 15 PPM)...2 ABOVE 15 PPM (AT LEAST 15 PPM).....3 **SALT NOT TESTED** NO SALT IN THE HOUSE.....4 OTHER REASON (*specify*)_____ 6	 2 ⇨*HH13* 3 ⇨*HH13* 4 ⇨*HH13* 6 ⇨*HH13*
SA2. I would like to perform one more test. May I have another sample of the same salt? *Apply 5 drops of recheck solution. Then apply 2 drops of test solution on the same spot. Observe the darkest reaction within 30 seconds, compare to the colour chart and then record the response (1, 2 or 3) that corresponds to test outcome.*	**SALT TESTED** 0 PPM (NO REACTION).....1 BELOW 15 PPM (BETWEEN 0 AND 15 PPM)...2 ABOVE 15 PPM (AT LEAST 15 PPM).....3 **SALT NOT TESTED** OTHER REASON (*specify*)_____ 6	

HH13. *Record the time.*	HOUR AND MINUTES..... __ __ : __ __	
HH18. *Check HL6 in the LIST OF HOUSEHOLD MEMBERS and indicate the total number of children age 5-17 years:*	NO CHILDREN.....0 1 CHILD.....1 2 OR MORE CHILDREN (NUMBER)..... __	0 ⇨*HH29* 1 ⇨*HH27*

HH19. *List each of the children age 5-17 years below in the order they appear in the LIST OF HOUSEHOLD MEMBERS. Do not include other household members outside of the age range 5-17 years. Record the line number, name, sex, and age for each child.*

HH20. *Rank number*	**HH21**. *Line number from HL1*	**HH22**. *Name from HL2*	**HH23**. *Sex from HL4*	**HH24**. *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	___ ___

HH25. *Check the last digit of the household number (HH2) from the HOUSEHOLD INFORMATION PANEL. This is the number of the row you should go to in the table below.*

Check the total number of children age 5-17 years in HH18 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 record the number that appears in the box. This is the rank number (HH20) of the selected child.

LAST DIGIT OF HOUSEHOLD NUMBER (FROM HH2)	TOTAL NUMBER OF ELIGIBLE CHILDREN IN THE HOUSEHOLD (FROM HH18)						
	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

HH26. *Record the rank number (HH20), line number (HH21), name (HH22) and age (HH24) of the selected child.* **HH27**. *(When HH18=1 or when there is a single child age 5-17 in the household): Record the rank number as '1' and record the line number (HL1), the name (HL2) and age (HL6) of this child from the LIST OF HOUSEHOLD MEMBERS.*	RANK NUMBER ..... __ LINE NUMBER.....__ __ NAME_____ AGE.....__ __

HH28. *Issue a QUESTIONNAIRE FOR CHILDREN AGE 5-17 to be administered to the mother/caretaker of this child.*		
HH29. *Check HL8 in the LIST OF HOUSEHOLD MEMBERS: Are there any women age 15-49?*	YES, AT LEAST ONE WOMAN AGE 15-49 .. 1 NO 2	2 ⇨*HH34*
HH30. *Issue a separate QUESTIONNAIRE FOR INDIVIDUAL WOMEN for each woman age 15-49 years.*		
HH31. *Check HL6 and HL8 in the LIST OF HOUSEHOLD MEMBERS: Are there any girls age 15-17?*	YES, AT LEAST ONE GIRL AGE 15-17..... 1 NO 2	2 ⇨*HH34*
HH32. *Check HL20 in the LIST OF HOUSEHOLD MEMBERS: Is consent required for interviewing at least one girl age 15-17?*	YES, AT LEAST ONE GIRL AGE 15-17 WITH HL20≠90 ..... 1 NO, HL20=90 FOR ALL GIRLS AGE 15-17 ... 2	2 ⇨*HH34*

HH33. As part of the survey we are also interviewing women age 15-49. We ask each person we interview for permission. A female interviewer conducts these interviews.

For girls age 15-17 we must also get permission from an adult to interview them. As mentioned before, all the information we obtain will remain strictly confidential and anonymous.

May we interview (***name(s) of female member(s) age 15-17***) later?

☐***0*** *'Yes' for all girls age 15-17 ⇨ Continue with HH34.*

☐***0*** *'No' for at least one girl age 15-17 and 'Yes' to at least one girl age 15-17 ⇨ Record '06' in WM17 (also in UF17 and FS17, if applicable) on individual questionnaires for those adult consent was not given. Then continue with HH34.*

☐***0*** *'No' for all girls age 15-17 ⇨ Record '06' in WM17 (also in UF17 and FS17, if applicable) on all individual questionnaires for whom adult consent was not given. Then continue with HH34.*

HH34. *Check HH8 in the HOUSEHOLD INFORMATION PANEL: Is the household selected for Questionnaire for Men?*	YES, HH8=1 ..... 1 NO, HH8=0..... 2	2 ⇨*HH40*
HH35. *Check HL9 in the LIST OF HOUSEHOLD MEMBERS: Are there any men age 15-49?*	YES, AT LEAST ONE MAN AGE 15-49..... 1 NO 2	2 ⇨*HH40*
HH36. *Issue a separate QUESTIONNAIRE FOR INDIVIDUAL MEN for each man age 15-49 years.*		
HH37. *Check HL6 and HL9 in the LIST OF HOUSEHOLD MEMBERS: Are there any boys age 15-17?*	YES, AT LEAST ONE BOY AGE 15-17..... 1 NO 2	2 ⇨*HH40*
HH38. *Check HL20 in the LIST OF HOUSEHOLD MEMBERS: Is consent required for interviewing at least one boy age 15-17?*	YES, AT LEAST ONE BOY AGE 15-17 WITH HL20≠90 ..... 1 NO, HL20=90 FOR ALL BOYS AGE 15-17 2	2 ⇨*HH40*

HH39. As part of the survey we are also interviewing men age 15-49. We ask each person we interview for permission. A male interviewer conducts these interviews.

For boys age 15-17 we must also get permission from an adult to interview them. As mentioned before, all the information we obtain will remain strictly confidential and anonymous.

May we interview (***name(s) of male member(s) age 15-17***) later?

☐**0***'Yes' for all boys age 15-17 ⇨ Continue with HH40.*

☐**0***'No' for at least one boy age 15-17 and 'Yes' to at least one boy age 15-17 ⇨ Record '06' in MWM7 on individual questionnaires for those adult consent was not given. Then continue with HH40.*

☐**0***'No' for all boys age 15-17 ⇨ Record '06' in MWM7 on all individual questionnaires for whom adult consent was not given. Then continue with HH40.*

HH40. *Check HL10 in the LIST OF HOUSEHOLD MEMBERS: Are there any children age 0-4?*	YES, AT LEAST ONE ..... 1 NO 2	2 ⇨*HH42*
HH41. *Issue a separate QUESTIONNAIRE FOR CHILDREN UNDER FIVE for each child age 0-4 years.*		
HH42. *Check HH9 in the HOUSEHOLD INFORMATION PANEL: Is the household selected for Water Quality Testing Questionnaire?*	YES, HH9=1 ..... 1 NO, HH9=2..... 2	2 ⇨*HH45*
HH43. *Issue a separate WATER QUALITY TESTING QUESTIONNAIRE for this household*		
HH44. As part of the survey we are also looking at the quality of drinking water. We would like to do a simple test of your drinking water. A colleague will come and collect the water samples. May we do such a test? *If the respondent requests to learn the results, explain that results will not be shared with individual households but will be made available to local authorities.*	YES, PERMISSION IS GIVEN ..... 1 NO, PERMISSION IS NOT GIVEN 2	2 ⇨*Record '02' in WQ31 on the WATER QUALITY TESTING QUESTION -NAIRE*

HH45. *Now return to the HOUSEHOLD INFORMATION PANEL and,*

- *Record '01' in question HH46 (Result of the Household Questionnaire interview),*
- *Record the name and the line number (from the LIST OF HOUSEHOLD MEMBERS) of the Respondent to the Household Questionnaire interview in HH47,*
- *Fill the questions HH48 – HH52,*
- *Thank the respondent for his/her cooperation and then*
- *Proceed with the administration of the remaining individual questionnaire(s) in this household.*

If there is no individual questionnaire and no WATER QUALITY TESTING QUESTIONNAIRE to be completed in this household thank the respondent for his/her cooperation and move to the next household you have been assigned by your supervisor.

INTERVIEWER'S OBSERVATIONS

SUPERVISOR'S OBSERVATIONS

WATER QUALITY TESTING QUESTIONNAIRE

2017 DPRK Multiple Cluster Indicator Survey

WATER QUALITY TESTING INFORMATION PANEL	WQ
WQ1. *Cluster number:* ___ ___ ___	**WQ2**. *Household number:* ___ ___
WQ3. *Measurer's name and number:* NAME _____ ___ ___ ___	**WQ4**. *Interviewer's name and number:* NAME _____ ___ ___ ___
WQ5. *Day / Month / Year:* ___ ___ /___ ___ / 2 0 1 ___	
WQ6. *Check HH10 in the HOUSEHOLD INFORMATION PANEL in the HOUSEHOLD QUESTIONNAIRE: Is the household selected for blank testing?*	YES.....1 NO 2

WQ7. *Name of the respondent to Water Quality Testing Questionnaire:* NAME _____		
WQ8. *Check HH44. Is permission given to test water?*	YES, PERMISSION IS GIVEN .....1 NO, PERMISSION IS NOT GIVEN 2	1 ⇨*WQ10* 2 ⇨*WQ31*

WQ31. *Result of Water Quality Testing Questionnaire.* *Discuss any result not completed with Supervisor.*	COMPLETED.....01 PERMISSION NOT GIVEN .....02 GLASS OF WATER NOT GIVEN.....03 PARTLY COMPLETED.....04 OTHER (*specify*) _____96

WATER QUALITY TESTING		
WQ10. *Record the time:*	HOURS: ..... ___ ___ MINUTES: ..... ___ ___	
WQ11. Could you please provide me with a glass of the water that members of your household usually drink?	YES..... 1 NO..... 2	 2 ⇨ *WQ31 and record '03'*
WQ12. *Observe and record whether the water was collected directly from the source or from a separate storage container.*	DIRECT FROM SOURCE..... 1 COVERED CONTAINER ..... 2 UNCOVERED CONTAINER..... 3 UNABLE TO OBSERVE 8	
WQ13A. *Perform the household water test* *Using the water from the glass of drinking water provided by the respondent, conduct the water quality test. Label **H-XXX-YY**, where **XXX** is the cluster number (WQ1) and **YY** is the household number (WQ2).* *Record whether test was conducted*	HOUSEHOLD WATER TEST CONDUCTED ..... 1 HOUSEHOLD WATER TEST NOT CONDUCTED (*specify*) 2	
WQ14. Have you or any other member of this household done anything to this water to make it safer to drink?	YES..... 1 NO..... 2 DK..... 8	 2 ⇨ *WQ16* 8 ⇨ *WQ16*
WQ15. What has been done to the water to make it safer to drink? *Probe:* Anything else? *Record all items mentioned.*	BOILED IT..... A STRAINED IT THROUGH A CLOTH .....C USED A WATER FILTER (CERAMIC, SAND, COMPOSITE, ETC.) ..... D SOLAR DISINFECTION.....E LEFT IT STAND AND SETTLE .....F WATER PURIFICATION TABLETS..... G OTHER (*specify*) _____ X DK.....Z	
WQ16. Is this water from the main source of drinking water used by members of your household?	YES..... 1 NO..... 2	1 ⇨ *WQ18*

WQ17. What source was this water collected from?	**PIPED WATER** PIPED INTO DWELLING ..... 11 PIPED TO YARD / PLOT ..... 12 PIPED TO NEIGHBOUR ..... 13 PUBLIC TAP / STANDPIPE ..... 14 TUBE WELL / BOREHOLE ..... 21 **DUG WELL** PROTECTED WELL ..... 31 UNPROTECTED WELL ..... 32 **SPRING** PROTECTED SPRING ..... 41 UNPROTECTED SPRING ..... 42 RAINWATER ..... 51 TANKER-TRUCK ..... 61 CART WITH SMALL TANK ..... 71 WATER KIOSK (WATER DISTRIBUTION CENTER/POINT) ..... 72 SURFACE WATER (RIVER, DAM, LAKE, POND, STREAM, CANAL, IRRIGATION CHANNEL) ..... 81 **PACKAGED WATER** BOTTLED WATER ..... 91 OTHER (*specify*) _____ 96	
WQ18. Can you please show me the source of the glass of drinking water so that I can take a sample from there as well? *If 'No' probe to find out why this is not possible?*	YES, SHOWN ..... 1 NO WATER SOURCE WAS NOT FUNCTIONAL ..... 2 WATER SOURCE TOO FAR ..... 3 UNABLE TO ACCESS SOURCE ..... 4 DO NOT KNOW WHERE SOURCE IS LOCATED ..... 5 OTHER REASON (*specify*) _____ 6	 3 ⇨*WQ20* 4 ⇨*WQ20* 5 ⇨*WQ20* 6 ⇨*WQ20*
WQ19A. *Perform source or stored water test* *Using a sample of water taken at the source or from the water container conduct the water quality test. Label **S-XXX-YY**, where **XXX** is the cluster number (WQ1) and **YY** is the household number (WQ2).* *Record whether test was conducted*	SOURCE WATER TEST CONDUCTED ..... 1 STORED WATER TEST CONDUCTED ..... 2 SOURCE OR STORED WATER TEST NOT CONDUCTED (*specify*) _____ 3	
WQ20. *Check WQ6: Is the household selected for blank testing?*	YES ..... 1 NO 2	 2 ⇨*WQ23*

WQ21A. *Perform the blank water tests* *Using a sample of sterile water given by the supervisor, conduct the water quality test as you normally would. Label **B-XXX-YY**, where **XXX** is the cluster number (WQ1) and **YY** is the household number (WQ2).* *Record whether the blank test was conducted.*	BLANK WATER TEST CONDUCTED ..... 1 BLANK WATER TEST NOT CONDUCTED (*specify*)_____ 2	
WQ23. *Record the time.*	HOURS AND MINUTES ..... __ __ : __ __	

WATER QUALITY TESTING RESULTS		
Following 16-36 hours of incubation the results from the water quality tests should be recorded.		
WQ24. *Day / Month / Year of recording test results:*	___ ___ /___ ___ / 2 0 1 ___	
WQ25. *Record the time:*	HOUR AND MINUTES ..... ___ ___ : ___ ___	
In the boxes below: • *Record 3-digit count of colonies.* • *If 101 or more colonies are counted, record '101'* • *If it is not possible to read results / results are lost, record '998'*		
WQ25A. *Household water test (100ml)*:	NUMBER OF COLONIES ___ ___ ___	
WQ26A. *Check WQ19A: Was a source water sample collected?*	YES, WQ19A=1 ..... 1 NO, WQ19A=3 OR BLANK 2	2⇨*WQ28A*
WQ27A. *Source water test (100ml)*:	NUMBER OF COLONIES ___ ___ ___	
WQ28A. *Check WQ21A: Was the blank test conducted?*	YES, WQ21A=1 ..... 1 NO, WQ21A=2 OR BLANK 2	2⇨*WQ31*
WQ29A. *Blank water test (100ml)*:	NUMBER OF COLONIES ___ ___ ___	

MEASURER'S OBSERVATIONS

SUPERVISOR'S OBSERVATIONS

MICS

QUESTIONNAIRE FOR INDIVIDUAL WOMEN

2017 DPRK Multiple Indicator Cluster Survey

WOMAN'S INFORMATION PANEL	WM
WM1. *Cluster number:* ___ ___ ___	**WM2**. *Household number:* ___ ___
WM3. *Woman's name and line number:* NAME _____ ___ ___	**WM4**. *Supervisor's name and number:* NAME _____ ___ ___ ___
WM5. *Interviewer's name and number:* NAME _____ ___ ___ ___	**WM6**. *Day / Month / Year of interview:* ___ ___ / ___ ___ / 2 0 1 ___

Check woman's age in HL6 in LIST OF HOUSEHOLD MEMBERS, HOUSEHOLD QUESTIONNAIRE: If age 15-17, make sure in HH33 that adult permission for interview is obtained or not needed (HL20=90). If consent is needed and not obtained, the interview must not commence and '06' should be recorded in WM17.	**WM7**. *Record the time:* HOURS : MINUTES __ __ : __ __

WM8. *Check completed questionnaires in this household: Have you or another member of your team interviewed this respondent for another questionnaire?*	YES, INTERVIEWED ALREADY ..... 1 NO, FIRST INTERVIEW 2 ***0***	1 ⇨*WM9B* 2 ⇨WM9A

WM9A. Hello, my name is (***name of the interviewer***). We are from the ***Central Bureau of Statistics***. We are conducting a survey about the situation of children, families and households. I want to talk to you about your health and other topics. This interview usually takes about ***15*** minutes. We are also want to talk to mothers about their children. All the information we obtain will remain strictly confidential and anonymous. If you wish not to answer a question or wish to stop the interview, please let me know. May I start now?	**WM9B**. Now I want to talk to you about your health and other topics in more detail. This interview will take about ***15*** minutes. Again, all the information we obtain will remain strictly confidential and anonymous. If you wish not to answer a question or wish to stop the interview, please let me know. May I start now?
YES, PERMISSION IS GIVEN ..... 1 *NO / NOT ASKED 2*	1 ⇨*WOMAN'S BACKGROUND Module* 2 ⇨*WM17*

WM17. *Result of woman's interview.* *Discuss any result not completed with Supervisor.*	COMPLETED ..... 01 NOT AT HOME ..... 02 REFUSED ..... 03 PARTLY COMPLETED ..... 04 INCAPACITATED (*specify*) _____ 05 NO ADULT CONSENT FOR RESPONDENT AGE 15-17 ..... 06 OTHER (*specify*) _____ 96

WOMAN'S BACKGROUND		WB
WB1. *Check the respondent's line number (WM3) in WOMAN'S INFORMATION PANEL and the respondent to the HOUSEHOLD QUESTIONNAIRE (HH47):*	WM3=HH47 ..... 1 WM3≠HH47..... 2	 2⇨WB3
WB2. *Check ED5 in EDUCATION Module in the HOUSEHOLD QUESTIONNAIRE for this respondent: Highest level of school attended:*	ED5=2, 3 OR 4..... 1 ED5=0, 1, 8 OR BLANK..... 2	1⇨*End* 2⇨WB14
WB3. In what month and year were you born?	DATE OF BIRTH MONTH .....__ __ DK MONTH..... 98 YEAR..... __ __ __ __ DK YEAR 9998	
WB4. How old are you? *Probe:* How old were you at your last birthday? *If responses to WB3 and WB4 are inconsistent, probe further and make correction. Age must be recorded.*	AGE (IN COMPLETED YEARS) .....__ __	
WB5. Have you ever attended school or kindergarten?	YES..... 1 NO 2	 2⇨*WB14*
WB6. What is the highest level and grade of school you have attended?	KINDERGARTEN .....000 PRIMARY ..... **1** __ __ LOWER SECONDARY ..... **2** __ __ UPPER SECONDARY..... **3** __ __ HIGHER ..... **4** __ __	000⇨*WB14*
WB7. Did you complete that grade?	YES..... 1 NO 2	
WB8. *Check WB4: Age of respondent:*	AGE 15-24 ..... 1 AGE 25-49 2	 2⇨WB13
WB9. At any time during the 2017-2018 school year did you attend school?	YES..... 1 NO 2	 2⇨*WB11*
WB10. During this 2017-2018 school year, which level and grade are you <u>attending</u>?	PRIMARY ..... **1** __ __ LOWER SECONDARY ..... **2** __ __ UPPER SECONDARY..... **3** __ __ HIGHER ..... **4** __ __	
WB11. At any time during the 2016-2017 school year did you attend school?	YES..... 1 NO 2	 2⇨*WB13*
WB12. During that 2016-2017 school year, which level and grade did you <u>attend</u>?	PRIMARY ..... **1** __ __ LOWER SECONDARY ..... **2** __ __ UPPER SECONDARY..... **3** __ __ HIGHER ..... **4** __ __	
WB13. *Check WB6: Highest level of school attended:*	WB6=2, 3 OR 4..... 1 WB6=1..... 2	1⇨*End*

WB14. Now will you to read this sentence to me. *Show sentence on the card to the respondent.* *If respondent cannot read the whole sentence, probe:* Can you read part of the sentence to me?	CANNOT READ AT ALL ..... 1 ABLE TO READ ONLY PARTS OF SENTENCE..... 2 ABLE TO READ WHOLE SENTENCE..... 3 NO SENTENCE IN BRAILLE 4	

MASS MEDIA AND ICT		MT
MT1. Do you read a newspaper or magazine at least once a week, less than once a week or not at all? *If 'At least once a week', probe:* In other words, do you read newspapers or magazines almost every day? *If 'Yes' record 3, if 'No' record 2.*	NOT AT ALL .....0 LESS THAN ONCE A WEEK .....1 AT LEAST ONCE A WEEK.....2 ALMOST EVERY DAY 3	
MT2. Do you listen to the radio at least once a week, less than once a week or not at all? *If 'At least once a week', probe:* In other words, do you listen to the radio almost every day? *If 'Yes' record 3, if 'No' record 2*	NOT AT ALL .....0 LESS THAN ONCE A WEEK .....1 AT LEAST ONCE A WEEK.....2 ALMOST EVERY DAY 3	
MT3. Do you watch television at least once a week, less than once a week or not at all? *If 'At least once a week', probe:* In other words, do you watching television almost every day? *If 'Yes' record 3, if 'No' record 2*	NOT AT ALL .....0 LESS THAN ONCE A WEEK .....1 AT LEAST ONCE A WEEK.....2 ALMOST EVERY DAY 3	
MT4. Have you ever used a computer or a tablet from any location?	YES .....1 NO 2	 2 ⇨*MT9A*
MT5. During the last 3 months, did you use a computer or a tablet at least once a week, less than once a week or not at all? *If 'At least once a week', probe:* In other words, do you use it almost every day? *If 'Yes' record 3, if 'No' record 2*	NOT AT ALL .....0 LESS THAN ONCE A WEEK .....1 AT LEAST ONCE A WEEK.....2 ALMOST EVERY DAY 3	0 ⇨*MT9A*

MT6. During the last 3 months, did you done following:	YES NO	
[A] Copy or move a file or folder?	COPY/MOVE FILE 1 2	
[B] Use a copy and paste tool to duplicate or move information within a document?	USE COPY/PASTE IN DOCUMENT 1 2	
[C] Send e-mail with attached file, such as a document, picture or video?	SEND E-MAIL WITH ATTACHMENT 1 2	
[D] Use a basic arithmetic formula in a spreadsheet?	USE BASIC SPREADSHEET FORMULA 1 2	
[E] Connect and install a new device, such as a modem, camera or printer?	CONNECT DEVICE..... 1 2	
[F] Find, download, install and configure software?	INSTALL SOFTWARE 1 2	
[G] Create an electronic presentation with presentation software, including text, images, sound, video or charts?	CREATE PRESENTATION 1 2	
[H] Transfer a file between a computer and other device?	TRANSFER FILE 1 2	
[I] Write a computer program in any programming language?	PROGRAMMING..... 1 2	
MT7. *Check MT6[C]: Is 'Yes' recorded?*	YES, MT6[C]=1.....1 NO, MT6[C]=2 2	1 ⇨*MT10A* 0
MT8. *Check MT6[F]: Is 'Yes' recorded?*	YES, MT6[F]=1 .....1 NO, MT6[F]=2.....2	1 ⇨*MT10A* 0
MT9A. Have you ever used the intranet from any location and any device?	YES .....1 NO.....2	 2 ⇨*MT11*
MT10A. During the last 3 months, did you use the intranet at least once a week, less than once a week or not at all? *If 'At least once a week', probe:* In other words, have you used it almost every day? *If 'Yes' record 3, if 'No' record 2.*	NOT AT ALL .....0 LESS THAN ONCE A WEEK .....1 AT LEAST ONCE A WEEK.....2 ALMOST EVERY DAY 3	
MT11. Do you own a mobile phone?	YES .....1 NO.....2	
MT12. During the last 3 months, did you use a mobile telephone at least once a week, less than once a week or not at all? *Probe if necessary:* I mean, have you ever communicated with someone using a mobile phone. *If 'At least once a week', probe:* In other words, have you used it almost every day? *If 'Yes' record 3, if 'No' record 2.*	NOT AT ALL .....0 LESS THAN ONCE A WEEK .....1 AT LEAST ONCE A WEEK.....2 ALMOST EVERY DAY 3	

MARRIAGE		MA
MA1. Are you currently married?	YES, CURRENTLY MARRIED..... 1 NO, NOT MARRIED..... 3	 3 ⇨*MA5*
MA2. How old is your husband? *Probe*: How old was your husband on his last birthday?	 AGE IN YEARS.....__ __ DK..... 98	 ⇨*MA7* 98 ⇨*MA7*
MA5. Have you ever been married?	YES, FORMERLY MARRIED..... 1 NO..... 3	 3 ⇨*Module DV*
MA6. What is your marital status now: are you widowed, divorced or separated?	WIDOWED..... 1 DIVORCED..... 2 SEPARATED..... 3	
MA7. Have you been married only once or more than once?	ONLY ONCE..... 1 MORE THAN ONCE..... 2	1 ⇨*MA8A* 2 ⇨*MA8B*
MA8A. In what month and year did you first start living with your husband? **MA8B**. In what month and year did you first start living with your <u>first</u> husband?	DATE OF (FIRST) MARRIAGE MONTH .....__ __ DK MONTH..... 98 YEAR..... __ __ __ __ DK YEAR.....9998	
MA9. *Check MA8A/B: Is 'DK YEAR' recorded?*	YES, MA8A/B=9998..... 1 NO, MA8A/B≠9998..... 2	 2 ⇨*End*
MA10. *Check MA7: In marriage only once?*	YES, MA7=1..... 1 NO, MA7=2..... 2	1 ⇨*MA11A* 2 ⇨*MA11B*
MA11A. How old were you when you started living with your husband? **MA11B**. How old were you when you started living with your <u>first</u> husband?	 AGE IN YEARS.....__ __	

FERTILITY/BIRTH HISTORY		CM
CM1. Now I will ask you about all the births you have had during your life. Have you ever given birth? *This module and the birth history should only include live births. Stillbirths should not be included in response to any question.*	YES .....1 NO 2	2 ⇨*CM8*
CM2. Do you have any sons or daughters to whom you have given birth who are now living with you?	YES .....1 NO 2	2 ⇨*CM5*
CM3. How many sons live with you? *If none, record '00'.*	SONS AT HOME..... __ __	
CM4. How many daughters live with you? *If none, record '00'.*	DAUGHTERS AT HOME ..... __ __	
CM5. 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*
CM6. How many sons are alive but do not live with you? *If none, record '00'.*	SONS ELSEWHERE ..... __ __	
CM7. How many daughters are alive but do not live with you? *If none, record '00'.*	DAUGHTERS ELSEWHERE ..... __ __	
CM8. Have you ever given birth to a boy or girl who was born alive but later died? *If 'No' probe by asking:* I mean, to any baby who cried, who made any movement, sound, or effort to breathe, or who showed any other signs of life even if for a very short time?	YES .....1 NO 2	2 ⇨*CM11*
CM9. How many boys have died? *If none, record '00'.*	BOYS DEAD..... __ __	
CM10. How many girls have died? *If none, record '00'.*	GIRLS DEAD..... __ __	
CM11. *Sum answers to CM3, CM4, CM6, CM7, CM9 and CM10.*	SUM ..... __ __	
CM12. Just to make sure that I have this right, you have had in total (***total number in CM11***) births during your life, is this correct?	YES .....1 NO 2	1 ⇨*CM14*
CM13. *Check responses to CM1-CM10 and make corrections as necessary until response in CM12 is 'Yes'.*		
CM14. *Check CM11: How many live births?*	NO LIVE BIRTHS, CM11=00 .....0 ONE OR MORE LIVE BIRTH, CM11=01 OR MORE.....1	0 ⇨*End*

FERTILITY/BIRTH HISTORY

BH

BH0. Now I would like to record the names of all of your births, whether still alive or not, starting with the first one you had.

Record names of all of the births in BH1. Record twins and triplets on separate lines.

BH0. *BH Line Number*	**BH1**. What name was given to your (first/next) baby?	**BH2**. Were any of these births twins?		**BH3**. Is (***name of birth***) a boy or a girl?		**BH4**. In what month and year was (***name of birth***) born? *Probe*: What is (his/her) birthday?			**BH5**. Is (***name of birth***) still alive?		**BH6**. How old was (***name of birth***) at (his/her) last birthday? *Record age in completed years.*	**BH7**. Is (***name of birth***) living with you?		**BH8**. *Record household line number of child (from HL1)* *Record '00' if child is not listed.*	**BH9**. How old was (***name of birth***) when (he/she) died? *If '1 year', probe:* How many months old (***name of birth***) was? *Record number of days if less than 1 month; record number months if less than 2 years; otherwise record number of years*		**BH10**. Were there any other live births between (***name of previous birth***) and (***name of birth***), including any children who died after birth?	
		S	M	B	G	Day	Month	Year	Y	N	Age	Y	N	Line No	Unit	Number	Y	N
01		1	2	1	2	__ __	__ __	__ __ __ __	1	2 ⇨ *BH9*	__ __	1	2	__ __ ⇨ *Next Birth*	DAYS..... 1 MONTHS.. 2 YEARS..... 3	__ __		
02		1	2	1	2	__ __	__ __	__ __ __ __	1	2 ⇨ *BH9*	__ __	1	2	__ __ ⇨ *BH10*	DAYS..... 1 MONTHS.. 2 YEARS..... 3	__ __	1 ⇨ *Add Birth*	2 ⇨ *Next Birth*
03		1	2	1	2	__ __	__ __	__ __ __ __	1	2 ⇨ *BH9*	__ __	1	2	__ __ ⇨ *BH10*	DAYS..... 1 MONTHS.. 2 YEARS..... 3	__ __	1 ⇨ *Add Birth*	2 ⇨ *Next Birth*
04		1	2	1	2	__ __	__ __	__ __ __ __	1	2 ⇨ *BH9*	__ __	1	2	__ __ ⇨ *BH10*	DAYS..... 1 MONTHS.. 2 YEARS..... 3	__ __	1 ⇨ *Add Birth*	2 ⇨ *Next Birth*
05		1	2	1	2	__ __	__ __	__ __ __ __	1	2 ⇨ *BH9*	__ __	1	2	__ __ ⇨ *BH10*	DAYS..... 1 MONTHS.. 2 YEARS..... 3	__ __	1 ⇨ *Add Birth*	2 ⇨ *Next Birth*
06		1	2	1	2	__ __	__ __	__ __ __ __	1	2 ⇨ *BH9*	__ __	1	2	__ __ ⇨ *BH10*	DAYS..... 1 MONTHS.. 2 YEARS..... 3	__ __	1 ⇨ *Add Birth*	2 ⇨ *Next Birth*
07		1	2	1	2	__ __	__ __	__ __ __ __	1	2 ⇨ *BH9*	__ __	1	2	__ __ ⇨ *BH10*	DAYS..... 1 MONTHS.. 2 YEARS..... 3	__ __	1 ⇨ *Add Birth*	2 ⇨ *Next Birth*
08		1	2	1	2	__ __	__ __	__ __ __ __	1	2 ⇨ *BH9*	__ __	1	2	__ __ ⇨ *BH10*	DAYS..... 1 MONTHS.. 2 YEARS..... 3	__ __	1 ⇨ *Add Birth*	2 ⇨ *Next Birth*
09		1	2	1	2	__ __	__ __	__ __ __ __	1	2 ⇨ *BH9*	__ __	1	2	__ __ ⇨ *BH10*	DAYS..... 1 MONTHS.. 2 YEARS..... 3	__ __	1 ⇨ *Add Birth*	2 ⇨ *Next Birth*

BH0. *BH Line Number*	**BH1**. What name was given to your (first/next) baby?	**BH2**. Were any of these births twins?		**BH3**. Is (***name of birth***) a boy or a girl?		**BH4**. In what month and year was (***name of birth***) born? *Probe*: What is (his/her) birthday?			**BH5**. Is (***name of birth***) still alive?		**BH6**. How old was (***name of birth***) at (his/her) last birthday? *Record age in completed years.*	**BH7**. Is (***name of birth***) living with you?		**BH8**. *Record household line number of child (from HL1)* *Record '00' if child is not listed.*	**BH9**. How old was (***name of birth***) when (he/she) died? *If '1 year', probe:* How many months old (***name of birth***) was? *Record number of days if less than 1 month; record number months if less than 2 years; otherwise record number of years*		**BH10**. Were there any other live births between (***name of previous birth***) and (***name of birth***), including any children who died after birth?	
		S	M	B	G	Day	Month	Year	Y	N	Age	Y	N	Line No	Unit	Number	Y	N
10		1	2	1	2	__ __	__ __	__ __ __ __	1	2 ⇨ *BH9*	__ __	1	2	__ __ ⇨ *BH10*	DAYS.....1 MONTHS..2 YEARS.....3	__ __	1 ⇨ *Add Birth*	2 ⇨ *Next Birth*
11		1	2	1	2	__ __	__ __	__ __ __ __	1	2 ⇨ *BH9*	__ __	1	2	__ __ ⇨ *BH10*	DAYS.....1 MONTHS..2 YEARS.....3	__ __	1 ⇨ *Add Birth*	2 ⇨ *Next Birth*
12		1	2	1	2	__ __	__ __	__ __ __ __	1	2 ⇨ *BH9*	__ __	1	2	__ __ ⇨ *BH10*	DAYS.....1 MONTHS..2 YEARS.....3	__ __	1 ⇨ *Add Birth*	2 ⇨ *Next Birth*
13		1	2	1	2	__ __	__ __	__ __ __ __	1	2 ⇨ *BH9*	__ __	1	2	__ __ ⇨ *BH10*	DAYS.....1 MONTHS..2 YEARS.....3	__ __	1 ⇨ *Add Birth*	2 ⇨ *Next Birth*
14		1	2	1	2	__ __	__ __	__ __ __ __	1	2 ⇨ *BH9*	__ __	1	2	__ __ ⇨ *BH10*	DAYS.....1 MONTHS..2 YEARS.....3	__ __	1 ⇨ *Add Birth*	2 ⇨ *Next Birth*

BH11. Have you had any live births since the birth of (***name of last birth listed***)?

YES.....1

NO.....2

1 ⇨*Record birth(s) in Birth History*

CM15. *Compare number in CM11 with number of births listed in the birth history above and check:*	NUMBERS ARE THE SAME.....1 NUMBERS ARE DIFFERENT.....2	1⇨*CM17*
CM16. *Probe and reconcile responses in the birth history until response in CM12 is 'Yes'.*		
CM17. *Check BH4: Last birth occurred within the last 2 years, that is, since* ***(month of interview)*** *in* ***2015****?* *If the month of interview and the month of birth are the same, and the year of birth is* ***2015****, consider this as a birth within the last 2 years.*	NO LIVE BIRTHS IN THE LAST 2 YEARS.....0 ONE OR MORE LIVE BIRTHS IN THE LAST 2 YEARS.....1	0⇨*End*
CM18. *Copy name of the last child listed in BH1.* *If the child has died, give special attention when referring to this child by name in the following modules.*	NAME OF LAST-BORN CHILD _____	

DESIRE FOR LAST BIRTH		DB
DB1. *Check CM17: Was there a live birth in the last 2 years?* *Copy name of last birth listed in the birth history (CM18) to here and use where indicated:* *Name*_____	YES, CM17=1 ..... 1 NO, CM17=0 OR BLANK 2	 2 ⇨*End*
DB2. When you got pregnant with (***name of the child***), did you want to get pregnant at that time?	YES ..... 1 NO 2	1 ⇨*End*
DB3. *Check CM11: Number of births:*	ONLY 1 BIRTH ..... 1 2 OR MORE BIRTHS 2	1 ⇨*DB4A* 2 ⇨*DB4B*
DB4A. Did you want to have a baby later, or did you not want to have any children? **DB4B**. Did you want to have a baby later, or did you not want to have any more children?	LATER ..... 1 NO MORE 2	

MATERNAL AND NEWBORN HEALTH		MN
MN1. *Check CM17: Was there a live birth in the last 2 years?* *Copy name of last birth listed in the birth history (CM18) to here and use where indicated:* *Name*_____	YES, CM17=1 ..... 1 NO, CM17=0 OR BLANK 2	2 ⇨*End*
MN2. Did you meet anyone for antenatal care during your pregnancy with (***name of the child***)?	YES ..... 1 NO 2	2 ⇨*MN8*
MN3. Whom did you meet? *Probe:* Anyone else? *Probe for the type of person met and record all answers given.*	**HEALTH PROFESSIONAL** DOCTOR / ASSISTANT DOCTOR ..... A NURSE / MIDWIFE ..... B OTHER (*specify*)_____ X	
MN4. How many weeks or months pregnant were you when you first received antenatal care during this pregnancy? *Record the answer as stated by respondent. If '9 months' or later, record '9'*	WEEKS ..... **1** __ __ MONTHS ..... **2** 0 __ DK 998	
MN5. How many times did you receive antenatal care during this pregnancy? *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.*	NUMBER OF TIMES ..... __ __ DK 98	
MN6. As part of your antenatal care during this pregnancy, were any of the following done at least once: [A] Was your blood pressure measured? [B] Did you give a urine sample? [C] Did you give a blood sample?	YES NO BLOOD PRESSURE ..... 1 2 URINE SAMPLE ..... 1 2 BLOOD SAMPLE 1 2	
MN8. When you were pregnant with (***name of the child***), did you receive injection in the arm or shoulder to prevent the baby from getting tetanus, that is, convulsions after birth?	YES ..... 1 NO ..... 2 DK 8	2 ⇨*MN11* 8 ⇨*MN11*
MN9. How many times did you receive this tetanus injection during your pregnancy with (***name of the child***)?	NUMBER OF TIMES ..... __ DK 8	8 ⇨*MN11*
MN10. *Check MN9: How many tetanus injections during last pregnancy were reported?*	ONLY 1 INJECTION ..... 1 2 OR MORE INJECTIONS 2	2 ⇨*MN19*
MN11. At any time before your pregnancy with (***name of the child***), did you receive any tetanus injection either to protect yourself or another baby? *Include DPT (Tetanus) vaccinations received as a child if mentioned.*	YES ..... 1 NO ..... 2 DK 8	2 ⇨*MN19* 8 ⇨*MN19*

MN12. How many times did you receive a tetanus injection before getting pregnant with (***name of the child***)? *If 7 or more times, record '7'.* *Include DPT (Tetanus) vaccinations received as a child if mentioned.*	NUMBER OF TIMES ..... __ DK 8	
MN13. *Check MN12: How many tetanus injections before last pregnancy were reported?*	ONLY 1 INJECTION ..... 1 2 OR MORE INJECTIONS OR DK..... 2	1 ⇨*MN14A* 2 ⇨*MN14B*
MN14A. How many years ago did you receive that tetanus injection? **MN14B**. How many years ago did you receive the last of those tetanus injections? *The reference is to the last injection received prior to this pregnancy, as recorded in MN12.* *If less than 1 year, record '00'.*	YEARS AGO ..... __ __ DK 98	
MN19. Who assisted with the delivery of (***name of the child***)? *Probe:* Who else? *Probe for the type of person assisting and record all answers given.*	**HEALTH PROFESSIONAL** DOCTOR / ASSISTANT DOCTOR ..... A NURSE / MIDWIFE..... B **OTHER PERSON** RELATIVE / FRIEND..... H OTHER (*specify*)_____ X NO ONE ..... Y	
MN20. Where did you give birth to (***name of the child***)? *Probe to identify the type of place.* *If unable to determine type of facility, write the name of the place and then temporarily record '96' until you learn the appropriate category for the response.* _____ *(Name of place)*	**HOME** RESPONDENT'S HOME..... 11 OTHER HOME ..... 12 **PUBLIC MEDICAL SECTOR** CENTRAL HOSPITAL ..... 21 PROVINCIAL HOSPITAL..... 22 COUNTY / DISTRICT PEOPLE HOSPITAL ... 23 RI PEOPLE HOSPITAL / CLINIC ..... 24 OTHER PUBLIC (*specify*)_____ 26 OTHER (*specify*)_____ 96	11 ⇨*MN23* 12 ⇨*MN23* 96 ⇨*MN23*
MN21. Was (***name of the child***) delivered by caesarean section? In other words, did they cut your belly open to take the baby out?	YES ..... 1 NO 2	 2 ⇨*MN23*
MN22. When was the decision made to have the caesarean section? *Probe if necessary:* Was it before or after your labour pains started?	BEFORE LABOUR PAINS..... 1 AFTER LABOUR PAINS 2	

MN23. Immediately after the birth, was (***name of the child***) put directly on the bare skin of your chest? *If necessary, show the picture of skin contact.* 	YES ..... 1 NO ..... 2 DK/ DON'T REMEMBER 8	 2 ⇨*MN25* 8 ⇨*MN25*
MN24. Before being placed on your bare skin, was the baby wrapped up?	YES ..... 1 NO ..... 2 DK/ DON'T REMEMBER 8	
MN25. Was (***name of the child***) dried and wiped immediately after birth?	YES ..... 1 NO ..... 2 DK/ DON'T REMEMBER 8	
MN26. How long after the birth was (***name of the child***) bathed for the first time? *If "immediately" or less than 1 hour, record '000'. If less than 24 hours, record hours.* *If "1 day" or "next day", probe:* About how many hours after the delivery? *If "24 hours", probe to ensure best estimate of less than 24 hours or 1 day.* *If 24 hours or more, record days.*	IMMEDIATELY/ LESS THAN 1 HOUR ..... 000 HOURS ..... **1** __ __ DAYS ..... **2** __ __ NEVER BATHED ..... 997 DK / DON'T REMEMBER 998	
MN32. When (***name of the child***) was born, was (he/she) very large, larger than average, average, smaller than average, or very small?	VERY LARGE ..... 1 LARGER THAN AVERAGE ..... 2 AVERAGE ..... 3 SMALLER THAN AVERAGE ..... 4 VERY SMALL ..... 5 DK 8	
MN33. Was (***name of the child***) weighed at the time of birth?	YES ..... 1 NO ..... 2 DK 8	 2 ⇨*MN35* 8 ⇨*MN35*
MN34. How much did (***name of the child***) weigh?	FROM RECALL ..... **2 (KG)** __ . __ __ __ DK 99998	
MN35. Has your menstrual period returned since the birth of (***name of the child***)?	YES ..... 1 NO 2	
MN36. Did you ever breastfeed (***name of the child***)?	YES ..... 1 NO 2	 2 ⇨*MN39B*

MN37. How long after birth did you first put (***name of the child***) to the breast? *If less than 1 hour, record '00' hours.* *If less than 24 hours, record hours.* *Otherwise, record days.*	IMMEDIATELY ..... 000 HOURS .....**1** __ __ DAYS .....**2** __ __ DK / DON'T REMEMBER 998	
MN38. In the first three days after delivery, was (***name of the child***) given anything to drink other than breast milk?	YES ..... 1 NO 2	1 ⇨*MN39A* 2 ⇨*End*
MN39A. What was (***name of the child***) given to drink? *Probe:* Anything else? *'Not given anything to drink' is not a valid response and response category Y cannot be recorded.* **MN39B**. In the first three days after delivery, what was (***name of the child***) given to drink? *Probe:* Anything else? *'Not given anything to drink' (category Y) can only be recorded if no other response category is recorded.*	MILK (OTHER THAN BREAST MILK) ..... A PLAIN WATER ..... B SUGAR OR GLUCOSE WATER ..... C ORAL REHYDRATION SALT SOLUTION (ORS) ..... E FRUIT JUICE ..... F INFANT FORMULA ..... G TEA / INFUSIONS / TRADITIONAL HERBAL PREPARATIONS ..... H HONEY ..... I PRESCRIBED MEDICINE ..... J OTHER (*specify*)_____ X NOT GIVEN ANYTHING TO DRINK ..... Y	

POST-NATAL HEALTH CHECKS		PN
PN1. *Check CM17: Was there a live birth in the last 2 years?* *Copy name of last birth listed in the birth history (CM18) to here and use where indicated:* *Name*_____	YES, CM17=1 ..... 1 NO, CM17=0 OR BLANK 2	2 ⇨*End*
PN2. *Check MN20: Was the child delivered in a health facility?*	YES, MN20=21-26 ..... 1 NO, MN20=11-12 OR 96 2	2 ⇨*PN7*
PN3. I want to ask you some questions about what happened in the hours and days after the birth of (***name of the child***). You have said that you gave birth in (***name or type of facility in MN20***). How long did you stay there after the delivery? *If less than one day, record hours.* *If less than one week, record days.* *Otherwise, record weeks.*	HOURS ..... **1** __ __ DAYS ..... **2** __ __ WEEKS ..... **3** __ __ DK / DON'T REMEMBER 998	
PN4. I would like to talk to you about checks on (***name of the child***)'s health after delivery. For example, someone examining (***name of the child***), checking the cord, or seeing if (***name of the child***) is ok. Before you left the (***name or type of facility in MN20***, did anyone check on (***name of the child***)'s health)?	YES ..... 1 NO 2	
PN5. And what about checks on <u>your</u> health – I mean, someone checking your health, for example asking questions about your health or examining you? Did anyone check on <u>your</u> health before you left (***name or type or facility in MN20***)?	YES ..... 1 NO 2	
PN6. Now I want to talk to you about what happened after you left (***name or type of facility in MN20***). Did anyone check on (***name of the child***)'s health after you left (***name or type of facility in MN20***)?	YES ..... 1 NO 2	1 ⇨*PN12* 2 ⇨*PN17*
PN7. *Check MN19: Did a health professional assist with the delivery?*	YES, AT LEAST ONE OF THE CATEGORIES A OR B RECORDED ..... 1 NO, NONE OF THE CATEGORIES A OR B RECORDED 2	2 ⇨*PN11*

PN8. You have already said that (***person or persons in MN19***) assisted with the birth. Now I want to talk to you about checks on (***name of the child***)'s health after delivery. For example examining (***name of the child***), checking the cord, or seeing if (***name of the child***) is ok. After the delivery and before (***person or persons in MN19***) left you, did (***person or persons in MN19***) check on (***name of the child***)'s health?	YES ..... 1 NO 2	
PN9. And did (***person or persons in MN19***) check on <u>your</u> health before leaving for example asking questions about your health or examining you?	YES ..... 1 NO 2	
PN10. After the (***person or persons in MN19***) left you, did anyone check on the health of (***name of the child***)?	YES ..... 1 NO 2	1 ⇨*PN12* 2 ⇨*PN19*
PN11. I want to talk to you about checks on (***name of the child***)'s health after delivery. For example, someone examining (***name of the child***), checking the cord, or seeing if the baby is ok. After (***name of the child***) was delivered, did anyone check on (his/her) health?	YES ..... 1 NO 2	 2 ⇨*PN20*
PN12. Did such a check happen only once, or more than once?	ONCE ..... 1 MORE THAN ONCE 2	1 ⇨*PN13A* 2 ⇨*PN13B*
PN13A. How long after delivery did that check happen? **PN13B**. How long after delivery did the first of these checks happen? *If less than one day, record hours.* *If less than one week, record days.* *Otherwise, record weeks.*	HOURS ..... **1** __ __ DAYS ..... **2** __ __ WEEKS ..... **3** __ __ DK / DON'T REMEMBER 998	
PN14. Who checked on (***name of the child***)'s health at that time?	**HEALTH PROFESSIONAL** DOCTOR / ASSISTANT DOCTOR ..... A NURSE / MIDWIFE ..... B **OTHER PERSON** RELATIVE / FRIEND ..... H OTHER (*specify*)_____ X	
PN15. Where did you get that check? *Probe to identify the type of place.* *<u>If unable to determine type of facility</u>, write the name of the place and then temporarily record '96' until you learn the appropriate category for the response.* _____ *(Name of place)*	**HOME** RESPONDENT'S HOME ..... 11 OTHER HOME ..... 12 **PUBLIC MEDICAL SECTOR** CENTRAL HOSPITAL ..... 21 PROVINCIAL HOSPITAL ..... 22 COUNTY / DISTRICT PEOPLE HOSPITAL ... 23 RI PEOPLE HOSPITAL / CLINIC ..... 24 OTHER PUBLIC (*specify*)_____ 26 OTHER (*specify*)_____ 96	

PN16. *Check MN20: Was the child delivered in a health facility?*	YES, MN20=21-26 ..... 1 NO, MN20=11-12 OR 96 2	 2 ⇨ *PN18*
PN17. After you left (***name or type of facility in MN20***), did anyone check on <u>your</u> health?	YES ..... 1 NO 2	1 ⇨ *PN21* 2 ⇨ *PN25*
PN18. *Check MN19: Did a health professional assist with the delivery?*	YES, AT LEAST ONE OF THE CATEGORIES A OR B RECORDED ..... 1 NO, NONE OF THE CATEGORIES A OR B RECORDED 2	 2 ⇨ *PN20*
PN19. After the delivery was over and (***person or persons in MN19***) left, did anyone check on <u>your</u> health?	YES ..... 1 NO 2	1 ⇨ *PN21* 2 ⇨ *PN25*
PN20. After the birth of (***name of the child***), did anyone check on <u>your</u> health, for example asking questions about your health or examining you?	YES ..... 1 NO 2	 2 ⇨ *PN25*
PN21. Did such a check happen only once, or more than once?	ONCE ..... 1 MORE THAN ONCE 2	1 ⇨ *PN22A* 2 ⇨ *PN22B*
PN22A. How long after delivery did that check happen? **PN22B**. How long after delivery did the first of these checks happen? *If less than one day, record hours.* *If less than one week, record days.* *Otherwise, record weeks.*	HOURS ..... **1** __ __ DAYS ..... **2** __ __ WEEKS ..... **3** __ __ DK / DON'T REMEMBER 998	
PN23. Who checked on <u>your</u> health at that time?	**HEALTH PROFESSIONAL** DOCTOR / ASSISTANT DOCTOR ..... A NURSE / MIDWIFE ..... B **OTHER PERSON** RELATIVE / FRIEND ..... H OTHER (*specify*)_____ X	
PN24. Where did you get that check? *Probe to identify the type of place.* *<u>If unable to determine type of facility</u>, write the name of the place and then temporarily record '96' until you learn the appropriate category for the response.* _____ *(Name of place)*	**HOME** RESPONDENT'S HOME ..... 11 OTHER HOME ..... 12 **PUBLIC MEDICAL SECTOR** CENTRAL HOSPITAL ..... 21 PROVINCIAL HOSPITAL ..... 22 COUNTY / DISTRICT PEOPLE HOSPITAL ... 23 RI PEOPLE HOSPITAL / CLINIC ..... 24 OTHER PUBLIC (*specify*) _____ 26 OTHER (*specify*)_____ 96	

PN25. During the first two days after birth, did any health care provider do any of the following either at home or at a facility: [A] Examine (***name of the child***)'s cord? [B] Take the temperature of (***name of the child***)? [C] Counsel you on breastfeeding?	YES NO DK EXAMINE THE CORD ..... 1 2 8 TAKE TEMPERATURE ..... 1 2 8 COUNSEL ON BREASTFEEDING 1 2 8	
PN26. *Check MN36: Was child ever breastfed?*	YES, MN36=1 ..... 1 NO, MN36=2 2	 2 ⇨*PN28*
PN27. Observe (***name of the child***)'s breastfeeding?	YES NO DK OBSERVE BREASTFEEDING..... 1 2 8	
PN28. *Check MN33: Was child weighed at birth?*	YES, MN33=1 ..... 1 NO, MN33=2 ..... 2 DK, MN33=8 3	1 ⇨*PN29A* 2 ⇨*PN29B* 3 ⇨*PN29C*
PN29A. You mentioned that (***name of the child***) was weighed at birth. After that, was (***name of the child***) weighed again by a health care provider within two days? **PN29B**. You mentioned that (***name of the child***) was not weighed at birth. Was (***name of the child***) weighed at all by a health care provider within two days after birth? **PN29C**. You mentioned that you do not know if (***name of the child***) was weighed at birth. Was (***name of the child***) weighed at all by a health care provider within two days after birth?	YES ..... 1 NO 2	
PN30. During the first two days after (***name of the child)***'s birth, did any health care provider give you information on the symptoms that require you to take your sick child to a health facility for care?	YES ..... 1 NO 2	

CONTRACEPTION		CP
CP1. I would like to talk with you about another subject: family planning. Are you pregnant now?	YES, CURRENTLY PREGNANT ..... 1 NO ..... 2 DK OR NOT SURE 8	1 ⇨*CP3*
CP2. Couples use various contraceptive methods to delay or avoid getting pregnant. Are you currently using any method including contraceptive method to delay or avoid getting pregnant?	YES ..... 1 NO 2	1 ⇨*CP4*
CP3. Have you ever done something or used any contraceptive method to delay or avoid getting pregnant?	YES ..... 1 NO 2	1 ⇨*End* 2 ⇨*End*
CP4. What methods are you using to delay or avoid a pregnancy? *Do not prompt.* *If more than one method is mentioned, record each one.*	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 PERIODIC ABSTINENCE / RHYTHM ..... L WITHDRAWAL ..... M OTHER (*specify*) _____ X	

UNMET NEED		UN
UN1. *Check CP1: Currently pregnant?*	YES, CP1=1 ..... 1 NO, DK OR NOT SURE, CP1=2 OR 8 2	 2 ⇨ *UN6*
UN2. I want to talk to you about your current pregnancy. When you got pregnant, did you want to get pregnant at that time?	YES ..... 1 NO 2	1 ⇨ *UN5*
UN3. *Check CM11: Any births?*	NO BIRTHS ..... 0 ONE OR MORE BIRTHS 1	0 ⇨ *UN4A* 1 ⇨ *UN4B*
UN4A. Did you want to have a baby later on or did you not want any children? **UN4B**. Did you want to have a baby later on or did you not want any more children?	LATER ..... 1 NONE / NO MORE 2	
UN5. 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?	HAVE ANOTHER CHILD ..... 1 NO MORE / NONE ..... 2 UNDECIDED / DK 8	1 ⇨ *UN8* 2 ⇨ *UN14* 8 ⇨ *UN14*
UN6. *Check CP4: Currently using 'Female sterilization'?*	YES, CP4=A ..... 1 NO, CP4≠A 2	1 ⇨ *UN14*
UN7. I want 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?	HAVE (A/ANOTHER) CHILD ..... 1 NO MORE / NONE ..... 2 SAYS SHE CANNOT GET PREGNANT ..... 3 UNDECIDED / DK 8	 2 ⇨ *UN10* 3 ⇨ *UN12* 8 ⇨ *UN10*
UN8. How long would you like to wait before the birth of (a/another) child? *Record the answer as stated by respondent.*	MONTHS ..... **1** __ __ YEARS ..... **2** __ __ DOES NOT WANT TO WAIT (SOON/NOW) ..... 993 SAYS SHE CANNOT GET PREGNANT ..... 994 AFTER MARRIAGE ..... 995 OTHER ..... 996 DK 998	 994 ⇨ *UN12*
UN9. *Check CP1: Currently pregnant?*	YES, CP1=1 ..... 1 NO, DK OR NOT SURE, CP1=2 OR 8 2	1 ⇨ *UN14*
UN10. *Check CP2: Currently using a method?*	YES, CP2=1 ..... 1 NO, CP2=2 2	1 ⇨ *UN14*
UN11. Do you think you are physically able to get pregnant at this time?	YES ..... 1 NO ..... 2 DK 8	1 ⇨ *UN14* 8 ⇨ *UN14*

UN12. Why do you think you are not physically able to get pregnant?	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..... I OTHER (*specify*) _____X DK..... Z	
UN13. *Check UN12: 'Never menstruated' mentioned?*	MENTIONED, UN12=C.....1 NOT MENTIONED, UN12≠C 2	1⇨*End*
UN14. When did your last menstrual period start? *Record the answer using the same unit stated by the respondent.* *If '1 year', probe:* How many months ago?	DAYS AGO..... **1** __ __ WEEKS AGO ..... **2** __ __ MONTHS AGO ..... **3** __ __ YEARS AGO..... **4** __ __ IN MENOPAUSE / HAS HAD HYSTERECTOMY.....993 BEFORE LAST BIRTH.....994 NEVER MENSTRUATED.....995	
UN15. *Check UN14: Was the last menstrual period within last year?*	YES, WITHIN LAST YEAR .....1 NO, ONE YEAR OR MORE 2	2⇨*End*
UN16. Due to your last menstruation, were there any social activities, school or work days that you did not attend?	YES .....1 NO.....2 DK / NOT SURE / NO SUCH ACTIVITY 8	
UN17. During your last menstrual period were you able to wash and change in privacy while at home?	YES .....1 NO.....2 DK.....8	
UN18. Did you use any materials such as sanitary pads, tampons or cloth?	YES .....1 NO.....2 DK.....8	 2⇨*End* *8⇨End*
UN19. Were the materials reusable?	YES .....1 NO.....2 DK.....8	

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 wife goes out without telling husband?	GOES OUT WITHOUT TELLING..... 1	2	8	
[B]	If wife neglects the children?	NEGLECTS CHILDREN 1	2	8	
[C]	If wife argues with husband?	ARGUES WITH HIM 1	2	8	
[D]	If wife refuses to have sex with husband?	REFUSES SEX 1	2	8	
[E]	If wife burns the food?	BURNS FOOD..... 1	2	8	

WM10. *Record the time.*	HOURS AND MINUTES..... __ __ : __ __	
WM11. *Was the entire interview completed in private or was there anyone else during the entire interview or part of it?*	YES, THE ENTIRE INTERVIEW WAS COMPLETED IN PRIVATE ..... 1 NO, OTHERS WERE PRESENT DURING THE ENTIRE INTERVIEW (*specify*) _____ 2 NO, OTHERS WERE PRESENT DURING PART OF THE INTERVIEW (*specify*) _____ 3	

WM16. *Check columns HL10 and HL20 in LIST OF HOUSEHOLD MEMBERS, HOUSEHOLD QUESTIONNAIRE: Is the respondent the mother or caretaker of any child age 0-4 living in this household?*

☐ *Yes* ⇨ *Go to WM17 in WOMAN'S INFORMATION PANEL and record '01'. Then go to the QUESTIONNAIRE FOR CHILDREN UNDER FIVE for that child and start the interview with this respondent.*

☐ *No* ⇨ *Check HH26-HH27 in HOUSEHOLD QUESTIONNAIRE: Is there a child age 5-17 selected for QUESTIONNAIRE FOR CHILDREN AGE 5-17?*

☐ *Yes* ⇨ *Check column HL20 in LIST OF HOUSEHOLD MEMBERS, HOUSEHOLD QUESTIONNAIRE: Is the respondent the mother or caretaker of the child selected for QUESTIONNAIRE FOR CHILDREN AGE 5-17 in this household?*

☐ *Yes* ⇨ *Go to WM17 in WOMAN'S INFORMATION PANEL and record '01'. Then go to the QUESTIONNAIRE FOR CHILDREN AGE 5-17 for that child and start the interview with this respondent.*

☐ *No* ⇨ *Go to WM17 in WOMAN'S INFORMATION PANEL and record '01'. Then end the interview with this respondent by thanking her for her cooperation. Check to see if there are other questionnaires to be administered in this household.*

☐ *No* ⇨ *Go to WM17 in WOMAN'S INFORMATION PANEL and record '01'. Then end the interview with this respondent by thanking her for her cooperation. Check to see if there are other questionnaires to be administered in this household.*

INTERVIEWER'S OBSERVATIONS

SUPERVISOR'S OBSERVATIONS

MICS

QUESTIONNAIRE FOR INDIVIDUAL MEN

2017 DPRK Multiple Indicator Cluster Survey

MAN'S INFORMATION PANEL	MWM
MWM1. *Cluster number:* ___ ___ ___	**MWM2**. *Household number:* ___ ___
MWM3. *Man's name and line number:* NAME _____ ___ ___	**MWM4**. *Supervisor's name and number:* NAME _____ ___ ___ ___
MWM5. *Interviewer's name and number:* NAME _____ ___ ___ ___	**MWM6**. *Day / Month / Year of interview:* ___ ___ / ___ ___ / 2 0 1 ___

Check man's age in HL6 in LIST OF HOUSEHOLD MEMBERS, HOUSEHOLD QUESTIONNAIRE: If age 15-17, make sure in HH39 that adult permission for interview is obtained or not needed (HL20=90). If consent is needed and not obtained, the interview must not commence and '06' should be recorded in MWM17.		**MWM7**. *Record the time:* HOURS : MINUTES __ __ : __ __
MWM8. *Check completed questionnaires in this household: Have you or another member of your team interviewed this respondent for another questionnaire?*	YES, INTERVIEWED ALREADY ..... 1 NO, FIRST INTERVIEW 2	1 ⇨*MWM9B* 2 ⇨*MWM9A*
MWM9A. Hello, my name is (***name of the interviewer***). We are from the Central Bureau of Statistics. We are conducting a survey about the situation of children, families and households. I want to talk to you about your health and other topics. This interview usually takes about 10 minutes. We are also want to talk to mothers about their children. All the information we obtain will remain strictly confidential and anonymous. If you wish not to answer a question or wish to stop the interview, please let me know. May I start now?	**MWM9B**. Now I want to talk to you about your health and other topics in more detail. This interview will take about 10 minutes. Again, all the information we obtain will remain strictly confidential and anonymous. If you wish not to answer a question or wish to stop the interview, please let me know. May I start now?	
YES, PERMISSION IS GIVEN..... 1 NO / NOT ASKED..... 2	1 ⇨*MAN'S BACKGROUND Module* 2 ⇨*MWM17*	

MWM17. *Result of man's interview.* *Discuss any result not completed with Supervisor.*	COMPLETED ..... 01 NOT AT HOME ..... 02 REFUSED ..... 03 PARTLY COMPLETED..... 04 INCAPACITATED (*specify*) _____ 05 NO ADULT CONSENT FOR RESPONDENT AGE 15-17..... 06 OTHER (*specify*) _____ 96

MAN'S BACKGROUND		MWB
MWB1. *Check the respondent's line number (MWM3) in MAN'S INFORMATION PANEL and the respondent to the HOUSEHOLD QUESTIONNAIRE (HH47):*	MWM3=HH47 ..... 1 MWM3≠HH47 2	2 ⇨*MWB3*
MWB2. *Check ED5 in EDUCATION Module in the HOUSEHOLD QUESTIONNAIRE for this respondent: Highest level of school attended:*	ED5=2, 3 OR 4 ..... 1 ED5=0, 1, 8 OR BLANK 2	1 ⇨*End* 2 ⇨*MWB14*
MWB3. In what month and year were you born?	DATE OF BIRTH MONTH ..... __ __ DK MONTH ..... 98 YEAR ..... __ __ __ __ DK YEAR 9998	
MWB4. How old are you? *Probe:* How old were you at your last birthday? *If responses to MWB3 and MWB4 are inconsistent, probe further and correct. Age must be recorded.*	AGE (IN COMPLETED YEARS) ..... __ __	
MWB5. Have you ever attended school or kindergarten?	YES ..... 1 NO 2	2 ⇨*MWB14*
MWB6. What is the highest level and grade or year of school you have attended?	KINDERGARTEN ..... 000 PRIMARY ..... **1** __ __ LOWER SECONDARY ..... **2** __ __ UPPER SECONDARY ..... **3** __ __ HIGHER ..... **4** __ __	000 ⇨*MWB14*
MWB7. Did you complete that grade?	YES ..... 1 NO 2	
MWB8. *Check MWB4: Age of respondent:*	AGE 15-24 ..... 1 AGE 25-49 2	2 ⇨*MWB13*
MWB9. At any time during the 2017-2018 school year did you attend school?	YES ..... 1 NO 2	2 ⇨*MWB11*
MWB10. During this 2017-2018 school year, which level and grade are you attending?	PRIMARY ..... **1** __ __ LOWER SECONDARY ..... **2** __ __ UPPER SECONDARY ..... **3** __ __ HIGHER ..... **4** __ __	
MWB11. At any time during the 2016-2017 school year did you attend school?	YES ..... 1 NO 2	2 ⇨*MWB13*
MWB12. During that 2016-2017 school year, which level and grade did you attend?	PRIMARY ..... **1** __ __ LOWER SECONDARY ..... **2** __ __ UPPER SECONDARY ..... **3** __ __ HIGHER ..... **4** __ __	
MWB13. *Check MWB6: Highest level of school attended:*	MWB6=2, 3 OR 4 ..... 1 MWB6=1 2	1 ⇨*End*

MWB14. Now I want you to read this sentence to me. *Show sentence on the card to the respondent.* *If respondent cannot read the whole sentence, probe:* Can you read part of the sentence to me?	CANNOT READ AT ALL ..... 1 ABLE TO READ ONLY PARTS OF SENTENCE..... 2 ABLE TO READ WHOLE SENTENCE..... 3 NO SENTENCE IN BRAILLE 4	

MASS MEDIA AND ICT		MMT
MMT1. Do you read a newspaper or magazine at least once a week, less than once a week or not at all? *If 'At least once a week', probe:* In other words, do you read newspapers or magazines almost every day? *If 'Yes' record 3, if 'No' record 2.*	NOT AT ALL..... 0 LESS THAN ONCE A WEEK..... 1 AT LEAST ONCE A WEEK ..... 2 ALMOST EVERY DAY 3	
MMT2. Do you listen to the radio at least once a week, less than once a week or not at all? *If 'At least once a week', probe:* In other words, do you listen to the radio almost every day? *If 'Yes' record 3, if 'No' record 2.*	NOT AT ALL..... 0 LESS THAN ONCE A WEEK..... 1 AT LEAST ONCE A WEEK ..... 2 ALMOST EVERY DAY 3	
MMT3. Do you watch television at least once a week, less than once a week or not at all? *If 'At least once a week', probe:* In other words, do you watch television almost every day? *If 'Yes' record 3, if 'No' record 2.*	NOT AT ALL..... 0 LESS THAN ONCE A WEEK..... 1 AT LEAST ONCE A WEEK ..... 2 ALMOST EVERY DAY 3	
MMT4. Have you ever used a computer or a tablet from any location?	YES..... 1 NO 2	 2⇨*MMT9A*
MMT5. During the last 3 months, did you use a computer or a tablet at least once a week, less than once a week or not at all? *If 'At least once a week', probe:* In other words, do you use it almost every day? *If 'Yes' record 3, if 'No' record 2.*	NOT AT ALL..... 0 LESS THAN ONCE A WEEK..... 1 AT LEAST ONCE A WEEK ..... 2 ALMOST EVERY DAY 3	0⇨*MMT9A*

MMT6. During the last 3 months, did you done following: [A] Copy or move a file or folder? [B] Use a copy and paste tool to duplicate or move information within a document? [C] Send e-mail with attached file, such as a document, picture or video? [D] Use a basic arithmetic formula in a spreadsheet? [E] Connect and install a new device, such as a modem, camera or printer? [F] Find, download, install and configure software? [G] Create an electronic presentation with presentation software, including text, images, sound, video or charts? [H] Transfer a file between a computer and other device? [I] Write a computer program in any programming language?	YES NO COPY/MOVE FILE ..... 1 2 USE COPY/PASTE IN DOCUMENT..... 1 2 SEND E-MAIL WITH ATTACHMENT..... 1 2 USE BASIC SPREADSHEET FORMULA. 1 2 CONNECT DEVICE..... 1 2 INSTALL SOFTWARE..... 1 2 CREATE PRESENTATION..... 1 2 TRANSFER FILE ..... 1 2 PROGRAMMING..... 1 2	
MMT7. *Check MMT6[C]: Is 'Yes' recorded?*	YES, MMT6[C]=1..... 1 NO, MMT6[C]=2 2	1⇨*MMT10A*
MMT8. *Check MMT6[F]: Is 'Yes' recorded?*	YES, MMT6[F]=1 ..... 1 NO, MMT6[F]=2..... 2	1⇨*MMT10A*
MMT9A. Have you ever used the intranet from any location and any device?	YES..... 1 NO 2	2⇨*MMT11*
MMT10A. During the last 3 months, did you use the intranet at least once a week, less than once a week or not at all? *If 'At least once a week', probe:* In other words, have you used it almost every day? *If 'Yes' record 3, if 'No' record 2.*	NOT AT ALL..... 0 LESS THAN ONCE A WEEK..... 1 AT LEAST ONCE A WEEK ..... 2 ALMOST EVERY DAY 3	
MMT11. Do you own a mobile phone?	YES..... 1 NO 2	
MMT12. During the last 3 months, did you use a mobile telephone at least once a week, less than once a week or not at all? *Probe if necessary:* I mean, have you ever communicated with someone using a mobile phone. *If 'At least once a week', probe:* In other words, have you used it almost every day? *If 'Yes' record 3, if 'No' record 2.*	NOT AT ALL..... 0 LESS THAN ONCE A WEEK..... 1 AT LEAST ONCE A WEEK ..... 2 ALMOST EVERY DAY 3	

MARRIAGE		MMA
MMA1. Are you currently married?	YES, CURRENTLY MARRIED.....1 NO, NOT IN UNION.....3	1 ⇨*MMA7*
MMA5. Have you ever been married?	YES, FORMERLY MARRIED.....1 NO.....3	3 ⇨*Module MDV*
MMA6. What is your marital status now: are you widowed, divorced or separated?	WIDOWED.....1 DIVORCED.....2 SEPARATED.....3	
MMA7. Have you been married only once or more than once?	ONLY ONCE.....1 MORE THAN ONCE.....2	1 ⇨*MMA8A* 2 ⇨*MMA8B*
MMA8A. In what month and year did you start living with your wife? **MMA8B**. In what month and year did you start living with your first wife?	DATE OF (FIRST) UNION MONTH.....__ __ DK MONTH.....98 YEAR.....__ __ __ __ DK YEAR.....9998	
MMA9. *Check MMA8A/B: Is 'DK YEAR' recorded?*	YES, MMA8A/B=9998.....1 NO, MMA8A/B≠9998.....2	2 ⇨*End*
MMA10. *Check MMA7: In marriage only once?*	YES, MMA7=1.....1 NO, MMA7=2.....2	1 ⇨*MMA11A* 2 ⇨*MMA11B*
MMA11A. How old were you when you started living with your wife? **MMA11B**. How old were you when you started living with your first wife?	AGE IN YEARS.....__ __	

FERTILITY		MCM
MCM1. Now I will ask about all the children you have had during your life. I am interested in all of the children that are biologically yours, even if they are not legally yours or do not have your last name. Have you ever fathered any children with any woman? *This module should only include children born alive. Stillbirths should not be included in response to any question.*	YES..... 1 NO ..... 2 DK 8	 2 ⇨*MCM8* 8 ⇨*MCM8*
MCM2. Do you have any biological sons or daughters who are now living with you?	YES..... 1 NO 2	 2 ⇨*MCM5*
MCM3. How many sons live with you? *If none, record '00'.*	SONS AT HOME.....__ __	
MCM4. How many daughters live with you? *If none, record '00'.*	DAUGHTERS AT HOME.....__ __	
MCM5. Do you have any biological sons or daughters who are alive but do not live with you?	YES..... 1 NO 2	 2 ⇨*MCM8*
MCM6. How many sons are alive but do not live with you? *If none, record '00'.*	SONS ELSEWHERE.....__ __	
MCM7. How many daughters are alive but do not live with you? *If none, record '00'.*	DAUGHTERS ELSEWHERE .....__ __	
MCM8. Have you ever fathered a son or daughter who was born alive but later died? *If 'No' probe by asking:* I mean, to any baby who cried, who made any movement, sound, or effort to breathe, or who showed any other signs of life even if for a very short time?	YES..... 1 NO 2	 2 ⇨*MCM11*
MCM9. How many boys have died? *If none, record '00'.*	BOYS DEAD .....__ __	
MCM10. How many girls have died? *If none, record '00'.*	GIRLS DEAD .....__ __	
MCM11. *Sum answers to MCM3, MCM4, MCM6, MCM7, MCM9 and MCM10.*	SUM.....__ __	
MCM12. Just to make sure that I have this right, you have fathered (***total number in MCM11***) live births during your life. Is this correct?	YES..... 1 NO 2	1 ⇨*MCM14*
MCM13. *Check responses to MCM1-MCM10 and make corrections as necessary until response in MCM12 is 'Yes'.*		

MCM14. *Check MCM11: How many live births fathered?*	NO LIVE BIRTHS, MCM11=00 ..... 0 ONE LIVE BIRTH ONLY, MCM11=01..... 1 TWO OR MORE LIVE BIRTHS, MCM11=02 OR MORE..... 2	0 ⇨*End* 1 ⇨*MCM18A*
MCM15. Did all the children you have fathered have the same biological mother?	YES..... 1 NO 2	1 ⇨*MCM17*
MCM16. In total, how many women have you fathered children with?	NUMBER OF WOMEN .....__ __	
MCM17. How old were you when your first child was born?	AGE IN YEARS.....__ __	⇨*MCM18B*
MCM18A. In what month and year was your biological child born? **MCM18B**. In what month and year was the last of these (***total number in MCM11***) children you have fathered born even if he or she has died? *Month and year must be recorded.*	DATE OF LAST BIRTH MONTH ..... __ __ YEAR ..... __ __ __ __	

ATTITUDES TOWARD DOMESTIC VIOLENCE					MDV
MDV1. 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 wife goes out without telling husband?	GOES OUT WITHOUT TELLING	1	2	8	
[B] If wife neglects the children?	NEGLECTS CHILDREN	1	2	8	
[C] If wife argues with husband?	ARGUES WITH HIM	1	2	8	
[D] If wife refuses to have sex with husband?	REFUSES SEX	1	2	8	
[E] If wife burns the food?	BURNS FOOD	1	2	8	

MWM10. *Record the time.*	HOURS AND MINUTES..... __ __ : __ __	
MWM11. *Was the entire interview completed in private or was there anyone else during the entire interview or part of it?*	YES, THE ENTIRE INTERVIEW WAS COMPLETED IN PRIVATE ..... 1 NO, OTHERS WERE PRESENT DURING THE ENTIRE INTERVIEW (*specify*) _____ 2 NO, OTHERS WERE PRESENT DURING PART OF THE INTERVIEW (*specify*) _____ 3	

MWM16. *Check columns HL20 in LIST OF HOUSEHOLD MEMBERS, HOUSEHOLD QUESTIONNAIRE: Is the respondent the caretaker of any child age 0-4 living in this household?*

☐ *Yes* ⇨ *Go to MWM17 in MAN'S INFORMATION PANEL and record '01'. Then go to the QUESTIONNAIRE FOR CHILDREN UNDER FIVE for that child and start the interview with this respondent.*

☐ *No* ⇨ *Check HH26-HH27 in HOUSEHOLD QUESTIONNAIRE: Is there a child age 5-17 selected for QUESTIONNAIRE FOR CHILDREN AGE 5-17?*

☐ *Yes* ⇨ *Check column HL20 in LIST OF HOUSEHOLD MEMBERS, HOUSEHOLD QUESTIONNAIRE: Is the respondent the caretaker of the child selected for QUESTIONNAIRE FOR CHILDREN AGE 5-17 in this household?*

☐ *Yes* ⇨ *Go to MWM17 in MAN'S INFORMATION PANEL and record '01'. Then go to the QUESTIONNAIRE FOR CHILDREN AGE 5-17 for that child and start the interview with this respondent.*

☐ *No* ⇨ *Go to MWM17 in MAN'S INFORMATION PANEL and record '01'. Then end the interview with this respondent by thanking him for his cooperation. Check to see if there are other questionnaires to be administered in this household.*

☐ *No* ⇨ *Go to MWM17 in MAN'S INFORMATION PANEL and record '01'. Then end the interview with this respondent by thanking him for his cooperation. Check to see if there are other questionnaires to be administered in this household.*

INTERVIEWER'S OBSERVATIONS

SUPERVISOR'S OBSERVATIONS

MICS

QUESTIONNAIRE FOR CHILDREN UNDER FIVE

2017 DPRK Multiple Indicator Cluster Survey

UNDER-FIVE CHILD INFORMATION PANEL		UF
UF1. *Cluster number:* ___ ___ ___	**UF2**. *Household number:* ___ ___	
UF3. *Child's name and line number:* NAME _____ ___ ___	**UF4**. *Mother's / Caretaker's name and line number:* NAME _____ ___ ___	
UF5. *Interviewer's name and number:* NAME _____ ___ ___ ___	**UF6**. *Supervisor's name and number:* NAME _____ ___ ___ ___	
UF7. *Day / Month / Year of interview:* ___ ___ /___ ___ / 2 0 1 ___	**UF8**. *Record the time:*	HOURS : MINUTES __ __ : __ __

Check respondent's age in HL6 in LIST OF HOUSEHOLD MEMBERS, HOUSEHOLD QUESTIONNAIRE:
If age 15-17, check that adult consent for interview is obtained (HH33 or HH39) or not needed (HL20=90). If consent is needed and not obtained, the interview must not commence and '06' should be recorded in UF17. The respondent must be at least 15 years old.

UF9. *Check completed questionnaires in this household: Have you or another member of your team interviewed this respondent for another questionnaire?*	YES, INTERVIEWED ALREADY .....1 NO, FIRST INTERVIEW.....2	1 ⇨*UF10B* 2 ⇨*UF10A*

UF10A. Hello, my name is (***name of the interviewer***). We are from the Central Bureau of Statistics. We are conducting a survey about the situation of children, families and households. I would like to talk to you about (***child's name from UF3***)'s health and well-being. This interview will take about ***30*** minutes. All the information we obtain will remain strictly confidential and anonymous. If you wish not to answer a question or wish to stop the interview, please let me know. May I start now?	**UF10B**. Now I would like to talk to you about (***child's name from UF3***)'s health and well-being in more detail. This interview will take about ***30*** minutes. Again, all the information we obtain will remain strictly confidential and anonymous. If you wish not to answer a question or wish to stop the interview, please let me know. May I start now?
YES, PERMISSION IS GIVEN..... 1 NO / NOT ASKED..... 2	1 ⇨*UNDER FIVE'S BACKGROUND Module* 2 ⇨*UF17*

UF17. *Result of interview for children under 5* *Codes refer to mother/caretaker.* *Discuss any result not completed with Supervisor.*	COMPLETED ..... 01 NOT AT HOME ..... 02 REFUSED ..... 03 PARTLY COMPLETED..... 04 INCAPACITATED (*specify*) _____ 05 NO ADULT CONSENT FOR MOTHER/ CARETAKER AGE 15-17..... 06 OTHER (*specify*) _____ 96

UNDER-FIVE'S BACKGROUND		UB
UB1. On what day, month and year was (***name of the child***) born? *Probe:* What is (his/her) birthday? *If the mother/caretaker knows the exact date of birth, also record the day; otherwise, record '98' for day.* *Month and year must be recorded.*	DATE OF BIRTH DAY ..... __ __ DK DAY..... 98 MONTH ..... __ __ YEAR..... 2 0 1 __	
UB2. How old is (***name of the child***)? *Probe*: How old was (***name of the child***) at (his/her) last birthday? *Record age in completed years.* *Record '0' if less than 1 year.* *If responses to UB1 and UB2 are inconsistent, probe further and correct.*	AGE (IN COMPLETED YEARS)..... __	
UB3. *Check UB2: Child's age?*	AGE 0, 1, OR 2..... 1 AGE 3 OR 4..... 2	1 ⇨*End*
UB4. *Check the respondent's line number (UF4) and the respondent to the HOUSEHOLD QUESTIONNAIRE (HH47):*	RESPONDENT IS THE SAME, UF4=HH47 ..... 1 RESPONDENT IS NOT THE SAME, UF4≠HH47 2	2 ⇨*UB6*
UB5. *Check ED10 in the EDUCATION MODULE in the HOUSEHOLD QUESTIONNAIRE: Is the child attending nursery or kindergarten in the current school year?*	YES, ED10=0 ..... 1 NO, ED10≠0 OR BLANK..... 2	1 ⇨*UB8B* 2 ⇨*End*
UB6. Has (***name of the child***) ever attended nursery or kindergarten?	YES ..... 1 NO..... 2	2 ⇨*End*
UB7. At any time since April, did (he/she) attend (*nursery / kindergarten*)?	YES ..... 1 NO..... 2	1 ⇨*UB8A* 2 ⇨*End*
UB8A. Does (he/she) currently attend (*nursery / kindergarten*)? **UB8B**. You have mentioned that (***name of the child***) has attended nursery/kindergarten this school year. Does (he/she) currently attend this programme?	YES ..... 1 NO..... 2	

EARLY CHILDHOOD DEVELOPMENT		EC
EC1. How many children's books or picture books do you have for (***name of the child***)?	NONE ..... 00 NUMBER OF CHILDREN'S BOOKS..... 0 __ TEN OR MORE BOOKS 10	
EC2. I want to know about the things that (***name of the child***) plays with when (he/she) is at home. Does (he/she) play with the following: [A] Homemade toys, such as dolls, cars, or other toys made at home? [B] Toys from a shop or manufactured toys? [C] Household objects, such as bowls or pots, or objects found outside, such as sticks, rocks, shells or leaves?	Y N DK HOMEMADE TOYS..... 1 2 8 TOYS FROM A SHOP..... 1 2 8 HOUSEHOLD OBJECTS OR OUTSIDE OBJECTS 1 2 8	
EC3. 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 alone. On how many days in the past week was (***name of the child***): [A] Left alone for more than an hour? [B] Left in the care of another child, that is, another child under 10 years old, for more than an hour? *If 'None' record '0'. If 'Don't know' record '8'.*	NUMBER OF DAYS LEFT ALONE FOR MORE THAN AN HOUR.....__ NUMBER OF DAYS LEFT WITH ANOTHER CHILD FOR MORE THAN AN HOUR.....__	
EC4. *Check UB2: Child's age?*	AGE 0 OR 1 ..... 1 AGE 2, 3 OR 4 2	1 ⇨*End*

EC5. In the past 3 days, did you or any household member age 15 or over engage in any of the following activities with (***name of the child***): *If 'Yes', ask:* Who engaged in this activity with (***name of the child***)? *A foster/step mother or father living in the household who engaged with the child should be coded as mother or father.* *Record all that apply.* *'No one' cannot be recorded if any household member age 15 and above engaged in activity with child.*		**MOTHER**	**FATHER**	**OTHER**	**NO ONE**	
[A] Read books or looked at picture books with (***name of the child***)?	READ BOOKS	A	B	X	Y	
[B] Told stories to (***name of the child***)?	TOLD STORIES	A	B	X	Y	
[C] Sang songs to or with (***name of the child***), including lullabies?	SANG SONGS	A	B	X	Y	
[D] Took (***name of the child***) outside the home?	TOOK OUTSIDE	A	B	X	Y	
[E] Played with (***name of the child***)?	PLAYED WITH	A	B	X	Y	
[F] Named, counted, or drew things for or with (***name of the child***)?	NAMED	A	B	X	Y	
EC5G. *Check UB2: Child's age?*	AGE 2 ..... 1 AGE 3 OR 4 2					1 ⇨*End*
EC6. I want to ask you some questions about the health and development of (***name of the child***). Children do not all develop and learn at the same rate. For example, some walk earlier than others. These questions are related to several aspects of (***name of the child***)'s development. Can (***name of the child***) identify or name at least ten letters of the alphabet?	YES..... 1 NO ..... 2 DK 8					
EC7. Can (***name of the child***) read at least four simple, popular words?	YES..... 1 NO ..... 2 DK 8					
EC8. Does (***name of the child***) know the name and recognize the symbol of all numbers from 1 to 10?	YES..... 1 NO ..... 2 DK 8					
EC9. Can (***name of the child***) pick up a small object with two fingers, like a stick or a stone from the ground?	YES..... 1 NO ..... 2 DK 8					

EC10. Is (***name of the child***) sometimes too sick to play?	YES..... 1 NO ..... 2 DK 8	
EC11. Does (***name of the child***) follow simple methods on how to do something correctly?	YES..... 1 NO ..... 2 DK 8	
EC12. When given something to do, is (***name of the child***) able to do it independently?	YES..... 1 NO ..... 2 DK 8	
EC13. Does *(**name of the child***) get along well with other children?	YES..... 1 NO ..... 2 DK 8	
EC14. Does (***name of the child***) kick, bite, or hit other children or adults?	YES..... 1 NO ..... 2 DK 8	
EC15. Does (***name of the child***) get distracted easily?	YES..... 1 NO ..... 2 DK 8	

CHILD DISCIPLINE		UCD
UCD1. *Check UB2: Child's age?*	AGE 0 ..... 1 AGE 1, 2, 3 OR 4..... 2	1 ⇨*End*
UCD2. Adults use different ways to teach children the right behavior or to address a behavior problem. I am going to read you various methods that are used. Please tell me if you or any other adult in your household has used this method with (***name of the child***) in the past month.	YES NO	
[A] Took away privileges, forbade something (***name of the child***) liked or did not allow (him/her) to leave the house.	TOOK AWAY PRIVILEGES 1 2	
[B] Explained why (***name of the child***)'s behavior was wrong.	EXPLAINED WRONG BEHAVIOR..... 1 2	
[C] Shook (him/her).	SHOOK HIM/HER 1 2	
[D] Shouted, yelled at or screamed at (him/her).	SHOUTED, YELLED, SCREAMED 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, 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	
UCD3. *Check UF4: Is this respondent the mother or caretaker of any other children under age 5 or a child age 5-14 selected for the questionnaire for children age 5-17?*	YES..... 1 NO..... 2	2 ⇨*UCD5*
UCD4. *Check UF4: Has this respondent already responded to the following question (UCD5 or FCD5) for another child?*	YES..... 1 NO..... 2	1 ⇨*End*
UCD5. 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	

CHILD FUNCTIONING (age 2-4)		UCF
UCF1. *Check UB2: Child's age?*	AGE 0 OR 1 ..... 1 AGE 2, 3 OR 4 2	1 ⇨*End*
UCF2. I want to ask you some questions about difficulties (***name of the child***) may have. Does (***name of the child***) wear glasses?	YES ..... 1 NO 2	
UCF3. Does (***name of the child***) use a hearing aid?	YES ..... 1 NO 2	
UCF4. Does (***name of the child***) use any equipment or receive assistance for walking?	YES ..... 1 NO 2	
UCF5. In the following questions, please answer by selecting one of four possible answers. For each question, would you say that (***name of the child***) has: 1) no difficulty, 2) some difficulty, 3) a lot of difficulty, or 4) cannot do it at all. *Repeat the categories during the individual questions whenever the respondent does not use an answer category:* Remember the four possible answers: Would you say that (***name of the child***) has: 1) no difficulty, 2) some difficulty, 3) a lot of difficulty, or 4) cannot do it at all?		
UCF6. *Check UCF2: Child wears glasses?*	YES, UCF2=1 ..... 1 NO, UCF2=2 2	1 ⇨*UCF7A* 2 ⇨*UCF7B*
UCF7A. When wearing (his/her) glasses, does (***name of the child***) have difficulty seeing? **UCF7B**. Does (***name of the child***) have difficulty seeing?	NO DIFFICULTY ..... 1 SOME DIFFICULTY ..... 2 A LOT OF DIFFICULTY ..... 3 CANNOT SEE AT ALL 4	
UCF8. *Check UCF3: Child uses a hearing aid?*	YES, UCF3=1 ..... 1 NO, UCF3=2 2	1 ⇨*UCF9A* 2 ⇨*UCF9B*
UCF9A. When using (his/her) hearing aid(s), does (***name of the child***) have difficulty hearing sounds like peoples' voices or music? **UCF9B**. Does (***name of the child***) have difficulty hearing sounds like peoples' voices or music?	NO DIFFICULTY ..... 1 SOME DIFFICULTY ..... 2 A LOT OF DIFFICULTY ..... 3 CANNOT HEAR AT ALL 4	
UCF10. *Check UCF4: Child uses equipment or receives assistance for walking?*	YES, UCF4=1 ..... 1 NO, UCF4=2 2	1 ⇨*UCF11* 2 ⇨*UCF13*
UCF11. Without (his/her) equipment or assistance, does (***name of the child***) have difficulty walking?	SOME DIFFICULTY ..... 2 A LOT OF DIFFICULTY ..... 3 CANNOT WALK AT ALL 4	
UCF12. With (his/her) equipment or assistance, does (***name of the child***) have difficulty walking?	NO DIFFICULTY ..... 1 SOME DIFFICULTY ..... 2 A LOT OF DIFFICULTY ..... 3 CANNOT WALK AT ALL 4	1 ⇨*UCF14* 2 ⇨*UCF14* 3 ⇨*UCF14* 4 ⇨*UCF14*

UCF13. Compared with other children of the same age, does (***name of the child***) have difficulty walking?	NO DIFFICULTY ..... 1 SOME DIFFICULTY ..... 2 A LOT OF DIFFICULTY..... 3 CANNOT WALK AT ALL 4	
UCF14. Compared with other children of the same age, does (***name of the child***) have difficulty picking up small objects with (his/her) hand?	NO DIFFICULTY ..... 1 SOME DIFFICULTY ..... 2 A LOT OF DIFFICULTY..... 3 CANNOT PICK UP AT ALL 4	
UCF15. Does (***name of the child***) have difficulty understanding you?	NO DIFFICULTY ..... 1 SOME DIFFICULTY ..... 2 A LOT OF DIFFICULTY..... 3 CANNOT UNDERSTAND AT ALL..... 4	
UCF16. When (***name of the child***) speaks, do you have difficulty understanding (him/her)?	NO DIFFICULTY ..... 1 SOME DIFFICULTY ..... 2 A LOT OF DIFFICULTY..... 3 CANNOT BE UNDERSTOOD AT ALL 4	
UCF17. Compared with other children of the same age, does (***name of the child***) have difficulty learning things?	NO DIFFICULTY ..... 1 SOME DIFFICULTY ..... 2 A LOT OF DIFFICULTY..... 3 CANNOT LEARN THINGS AT ALL 4	
UCF18. Compared with other children of the same age, does (***name of the child***) have difficulty playing?	NO DIFFICULTY ..... 1 SOME DIFFICULTY ..... 2 A LOT OF DIFFICULTY..... 3 CANNOT PLAY AT ALL..... 4	
UCF19. The next questions have different options for answers. I am going to read these to you after question. Compared with other children of the same age, how much does (***name of the child***) kick, bite or hit other children or adults? Would you say: not at all, less, the same, more or a lot more?	NOT AT ALL ..... 1 LESS..... 2 THE SAME..... 3 MORE..... 4 A LOT MORE..... 5	

BREASTFEEDING AND DIETARY INTAKE		BD
BD1. *Check UB2: Child's age?*	AGE 0, 1, OR 2.....1 AGE 3 OR 4.....2	 2 ⇨*End*
BD2. Has (***name of the child***) ever been breastfed?	YES.....1 NO.....2 DK.....8	 2 ⇨*BD3A* 8 ⇨*BD3A*
BD3. Is (***name of the child***) still being breastfed?	YES.....1 NO.....2 DK.....8	
BD3A. *Check UB2: Child's age?*	AGE 0 OR 1.....1 AGE 2.....2	 2 ⇨*End*
BD4. Yesterday, during the day or night, did (***name of the child***) drink anything from a bottle with a rubber nipple?	YES.....1 NO.....2 DK.....8	
BD5. Did (***name of the child***) drink Oral Rehydration Salt solution (ORS) yesterday, during the day or night?	YES.....1 NO.....2 DK.....8	
BD6. Did (***name of the child***) drink or eat vitamin or mineral supplements or any medicines yesterday, during the day or night?	YES.....1 NO.....2 DK.....8	

BD7. I want to ask you about all other liquids that (***name of the child***) may have had yesterday during the day or the night.

Include liquids consumed outside of your home.

Did (***name of the child***) drink (***name of item***) yesterday during the day or the night:

		YES	NO	DK
[A] Plain water?	PLAIN WATER	1	2	8
[B] Juice or juice drinks?	JUICE OR JUICE DRINKS	1	2	8
[C] Clear soup?	CLEAR SOUP	1	2	8
[D] Infant formula, such as KKotmangul (flower-bud) infant formula?	INFANT FORMULA	1	2 ⇨ *BD7[E]*	8 ⇨ *BD7[E]*
[D1] How many times did (***name of the child***) drink infant formula? *If 7 or more times, record '7'.* *If unknown, record '8'.*	NUMBER OF TIMES DRANK INFANT FORMULA.....__			
[E] Milk from animals, such as fresh, tinned, or powdered milk?	MILK	1	2 ⇨ *BD7[F]*	8 ⇨ *BD7[F]*
[E1] How many times did (***name of the child***) drink milk? *If 7 or more times, record '7'.* *If unknown, record '8'.*	NUMBER OF TIMES DRANK MILK.....__			
[F] Tea (tea without milk or dairy products)?	WATER-BASED TEA	1	2	8
[G] Honey water?	HONEY WATER	1	2	8

[X] Any other liquids?	OTHER LIQUIDS	1	2 ✩ *BD8*	8 ✩ *BD8*	
[X1] *Record all other liquids mentioned.*	(*Specify*) _____				

BD8. I want to ask you about <u>everything</u> that (***name of the child***) ate yesterday during the day or the night. Please include foods consumed outside of your home.

- Think about when (***name of the child***) woke up yesterday. Did (he/she) eat anything at that time?

If 'Yes' ask: Please tell me everything (***name of the child***) ate at that time. *Probe:* Anything else?

Record answers using the food groups below.

- What did (***name of the child***) do after that? Did (he/she) eat anything at that time?

Repeat this string of questions, recording in the food groups, until the respondent tells you that the child went to sleep until the next morning.

For each food group not mentioned after completing the above ask: Just to confirm, did (***name of the child***) eat (***food group items***) yesterday during the day or the night		YES	NO	DK
[A] Yogurt made from animal milk? *Note that liquid/drinking yogurt should be captured in BD7[E] or BD7[X], depending on milk content*	YOGURT	1	2 ✩ *BD8[B]*	8 ✩ *BD8[B]*
[A1] How many times did (***name)*** eat yogurt? *If 7 or more times, record '7'. If unknown, record '8'.*	NUMBER OF TIMES ATE YOGURT.....__			
[B] Any baby food, such as KKotmangul (flower-bud) baby food?	FORTIFIED BABY FOOD	1	2	8
[C] Bread, rice, noodles, porridge, or other foods made from grains?	FOODS MADE FROM GRAINS	1	2	8
[D] Pumpkin, carrots or sweet potatoes that are yellow or orange inside?	PUMPKIN, CARROTS, ETC.	1	2	8
[E] Potatoes, yams, or any other foods made from roots?	FOODS MADE FROM ROOTS	1	2	8
[F] Any dark green, leafy vegetables, such as spinach, broccoli or seaweed?	DARK GREEN, LEAFY VEGETABLES	1	2	8
[G] Apricot or watermelon?	APRICOT OR WATERMELON	1	2	8
[H] Any other fruits or vegetables, such as apple, pear, cabbage, cucumber, tomato or eggplant?	OTHER FRUITS OR VEGETABLES	1	2	8
[I] Liver, kidney, heart or other organ meats?	ORGAN MEATS	1	2	8
[J] Any other meat, such as beef, pork, lamb, goat, chicken, duck or sausages made from these meats?	OTHER MEATS	1	2	8
[K] Eggs?	EGGS	1	2	8
[L] Fish or shellfish, either fresh or dried?	FRESH OR DRIED FISH	1	2	8
[M] Beans, peas, lentils or nuts, including any foods made from these?	FOODS MADE FROM BEANS, PEAS, NUTS, ETC.	1	2	8
[N] Cheese or other food made from animal milk?	CHEESE OR OTHER FOOD MADE FROM MILK	1	2	8

[X] Other solid, semi-solid, or soft food?	OTHER SOLID, SEMI-SOLID, OR SOFT FOOD 1 / 2 ⇨ *BD9* / 8 ⇨ *BD9*	
[X1] *Record all other solid, semi-solid, or soft food that do not fit food groups above.*	(*Specify*) _____	
BD9. How many times did (***name of the child***) eat any solid, semi-solid or soft foods yesterday during the day or night? *If BD8[A] is 'Yes', ensure that the response here includes the number of times recorded for yogurt in BD8[A1].* *If 7 or more times, record '7'.*	NUMBER OF TIMES.....__ DK.....8	

IMMUNIZATION		IM
IM1. *Check UB2: Child's age?*	AGE 0, 1, OR 2 ..... 1 AGE 3 OR 4 2	2 ⇨*End*
IM11. Has (***name of the child***) ever received any vaccinations to prevent (him/her) from getting diseases?	YES ..... 1 NO ..... 2 DK 8	
IM13. *Check IM11:*	NO OR DK ..... 1 YES 2	1 ⇨*End*
IM14. Has (***name of the child***) ever received a BCG vaccination against tuberculosis – that is, an injection in the arm or shoulder that usually causes a scar?	YES ..... 1 NO ..... 2 DK 8	
IM15. Did (***name of the child***) receive a Hepatitis B vaccination – that is an injection on the outside of the thigh to prevent Hepatitis B disease – within the first 24 hours after birth?	YES, WITHIN 24 HOURS ..... 1 YES, BUT NOT WITHIN 24 HOURS ..... 2 NO ..... 3 DK 8	
IM16. Has (***name of the child***) ever received any vaccination drops in the mouth to protect (him/her) from polio? *Probe by indicating that the drop is usually given at the same time as injections to prevent other diseases.*	YES ..... 1 NO ..... 2 DK 8	2 ⇨*IM20* 8 ⇨*IM20*
IM18. How many times were the polio drops received?	NUMBER OF TIMES ..... __ DK 8	
IM19. The last time (***name of the child***) received the polio drops, did (he/she) also get an injection to protect against polio? *Probe to ensure that both were given, drops and injection.*	YES ..... 1 NO ..... 2 DK 8	
IM20. Has (***name of the child***) ever received a Pentavalent vaccination – that is, an injection in the thigh to prevent (him/her) from getting tetanus, whooping cough, diphtheria, Hepatitis B disease, and Haemophilus influenzae type b? *Probe by indicating that Pentavalent vaccination is sometimes given at the same time as the Polio drops.*	YES ..... 1 NO ..... 2 DK 8	2 ⇨*IM26* 8 ⇨*IM26*
IM21. How many times was the Pentavalent vaccine received?	NUMBER OF TIMES ..... __ DK 8	
IM26. Has (***name of the child***) ever received a measles vaccine – that is, a shot in the arm at the age of 9 months or older - to prevent (him/her) from getting measles?	YES ..... 1 NO ..... 2 DK 8	2 ⇨*End* 8 ⇨*End*
IM26A. How many times was the measles vaccine received?	NUMBER OF TIMES ..... __ DK 8	
IM28. *Issue a QUESTIONNAIRE FORM FOR VACCINATION RECORDS AT HEALTH FACILITY for this child. Complete the Information Panel on that Questionnaire*		

CARE OF ILLNESS		CA
CA1. In the last two weeks, has (***name of the child***) had diarrhoea?	YES .....1 NO .....2 DK 8	 2 ⇨*CA14* 8 ⇨*CA14*
CA2. *Check BD3: Is child still breastfeeding?*	YES OR BLANK, BD3=1 OR BLANK.....1 NO OR DK, BD3=2 OR 8 2	1 ⇨*CA3A* 2 ⇨*CA3B*
CA3A. I would like to know how much (***name of the child***) was given to drink during the diarrhoea. This includes breastmilk, Oral Rehydration Salt solution (ORS) and other liquids given with medicine. During the time (***name of the child***) had diarrhoea, was (he/she) given less than usual to drink, about the same amount, or more than usual? *If 'less', probe*: Was (he/she) given much less than usual to drink, or somewhat less? **CA3B**. I would like to know how much (***name of the child***) was given to drink during the diarrhoea. This includes Oral Rehydration Salt solution (ORS) and other liquids given with medicine. During the time (***name of the child***) had diarrhoea, was (he/she) given less than usual to drink, about the same amount, or more than usual? *If 'less', probe*: Was (he/she) given much less than usual to drink, or somewhat less?	MUCH LESS .....1 SOMEWHAT LESS.....2 ABOUT THE SAME.....3 MORE .....4 NOTHING TO DRINK .....5 DK 8	
CA4. During the time (***name***) had diarrhoea, was (he/she) given less than usual to eat, about the same amount, more than usual, or nothing to eat? *If 'less', probe:* Was (he/she) given much less than usual to eat or somewhat less?	MUCH LESS .....1 SOMEWHAT LESS.....2 ABOUT THE SAME.....3 MORE .....4 STOPPED FOOD.....5 NEVER GAVE FOOD .....7 DK 8	
CA5. Did you seek any advice or treatment for the diarrhoea from any source?	YES .....1 NO .....2 DK 8	 2 ⇨*CA7* 8 ⇨*CA7*

CA6. Where did you seek advice or treatment? *Probe:* Anywhere else? *Record all providers mentioned, but do not prompt with any suggestions.* *Probe to identify each type of provider.* *If unable to determine type of facility, write the name of the place and then temporarily record 'X' until you learn the appropriate category for the response.* _____ (*Name of place*)	**PUBLIC MEDICAL SECTOR** CENTRAL HOSPITAL.....A PROVINCIAL HOSPITAL .....B COUNTY / DISTRICT PEOPLE HOSPITAL.....C RI PEOPLE HOSPITAL / CLINIC .....D OTHER PUBLIC MEDICAL (*specify*) _____ H **OTHER SOURCE** RELATIVE / FRIEND..... P SHOP / MARKET / STREET .....Q OTHER (*specify*) _____ X	
CA7. During the time (***name of the child***) had diarrhoea, was (he/she) given: [A] A fluid made from a special Oral Rehydration Salts solution (ORS) packet? [C] Zinc tablets or syrup?	Y N DK FLUID FROM ORS PACKET..... 1 2 8 ZINC TABLETS OR SYRUP..... 1 2 8	
CA8. *Check CA7[A]]: Was child given any ORS?*	YES, YES IN CA7[A].....1 NO, 'NO' OR 'DK' IN CA7[A].....2	2 ⇨*CA10*
CA9. Where did you get the (*ORS mentioned in CA7[A]*)? *Probe to identify the type of source.* *If 'Already had at home', probe to learn if the source is known.* *If unable to determine type of facility, write the name of the place and then temporarily record 'X' until you learn the appropriate category for the response.* _____ *(Name of place)*	**PUBLIC MEDICAL SECTOR** CENTRAL HOSPITAL.....A PROVINCIAL HOSPITAL .....B COUNTY / DISTRICT PEOPLE HOSPITAL.....C RI PEOPLE HOSPITAL / CLINIC .....D OTHER PUBLIC MEDICAL (*specify*) _____ H **OTHER SOURCE** RELATIVE / FRIEND..... P SHOP / MARKET / STREET .....Q OTHER (*specify*) _____ X DK / DON'T REMEMBER..... Z	
CA10. *Check CA7[C]: Was child given any zinc?*	YES, CA7[C]=1 .....1 NO, CA7[C] ≠1 2	2 ⇨*CA12*

CA11. Where did you get the zinc? *Probe to identify the type of source.* *If 'Already had at home', probe to learn if the source is known.* *If unable to determine type of facility, write the name of the place and then temporarily record 'X' until you learn the appropriate category for the response.* _____ *(Name of place)*	**PUBLIC MEDICAL SECTOR** CENTRAL HOSPITAL ..... A PROVINCIAL HOSPITAL ..... B COUNTY / DISTRICT PEOPLE HOSPITAL ..... C RI PEOPLE HOSPITAL / CLINIC ..... D OTHER PUBLIC MEDICAL (*specify*) _____ H **OTHER SOURCE** RELATIVE / FRIEND ..... P SHOP / MARKET / STREET ..... Q OTHER (*specify*) _____ X DK / DON'T REMEMBER ..... Z	
CA12. Was anything else given to treat the diarrhoea?	YES ..... 1 NO ..... 2 DK 8	 2 ⇨*CA14* 8 ⇨*CA14*
CA13. What else was given to treat the diarrhoea? *Probe*: Anything else? *Record all treatments given. Write brand name(s) of all medicines mentioned.* _____ *(Name of brand)* _____ *(Name of brand)*	**PILL OR SYRUP** ANTIBIOTIC ..... A ANTIMOTILITY (ANTI-DIARRHOEA) ..... B OTHER PILL OR SYRUP ..... G UNKNOWN PILL OR SYRUP ..... H **INJECTION** ANTIBIOTIC ..... L NON-ANTIBIOTIC ..... M UNKNOWN INJECTION ..... N INTRAVENOUS (IV) ..... O HOME REMEDY / HERBAL MEDICINE ..... Q OTHER (*specify*) _____ X	
CA14. At any time in the last two weeks, has (***name of the child***) been ill with a fever?	YES ..... 1 NO ..... 2 DK 8	
CA16. At any time in the last two weeks, has (***name of the child***) had an illness with a cough?	YES ..... 1 NO ..... 2 DK 8	
CA17. At any time in the last two weeks, has (***name of the child***) had fast, short, rapid breaths or difficulty breathing?	YES ..... 1 NO ..... 2 DK 8	 2 ⇨*CA19* 8 ⇨*CA19*

CA18. Was the fast or difficult breathing due to a problem in the chest or a blocked or runny nose?	PROBLEM IN CHEST ONLY .....1 BLOCKED OR RUNNY NOSE ONLY.....2 BOTH .....3 OTHER (*specify*) _____ 6 DK.....8	1 ⇨*CA20* 2 ⇨*CA20* 3 ⇨*CA20* 6 ⇨*CA20* 8 ⇨*CA20*
CA19. *Check CA14: Did child have fever?*	YES, CA14=1 .....1 NO OR DK, CA14=2 OR 8 2	 2 ⇨*CA30*
CA20. Did you seek any advice or treatment for the illness from any source?	YES .....1 NO.....2 DK.....8	 2 ⇨*CA22* 8 ⇨*CA22*
CA21. From where did you seek advice or treatment? *Probe:* Anywhere else? *Record all providers mentioned, but do not prompt with any suggestions.* *Probe to identify each type of provider.* *If unable to determine type of facility, write the name of the place and then temporarily record 'X' until you learn the appropriate category for the response.* _____ *(Name of place)*	**PUBLIC MEDICAL SECTOR** CENTRAL HOSPITAL.....A PROVINCIAL HOSPITAL .....B COUNTY / DISTRICT PEOPLE HOSPITAL.....C RI PEOPLE HOSPITAL / CLINIC .....D OTHER PUBLIC MEDICAL (*specify*) _____ H **OTHER SOURCE** RELATIVE / FRIEND..... P SHOP / MARKET / STREET .....Q OTHER (*specify*) _____ X	
CA22. At any time during the illness, was (***name of the child***) given any medicine for the illness?	YES .....1 NO.....2 DK.....8	 2 ⇨*CA30* 8 ⇨*CA30*
CA23. What medicine was (***name of the child***) given? *Probe:* Any other medicine? *Record all medicines given. Write brand name(s) of all medicines mentioned.* _____ *(Name of brand)* _____ *(Name of brand)*	**ANTIBIOTICS** AMOXICILLIN ..... L COTRIMOXAZOLE..... M OTHER ANTIBIOTIC PILL/SYRUP.....N OTHER ANTIBIOTIC INJECTION/IV.....O **OTHER MEDICATIONS** PARACETAMOL/PANADOL/ ACETAMINOPHEN .....R ASPIRIN..... S IBUPROFEN..... T OTHER (*specify*) _____ X DK..... Z	
CA24. *Check CA23: Antibiotics mentioned?*	YES, ANTIBIOTICS MENTIONED, CA23=L-O .....1 NO, ANTIBIOTICS NOT MENTIONED 2	 2 ⇨*CA30*

CA25. Where did you get the (***name of medicine from CA23, codes L to O***)? *Probe to identify the type of source.* *If 'Already had at home', probe to learn if the source is known.* *If unable to determine type of facility, write the name of the place and then temporarily record 'X' until you learn the appropriate category for the response.* _____ *(Name of place)*	**PUBLIC MEDICAL SECTOR** CENTRAL HOSPITAL.....A PROVINCIAL HOSPITAL .....B COUNTY / DISTRICT PEOPLE HOSPITAL.....C RI PEOPLE HOSPITAL / CLINIC .....D OTHER PUBLIC MEDICAL (*specify*) _____ H **OTHER SOURCE** RELATIVE / FRIEND..... P SHOP / MARKET / STREET .....Q OTHER (*specify*) _____ X DK / DON'T REMEMBER ..... Z	
CA30. *Check* UB2: *Child's age*?	AGE 0, 1 OR 2.....1 AGE 3 OR 4.....2	2 ⇨*End*
CA31. The last time (***name of the child***) passed stools, what was done to dispose of the stools?	CHILD USED TOILET / LATRINE.....01 PUT / RINSED INTO TOILET OR LATRINE .....02 PUT / RINSED INTO DRAIN OR DITCH.....03 THROWN INTO GARBAGE (SOLID WASTE).....04 BURIED .....05 LEFT IN THE OPEN .....06 OTHER (*specify*) _____96 DK.....98	

UF11. *Record the time.*	HOURS AND MINUTES.....__ __ : __ __	

UF16. *Tell the respondent that you will need to measure the weight and height of the child before you leave the household and a colleague will come to lead the measurement. Issue the ANTHROPOMETRY MODULE FORM for this child and complete the Information Panel on that Form.*

Check columns HL10 and HL20 in LIST OF HOUSEHOLD MEMBERS, HOUSEHOLD QUESTIONNAIRE: Is the respondent the mother or caretaker of another child age 0-4 living in this household?

☐ *Yes* ⇨ *Go to UF17 on the UNDER-FIVE INFORMATION PANEL and record '01'. Then go to the next QUESTIONNAIRE FOR CHILDREN UNDER FIVE to be administered to the same respondent.*

☐ *No* ⇨ *Check HL6 and column HL20 in LIST OF HOUSEHOLD MEMBERS, HOUSEHOLD QUESTIONNAIRE: Is the respondent the mother or caretaker of a child age 5-17 selected for Questionnaire for Children Age 5-17 in this household?*

☐ *Yes* ⇨ *Go to UF17 on the UNDER-FIVE INFORMATION PANEL and record '01'. Then go to the QUESTIONNAIRE FOR CHILDREN AGE 5-17 to be administered to the same respondent.*

☐ *No* ⇨ *Go to UF17 on the UNDER-FIVE INFORMATION PANEL and record '01'. Then end the interview with this respondent by thanking her/him for her/his cooperation. Check to see if there are other questionnaires to be administered in this household.*

INTERVIEWER'S OBSERVATIONS

SUPERVISOR'S OBSERVATIONS

ANTHROPOMETRY MODULE INFORMATION PANEL	AN
AN1. *Cluster number:* ___ ___ ___	**AN2**. *Household number:* ___ ___
AN3. *Child's name and line number:* NAME _____ ___ ___	**AN4**. *Child's age from UB2:* AGE (IN COMPLETED YEARS) ..... __
AN5. *Mother's / Caretaker's name and line number:* NAME _____ ___ ___	**AN6**. *Interviewer's name and number:* NAME _____ ___ ___ ___

ANTHROPOMETRY		
AN7. *Measurer's name and number:*	NAME_____ ___ ___ ___	
AN8. *Record the result of weight measurement as read out by the Measurer:* *Read the record back to the Measurer and also ensure that he/she verifies your record.*	KILOGRAMS (KG) ..... ___ ___ . ___ CHILD NOT PRESENT ..... 99.3 CHILD REFUSED ..... 99.4 RESPONDENT REFUSED ..... 99.5 OTHER (*specify*) _____ 99.6	 99.3 ⇨*AN13* 99.4 ⇨*AN10* 99.5 ⇨*AN10* 99.6 ⇨*AN10*
AN9. *Was the child undressed to the minimum?*	YES ..... 1 NO, THE CHILD COULD NOT BE UNDRESSED TO THE MINIMUM 2	
AN10. *Check AN4: Child's age?*	AGE 0 OR 1 ..... 1 AGE 2, 3 OR 4 2	1 ⇨*AN11A* 2 ⇨*AN11B*
AN11A. *The child is less than 2 years old and should be measured lying down. Record the result of length measurement as read out by the Measurer:* *Read the record back to the Measurer and also ensure that he/she verifies your record.* **AN11B**. *The child is at least 2 years old and should be measured standing up. Record the result of height measurement as read out by the Measurer:* *Read the record back to the Measurer and also ensure that he/she verifies your record.*	LENGTH / HEIGHT (CM) ..... ___ ___ ___ . ___ CHILD REFUSED ..... 999.4 RESPONDENT REFUSED ..... 999.5 OTHER (*specify*) _____ 999.6	 999.4 ⇨*AN13* 999.5 ⇨*AN13* 999.6 ⇨*AN13*
AN12. *How was the child actually measured? Lying down or standing up?*	LYING DOWN ..... 1 STANDING UP 2	
AN13. *Today's date: Day / Month / Year:* ___ ___ / ___ ___ / 2 0 1 ___		
AN14. *Is there another child under age 5 in the household who has not yet been measured?*	YES ..... 1 NO 2	1 ⇨*Next Child*
AN15. *Thank the respondent for his/her cooperation and inform your Supervisor that the Measurer and you have completed all the measurements in this household.*		

INTERVIEWER'S OBSERVATIONS FOR ANTHROPOMENTRY MODULE

MEASURER'S OBSERVATIONS FOR ANTHROPOMENTRY MODULE

SUPERVISOR'S OBSERVATIONS FOR ANTHROPOMENTRY MODULE

MICS

FORM FOR VACCINATION RECORDS AT HEALTH FACILITY

2017 DPRK Multiple Indicator Cluster Survey

UNDER-FIVE CHILD INFORMATION PANEL		**HF**
This form must be appended to the QUESTIONNAIRE FOR CHILDREN UNDER FIVE for each child.		
HF1. *Cluster number:* ___ ___ ___	**HF2**. *Household number:* ___ ___	
HF3. *Child's name and line number:* NAME _____ ___ ___	**HF4**. *Mother's / Caretaker's name and line number:* NAME _____ ___ ___	
HF5. *Name and number of field staff recording at facility:* NAME _____ ___ ___	**HF6**. *Interviewer's name and number:* NAME _____ ___ ___	
HF7. *Day / Month / Year of facility visit:* ___ ___ / ___ ___ / 2 0 1 ___	**HF8**. *Record the time:*	HOURS : MINUTES __ __ : __ __
HF9. *Child's day, month and year of birth: Copy from UB1 in the UNDER-FIVE'S BACKGROUND Module of the QUESTIONNAIRE FOR CHILDREN UNDER FIVE* ___ ___ / ___ ___ / 2 0 1 ___	**HF10**. *Write the name of health facility:* _____	⇨*HF11*

HF15. *Result of health facility visit:*	RECORDS AVAILABLE AT FACILITY COPIED..... 01 NOT COPIED (*specify*) _____ 02 RECORDS NOT AVAILABLE AT FACILITY (*specify*) _____ 03 OTHER (*specify*) _____ 96

IMMUNIZATION										HF
HF11. *Record day, month and year of birth as written on vaccination record/card*:		___ ___ / ___ ___ / 2 0 1 ___								
HF12. *(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					2	0	1		
HepB (at birth)	HepB0					2	0	1		
Polio (OPV) 1	OPV1					2	0	1		
Polio (OPV) 2	OPV2					2	0	1		
Polio (OPV) 3	OPV3					2	0	1		
Polio (IPV)	IPV					2	0	1		
Pentavalent (DPTHibHepB) 1	Penta1					2	0	1		
Pentavalent (DPTHibHepB) 2	Penta2					2	0	1		
Pentavalent (DPTHibHepB) 3	Penta3					2	0	1		
Measles 1	Measles1					2	0	1		
Measles 2	Measles2					2	0	1		
HF13. *For each vaccination not recorded enter '00' in day column.*										

HF14. *Record the time.*	HOURS AND MINUTES .....__ __ : __ __	⇨*HF15*

DATA COLLECTOR'S OBSERVATIONS

SUPERVISOR'S OBSERVATIONS

MICS

QUESTIONNAIRE FOR CHILDREN AGE 5-17

2017 DPRK Multiple Indicator Cluster Survey

5-17 CHILD INFORMATION PANEL		**FS**
FS1. *Cluster number:* ___ ___ ___	**FS2**. *Household number:* ___ ___	
FS3. *Child's name and line number:* NAME _____ ___ ___	**FS4**. *Mother's / Caretaker's name and line number:* NAME _____ ___ ___	
FS5. *Interviewer's name and number:* NAME _____ ___ ___	**FS6**. *Supervisor's name and number:* NAME _____ ___ ___	
FS7. *Day / Month / Year of interview:* ___ ___ /___ ___ / 2 0 1 ___	**FS8**. *Record the time:*	HOURS : MINUTES __ __ : __ __

Check respondent's age in HL6 in LIST OF HOUSEHOLD MEMBERS, HOUSEHOLD QUESTIONNAIRE:
If age 15-17, verify that adult consent for interview is obtained (HH33 or HH39) or not necessary (HL20=90). If consent is needed and not obtained, the interview must not start interview and '06' should be circled in FS17. The respondent must be at least 15 years old. In very few cases where a child age 15-17 has no mother or caretaker identified in the household (HL20=90), the respondent will be that child him/herself.

FS9. *Check completed questionnaires in this household: Have you or another member of your team interviewed this respondent for other questionnaire?*	YES, INTERVIEWED ALREADY ..... 1 NO, FIRST INTERVIEW 2	1 ⇨*FS10B* 2 ⇨*FS10A*
FS10A. Hello, my name is (***name of the interviewer***). We are from the Central Bureau of Statistics. We are conducting a survey about the situation of children, families and households. I would like to talk to you about (***child's name from FS3***)'s health and well-being. This interview will take about ***15*** minutes. All the information we obtain will remain strictly confidential and anonymous. If you wish not to answer a question or wish to stop the interview, please let me know. May I start now?	**FS10B**. Now I would like to talk to you about (***child's name from FS3***)'s health and well-being in more detail. This interview will take about ***15*** minutes. Again, all the information we obtain will remain strictly confidential and anonymous. If you wish not to answer a question or wish to stop the interview, please let me know. May I start now?	
YES, PERMISSION IS GIVEN ..... 1 NO / NOT ASKED 2	1 ⇨*CHILD'S BACKGROUND Module* 2 ⇨*FS17*	

FS17. *Result of interview for child age 5-17 years* *Codes refer to the respondent.* *Discuss any result not completed with Supervisor.*	COMPLETED ..... 01 NOT AT HOME ..... 02 REFUSED ..... 03 PARTLY COMPLETED ..... 04 INCAPACITATED (*specify*) _____ 05 NO ADULT CONSENT FOR MOTHER/ CARETAKER AGE 15-17 ..... 06 OTHER (*specify*) _____ 96

CHILD'S BACKGROUND		CB
CB1. *Check the line number of the respondent (FS4) in 5-17 CHILD INFORMATION PANEL and the respondent to the HOUSEHOLD QUESTIONNAIRE (HH47):*	FS4=HH47 ..... 1 FS4≠HH47 2	1 ⇨*End*
CB2. In what month and year was (***name of the child***) born? *Month and year must be recorded.*	DATE OF BIRTH MONTH ..... __ __ YEAR ..... __ __ __ __	
CB3. How old is (***name of the child***)? *Probe*: How old was (***name of the child***) at (his/her) last birthday? *Record age in completed years.* *If responses to CB2 and CB3 are inconsistent, probe further and correct.*	AGE (IN COMPLETED YEARS) ..... __ __	
CB4. Has (***name of the child***) ever attended school, nursery or kindergarten?	YES ..... 1 NO 2	2 ⇨*End*
CB5. What is the highest level and grade of school (***name of the child***) has ever attended?	NURSERY OR KINDERGARTEN ..... 000 PRIMARY ..... **1** __ __ LOWER SECONDARY ..... **2** __ __ UPPER SECONDARY ..... **3** __ __ HIGHER ..... **4** __ __	000 ⇨*CB7*
CB6. Did (he/she) ever complete that grade?	YES ..... 1 NO 2	
CB7. At any time during the 2017-2018 school year did (***name of the child***) attend school, nursery or kindergarten?	YES ..... 1 NO 2	2 ⇨*CB9*
CB8. During this 2017-2018 school year, which level and grade is (***name of the child***) attending?	NURSERY OR KINDERGARTEN ..... 000 PRIMARY ..... **1** __ __ LOWER SECONDARY ..... **2** __ __ UPPER SECONDARY ..... **3** __ __ HIGHER ..... **4** __ __	
CB9. At any time during the 2016-2017 school year did (***name of the child***) attend school, nursery or kindergarten?	YES ..... 1 NO 2	2 ⇨*End*
CB10. During that 2016-2017 school year, which level and grade did (***name of the child***) attend?	NURSERY OR KINDERGARTEN ..... 000 PRIMARY ..... **1** __ __ LOWER SECONDARY ..... **2** __ __ UPPER SECONDARY ..... **3** __ __ HIGHER ..... **4** __ __	

CHILD LABOUR		CL
CL1. Now I would like to ask about any work (***name of the child***) may do. Since last (***day of the week***), did (***name of the child***) do any of the following activities, even for only one hour?	YES NO	
[A] Did (***name of the child***) do any work or help on the household's plot, farm, food garden or looked after animals? For example, growing farm produce, harvesting, or feeding, grazing or milking animals?	WORKED ON PLOT, FARM, FOOD GARDEN, LOOKED AFTER ANIMALS..... 1 2	
[B] Did (***name of the child***) help in a family business or a relative's business with or without pay, or run (his/her) own business?	HELPED IN FAMILY / RELATIVE'S BUSINESS / RAN OWN BUSINESS..... 1 2	
[C] Did (***name of the child***) produce or sell articles, handicrafts, clothes, food or agricultural products?	PRODUCE / SELL ARTICLES / HANDICRAFTS / CLOTHES / FOOD OR AGRICULTURAL PRODUCTS..... 1 2	
[X] Since last (***day of the week***), did (***name of the child***) engage in any other activity in return for income in cash or in kind, even for only one hour?	ANY OTHER ACTIVITY..... 1 2	
CL2. *Check CL1, [A]-[X]:*	AT LEAST ONE 'YES' .....1 ALL ANSWERS ARE 'NO' 2	2⇨*CL7*
CL3. Since last (***day of the week***) about how many hours in total did (***name of the child***) engage in (this activity/these activities)? *If less than one hour, record '00'.*	NUMBER OF HOURS..... __ __	
CL4. (Does the activity/Do these activities) require carrying heavy loads?	YES .....1 NO 2	
CL5. (Does the activity/Do these activities) require working with dangerous tools such as knives and similar or operating heavy machinery?	YES .....1 NO 2	

CL6. How would you describe the work environment of (***name of the child***)?		
[A] Is (he/she) exposed to dust, fumes or gas?	YES ..... 1 NO 2	
[B] Is (he/she) exposed to extreme cold, heat or humidity?	YES ..... 1 NO 2	
[C] Is (he/she) exposed to loud noise or vibration?	YES ..... 1 NO 2	
[D] Is (he/she) required to work at high places?	YES ..... 1 NO 2	
[E] Is (he/she) required to work with chemicals, such as pesticides, glues or explosives?	YES ..... 1 NO 2	
[X] Is (***name of the child***) exposed to other things, processes or conditions bad for (his/her) health or safety?	YES ..... 1 NO 2	
CL7. Since last (***day of the week***), did (***name of the child***) fetch water for household use?	YES ..... 1 NO 2	2 ⇨ *CL9*
CL8. In total, how many hours did (***name of the child***) spend on fetching water for household use, since last (***day of the week***)? *If less than one hour, record '00'.*	NUMBER OF HOURS..... __ __	
CL9. Since last (***day of the week***), did (***name of the child***) collect firewood for household use?	YES ..... 1 NO 2	2 ⇨ *CL11*
CL10. In total, how many hours did (***name of the child***) spend on collecting firewood for household use, since last (***day of the week***)? *If less than one hour, record '00'.*	NUMBER OF HOURS..... __ __	
CL11. Since last (***day of the week***), did (***name of the child***) do any of the following for this household?	YES NO	
[A] Shopping for the household?	SHOPPING FOR HOUSEHOLD..... 1 2	
[B] Cooking?	COOKING..... 1 2	
[C] Washing dishes or cleaning around the house?	WASHING DISHES / CLEANING HOUSE..... 1 2	
[D] Washing clothes?	WASHING CLOTHES 1 2	
[E] Taking care for children?	CARING FOR CHILDREN 1 2	
[F] Taking care for someone old or sick?	CARING FOR OLD / SICK 1 2	
[X] Other household tasks?	OTHER HOUSEHOLD TASKS 1 2	

CL12. *Check CL11, [A]-[X]:*	AT LEAST ONE 'YES' .....1 ALL ANSWERS ARE 'NO' 2	2⇨*End*
CL13. Since last (***day of the week***), about how many hours did (***name of the child***) engage in (this activity/these activities), in total? *If less than one hour, record '00'*	NUMBER OF HOURS..... __ __	

CHILD DISCIPLINE		FCD
FCD1. *Check CB3: Child's age?*	AGE 5-14 YEARS ..... 1 AGE 15-17 YEARS 2	 2 ⇨*End*
FCD2. I want to talk to you about something else. Adults use different 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 <u>you or any other adult in your household</u> has used this method with ***(name of the child)*** <u>in the past month</u>.	YES NO	
[A] Took away privileges, forbade something (***name of the child***) liked or did not allow (him/her) to leave the house.	TOOK AWAY PRIVILEGES.....1 2	
[B] Explained why (***name of the child***)'s behaviour was wrong.	EXPLAINED WRONG BEHAVIOR.....1 2	
[C] Shook (him/her).	SHOOK HIM/HER 1 2	
[D] Shouted, yelled at or screamed at (him/her).	SHOUTED, YELLED, SCREAMED 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, 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	
FCD3. *Check FS4: Is this respondent the mother or caretaker of any other children under age 5?*	YES ..... 1 NO 2	 2 ⇨*FCD5*
FCD4. *Check FS4: Has this respondent already responded to the following question (UCD5) for another child?*	YES ..... 1 NO 2	1 ⇨*End*
FCD5. Do you believe that in order to raise or educate a child properly, the child needs to be physically punished?	YES ..... 1 NO ..... 2 DK / NO OPINION 8	

CHILD FUNCTIONING (AGE 5-17)		FCF
FCF1. I would like to ask you some questions about difficulties (***name of the child***) may have. Does (***name of the child***) wear glasses or contact lenses?	YES .....1 NO 2	
FCF2. Does (***name of the child***) use a hearing aid?	YES .....1 NO 2	
FCF3. Does (***name of the child***) use any equipment or receive assistance for walking?	YES ..... 1 NO 2	
FCF4. In the following questions, please answer by selecting one of four possible answers. For each question, would you say that (***name of the child***) has: 1) no difficulty, 2) some difficulty, 3) a lot of difficulty, or 4) cannot do it at all. *Whenever the respondent does not use an answer category during the individual questions, repeat the categories:* Remember the four possible answers: Would you say that (***name of the child***) has: 1) no difficulty, 2) some difficulty, 3) a lot of difficulty, or 4) cannot do it at all?		
FCF5. *Check FCF1: Child wears glasses or contact lenses?*	YES, FCF1=1 .....1 NO, FCF1=2.....2	1 ⇨*FCF6A* 2 ⇨*FCF6B*
FCF6A. When wearing (his/her) glasses or contact lenses, does (***name of the child***) have difficulty seeing? **FCF6B**. Does (***name of the child***) have difficulty seeing?	NO DIFFICULTY .....1 SOME DIFFICULTY .....2 A LOT OF DIFFICULTY.....3 CANNOT SEE AT ALL.....4	
FCF7. *Check FCF2: Child uses a hearing aid?*	YES, FCF2=1 .....1 NO, FCF2=2.....2	1 ⇨*FCF8A* 2 ⇨*FCF8B*
FCF8A. When using (his/her) hearing aid(s), does (***name of the child***) have difficulty hearing sounds like peoples' voices or music? **FCF8B**. Does (***name of the child***) have difficulty hearing sounds like peoples' voices or music?	NO DIFFICULTY .....1 SOME DIFFICULTY .....2 A LOT OF DIFFICULTY.....3 CANNOT HEAR AT ALL 4	
FCF9. *Check FCF3: Child uses equipment or receives assistance for walking?*	YES, FCF3=1 .....1 NO, FCF3=2.....2	2 ⇨*FCF14*
FCF10. Without (his/her) equipment or assistance, does (***name of the child***) have difficulty walking 100 meters on level ground? *Probe:* That would be the length similar to 1 football field. *Category 'No difficulty' is not available, as the child uses equipment or receives assistance for walking.*	SOME DIFFICULTY .....2 A LOT OF DIFFICULTY.....3 CANNOT WALK 100 M AT ALL 4	3 ⇨*FCF12* 4 ⇨*FCF12*

FCF11. Without (his/her) equipment or assistance, does (***name of the child***) have difficulty walking 500 meters on level ground? *Probe:* That would be the length similar to 5 football field. *Category 'No difficulty' is not available, as the child uses equipment or receives assistance for walking.*	SOME DIFFICULTY .....2 A LOT OF DIFFICULTY.....3 CANNOT WALK 500 M AT ALL 4	
FCF12. With (his/her) equipment or assistance, does (***name of the child***) have difficulty walking 100 meters on level ground? *Probe:* That would be the length similar to 1 football field.	NO DIFFICULTY .....1 SOME DIFFICULTY .....2 A LOT OF DIFFICULTY.....3 CANNOT WALK 100 M AT ALL 4	 3 ⇨*FCF16* 4 ⇨*FCF16*
FCF13. With (his/her) equipment or assistance, does (***name of the child***) have difficulty walking 500 meters on level ground? *Probe:* That would be the length similar to 5 football field.	NO DIFFICULTY .....1 SOME DIFFICULTY .....2 A LOT OF DIFFICULTY.....3 CANNOT WALK 500 M AT ALL 4	1 ⇨*FCF16*
FCF14. Compared with other children of the same age, does (***name of the child***) have difficulty walking 100 meters on level ground? *Probe:* That would be the length similar to 1 football field.	NO DIFFICULTY .....1 SOME DIFFICULTY .....2 A LOT OF DIFFICULTY.....3 CANNOT WALK 100 M AT ALL 4	 3 ⇨*FCF16* 4 ⇨*FCF16*
FCF15. Compared with other children of the same age, does (***name of the child***) have difficulty walking 500 meters on level ground? *Probe:* That would be the length similar to 5 football field.	NO DIFFICULTY .....1 SOME DIFFICULTY .....2 A LOT OF DIFFICULTY.....3 CANNOT WALK 500 M AT ALL 4	
FCF16. Does (***name of the child***) have difficulty with self-care such as feeding or dressing (himself/herself)?	NO DIFFICULTY .....1 SOME DIFFICULTY .....2 A LOT OF DIFFICULTY.....3 CANNOT CARE FOR SELF AT ALL 4	
FCF17. When (***name of the child***) speaks, does (he/she) have difficulty being understood by people inside of this household?	NO DIFFICULTY .....1 SOME DIFFICULTY .....2 A LOT OF DIFFICULTY.....3 CANNOT BE UNDERSTOOD AT ALL 4	
FCF18. When (***name of the child***) speaks, does (he/she) have difficulty being understood by people outside of this household?	NO DIFFICULTY .....1 SOME DIFFICULTY .....2 A LOT OF DIFFICULTY.....3 CANNOT BE UNDERSTOOD AT ALL 4	

FCF19. Compared with other children of the same age, does (***name of the child***) have difficulty learning things?	NO DIFFICULTY .....1 SOME DIFFICULTY .....2 A LOT OF DIFFICULTY.....3 CANNOT LEARN THINGS AT ALL 4	
FCF20. Compared with other children of the same age, does (***name of the child***) have difficulty remembering things?	NO DIFFICULTY .....1 SOME DIFFICULTY .....2 A LOT OF DIFFICULTY.....3 CANNOT REMEMBER THINGS AT ALL.....4	
FCF21. Does (***name of the child***) have difficulty concentrating on an activity that (he/she) likes doing?	NO DIFFICULTY .....1 SOME DIFFICULTY .....2 A LOT OF DIFFICULTY.....3 CANNOT CONCENTRATE AT ALL.....4	
FCF22. Does (***name of the child***) have difficulty accepting changes in (his/her) routine?	NO DIFFICULTY .....1 SOME DIFFICULTY .....2 A LOT OF DIFFICULTY.....3 CANNOT ACCEPT CHANGES AT ALL 4	
FCF23. Compared with other children of the same age, does (***name of the child***) have difficulty controlling (his/her) behaviour?	NO DIFFICULTY .....1 SOME DIFFICULTY .....2 A LOT OF DIFFICULTY.....3 CANNOT CONTROL BEHAVIOUR AT ALL 4	
FCF24. Does (***name of the child***) have difficulty making friends?	NO DIFFICULTY .....1 SOME DIFFICULTY .....2 A LOT OF DIFFICULTY.....3 CANNOT MAKE FRIENDS AT ALL.....4	
FCF25. The next questions have different options for answers. I am going to read these to you after each question. I would like to know how often (***name of the child***) seems very anxious, nervous or worried. Would you say: daily, weekly, monthly, a few times a year or never?	DAILY .....1 WEEKLY.....2 MONTHLY.....3 A FEW TIMES A YEAR.....4 NEVER 5	
FCF26. I would also like to know how often (***name of the child***) seems very sad or depressed. Would you say: daily, weekly, monthly, a few times a year or never?	DAILY .....1 WEEKLY.....2 MONTHLY.....3 A FEW TIMES A YEAR.....4 NEVER 5	

PARENTAL INVOLVEMENT		PR
PR1. *Check CB3: Child's age?*	AGE 5-6 YEARS.....1 AGE 7-14 YEARS.....2 AGE 15-17 YEARS.....3	1 ⇨*End* 3 ⇨*End*
PR2. At the end of this interview I will ask you if I can talk to (***name of the child***). If (he/she) is close, can you please ask (him/her) to stay here. If (***name of the child***) is not with you at the moment will you ask (him/her) to return? If that is not possible, let later discuss about a convenient time for me to come back.		
PR3. Excluding school text books, how many books do you have for (***name of the child***) to read at home?	NONE .....00 NUMBER OF BOOKS ..... 0 __ TEN OR MORE BOOKS.....10	
PR4. *Check CB7: Did the child attend any school?* *Check ED9 in the EDUCATION Module in the HOUSEHOLD QUESTIONNAIRE for child if CB7 was not asked.*	YES, CB7/ED9=1.....1 NO, CB7/ED9=2 OR BLANK 2	2 ⇨*End*
PR5. Does (***name of the child***) ever have homework?	YES.....1 NO .....2 DK 8	 2 ⇨*PR10* 8 ⇨*PR10*
PR6. Does anyone help (***name of the child***) with homework?	YES .....1 NO .....2 DK 8	
PR10. In the last 12 months, have you or any other adult from your household received a school report card for (***name of the child***)?	YES .....1 NO .....2 DK 8	
PR11. In the last 12 months, have you or other adult from your household gone to (***name of the child***)'s school for the following reasons? [A] A school celebration or a sport event? [B] To discuss (***name of the child***)'s progress with (his/her) teachers?	YES NO DK CELEBRATION OR SPORT EVENT.....1 2 8 TO DISCUSS PROGRESS WITH TEACHERS.....1 2 8	

PR12. In the last 12 months, has (***name of the child***)'s school been closed on a school day for the following reasons: [A] Natural disasters, such as flood, cyclone, epidemics or similar? [B] Man-made disasters, such as fire, building collapse or similar? [X] Other?	YES NO DK NATURAL DISASTERS.....1 2 8 MAN-MADE DISASTERS .....1 2 8 OTHER 1 2 8	
PR13. In the last 12 months, was (***name of the child***) unable to attend class due to (his/her) teacher being absent?	YES .....1 NO .....2 DK 8	
PR14. *Check PR13: 'Yes' circled?*	YES, PR13=1 .....1 NO 2	2 ⇨*End*
PR15. When teacher absence happened did you or any other adult member of your household contact any school officials or school management representatives?	YES .....1 NO .....2 DK 8	

FOUNDATIONAL LEARNING SKILLS		FL
FL0. *Check CB3: Child's age?*	AGE 5-6 YEARS.....1 AGE 7-14 YEARS.....2 AGE 15-17 YEARS.....3	1 ⇨*End* 3 ⇨*End*

FL1. I would like to talk to (***name of the child***). I will ask (him/her) a few questions about (himself/herself) and about reading, and then ask (him/her) to complete a few reading and number activities.

These are not school tests and the results will not be shared with anyone else, such as other parents or the school.

You will not benefit directly from participating and I am not trained to tell you how well (***name of the child***) has performed.

Through this activities we can find out how well children in this country are learning to read and to use numbers so that improvements can be made.

This will take about 15 minutes. Again, all the information we obtain will remain strictly confidential and anonymous.

May I talk to (***name of the child***)?	YES, PERMISSION IS GIVEN.....1 NO, PERMISSION IS NOT GIVEN.....2	 2 ⇨*FL28*

FL2. *Record the time.*	HOURS AND MINUTES .....__ __ : __ __	

FL3. My name is (***name of interviewer***). I would like to tell you briefly about myself.

Could you tell me a little bit about yourself?

When the child is comfortable, continue to get permission:

I will tell you why I am here today. I am from the Central Bureau of Statistics**.** I am member of a team trying to find out how children are learning to read and to use numbers. We are also talking to some of the children about this and asking them to do some reading and number activities. (Your mother/***Name of caretaker***) has said that you can decide if you will help us. If you want to help us, I will ask you a few questions and give you some activities to do. I will explain each activity, and you can ask me questions any time. You do not have to do anything that you do not want to do. After we begin, if you do not want to answer a question or you do not want to continue that is alright.

Are you ready to get started?	YES, PERMISSION IS GIVEN .....1 NO / NOT ASKED 2	1 ⇨*FL4* 2 ⇨*FL28*

FL4. *Before you start with the reading and number activities, tick the following boxes to show that:*

- ☐ *You are not alone with the child as long as the child is in the sight of an adult known to the child.*
- ☐ *You have engaged the child in conversation and make friendly relationship by doing something like an Icebreaker.*
- ☐ *The child is sat comfortably, able to use the Reading & Numbers Book without difficulty while you can see which page is open.*

FL5. Remember you can ask me a question at any time if you do not understand. You can ask me to stop at any time.		

FL6. First, we are going to talk about reading. [A] Do you read books at home? [B] Does someone read to you at home?	YES NO READS BOOKS AT HOME ..... 1 2 READS TO AT HOME 1 2	
FL10. Now, I will give you a short story to read. Would you like to read the story?	YES .....1 NO 2	2⇨*FL23*
FL11. *Check CB3: Child's age?*	AGE 7-9 YEARS .....1 AGE 10-14 YEARS.....2	1⇨*FL13*
FL12. *Check CB7: Did the child attend any school?* *Check ED9 in the EDUCATION Module in the HOUSEHOLD QUESTIONNAIRE for child if CB7 was not asked.*	YES, CB7/ED9=1.....1 NO, CB7/ED9=2 OR BLANK.....2	1⇨*FL19*
FL13. *Give the child the READING & NUMBER BOOK.* *Open the page showing the reading practice item and say:* Now we are going to do some reading. *Point to the sentence.* I would like you to read this aloud. Then I will ask you a question. *Tori is a cat. Komi is a dog. Tori is 5. Komi is 6.*		
FL14. *Did the child read every word in the practice correctly?*	YES.....1 NO 2	2⇨*FL23*
FL15. *Once the reading is done, ask:* How old is Tori?	TORI IS 5 YEARS OLD.....1 OTHER ANSWERS .....2 NO ANSWER AFTER 5 SECONDS 3	1⇨*FL17*
FL16. *Say:* Tori is 5 years old. *and go to FL23.*		⇨*FL23*
FL17. Here is another question: Who is older: Tori or Komi?	KOMI IS OLDER (THAN TORI) .....1 OTHER ANSWERS .....2 NO ANSWER AFTER 5 SECONDS 3	1⇨*FL19*
FL18. *Say:* Komi is older than Tori. Komi is 6 and Tori is 5. *and go to FL23.*		⇨*FL23*

FL19. *Turn the page to reveal the reading story.*

Thank you. Now I want you to try this.

Here is a story. I want you to read it aloud as carefully as you can.

Start from here *(point to the first word on the first line)* and you will read line by line *(point to the direction for reading each line)*.

When you finish reading, I will ask you some questions about what you have read.

If you come to a word you do not know, read the next word.

Put your finger on the first word. Are you ready? Begin.

Choli	is	in	class	two.	One	day,
1	2	3	4	5	6	7
Choli	was	going	home	from	school.	He
8	9	10	11	12	13	14
saw	some	red	flowers	on	the	way.
15	16	17	18	19	20	21
The	flowers	were	near	a	vegetable	farm.
22	23	24	25	26	27	28
Choli	wanted	to	get	some	flowers	For
29	30	31	32	33	34	35
his	mother.	Choli	ran	fast	across	The
36	37	38	39	40	41	42
farm	to	get	the	flowers.	He	Fell
43	44	45	46	47	48	49
down	near	an	apple	tree.	Choli	Started
50	51	52	53	54	55	56
crying.	The	farmer	saw	him	and	came.
57	58	59	60	61	62	63
He	gave	Choli	many	flowers.	Choli	Was
64	65	66	67	68	69	70
very	happy.					
71	72					

FL20. *Results of the child's reading.*	LAST WORD ATTEMPTED ..... NUMBER __ __ TOTAL NUMBER OF WORDS INCORRECT OR MISSED ..... NUMBER __ __	
FL21. *How well did the child read the story?*	THE CHILD READ AT LEAST ONE WORD CORRECT ..... 1 THE CHILD DID NOT READ ANY WORD CORRECTLY ..... 2 THE CHILD DID NOT TRY TO READ THE STORY 3	 2 ⇨*FL23* 3 ⇨*FL23*

FL22. Now I will ask you a few questions about what you have read. *If the child does not response within a few seconds, repeat the question. If the child does not answer after repeating the question, mark 'No response' and say:* Thank you. That is ok. We will move on. *Make sure the child can still see story and ask:*		
[A] What grade is Choli in?	CORRECT ((CHOLI IS) IN CLASS TWO)..... 1 INCORRECT ..... 2 NO RESPONSE / SAYS 'I DON'T KNOW' 3	
[B] What did Choli see on the way home?	CORRECT (HE SAW SOME FLOWERS)..... 1 INCORRECT ..... 2 NO RESPONSE / SAYS 'I DON'T KNOW' 3	
[C] Why did Choli start crying?	CORRECT (BECAUSE HE FELL) ..... 1 INCORRECT ..... 2 NO RESPONSE / SAYS 'I DON'T KNOW' 3	
[D] Where did Choli fall down?	CORRECT ((CHOLI FELL DOWN) NEAR AN APPLE TREE) ..... 1 INCORRECT ..... 2 NO RESPONSE / SAYS 'I DON'T KNOW' 3	
[E] Why was Choli happy?	CORRECT (BECAUSE THE FARMER GAVE HIM MANY FLOWERS. / BECAUSE HE HAD FLOWERS TO GIVE TO HIS MOTHER)..... 1 INCORRECT ..... 2 NO RESPONSE / SAYS 'I DON'T KNOW' 3	
FL23. *Open the page in the Reading & Numbers Book so the child is looking at the list of numbers. Make sure the child is looking at this page.* Now, here are some numbers. I want you to point to each number and tell me what that number is. *Point to the first number and say:* Let us start here. *If a child stops at one number for a while, tell the child what the number is, mark the number as 'No Attempt' and point to the next number and say:* What is this number*?* *STOP RULE* *If the child does not attempt to read 2 consecutive numbers, say:* Thank you. That is ok. We will go to the next activity.	**9** CORRECT ..... 1 INCORRECT ..... 2 NO ATTEMPT..... 3 **12** CORRECT ..... 1 INCORRECT ..... 2 NO ATTEMPT..... 3 **30** CORRECT ..... 1 INCORRECT ..... 2 NO ATTEMPT..... 3 **48** CORRECT ..... 1 INCORRECT ..... 2 NO ATTEMPT..... 3 **74** CORRECT ..... 1 INCORRECT ..... 2 NO ATTEMPT..... 3 **731** CORRECT ..... 1 INCORRECT ..... 2 NO ATTEMPT..... 3	

FL23A. *Check FL23: Did the child correctly identify two of the first three numbers (9, 12 and 30)?*	YES, AT LEAST TWO CORRECT 1 NO, AT LEAST 2 INCORRECT OR WITH NO ATTEMPT 2	2 ⇨*FL28*
FL24. *Turn the page so the child is looking at the first pair of numbers. Make sure the child is looking at this page. Say:* Look at these numbers. Tell me which one is bigger. *Record the child's answer before turning the page in the book and repeat the question for the next pair of numbers.* *If the child does not answer after a few seconds, repeat the question. If the child does not answer after repeating the question, mark a 'Z' for the answer on the appropriate row on the questionnaire, turn the booklet page and show the child the next pair of numbers.* *If the child does not try to read 2 consecutive pairs, say:* Thank you. That is ok. We will go to the next activity.	7 5 _____ 11 24 _____ 58 49 _____ 65 67 _____ 146 154 _____	
FL25. *Give a pencil and paper to the child. Open the page so the child is looking at the first addition. Make sure the child is looking at this page. Say:* Look at this sum. How much is (***number*** + ***number***)? Tell me the answer. You can use the pencil and paper if it helps you. *Record the child's answer before turning the page in the book and repeating the question for the next sum.* *If the child does not answer after a few seconds, repeat the question. If the child does not answer after repeating the question, mark a 'Z' for the answer on the appropriate row on the questionnaire, turn the booklet page and show the child the next addition.* *If the child does not try to read 2 consecutive pairs, say:* Thank you. That is ok. We will go to the next activity.	3 + 2 =_____ 8 + 6 =_____ 7 + 3 =_____ 13 + 6 =_____ 12 + 24 =_____	

FL26. *Open the page of exercise sheet for missing numbers and say:*

Here some numbers. 1, 2, and 4. What number is missing?

If the child answers ***correctly*** *say:*

That's correct. It is 3. Let's try another one.

If the child answers ***incorrectly, do not explain the child how to get the correct answer****. Say:*

The number 3 goes here. Say the numbers together with me. *(Point to each number)* 1, 2, 3, 4.
3 goes here. Let's try another one.

Now open the page to the next exercise. Say

Here are some more numbers. 5, 10, 15 and ___. What number do you think goes here?

If the child answers ***correctly*** *say:*

That's correct. It is 20. Now, try this one on your own.

If the child answers ***incorrectly*** *say*:

The number 20 goes here. Say the numbers together with me. *(Point to each number)* 5, 10, 15, 20. 20 goes here. Now, try this on your own.

FL27. *Open the page in the Reading & Numbers Book with the first missing number exercise. Say*:

Here are more numbers. Tell me what number goes here (*pointing to the missing number*).

Record the child's answer before turning the page in the book and repeat the question.

If the child do not answer after a few seconds, repeat the question. If the child does not answer after repeating the question, mark a 'Z' for the answer on the appropriate row on the questionnaire.

If the child does not attempt 2 consecutive activities, say:

Thank you. That is ok.

5	6	7	___
14	15	___	17
20	___	40	50
2	4	6	___
5	8	11	___

FL28. *Result of interview with child.*

Discuss any result not completed with Supervisor.

COMPLETED.....01
NOT AT HOME 02
MOTHER / CARETAKER REFUSED.....03
CHILD REFUSED.....04
PARTLY COMPLETED.....05
INCAPACITATED.....06

OTHER (*specify*) _____ 96

FS11. *Record the time.*	HOURS AND MINUTES ..... __ __ : __ __	

FS16. *Thank the respondent and the child for her/his cooperation.*

Proceed to complete the result in FS17 in the 5-17 CHILD INFORMATION PANEL and then go to the HOUSEHOLD QUESTIONNAIRE and complete HH56.

Make arrangements for the administration of the remaining questionnaire(s) in this household.

INTERVIEWER'S OBSERVATIONS

SUPERVISOR'S OBSERVATIONS