



NIGERIA

Multiple Indicator Cluster Survey 2016-17



Kano State
Survey
Finding
Report

October, 2017





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The fifth round Multiple Indicator Cluster Survey (MICS5) was carried out in 2016/2017 by the National Bureau of Statistics (NBS) in collaboration with the National Primary Health Care Development Agency (NPHCDA) and National Agency for the Control of Aids (NACA), as part of the global MICS programme. Technical support was provided by the United Nations Children's Fund (UNICEF). World Health Organization (WHO), World Bank, Save One Million Live (SOML), Bill and Melinda Gates Foundation, United Nations Population Funds (UNFPA), United States Agency for International Development (USAID) and UNICEF provided financial support.

The global MICS programme was developed by UNICEF in the 1990s as an international household survey programme to support countries in the collection of internationally comparable data on a wide range of indicators on the situation of children and women. MICS surveys measure key indicators that allow countries to generate data for use in policies and programmes, and to monitor progress towards the Millennium Development Goals (MDGs) and other internationally agreed upon commitments. The Nigeria MICS5 provided opportunity for strengthening of national statistical capacity by providing technical guidance on data gathering, quality of survey information, statistical tracking and analysis. MICS5 will contributed to the improvement of data and monitoring systems in Nigeria and strengthened technical expertise in the design, implementation and analysis of such systems. In addition, MICS5 provided statistics to complement and assess the quality of data from recent national surveys such as Nigerian General Household Panel Survey (NGHPS) and National Demographic and Health Survey (NDHS) conducted by National Population Commission (NPopC).

As part of devolving the reporting domain to the lower level in Kano State, sample was taken at the Senatorial district level in order to disaggregate the data at both state and senatorial district. In the history of MICS Nigeria, this is the first time the reporting domain is taking to senatorial level.

Suggested citation:

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Summary Table of Survey Implementation and the Survey Population, Multiple Indicator Cluster Survey, Nigeria 2016-17, Kano State

Survey implementation			
Sample frame	2006 Population and Housing Census November 2015	Questionnaires	Household Women (age 15-49) Men (age 15-49) Children under five
- Updated			
Interviewer training	August 2016	Fieldwork	September 2016- January 2017
Survey sample			
<i>Households</i>		<i>Children under five</i>	
- Sample	1,920	- Eligible	2,574
- Actual Coverage	1,920	- Mothers/caretakers interviewed	2,559
- Occupied	1,876	- Response rate (Per cent)	98.9
- Interviewed	1,867		
- Response rate (Per cent)	99.5		
<i>Women</i>		<i>Men</i>	
- Eligible for interviews	2,576	- Eligible for interviews	1,201
- Interviewed	2,500	- Interviewed	1,099
- Response rate (Per cent)	96.6	- Response rate (Per cent)	91.1

Survey population			
Average household size	7.2	Percentage of population living in	
Percentage of population:		- Urban areas	26.8
- Under 5 years	19.1	- Rural areas	73.2
- Under 18 years	57.3		
Percentage of population by sex:		Percentage of population by senatorial district	
- Male	49.1	- Kano Central	42.1
- Female	50.9	- Kano North	28.2
Percentage of women age 15-49 years with at least one live birth in the last 2 years	43.5	- Kano South	29.7

Housing characteristics	
Percentage of households with	
- Electricity	46.8
- Finished floor	52.3
- Finished roofing	80.8
- Finished walls	61.3
Mean number of persons per room used for sleeping	3.0

Household or personal assets	
Percentage of households that own	
- A television	25.6
- A refrigerator	12.0
- Agricultural land	65.3
- Farm animals/livestock	57.1
Percentage of households where at least a member has or owns a	
- Mobile phone	55.6
- Car or truck	8.2

Summary Table of Findings¹

Multiple Indicator Cluster Surveys (MICS), Millennium Development Goals (MDG) Indicators, Nigeria 2016-17 Kano State

CHILD MORTALITY				
Early childhood mortality				
MICS Indicator	Indicator	Description	Value ^a	
1.1	SDG 3.2.2	Neonatal mortality rate	Probability of dying within the first month of life	69
1.2	MDG 4.2	Infant mortality rate	Probability of dying between birth and the first birthday	112
1.3		Post-neonatal mortality rate	Difference between infant and neonatal mortality rates	44
1.4		Child mortality rate	Probability of dying between the first and the fifth birthdays	103
1.5	SDG 3.2.1 /MDG 4.1	Under-five mortality rate	Probability of dying between birth and the fifth birthday	203
^a Indicator values are per 1,000 live births and refer to the 5-year period preceding the survey.				

NUTRITION				
Nutritional status				
MICS Indicator	Indicator	Description	Value	
2.1a	MDG 1.8	Underweight prevalence	Percentage of children under age 5 who fall below	
2.1b		(a) Moderate and severe (b) Severe	(a) minus two standard deviations (moderate and severe) (b) minus three standard deviations (severe) of the median weight for age of the WHO standard	40.3 16.1
2.2a	SDG 2.2.1	Stunting prevalence	Percentage of children under age 5 who fall below	
2.2b		(a) Moderate and severe (b) Severe	(a) minus two standard deviations (moderate and severe) (b) minus three standard deviations (severe) of the median height for age of the WHO standard	58.0 32.8
2.3a	SDG 2.2.2	Wasting prevalence	Percentage of children under age 5 who fall below	
2.3b		(a) Moderate and severe (b) Severe	(a) minus two standard deviations (moderate and severe) (b) minus three standard deviations (severe) of the median weight for height of the WHO standard	10.8 2.8
2.4	SDG 2.2.2	Overweight prevalence	Percentage of children under age 5 who are above two standard deviations of the median weight for height of the WHO standard	1.7
Breastfeeding and infant feeding				
2.5		Children ever breastfed	Percentage of women with a live birth in the last 2 years who breastfed their last live-born child at any time	90.2
2.6		Early initiation of breastfeeding	Percentage of women with a live birth in the last 2 years who put their last newborn to the breast within one hour of birth	30.8
2.7		Exclusive breastfeeding under 6 months	Percentage of infants under 6 months of age who are exclusively breastfed	18.6
2.8		Predominant breastfeeding under 6 months	Percentage of infants under 6 months of age who received breast milk as the predominant source of nourishment during the previous day	65.1
2.9		Continued breastfeeding at 1 year	Percentage of children age 12-15 months who received breast milk during the previous day	94.9
2.10		Continued breastfeeding at 2 years	Percentage of children age 20-23 months who received breast milk during the previous day	47.0
2.11		Median duration of breastfeeding	The age in months when 50 percent of children age 0-35 months did not receive breast milk during the previous day	21.1

¹ See Appendix E for a detailed description of MICS indicators

2.12	Age-appropriate breastfeeding	Percentage of children age 0-23 months appropriately fed during the previous day	62.8
2.13	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	78.1
2.14	Milk feeding frequency for non-breastfed children	Percentage of non-breastfed children age 6-23 months who received at least 2 milk feedings during the previous day	34.2
2.15	Minimum meal frequency	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 or more during the previous day	40.5
2.16	Minimum dietary diversity	Percentage of children age 6-23 months who received foods from 4 or more food groups during the previous day	32.0
2.17a	Minimum acceptable diet	(a) Percentage of breastfed children age 6-23 months who had at least the minimum dietary diversity and the minimum meal frequency during the previous day	14.6
2.17b		(b) Percentage of non-breastfed children age 6-23 months who received at least 2 milk feedings and had at least the minimum dietary diversity not including milk feeds and the minimum meal frequency during the previous day	17.1
2.18	Bottle feeding	Percentage of children age 0-23 months who were fed with a bottle during the previous day	31.6
Low-birthweight			
2.20	Low-birthweight infants	Percentage of most recent live births in the last 2 years weighing below 2,500 grams at birth	19.4
2.21	Infants weighed at birth	Percentage of most recent live births in the last 2 years who were weighed at birth	7.8

CHILD HEALTH			
Vaccinations			
MICS Indicator	Indicator	Description	Value
3.1	Tuberculosis immunization coverage	Percentage of children age 12-23 months who received BCG vaccine by their first birthday	32.2
3.2	Polio immunization coverage	Percentage of children age 12-23 months who received the third dose of OPV vaccine (OPV3) by their first birthday	15.0
3.3	Diphtheria, pertussis and tetanus (DPT) immunization coverage	Percentage of children age 12-23 months who received the third dose of DPT vaccine (DPT3) by their first birthday	16.5
3.4 MDG 4.3	Measles immunization coverage	Percentage of children age 12-23 months who received measles vaccine by their first birthday	19.7
3.7	Yellow fever immunization coverage	Percentage of children age 12-23 months who received yellow fever vaccine by their first birthday	18.1
3.8 SDG 3.b.1	Full immunization coverage	Percentage of children age 12-23 months who received all vaccinations recommended in the national immunization schedule by their first birthday (measles by second birthday)	4.6
Tetanus toxoid			
3.9	Neonatal tetanus protection	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 prior to the most recent birth	53.8
Diarrhoea			

-	Children with diarrhoea	Percentage of children under age 5 with diarrhoea in the last 2 weeks	20.7
3.10	Care-seeking for diarrhoea	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	21.3
3.11	Diarrhoea treatment with oral rehydration salts (ORS) and zinc	Percentage of children under age 5 with diarrhoea in the last 2 weeks who received ORS and zinc	22.2
3.12	Diarrhoea treatment with oral rehydration therapy (ORT) and continued feeding	Percentage of children under age 5 with diarrhoea in the last 2 weeks who received ORT (ORS packet, pre-packaged ORS fluid, recommended homemade fluid or increased fluids) and continued feeding during the episode of diarrhoea	35.0
Acute Respiratory Infection (ARI) symptoms			
-	Children with ARI symptoms	Percentage of children under age 5 with ARI symptoms in the last 2 weeks	2.4
3.13	Care-seeking for children with ARI symptoms	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	21.0
3.14	Antibiotic treatment for children with ARI symptoms	Percentage of children under age 5 with ARI symptoms in the last 2 weeks who received antibiotics	13.3
Solid fuel use			
3.15 SDG 7.1.2	Use of solid fuels for cooking	Percentage of household members in households that use solid fuels as the primary source of domestic energy to cook	89.7
Malaria / Fever			
-	Children with fever	Percentage of children under age 5 with fever in the last 2 weeks	35.4
3.16a 3.16b	Household availability of insecticide-treated nets (ITNs)	Percentage of households with (a) at least one ITN (b) at least one ITN for every two people	80.8 32.1
3.18 MDG 6.7	Children under age 5 who slept under an ITN	Percentage of children under age 5 who slept under an ITN the previous night	61.8
3.19	Population that slept under an ITN	Percentage of household members who slept under an ITN the previous night	54.8
3.20	Care-seeking for fever	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	62.2
3.21	Malaria diagnostics usage	Percentage of children under age 5 with fever in the last 2 weeks who had a finger or heel stick for malaria testing	11.3
3.22 MDG 6.8	Anti-malarial treatment of children under age 5	Percentage of children under age 5 with fever in the last 2 weeks who received any antimalarial treatment	39.0

3.23	Treatment with Artemisinin-based Combination Therapy (ACT) among children who received anti-malarial treatment	Percentage of children under age 5 with fever in the last 2 weeks who received ACT (or other first-line treatment according to national policy) among children who received anti-malarial treatment	23.4
3.24	Pregnant women who slept under an ITN	Percentage of pregnant women who slept under an ITN the previous night	51.1
3.25	Intermittent preventive treatment for malaria during pregnancy	Percentage of women age 15-49 years who received three or more doses of SP/Fansidar, at least one of which was received during an ANC visit, to prevent malaria during their last pregnancy that led to a live birth in the last 2 years	16.5

WATER AND SANITATION

MICS Indicator	Indicator	Description	Value
4.1 SDG 6.1.1	Use of improved drinking water sources	Percentage of household members using improved sources of drinking water	57.9
4.2	Water treatment	Percentage of household members in households using unimproved drinking water who use an appropriate treatment method	0.7
4.3 MDG 7.9 SDG 1.4.1	Use of improved sanitation	Percentage of household members using improved sanitation facilities which are not shared	55.1
4.4 SDG 6.2.1	Safe disposal of child's faeces	Percentage of children age 0-2 years whose last stools were disposed of safely	83.3
4.5 SDG 6.1.2	Place for handwashing	Percentage of households with a specific place for hand washing where water and soap or other cleansing agent are present	16.3
4.6	Availability of soap or other cleansing agent	Percentage of households with soap or other cleansing agent	45.3
4.S1	Quality of drinking water at the households	Percentage of household members drinking water contaminated by <i>E. Coli</i> in the drinking water of the household	97.0
4.S2	Quality at the source of household drinking water	Percentage of household members drinking water contaminated by <i>E. Coli</i> at the source of drinking water	88.0
4.S3 SDG 6.1.1	Use of safely managed drinking water sources	Percentage of household members with an improved drinking water source located on premises, free of <i>E. coli</i> and available when needed	0.2

REPRODUCTIVE HEALTH

Contraception and unmet need

MICS Indicator	Indicator	Description	Value
-	Total fertility rate	Total fertility rate for women age 15-49 years	7.7
5.1 SDG 3.7.2	Adolescent birth rate	Age-specific fertility rate for women age 15-19 years	169
5.2	Early childbearing	Percentage of women age 20-24 years who had at least one live birth before age 18	44.3

5.3	MDG 5.3	Contraceptive prevalence rate	Percentage of women age 15-49 years currently married or in union who are using (or whose partner is using) a (modern or traditional) contraceptive method	6.3
5.4	SDG 3.7.1	Unmet need	Percentage of women age 15-49 years who are currently married or in union who are fecund and want to space their births or limit the number of children they have and who are not currently using contraception	30.8
Maternal and newborn health				
5.5a	MDG 5.5	Antenatal care coverage	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	
5.5b	MDG 5.5		(a) at least once by skilled health personnel (b) at least four times by any provider	65.1 44.7
5.6		Content of antenatal care	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	49.3
5.7	SDG 3.1.2	Skilled attendant at delivery	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	19.8
5.8		Institutional deliveries	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	15.7
5.9		Caesarean section	Percentage of women age 15-49 years whose most recent live birth in the last 2 years was delivered by caesarean section	1.0
Post-natal health checks				
5.10		Post-partum stay in health facility	Percentage of women age 15-49 years who stayed in the health facility for 12 hours or more after the delivery of their most recent live birth in the last 2 years	26.7
5.11		Post-natal health check for the newborn	Percentage of last live births in the last 2 years who received a health check while in facility or at home following delivery, or a post-natal care visit within 2 days after delivery	17.5
5.12		Post-natal health check for the mother	Percentage of women age 15-49 years who received a health check while in facility or at home following delivery, or a post-natal care visit within 2 days after delivery of their most recent live birth in the last 2 years	4.3

CHILD DEVELOPMENT				
MICS Indicator	Indicator	Description	Value	
6.1	Attendance to early childhood education	Percentage of children age 36-59 months who are attending an early childhood education programme	18.1	
6.2	Support for learning	Percentage of children age 36-59 months with whom an adult has engaged in four or more activities to promote learning and school readiness in the last 3 days	62.6	
6.3	Father's support for learning	Percentage of children age 36-59 months whose biological father has engaged in four or more activities to promote learning and school readiness in the last 3 days	7.8	
6.4	Mother's support for learning	Percentage of children age 36-59 months whose biological mother has engaged in four or more activities to promote learning and school readiness in the last 3 days	20.4	
6.5	Availability of children's books	Percentage of children under age 5 who have three or more children's books	1.6	
6.6	Availability of playthings	Percentage of children under age 5 who play with two or more types of playthings	52.7	
6.7	Inadequate care	Percentage of children under age 5 left alone or in the care of another child younger than 10 years of age for more than one hour at least once in the last week	21.9	

CHILD DEVELOPMENT

MICS Indicator	Indicator	Description	Value
6.8 SDG 4.2.1	Early child development index	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	61.0

LITERACY AND EDUCATION

MICS Indicator	Indicator	Description	Value
7.1 MDG 2.3	Literacy rate among young people	Percentage of young people age 15-24 years who are able to read a short simple statement about everyday life or who attended secondary or higher education (a) women (b) men	46.1 72.5
7.2	School readiness	Percentage of children in first grade of primary school who attended pre-school during the previous school year	23.8
7.3	Net intake rate in primary education	Percentage of children of school-entry age who enter the first grade of primary school	35.4
7.4 SDG 4.1.2	Primary school net attendance ratio (adjusted)	Percentage of children of primary school age currently attending primary or secondary school	56.7
7.5 SDG 4.1.1	Secondary school net attendance ratio (adjusted)	Percentage of children of secondary school age currently attending secondary school or higher	45.3
7.6 MDG 2.2	Children reaching last grade of primary	Percentage of children entering the first grade of primary school who eventually reach last grade	93.6
7.7	Primary completion rate	Number of children attending the last grade of primary school (excluding repeaters) divided by number of children of primary school completion age (age appropriate to final grade of primary school)	56.1
7.8	Transition rate to secondary school	Number of children attending the last grade of primary school during the previous school year who are in the first grade of secondary school during the current school year divided by number of children attending the last grade of primary school during the previous school year	39.7
7.9 SDG 4.5.1	Gender parity index (primary school)	Primary school net attendance ratio (adjusted) for girls divided by primary school net attendance ratio (adjusted) for boys	0.9
7.10 MDG 3.1 SDG 4.5.1	Gender parity index (secondary school)	Secondary school net attendance ratio (adjusted) for girls divided by secondary school net attendance ratio (adjusted) for boys	0.8

CHILD PROTECTION**Birth registration**

MICS Indicator	Indicator	Description	Value
8.1 SDG 16.9.1	Birth registration	Percentage of children under age 5 whose births are reported registered	35.3

Child labour

8.2 SDG 8.7.1	Child labour	Percentage of children age 5-17 years who are involved in child labour	53.6
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Child discipline

8.3	SDG 16.2.1	Violent discipline	Percentage of children age 1-14 years who experienced psychological aggression or physical punishment during the last one month	82.5
Early marriage and polygyny				
8.4	SDG 5.3.1	Marriage before age 15	Percentage of people age 15-49 years who were first married or in union before age 15 (a) Women (b) Men	30.8 1.9
8.5	SDG 5.3.1	Marriage before age 18	Percentage of people age 20-49 years who were first married or in union before age 18 (a) Women (b) Men	69.7 4.1
8.6		Young people age 15-19 years currently married or in union	Percentage of young people age 15-19 years who are married or in union (a) Women (b) Men	30.8 0.0
8.7		Polygyny	Percentage of people age 15-49 years who are in a polygynous union (a) Women (b) Men	48.2 34.7
8.8a 8.8b		Spousal age difference	Percentage of young women who are married or in union and whose spouse is 10 or more years older, (a) among women age 15-19 years, (b) among women age 20-24 years	56.8 57.1
Female genital mutilation/cutting				
8.9		Approval for female genital mutilation/cutting (FGM/C)	Percentage of women age 15-49 years who state that FGM/C should be continued	59.0
8.10	SDG 5.3.2	Prevalence of FGM/C among women	Percentage of women age 15-49 years who report to have undergone any form of FGM/C	30.9
8.11		Prevalence of FGM/C among girls	Percentage of daughters age 0-14 years who have undergone any form of FGM/C, as reported by mothers age 15-49 years	71.0
Attitudes towards domestic violence				
8.12		Attitudes towards domestic violence	Percentage of people 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 (a) Women (b) Men	34.7 22.0
Children's living arrangements				
8.13		Children's living arrangements	Percentage of children age 0-17 years living with neither biological parent	6.0
8.14		Prevalence of children with one or both parents dead	Percentage of children age 0-17 years with one or both biological parents dead	6.4
8.15		Children with at least one parent living abroad	Percentage of children 0-17 years with at least one biological parent living abroad	0.1

HIV/AIDS AND SEXUAL BEHAVIOUR

HIV/AIDS knowledge and attitudes

MICS Indicator	Indicator	Description	Value
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-		Have heard of AIDS	Percentage of people age 15-49 years who have heard of AIDS (a) Women (b) Men	75.3 91.9
9.1	MDG 6.3	Knowledge about HIV prevention among young people	Percentage of young people age 15-24 years who correctly identify ways of preventing the sexual transmission of HIV, and who reject major misconceptions about HIV transmission (a) Women (b) Men	15.5 23.3
9.2		Knowledge of mother-to-child transmission of HIV	Percentage of people age 15-49 years who correctly identify all three means of mother-to-child transmission of HIV (a) Women (b) Men	42.2 34.2
9.3		Accepting attitudes towards people living with HIV	Percentage of people age 15-49 years expressing accepting attitudes on all four questions toward people living with HIV (a) Women (b) Men	7.2 21.3
HIV testing				
9.4		People who know where to be tested for HIV	Percentage of people age 15-49 years who state knowledge of a place to be tested for HIV (a) Women (b) Men	44.7 47.0
9.5		People who have been tested for HIV and know the results	Percentage of people age 15-49 years who have been tested for HIV in the last 12 months and who know their results (a) Women (b) Men	6.9 5.8
9.6		Sexually active young people who have been tested for HIV and know the results	Percentage of young people age 15-24 years who have had sex in the last 12 months, who have been tested for HIV in the last 12 months and who know their results (a) Women (b) Men	6.9 5.8
9.7		HIV counselling during antenatal care	Percentage of women age 15-49 years who had a live birth in the last 2 years and received antenatal care during the pregnancy of their most recent birth, reporting that they received counselling on HIV during antenatal care	27.1
9.8		HIV testing during antenatal care	Percentage of women age 15-49 years who had a live birth in the last 2 years and received antenatal care during the pregnancy of their most recent birth, reporting that they were offered and accepted an HIV test during antenatal care and received their results	18.6
Sexual behaviour				
9.9		Young people who have never had sex	Percentage of never married young people age 15-24 years who have never had sex (a) Women (b) Men	98.6 86.2
9.10		Sex before age 15 among young people	Percentage of young people age 15-24 years who had sexual intercourse before age 15 (a) Women (b) Men	15.5 0.4
9.11		Age-mixing among sexual partners	Percentage of women age 15-24 years who had sex in the last 12 months with a partner who was 10 or more years older	60.8
9.12		Multiple sexual partnerships	Percentage of people age 15-49 years who had sexual intercourse with more than one partner in the last 12 months (a) Women (b) Men	0.6 3.2

9.13		Condom use at last sex among people with multiple sexual partnerships	Percentage of people age 15-49 years who report having had more than one sexual partner in the last 12 months who also reported that a condom was used the last time they had sex (a) Women (b) Men	12.1 35.7
9.14		Sex with non-regular partners	Percentage of sexually active young people age 15-24 years who had sex with a non-marital, non-cohabitating partner in the last 12 months (a) Women (b) Men	0.3 11.1
9.15	MDG 6.2	Condom use with non-regular partners	Percentage of young people age 15-24 years reporting the use of a condom during the last sexual intercourse with a non-marital, non-cohabiting sex partner in the last 12 months (a) Women (b) Men	55.2 80.3
Orphans				
9.16	MDG 6.4	Ratio of school attendance of orphans to school attendance of non-orphans	Proportion attending school among children age 10-14 years who have lost both parents divided by proportion attending school among children age 10-14 years whose parents are alive and who are living with one or both parents	1.07
Male circumcision				
9.17		Male circumcision	Percentage of men age 15-49 years who report having been circumcised	99.3

ACCESS TO MASS MEDIA AND ICT

Access to mass media

MICS Indicator	Indicator	Description	Value
10.1	Exposure to mass media	Percentage of people age 15-49 years who, at least once a week, read a newspaper or magazine, listen to the radio, and watch television (a) Women (b) Men	3.8 19.9
Use of information/communication technology			
10.2	Use of computers	Percentage of young people age 15-24 years who used a computer during the last 12 months (a) Women (b) Men	7.9 16.3
10.3	SDG 17.8.1 Use of internet	Percentage of young people age 15-24 years who used the internet during the last 12 months (a) Women (b) Men	7.2 32.9

SUBJECTIVE WELL-BEING

MICS Indicator	Indicator	Description	Value
11.1	Life satisfaction	Percentage of young people age 15-24 years who are very or somewhat satisfied with their life, overall (a) Women (b) Men	89.6 87.6

SUBJECTIVE WELL-BEING

MICS Indicator	Indicator	Description	Value
11.2	Happiness	Percentage of young people age 15-24 years who are very or somewhat happy (a) Women (b) Men	91.2 90.9
11.3	Perception of a better life	Percentage of young people age 15-24 years whose life improved during the last one year, and who expect that their life will be better after one year (a) Women (b) Men	74.0 66.6

TOBACCO AND ALCOHOL USE

Tobacco use

MICS Indicator	Indicator	Description	Value
12.1 SDG.3.a.1	Tobacco use	Percentage of people age 15-49 years who smoked cigarettes, or used smoked or smokeless tobacco products at any time during the last one month (a) Women (b) Men	- 4.0
12.2	Smoking before age 15	Percentage of people age 15-49 years who smoked a whole cigarette before age 15 (a) Women (b) Men	0.1 1.1

Alcohol use

12.3 SDG 3.a.1	Use of alcohol	Percentage of people age 15-49 years who had at least one alcoholic drink at any time during the last one month (a) Women (b) Men	- -
12.4	Use of alcohol before age 15	Percentage of people age 15-49 years who had at least one alcoholic drink before age 15 (a) Women (b) Men	- 0.2

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List of Abbreviations

AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
APP	Agricultural Promotion Policy
BCG	Bacillus Calmette-Guérin (Tuberculosis)
BMGF	Bill and Melinda Gates Foundation
BNPC	Budget and National Planning Commission
CAPI	Computer Assisted Personal Interviewing
CBN	Central Bank of Nigeria
CDC	Center for Disease Control and Prevention
CRC	Convention on the Rights of the Child
CEDAW	Convention on the Elimination of All Forms of Discrimination against Women
CSPro	Census and Survey Processing System
DFID	Department for International Development
DPT	Diphtheria Pertussis Tetanus
ECCD	Early Childhood Care and Development
ECDI	Early Child Development Index
EPI	Expanded Programme on Immunization
FGM/C	Female genital mutilation/cutting
GPI	Gender Parity Index
HIV	Human Immunodeficiency Virus
ICT	Information and Communications Technology
IDD	Iodine Deficiency Disorders
ITN	Insecticide Treated Net
IUD	Intrauterine Device
JMP	Joint Monitoring Programme
KANBUS	Kano State Bureau of Statistics
LAM	Lactational Amenorrhea Method
LLIN	Long-Lasting Insecticidal Net
MCV	Measles Containing Vaccine
MDAs	Ministries, Departments and Agencies
MDG	Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
MICS5	Fifth global round of Multiple Indicator Clusters Surveys programme
MoH	Ministry of Health
NACA	National Agency for the Control of AIDS
NAR	Net Attendance Rate
NBS	National Bureau of Statistics
NDHS	National Demographic and Health Survey
NGHIPS	Nigerian General Household Panel Survey
NISH	National Integrated Survey of Households
NPHCDA	National Primary Health Care Development Agency
NPoPC	National Population Commission
PNC	Post-natal Care
Ppm	Parts Per Million
ORT	Oral rehydration treatment
SDG	Sustainable Development Goals
SFR	Survey Finding Report
SOML	Save One Million Live
SPSS	Statistical Package for Social Sciences

TFR	Total Fertility Rate
UNAIDS	United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNFPA	United Nations Population Fund
UNGASS	United Nations General Assembly Special Session on HIV/AIDS
UNICEF	United Nations Children's Fund
UNIO	United Nations and International Organizations
VIP	Ventilated Improved Pit
WB	World Bank
WCARO	West and Central Africa Regional Office
WFFC	World Fit for Children
WHO	World Health Organization

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Barrister Zubaida Damakka Abubakar
Honourable Commissioner
Kano State Ministry of Planning and Budget

I. Introduction

Background

This report is based on the Multiple Indicator Cluster Survey (MICS), conducted between September 2016 and January 2017 by National Bureau of Statistics and Kano State Bureau of Statistics, with technical and financial support from UNICEF, WHO, UNFPA, Bill and Melinda Gates Foundation, Save One Million Lives and NACA. The survey provides statistically sound and internationally comparable data essential for developing evidence-based policies and programmes, and for monitoring progress toward national goals, state goals and global commitments. Among these global commitments are those emanating from the World Fit for Children Declaration and Plan of Action, the goals of the United Nations General Assembly Special Session on HIV/AIDS, the Education for All Declaration and the Millennium Development Goals (MDGs/SDGs).

A Commitment to Action: National and International Reporting Responsibilities

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

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

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

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

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

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

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

The Federal Government of Nigeria has made several efforts directed toward the achievement of the objectives and aspirations expressed in the Sustainable Development Goals (SDGs), the World Fit for Children Goals, the UNICEF Country Programme, the Convention on the Rights of the Child (CRC) and the Convention on the Elimination of All Forms of Discrimination against Women (CEDAW), among others. The Government has in recent times launched a number of development initiatives to improve the economic and social life of its people. The Change agenda of the present Government and Vision 20: 2020 are developed to create employment, increase and stabilise electricity power supply, improve social and economic infrastructure and provide enabling environment for local and foreign investments and to become one of the twenty leading

economies in the world by year 2020. The Agricultural Promotion Policy (APP) is to rejuvenate and redirect building an agribusiness ecosystem that will take Nigeria out of food importation and able to earn significant foreign exchange from agriculture.

The National Bureau of Statistics (NBS) with strong financial and technical support from International Development partners and donors like UNICEF, UNFPA, DFID and Kano state government among others has been involved in National and State effort to achieve the goals through provision of relevant data to monitor, evaluate and advise necessary adjustment in development programmes. The Nigeria Multiple Indicator Cluster Survey 2016-17 has been designed to measure achievements of MDGs and provide baseline for SDG in Kano State. More specifically, the report provides a robust baseline data and assists the Kano state government in monitoring and evaluating her programmes and policies to improve the quality of lives of her people.

Survey Objectives

The primary objectives of Multiple Indicator Cluster Survey (MICS) Nigeria 2016-17 are:

- To provide up-to-date information for assessing the situation of children and women;
- To generate data for the critical assessment of the progress made in various programme areas, and to identify areas that require more attention;
- To contribute to the generation of baseline data for (SDG);
- To furnish data needed for monitoring progress toward goals established in the post Millennium Declaration and other internationally agreed goals, as a basis for future action;
- To provide disaggregated data to identify disparities among various groups to enable evidence based actions aimed at social inclusion of the most vulnerable;

II. Sample and Survey Methodology

Sample Design: the sample for Kano state

As part of Nigeria Multiple Indicator Cluster Survey (MICS) 2016-17, the sample for the Kano state MICS 2016-17 was designed to provide estimates for a large number of indicators on the situation of children and women at the state level, for urban and rural areas, as well as the 3 senatorial districts namely Kano Central, Kano North and Kano South. The senatorial districts within the state were identified as the main sampling strata while the Enumeration Areas (EAs) within each district were identified as the Primary Sampling Units (PSUs). The EAs for the survey were selected from the National Integrated Survey of Households round 2 (NISH2) master sample, based on a list of EAs prepared for the 2006 Population Census. Two stage sampling was conducted with the first stage being the selection of EAs within the strata while the second stage was the selection of households within each EA.

For each Senatorial district, 40 EAs were selected using Random Systematic Sampling. After a household listing was carried out within the selected EAs, a systematic sample of sixteen (16) households was drawn in each EA. The sample is not self-weighting, however for reporting results, sample weights were applied. A more detailed description of the sample design can be found in Appendix A.

Questionnaires

Four sets of questionnaires were used in the MICS 2016-17:

1. Household questionnaire - was used to collect basic demographic information on all the household members (usual residents), and household characteristics;
2. Individual women questionnaire - administered in each household to all women age 15-49 years;
3. Individual men questionnaire - administered to all men age 15-49 years in every other (one in every two) households;
4. Under-5 children questionnaire - administered to mothers or caretakers for all children under 5 years of age² living in the sampled households.

The Household Questionnaire included the following modules:

- Household Information Panel
- List of Household Members
- Education
- Child Labour
- Child Discipline
- Household Characteristics
- Insecticide Treated Nets
- Water and Sanitation
- Handwashing
- Salt Iodization
- Water Quality Test

² The terms “children under 5”, “children age 0-4 years”, and “children age 0-59 months” are used interchangeably in this report.

Individual Women questionnaire included the following modules:

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

Individual Men questionnaire included the following modules:

- Man Information Panel
- Man's Background
- Access to Mass Media and Use of Information/Communication Technology
- Fertility
- Attitudes Toward Domestic Violence
- Marriage/Union
- Sexual Behaviour
- HIV/AIDS
- Circumcision
- Tobacco and Alcohol Use
- Life Satisfaction

Under 5 children questionnaire included the following modules:

- Under Five Information Panel
- Age
- Birth Registration
- Early Childhood Development
- Breastfeeding and Dietary Intake
- Immunization
- Care of Illness
- Anthropometry

The questionnaires are based on the MICS5 questionnaire³ model (English version), customised and were pre-tested in the state in April, 2016. Based on the results of the pre-test, modifications were made to the wording of the questionnaires. A copy of the Nigeria MICS questionnaires is provided in Appendix F.

In addition to the administration of questionnaires, salt iodization and water quality tests were conducted. Weights and heights of children age under 5 years were also measured. Details of the tests and measurements are provided in the respective sections of the report.

Training and Fieldwork

Training for the fieldwork was conducted for thirty-one (31) days in August 2016. Training included lectures on interviewing techniques and the contents of the questionnaires. Mock interviews among trainees were also conducted to gain practice in asking questions. Towards the end of the training period, trainees spent 2 days in field practice in purposively selected residential areas in 2 communities in the state.

The data were collected by 4 teams; each team comprised four interviewers, one driver, one measurer and a supervisor. Fieldwork began in September, 2016 and concluded in January 2017.

Using Computer Assisted Personal Interviewing (CAPI), the data were electronically captured from the field and transmitted to a central server, using CSPro CAPI application, Version 5.0. Being the first time of using CAPI, the programme was pretested to know the effectiveness and efficiency of the device. Using CAPI to capture data helps in reducing errors associated with the use of paper questionnaire such as omission and skipping errors.

Data Processing

Data were analysed using the Statistical Package for Social Scientist (SPSS) software, Version 21 version of SPSS used. Model syntax and tabulation plans developed by UNICEF MICS team were customized and used for this purpose.

³The model MICS5 questionnaires can be found at <http://mics.unicef.org/tools#survey-design>.

III. Sample Coverage and the Characteristics of Households and Respondents

Kano state sub-Sample Coverage

Out of 1,920 households sampled for coverage, all were visited but 1,876 were found to be occupied and 1,867 were successfully interviewed, representing a household response rate of 99.5 percent.

In the interviewed households, 2,576 women (aged 15-49 years) were identified. Of these, 2,500 were successfully interviewed, yielding a response rate of 97.0 percent within the interviewed households.

The survey also sampled men (aged 15-49 years), but required only a subsample. All men (aged 15-49) were identified in 960 households selected for the men questionnaire; 1,201 men (aged 15-49 years) were listed in the household questionnaires. Questionnaires were completed for 1,099 eligible men, which corresponds to a response rate of 91.5 percent within eligible interviewed households.

There were 2,574 children under age five listed in the household questionnaires. Questionnaires were completed for 2,559 of these children, which corresponds to a response rate of 99.4 percent within interviewed households.

Overall response rates of 96.6, 91.1 and 98.9 are calculated for the individual interviews of women, men, and under-5s, respectively (Table HH.1).

Table HH.1: Results of household, women's, men's and under-5 interviews

Number of households, women, men, and children under 5 by interview results, and household, women's, men's and under-5's response rates, Nigeria, 2016-17 Kano State

	Total	Residence		Senatorial District		
		Urban	Rural	Kano Central	Kano North	Kano South
Households						
Sampled	1920	448	1472	640	640	640
Actual coverage	1920	448	1472	640	640	640
Occupied	1876	434	1442	621	623	632
Interviewed	1867	431	1436	616	622	629
Household response rate	99.5	99.3	99.6	99.2	99.8	99.5
Women						
Eligible	2576	665	1911	905	739	932
Interviewed	2500	628	1872	864	711	925
Women's response rate	97.0	94.4	98.0	95.5	96.2	99.2
Women's overall response rate	96.6	93.8	97.6	94.7	96.1	98.8
Men						
Eligible	1201	359	842	464	297	440
Interviewed	1099	330	769	414	267	418
Men's response rate	91.5	91.9	91.3	89.2	89.9	95.0
Men's overall response rate	91.1	91.3	91.0	88.5	89.8	94.5
Children under 5						
Eligible	2574	522	2052	748	812	1014
Mothers/caretakers interviewed	2559	514	2045	741	806	1012
Under-5's response rate	99.4	98.5	99.7	99.1	99.3	99.8
Under-5's overall response rate	98.9	97.8	99.2	98.3	99.1	99.3

Characteristics of Households

The weighted age and sex distribution of the survey population is provided in Table HH.2. In the households successfully interviewed in the survey, a weighted total of 13,365 household members was listed. Of these, 6,567 were males, and 6,798 were females.

Table HH.2: 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, Nigeria, 2016-17, Kano State						
	Total		Males		Females	
	Number	Percent	Number	Percent	Number	Percent
Total	13365	100.0	6567	100.0	6798	100.0
Age (Years)						
0-4	2555	19.1	1289	19.6	1265	18.6
5-9	2357	17.6	1178	17.9	1180	17.4
10-14	1930	14.4	917	14.0	1013	14.9
15-19	1226	9.2	607	9.2	618	9.1
20-24	853	6.4	405	6.2	448	6.6
25-29	800	6.0	350	5.3	450	6.6
30-34	662	5.0	299	4.5	363	5.3
35-39	523	3.9	227	3.5	297	4.4
40-44	486	3.6	255	3.9	231	3.4
45-49	433	3.2	232	3.5	201	3.0
50-54	492	3.7	199	3.0	293	4.3
55-59	225	1.7	96	1.5	129	1.9
60-64	313	2.3	164	2.5	149	2.2
65-69	144	1.1	99	1.5	45	0.7
70-74	183	1.4	125	1.9	58	0.8
75-79	38	0.3	27	0.4	11	0.2
80-84	94	0.7	66	1.0	27	0.4
85+	41	0.3	25	0.4	16	0.2
Missing	11	0.1	7	0.1	4	0.1
Dependency age groups						
0-14	6842	51.2	3384	51.5	3458	50.9
15-64	6013	45.0	2834	43.2	3179	46.8
65+	499	3.7	342	5.2	157	2.3
Missing	11	0.1	7	0.1	4	0.1
Child and adult populations						
Children age 0-17 years	7660	57.3	3803	57.9	3857	56.7
Adults age 18+ years	5695	42.6	2757	42.0	2938	43.2
Missing	11	0.1	7	0.1	4	0.1

Table HH.3: Household composition

Percent and frequency distribution of households by selected characteristics, Nigeria, 2016-17 Kano State			
	Weighted percent	Number of households	
		Weighted	Unweighted
Total	100.0	1867	1867
Senatorial District			
Kano Central	42.1	786	616
Kano North	28.2	527	622
Kano South	29.7	554	629
Sex of household head			
Male	96.1	1794	1799
Female	3.9	73	68
Residence			
Urban	26.8	500	431
Rural	73.2	1367	1436
Number of household members			
1	1.5	27	30
2	6.1	114	124
3	10.2	190	198
4	10.7	200	198
5	12.1	226	218
6	10.9	203	200
7	9.5	178	169
8	8.0	149	150
9	8.2	154	152
10+	22.7	425	428
Education of household head			
None	10.5	196	198
Non-formal	49.0	915	932
Primary	11.9	222	226
Secondary	17.4	325	304
Higher	10.4	194	189
Missing/	0.8	15	18
Ethnicity of household head			
Hausa	97.3	1818	1812
Igbo	0.4	7	7
Yoruba	0.3	6	7
Other ethnic group	2.0	37	41
Mean household size	7.2	1867	1867

Both unweighted and weighted numbers are presented. Such information is essential for the interpretation of findings presented later in the report and provides background information on the representativeness of the survey sample. The remaining tables in this report are presented only with weighted numbers.⁴

Table HH.3 provides basic background information on the households, including the sex of the household head, Senatorial District, residence, number of household members, education of household head and ethnicity⁵ 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.

⁴ See Appendix A: Sample Design, for more details on sample weights.

⁵ This was determined by asking describe the questions asked and used for the construction of this background variable; typical questions asked in MICS surveys are mother tongue, ethnic background and/or religion.

Table HH.4: Women's background characteristics			
Percent and frequency distribution of women age 15-49 years by selected background characteristics, Nigeria, 2016-17 Kano State			
	Weighted percent	Number of women	
		Weighted	Unweighted
Total	100.0	2500	2500
Senatorial District			
Kano Central	43.7	1093	864
Kano North	24.1	603	711
Kano South	32.1	803	925
Residence			
Urban	29.2	731	628
Rural	70.8	1769	1872
Age(Years)			
15-19	23.4	586	563
20-24	17.2	431	442
25-29	17.3	432	430
30-34	14.2	354	367
35-39	11.4	286	281
40-44	8.9	222	225
45-49	7.6	190	192
Marital/Union status			
Currently married/in union	78.1	1949	1999
Widowed	0.9	23	18
Divorced	1.5	37	34
Separated	0.1	4	4
Never married/in union	19.3	482	441
Motherhood and recent births			
Never gave birth	23.6	589	555
Ever gave birth	76.3	1908	1943
Gave birth in last two years	43.5	1087	1119
No birth in last two years	32.9	824	827
Education			
None	16.7	419	411
Non-formal	43.2	1081	1161
Primary	11.7	294	286
Secondary	24.3	608	543
Higher	3.9	99	99
Wealth index quintile			
Poorest	17.9	447	509
Second	19.4	484	529
Middle	19.1	479	488
Fourth	21.2	530	480
Richest	22.4	560	494
Ethnicity of household head			
Hausa	97.2	2429	2429
Igbo	0.4	9	8
Yoruba	0.3	8	9
Other ethnic group	2.2	55	54

The table includes information on the distribution of women/men, children under 5 according to Senatorial District , Residence , age, marital/union status, motherhood status, births in last two years, education⁶, wealth index quintiles⁷, and ethnicity of the household head.

⁶ 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.

⁷ 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, 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.

Table HH.4M: Men's background characteristics

Percent and frequency distribution of men age 15-49 years by selected background characteristics, Nigeria, 2016-17 Kano State

	Weighted percent	Number of men	
		Weighted	Unweighted
Total	100.0	1099	1099
Senatorial District			
Kano Central	49.0	538	414
Kano North	20.7	228	267
Kano South	30.3	333	418
Residence			
Urban	35.8	394	330
Rural	64.2	705	769
Age (Years)			
15-19	26.4	290	287
20-24	17.5	193	188
25-29	14.8	163	164
30-34	11.6	128	129
35-39	8.8	97	100
40-44	11.8	130	127
45-49	9.0	99	104
Marital/Union status			
Currently married/in union	43.2	474	489
Widowed	0.0	0.0	.0.0
Divorced	0.3	3	4
Separated	0.1	1	1
Never married/in union	56.4	620	604

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

In Nigeria MICS 2016-17, the following assets were used in these calculations: Type of floor, roof, wall, fuel used by household for cooking, household assets, source and location of drinking water and sanitation facility.

The wealth index is assumed to capture the underlying long-term wealth through information on the household assets, and is intended to produce a ranking of households by wealth, from poorest to richest. The wealth index does not provide information on absolute poverty, current income or expenditure levels.

Table HH.4M: Men's background characteristics(continued)

Percent and frequency distribution of men age 15-49 years by selected background characteristics, Nigeria, 2016-17 Kano State

	Weighted percent	Number of men	
		Weighted	Unweighted
Total	100.0	1099	1099
Fatherhood status			
Has at least one living child	40.6	446	459
Has no living children	59.2	651	638
Education			
None	3.0	33	34
Non-formal	29.9	329	363
Primary	13.1	144	155
Secondary	42.0	461	426
Higher	12.1	133	121
Wealth index quintile			
Poorest	15.7	172	214
Second	15.9	175	195
Middle	19.0	209	221
Fourth	21.9	241	216
Richest	27.5	303	253
Ethnicity of household head			
Hausa	97.5	1072	1071
Igbo	0.2	2	2
Yoruba	0.2	3	3
Other ethnic group	2.0	22	23

Table HH.5: Under-5's background characteristics

Percent and frequency distribution of children under five years of age by selected characteristics, Nigeria, 2016-17 Kano State

	Weighted percent	Number of under-5 children	
		Weighted	Unweighted
Total	100.0	2559	2559
Senatorial District			
Kano Central	37.6	962	741
Kano North	27.1	693	806
Kano South	35.3	904	1012
Sex			
Male	50.5	1293	1281
Female	49.5	1266	1278
Residence			
Urban	23.5	603	514
Rural	76.5	1956	2045
Age (Months)			
0-5	10.6	271	275
6-11	9.5	243	251
12-23	21.0	538	530
24-35	18.9	485	483
36-47	20.4	522	524
48-59	19.5	500	496
Respondent to the under-5 questionnaire			
Mother	96.9	2479	2475
Other primary caretaker	3.1	80	84
Mother's education^a			
None	17.7	452	432
Non-formal	50.7	1298	1373
Primary	13.8	352	335
Secondary	14.8	379	347
Higher	3.0	77	71
Wealth index quintile			
Poorest	20.7	530	588
Second	21.8	559	601
Middle	20.7	529	532
Fourth	19.0	487	452
Richest	17.8	455	386
Ethnicity of household head			
Hausa	98.2	2514	2503
Igbo	0.4	9	9
Yoruba	0.2	4	6
Other ethnic group	1.2	31	41

^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.

Housing characteristics, asset ownership, and wealth quintiles

Table HH.6: Housing characteristics

Percent distribution of households by selected housing characteristics, according to area of residence and regions, Nigeria, 2016-17 Kano State

	Total	Residence		Senatorial District		
		Urban	Rural	Kano Central	Kano North	Kano South
Electricity						
Yes	46.8	85.5	32.6	78.7	27.6	19.9
No	53.2	14.5	67.3	21.3	72.4	80.0
Flooring						
Natural floor	47.3	16.2	58.6	30.0	56.6	62.9
Rudimentary floor	0.4	0.2	0.4	0.1	0.2	0.9
Finished floor	52.3	83.2	40.9	69.6	43.2	36.3
Other	0.1	0.4	0.0	0.2	0.0	0.0
Roof						
Natural roofing	11.4	1.6	15.1	2.2	20.7	15.8
Rudimentary roofing	6.8	7.1	6.7	4.8	11.8	5.0
Finished roofing	80.8	90.8	77.1	92.7	65.4	78.5
Other	0.9	0.4	1.1	0.4	2.1	0.6
Exterior walls						
Natural walls	17.7	1.6	23.6	6.9	15.4	35.4
Rudimentary walls	21.0	5.3	26.7	11.6	28.5	27.2
Finished walls	61.3	93.1	49.6	81.6	56.0	37.5
Other	0.0	0.0	0.0	0.0	0.1	0.0
Rooms used for sleeping						
1	19.4	17.6	20.1	15.4	22.9	21.7
2	36.4	33.1	37.7	35.4	40.8	33.6
3 or more	44.2	49.4	42.3	49.2	36.2	44.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households	1867	500	1367	786	527	554
Mean number of persons per room used for sleeping	3.0	2.9	3.0	2.9	3.0	3.1

Table HH.7: Household and personal assets

Percentage of households by ownership of selected household and personal assets, and percent distribution by ownership of dwelling, according to area of residence and Senatorial District, Nigeria, 2016-17 Kano State						
	Residence			Senatorial District		
	Total	Urban	Rural	Kano Central	Kano North	Kano South
Percentage of households that own a						
Radio	64.7	81.1	58.6	74.5	52.6	62.2
Television	25.6	60.0	13.0	45.9	10.2	11.3
Non-mobile telephone	4.4	6.3	3.7	6.2	4.7	1.6
Refrigerator	12.0	33.7	4.1	24.3	4.0	2.3
Percentage of households that own						
Agricultural land	65.3	19.1	82.2	38.0	85.5	84.9
Farm animals/Livestock	57.1	24.4	69.0	33.0	74.7	74.5
Percentage of households where at least one member owns or has a						
Watch	47.0	65.2	40.4	59.3	25.4	50.1
Mobile telephone	55.6	79.8	46.8	69.1	38.3	53.0
Bicycle	35.9	33.4	36.8	31.8	37.4	40.3
Motorcycle or scooter	39.4	33.9	41.5	37.5	31.4	49.8
Animal-drawn cart	6.9	2.7	8.5	4.2	11.9	6.2
Car or truck	8.2	18.4	4.4	13.9	4.2	3.8
Boat with a motor	1.5	2.1	1.3	1.7	1.2	1.6
Tricycle (Keke Napep)	2.4	5.0	1.4	4.6	0.8	0.8
Bank account	22.9	46.8	14.1	35.8	13.0	14.0
Ownership of dwelling						
Owned by a household member	88.1	68.8	95.2	76.2	95.9	97.6
Not owned	11.9	31.2	4.8	23.8	4.1	2.4
Rented	10.6	29.2	3.8	22.0	3.2	1.6
Other	1.2	2.0	1.0	1.8	0.9	0.7
Total	100.0	100.0	100.0	100.0	100.0	100.0
Number of households	1867	500	1367	786	527	554

Table HH.8: Wealth quintiles

Percent distribution of the household population by wealth index quintile, according to area of residence and regions, Nigeria, 2016-17 Kano State

	Wealth index quintile					Total	Number of household members
	Poorest	Second	Middle	Fourth	Richest		
Total	20.0	20.0	20.1	19.9	20.0	100.0	13365
Residence							
Urban	2.9	3.0	6.1	27.9	60.1	100.0	3748
Rural	26.7	26.6	25.5	16.8	4.4	100.0	9617
Senatorial District							
Kano Central	5.5	9.5	14.5	27.1	43.3	100.0	5772
Kano North	32.3	28.1	24.2	12.6	2.8	100.0	3431
Kano South	29.9	27.7	24.4	16.0	1.9	100.0	4162

IV. Child Mortality

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 if yes, they were asked to report the number of sons and daughters who live with them, the number who live elsewhere, and the number who have died. In addition, they were asked to provide a detailed birth history of live births of children in chronological order starting with the firstborn. Women were asked whether births were single or multiple, the sex of the children, the date of birth (month and year), and survival status. Further, for children still alive, they were asked the current age of the child and, if not alive, the age at death. 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

Rates are expressed as deaths per 1,000 live births, except in the case of child mortality, which is expressed as deaths per 1,000 children surviving to age one, and post-neonatal mortality, which is the difference between infant and neonatal mortality rates.

Table CM.1: Early childhood mortality rates					
Neonatal, post-neonatal, Infant, child and under-five mortality rates for five year periods preceding the survey, Nigeria, 2016-17 Kano State					
	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	69	44	112	103	203
5-9	58	47	105	100	194
10-14	45	63	108	110	206
¹ MICS indicator 1.1 - Neonatal mortality rate					
² MICS indicator 1.3 - Post-neonatal mortality rate					
³ MICS indicator 1.2; MDG indicator 4.2 - Infant mortality rate					
⁴ MICS indicator 1.4 - Child mortality rate					
⁵ MICS indicator 1.5; MDG indicator 4.1 - Under-five mortality rate					
^a Post-neonatal mortality rates are computed as the difference between the infant and neonatal mortality rates					

Table CM.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, Nigeria, 2016-17 Kano State

	Neonatal mortality rate ¹	Post-neonatal mortality rate ^{2, a}	Infant mortality rate ³	Child mortality rate ⁴	Under-five mortality rate ⁵
Total	69	44	112	103	203
Senatorial District					
Kano Central	66	31	97	69	159
Kano North	81	62	143	137	260
Kano South	62	42	104	113	205
Residence					
Urban	54	25	79	34	110
Rural	73	49	122	124	231
Mother's education					
None	(95)	56	151	109	243
Non Formal	56	51	107	121	215
Primary	(93)	40	133	108	227
Secondary	(67)	14	80	32	110
Higher	(*)	(*)	(*)	(*)	(*)
Wealth index quintile					
Poorest	53	52	105	141	231
Second	80	46	127	137	246
Middle	78	58	136	123	242
Fourth	72	46	119	72	182
Richest	(57)	(8)	65	22	86

¹ MICS indicator 1.1 - Neonatal mortality rate

² MICS indicator 1.3 - Post-neonatal mortality rate

³ MICS indicator 1.2; MDG indicator 4.2 - Infant mortality rate

⁴ MICS indicator 1.4 - Child mortality rate

⁵ MICS indicator 1.5; MDG indicator 4.1 - Under-five mortality rate

^a Post-neonatal mortality rates are computed as the difference between the infant and neonatal mortality rates

() Total number of live births (exposure) are based on 250-499 unweighted cases

(*) The result did not pass reliability test

Table CM.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, Nigeria, 2016-17 Kano State

	Neonatal mortality rate ¹	Post-neonatal mortality rate ^{2, a}	Infant mortality rate ³	Child mortality rate ⁴	Under-five mortality rate ⁵
Total	69	44	112	103	203
Sex of child					
Male	83	47	130	100	217
Female	53	40	93	105	188
Mother's age at birth					
Less than 20	99	44	143	103	232
20-34	60	42	102	98	190
35-49	68	50	118	121	225
Birth order					
1	(119)	50	169	95	248
2-3	54	36	90	96	178
4-6	45	49	94	110	194
7+	87	41	128	104	218
Previous birth interval^b					
< 2 years	92	60	152	135	267
2 years	57	42	99	90	180
3 years	36	40	76	104	173
4+ years	(34)	12	45	57	100

¹ MICS indicator 1.1 - Neonatal mortality rate

² MICS indicator 1.3 - Post-neonatal mortality rate

³ MICS indicator 1.2; MDG indicator 4.2 - Infant mortality rate

⁴ MICS indicator 1.4 - Child mortality rate

⁵ MICS indicator 1.5; MDG indicator 4.1 - Under-five mortality rate

^a Post-neonatal mortality rates are computed as the difference between the infant and neonatal mortality rates

^b Excludes first order births

() Total number of live births (exposure) are based on 250-499 unweighted cases

V. Nutrition

Low Birth Weight

Table NU.1: Low birth weight infants

Percentage of last live-born children in the last two years that are estimated to have weighed below 2,500 grams at birth and percentage of live births weighed at birth, Nigeria, 2016-17 Kano State

	Percent distribution of births by mother's assessment of size at birth					Total	Percentage of live births:		Number of last live-born children in the last two years
	Very small	Smaller than average	Average	Larger than average or very large	Don't Know		Below 2,500 grams ¹	Weighed at birth ²	
Total	3.5	12.9	42.0	41.2	0.4	100.0	19.4	7.8	1087
Mother's age at birth									
Less than 20 years	4.7	7.2	46.2	41.8	0.0	100.0	17.1	2.1	190
20-34 years	2.9	13.9	40.8	41.8	0.6	100.0	19.4	9.1	695
35-49 years	4.7	14.5	42.3	38.5	0.0	100.0	21.6	8.8	202
Birth order									
1	3.7	8.3	48.5	38.4	1.1	100.0	16.1	6.6	146
2-3	3.6	11.9	44.5	39.2	0.8	100.0	19.3	9.3	284
4-5	2.0	13.1	40.5	44.4	0.0	100.0	18.1	8.2	276
6+	4.5	15.2	38.8	41.3	0.2	100.0	21.7	7.0	381
Senatorial District									
Kano Central	4.0	11.7	43.0	40.6	0.7	100.0	19.3	16.7	393
Kano North	4.3	13.0	38.8	43.6	0.3	100.0	19.9	2.8	314
Kano South	2.5	13.9	43.6	39.8	0.2	100.0	19.2	2.8	380
Residence									
Urban	4.1	14.2	37.8	43.4	0.5	100.0	20.7	24.7	239
Rural	3.4	12.5	43.2	40.6	0.4	100.0	19.1	3.1	847
Mother's education									
None	4.8	14.3	36.4	44.5	0.0	100.0	21.5	1.8	196
Non-formal	2.9	13.5	44.9	38.4	0.3	100.0	18.9	2.1	533
Primary	4.9	12.8	42.4	39.9	0.0	100.0	21.4	8.3	165
Secondary	3.6	10.0	40.9	43.9	1.7	100.0	18.3	23.4	162
Higher	(0.0)	(7.0)	(31.1)	(61.9)	(0.0)	100.0	(10.6)	(62.3)	30
Wealth index quintile									
Poorest	2.0	14.7	45.2	38.1	0.0	100.0	18.9	1.0	234
Second	6.3	12.0	48.2	33.1	0.3	100.0	21.3	2.0	228
Middle	2.2	10.5	38.6	48.3	0.5	100.0	16.9	2.5	237
Fourth	2.3	14.4	42.2	40.4	0.7	100.0	19.3	5.3	218
Richest	5.4	12.8	33.7	47.4	0.7	100.0	21.3	35.8	169
Ethnicity of household head									
Hausa	3.5	12.9	42.3	40.9	0.4	100.0	19.4	7.3	1066
Igbo	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	4
Yoruba	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	3
Other ethnic group	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	14

¹ MICS indicator 2.20 - Low-birthweight infants

² MICS indicator 2.21 - Infants weighed at birth

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Nutritional Status

The reference population used in this report is based on the WHO growth standards⁸. 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 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.

⁸ http://www.who.int/childgrowth/standards/technical_report

Table NU.2: Nutritional status of children

Percentage of children under age 5 by nutritional status according to three anthropometric indices: weight for age, height for age, and weight for height, Nigeria, 2016-17 Kano State

	Weight for age				Height for age				Weight for height				
	Underweight			Number of children under age 5	Stunted			Number of children under age 5	Wasted		Overweight		Number of children under age 5
	Percent below - 2 SD ¹	Mean Z-Score (SD)	Percent below - 3 SD ²		Percent below - 2 SD ³	Mean Z-Score (SD)	Percent below - 3 SD ⁴		Percent below - 2 SD ⁵	Percent below - 3 SD ⁶	Percent above + 2 SD ⁷	Mean Z-Score (SD)	
Total	40.3	16.1	-1.8	2510	58.0	32.8	-2.3	2487	10.8	2.8	1.7	-0.6	2508
Senatorial District													
Kano Central	35.5	12.1	-1.6	943	47.8	25.5	-1.9	942	12.2	3.6	1.2	-0.7	938
Kano North	49.3	23.8	-2.0	674	68.2	42.6	-2.7	657	9.6	2.0	3.0	-0.5	675
Kano South	38.7	14.6	-1.7	892	61.2	33.3	-2.4	888	10.1	2.6	1.3	-0.4	895
Sex													
Male	42.2	18.0	-1.8	1270	60.8	35.7	-2.4	1253	12.6	3.8	1.7	-0.6	1268
Female	38.4	14.2	-1.7	1240	55.1	29.9	-2.2	1234	8.9	1.8	1.8	-0.5	1240
Residence													
Urban	31.5	10.1	-1.5	593	41.7	21.6	-1.7	592	12.2	2.8	1.3	-0.7	593
Rural	43.1	18.0	-1.8	1917	63.0	36.3	-2.5	1895	10.3	2.8	1.9	-0.5	1916
Age (Months)													
0-5	27.4	6.8	-1.2	267	26.4	8.8	-1.0	266	11.0	3.6	3.9	-0.4	263
6-11	39.0	12.7	-1.7	242	40.9	14.6	-1.6	239	17.9	4.7	0.7	-0.9	239
12-17	45.0	21.8	-1.9	329	54.4	31.5	-2.1	325	19.6	3.9	0.3	-1.1	324
18-23	50.9	26.8	-2.1	203	67.9	41.4	-2.7	200	20.1	5.5	0.4	-1.0	205
24-35	48.8	21.8	-1.9	478	72.5	44.8	-2.8	471	7.6	1.7	0.9	-0.5	479
36-47	39.3	15.3	-1.8	510	67.2	41.8	-2.7	507	5.9	2.8	2.9	-0.3	512
48-59	33.2	9.8	-1.6	481	58.2	31.3	-2.3	477	5.6	.6	2.2	-0.3	486
Mother's education													
None	49.3	21.5	-2.0	447	64.1	40.6	-2.6	439	14.4	3.8	1.8	-0.6	447
Non-formal	42.5	16.9	-1.8	1270	63.7	35.4	-2.4	1258	10.3	3.0	1.9	-0.5	1270
Primary	39.8	16.1	-1.8	347	59.4	34.2	-2.3	345	8.9	2.1	1.8	-0.6	348
Secondary	28.6	9.3	-1.4	369	38.9	18.9	-1.7	369	9.3	1.7	1.3	-0.6	368
Higher	10.2	5.6	-0.9	76	12.6	5.2	-0.8	76	14.1	1.3	0.9	-0.7	76

Table NU.2: Nutritional status of children continued

Percentage of children under age 5 by nutritional status according to three anthropometric indices: weight for age, height for age, and weight for height, Nigeria, 2016-17 Kano State

	Weight for age				Height for age				Weight for height				
	Underweight			Numbe r of childre n under age 5	Stunted			Numbe r of childre n under age 5	Wasted		Overweig ht		Numbe r of childre n under age 5
	Percent below		Mean Z-Score (SD)		Percent below		Mean Z- Score (SD)		Percent below		Percent above	Mean Z- Score (SD)	
	- 2 SD ¹	- 3 SD ²			- 2 SD ³	- 3 SD ⁴			- 2 SD ⁵	- 3 SD ⁶			
Total	40.3	16.1	-1.8	2510	58.0	32.8	-2.3	2487	10.8	2.8	1.7	-0.6	2508
Wealth index quintile													
Poorest	47.8	21.0	-2.0	514	70.7	43.8	-2.7	504	9.9	3.3	2.1	-0.5	513
Second	47.2	20.7	-1.9	552	65.1	40.1	-2.5	544	12. 8	3.9	2.2	-0.6	551
Middle	41.8	18.5	-1.8	518	63.3	34.5	-2.5	515	9.2	2.1	1.8	-0.4	520
Fourth	36.2	11.3	-1.7	481	53.8	27.4	-2.1	479	10. 9	1.9	1.6	-0.6	481
Richest	25.9	7.3	-1.3	445	33.2	15.5	-1.4	445	10. 9	2.7	0.8	-0.7	444
Ethnicity of household head													
Hausa	40.6	16.2	-1.8	246 5	58.2	32.9	-2.3	244 2	10. 8	2.7	1.7	-0.6	246 4
Igbo	(*)	(*)	-0.3	9	(*)	(*)	-0.2	9	(*)	(*)	(*)	-0.3	9
Yoruba	(*)	(*)	-0.9	4	(*)	(*)	-0.5	4	(*)	(*)	(*)	-1.0	4
Other ethnic group	(29.9)	(13. 8)	-1.5	31	(53. 5)	(36. 5)	-2.1	31	(3.9)	(3.0)	(2.2)	-0.3	31
¹ MICS indicator 2.1a and MDG indicator 1.8 - Underweight prevalence (moderate and severe)													
² MICS indicator 2.1b - Underweight prevalence (severe)													
³ MICS indicator 2.2a - Stunting prevalence (moderate and severe)													
⁴ MICS indicator 2.2b - Stunting prevalence (severe)													
⁵ MICS indicator 2.3a - Wasting prevalence (moderate and severe)													
⁶ MICS indicator 2.3b - Wasting prevalence (severe)													
⁷ MICS indicator 2.4 - Overweight prevalence													

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Breastfeeding and Infant and Young Child Feeding

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.⁹ Starting at 6 months, breastfeeding should be combined with safe, age-appropriate feeding of solid, semi-solid and soft foods.¹⁰ A summary of key guiding principles^{11, 12} 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, seven food groups were created for which a child consuming at least four of these is considered to have a better quality diet. In most populations, consumption of at least four food groups means that the child has a high likelihood of consuming at least one animal-source food and at least one fruit or vegetable, in addition to a staple food (grain, root or tuber).¹³

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 from at least 4 food groups; and
- (iii) breastmilk or at least 2 milk feeds (for non-breastfed children).

Guiding Principle (age 6-23 months)	Proximate measures	Table
Continue frequent, on-demand breastfeeding for two years and beyond	Breastfed in the last 24 hours	NU.4
Appropriate frequency and energy density of meals	Breastfed children Depending on age, two or three meals/snacks provided in the last 24 hours	NU.6
	Non-breastfed children Four meals/snacks <u>and/or milk feeds</u> provided in the last 24 hours	
Appropriate nutrient content of food	Four food groups ¹⁴ eaten in the last 24 hours	NU.6
Appropriate amount of food	No standard indicator exists	na
Appropriate consistency of food	No standard indicator exists	na
Use of vitamin-mineral supplements or fortified products for infant and mother	No standard indicator exists	na
Practice good hygiene and proper food handling	While it was not possible to develop indicators to fully capture programme guidance, one standard indicator does cover part of the principle: Not feeding with a bottle with a nipple	NU.9
Practice responsive feeding, applying the principles of psycho-social care	No standard indicator exists	na

⁹ WHO. 2003. *Implementing the Global Strategy for Infant and Young Child Feeding*. Meeting Report Geneva, 3-5 February, 2003.

¹⁰ WHO. 2003. *Global Strategy for Infant and Young Child Feeding*.

¹¹ PAHO. 2003. *Guiding principles for complementary feeding of the breastfed child*.

¹² WHO. 2005. *Guiding principles for feeding non-breastfed children 6-24 months of age*.

¹³ WHO. 2008. *Indicators for assessing infant and young child feeding practices. Part 1: Definitions*.

¹⁴ Food groups used for assessment of this indicator are 1) Grains, roots and tubers, 2) legumes and nuts, 3) dairy products (milk, yogurt, cheese), 4) flesh foods (meat, fish, poultry and liver/organ meats), 5) eggs, 6) vitamin-A rich fruits and vegetables, and 7) other fruits and vegetables.

Table NU.3: 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, Nigeria, 2016-17 Kano State

	Percentage who were ever breastfed ¹	Percentage who were first breastfed:		Percentage who received a prelacteal feed	Number of last live-born children in the last two years
		Within one hour of birth ²	Within one day of birth		
Total	90.2	30.8	75.4	51.3	1087
Senatorial District					
Kano Central	91.7	35.6	81.7	48.1	393
Kano North	88.6	20.1	71.6	62.6	314
Kano South	89.9	34.7	72.1	45.1	380
Residence					
Urban	92.0	36.2	82.8	53.1	239
Rural	89.6	29.3	73.3	50.8	847
Months since last birth					
0-11 months	91.2	32.6	75.9	52.8	527
12-23 months	89.3	29.1	74.9	49.8	560
Assistance at delivery					
Skilled attendant	90.7	33.7	82.5	51.6	215
Traditional birth attendant	94.4	21.3	75.7	63.0	255
Other	84.7	35.1	67.8	45.9	367
Place of delivery					
Home	89.7	29.5	73.8	50.9	913
Health facility	93.2	38.2	85.5	52.7	170
Public	92.5	40.3	86.3	52.0	136
Private	95.9	30.1	82.4	55.5	34
Mother's education					
None	92.1	28.0	76.0	56.5	196
Non-formal	89.7	30.4	71.6	48.1	533
Primary	85.9	30.0	76.3	55.6	165
Secondary	94.3	35.4	84.8	51.0	162
Higher	(87.3)	(36.5)	(84.1)	(50.6)	30
Wealth index quintile					
Poorest	92.4	31.3	69.5	47.7	234
Second	86.6	27.6	70.3	52.2	228
Middle	88.6	24.7	73.6	54.2	237
Fourth	90.8	34.5	81.4	51.5	218
Richest	93.4	38.3	85.4	50.5	169
Ethnicity of household head					
Hausa	90.1	30.8	75.6	51.3	1066
Igbo	(*)	(*)	(*)	(*)	4
Yoruba	(*)	(*)	(*)	(*)	3
Other ethnic group	(*)	(*)	(*)	(*)	14
¹ MICS indicator 2.5 - Children ever breastfed					
² MICS indicator 2.6 - Early initiation of breastfeeding					

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table NU.4: Breastfeeding

Percentage of living children according to breastfeeding status at selected age groups, Nigeria, 2016-17 Kano State

	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	18.6	65.1	271	94.9	219	47.0	131
Senatorial District							
Kano Central	20.9	63.2	101	95.8	83	(43.3)	55
Kano North	6.2	58.5	78	95.8	53	(56.2)	39
Kano South	26.6	72.7	93	93.5	84	(42.6)	36
Sex							
Male	19.7	68.8	135	97.0	107	52.0	70
Female	17.6	61.5	137	92.9	112	41.3	61
Residence							
Urban	16.7	45.8	64	(95.4)	47	(32.6)	37
Rural	19.3	71.1	207	94.8	173	52.6	94
Mother's education							
None	(29.1)	(70.8)	45	(96.1)	39	(*)	18
Non-formal	17.1	68.4	126	93.7	107	52.0	56
Primary	(13.6)	(63.1)	46	(93.1)	31	(*)	24
Secondary	(19.4)	(61.5)	44	(97.7)	37	(*)	24
Higher	(*)	(*)	10	(*)	5	(*)	9
Wealth index quintile							
Poorest	31.7	75.3	55	96.3	48	(*)	23
Second	11.0	67.2	61	(95.7)	44	(*)	25
Middle	12.1	68.2	57	(88.9)	49	(51.6)	24
Fourth	15.4	57.3	54	(95.8)	51	(*)	23
Richest	(25.1)	(54.9)	45	(100.0)	28	(25.0)	36
Ethnicity of household head							
Hausa	18.9	66.1	264	94.9	219	47.3	128
Igbo	(*)	(*)	2		0		0
Yoruba	(*)	(*)	1		0	(*)	1
Other ethnic group	(*)	(*)	4		0	(*)	2
¹ MICS indicator 2.7 - Exclusive breastfeeding under 6 months ² MICS indicator 2.8 - Predominant breastfeeding under 6 months ³ MICS indicator 2.9 - Continued breastfeeding at 1 year ⁴ MICS indicator 2.10 - Continued breastfeeding at 2 years							

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table NU.5: Duration of breastfeeding

Median duration of any breastfeeding, exclusive breastfeeding, and predominant breastfeeding among children age 0-35 months, Nigeria, 2016-17 Kano State

	Median duration (in months) of:			Number of children age 0-35 months
	Any breastfeeding ¹	Exclusive breastfeeding	Predominant breastfeeding	
Median	21.1	0.5	4.4	1536
Senatorial District				
Kano Central	20.5	0.4	4.1	570
Kano North	21.7	0.4	3.7	434
Kano South	21.1	0.7	4.9	533
Sex				
Male	21.3	0.5	4.7	783
Female	20.9	0.4	4.0	754
Residence				
Urban	20.3	0.0	0.7	351
Rural	21.3	0.5	4.7	1185
Mother's education				
None	22.1	0.7	4.5	264
Non-formal	21.3	0.5	4.5	763
Primary	20.9	0.5	4.5	229
Secondary	19.4	0.0	3.9	240
Higher	(10.1)	0.0	0.0	40
Wealth index quintile				
Poorest	21.1	0.6	4.8	307
Second	21.9	0.5	4.7	329
Middle	21.5	0.4	4.7	328
Fourth	21.6	0.5	3.3	306
Richest	18.9	0.0	3.6	268
Ethnicity of household head				
Hausa	21.2	0.5	4.4	1505
Igbo	(*)	0.0	0.0	8
Yoruba	0.0	0.0	0.0	4
Other ethnic group	(20.3)	0.0	0.0	20
Mean	21.0	1.2	4.9	1536
¹ MICS indicator 2.11 - Duration of breastfeeding				

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table NU.6: Age-appropriate breastfeeding

Percentage of children age 0-23 months who were appropriately breastfed during the previous day, Nigeria, 2016-17 Kano State

	Children age 0-5 months		Children age 6-23 months		Children age 0-23 months	
	Percent exclusively breastfed ¹	Number of children	Percent currently breastfeeding and receiving solid, semi-solid or soft foods	Number of children	Percent appropriately breastfed ²	Number of children
Total	18.6	271	78.1	781	62.8	1052
Senatorial District						
Kano Central	20.9	101	77.1	286	62.5	387
Kano North	6.2	78	78.2	218	59.2	296
Kano South	26.6	93	79.0	276	65.9	369
Sex						
Male	19.7	135	77.3	389	62.5	524
Female	17.6	137	78.9	391	63.0	528
Residence						
Urban	16.7	64	74.0	178	58.8	242
Rural	19.3	207	79.3	603	64.0	809
Mother's education						
None	(29.1)	45	83.2	152	71.0	197
Non-formal	17.1	126	78.4	376	63.0	502
Primary	(13.6)	46	78.5	114	59.7	160
Secondary	(19.4)	44	74.6	118	59.6	162
Higher	(*)	10	(*)	21	(39.7)	31
Wealth index quintile						
Poorest	31.7	55	79.3	169	67.6	225
Second	11.0	61	80.7	167	62.1	228
Middle	12.1	57	78.7	168	61.9	224
Fourth	15.4	54	81.7	151	64.4	205
Richest	(25.1)	45	67.7	125	56.5	170
Ethnicity of household head						
Hausa	18.9	264	78.3	766	63.1	1030
Igbo	(*)	2	(*)	3	(*)	4
Yoruba	(*)	1	(*)	2	(*)	4
Other ethnic group	(*)	4	(*)	10	(*)	14
¹ MICS indicator 2.7 - Exclusive breastfeeding under 6 months						
² MICS indicator 2.12 - Age-appropriate breastfeeding						

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table NU.7: 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, Nigeria, 2016-17 Kano State

	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	77.7	114	(*)	4	77.1	119
Sex						
Male	68.4	53	(*)	3	66.8	55
Female	85.7	61	(*)	2	86.1	63
Residence						
Urban	(*)	21	(*)	1	(*)	22
Rural	73.2	93	(*)	3	72.3	96
¹ MICS indicator 2.13 - Introduction of solid, semi-solid or soft foods						

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table NU.8: 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, Nigeria, 2016-17 Kano State

	Currently breastfeeding				Currently not breastfeeding				Nu mb er of chil dren age 6- 23 month s	All			
	Percent of children who received:			Num ber of child ren age 6-23 month s	Percent of children who received:			Percent of children who received:					
	Minimu m dietary diversit y ^a	Minimum meal frequenc y ^b	Minimu m accept able diet ^{1, c}		Minim um dietar y divers ity ^a	Minim um meal freque ncy ^b	Minim um accept able diet ^{2, c}	At least 2 milk feeds ³		Minim um dietar y divers ity ^{4, a}	Minimu m meal freque ncy ^{5, b}	Minim um accept able diet ^c	Numb er of childre n age 6-23 month s
Total	30.3	40.5	14.6	664	39.2	42.3	17.1	34.2	94	32.0	40.7	15.0	781
Senatorial District													
Kano Central	34.4	35.8	11.0	234	(49.1)	(57.9)	(27.7)	(49.8)	45	36.7	39.4	13.7	286
Kano North	28.5	35.8	13.8	190	(37.4)	(33.6)	(9.4)	(24.8)	22	29.6	35.6	13.3	218
Kano South	27.7	48.8	18.9	240	(23.8)	(23.0)	(5.6)	(15.5)	27	28.9	46.3	17.6	276
Sex													
Male	30.4	36.0	15.1	331	(35.6)	(39.3)	(14.2)	(32.9)	49	31.1	36.5	15.0	389
Female	30.1	45.0	14.2	333	(43.0)	(45.4)	(20.2)	(35.6)	46	32.8	45.0	14.9	391
Age (Months)													
6-8	15.6	50.9	9.0	114	(*)	(*)	(*)	(*)	3	16.4	49.8	8.8	119
9-11	32.0	29.1	10.6	122	0.0	0.0	0.0	0.0	0	32.0	29.1	10.6	124
12-17	31.6	42.5	16.6	304	(*)	(*)	(*)	(*)	19	32.3	42.3	16.4	329
18-23	38.7	37.2	19.1	124	40.9	44.7	18.6	37.9	73	40.2	40.0	18.9	209
Residence													
Urban	38.8	33.6	12.4	140	(66.1)	(70.2)	(41.3)	(66.1)	32	43.6	40.4	17.7	178
Rural	28.0	42.4	15.3	525	25.4	28.1	4.8	17.9	63	28.5	40.8	14.1	603
Mother's education													
None	37.9	33.9	13.7	132	(*)	(*)	(*)	(*)	17	40.3	34.3	13.9	152
Non-formal	23.8	43.6	14.0	333	(17.2)	(18.0)	(6.3)	(15.9)	34	23.4	41.3	13.3	376
Primary	24.5	46.3	13.2	94	(*)	(*)	(*)	(*)	12	27.7	42.8	11.7	114
Secondary	47.0	34.9	19.4	92	(*)	(*)	(*)	(*)	24	48.2	43.9	20.3	118
Higher	(*)	(*)	(*)	13	(*)	(*)	(*)	(*)	8	(*)	(*)	(*)	21

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

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, Nigeria, 2016-17 Kano State

This previous day, by breastfeeding status, Nigeria, 2010-11: Kano State														
	Currently breastfeeding				Num ber of childr en age 6-23 mont hs	Currently not breastfeeding					All			
	Percent of children who received:					Percent of children who received:					Percent of children who received:			Number of children age 6- 23 months
	Minimum dietary diversity ^a	Minim um meal freque ncy ^b	Minim um accept able diet ^{1, c}			Mini mum dieta ry diver sity ^a	Minimu m meal frequen cy ^b	Minim um accept able diet ^{2, c}	At least 2 milk feed s ³		Numb er of childre n age 6-23 month s	Mini mum dieta ry diver sity ^{4, a}	Minim um meal freque ncy ^{5, b}	
Wealth index quintile														
Poorest	25.4	40.8	16.0	149	(*)	(*)	(*)	(*)	17	26.6	39.4	14.9	169	
Second	29.5	41.1	11.6	152	(*)	(*)	(*)	(*)	12	29.9	40.1	11.3	167	
Middle	18.2	42.9	11.5	145	(*)	(*)	(*)	(*)	14	20.5	40.9	10.8	168	
Fourth	38.6	46.0	22.3	128	(*)	(*)	(*)	(*)	17	38.5	44.9	21.7	151	
Richest	47.3	27.3	11.6	89	(58.2)	(67.0)	(32.5)	(64.4)	34	49.3	38.2	17.3	125	
Ethnicity of household head														
Hausa	29.7	40.2	14.2	654	37.4	40.6	16.5	32.3	92	31.2	40.2	14.5	766	
Igbo	(*)	(*)	(*)	1	(*)	(*)	(*)	(*)	2	(*)	(*)	(*)	3	
Yoruba	(*)	(*)	(*)	1	(*)	(*)	(*)	(*)	1	(*)	(*)	(*)	2	
Other ethnic group	(*)	(*)	(*)	8					0	(*)	(*)	(*)	10	

¹ MICS indicator 2.17a - Minimum acceptable diet (breastfed)

² MICS indicator 2.17b - Minimum acceptable diet (non-breastfed)

³ MICS indicator 2.14 - Milk feeding frequency for non-breastfed children

⁴ MICS indicator 2.16 - Minimum dietary diversity

⁵ MICS indicator 2.15 - Minimum meal frequency

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

^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.

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table NU.9: Bottle feeding

Percentage of children age 0-23 months who were fed with a bottle with a nipple during the previous day, Nigeria, 2016-17
Kano State

	Percentage of children age 0-23 months fed with a bottle with a nipple ¹	Number of children age 0-23 months
Total	31.6	1052
Senatorial District		
Kano Central	33.7	387
Kano North	27.0	296
Kano South	33.1	369
Sex		
Male	30.4	524
Female	32.7	528
Age (Months)		
0-5	31.2	271
6-11	39.8	243
12-23	28.1	538
Residence		
Urban	33.5	242
Rural	31.0	809
Mother's education		
None	32.6	197
Non-formal	28.2	502
Primary	31.8	160
Secondary	38.1	162
Higher	(44.8)	31
Wealth index quintile		
Poorest	22.9	225
Second	33.0	228
Middle	27.9	224
Fourth	39.2	205
Richest	37.0	170
Ethnicity of household head		
Hausa	31.3	1030
Igbo	(*)	4
Yoruba	(*)	4
Other ethnic group	(*)	14
¹ MICS indicator 2.18 - Bottle feeding		

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Salt Iodization

Table NU.10: Iodized salt consumption								
Percent distribution of households by consumption of iodized salt, Nigeria, 2016-17 Kano State								
	Percentage of households in which salt was tested	Number of households	Percent of households with:				Total	Number of households in which salt was tested or with no salt
			No salt	Salt test result				
				Not iodized	>0 and <15 PPM	15+ PPM ¹		
Total								
Senatorial District								
Kano Central								
Kano North								
Kano South								
Residence								
Urban								
Rural								
Wealth index quintile								
Poorest								
Second								
Middle								
Fourth								
Richest								
1 MICS indicator 2.19 - Iodized salt consumption								

Note: The results of testing for salt iodisation are not shown, due to problems with data quality in parts of the sample. This is likely due to issues with test kits. The data is available in the microdata for the purpose of further analysis and investigation.

VI. Child Health

Vaccinations

Crude full immunization coverage describes the situation whereby children have received all antigens defined by the expanded programme on immunisation (EPI) without regard to the specified age or time interval between doses as prescribed by the national schedule. A child is considered fully vaccinated if he/she has received BCG (Bacillus Calmette-Guérin) vaccine, at least three doses of Polio vaccine, three doses of Pentavalent vaccine (Diphtheria, Pertussis, Tetanus, *Hemophilus Influenza* Type B and Hepatitis B), one of Measles containing vaccine (MCV), Inactivated Polio Vaccine (IPV) and Yellow Fever vaccine.

Table CH.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 and by their first birthday, Nigeria, 2016-17 Kano State

Antigen	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 ^a	Vaccinated at any time before the survey according to:			Vaccinated by 12 months of age
	Vaccination card	Mother's report	Either		Vaccination card	Mother's report	Either	
BCG¹	18.5	15.3	33.8	32.2	9.8	22.4	32.2	31.5
Polio								
At birth	14.2	15.4	29.5	29.5	8.6	19.8	28.4	28.4
1	15.4	13.3	28.8	27.5	8.9	20.2	29.1	28.5
2	10.7	9.8	20.4	20.1	7.5	16.7	24.2	19.7
3 ²	9.5	6.4	15.9	15.0	6.7	11.7	18.4	15.5
DPT/Penta								
1	16.0	13.1	29.1	27.9	10.8	20.2	31.0	29.2
2	12.6	9.2	21.8	21.2	7.8	13.4	21.3	17.4
3 ³	10.9	6.4	17.3	16.5	6.9	8.7	15.5	13.1
HepB								
At birth	6.4	5.2	11.6	11.6	7.4	5.8	13.2	13.2
PCV								
1	6.9	10.8	17.7	15.7	4.6	15.9	20.5	18.7
2	5.8	7.1	12.9	12.5	4.0	11.2	15.1	13.1
3 ⁵	4.9	3.9	8.7	7.3	3.3	7.3	10.5	9.2
Inactivated Polio Vaccine	8.6	13.3	21.9	19.9	3.6	18.9	22.5	9.5
Yellow fever ⁶	11.2	11.3	22.5	18.1	6.4	16.5	22.9	15.2
Measles (MCV1) ⁷	11.8	12.6	24.4	19.7	6.7	19.4	26.1	17.8
Fully vaccinated ^{8, b}	7.1	1.4	8.5	4.6	4.2	2.9	7.1	3.1
No vaccinations	1.0	5.6	6.6	6.6	0.0	5.9	5.9	5.9
Number of children	538	538	538	538	485	485	485	485

¹ MICS indicator 3.1 - Tuberculosis immunization coverage

² MICS indicator 3.2 - Polio immunization coverage

³ MICS indicator 3.3 - Diphtheria, pertussis and tetanus (DPT) immunization coverage

⁴ MICS indicator 3.5 - Hepatitis B immunization coverage

⁵ MICS indicator 3.6 - Haemophilus influenzae type B (Hib) immunization coverage

⁶ MICS indicator 3.7 - Yellow fever immunization coverage

⁷ MICS indicator 3.4; MDG indicator 4.3 - Measles immunization coverage

⁸ MICS indicator 3.8 - Full immunization coverage

^a All MICS indicators refer to results in this column

^b Includes: BCG, Polio3, DPT3, HepB3, Hib3, and Measles (MCV1) as per the vaccination schedule in Country

Table CH.2: Vaccinations by background characteristics

Percentage of children age 12-23 months currently vaccinated against vaccine preventable childhood diseases, Nigeria, 2016-17 Kano State

	Percentage of children who received:														Number of children age 12-23 months
	Polio					DPT/PENTA			HepB	Yellow fever	Measles (MCV1)	Full ^a	None	Percentage children with vaccination card seen	
	BCG	At birth	1	2	3	1	2	3	At birth						
Total	33.8	29.5	28.8	20.4	15.9	29.1	21.8	17.3	11.6	22.5	24.4	8.5	6.6	20.6	538
Senatorial District															
Kano Central	46.0	40.0	38.9	29.8	21.9	41.5	32.9	27.1	16.9	30.1	31.6	12.9	3.8	31.2	200
Kano North	30.0	25.2	26.3	16.5	14.1	24.0	17.7	15.1	10.7	17.8	19.3	8.0	8.9	15.0	152
Kano South	24.0	21.9	20.0	13.5	11.0	19.9	13.2	8.7	6.8	18.2	20.8	4.2	9.1	13.9	186
Sex															
Male	36.9	29.6	30.8	21.9	18.2	31.4	23.3	17.3	12.4	24.6	27.0	10.0	6.1	20.9	269
Female	30.8	29.5	26.8	18.9	13.7	26.8	20.3	17.4	10.9	20.5	21.7	7.0	7.2	20.4	269
Residence															
Urban	57.9	50.3	49.9	37.1	26.4	52.9	41.1	34.1	18.9	41.1	42.6	15.1	1.2	37.2	129
Rural	26.2	23.0	22.1	15.1	12.6	21.6	15.7	12.0	9.4	16.7	18.6	6.4	9.7	15.4	409
Mother's education															
None	23.8	21.4	15.6	10.8	7.7	18.4	11.9	7.0	6.7	13.0	15.4	3.5	18.4	13.3	100
Non-formal	20.4	16.7	18.8	14.1	11.0	17.6	14.1	11.4	8.8	14.7	16.1	6.1	9.2	11.9	253
Primary	39.7	36.2	34.1	25.4	20.0	31.1	22.0	18.2	12.9	22.8	25.4	6.9	4.5	18.2	78
Secondary	67.8	59.6	61.3	38.7	32.5	61.2	47.3	37.7	16.4	45.6	47.3	18.0	0.0	50.9	90
Higher	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	17
Wealth index quintile															
Poorest	17.7	10.8	15.9	9.8	7.7	12.9	9.5	5.1	4.2	11.2	13.8	3.2	17.4	8.1	110
Second	20.2	19.8	17.6	13.2	9.1	19.0	12.6	10.3	8.1	10.9	14.0	3.4	16.0	10.6	117
Middle	29.2	25.3	24.4	17.0	13.1	23.3	17.8	14.6	8.5	17.9	19.8	7.5	5.9	14.9	113
Fourth	39.5	38.5	33.1	23.5	19.4	35.1	26.1	16.9	14.3	28.0	29.6	8.5	3.4	25.5	107
Richest	70.0	59.5	59.2	43.2	34.1	61.9	48.4	45.1	26.2	50.8	50.1	22.8	0.0	50.1	91
Ethnicity of household head															
Hausa	33.3	29.1	28.5	20.3	15.8	28.5	21.2	16.9	11.2	22.2	23.8	8.3	6.8	20.5	527
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	3
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2
Other ethnic group	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	6

^a Includes: BCG, Polio3, DPT3, HepB3, Hib3, and Measles (MCV1) as per the vaccination schedule in Country

(*) Sample data are fewer than 25 unweighted cases

Neonatal Tetanus Protection

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) is 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.

Table CH.3: Neonatal tetanus protection

Percentage of women age 15-49 years with a live birth in the last 2 years protected against neonatal tetanus, Nigeria, 2016-17 Kano State

	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	43.0	10.3	0.4	0.1	0.0	53.8	1,087
Senatorial District							
Kano Central	47.9	14.1	0.4	0.0	0.0	62.3	393
Kano North	38.4	7.6	0.5	0.0	0.0	46.6	314
Kano South	41.7	8.7	0.4	0.2	0.0	51.0	380
Residence							
Urban	55.0	11.9	0.9	0.0	0.0	67.8	239
Rural	39.6	9.9	0.3	0.1	0.0	49.9	847
Education							
None	34.3	8.1	0.0	0.0	0.0	42.4	196
Non-formal	36.6	9.9	0.6	0.0	0.0	47.2	533
Primary	51.4	11.7	0.0	0.0	0.0	63.0	165
Secondary	60.4	12.1	0.9	0.4	0.0	73.8	162
Higher	(73.5)	(15.1)	(0.0)	(0.0)	(0.0)	(88.5)	30
Wealth index quintile							
Poorest	30.0	6.6	0.0	0.0	0.0	36.6	234
Second	36.7	7.6	0.4	0.0	0.0	44.6	228
Middle	43.9	10.5	0.3	0.0	0.0	54.7	237
Fourth	49.7	15.6	0.8	0.0	0.0	66.1	218
Richest	59.7	12.1	0.8	0.4	0.0	73.0	169
Ethnicity of household head							
Hausa	42.8	10.4	0.4	0.1	0.0	53.7	1,066
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	4
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	3
Other ethnic group	(*)	(*)	(*)	(*)	(*)	(*)	14

¹ MICS indicator 3.9 - Neonatal tetanus protection

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Care of Illness

Table CH.4: 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, Nigeria, 2016-17 Kano State

	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	20.7	2.4	35.4	2559
Senatorial District				
Kano Central	18.1	1.9	33.3	962
Kano North	16.6	2.6	32.3	693
Kano South	26.7	2.7	40.0	904
Sex				
Male	23.0	2.5	37.0	1293
Female	18.4	2.2	33.8	1266
Residence				
Urban	18.6	1.2	31.4	603
Rural	21.4	2.7	36.6	1956
Age(Months)				
0-11	23.1	2.5	29.2	514
12-23	25.6	2.9	39.6	538
24-35	20.6	2.3	33.8	485
36-47	16.0	2.5	35.6	522
48-59	18.1	1.6	38.6	500
Mother's education				
None	19.7	4.1	38.5	452
Non-formal	22.2	2.3	36.5	1298
Primary	21.1	1.1	34.3	352
Secondary	20.0	2.2	31.5	379
Higher	4.5	0.0	22.2	77
Wealth index quintile				
Poorest	22.5	1.8	37.5	530
Second	22.6	3.2	37.1	559
Middle	21.3	2.7	40.0	529
Fourth	20.8	2.8	33.2	487
Richest	15.6	1.2	27.8	455
Ethnicity of household head				
Hausa	20.9	2.4	35.5	2514
Igbo	(*)	(*)	(*)	9
Yoruba	(*)	(*)	(*)	4
Other ethnic group	(17.3)	(2.8)	(27.8)	31

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Diarrhoea

Table CH.5: 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, Nigeria, 2016-17 Kano State

	Percentage of children with diarrhoea for whom:						Number of children age 0-59 months with diarrhoea in the last two weeks
	Advice or treatment was sought from:						
	Health facilities or providers			Other source	A health facility or provider ^{1, b}	No advice or treatment sought	
	Public	Private	Community health provider ^a				
Total	20.8	14.7	0.2	30.3	21.3	35.9	531
Senatorial District							
Kano Central	32.7	20.1	0.0	17.8	33.5	32.7	174
Kano North	18.1	3.8	0.0	38.5	19.1	40.5	115
Kano South	13.4	15.9	0.4	35.4	13.4	36.1	242
Sex							
Male	20.8	14.7	0.3	29.4	21.3	37.4	298
Female	20.7	14.7	0.0	31.5	21.2	34.0	233
Residence							
Urban	33.5	11.7	0.0	22.2	34.8	33.6	112
Rural	17.4	15.5	0.2	32.5	17.6	36.5	419
Age(Months)							
0 -11	27.0	10.3	0.0	27.4	27.0	36.9	119
12-23	20.1	17.1	0.0	30.8	22.0	34.7	137
24-35	19.1	15.0	0.0	30.1	19.1	36.7	100
36-47	17.5	14.3	0.0	35.0	17.5	33.2	84
48-59	18.3	16.7	1.0	29.4	18.3	38.0	91
Mother's education							
None	12.6	15.2	0.0	37.3	13.9	38.8	89
Non-formal	19.4	14.4	0.3	28.5	19.4	38.4	288
Primary	18.8	13.3	0.0	37.1	20.7	32.2	74
Secondary	35.6	16.8	0.0	23.9	35.6	26.8	76
Higher	(*)	(*)	(*)	(*)	(*)	(*)	3
Wealth index quintile							
Poorest	20.4	10.4	0.7	32.8	21.4	38.2	119
Second	15.9	15.4	0.0	24.6	15.9	45.8	126
Middle	12.5	20.1	0.0	38.6	12.5	30.9	113
Fourth	23.6	10.7	0.0	36.8	23.6	28.9	101
Richest	39.2	17.5	0.0	14.1	41.2	32.6	71
Ethnicity of household head							
Hausa	20.6	14.7	0.2	30.6	21.1	35.8	525
Igbo							0
Yoruba							0
Other ethnic group	(*)	(*)	(*)	(*)	(*)	(*)	5
1 MICS indicator 3.10 - Care-seeking for diarrhoea							
a Community health providers includes both public (<i>Community health worker and Mobile/Outreach clinic</i>) and private (<i>Mobile clinic</i>) health facilities							
b Includes all public and private health facilities and providers, but excludes private pharmacy							

¹ MICS indicator 3.10 - Care-seeking for diarrhoea

^a Community health providers includes both public (*Community health worker and Mobile/Outreach clinic*) and private (*Mobile clinic*) health facilities

^b Includes all public and private health facilities and providers, but excludes private pharmacy

(*) Sample data are fewer than 25 unweighted cases

Table CH.6: 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, Nigeria, 2016-17 Kano State

	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	Missing/ Don't Know	Total	Much less	Somewhat less	About the same	More	Nothing	Total		
Total	28.4	29.3	34.0	6.9	1.2	0.2	100.0	25.4	33.5	33.2	4.4	3.5	100.0	531	
Senatorial District															
Kano Central	30.2	22.3	35.5	8.7	3.2	0.0	100.0	27.8	25.7	33.4	6.7	6.4	100.0	174	
Kano North	20.9	38.5	32.6	7.3	0.7	0.0	100.0	16.7	45.2	34.4	1.6	2.1	100.0	115	
Kano South	30.6	30.0	33.5	5.5	0.0	0.4	100.0	27.8	33.5	32.6	4.1	2.1	100.0	242	
Sex															
Male	28.8	28.9	32.8	7.5	2.1	0.0	100.0	25.3	31.9	34.6	4.8	3.4	100.0	298	
Female	27.9	29.9	35.6	6.2	0.0	0.4	100.0	25.5	35.6	31.4	3.8	3.7	100.0	233	
Residence															
Urban	28.9	25.9	37.5	4.8	2.8	0.0	100.0	25.4	24.5	35.6	6.2	8.3	100.0	112	
Rural	28.2	30.2	33.1	7.5	0.7	0.2	100.0	25.4	35.9	32.6	3.9	2.2	100.0	419	
Age (Months)															
0-11	34.0	30.2	31.9	3.9	0.0	0.0	100.0	29.9	30.4	32.8	3.0	4.0	100.0	119	
12-23	25.8	29.3	29.9	11.5	3.6	0.0	100.0	24.1	30.6	33.6	5.5	6.2	100.0	137	
24-35	31.0	27.0	32.9	6.7	1.4	1.0	100.0	26.2	40.3	29.4	3.5	0.6	100.0	100	
36-47	21.0	35.8	34.9	8.3	0.0	0.0	100.0	23.2	36.0	33.4	5.0	2.4	100.0	84	
48-59	28.9	24.7	43.3	3.2	0.0	0.0	100.0	22.8	32.0	37.3	5.1	2.9	100.0	91	

Table CH.6: Feeding practices during diarrhoea (continued)

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, Nigeria, 2016-17 Kano State

	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	Missing/ Don't Know	Total	Much less	Somewhat less	About the same	More	Nothing	Total		
Mother's education															
None	26.2	39.4	21.3	11.5	1.6	0.0	100.0	22.7	38.3	26.1	7.4	5.6	100.0	89	
Non-formal	28.3	29.8	35.6	5.8	0.3	0.3		28.1	35.9	32.4	2.0	1.6		288	
Primary	28.1	21.7	43.0	3.5	3.7	0.0	100.0	18.0	30.0	44.6	1.8	5.7	100.0	74	
Secondary	28.2	24.5	35.8	9.7	1.9	0.0	100.0	26.9	23.6	33.4	11.4	4.7	100.0	76	
Higher	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	3	
Wealth index quintile															
Poorest	25.6	35.8	32.8	4.4	0.6	0.8	100.0	26.4	39.1	29.2	1.6	3.7	100.0	119	
Second	23.8	33.1	34.8	7.2	1.1	0.0	100.0	18.9	43.2	31.2	3.3	3.4	100.0	126	
Middle	39.5	26.4	26.1	8.1	0.0	0.0	100.0	35.8	25.9	33.1	4.5	.7	100.0	113	
Fourth	21.6	29.3	37.5	8.9	2.7	0.0	100.0	22.0	32.5	37.7	7.2	.7	100.0	101	
Richest	33.2	16.4	42.2	6.2	2.0	0.0	100.0	23.7	20.1	37.4	7.0	11.7	100.0	71	
Ethnicity of household head															
Hausa	28.5	29.6	33.5	7.0	1.2	0.2	100.0	25.5	33.7	32.9	4.4	3.5	100.0	525	
Igbo							100.0						100.0		
Yoruba							100.0						100.0		
Other ethnic group	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)		5	

(*) Sample data are fewer than 25 unweighted cases

Table CH.7: Oral rehydration solutions, recommended homemade fluids, and zinc

Percentage of children age 0-59 months with diarrhoea in the last two weeks, and treatment with oral rehydration salts (ORS), recommended homemade fluids, and zinc, Nigeria, 2016-2017 Kano State

	Percentage of children with diarrhoea who received:												Number of children age 0-59 months with diarrhoea in the last two weeks
	Oral rehydration salts (ORS)			Recommended homemade fluids				ORS or any recommended homemade fluid	Zinc			ORS and zinc ¹	
	Fluid from packet	Pre-packaged fluid	Any ORS	Salt sugar solution	Coconut water	Rice water	Any recommended homemade fluid		Tablet	Syrup	Any zinc		
Total	39.3	29.7	43.1	17.1	0.7	1.8	17.8	50.1	27.4	16.9	33.3	22.2	531
Senatorial District													
Kano Central	48.3	41.0	52.8	23.4	0.6	1.5	24.3	58.1	26.1	15.5	31.2	24.9	174
Kano North	36.8	27.5	39.6	14.3	0.0	0.9	14.3	44.6	23.9	15.0	28.2	18.7	115
Kano South	33.9	22.7	37.9	13.9	1.2	2.5	14.8	47.0	29.9	18.8	37.3	21.9	242
Sex													
Male	42.8	34.1	46.8	17.8	0.8	2.8	18.7	52.6	27.1	19.5	33.9	23.4	298
Female	34.8	24.1	38.5	16.2	0.7	0.5	16.6	46.9	27.8	13.6	32.6	20.5	233
Residence													
Urban	51.2	43.1	56.2	25.6	0.9	0.9	25.6	63.0	28.0	19.1	34.8	28.0	112
Rural	36.1	26.2	39.6	14.8	0.7	2.1	15.7	46.7	27.2	16.3	33.0	20.6	419
Age(Months)													
0-11	35.6	28.1	40.0	13.9	0.0	3.2	15.2	45.9	27.3	18.8	33.6	21.8	119
12-23	40.6	30.2	44.7	17.8	0.8	4.3	18.7	52.5	22.8	13.9	28.8	22.1	137
24-35	40.6	32.2	44.9	13.0	2.2	0.0	13.9	48.3	30.6	23.1	40.3	26.5	100
36-47	44.6	28.1	47.5	20.4	0.8	0.0	20.4	56.5	29.3	16.8	34.7	22.5	84
48-59	35.7	30.0	38.9	21.5	0.0	0.0	21.5	48.2	29.1	12.0	30.9	17.7	91

Table CH.7: Oral rehydration solutions, recommended homemade fluids, and zinc (continued)

Percentage of children age 0-59 months with diarrhoea in the last two weeks, and treatment with oral rehydration salts (ORS), recommended homemade fluids, and zinc, Nigeria, 2016-2017
Kano State

	Percentage of children with diarrhoea who received:												Number of children age 0-59 months with diarrhoea in the last two weeks
	Oral rehydration salts (ORS)			Recommended homemade fluids				ORS or any recommended homemade fluid	Zinc			ORS and zinc ¹	
	Fluid from packet	Pre-packaged fluid	Any ORS	Salt sugar solution	Coconut water	Rice water	Any recommended homemade fluid		Tablet	Syrup	Any zinc		
Mother's education													
None	30.2	22.8	33.7	17.7	0.0	1.2	17.7	41.6	16.6	13.5	24.2	9.6	89
Non-formal	38.0	29.1	41.2	17.3	0.8	2.1	18.1	50.0	24.6	16.1	31.1	21.4	288
Primary	45.1	27.0	46.9	8.5	0.9	2.1	10.6	49.8	39.1	16.2	43.4	30.1	74
Secondary	49.1	43.0	58.3	23.1	1.4	1.4	23.1	60.0	37.4	25.4	41.3	31.6	76
Higher	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	3
Wealth index quintile													
Poorest	31.2	19.1	33.4	19.4	0.0	0.9	19.4	43.5	22.4	11.2	26.0	13.7	119
Second	37.3	32.3	41.1	14.9	1.8	1.8	16.7	49.8	20.2	18.8	30.3	22.3	126
Middle	36.5	24.0	41.4	8.6	0.6	2.5	10.0	44.1	26.6	13.4	31.3	19.3	113
Fourth	47.5	32.3	50.5	22.5	1.0	3.5	22.5	59.2	33.9	23.1	40.9	26.2	101
Richest	49.0	48.5	55.3	22.7	0.0	0.0	22.7	58.4	40.4	19.7	43.5	34.8	71
Ethnicity of household head													
Hausa	39.2	29.9	43.1	17.1	0.8	1.9	17.8	50.1	27.3	17.1	33.4	22.1	525
Igbo													0
Yoruba													0
Other ethnic group	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	5
¹ MICS indicator 3.11 - Diarrhoea treatment with oral rehydration salts (ORS) and zinc													

¹ MICS indicator 3.11 - Diarrhoea treatment with oral rehydration salts (ORS) and zinc

(*) Sample data are fewer than 25 unweighted cases

Table CH.8: 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, Nigeria, 2016-17 Kano State

	Children with diarrhoea who were given:														Not given any treatment or drug	Number of children age 0-59 months with diarrhoea in the last two weeks
	Zinc	ORS or increased fluids	ORT (ORS or recommended fluids or increased fluids)	ORT with continued feeding ¹	Other treatments											
					Pill or syrup				Injection							
					Anti-biotic	Anti-motility	Other	Unknown	Anti-biotic	Non-antibiotic	Unknown	Intra-venous	Home remedy, herbal medicine	Other		
Total	33.3	46.3	52.8	35.0	3.9	1.2	3.2	3.0	10.9	1.6	0.9	0.0	0.0	3.6	29.2	531
Senatorial District																
Kano Central	31.2	56.0	60.7	37.1	3.7	0.6	3.4	1.3	11.2	2.2	0.5	0.0	0.0	4.8	24.4	174
Kano North	28.2	42.3	45.9	36.8	3.6	2.8	0.7	4.0	9.3	0.7	0.0	0.0	0.0	1.7	36.8	115
Kano South	37.3	41.2	50.3	32.6	4.3	0.9	4.1	3.8	11.6	1.7	1.6	0.0	0.0	3.6	29.1	242
Sex																
Male	33.9	50.1	55.4	37.9	3.1	0.3	1.4	3.5	10.6	1.5	0.4	0.0	0.0	4.9	29.3	298
Female	32.6	41.4	49.5	31.2	5.0	2.3	5.4	2.4	11.4	1.8	1.5	0.0	0.0	2.0	29.1	233
Residence																
Urban	34.8	57.3	64.0	37.2	6.2	0.9	2.1	3.3	13.0	2.5	0.0	0.0	0.0	3.3	21.5	112
Rural	33.0	43.4	49.8	34.4	3.3	1.3	3.4	3.0	10.4	1.4	1.2	0.0	0.0	3.7	31.3	419
Age(Months)																
0-11	33.6	43.3	48.3	27.1	3.3	0.5	6.2	5.9	10.0	3.2	0.0	0.0	0.0	6.5	33.5	119
12-23	28.8	48.2	55.9	34.9	2.5	0.0	4.0	1.8	12.0	0.4	0.0	0.0	0.0	0.9	31.5	137
24-35	40.3	48.3	51.7	40.6	3.3	2.7	2.2	1.4	11.9	1.4	1.9	0.0	0.0	8.4	24.8	100
36-47	34.7	52.4	59.6	40.7	7.3	2.3	0.0	2.9	10.1	2.1	2.2	0.0	0.0	2.0	18.6	84
48-59	30.9	39.6	48.9	33.9	4.6	1.1	1.8	3.1	10.3	1.3	1.1	0.0	0.0	0.0	34.8	91

Table CH.8: Oral rehydration therapy with continued feeding and other treatments (continued)

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, Nigeria, 2016-17 Kano State

	Children with diarrhoea who were given:															Number of children age 0-59 months with diarrhoea in the last two weeks
	Other treatments															
	Pill or syrup				Injection											
	Zinc	ORS or increased fluids	ORT (ORS or recommended homemade fluids or increased fluids)	ORT with continued feeding ¹	Anti-biotic	Anti-motility	Other	Unknown	Anti-biotic	Non-antibiotic	Unknown	Intra-venous	Home remedy, herbal medicine	Other	Not given any treatment or drug	
Mother's education																
None	24.2	39.0	44.1	30.8	4.1	0.0	1.3	2.9	13.0	1.6	0.0	0.0	0.0	5.5	30.0	89
Non-formal	31.1	44.4	53.2	34.1	3.9	1.2	4.2	3.5	10.7	1.9	1.3	0.0	0.0	3.2	29.7	288
Primary	43.4	46.9	49.8	35.7	0.9	3.7	3.1	3.1	13.4	0.0	1.3	0.0	0.0	0.0	32.9	74
Secondary	41.3	62.4	64.0	42.7	7.0	0.0	1.6	0.0	7.7	2.4	0.0	0.0	0.0	5.1	24.2	76
Higher	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	3
Wealth index quintile																
Poorest	26.0	35.8	44.7	26.9	5.4	1.8	5.2	1.8	8.7	0.0	0.0	0.0	0.0	2.2	36.5	119
Second	30.3	43.5	51.4	38.4	1.5	0.0	2.9	3.9	11.0	0.0	1.7	0.0	0.0	1.9	35.8	126
Middle	31.3	47.3	49.9	29.6	3.6	1.2	4.0	4.8	12.2	0.7	1.5	0.0	0.0	3.2	26.9	113
Fourth	40.9	53.6	62.3	47.6	4.4	1.9	1.2	2.5	13.3	5.9	0.9	0.0	0.0	9.3	17.9	101
Richest	43.5	57.0	60.1	33.0	5.7	1.4	1.7	1.6	9.1	2.6	0.0	0.0	0.0	1.6	25.3	71
Ethnicity of household head																
Hausa	33.4	46.3	52.9	35.0	4.0	1.2	3.2	3.1	11.1	1.6	0.9	0.0	0.0	3.6	29.0	525
Igbo																0
Yoruba																0
Other ethnic group	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	5
¹ MICS indicator 3.12 - Diarrhoea treatment with oral rehydration therapy (ORT) and continued feeding																

¹ MICS indicator 3.12 - Diarrhoea treatment with oral rehydration therapy (ORT) and continued feeding

(*) Sample data are fewer than 25 unweighted cases

Table CH.9: 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, Nigeria, 2016-2017 Kano State

	Percentage of children who were given as treatment for diarrhoea:		Number of children age 0-59 months with diarrhoea in the last two weeks	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
				Health facilities or providers						Health facilities or providers					
	ORS	zinc		Public	Private	Communi-ty health provider ^a	Other source	A health facility or provider ^b		Public	Private	Communi-ty health provider ^a	Other source	A health facility or provider ^b	
Total	43.1	33.3	531	25.6	32.8	1.6	41.7	58.3	229	25.2	40.8	1.0	33.9	66.1	177
Senatorial District															
Kano Central	(52.8)	(31.2)	174	(29.8)	(40.7)	(0.0)	(29.5)	(70.5)	92	(39.5)	(42.3)	(0.0)	(18.1)	(81.9)	54
Kano North	(39.6)	(28.2)	115	(30.2)	(7.5)	(1.5)	(62.3)	(37.7)	45	(20.7)	(6.5)	(0.0)	(72.8)	(27.2)	32
Kano South	37.9	37.3	242	19.0	37.4	3.2	43.6	56.4	92	18.3	52.2	2.0	29.5	70.5	90
Sex															
Male	46.8	33.9	298	25.5	32.5	1.5	42.0	58.0	139	26.8	40.4	0.9	32.9	67.1	101
Female	38.5	32.6	233	25.6	33.3	1.8	41.1	58.9	90	23.2	41.5	1.2	35.3	64.7	76
Residence															
Urban	(56.2)	(34.8)	112	(30.0)	(41.3)	(.0)	(28.7)	(71.3)	63	(45.4)	(40.6)	(0.0)	(14.0)	(86.0)	39
Rural	39.6	33.0	419	23.9	29.6	2.2	46.6	53.4	166	19.6	40.9	1.3	39.5	60.5	138
Age (Months)															
0-11	(40.0)	(33.6)	119	(31.4)	(25.7)	(1.5)	(42.8)	(57.2)	48	(26.9)	(42.0)	(0.0)	(31.1)	(68.9)	40
12-23	(44.7)	(28.8)	137	(29.7)	(30.3)	(3.4)	(40.0)	(60.0)	61	(33.4)	(37.3)	(2.3)	(29.3)	(70.7)	40
24-35	(44.9)	(40.3)	100	(22.2)	(33.1)	(.0)	(44.8)	(55.2)	45	(28.1)	(36.9)	(0.0)	(35.0)	(65.0)	40
36-47	(47.5)	(34.7)	84	(15.4)	(40.8)	(.0)	(43.8)	(56.2)	40	(8.6)	(59.6)	(0.0)	(31.8)	(68.2)	29
48-59	(38.9)	(30.9)	91	(26.2)	(37.3)	(2.5)	(36.5)	(63.5)	35	(24.4)	(30.3)	(3.2)	(45.2)	(54.8)	28

Table CH.9: Source of ORS and zinc (continued)

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, Nigeria, 2016-2017 Kano State															
	Percentage of children who were given as treatment for diarrhoea:		Number of children age 0-59 months with diarrhoea in the last two weeks	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
	ORS	zinc		Public	Private	Community health provider ^a	Other source	A health facility or provider ^b		Public	Private	Community health provider ^a	Other source	A health facility or provider ^b	
Mother's education															
None	(*)	(*)	89	(*)	(*)	(*)	(*)	(*)	30	(*)	(*)	(*)	(*)	(*)	22
Non-formal	41.2	31.1	288	27.2	32.6	3.1	40.2	59.8	119	24.3	46.9	2.0	28.8	71.2	89
Primary	(46.9)	(43.4)	74	(20.6)	(32.1)	(0.0)	(47.4)	(52.6)	35	(13.9)	(37.9)	(0.0)	(48.1)	(51.9)	32
Secondary	(58.3)	(41.3)	76	(34.7)	(38.6)	(0.0)	(26.8)	(73.2)	44	(46.0)	(34.5)	(0.0)	(19.5)	(80.5)	31
Higher	(*)	(*)	3	(*)	(*)	(*)	(*)	(*)	1	(*)	(*)	(*)	(*)	(*)	2
Wealth index quintile															
Poorest	(33.4)	(26.0)	119	(22.0)	(34.4)	(6.9)	(43.7)	(56.3)	40	(14.5)	(49.5)	(2.9)	(36.0)	(64.0)	31
Second	(41.1)	(30.3)	126	(27.3)	(33.9)	(0.0)	(38.9)	(61.1)	52	(18.5)	(52.7)	(0.0)	(28.9)	(71.1)	38
Middle	(41.4)	(31.3)	113	(17.8)	(26.1)	(1.9)	(56.1)	(43.9)	47	(16.0)	(35.1)	(2.5)	(48.9)	(51.1)	35
Fourth	(50.5)	(40.9)	101	(28.7)	(23.0)	(0.0)	(48.2)	(51.8)	51	(37.4)	(23.7)	(0.0)	(38.8)	(61.2)	41
Richest	(55.3)	(43.5)	71	(32.0)	(50.5)	(0.0)	(17.5)	(82.5)	39	(38.7)	(47.0)	(0.0)	(14.3)	(85.7)	31
Ethnicity of household head															
Hausa	43.1	33.4	525	25.5	32.4	1.6	42.1	57.9	226	25.5	40.3	1.0	34.2	65.8	175
Igbo			0	0.0	0.0	0.0	0.0		0	0.0	0.0	0.0	0.0		0
Yoruba			0	0.0	0.0	0.0	0.0		0	0.0	0.0	0.0	0.0		0
Other ethnic group	(*)	(*)	5	(*)	(*)	(*)	(*)	(*)	3	(*)	(*)	(*)	(*)	(*)	(*)
^a Community health provider includes both public (<i>Community health worker and Mobile/Outreach clinic</i>) and private (<i>Mobile clinic</i>) health facilities															
^b Includes all public and private health facilities and providers															

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Acute Respiratory Infections

Table CH.10: Care-seeking for and antibiotic treatment of symptoms of acute respiratory infection (ARI)

Percentage of children age 0-59 months with symptoms of ARI in the last two weeks for whom advice or treatment was sought, by source of advice or treatment, and percentage of children with symptoms who were given antibiotics, Nigeria, 2016-17 Kano State

	Percentage of children with symptoms of ARI for whom:							Percentage of children with symptoms of ARI in the last two weeks who were given antibiotics ²	Number of children age 0-59 months with symptoms of ARI in the last two weeks	Percentage of children with symptoms of ARI for whom the source of antibiotics was:					Number of children with symptoms of ARI in the last two weeks who were given antibiotics
	Advice or treatment was sought from:						Health facilities or providers								
	Health facilities or providers				A health facility or provider ¹ ^b	No advice or treatment sought	Health facilities or providers								
	Public	Private	Community health provider ^a	Other source			Public			Private	Community health provider ^a	Other source	A health facility or provider ^c		
Total	21.0	18.8	1.2	17.7	21.0	14.3		13.3	60	(*)	(*)	(*)	(*)	(*)	8
Senatorial District															
Kano Central	(*)	(*)	(*)	(*)	(*)	(*)		(*)	18						0
Kano North	(*)	(*)	(*)	(*)	(*)	(*)		(*)	18	(*)	(*)	(*)	(*)	(*)	3
Kano South	(18.9)	(22.4)	(0.0)	(25.4)	(18.9)	(12.8)		(19.0)	24	(*)	(*)	(*)	(*)	(*)	5
Sex															
Male	(22.5)	(22.8)	(2.3)	(12.4)	(22.5)	(15.6)		(17.1)	32	(*)	(*)	(*)	(*)	(*)	6
Female	(19.3)	(14.2)	(0.0)	(23.8)	(19.3)	(12.7)		(9.0)	28	(*)	(*)	(*)	(*)	(*)	3
Residence															
Urban	(*)	(*)	(*)	(*)	(*)	(*)		(*)	8						0
Rural	20.7	19.1	1.4	20.2	20.7	14.5		15.2	53	(*)	(*)	(*)	(*)	(*)	8
Age(Months)															
0-11	(*)	(*)	(*)	(*)	(*)	(*)		(*)	13	(*)	(*)	(*)	(*)	(*)	4
12-23	(*)	(*)	(*)	(*)	(*)	(*)		(*)	15	(*)	(*)	(*)	(*)	(*)	2
24-35	(*)	(*)	(*)	(*)	(*)	(*)		(*)	11	(*)	(*)	(*)	(*)	(*)	1
36-47	(*)	(*)	(*)	(*)	(*)	(*)		(*)	13	(*)	(*)	(*)	(*)	(*)	1
48-59	(*)	(*)	(*)	(*)	(*)	(*)		(*)	8						0

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table CH.10: Care-seeking for and antibiotic treatment of symptoms of acute respiratory infection (ARI) (continued)

Percentage of children age 0-59 months with symptoms of ARI in the last two weeks for whom advice or treatment was sought, by source of advice or treatment, and percentage of children with symptoms who were given antibiotics, Nigeria, 2016-17 Kano State

	Percentage of children with symptoms of ARI for whom:							Number of children age 0-59 months with symptoms of ARI in the last two weeks	Percentage of children with symptoms of ARI for whom the source of antibiotics was:					Number of children with symptoms of ARI in the last two weeks who were given antibiotics
	Advice or treatment was sought from:				Percentage of children with symptoms of ARI in the last two weeks who were given antibiotics ²	Health facilities or providers								
	Health facilities or providers													
	Public	Private	Communit y health provider ^a	Other source		Public	Private		Community health provider ^a	Other source	A health facility or provider ^c			
Mother's education														
None	(*)	(*)	(*)	(*)	(*)	(*)	(*)	18	(*)	(*)	(*)	(*)	(*)	2
Non-formal	(29.5)	(12.4)	(0.0)	(19.1)	(29.5)	(13.4)	(16.5)	30	(*)	(*)	(*)	(*)	(*)	5
Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	4						0
Secondary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	8	(*)	(*)	(*)	(*)	(*)	1
Higher								0						0
Wealth index quintile														
Poorest	(*)	(*)	(*)	(*)	(*)	(*)	(*)	9	(*)	(*)	(*)	(*)	(*)	1
Second	(*)	(*)	(*)	(*)	(*)	(*)	(*)	18	(*)	(*)	(*)	(*)	(*)	5
Middle	(*)	(*)	(*)	(*)	(*)	(*)	(*)	14	(*)	(*)	(*)	(*)	(*)	1
Fourth	(*)	(*)	(*)	(*)	(*)	(*)	(*)	14	(*)	(*)	(*)	(*)	(*)	1
Richest	(*)	(*)	(*)	(*)	(*)	(*)	(*)	5						0
Ethnicity of household head														
Hausa	21.3	19.1	1.2	17.9	21.3	14.5	13.5	60	(*)	(*)	(*)	(*)	(*)	8
Igbo								0						0
Yoruba								0						0
Other ethnic group	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1						0

¹ MICS indicator 3.13 - Care-seeking for children with acute respiratory infection (ARI) symptoms

² MICS indicator 3.14 - Antibiotic treatment for children with ARI symptoms

^a Community health providers includes both public (*Community health worker and Mobile/Outreach clinic*) and private (*Mobile clinic*) health facilities

^b Includes all public and private health facilities and providers, but excludes private pharmacy

^c Includes all public and private health facilities and providers

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table CH.11: Knowledge of the two danger signs of pneumonia

Percentage of women age 15-49 years who are mothers or caretakers of children under age 5 by symptoms that would cause them to take a child under age 5 immediately to a health facility, and percentage of mothers who recognize fast or difficult breathing as signs for seeking care immediately, Nigeria, 2016-17 Kano State

	Percentage of mothers/caretakers of children age 0-59 months who think that a child should be taken immediately to a health facility if the child:								Mothers/caretakers who recognize at least one of the two danger signs of pneumonia (fast and/or difficult breathing)	Number of women age 15-49 years who are mothers/caretakers of children under age 5
	Is not able to drink or breastfeed	Becomes sicker	Develops a fever	Has fast breathing	Has difficult breathing	Has blood in stool	Is drinking poorly	Has other symptoms		
Total	31.0	48.9	79.8	35.3	27.7	22.5	15.0	0.0	44.7	1522
Senatorial District										
Kano Central	38.9	49.0	82.4	38.2	33.3	27.0	19.6	0.0	49.3	564
Kano North	25.5	53.5	84.1	30.6	22.7	18.8	14.1	0.0	39.7	417
Kano South	27.0	45.2	73.8	35.8	25.8	20.7	10.7	0.0	43.7	541
Residence										
Urban	36.3	53.2	80.9	34.8	30.0	21.7	18.3	0.0	44.5	351
Rural	29.4	47.6	79.5	35.5	27.1	22.7	13.9	0.0	44.7	1170
Education										
None	32.6	50.5	78.7	37.6	30.9	18.9	16.9	0.0	50.6	280
Non-formal	28.7	44.8	77.3	33.3	25.9	24.7	14.7	0.0	41.5	764
Primary	28.3	56.0	84.5	37.2	26.3	18.7	12.7	0.0	45.6	208
Secondary	36.6	52.9	84.4	35.0	31.0	23.5	15.8	0.0	45.2	225
Higher	(45.1)	(55.6)	(84.8)	(47.7)	(29.9)	(20.6)	(12.8)	(0.0)	(55.0)	45
Wealth index quintile										
Poorest	27.0	44.2	79.6	33.9	22.8	24.3	10.4	0.0	42.0	315
Second	28.3	45.2	78.3	32.2	25.6	19.9	15.3	0.0	41.0	330
Middle	31.1	54.8	81.2	42.6	33.3	22.7	15.5	0.0	51.9	331
Fourth	32.8	48.3	77.1	29.5	23.5	18.7	15.4	0.0	40.6	274
Richest	37.0	52.3	83.0	37.6	33.6	27.3	18.7	0.0	47.4	271
Ethnicity of household head										
Hausa	31.0	49.1	79.6	35.4	27.7	22.7	15.0	0.0	44.6	1494
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	5
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	3
Other ethnic group	(15.9)	(41.1)	(87.5)	(27.6)	(21.1)	(9.2)	(20.7)	(0.0)	(38.3)	20

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Solid Fuel Use

Table CH.12: Solid fuel use

Percent distribution of household members according to type of cooking fuel mainly used by the household, and percentage of household members living in households using solid fuels for cooking, Nigeria, 2016-17 Kano State

Percentage of household members in households mainly using:														
	Electricity	Liquefied Petroleum Gas (LPG)	Biogas	Kerosene	Solid fuels						No food cooked in the household	Total	Solid fuels for cooking ¹	Number of household members
					Coal/ Lignite	Char-coal	Wood	Straw/ Shrubs/ Grass	Animal dung	Agricultural crop residue				
Total	1.7	2.1	1.2	4.8	1.5	8.0	69.7	8.7	0.1	1.8	0.4	100.0	89.7	13365
Senatorial District														
Kano Central	3.3	4.9	2.5	10.2	3.0	16.8	51.5	6.3	0.0	1.2	0.3	100.0	78.7	5772
Kano North	0.6	0.0	0.2	0.7	0.7	1.1	81.6	10.0	0.3	4.2	0.5	100.0	98.0	3431
Kano South	0.4	0.0	0.3	0.8	0.0	1.4	85.0	11.0	0.0	0.7	0.4	100.0	98.2	4162
Residence														
Urban	4.6	7.4	3.4	14.6	4.6	23.2	40.7	1.1	0.0	0.0	0.3	100.0	69.6	3748
Rural	0.5	0.1	0.4	1.0	0.3	2.0	80.9	11.7	0.1	2.5	0.4	100.0	97.6	9617
Education of household head														
None	0.0	0.4	0.6	5.6	2.6	5.5	65.9	16.8	0.0	1.3	0.8	100.0	92.1	1262
Non-formal	0.8	0.5	0.3	0.7	0.7	4.9	78.2	11.1	0.0	2.6	0.3	100.0	97.6	6747
Primary	2.9	0.0	0.4	3.6	1.9	5.3	76.3	8.4	0.0	0.8	0.4	100.0	92.7	1562
Secondary	1.9	4.2	1.2	12.0	3.0	19.5	52.9	2.9	0.4	1.5	0.5	100.0	80.3	2282
Higher	6.0	10.7	7.3	14.0	1.1	9.3	51.4	0.0	0.0	0.0	0.3	100.0	61.7	1427
Wealth index quintile														
Poorest	0.5	0.0	0.0	0.0	0.0	0.5	75.8	18.9	0.0	4.0	0.3	100.0	99.2	2672
Second	0.0	0.0	0.0	0.0	0.0	.6	87.9	8.1	0.4	2.6	0.5	100.0	99.5	2668
Middle	0.3	0.0	0.0	0.6	1.0	2.4	80.3	13.5	0.0	1.5	0.3	100.0	98.7	2682
Fourth	2.7	0.0	0.0	1.9	1.8	15.5	74.3	2.5	0.0	1.0	0.4	100.0	95.0	2665
Richest	4.9	10.6	6.1	21.6	4.6	20.9	30.2	0.6	0.0	0.0	0.3	100.0	56.3	2678
Ethnicity of household head														
Hausa	1.7	2.1	1.2	4.3	1.5	7.9	70.1	8.9	0.1	1.8	0.4	100.0	90.3	13081
Igbo	(0.0)	(0.0)	(0.0)	(25.1)	(0.0)	(18.7)	(56.3)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	(74.9)	44
Yoruba	(0.0)	(0.0)	(0.0)	(48.0)	(0.0)	(0.0)	(52.0)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	(52.0)	26
Other ethnic group	3.3	2.6	3.3	27.9	0.0	11.2	46.2	2.0	0.0	2.4	0.0	100.0	61.9	214
¹ MICS indicator 3.15 . SDG 7.1.2 - Use of solid fuels for cooking														

¹ MICS indicator 3.15 , SDG 7.1.2 - Use of solid fuels for cooking

() Sample data are based on 25-49 unweighted cases

Table CH.13: Solid fuel use by place of cooking

Percent distribution of household members in households using solid fuels by place of cooking, Nigeria, 2016-17 Kano State

	Place of cooking:						Number of household members in households using solid fuels for cooking
	In the house		In a separate building	Outdoors	Other place	Total	
	In a separate room used as kitchen	Elsewhere in the house					
Total	31.2	33.7	3.8	31.2	0.0	100.0	11990
Senatorial District							
Kano Central	39.5	30.8	2.6	27.1	0.0	100.0	4542
Kano North	27.7	48.4	1.2	22.7	0.0	100.0	3363
Kano South	24.9	24.8	7.3	42.8	0.1	100.0	4086
Residence							
Urban	54.1	26.1	2.0	17.9	0.0	100.0	2607
Rural	24.9	35.8	4.3	34.9	0.0	100.0	9383
Education of household head							
None	28.4	33.1	4.6	33.5	0.3	100.0	1163
Non-formal	25.7	34.2	3.8	36.2	0.0		6582
Primary	32.3	37.9	4.5	25.4	0.0	100.0	1448
Secondary	40.2	35.4	2.3	22.0	0.0	100.0	1831
Higher	55.5	18.6	4.7	21.2	0.0	100.0	881
Missing/Don't Know	32.2	47.4	5.2	15.2	0.0	100.0	85
Wealth index quintile							
Poorest	9.8	37.8	2.6	49.7	0.1	100.0	2650
Second	23.7	33.7	2.3	40.2	0.0	100.0	2655
Middle	28.2	45.2	2.9	23.6	0.0	100.0	2647
Fourth	51.4	23.4	7.6	17.7	0.0	100.0	2532
Richest	53.7	23.5	3.9	18.9	0.0	100.0	1507
Ethnicity of household head							
Hausa	31.2	34.0	3.9	30.9	0.0	100.0	11812
Igbo	(0.0)	(29.3)	(0.0)	(70.7)	(0.0)	100.0	33
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	14
Other ethnic group	47.6	2.9	0.0	49.5	0.0	100.0	132

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Malaria/Fever

Table CH.14: Household availability of insecticide treated nets and protection by a vector control method

Percentage of households with at least one mosquito net, one insecticide treated net (ITN), and one long-lasting treated net, percentage of households with at least one mosquito net, one insecticide treated net (ITN) per two people, and one long-lasting treated net, percentage of households with at least one ITN and percentage of households with at least one ITN per two people, Nigeria, MICS 2016-17 Kano State

	Percentage of households with at least one mosquito net:			Percentage of households with at least one net for every two persons ^a :			Number of households
	Any mosquito net	Insecticide treated mosquito net (ITN) ¹	Long-lasting insecticidal treated net (LLIN)	Any mosquito net	Insecticide treated mosquito net (ITN) ²	Long-lasting insecticidal treated net (LLIN)	
Total	81.6	80.8	80.4	32.7	32.1	31.9	1867
Senatorial District							
Kano Central	82.5	80.8	80.2	33.1	32.0	31.4	786
Kano North	79.7	79.3	78.8	34.6	34.3	34.3	527
Kano South	82.2	82.2	82.2	30.2	30.2	30.2	554
Residence							
Urban	80.0	78.7	78.1	30.2	29.5	28.8	500
Rural	82.2	81.5	81.2	33.5	33.1	33.0	1367
Education of household head							
None	78.9	76.7	76.3	39.4	37.0	37.0	196
Non-formal	78.8	78.2	77.8	30.4	30.2	30.0	915
Primary	92.5	91.6	91.6	37.2	36.8	36.8	222
Secondary	82.8	81.8	81.2	30.4	29.8	29.1	325
Higher	82.7	82.7	82.7	34.8	34.2	33.7	194
Missing/Don't Know	90.4	83.5	83.5	37.0	37.0	37.0	15
Wealth index quintile							
Poorest	79.0	77.6	77.2	36.0	35.1	35.1	382
Second	79.9	79.4	79.4	28.2	27.9	27.9	376
Middle	82.5	82.2	81.5	31.0	30.8	30.8	385
Fourth	83.9	83.0	82.6	35.7	34.8	33.8	365
Richest	83.0	81.8	81.5	32.5	32.0	31.7	360
Ethnicity of household head							
Hausa	82.0	81.1	80.7	32.6	32.0	31.8	1818
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	7
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	6
Other ethnic group	(70.3)	(70.3)	(70.3)	(40.1)	(40.1)	(40.1)	37

¹ MICS indicator 3.16a - Household availability of insecticide-treated nets (ITNs) - One+

² MICS indicator 3.16b - Household availability of insecticide-treated nets (ITNs) - One+ per 2 people

³ MICS indicator 3.17a - Households covered by vector control - One+ ITNs

⁴ MICS indicator 3.17b - Households covered by vector control - One+ ITNs per 2 people

^a The numerators are based on number of usual (de jure) household members and does not take into account whether household members stayed in the household last night. MICS does not collect information on visitors to the household

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table CH.15: Access to an insecticide treated net (ITN) - number of household members

Percentage of household population with access to an ITN in the household, Nigeria, 2016-17 Kano State

	Number of ITNs owned by household:									Total	Percentage with access to an ITN ^a	Number of household members ^b
	0	1	2	3	4	5	6	7	8 or more			
Total	19.2	14.3	29.6	17.7	9.3	4.3	2.7	1.5	1.5	100.0	57.2	13365
Number of household members												
1	(38.0)	(56.6)	(5.4)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	(62.0)	27
2	24.6	46.4	27.0	0.0	1.9	0.0	0.0	0.0	0.0	100.0	75.4	229
3	20.0	32.4	33.6	10.1	3.9	0.0	0.0	0.0	0.0	100.0	69.2	571
4	16.5	21.4	47.6	11.9	1.7	0.3	0.0	0.0	0.6	100.0	72.8	802
5	20.2	8.8	38.7	25.6	5.8	0.3	0.0	0.0	0.7	100.0	66.8	1129
6	18.7	11.0	39.5	19.3	6.7	3.7	1.1	0.0	0.0	100.0	60.8	1220
7	18.2	8.2	29.8	24.9	13.6	3.9	1.4	0.0	0.0	100.0	59.6	1243
8 or more	18.3	5.0	19.3	20.0	15.1	8.9	6.3	3.8	3.3	100.0	52.1	8144

^a Percentage of household population who could sleep under an ITN if each ITN in the household were used by up to two people^b The denominator is number of usual (de jure) household members and does not take into account whether household members stayed in the household last night. MICS does not collect information on visitors to the household

() Sample data are based on 25-49 unweighted cases

Table CH.16: Access to an insecticide treated net (ITN) - background characteristics

Percentage of household population with access to an ITN in the household, Nigeria, 2016-17 Kano State

	Percentage with access to an ITN ^a	Number of household members ^b
Total	57.2	13365
Senatorial District		
Kano Central	55.3	5772
Kano North	58.5	3431
Kano South	58.9	4162
Residence		
Urban	52.3	3748
Rural	59.2	9617
Wealth index quintile		
Poorest	54.9	2672
Second	58.2	2668
Middle	58.6	2682
Fourth	60.6	2665
Richest	53.9	2678
Ethnicity of household head		
Hausa	57.3	13081
Igbo	(22.2)	44
Yoruba	(57.1)	26
Other ethnic group	61.0	214

^a Percentage of household population who could sleep under an ITN if each ITN in the household were used by up to two people^b The denominator is number of usual (de jure) household members and does not take into account whether household members stayed in the household last night. MICS does not collect information on visitors to the household

() Sample data are based on 25-49 unweighted cases

Table CH.17: Use of ITNs

Percentage of insecticide treated nets (ITNs) that were used by anyone last night, Nigeria, 2016-17 Kano State

	Percentage of ITNs used last night	Number of ITNs
Total	82.7	4191
Senatorial District		
Kano Central	84.5	1750
Kano North	77.5	1139
Kano South	84.8	1302
Residence		
Urban	84.5	1057
Rural	82.1	3134
Wealth index quintile		
Poorest	81.5	823
Second	84.1	847
Middle	85.2	845
Fourth	80.6	878
Richest	82.0	798
Ethnicity of household head		
Hausa	82.7	4103
Igbo	(*)	5
Yoruba	(*)	8
Other ethnic group	79.7	76

(*) Sample data are fewer than 25 unweighted cases

Table CH.18: Children sleeping under mosquito nets

Percentage of children age 0-59 months who slept under a mosquito net last night, by type of net, Nigeria, 2016-17 Kano State

	Percentage of children age 0-59 who spent last night in the interviewed households	Number of children age 0-59 months	Percentage of children under age five who the previous night slept under:			Number of children age 0-59 months who spent last night in the interviewed households	Percentage of children who slept under an ITN last night in households with at least one ITN	Number of children age 0-59 living in households with at least one ITN
			Any mosquito net	An insecticide treated net (ITN) ¹	A Long-lasting insecticidal treated net (LLIN)			
Total	99.4	2559	62.0	61.8	61.5	2543	73.9	2126
Senatorial District								
Kano Central	99.8	962	63.5	63.2	62.8	960	74.5	814
Kano North	99.5	693	56.7	56.1	55.7	690	68.7	563
Kano South	98.8	904	64.6	64.6	64.6	893	77.2	748
Sex								
Male	99.4	1293	59.9	59.6	59.3	1285	71.6	1070
Female	99.4	1266	64.2	64.0	63.7	1258	76.3	1055
Residence								
Urban	99.7	603	56.9	56.6	55.9	601	70.2	485
Rural	99.3	1956	63.6	63.4	63.2	1942	75.0	1641
Age (Months)								
0-11	99.3	514	66.6	66.6	66.1	510	76.0	447
12-23	99.1	538	64.7	63.7	63.2	533	77.0	441
24-35	99.7	485	61.0	60.8	60.8	483	72.4	406
36-47	99.5	522	58.2	58.2	58.0	519	71.8	421
48-59	99.3	500	59.4	59.5	59.1	497	71.8	412
Mother's education								
None	99.7	452	58.0	57.3	56.9	451	69.6	371
Non-formal	99.1	1298	63.0	62.8	62.6	1287	76.4	1057
Primary	100.0	352	68.6	68.3	67.1	352	74.2	324
Secondary	99.1	379	59.5	59.6	59.6	375	69.9	320
Higher	100.0	77	53.0	53.0	53.0	77	76.4	54
Wealth index quintile								
Poorest	98.6	530	56.5	56.2	55.9	522	69.1	425
Second	99.2	559	63.4	63.0	63.0	554	75.6	462
Middle	99.7	529	65.2	65.0	64.3	527	78.8	435
Fourth	99.4	487	65.8	65.3	64.8	484	73.7	429
Richest	100.0	455	59.0	59.1	59.1	455	71.8	374
Ethnicity of household head								
Hausa	99.4	2514	61.9	61.7	61.4	2498	73.7	2091
Igbo	(*)	9	(*)	(*)	(*)	9	(*)	5
Yoruba	(*)	4	(*)	(*)	(*)	4	(*)	3
Other ethnic group	(100.0)	31	(71.0)	(71.0)	(71.0)	31	(88.0)	25
¹ MICS indicator 3.18; MDG indicator 6.7 - Children under age 5 sleeping under insecticide-treated nets (ITNs)								

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table CH.19: Use of mosquito nets by the household population

Percentage of household members who slept under a mosquito net last night, by type of net, Nigeria, 2016-17 Kano State

	Percentage of household members who the previous night slept under:			Number of household members who spent the previous night in the interviewed households	Percentage who the previous night slept under an ITN	Number of household members in households with at least one ITN
	Any mosquito net	An insecticide treated net (ITN) ¹	A Long-lasting insecticidal treated net (LLIN)			
Total	55.2	54.8	54.5	12982	67.1	10597
Senatorial District						
Kano Central	53.5	52.9	52.4	5592	64.8	4563
Kano North	56.0	55.1	54.9	3322	68.1	2688
Kano South	57.0	57.0	57.0	4068	69.4	3345
Sex						
Male	51.6	51.1	50.9	6287	62.9	5110
Female	58.6	58.2	57.8	6695	71.0	5486
Residence						
Urban	49.6	49.0	48.5	3632	62.0	2870
Rural	57.4	57.0	56.8	9349	69.0	7726
Age(Months)						
0-4 ^a	62.1	61.8	61.5	2531	74.0	2115
5-14	50.0	49.3	49.1	4248	60.9	3438
15-34	55.4	55.1	54.8	3381	66.7	2792
35-49	61.5	60.9	60.6	1362	74.8	1108
50+	52.2	51.6	51.5	1450	66.0	1135
Missing/Don't Know	(*)	(*)	(*)	9	(*)	8
Education of household head						
None	53.8	53.2	52.9	1215	66.8	968
Non-formal	52.5	52.1	51.9	6560	65.8	5196
Primary	66.6	66.1	66.1	1522	71.0	1416
Secondary	56.5	56.1	55.5	2217	70.4	1768
Higher	54.9	54.3	54.3	1388	63.6	1185
Missing/Don't Know	51.7	49.1	49.1	79	61.6	63
Wealth index quintile						
Poorest	51.5	50.9	50.8	2611	65.2	2041
Second	57.5	57.1	57.1	2599	70.0	2120
Middle	59.4	59.0	58.5	2589	71.6	2133
Fourth	55.8	55.4	54.8	2585	64.9	2206
Richest	51.9	51.4	51.3	2597	63.6	2097
Ethnicity of household head						
Hausa	55.2	54.8	54.5	12709	66.9	10409
Igbo	(30.9)	(30.9)	(30.9)	44	(*)	19
Yoruba	(55.9)	(55.9)	(55.9)	26	(*)	18
Other ethnic group	59.5	59.5	59.5	202	79.5	151

¹ MICS indicator 3.19 - Population that slept under an ITN^a The results of the age group 0-4 years do not match those in Table CH.18, which is based on completed under-5 interviews only. The two tables are computed with different sample weights

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table CH.20: 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, Nigeria, 2016-17 Kano State

	Percentage of children for whom:						Number of children with fever in last two weeks
	Advice or treatment was sought from:						
	Health facilities or providers			Other source	A health facility or provider ^{1, b}	No advice or treatment sought	
	Public	Private	Community health provider ^a				
Total	25.2	14.4	1.9	27.0	62.2	34.8	906
Senatorial District							
Kano Central	35.7	18.0	1.3	14.2	65.2	32.7	321
Kano North	28.6	7.9	4.2	27.0	59.4	38.2	224
Kano South	13.7	15.2	.9	38.3	61.4	34.6	361
Sex							
Male	25.4	12.8	1.2	28.7	62.3	34.1	479
Female	24.9	16.1	2.6	25.1	62.2	35.6	427
Residence							
Urban	39.0	15.0	1.6	13.0	64.7	32.4	189
Rural	21.5	14.2	1.9	30.7	61.6	35.4	717
Age(Months)							
0-11	29.0	12.5	1.4	31.6	68.5	29.5	150
12-23	25.1	12.6	.6	25.9	58.3	36.8	213
24-35	26.9	13.0	.3	22.7	58.6	37.9	164
36-47	22.9	15.8	2.5	28.3	63.9	34.3	186
48-59	23.1	17.7	4.2	27.0	63.3	34.5	193
Mother's education							
None	19.9	9.1	.9	29.9	53.1	43.1	174
Non-formal	22.9	16.5	2.8	30.3	65.5	31.7	474
Primary	18.0	8.2	1.8	26.5	48.7	49.4	121
Secondary	42.2	19.3	0.0	13.5	71.8	24.5	119
Higher	(*)	(*)	(*)	(*)	(*)	(*)	17
Wealth index quintile							
Poorest	22.7	10.9	3.5	33.4	59.8	35.6	199
Second	21.0	14.1	1.8	26.6	57.5	38.5	208
Middle	16.3	12.5	2.9	33.1	58.9	39.5	211
Fourth	30.5	19.0	0.0	26.5	71.6	27.0	162
Richest	44.0	17.6	0.0	7.9	67.5	29.6	126
Ethnicity of household head							
Hausa	25.1	14.3	1.9	27.0	62.3	35.0	892
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	4
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	1
Other ethnic group	(*)	(*)	(*)	(*)	(*)	(*)	9

¹ MICS indicator 3.20 - Care-seeking for fever

^a Community health providers include both public (*Community health worker* and *Mobile/Outreach clinic*) and private (*Mobile clinic*) health facilities

^b Includes all public and private health facilities and providers as well as shops

(*) Sample data are fewer than 25 unweighted cases

Table CH.21: 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, Nigeria, 2016-17
Kano State

Kano State	Children with a fever in the last two weeks who were given:													Number of children with fever in last two weeks
	Anti-malarials						Other medications							
	SP/ Fansidar	Chloroquine	Amodia-quine	Quinine	Artemisinin-based Combination Therapy (ACT)	Other anti-malarial	Antibiotic pill or syrup	Antibiotic injection	Paracetamol/ Panadol/ Acetaminophen	Aspirin	Ibuprofen	Other	Missing/Don't Know	
Total	6.5	6.8	2.5	2.6	9.1	13.9	14.5	6.9	48.4	1.2	1.7	10.6	3.6	906
Senatorial District														
Kano Central	8.8	6.7	2.7	3.8	9.6	15.6	17.8	10.6	46.8	1.3	2.6	11.4	4.9	321
Kano North	3.6	0.7	0.5	3.0	17.6	10.2	11.3	8.8	49.9	0.6	2.4	11.9	2.4	224
Kano South	6.4	10.6	3.7	1.3	3.4	14.8	13.4	2.3	48.8	1.6	0.4	9.0	3.2	361
Sex														
Male	6.0	6.6	2.8	2.9	8.2	14.9	14.9	7.5	46.7	0.8	0.6	10.7	3.0	479
Female	7.2	6.9	2.2	2.3	10.1	12.8	14.0	6.1	50.3	1.7	2.8	10.4	4.3	427
Residence														
Urban	7.6	9.1	3.0	3.5	13.9	13.0	19.3	12.6	46.6	2.2	1.3	9.8	3.9	189
Rural	6.3	6.1	2.4	2.3	7.9	14.2	13.2	5.3	48.9	1.0	1.8	10.8	3.5	717
Age(Months)														
0-11	3.8	5.4	2.8	2.5	3.6	16.4	17.7	4.5	52.7	0.6	2.2	8.4	3.3	150
12-23	5.3	5.0	3.7	1.8	4.9	11.4	13.5	6.4	45.2	1.4	0.5	12.8	3.6	213
24-35	11.0	5.7	2.5	6.0	9.1	13.9	15.0	9.1	40.6	1.8	3.2	8.8	4.0	164
36-47	7.4	6.0	1.5	0.9	15.4	16.7	13.0	7.0	55.8	0.5	1.5	12.8	3.1	186
48-59	5.5	11.4	2.1	2.3	12.1	12.2	14.0	7.1	47.9	1.8	1.4	9.0	3.9	193
Mother's education														
None	8.0	6.9	3.4	1.8	2.7	5.1	11.0	6.9	42.4	1.1	2.8	12.1	6.4	174
Non-formal	7.1	7.6	1.8	2.4	9.5	17.3	14.5	5.6	50.0	1.1	0.7	9.8	3.2	474
Primary	2.7	3.7	2.8	5.1	10.2	14.1	11.9	9.7	41.7	1.0	1.0	5.1	0.6	121
Secondary	7.1	6.5	4.3	2.4	10.7	11.9	24.0	6.5	56.8	1.8	4.0	16.2	4.8	119
Higher	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	17
Wealth index quintile														
Poorest	4.6	7.4	3.0	1.2	6.1	14.2	8.3	2.8	51.9	0.4	2.3	7.6	2.5	199
Second	8.1	6.3	1.1	.7	7.4	11.8	14.4	6.5	48.5	1.5	0.7	10.9	3.6	208
Middle	4.7	5.0	2.6	4.2	6.6	19.9	16.3	8.1	48.2	0.9	0.4	11.4	1.7	211
Fourth	6.7	9.1	2.4	4.1	13.8	11.6	10.6	7.4	46.5	1.4	2.1	7.0	6.0	162
Richest	9.8	6.5	4.1	3.3	14.8	9.9	26.2	11.2	45.4	2.4	3.9	17.9	5.4	126
Ethnicity of household head														
Hausa	6.4	6.8	2.3	2.6	9.0	14.0	14.7	6.9	48.5	1.2	1.7	10.4	3.7	892
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	4
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1
Other ethnic group	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	9

(*) Sample data are fewer than 25 unweighted cases

Table CH.22: Diagnostics and anti-malarial treatment of children

Percentage of children age 0-59 months who had a fever in the last two weeks who had a finger or heel stick for malaria testing, who were given Artemisinin-combination Treatment (ACT) and any anti-malarial drugs, and percentage who were given ACT among those who were given anti-malarial drugs, Nigeria, 2016-17 Kano State

	Percentage of children who:					Number of children age 0-59 months with fever in the last two weeks	Treatment with Artemisinin-based Combination Therapy (ACT) among children who received anti-malarial treatment ³	Number of children age 0-59 months with fever in the last two weeks who were given any antimalarial drugs
	Had blood taken from a finger or heel for testing ¹	Were given:			Any antimalarial drugs same or next day			
		Artemisinin-combination Treatment (ACT)	ACT the same or next day	Any antimalarial drugs ²				
Total	11.3	9.1	7.2	39.0	30.9	906	23.4	353
Senatorial District								
Kano Central	12.8	9.6	9.6	44.1	37.9	321	21.9	141
Kano North	15.0	17.6	10.6	34.3	21.7	224	51.3	77
Kano South	7.7	3.4	3.0	37.4	30.4	361	9.2	135
Sex								
Male	12.5	8.2	5.5	39.4	30.6	479	20.9	188
Female	10.0	10.1	9.2	38.6	31.3	427	26.2	165
Residence								
Urban	11.7	13.9	13.4	46.7	38.9	189	29.8	88
Rural	11.2	7.9	5.6	37.0	28.8	717	21.3	265
Age (Months)								
0-11	10.2	3.6	2.7	33.3	28.5	150	10.7	50
12-23	9.9	4.9	3.5	31.1	23.0	213	15.7	66
24-35	14.7	9.1	7.8	44.0	34.7	164	20.6	72
36-47	11.7	15.4	11.9	44.8	36.6	186	34.4	83
48-59	10.6	12.1	10.0	42.2	32.8	193	28.7	82
Mother's education								
None	7.6	2.7	1.9	25.8	15.3	174	(10.7)	45
Non-formal	10.0	9.5	6.5	43.1	34.2	474	22.1	204
Primary	14.9	10.2	9.6	36.8	32.1	121	(27.7)	45
Secondary	17.6	10.7	10.1	39.2	33.0	119	(27.2)	47
Higher	(*)	(*)	(*)	(*)	(*)	17	(*)	12
Wealth index quintile								
Poorest	8.4	6.1	2.0	34.8	26.6	199	17.6	69
Second	13.4	7.4	5.3	33.9	22.7	208	21.9	70
Middle	9.1	6.6	5.3	39.5	33.1	211	16.7	84
Fourth	11.2	13.8	12.7	46.0	38.1	162	30.1	74
Richest	16.4	14.8	14.8	44.1	38.5	126	33.7	56
Ethnicity of household head								
Hausa	11.1	9.0	7.1	38.5	30.5	892	23.4	344
Igbo	(*)	(*)	(*)	(*)	(*)	4	(*)	4
Yoruba	(*)	(*)	(*)	(*)	(*)	1	(*)	1
Other ethnic group	(*)	(*)	(*)	(*)	(*)	9	(*)	5

¹ MICS indicator 3.21 - Malaria diagnostics usage

² MICS indicator 3.22; MDG indicator 6.8 - Anti-malarial treatment of children under age 5

³ MICS indicator 3.23 - Treatment with Artemisinin-based Combination Therapy (ACT) among children who received anti-malarial treatment

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table CH.23: Source of anti-malarial

Percentage of children age 0-59 months with fever in the last two weeks who were given anti-malarial by the source of anti-malarial, Nigeria, 2016-17
Kano State

	Percentage of children who were given anti-malarial	Number of children age 0-59 months with fever in the last two weeks	Percentage of children for whom the source of anti-malarial was:					Number of children age 0-59 months who were given anti-malarial as treatment for fever in the last two weeks
			Health facilities or providers				A health facility or provider ^b	
			Public	Private	Community health provider ^a	Other source		
Total	39.0	906	32.8	25.5	3.0	41.3	97.5	353
Senatorial District								
Kano Central	44.1	321	41.8	35.2	1.4	22.2	96.3	141
Kano North	34.3	224	35.7	20.3	9.4	44.0	99.4	77
Kano South	37.4	361	21.8	18.4	1.1	59.8	97.7	135
Sex								
Male	39.4	479	30.3	26.7	2.2	42.4	95.7	188
Female	38.6	427	35.7	24.2	3.9	40.1	99.5	165
Residence								
Urban	46.7	189	50.7	29.7	0.9	19.6	98.9	88
Rural	37.0	717	26.9	24.1	3.7	48.5	97.0	265
Age(Months)								
0-11	33.3	150	34.9	19.5	2.8	43.1	97.5	50
12-23	31.1	213	44.6	16.9	1.3	38.5	98.3	66
24-35	44.0	164	35.9	30.4	1.5	33.8	95.7	72
36-47	44.8	186	32.1	25.9	4.4	42.1	95.9	83
48-59	42.2	193	20.1	31.5	4.4	48.4	100.0	82
Mother's education								
None	25.8	174	(30.0)	(18.6)	(1.8)	(51.4)	(100.0)	45
Non-formal	43.1	474	29.9	23.4	4.8	46.6	98.5	204
Primary	36.8	121	(26.7)	(26.8)	(0.0)	(43.8)	(89.3)	45
Secondary	39.2	119	(43.5)	(40.8)	(0.0)	(15.7)	(98.0)	47
Higher	(*)	17	(*)	(*)	(*)	(*)	(*)	12
Wealth index quintile								
Poorest	34.8	199	34.0	14.1	6.0	51.9	95.6	69
Second	33.9	208	31.1	31.0	2.7	37.8	99.2	70
Middle	39.5	211	22.3	17.1	5.4	60.6	100.0	84
Fourth	46.0	162	29.7	34.4	0.0	34.2	94.2	74
Richest	44.1	126	53.3	33.4	0.0	13.3	98.3	56
Ethnicity of household head								
Hausa	38.5	892	32.6	25.4	3.1	41.7	97.4	344
Igbo	(*)	4	(*)	(*)	(*)	(*)	(*)	4
Yoruba	(*)	1	(*)	(*)	(*)	(*)	(*)	1
Other ethnic group	(*)	9	(*)	(*)	(*)	(*)	(*)	5

^a Community health providers include both public (*Community health worker and Mobile/Outreach clinic*) and private (*Mobile clinic*) health facilities

^b Includes all public and private health facilities and providers as well as shops

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table CH.24: Pregnant women sleeping under mosquito nets

Percentage of pregnant women age 15-49 years who slept under a mosquito net last night, by type of net, Nigeria, 2016-17 Kano State

	Percentage of pregnant women who spent last night in the interviewed households	Number of pregnant women age 15-49 years	Percentage of pregnant women age 15-49 years who the previous night slept under:			An ITN or in a dwelling sprayed with IRS in the past 12 months	Number of pregnant women who spent last night in the interviewed households	Percentage of pregnant women who slept under an ITN last night in households with at least one ITN	Number of pregnant women age 15-49 years living in households with at least one ITN
			Any mosquito net	An insecticide treated net (ITN) ¹	A Long-lasting insecticidal treated net (LLIN)				
Total	99.5	330	47.7	51.1	50.9		328	62.3	269
Senatorial District									
Kano Central	99.1	110	53.1	56.5	56.5		109	67.2	92
Kano North	99.2	89	41.9	44.1	43.1		88	57.1	68
Kano South	100.0	131	47.2	51.4	51.4		131	61.5	109
Residence									
Urban	98.7	75	55.0	58.2	58.2		74	69.8	62
Rural	99.7	254	45.6	49.0	48.7		254	60.1	207
Age(Months)									
15-19	(100.0)	44	(32.9)	(34.8)	(34.8)		44	(41.7)	36
20-24	98.6	67	50.4	53.4	53.4		66	62.4	56
25-29	100.0	79	48.9	56.7	55.6		79	66.5	67
30-34	100.0	53	39.2	41.7	41.7		53	(53.8)	41
35-39	(100.0)	49	(57.3)	(59.0)	(59.0)		49	(78.6)	37
40-44	(97.2)	26	(63.5)	(63.5)	(63.5)		25	(*)	21
45-49	(*)	13	(*)	(*)	(*)		13	(*)	10
Education									
None	100.0	69	45.8	48.2	46.9		69	61.8	53
Non-formal	98.9	159	47.6	50.0	50.0		157	62.3	126
Primary	(100.0)	52	(58.3)	(60.0)	(60.0)		52	(64.8)	48
Secondary	(100.0)	45	(38.4)	(49.4)	(49.4)		45	(59.5)	37
Higher	(*)	5	(*)	(*)	(*)		5	(*)	4
Wealth index quintile									
Poorest	99.1	82	41.7	43.7	43.7		81	55.0	64
Second	100.0	63	44.9	48.0	48.0		63	59.7	51
Middle	100.0	71	43.6	47.3	46.1		71	61.6	54
Fourth	100.0	60	56.1	62.2	62.2		60	71.2	53
Richest	98.2	54	(56.2)	(58.6)	(58.6)		53	(66.1)	47
Ethnicity of household head									
Hausa	99.5	323	47.8	51.3	51.0		321	62.4	264
Igbo	(*)	2	(*)	(*)	(*)		2		0
Yoruba	(*)								
Other ethnic group	(*)	5	(*)	(*)	(*)		5	(*)	5

¹ MICS indicator 3.24 - Pregnant women who slept under an insecticide treated net (ITN)

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table CH.25: Intermittent preventive treatment for malaria

Percentage of women age 15-49 years who had a live birth during the two years preceding the survey and who received intermittent preventive treatment (IPT) for malaria during pregnancy at any antenatal care visit, Nigeria, 2016-17 Kano State

	Percentage of women who received antenatal care (ANC)	Number of women with a live birth in the last two years	Who took any medicine to prevent malaria at any ANC visit during pregnancy	Percentage of pregnant women: who took SP/Fansidar at least once during an ANC visit and in total took:				Number of women with a live birth in the last two years and who received antenatal care
				At least once	Two or more times	Three or more times ¹	Four or more times	
Total	57.6	1087	80.3	67.6	40.6	16.5	6.0	626
Senatorial District								
Kano Central	77.0	393	85.6	72.9	41.1	15.9	4.8	303
Kano North	46.8	314	72.8	62.9	44.3	19.1	8.2	147
Kano South	46.5	380	77.4	62.5	36.7	15.4	6.0	177
Residence								
Urban	80.8	239	84.8	69.1	40.4	16.8	4.3	194
Rural	51.1	847	78.2	66.9	40.7	16.4	6.7	433
Education								
None	47.8	196	78.2	64.9	42.0	16.1	5.1	94
Non-formal	48.7	533	79.8	66.9	38.1	17.0	6.7	260
Primary	66.1	165	78.6	69.2	45.2	16.2	5.5	109
Secondary	83.9	162	83.0	69.0	41.8	16.3	5.1	136
Higher	(92.5)	30	(84.9)	(70.5)	(35.7)	(15.6)	(8.5)	28
Wealth index quintile								
Poorest	34.1	234	73.2	64.9	44.4	23.2	9.4	80
Second	48.1	228	72.3	56.0	33.0	13.2	4.6	110
Middle	53.1	237	84.4	72.7	42.8	21.1	9.8	126
Fourth	75.2	218	80.6	67.8	39.0	11.5	2.5	164
Richest	86.5	169	86.3	73.2	44.3	17.0	5.7	147
Ethnicity of household head								
Hausa	57.5	1066	80.0	67.4	40.6	16.6	6.1	613
Igbo	(*)	4	(*)	(*)	(*)	(*)	(*)	4
Yoruba	(*)	3	(*)	(*)	(*)	(*)	(*)	2
Other ethnic group	(*)	14	(*)	(*)	(*)	(*)	(*)	7

¹ MICS indicator 3.25 - Intermittent preventive treatment for malaria

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

VII. Water and Sanitation

Use of Improved Water Sources

Table WS.1: Use of improved water sources

Percent distribution of household population according to main source of drinking water and percentage of household population using improved drinking water sources, Nigeria, 2016-17 Kano State

	Main source of drinking water																	Percentage using improved sources of drinking water ¹	Number of household members
	Improved sources										Unimproved sources								
	Piped water				Tube-well/ bore-hole	Pro-ected well	Pro-ected spring	Bottled water	Sachet water	Unprotected well	Unprotected spring	Tanker truck	Cart with tank/ drum	Surface water	Sachet water	Other	Total		
	Into dwelling	Into yard/plot	To neigh- bour	Public tap/ stand-pipe															
Total	6.4	1.0	1.2	6.2	31.1	8.6	1.1	0.2	2.1	29.5	0.7	3.0	5.8	1.5	0.8	0.7	100.0	57.9	13365
Senatorial District																			
Kano Central	11.6	1.0	1.1	8.2	29.6	6.2	0.6	0.4	4.3	16.4	0.0	5.4	11.8	0.0	2.0	1.5	100.0	62.8	5772
Kano North	5.3	2.5	1.2	6.2	39.3	7.9	1.7	0.0	0.1	28.1	0.2	0.9	2.2	4.2	0.0	0.2	100.0	64.1	3431
Kano South	0.2	0.0	1.5	3.2	26.6	12.5	1.3	0.0	0.6	48.9	2.1	1.3	0.3	1.3	0.0	0.1	100.0	46.0	4162
Residence																			
Urban	12.6	0.8	1.1	7.8	26.5	6.8	0.6	0.6	6.7	6.8	0.2	7.7	16.7	0.3	2.9	1.9	100.0	63.4	3748
Rural	4.1	1.1	1.3	5.5	33.0	9.3	1.3	0.0	0.3	38.4	0.9	1.2	1.5	1.9	0.0	0.3	100.0	55.8	9617
Education of household head																			
None	7.2	0.0	0.5	3.4	3.4	32.7	7.4	3.1	2.4	33.9	1.4	3.8	3.1	0.9	0.0	0.0	100.0	56.9	1262
Non-formal	3.9	1.2	0.7	6.4	6.4	31.2	7.6	1.1	1.0	36.3	1.0	2.7	4.6	1.9	0.2	0.3	100.0	53.0	6747
Primary	4.0	1.9	2.2	7.3	7.3	34.7	10.9	0.9	0.2	28.5	0.0	2.5	6.6	0.0	0.0	0.2	100.0	62.2	1562
Secondary	6.9	1.3	2.3	7.3	7.3	30.0	10.0	0.5	3.4	17.3	0.3	4.5	9.4	1.6	3.4	1.7	100.0	61.7	2282
Higher	20.0	0.0	1.5	2.0	2.0	28.6	10.3	0.2	7.1	14.5	0.0	2.3	7.3	1.6	1.4	2.0	100.0	70.8	1427
Missing/ Don't Know	0.0	0.0	0.0	51.5	51.5	14.8	0.0	3.7	0.0	25.4	0.0	0.0	0.0	0.0	0.0	4.6	100.0	70.1	85

Table WS.1: Use of improved water sources (continued)

Percent distribution of household population according to main source of drinking water and percentage of household population using improved drinking water sources, Nigeria, 2016-17 Kano State

	Main source of drinking water																	Percentage using improved sources of drinking water ¹	Number of household members
	Improved sources									Unimproved sources									
	Piped water				Tube-well/ bore-hole	Pro-ected well	Pro-ected spring	Bottled water ^s	Sachet water	Unprotected well	Unprotected spring	Tanker truck	Cart with tank/ drum	Surface water	Sachet water	Other	Total		
	Into dwelling	Into yard/plot	To neigh-bour	Public tap/ stand-pipe															
Wealth index quintile																			
Poorest	0.6	0.4	0.3	5.0	25.8	9.3	1.4	0.0	0.0	54.0	0.6	0.0	0.0	2.6	0.0	0.0	100.0	42.8	2672
Second	3.5	1.5	0.7	5.1	31.1	8.1	0.7	0.0	0.0	43.6	1.1	2.1	0.6	1.9	0.0	0.0	100.0	50.7	2668
Middle	5.0	0.7	0.9	7.5	37.1	11.1	0.8	0.0	0.1	27.7	1.2	1.5	3.3	2.4	0.0	0.7	100.0	63.3	2682
Fourth	3.5	1.9	2.0	7.5	37.0	6.7	1.9	0.0	1.9	18.6	0.5	3.8	12.7	0.7	0.3	1.1	100.0	62.4	2665
Richest	19.6	0.7	2.2	5.8	24.8	7.7	0.6	0.8	8.3	3.9	0.0	7.6	12.3	0.0	4.0	1.9	100.0	70.4	2678
Ethnicity of household head																			
Hausa	6.5	1.1	1.2	6.2	31.4	8.6	1.1	0.2	2.0	29.7	0.7	2.9	5.7	1.5	0.5	0.7	100.0	58.2	13081
Igbo	(0.0)	(0.0)	(0.0)	(0.0)	(5.9)	(28.4)	(0.0)	(0.0)	(0.0)	(29.1)	(0.0)	(13.2)	(11.5)	(0.0)	(11.8)	(0.0)	100.0	(34.3)	44
Yoruba	(27.0)	(0.0)	(0.0)	(0.0)	(0.0)	(7.5)	(0.0)	(0.0)	(5.3)	(35.5)	(0.0)	(9.1)	(15.7)	(0.0)	(0.0)	(0.0)	100.0	(39.7)	26
Other ethnic group	3.3	0.0	4.1	6.0	21.7	1.8	0.0	0.0	8.2	19.0	0.9	6.0	8.8	0.0	17.7	2.4	100.0	45.1	214

¹ MICS indicator 4.1; MDG indicator 7.8 - Use of improved drinking water sources

^a Households using bottled water as the main source of drinking water are classified into improved or unimproved drinking water users according to the water source used for other purposes such as cooking and hand washing.

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table WS.2: Household water treatment

Percentage of household population by drinking water treatment method used in the household, and for household members living in households where an unimproved drinking water source is used, the percentage who are using an appropriate treatment method, Nigeria, 2016-17 Kano State

	Water treatment method used in the household										Number of household members	Percentage of household members in households using unimproved drinking water sources and using an appropriate water treatment method ¹	Number of household members in households using unimproved drinking water sources
	None	Boil	Add bleach/ chlorine	Strain through a cloth	Use water filter	Solar disinfection	Let it stand and settle	Add alum	Add water tablet	Other			
Total	91.1	0.7	0.7	3.6	0.1	0.0	1.7	3.0	0.1	0.1	13365	0.7	5624
Senatorial District													
Kano Central	90.5	1.1	0.4	4.0	0.0	0.0	1.6	3.3	0.1	0.2	5772	0.7	2145
Kano North	88.7	0.5	1.2	6.6	0.0	0.0	0.6	3.6	0.1	0.1	3431	0.5	1231
Kano South	94.1	0.5	0.6	0.7	0.3	0.0	2.8	2.1	0.0	0.0	4162	0.9	2248
Residence													
Urban	91.0	1.5	1.2	1.3	0.0	0.0	1.4	4.5	0.1	0.0	3748	1.0	1371
Rural	91.2	0.4	0.4	4.5	0.1	0.0	1.8	2.4	0.0	0.2	9617	0.6	4253
Main source of drinking water													
Improved	89.8	0.8	1.1	4.3	0.2	0.0	1.9	3.5	0.1	0.0	7742		
Unimproved	93.0	0.6	0.0	2.7	0.0	0.0	1.5	2.3	0.1	0.3	5624	0.7	5624
Education of household head													
None	95.9	0.0	0.0	3.2	0.0	0.0	0.0	1.3	0.0	0.0	1262	0.0	544
Non-formal	93.2	0.3	0.1	3.3	0.2	0.0	1.7	1.5	0.1	0.1	6747	0.7	3172
Primary	89.2	0.3	2.6	4.5	0.0	0.0	2.8	2.4	0.0	0.0	1562	0.3	591
Secondary	88.4	1.7	1.2	3.3	0.0	0.0	0.5	5.6	0.0	0.5	2282	1.7	874
Higher	83.8	2.3	0.8	4.8	0.0	0.0	4.2	8.1	0.3	0.0	1427	0.0	417
Missing/Don't know	90.4	0.0	0.0	9.6	0.0	0.0	0.0	0.0	0.0	0.0	85	0.0	26
Wealth index quintile													
Poorest	94.5	0.2	0.0	4.0	0.0	0.0	0.9	0.8	0.0	0.0	2672	0.3	1528
Second	90.7	0.3	0.7	6.4	0.0	0.0	1.5	0.9	0.0	0.1	2668	0.5	1316
Middle	88.8	0.4	0.7	4.6	0.4	0.0	3.0	2.8	0.2	0.0	2682	1.6	985
Fourth	90.7	0.9	1.1	2.0	0.0	0.0	2.2	5.2	0.0	0.0	2665	0.0	1002
Richest	91.0	1.9	0.9	1.3	0.0	0.0	1.0	5.3	0.1	0.4	2678	1.8	792
Ethnicity of household head													
Hausa	91.3	0.6	0.7	3.6	0.1	0.0	1.8	2.8	0.1	0.0	13081	0.5	5462
Igbo	(78.1)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(21.9)	(0.0)	(0.0)	44	(0.0)	29
Yoruba	(100.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	26	(*)	16
Other ethnic group	80.0	6.6	0.0	8.0	0.0	0.0	0.0	8.6	0.0	5.1	214	12.1	117

¹ MICS indicator 4.2 - Water treatment

na: not applicable

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table WS.3: Time to source of drinking water

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, Nigeria, 2016-17 Kano State

Improved and unimproved drinking water sources, Nigeria, 2010-11: Kano State										
	Time to source of drinking water								Total	Number of household members
	Users of improved drinking water sources				Users of unimproved drinking water sources					
	Less than 30 minutes	30 minutes or more	Missing/Don't know		Less than 30 minutes	30 minutes or more	Missing/Don't know			
Total	20.9	27.2	5.7	4.1	18.5	14.5	2.5	6.6	100.0	13365
Senatorial District										
Kano Central	26.4	28.7	4.4	3.3	10.5	11.9	2.4	12.4	100.0	5772
Kano North	23.1	27.5	9.5	4.1	17.7	12.3	3.2	2.6	100.0	3431
Kano South	11.4	24.8	4.5	5.3	30.2	20.0	2.0	1.8	100.0	4162
Residence										
Urban	31.0	23.6	5.4	3.4	6.3	11.4	3.0	15.9	100.0	3748
Rural	16.9	28.6	5.8	4.4	23.2	15.8	2.3	2.9	100.0	9617
Education of household head										
None	20.5	27.5	3.6	5.3	18.9	18.4	0.6	5.2	100.0	1262
Non-formal	13.2	29.6	5.2	5.0	23.1	14.1	2.9	7.0	100.0	6747
Primary	22.8	27.0	10.8	1.6	16.3	15.3	1.2	5.0	100.0	1562
Secondary	29.1	22.2	7.4	3.0	11.2	17.0	3.8	6.3	100.0	2282
Higher	43.4	21.7	2.1	3.5	10.4	8.8	1.7	8.3	100.0	1427
Missing/Don't know	3.7	66.3	0.0	0.0	20.8	4.5	0.0	4.6	100.0	85
Wealth index quintile										
Poorest	7.1	24.9	5.8	4.9	26.6	21.4	4.7	4.5	100.0	2672
Second	14.2	25.4	7.6	3.5	25.7	20.2	2.1	1.3	100.0	2668
Middle	19.3	34.8	4.3	4.9	19.4	13.2	0.8	3.4	100.0	2682
Fourth	17.6	33.6	6.5	4.8	16.0	11.7	1.9	8.0	100.0	2665
Richest	46.1	17.4	4.4	2.5	4.7	6.2	3.0	15.7	100.0	2678
Ethnicity of household head										
Hausa	21.0	27.4	5.7	4.2	18.6	14.5	2.3	6.3	100.0	13081
Igbo	(28.4)	(0.0)	(5.9)	(0.0)	(29.1)	(13.2)	(0.0)	(23.4)	100.0	44
Yoruba	(32.3)	(7.5)	(0.0)	(0.0)	(35.5)	(9.1)	(15.7)	(0.0)	100.0	26
Other ethnic group	13.3	23.1	8.7	0.0	6.1	18.9	10.7	19.3	100.0	214

() Sample data are based on 25-49 unweighted cases

Table WS.4: Person collecting water

Percentage of households without drinking water on premises, and percent distribution of households without drinking water on premises according to the person usually collecting drinking water used in the household, Nigeria, 2016-17 Kano State

	Percentage of households without drinking water on premises	Number of households	Person usually collecting drinking water							Number of households without drinking water on premises
			Adult woman	Adult man	Female child under age 15	Male child under age 15	Missing	Don't know	Total	
Total	62.3	1867	19.5	48.1	8.8	17.8	3.7	2.1	100.0	1164
Senatorial District										
Kano Central	64.1	786	15.6	47.7	6.7	18.6	7.4	4.0	100.0	503
Kano North	61.3	527	21.7	48.8	10.5	16.5	1.5	1.0	100.0	323
Kano South	60.9	554	23.3	48.2	10.2	17.8	0.2	0.2	100.0	337
Residence										
Urban	63.6	500	12.6	49.7	3.8	16.6	11.2	6.1	100.0	318
Rural	61.9	1367	22.1	47.5	10.7	18.2	0.9	0.5	100.0	846
Education of household head										
None	68.0	196	25.2	31.0	12.0	27.2	2.8	1.9	100.0	133
Non-formal	63.5	915	21.9	47.2	9.8	16.8	3.4	0.8	100.0	581
Primary	63.6	222	21.6	51.7	9.2	13.3	2.5	1.6	100.0	141
Secondary	61.8	325	11.5	54.8	6.1	17.6	5.7	4.3	100.0	201
Higher	49.7	194	11.7	56.7	3.6	17.4	4.8	5.7	100.0	96
Missing/ Don't know	73.7	15	12.1	60.7	6.6	20.6	0.0	0.0	100.0	11
Wealth index quintile										
Poorest	68.1	382	28.7	41.9	13.2	15.8	0.0	0.4	100.0	260
Second	62.3	376	21.3	45.8	11.1	19.9	2.0	0.0	100.0	234
Middle	61.6	385	18.5	45.3	10.6	22.1	1.9	1.5	100.0	237
Fourth	68.9	365	14.4	56.8	4.5	15.0	7.1	2.2	100.0	251
Richest	50.3	360	12.4	51.9	3.0	16.2	8.9	7.6	100.0	181
Ethnicity of household head										
Hausa	62.1	1818	19.6	48.3	8.8	17.7	3.8	1.8	100.0	1129
Igbo	(*)	7	(*)	(*)	(*)	(*)	(*)	(*)	100.0	4
Yoruba	(*)	6	(*)	(*)	(*)	(*)	(*)	(*)	100.0	2
Other ethnic group	(77.5)	37	(14.7)	(48.6)	(9.2)	(18.8)	(0.0)	(8.7)	100.0	29

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Use of Improved Sanitation

Table WS.5: Types of sanitation facilities

Percent distribution of household population according to type of toilet facility used by the household, Nigeria, 2016-17 Kano State

	Type of toilet facility used by household													Total	Number of household members
	Improved sanitation facility							Unimproved sanitation facility							
	Flush/Pour flush to:				Ventilated improved pit latrine	Pit latrine with slab	Composting toilet	Flush/Pour flush to somewhere else	Pit latrine without slab/ open pit	Bucket	Other	Open defecation (no facility, bush, field)			
	Piped sewer system	Septic tank	Pit latrine	Unknown place/not sure/Don't Know where											
Total	4.6	6.3	15.9	0.3	1.3	30.3	4.6	1.1	30.9	0.0	0.0	4.6	100.0	13365	
Senatorial District															
Kano Central	9.8	12.7	26.2	0.2	1.5	31.5	0.2	2.1	15.4	0.0	0.0	0.5	100.0	5772	
Kano North	1.1	0.8	2.7	0.0	0.9	38.6	14.8	0.4	31.4	0.2	0.2	9.0	100.0	3431	
Kano South	0.4	2.1	12.6	0.5	1.3	21.8	2.3	0.3	51.9	0.0	0.0	6.9	100.0	4162	
Residence															
Urban	13.8	15.7	27.0	0.4	2.4	28.6	1.5	2.6	8.1	0.0	0.0	0.0	100.0	3748	
Rural	1.1	2.7	11.6	0.2	0.8	31.0	5.8	0.5	39.8	0.1	0.1	6.5	100.0	9617	
Education of household head															
None	1.2	7.8	5.9	0.0	1.4	22.3	7.1	0.6	46.1	0.0	0.4	7.3	100.0	1262	
Non-formal	1.7	2.4	16.7	0.0	0.9	30.3	3.3	1.2	36.6	0.1	0.0	6.8	100.0	6747	
Primary	2.2	0.9	9.5	2.1	1.0	37.0	9.3	0.4	35.4	0.0	0.0	2.1	100.0	1562	
Secondary	7.2	14.8	23.8	0.0	1.7	29.8	5.1	1.3	15.1	0.0	0.0	1.3	100.0	2282	
Higher	20.2	16.3	16.4	0.0	2.7	29.4	3.0	1.5	10.4	0.0	0.0	0.0	100.0	1427	
Missing/Don't know	0.0	0.0	0.0	0.0	0.0	56.4	0.0	0.0	35.3	0.0	0.0	8.2	100.0	85	
Wealth index quintile															
Poorest	0.0	0.0	8.1	0.0	0.0	22.7	2.4	0.0	50.3	0.0	0.2	16.3	100.0	2672	
Second	0.0	0.2	12.6	0.7	0.6	28.8	5.4	0.4	45.7	0.2	0.1	5.3	100.0	2668	
Middle	0.1	2.4	14.6	0.0	1.3	32.7	9.2	0.3	38.3	0.0	0.0	1.2	100.0	2682	
Fourth	1.8	4.6	22.1	0.0	1.7	46.3	4.9	0.9	17.3	0.0	0.0	0.4	100.0	2665	
Richest	21.2	24.4	22.2	0.5	2.8	21.0	1.1	3.9	2.8	0.0	0.0	0.0	100.0	2678	
Ethnicity of household head															
Hausa	4.5	6.3	16.0	0.3	1.2	30.3	4.7	1.0	31.0	0.0	0.0	4.7	100.0	13081	
Igbo	(0.0)	(.0)	(40.3)	(0.0)	(0.0)	(17.4)	(0.0)	(13.2)	(21.9)	(0.0)	(0.0)	(7.2)	100.0	44	
Yoruba	(27.0)	(14.4)	(0.0)	(0.0)	(0.0)	(15.7)	(0.0)	(0.0)	(42.9)	(0.0)	(0.0)	(0.0)	100.0	26	
Other ethnic group	9.4	7.5	9.3	0.0	5.5	34.9	0.0	3.6	26.2	0.0	0.0	3.6	100.0	214	

() Sample data are based on 25-49 unweighted cases

Table WS.6: Use and sharing of sanitation facilities

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, Nigeria, 2016-17 Kano State

State	Users of improved sanitation facilities					Users of unimproved sanitation facilities				Open defecation (no facility, bush, field)	Total	Number of household members
	Not shared ¹	Public facility	Shared by		Missing/Don't know	Not shared	Public facility	Shared by				
			5 households or less	More than 5 households				5 households or less	More than 5 households			
Total	55.1	0.8	5.9	1.6	0.1	26.3	0.3	4.5	1.0	4.6	100.0	13365
Senatorial District												
Kano Central	73.0	0.2	7.1	1.7	0.1	15.0	0.4	1.6	0.4	0.5	100.0	5772
Kano North	50.8	1.3	4.4	2.3	0.0	27.8	0.0	3.7	0.7	9.0	100.0	3431
Kano South	33.8	1.1	5.4	0.7	0.0	40.7	0.5	9.0	2.1	6.9	100.0	4162
Residence												
Urban	80.4	0.3	8.2	0.6	0.0	7.1	0.2	3.2	0.2	0.0	100.0	3748
Rural	45.2	0.9	4.9	1.9	0.1	33.8	0.4	5.0	1.3	6.5	100.0	9617
Education of household head												
None	37.5	0.4	6.0	1.7	0.0	39.7	0.0	7.2	0.2	7.3	100.0	1262
Non-formal	46.8	1.0	5.8	1.6	0.1	30.6	0.3	5.8	1.2	6.8	100.0	6747
Primary	55.1	0.5	3.9	2.7	0.0	31.0	1.6	1.7	1.4	2.1	100.0	1562
Secondary	71.7	0.6	9.2	0.9	0.0	12.7	0.0	2.8	0.8	1.3	100.0	2282
Higher	84.2	0.4	2.4	1.1	0.0	9.9	0.0	1.7	0.3	0.0	100.0	1427
Missing/Don't know	42.6	0.0	13.9	0.0	0.0	35.3	0.0	0.0	0.0	8.2	100.0	85
Wealth index quintile												
Poorest	26.6	1.6	4.0	0.7	0.3	41.6	0.7	6.6	1.6	16.3	100.0	2672
Second	40.4	0.5	5.0	2.5	0.0	39.0	0.0	5.5	1.9	5.3	100.0	2668
Middle	51.3	0.9	5.9	2.1	0.0	31.3	0.7	5.4	1.1	1.2	100.0	2682
Fourth	70.3	0.4	8.4	2.4	0.0	15.0	0.0	3.2	0.0	0.4	100.0	2665
Richest	86.8	0.4	6.1	0.1	0.0	4.5	0.2	1.7	0.3	0.0	100.0	2678
Ethnicity of household head												
Hausa	55.2	0.8	5.7	1.6	0.1	26.5	0.3	4.3	0.9	4.7	100.0	13081
Igbo	(34.3)	(0.0)	(23.4)	(0.0)	(0.0)	(21.9)	(13.2)	(0.0)	(0.0)	(7.2)	100.0	44
Yoruba	(41.3)	(0.0)	(15.7)	(0.0)	(0.0)	(42.9)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	26
Other ethnic group	55.3	0.9	10.4	0.0	0.0	8.7	0.0	15.8	5.4	3.6	100.0	214

¹ MICS indicator 4.3; MDG indicator 7.9 - Use of improved sanitation

() Sample data are based on 25-49 unweighted cases

Table WS.7: Drinking water and sanitation ladders

Percentage of household population by drinking water and sanitation ladders, Nigeria, 2016-17 Kano State

	Percentage of household population using:										Number of household members
	Improved drinking water ^{1, a}			Total	Improved sanitation ²	Unimproved sanitation			Total	Improved drinking water sources and improved sanitation	
	Piped into dwelling, plot or yard	Other improved	Unimproved drinking water			Shared improved facilities	Unimproved facilities	Open defecation			
Total	7.8	50.1	42.1	100.0	55.1	8.2	32.0	4.6	100.0	33.8	13365
Senatorial District											
Kano Central	13.2	49.6	37.2	100.0	73.0	9.1	17.4	0.5	100.0	46.1	5772
Kano North	7.8	56.3	35.9	100.0	50.8	8.0	32.2	9.0	100.0	35.0	3431
Kano South	0.2	45.7	54.0	100.0	33.8	7.1	52.2	6.9	100.0	15.6	4162
Residence											
Urban	14.5	48.9	36.6	100.0	80.4	9.0	10.6	0.0	100.0	52.8	3748
Rural	5.2	50.6	44.2	100.0	45.2	7.9	40.4	6.5	100.0	26.3	9617
Education of household head											
None	7.3	49.5	43.1	100.0	37.5	8.1	47.1	7.3	100.0	24.4	1262
Non-formal	5.1	47.9	47.0	100.0	46.8	8.5	37.9	6.8	100.0	24.7	6747
Primary	6.0	56.2	37.8	100.0	55.1	7.0	35.8	2.1	100.0	35.4	1562
Secondary	8.6	53.1	38.3	100.0	71.7	10.7	16.3	1.3	100.0	46.7	2282
Higher	22.2	48.6	29.2	100.0	84.2	3.8	11.9	0.0	100.0	62.5	1427
Missing/Don't know	0.0	70.1	29.9	100.0	42.6	13.9	35.3	8.2	100.0	33.1	85
Wealth index quintile											
Poorest	1.0	41.8	57.2	100.0	26.6	6.6	50.5	16.3	100.0	10.1	2672
Second	5.0	45.7	49.3	100.0	40.4	8.0	46.3	5.3	100.0	21.2	2668
Middle	5.7	57.5	36.7	100.0	51.3	8.9	38.6	1.2	100.0	33.8	2682
Fourth	5.4	57.0	37.6	100.0	70.3	11.1	18.2	0.4	100.0	41.4	2665
Richest	21.8	48.6	29.6	100.0	86.8	6.6	6.6	0.0	100.0	62.3	2678
Ethnicity of household head											
Hausa	7.8	50.5	41.8	100.0	55.2	8.1	32.1	4.7	100.0	33.9	13081
Igbo	(0.0)	(34.3)	(65.7)	(100.0)	(34.3)	(23.4)	(35.1)	(7.2)	100.0	(34.3)	44
Yoruba	(27.0)	(12.8)	(60.3)	(100.0)	(41.3)	(15.7)	(42.9)	(0.0)	100.0	(32.3)	26
Other ethnic group	6.6	38.5	54.9	100.0	55.3	11.3	29.8	3.6	100.0	25.2	214

¹ MICS indicator 4.1; MDG indicator 7.8 - Use of improved drinking water sources² MICS indicator 4.3; MDG indicator 7.9 - Use of improved sanitation^a Those indicating bottled water as the main source of drinking water are distributed according to the water source used for other purposes such as cooking and hand washing.

() Sample data are based on 25-49 unweighted cases

Table WS.8: 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, Nigeria, 2016-17 Kano State

	Place of disposal of child's faeces										Percentage of children whose last stools were disposed of safely ¹	Number of children age 0-2 years
	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	Don't know	Missing	Total		
Total	27.8	55.4	6.2	7.1	1.7	0.7	0.7	0.3	0.1	100.0	83.3	1537
Type of sanitation facility used by household members												
Improved	30.2	55.4	6.2	5.4	0.8	0.4	1.0	0.4	0.1	100.0	85.6	940
Unimproved	25.3	59.5	6.7	7.6	0.5	0.3	0.2	0.0	0.0	100.0	84.8	524
Open defecation	15.8	26.5	2.0	26.5	21.2	6.9	1.1	0.0	0.0	100.0	42.3	73
Senatorial District												
Kano Central	32.5	54.1	5.9	4.1	0.8	0.4	1.4	0.7	0.2	100.0	86.5	570
Kano North	23.0	51.5	4.5	15.0	3.5	1.7	0.8	0.0	0.0	100.0	74.5	435
Kano South	26.9	60.1	7.8	4.0	1.1	0.2	0.0	0.0	0.0	100.0	86.9	533
Residence												
Urban	32.1	52.4	6.9	4.3	0.4	0.2	2.2	1.1	0.3	100.0	84.5	351
Rural	26.6	56.3	6.0	8.0	2.0	0.8	0.3	0.0	0.0	100.0	82.9	1186
Mother's education												
None	26.1	46.1	9.2	10.3	4.2	1.4	1.5	1.1	0.0	100.0	72.3	264
Non-formal	26.0	58.2	6.4	6.3	1.5	0.9	0.7	0.0	0.0	100.0	84.2	764
Primary	36.0	54.2	3.1	5.7	1.1	0.0	0.0	0.0	0.0	100.0	90.2	229
Secondary	28.6	57.3	6.1	6.6	0.0	0.0	0.9	0.5	0.0	100.0	85.9	240
Higher	(24.1)	(58.7)	(0.0)	(14.7)	(0.0)	(0.0)	(0.0)	(0.0)	(2.6)	100.0	(82.7)	40
Wealth index quintile												
Poorest	25.3	49.6	4.9	12.7	4.3	2.6	0.6	0.0	0.0	100.0	74.9	307
Second	25.6	56.5	7.5	6.8	2.3	0.8	0.5	0.0	0.0	100.0	82.1	329
Middle	28.6	57.1	6.5	7.8	0.0	0.0	0.0	0.0	0.0	100.0	85.6	328
Fourth	26.6	57.7	7.1	4.4	1.5	0.0	1.8	0.9	0.0	100.0	84.3	306
Richest	34.0	56.2	4.6	3.5	0.0	0.0	0.9	0.4	0.4	100.0	90.2	268
Ethnicity of household head												
Hausa	28.2	55.4	6.0	7.2	1.6	0.6	0.8	0.3	0.0	100.0	83.5	1506
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	8
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	4
Other ethnic group	(27.0)	(76.8)	(1.5)	(6.0)	(3.4)	(9.2)	(0.0)	(0.0)	(0.0)	100.0	(79.9)	20

¹ MICS indicator 4.4 - Safe disposal of child's faeces

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Handwashing

Table WS.9: Water and soap at place for handwashing

Percentage of households where place for handwashing was observed, percentage with no specific place for handwashing, and percent distribution of households by availability of water and soap at specific place for handwashing, Nigeria, 2016-17 Kano State

	Percentage of households:			Place for handwashing observed							No specific place for handwashing in the dwelling, yard, or plot	Total	Percentage of households with a specific place for handwashing where water and soap or other cleansing agent are present ¹	Number of households where place for handwashing was observed or with no specific place for handwashing in the dwelling, yard, or plot
	Where place for handwashing was observed	With no specific place for handwashing in the dwelling, yard, or plot	Number of households	Water is available and:			Water is not available and:							
				Soap present	No soap:		Soap present	No soap:						
					Ash, mud, or sand present	No other cleansing agent present		Ash, mud, or sand present	No other cleansing agent present					
Total	43.6	50.8	1867	15.9	0.4	9.9	2.1	0.2	17.8	53.8	100.0	16.3	1763	
Senatorial District														
Kano Central	57.9	35.0	786	29.0	0.6	11.7	3.4	0.3	17.4	37.7	100.0	29.6	731	
Kano North	34.6	58.8	527	7.8	0.2	4.9	1.7	0.0	22.5	62.9	100.0	8.0	492	
Kano South	31.8	65.7	554	5.5	0.3	12.1	0.6	0.2	13.9	67.3	100.0	5.7	540	
Residence														
Urban	63.2	28.3	500	34.1	0.8	11.8	4.0	0.4	18.0	30.9	100.0	34.9	457	
Rural	36.4	59.1	1367	9.5	0.3	9.3	1.4	0.1	17.7	61.8	100.0	9.7	1306	
Education of household head														
None	45.9	43.5	196	6.6	0.0	16.7	0.6	0.0	27.4	48.7	100.0	6.6	175.6	
Non-formal	36.5	58.3	915	8.6	0.2	9.2	2.1	0.2	18.2	61.5	100.0	8.8	867	
Primary	38.7	55.6	222	10.7	0.0	9.2	2.4	0.0	18.7	59.0	100.0	10.7	209	
Secondary	55.9	40.8	325	26.9	0.9	9.7	2.8	0.0	17.5	42.2	100.0	27.8	314	
Higher	59.8	34.4	194	45.5	1.2	8.4	1.4	0.5	6.4	36.6	100.0	46.7	182	
Missing/Don't know	43.4	50.2	15	27.1	0.0	5.1	5.6	0.0	8.6	53.6	100.0	27.1	14	
Wealth index quintile														
Poorest	28.8	66.2	382	2.7	0.3	6.5	0.8	0.3	19.8	69.7	100.0	3.0	362	
Second	29.8	65.0	376	4.1	0.3	8.8	1.0	0.0	17.3	68.6	100.0	4.3	356	
Middle	42.7	53.5	385	10.8	0.0	7.4	2.7	0.0	23.4	55.6	100.0	10.8	371	
Fourth	52.9	42.3	365	19.0	0.4	13.9	4.1	0.0	18.1	44.4	100.0	19.5	347	
Richest	65.3	25.5	360	45.6	1.1	13.6	1.7	0.6	9.2	28.1	100.0	46.7	327	
Ethnicity of household head														
Hausa	43.8	50.8	1818	15.7	0.4	10.0	2.1	0.2	17.8	53.7	100.0	16.1	1720	
Igbo	(*)	(*)	7	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	6	
Yoruba	(*)	(*)	6	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	4	
Other ethnic group	(32.9)	(56.1)	37	(17.2)	(0.0)	(3.7)	(0.0)	(0.0)	(16.1)	(63.0)	100.0	(17.2)	33	
¹ MICS indicator 4.5 - Place for handwashing														

¹ MICS indicator 4.5 - Place for handwashing

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table WS.10: Availability of soap or other cleansing agent

Percent distribution of households by availability of soap or other cleansing agent in the dwelling, Nigeria, 2016-17 Kano State

	Place for handwashing observed				Place for handwashing not observed			Total	Percentage of households with soap or other cleansing agent anywhere in the dwelling ¹	Number of households
	Soap or other cleansing agent observed	Soap or other cleansing agent not observed at place for handwashing			Soap or other cleansing agent shown	No soap or other cleansing agent in household	Not able/Does not want to show soap or other cleansing agent			
Total	17.5	11.4	12.6	2.2	16.4	35.2	4.8	100.0	45.3	1867
Senatorial District										
Kano Central	30.9	11.1	13.5	2.4	14.8	22.3	4.9	100.0	56.9	786
Kano North	9.0	10.3	14.4	1.0	19.6	43.9	1.9	100.0	38.9	527
Kano South	6.4	12.9	9.4	3.1	15.5	45.2	7.5	100.0	34.8	554
Residence										
Urban	36.0	12.8	12.6	1.8	14.0	18.2	4.6	100.0	62.7	500
Rural	10.7	10.9	12.5	2.3	17.3	41.4	4.9	100.0	38.9	1367
Education of household head										
None	6.5	27.1	10.3	2.1	14.7	33.0	6.4	100.0	48.3	196
Non-formal	10.5	8.2	14.7	3.1	16.6	42.3	4.6	100.0	35.3	915
Primary	12.4	12.6	12.1	1.6	19.3	35.9	6.1	100.0	44.3	222
Secondary	29.6	13.5	11.3	1.4	16.3	24.9	2.9	100.0	59.4	325
Higher	45.9	5.6	8.4	0.0	11.8	22.5	5.9	100.0	63.2	194
Missing/Don't know	30.7	12.8	0.0	0.0	40.5	8.3	7.7	100.0	83.9	15
Wealth index quintile										
Poorest	3.9	8.9	13.9	2.2	15.6	50.8	4.8	100.0	28.3	382
Second	5.1	10.0	11.3	3.3	18.7	45.6	5.9	100.0	33.8	376
Middle	13.1	12.4	15.6	1.7	20.8	32.4	4.1	100.0	46.2	385
Fourth	22.4	16.1	12.4	2.0	13.5	29.2	4.4	100.0	52.1	365
Richest	44.5	9.7	9.3	1.8	13.0	17.0	4.8	100.0	67.2	360
Ethnicity of household head										
Hausa	17.4	11.4	12.7	2.3	16.1	35.1	4.9	100.0	45.0	1818
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	7
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	6
Other ethnic group	(15.3)	(12.9)	(4.7)	(0.0)	(30.4)	(36.6)	(0.0)	100.0	(58.6)	37

¹ MICS indicator 4.6 - Availability of soap or other cleansing agent

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Safely managed drinking water services

Safe drinking water is a human right and a basic requirement for good health. Microbiological contamination of drinking water can lead to diarrhoea diseases including shigellosis and cholera. Other pathogens in drinking water can cause hepatitis, typhoid, and polio myelitis. Drinking water can also be contaminated with chemicals with harmful effects on human health.

The global indicator for tracking progress towards the SDG drinking water target (SDG 6.1) is use of 'safely managed drinking water services', defined as an improved drinking water source that is accessible on premises, available when needed and free from contamination¹⁵. This represents a much more ambitious service level for drinking water services than the 'improved source' indicator used during the MDGs. The Kano-Nigeria MICS 2016-17 recorded whether households used sources located on premises, whether water sources provided water every day in the last two weeks and also included direct measurement of microbiological quality of drinking water at both the source and the household level.

The bacteria species *Escherichia coli* (*E. coli*) is the most commonly recommended faecal indicator, and many countries including Nigeria have set a standard that no *E. coli* should be found in a 100 mL sample of drinking water. *E. coli* was measured in the field by MICS teams by filtering 100 mL of sample through a 0.45 micron filter (Millipore Microfil®) which was then placed onto Compact Dry EC growth media plates (Nissui, Japan). A 1 mL sample was also tested from the same source directly onto a second media plate. Incubation was done using ambient temperature and incubation belts were worn at night to keep the samples near body temperature. After 24-48 hours, the number of blue colonies, signifying the presence of *E. coli* colony forming units (CFU), was recorded and classified into the following risk categories: low risk (<1 per 100 mL), medium risk (1-10 per 100 mL), high risk (11-100 per 100 mL) and very high risk (>100 per 100 mL)¹⁶. Laboratory staff identified by the Federal Ministry of Water Resources trained field teams and conducted field visits to as part of the quality assurance for the water quality module.

Tables WQ.1 and WQ.2 report the levels of contamination of drinking water from a glass within the home and from water sample obtained from the water source. Table WQ.3 combines information on the quality, availability and location of drinking water sources to provide first estimates of safely managed drinking water services for Nigeria.

¹⁵ WHO/UNICEF Joint Monitoring Programme for Water Supply, Sanitation and Hygiene (2017), Progress on Drinking Water, Sanitation and Hygiene: 2017 Update and SDG baseline.

¹⁶ Adapted from WHO drinking water quality guidelines, 4th Ed. (2011), *E. coli* coliform counts are divided into risk categories based on probability of infection of diarrheal disease. Note, this classification does not take account of the sanitary inspection.

Table WQ.1: Quality of source of drinking water

Percent distribution of household population according to faecal contamination risk as assessed by levels of E. coli in source of drinking water, and percent of household population with E. coli in drinking water source Nigeria, 2016-17 Kano State

	Low (<1 per 100 mL)	Moderate (1-10 per 100 mL)	High (11-100 per 100 mL)	Very high (>100 per 100 mL)	Total	Number of household members
Total	12.0	16.8	30.1	41.1	100.0	639
Residence						
Urban	3.5	15.5	70.7	10.3	100.0	176
Rural	15.2	17.3	14.6	52.8	100.0	463
Senatorial District						
Kano Central	6.2	11.4	50.0	32.5	100.0	284
Kano North	17.4	13.6	17.8	51.2	100.0	131
Kano South	16.2	25.5	12.1	46.2	100.0	224
Main source of drinking water						
Piped water	4.7	11.0	50.6	33.8	100.0	101
Tubewell /borehole	25.9	35.4	32.7	6.0	100.0	272
Protected wells and springs	0.0	0.0	40.8	59.2	100.0	32
Unprotected wells and springs	0.0	0.0	14.7	85.3	100.0	227
Sachet and bottled water	100.0	0.0	0.0	0.0	100.0	2
Other	0.0	0.0	100.0	0.0	100.0	6
Education of household head						
None	0.0	0.0	31.8	68.2	100.0	19
Non-formal	10.5	18.9	30.3	40.3	100.0	410
Primary	0.0	48.7	13.7	37.7	100.0	56
Secondary	29.4	2.7	42.4	25.5	100.0	99
Higher	8.4	0.0	22.7	68.9	100.0	56
Wealth index quintile						
Poorest	11.8	8.2	13.7	66.2	100.0	124
Second	16.8	7.4	9.5	66.2	100.0	113
Middle	10.5	32.6	32.2	24.7	100.0	90
Fourth	13.6	23.6	26.7	36.2	100.0	202
Richest	5.7	10.7	73.8	9.8	100.0	110
Ethnicity of household head						
Hausa	11.9	16.5	30.5	41.0	100.0	629
Yoruba	100.0	0.0	0.0	0.0	100.0	2
Other ethnic group	0.0	40.3	0.0	59.7	100.0	8

Table WQ.2: Quality of household drinking water

Percent distribution of household population according to faecal contamination risk as assessed by levels of E. coli in household drinking water, and percent of household population with E. coli in drinking water Nigeria, 2016-17 Kano State

	Low (<1 per 100 mL)	Moderate (1-10 per 100 mL)	High (11-100 per 100 mL)	Very high (>100 per 100 mL)	Total	Number of household members
Total	3.0	1.8	29.2	66.0	100.0	639
Residence						
Urban	2.8	5.1	48.2	43.8	100.0	189
Rural	3.1	.4	21.2	75.3	100.0	450
Senatorial District						
Kano Central	1.7	3.1	36.4	58.8	100.0	315
Kano North	0.0	0.0	17.3	82.7	100.0	107
Kano South	6.4	.8	24.7	68.2	100.0	217
Main source of drinking water						
Piped water	4.2	2.5	58.2	35.0	100.0	95
Tubewell/borehole	5.2	.9	33.9	60.1	100.0	270
Protected wells and springs	0.0	0.0	31.4	68.6	100.0	38
Unprotected wells and springs	0.0	.8	12.5	86.8	100.0	222
Sachet and bottled water	21.3	78.7	0.0	0.0	100.0	6
Other	0.0	0.0	0.0	100.0	100.0	7
Education of household head						
None	0.0	0.0	0.0	100.0	100.0	22
Non-formal	0.0	.6	29.3	70.2	100.0	413
Primary	28.5	3.4	0.0	68.0	100.0	49
Secondary	1.3	7.2	50.8	40.6	100.0	101
Higher	7.4	0.0	26.9	65.8	100.0	55
Wealth index quintile						
Poorest	0.0	0.0	15.9	84.1	100.0	125
Second	0.0	0.0	8.0	92.0	100.0	118
Middle	0.0	2.0	46.9	51.1	100.0	83
Fourth	6.9	1.2	30.5	61.4	100.0	201
Richest	4.8	6.6	51.3	37.3	100.0	111
Ethnicity of household head						
Hausa	2.9	1.0	30.0	66.1	100.0	623
Igbo	0.0	100.0	0.0	0.0	100.0	5
Yoruba	100.0	0.0	0.0	0.0	100.0	1
Other ethnic group	0.0	0.0	0.0	100.0	100.0	10

Table WQ.3: Safely managed drinking water services

Percent distribution of household population with drinking water accessible on premises, available when needed, and free from faecal contamination, for users of improved and unimproved drinking water sources, Nigeria, 2016-17 Kano State

	Main source of drinking water						Percentage of household members with an improved drinking water source located on premises, free of E. coli and available when needed [1]	Number of household members with information on water quality
	Improved sources			Unimproved sources				
	Percent of household members without E. coli in drinking water source	Percentage of household population with drinking water available every day in last two weeks	Percentage of household population with drinking water accessible on premises	Percent of household members without E. coli in drinking water source	Percentage of household population with drinking water available every day in last two weeks	Percentage of household population with drinking water accessible on premises		
Total	18.9	79.6	11.7	0.0	96.5	47.1	0.2	639
Residence								
Urban	3.7	74.3	12.3	0.0	100.0	0.0	0.9	176
Rural	29.8	83.4	11.3	0.0	96.4	48.3	0.0	463
Senatorial District								
Kano Central	8.9	77.7	13.2	0.0	100.0	43.9	0.6	284
Kano North	34.5	82.3	15.3	0.0	100.0	40.1	0.0	131
Kano South	25.3	80.8	8.0	0.0	90.0	56.3	0.0	224
Main source of drinking water								
Piped water	4.7	35.7	22.7				0.0	101
Tubewell/borehole	25.9	93.2	3.9				0.0	272
Protected wells and springs	0.0	100.0	39.2				0.0	32
Unprotected wells and springs				0.0	96.4	48.3	0.0	227
Sachet and bottled water	100.0	100.0	100.0				100.0	2
Other				0.0	100.0	0.0	0.0	6
Education of household head								
None	0.0	0.0	0.0	0.0	48.9	62.0	0.0	19
Non-formal	16.3	76.4	1.9	0.0	100.0	56.5	0.0	410
Primary	0.0	100.0	9.4	0.0	100.0	91.7	0.0	56
Secondary	36.4	83.8	36.4	0.0	100.0	0.0	1.6	99
Higher	20.9	79.1	45.2	0.0	100.0	0.0	0.0	56
Wealth index quintile								
Poorest	26.2	73.3	0.0	0.0	100.0	28.3	0.0	124
Second	49.1	70.2	8.9	0.0	89.1	74.1	0.0	113
Middle	18.0	100.0	0.0	0.0	100.0	42.0	0.0	90
Fourth	17.7	91.7	15.0	0.0	100.0	41.6	0.0	202
Richest	6.0	58.2	20.0	0.0	100.0	0.0	1.4	110
Ethnicity of household head								
Hausa	18.9	80.3	11.6	0.0	96.5	47.1	0.0	629
Yoruba	100.0	100.0	100.0				100.0	2
Other ethnic group	0.0	40.3	0.0				0.0	8
[1] SDG indicator 6.1.1 - Use of safely managed drinking water sources								

[1] SDG indicator 6.1.1 - Use of safely managed drinking water sources

VIII. Reproductive Health

Fertility

Table RH.1: Fertility rates			
Adolescent birth rate, age-specific and total fertility rates, the general fertility rate, and the crude birth rate for the one-year / three-year period preceding the survey, by area, Nigeria, 2016-17 Kano State			
	Urban	Rural	Total
Age (Years)			
15-19 ¹	62	218	169
20-24	267	318	304
25-29	257	320	303
30-34	276	284	282
35-39	209	250	238
40-44	150	156	154
45-49	75	82	80
TFR^a	6.5	8.1	7.7
GFR^b	184.6	258.2	237.3
CBR^c	36.0	47.9	45.1
¹ MICS indicator 5.1; MDG indicator 5.4 - Adolescent birth rate ^a TFR: Total fertility rate expressed per woman age 15-49 years ^b GFR: General fertility rate expressed per 1,000 women age 15-49 years ^c CBR: Crude birth rate expressed per 1,000 population			

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

Adolescent birth rates and total fertility rates for the *one-year / three-year* period preceding the survey, Nigeria, 2016-17 Kano State

	Adolescent birth rate ¹ (Age-specific fertility rate for women age 15-19 years)	Total fertility rate
Total	169	7.7
Senatorial District		
Kano Central	78	6.8
Kano North	244	8.2
Kano South	241	8.3
Education		
None	268	7.6
Non-formal	255	8.3
Primary	252	9.4
Secondary	67	6.7
Higher	0	3.7
Wealth index quintile		
Poorest	241	8.0
Second	224	8.0
Middle	244	8.6
Fourth	147	8.3
Richest	45	5.7
Ethnicity of household head		
Hausa	173	7.7
Igbo	0	12.2
Yoruba	0	3.6
Other ethnics groups	75	5.4

¹ MICS indicator 5.1; MDG indicator 5.4 - Adolescent birth rate

Table RH.3: Early childbearing

Percentage of women age 15-19 years who have had a live birth, are pregnant with the first child, have begun childbearing, and who have had a live birth before age 15, and percentage of women age 20-24 years who have had a live birth before age 18, Nigeria, 2016-17 Kano State

	Percentage of women age 15-19 years who:				Number of women age 15-19 years	Percentage of women age 20-24 years who have had a live birth before age 18 ¹	Number of women age 20-24 years
	Have had a live birth	Are pregnant with first child	Have begun childbearing	Have had a live birth before age 15			
Total	19.2	4.8	24.0	4.3	586	44.3	431
Senatorial District							
Kano Central	5.3	1.4	6.8	0.3	299	30.3	165
Kano North	37.7	8.4	46.1	12.8	110	57.8	119
Kano South	31.2	8.4	39.6	5.7	177	49.1	147
Residence							
Urban	3.1	1.0	4.1	1.4	216	19.8	112
Rural	28.6	7.1	35.6	5.9	370	52.9	319
Education							
None	(40.3)	(18.0)	(58.2)	(7.7)	47	58.1	68
Non-formal	36.6	7.4	44.0	8.4	162	55.9	174
Primary	34.2	7.6	41.9	10.4	63	57.1	51
Secondary	4.1	.9	5.1	0.3	304	21.4	117
Higher	(*)	(*)	(*)	(*)	9	(*)	21
Wealth index quintile							
Poorest	32.9	11.5	44.4	12.0	72	54.8	72
Second	29.5	6.6	36.1	4.1	90	57.9	68
Middle	32.9	6.5	39.4	6.3	110	58.3	102
Fourth	12.8	3.1	15.9	3.3	155	38.9	102
Richest	4.0	1.3	5.4	0.4	159	14.6	86
Ethnicity of household head							
Hausa	19.7	5.0	24.7	4.3	566	44.9	417
Igbo	(*)	(*)	(*)	(*)	2	(*)	2
Yoruba	(*)	(*)	(*)	(*)	2	(*)	2
Other ethnics groups	(*)	(*)	(*)	(*)	16	(*)	10

¹ MICS indicator 5.2 - Early childbearing

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table RH.4: Trends in early childbearing

Percentage of women who have had a live birth, by age 15 and 18, by area and age group, Nigeria, 2016-17 Kano State

	Urban				Rural				All			
	Percentage of women with a live birth before age 15	Number of women age 15-49 years	Percentage of women with a live birth before age 18	Number of women age 20-49 years	Percentage of women with a live birth before age 15	Number of women age 15-49 years	Percentage of women with a live birth before age 18	Number of women age 20-49 years	Percentage of women with a live birth before age 15	Number of women age 15-49 years	Percentage of women with a live birth before age 18	Number of women age 20-49 years
Total	9.6	731	38.9	515	16.5	1769	52.0	1399	14.5	2500	48.5	1914
Age (Years)												
15-19	1.4	216	na	na	5.9	370	na	na	4.3	586	na	na
20-24	2.6	112	19.8	112	18.2	319	52.9	319	14.1	431	44.3	431
25-29	16.2	118	40.4	118	19.8	314	58.0	314	18.8	432	53.2	432
30-34	12.2	92	45.7	92	20.6	261	57.2	261	18.4	354	54.2	354
35-39	23.0	84	45.3	84	21.2	202	51.4	202	21.8	286	49.6	286
40-44	(17.0)	55	(46.5)	55	19.7	167	45.1	167	19.0	222	45.5	222
45-49	(10.1)	54	(45.5)	54	14.8	136	35.8	136	13.4	190	38.6	190

na: not applicable

() Sample data are based on 25-49 unweighted cases

Contraception

Table RH.5: Use of contraception

Percentage of women age 15-49 years currently married or in union who are using (or whose partner is using) a contraceptive method, Nigeria, 2016-17 Kano State

	Percent of women currently married or in union who are using (or whose partner is using):																	Number of women age 15-49 years currently married or in union
	No method	Female sterilization	Male sterilization	IUD	Injectables	Implants	Pill	Male condom	Female condom	Diaphragm /Foam/Jelly	LAM	Periodic abstinence	Withdrawal	Other	Any modern method	Any traditional method	Any method ¹	
Total	93.7	0.0	0.0	0.4	2.2	0.7	2.2	0.0	0.0	0.1	0.2	0.2	0.0	0.4	5.7	0.6	6.3	1949
Senatorial District																		
Kano Central	88.5	0.0	0.0	0.9	4.7	2.0	3.0	0.0	0.0	0.2	0.3	0.5	0.0	0.1	10.9	0.6	11.5	723
Kano North	96.3	0.0	0.0	0.2	0.2	0.0	2.2	0.0	0.0	0.0	0.0	0.0	0.0	1.1	2.6	1.1	3.7	538
Kano South	97.0	0.0	0.0	0.1	1.0	0.0	1.4	0.0	0.0	0.0	0.2	0.0	0.0	0.3	2.7	0.3	3.0	688
Residence																		
Urban	84.9	0.0	0.0	1.4	6.9	2.9	3.1	0.0	0.0	0.0	0.4	0.2	0.0	0.2	14.8	0.4	15.1	437
Rural	96.2	0.0	0.0	0.1	0.8	0.1	2.0	0.0	0.0	0.1	0.1	0.2	0.0	0.5	3.1	0.7	3.8	1512
Age (Years)																		
15-19	97.6	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.0	0.0	0.4	0.0	0.0	1.1	1.3	1.1	2.4	180
20-24	95.8	0.0	0.0	0.0	2.0	1.0	1.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	4.2	0.0	4.2	364
25-29	94.6	0.0	0.0	0.8	1.9	0.8	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.2	5.2	0.2	5.4	410
30-34	89.9	0.0	0.0	0.6	3.9	1.0	2.8	0.0	0.0	0.3	0.6	0.7	0.0	0.2	9.2	0.9	10.1	336
35-39	92.8	0.0	0.0	0.2	2.9	0.0	2.7	0.0	0.0	0.0	0.0	0.4	0.0	0.9	5.8	1.4	7.2	277
40-44	88.8	0.0	0.0	1.0	2.3	1.8	5.2	0.0	0.0	0.0	0.0	0.0	0.0	0.8	10.3	0.8	11.2	212
45-49	97.4	0.0	0.0	0.0	0.6	0.0	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.4	2.2	0.4	2.6	170

Table RH.5: Use of contraception (continued)

Percentage of women age 15-49 years currently married or in union who are using (or whose partner is using) a contraceptive method, Nigeria, 2016-17 Kano State

	Percent of women currently married or in union who are using (or whose partner is using):																	Number of women age 15-49 years currently married or in union
	No method	Female sterilization	Male sterilization	IUD	Injectables	Implants	Pill	Male condom	Female condom	Diaphragm / Foam/Jelly	LAM	Periodic abstinence	Withdrawal	Other	Any modern method	Any traditional method	Any method ¹	
Number of living children																		
0	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	152
1	97.1	0.0	0.0	0.0	0.6	0.5	0.9	0.0	0.0	0.0	0.3	0.0	0.0	0.8	2.2	0.8	2.9	261
2	93.6	0.0	0.0	0.7	1.4	1.2	2.5	0.0	0.0	0.0	0.2	0.0	0.0	0.3	6.1	0.3	6.4	288
3	92.2	0.0	0.0	0.6	2.5	1.7	2.2	0.0	0.0	0.4	0.0	0.3	0.0	0.0	7.4	0.3	7.8	288
4+	92.2	0.0	0.0	0.4	3.0	0.5	2.8	0.0	0.0	0.0	0.2	0.3	0.0	0.6	7.0	0.8	7.8	961
Education																		
None	96.7	0.0	0.0	0.0	0.9	0.4	1.3	0.0	0.0	0.0	0.2	0.0	0.0	0.5	2.9	0.5	3.3	392
Non-formal	97.6	0.0	0.0	0.0	0.8	0.0	1.0	0.0	0.0	0.0	0.1	0.1	0.0	0.4	1.9	0.5	2.4	985
Primary	92.5	0.0	0.0	0.0	2.6	0.0	3.5	0.0	0.0	0.0	0.7	0.5	0.0	0.3	6.8	0.7	7.5	252
Secondary	81.2	0.0	0.0	1.6	7.8	3.7	4.8	0.0	0.0	0.4	0.0	0.0	0.0	0.5	18.3	0.5	18.8	260
Higher	68.9	0.0	0.0	6.5	5.5	4.8	11.5	0.0	0.0	0.0	0.0	1.6	0.0	1.2	28.3	2.8	31.1	60
Wealth index quintile																		
Poorest	97.3	0.0	0.0	0.0	0.5	0.0	1.5	0.0	0.0	0.0	0.0	0.0	0.0	0.7	2.0	0.7	2.7	412
Second	97.1	0.0	0.0	0.0	0.2	0.0	1.9	0.0	0.0	0.0	0.2	0.3	0.0	0.4	2.3	0.7	2.9	421
Middle	97.2	0.0	0.0	0.0	1.0	0.0	1.4	0.0	0.0	0.0	0.2	0.0	0.0	0.2	2.6	0.2	2.8	406
Fourth	94.6	0.0	0.0	0.0	2.4	0.4	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.6	4.7	0.6	5.4	371
Richest	79.7	0.0	0.0	2.3	7.7	3.7	4.9	0.0	0.0	0.3	0.6	0.6	0.0	0.2	19.5	0.9	20.3	340
Ethnicity of household head																		
Hausa	93.7	0.0	0.0	0.4	2.1	0.7	2.3	0.0	0.0	0.1	0.2	0.1	0.0	0.4	5.7	0.5	6.3	1907
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	7
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	4
Other ethnics group:	(94.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(3.9)	(0.0)	(2.1)	(0.0)	(6.0)	(6.0)	31
¹ MICS indicator 5.3; MDG indicator 5.3 - Contraceptive prevalence rate																		

¹ MICS indicator 5.3; MDG indicator 5.3 - Contraceptive prevalence rate

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Unmet Need

Table RH.6: Unmet need for contraception

Percentage of women age 15-49 years currently married or in union with an unmet need for family planning and percentage of demand for contraception satisfied, Nigeria, 2016-17 Kano State									
	Met need for contraception			Unmet need for contraception			Number of women currently married or in union	Percentage of demand for contraception satisfied	Number of women currently married or in union with need for contraception
	For spacing	For limiting	Total	For spacing	For limiting	Total ¹			
Total	5.0	1.3	6.3	25.0	5.8	30.8	1,949	17.1	724
Senatorial District									
Kano Central	9.0	2.5	11.5	28.4	8.3	36.7	723	23.8	348
Kano North	2.9	0.8	3.7	19.5	4.3	23.8	538	13.5	148
Kano South	2.5	0.5	3.0	25.7	4.3	30.0	688	9.1	227
Residence									
Urban	11.3	3.8	15.1	28.7	10.5	39.2	437	27.9	238
Rural	3.2	0.6	3.8	23.9	4.4	28.3	1,512	11.8	486
Age (Years)									
15-19	2.4	0.0	2.4	19.1	1.5	20.5	180	(10.3)	41
20-24	4.2	0.0	4.2	31.0	.8	31.9	364	11.7	131
25-29	4.9	0.5	5.4	27.8	2.0	29.8	410	15.4	144
30-34	8.8	1.3	10.1	28.2	4.6	32.7	336	23.6	144
35-39	4.0	3.2	7.2	26.2	13.5	39.6	277	15.3	130
40-44	6.7	4.4	11.2	16.5	11.5	28.0	212	28.5	83
45-49	1.9	0.7	2.6	14.2	12.7	26.9	170	8.7	50
Education									
None	3.3	0.0	3.3	23.5	9.0	32.5	392	9.3	141
Non-formal	1.7	0.7	2.4	24.0	4.5	28.5	985	7.9	305
Primary	4.5	3.1	7.5	24.6	4.6	29.2	252	20.5	93
Secondary	16.4	2.4	18.8	33.0	6.2	39.2	260	32.4	151
Higher	23.4	7.7	31.1	17.4	9.5	26.8	60	(53.7)	35
Wealth index quintile									
Poorest	2.2	0.5	2.7	25.2	4.8	30.0	412	8.3	134
Second	2.7	0.2	2.9	21.8	5.1	26.9	421	9.7	126
Middle	2.1	0.7	2.8	26.7	3.7	30.4	406	8.3	134
Fourth	4.2	1.1	5.4	25.3	5.5	30.8	371	14.9	134
Richest	15.7	4.6	20.3	26.4	10.6	37.0	340	35.4	195
Ethnicity of household head									
Hausa	5.0	1.2	6.3	25.2	5.8	31.0	1,907	16.8	711
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	7	(*)	3
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	4	(*)	2
Other ethnics groups	(2.1)	(3.9)	(6.0)	(14.8)	(5.7)	(20.5)	31	(*)	8

¹ MICS indicator 5.4; MDG indicator 5.6 - Unmet need

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Antenatal Care

Table RH.7: 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, Nigeria, 2016-17 Kano State										
	Provider of antenatal care^a						No antenatal care	Total	Any skilled provider ^{1,b}	Number of women with a live birth in the last two years
	Medical doctor	Nurse/Midwife	Auxiliary midwife	Traditional birth attendant	Community health worker	Other				
Total	17.6	40.0	7.5	0.3	4.6	0.1	29.9	100.0	65.1	1087
Senatorial District										
Kano Central	31.0	46.0	2.1	0.0	3.3	0.0	17.6	100.0	79.1	393
Kano North	11.6	35.2	11.7	0.2	0.6	0.0	40.7	100.0	58.5	314
Kano South	8.8	37.7	9.6	0.6	9.3	0.2	33.9	100.0	56.1	380
Residence										
Urban	42.4	38.5	2.1	0.0	2.1	0.0	15.0	100.0	82.9	239
Rural	10.7	40.4	9.0	0.3	5.3	0.1	34.2	100.0	60.1	847
Mother's age at birth										
Less than 20	15.7	39.6	11.4	0.6	4.8	0.0	28.0	100.0	66.7	190
20-34	18.3	39.7	7.8	0.2	4.8	0.1	29.3	100.0	65.7	695
Missing	17.3	41.4	2.8	0.3	3.9	0.0	34.2	100.0	61.6	202
Education										
None	9.1	38.6	8.3	0.3	4.9	0.0	38.6	100.0	56.1	196
Non-formal	10.5	38.1	7.7	0.4	4.3	0.1	38.9	100.0	56.3	533
Primary	21.8	44.3	9.7	0.0	6.5	0.0	17.6	100.0	75.8	165
Secondary	35.7	48.2	5.0	0.0	3.7	0.0	7.5	100.0	88.9	162
Higher	79.8	12.7	0.0	0.0	3.7	0.0	3.7	100.0	(92.5)	30
Wealth index quintile										
Poorest	7.6	26.6	8.5	1.2	4.1	0.0	52.1	100.0	42.6	234
Second	7.3	40.7	7.8	0.0	4.7	0.0	39.4	100.0	55.9	228
Middle	12.7	40.5	10.4	0.0	7.5	0.3	28.7	100.0	63.6	237
Fourth	25.9	49.3	7.0	0.0	2.8	0.0	15.0	100.0	82.2	218
Richest	41.8	44.8	2.1	0.0	3.7	0.0	7.7	100.0	88.7	169
Ethnicity of household head										
Hausa	17.4	40.1	7.5	0.3	4.7	0.1	30.0	100.0	65.0	1066
Igbo	64.0	36.0	0.0	0.0	0.0	0.0	0.0		(*)	4
Yoruba	85.3	0.0	0.0	0.0	0.0	0.0	14.7	100.0	(*)	3
Other ethnics groups	10.7	38.0	9.2	0.0	0.0	0.0	42.1	100.0	(*)	14

¹ MICS indicator 5.5a; MDG indicator 5.5 - Antenatal care coverage

^a Only the most qualified provider is considered in cases where more than one provider was reported.

^b Skilled providers include *Medical doctor* and *Nurse/Midwife*.

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

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

Percent distribution 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, Nigeria, 2016-17
Kano State

	Percent distribution of women who had:						Percent distribution of women by number of months pregnant at the time of first antenatal care visit							Number of women with a live birth in the last two years who had at least one ANC visit	Median months pregnant at first ANC visit	
	No antenatal care visits	One visit	Two visits	Three visits	4 or more visits ¹	Total	No antenatal care visits	First trimester	4-5 months	6-7 months	8+ months	Missing /Don't Know	Total	Number of women with a live birth in the last two years		
Total	29.9	3.7	7.6	13.6	44.7	100.0	30.3	9.1	32.4	24.6	3.1	0.5	100.0	1087	5.0	752
Senatorial District																
Kano Central	17.6	3.5	11.1	17.0	50.1	100.0	18.5	9.9	38.1	28.2	3.9	1.3	100.0	393	5.0	315
Kano North	40.7	3.6	5.9	13.5	36.4	100.0	40.7	6.8	24.9	25.3	2.3	0.0	100.0	314	5.0	186
Kano South	33.9	3.9	5.4	10.2	45.9	100.0	33.9	10.1	32.6	20.3	3.0	0.2	100.0	380	5.0	251
Residence																
Urban	15.0	2.8	10.1	16.2	54.7	100.0	16.1	11.7	39.6	25.7	5.2	1.7	100.0	239	5.0	197
Rural	34.2	3.9	6.9	12.9	41.9	100.0	34.3	8.3	30.3	24.3	2.5	0.2	100.0	847	5.0	555
Mother's age at birth																
Less than 20	28.0	4.8	6.0	13.8	47.5	100.0	28.7	7.2	40.4	20.6	3.1	0.0	100.0	190	5.0	136
20-34	29.3	3.6	7.6	15.0	44.2	100.0	29.6	9.8	30.4	27.4	2.3	0.5	100.0	695	5.0	486
Missing	34.2	2.9	9.2	8.8	43.8	100.0	34.2	8.2	31.6	18.9	5.9	1.3	100.0	202	5.0	130
Education																
None	38.6	5.1	8.4	11.8	35.4	100.0	39.1	7.8	30.2	21.0	1.6	0.3	100.0	196	5.0	119
Non-formal	38.9	4.3	7.6	12.9	36.1	100.0	38.9	7.7	26.3	23.9	3.2	0.0	100.0	533	5.0	326
Primary	17.6	2.7	6.8	14.8	57.2	100.0	17.6	10.1	33.6	31.3	4.2	3.2	100.0	165	5.0	131
Secondary	7.5	1.0	7.8	16.4	67.3	100.0	8.3	12.1	51.6	24.9	3.2	0.0	100.0	162	5.0	148
Higher	(3.7)	(3.9)	(5.5)	(16.7)	(66.3)	100.0	(7.6)	(19.4)	(44.2)	(23.3)	(5.5)	(0.0)	100.0	30	(4.0)	28
Wealth index quintile																
Poorest	52.1	3.0	4.1	7.8	32.8	100.0	52.1	8.4	18.8	18.7	2.0	0.0	100.0	234	5.0	112
Second	39.4	4.7	4.5	11.1	39.9	100.0	39.9	7.6	28.0	21.9	2.3	0.3	100.0	228	5.0	137
Middle	28.7	4.2	11.1	13.8	41.7	100.0	28.7	8.7	29.8	30.0	2.8	0.0	100.0	237	5.0	169
Fourth	15.0	4.6	9.5	20.8	50.2	100.0	15.6	7.9	45.7	25.4	4.8	0.6	100.0	218	5.0	183
Richest	7.7	1.2	9.2	15.6	64.8	100.0	8.3	13.9	43.5	28.0	3.9	2.4	100.0	169	5.0	151
Ethnicity of household head																
Hausa	30.0	3.7	7.5	13.8	44.6	100.0	30.3	9.2	32.2	24.8	3.1	0.4	100.0	1066	5.0	738
Igbo	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	(*)	100.0	4	(*)	4
Yoruba	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	(*)	100.0	3	(*)	1
Other ethnics groups	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	(*)	100.0	14	(*)	8

¹ MICS indicator 5.5b; MDG indicator 5.5 - Antenatal care coverage

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table RH.9: 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, Nigeria, 2016-17 Kano State

	Percentage of women who, during the pregnancy of their last birth, had:				Number of women with a live birth in the last two years
	Blood pressure measured	Urine sample taken	Blood sample taken	Blood pressure measured, urine and blood sample taken ¹	
Total	58.7	55.9	56.4	49.3	1087
Senatorial District					
Kano Central	74.3	75.6	76.4	70.4	393
Kano North	44.2	38.6	38.6	32.0	314
Kano South	54.6	49.7	50.5	41.8	380
Residence					
Urban	76.2	78.0	78.7	73.6	239
Rural	53.8	49.6	50.1	42.4	847
Mother's age at birth					
Less than 20	53.9	51.0	53.6	41.6	190
20-34	60.7	57.8	58.0	51.9	695
Missing	56.2	53.9	53.7	47.7	202
Education					
None	50.4	43.6	46.4	38.3	196
Non-formal	51.6	48.1	48.9	43.0	533
Primary	63.4	60.2	59.7	48.6	165
Secondary	80.6	84.5	82.6	75.5	162
Higher	(96.3)	(96.3)	(96.3)	(96.3)	30
Wealth index quintile					
Poorest	35.8	31.5	31.4	26.0	234
Second	49.3	43.2	44.4	38.2	228
Middle	57.9	51.5	53.2	44.4	237
Fourth	74.1	75.7	76.1	66.1	218
Richest	84.3	87.2	86.4	81.8	169
Ethnicity of household head					
Hausa	58.7	56.0	56.5	49.3	1066
Igbo	(*)	(*)	(*)	(*)	4
Yoruba	(*)	(*)	(*)	(*)	3
Other ethnics groups	(*)	(*)	(*)	(*)	14

¹ MICS indicator 5.6 - Content of antenatal care

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Assistance at Delivery

Table RH.10: 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, Nigeria, 2016-17 Kano State

	Person assisting at delivery									Delivery assisted by any skilled attendant ^{1,a}	Percent delivered by C-section			Number of women who had a live birth in the last two years
	Medical doctor	Nurse/ Midwife	Auxiliary midwife	Traditional birth attendant	Community health worker	Relative /Friend	Other	No attendant	Total		Decided before onset of labour pains	Decided after onset of labour pains	Total ²	
Total	6.2	12.4	1.2	23.5	2.1	30.4	1.4	22.9	100.0	19.8	0.5	0.5	1.0	1087
Senatorial District														
Kano Central	11.6	22.6	0.5	14.6	3.4	24.6	2.0	20.6	100.0	34.7	1.3	0.9	2.2	393
Kano North	4.5	6.0	2.1	32.1	0.6	31.7	0.9	22.1	100.0	12.6	0.0	0.3	0.3	314
Kano South	2.0	7.2	1.1	25.5	2.0	35.4	1.2	25.8	100.0	10.2	0.0	0.4	0.4	380
Residence														
Urban	16.5	33.5	0.7	10.8	3.5	17.7	0.7	16.7	100.0	50.7	1.5	1.4	3.0	239
Rural	3.3	6.4	1.3	27.1	1.7	34.0	1.6	24.6	100.0	11.0	0.2	0.3	0.4	847
Mother's age at birth														
Less than 20	4.6	9.8	2.3	26.5	1.0	40.1	1.7	14.0	100.0	16.7	0.0	0.7	0.7	190
20-34	6.9	11.6	0.9	24.2	2.9	30.8	1.4	21.4	100.0	19.3	0.8	0.4	1.2	695
35-49	5.3	17.7	1.0	18.2	0.3	20.2	1.0	36.2	100.0	24.1	0.0	0.6	0.6	202
Place of delivery														
Home	1.7	3.5	0.7	27.9	1.5	36.1	1.5	26.9	100.0	6.0	0.0	0.0	0.0	913
Health facility	30.2	60.2	3.7	0.0	3.9	0.5	0.0	1.4	100.0	94.1	3.1	3.3	6.4	170
Public	29.8	59.7	4.7	0.0	4.9	0.0	0.0	0.9	100.0	94.2	3.9	3.5	7.4	136
Private	31.9	62.2	0.0	(0.0)	(0.0)	(2.6)	(0.0)	(3.3)	100.0	(94.1)	(0.0)	(2.6)	(2.6)	34
Other/Don't Know/Missing	0.0	0.0	0.0	0.0	64.8	0.0	35.2	0.0	100.0	0.0	0.0	0.0	0.0	3

Table RH.10: Assistance during delivery and caesarean section (continued)

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, Nigeria, 2016-17 Kano State

	Person assisting at delivery								Delivery assisted by any skilled attendant ^{1,a}	Percent delivered by C-section			Number of women who had a live birth in the last two years	
	Medical doctor	Nurse/ Midwife	Auxiliary midwife	Traditional birth attendant	Community health worker	Relative/Friend	Other	No attendant		Total	Decided before onset of labour pains	Decided after onset of labour pains		Total ²
Education														
None	1.6	5.9	0.0	33.6	3.2	31.6	2.0	22.1	100.0	7.5	0.0	0.0	0.0	196
Non-formal	1.8	6.5	1.2	25.0	1.9	36.5	1.3	25.8		9.5	0.0	0.2	0.2	533
Primary	6.7	13.7	1.0	25.4	0.9	22.9	0.0	29.3	100.0	21.5	0.6	0.5	1.1	165
Secondary	18.7	33.5	2.9	8.4	1.4	21.3	2.8	11.1	100.0	55.0	1.7	2.5	4.2	162
Higher	44.3	39.6	0.0	(0.0)	(7.5)	(5.5)	(0.0)	(3.1)	100.0	(83.9)	(4.7)	(0.0)	(4.7)	30
Wealth index quintile														
Poorest	0.7	4.2	1.2	35.6	1.2	34.1	0.8	22.1	100.0	6.2	0.0	0.4	0.4	234
Second	1.9	4.7	1.6	30.2	0.3	34.7	2.3	24.2	100.0	8.3	0.0	0.0	0.0	228
Middle	2.1	5.9	0.7	26.0	2.6	31.3	1.0	30.4	100.0	8.7	0.0	0.0	0.0	237
Fourth	10.7	12.7	1.2	15.4	2.7	30.7	1.8	24.8	100.0	24.6	0.7	0.6	1.3	218
Richest	19.5	42.7	1.1	4.4	4.2	17.9	1.0	9.3	100.0	63.2	2.2	2.0	4.2	169
Ethnicity of household head														
Hausa	6.0	12.1	1.2	23.4	2.1	30.8	1.4	23.0	100.0	19.2	0.5	0.4	0.9	1066
Igbo	64.0	(*)	(*)	(*)	(*)	(*)	(*)	(*)		(*)	(*)	(*)	(*)	4
Yoruba	0.0	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	3
Other ethnics groups	7.3	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	14

¹ MICS indicator 5.7; MDG indicator 5.2 - Skilled attendant at delivery

² MICS indicator 5.9 - Caesarean section

^a Skilled attendants include *Medical doctor* and *Nurse/Midwife*.

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Place of Delivery

Table RH.11: 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, Nigeria, 2016-17 Kano State

	Place of delivery					Delivered in health facility ¹	Number of women with a live birth in the last two years
	Health facility		Home	Other	Total		
	Public sector	Private sector					
Total	12.5	3.2	84.0	0.2	100.0	15.7	1087
Senatorial District							
Kano Central	21.7	7.5	70.3	0.5	100.0	29.2	393
Kano North	7.6	1.3	91.0	0.0	100.0	8.9	314
Kano South	7.1	0.2	92.5	0.0	100.0	7.3	380
Residence							
Urban	30.5	12.3	57.2	0.0	100.0	42.8	239
Rural	7.4	0.6	91.6	0.2	100.0	8.0	847
Mother's age at birth							
Less than 20	10.6	1.4	88.0	0.0	100.0	12.0	190
20-34	12.4	3.1	84.0	0.3	100.0	15.5	695
35-49	14.5	5.0	80.4	0.0	100.0	19.6	202
Number of antenatal care visits							
None	1.2	0.8	97.0	0.6	100.0	2.0	325
1-3 visits	10.3	2.4	87.3	0.0	100.0	12.7	271
4+ visits	21.1	4.9	73.9	0.0	100.0	26.1	486
Missing/Don't know	23.4	27.8	48.9	0.0	100.0	51.1	5
Education							
None	4.3	1.6	94.1	0.0	100.0	5.9	196
Non-formal	6.0	0.6	92.8	0.4	100.0	6.6	533
Primary	12.7	4.7	82.5	0.0	100.0	17.5	165
Secondary	34.7	7.6	57.7	0.0	100.0	42.3	162
Higher	(60.5)	(27.1)	(12.3)	(0.0)	100.0	(87.7)	30
Wealth index quintile							
Poorest	2.8	1.0	96.2	0.0	100.0	3.8	234
Second	4.8	0.0	94.9	0.0	100.0	4.8	228
Middle	5.9	0.7	92.3	0.9	100.0	6.6	237
Fourth	17.5	1.5	81.0	0.0	100.0	19.0	218
Richest	39.0	16.1	44.9	0.0	100.0	55.1	169
Ethnicity of household head							
Hausa	12.4	2.9	84.4	0.2	100.0	15.3	1066
Igbo	(*)	(*)	(*)	(*)	100.0	(*)	4
Yoruba	(*)	(*)	(*)	(*)	100.0	(*)	3
Other ethnics groups	(*)	(*)	(*)	(*)	100.0	(*)	14
¹ MICS indicator 5.8 - Institutional deliveries							

¹ MICS indicator 5.8 - Institutional deliveries

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table RH.12: 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, Nigeria, 2016-17 Kano State

	Duration of stay in health facility					Total	12 hours or more ¹	Number of women who had their last birth delivered in a health facility in the last 2 years
	Less than 6 hours	6-11 hours	12-23 hours	1-2 days	3 days or more			
Total	54.8	18.4	1.4	15.0	10.4	100.0	26.7	170
Senatorial District								
Kano Central	52.4	19.3	2.0	17.5	8.7	100.0	28.3	115
Kano North	(49.4)	(22.3)	(0.0)	(10.2)	(18.0)	100.0	(28.3)	28
Kano South	(70.2)	(10.8)	(0.0)	(9.4)	(9.6)	100.0	(19.0)	28
Residence								
Urban	52.1	20.4	1.2	17.3	9.0	100.0	27.5	102
Rural	59.0	15.4	1.6	11.4	12.5	100.0	25.6	68
Mother's age at birth								
Less than 20	(70.5)	(8.7)	(0.0)	(8.3)	(12.5)	100.0	(20.8)	23
20-34	50.5	19.0	2.1	16.6	11.7	100.0	30.5	108
Missing/Don't know	57.7	22.4	0.0	14.4	5.5	100.0	19.9	39
Type of health facility								
Public	53.4	19.0	1.7	14.2	11.7	100.0	27.6	136
Private	(60.3)	(16.3)	(0.0)	(18.2)	(5.2)	100.0	(23.4)	34
Type of delivery								
Vaginal birth	58.0	19.7	1.4	15.6	5.3	100.0	22.3	159
C-section	(*)	(*)	(*)	(*)	(*)	100.0	(*)	11
Education								
None	(*)	(*)	(*)	(*)	(*)	100.0	(*)	12
Non-formal	(55.0)	(19.3)	(0.0)	(21.4)	(4.3)	100.0	(25.7)	35
Primary	(58.6)	(21.4)	(0.0)	(5.8)	(14.2)	100.0	(19.9)	29
Secondary	53.0	17.0	3.4	14.0	12.7	100.0	30.0	69
Higher	(46.6)	(17.9)	(0.0)	(25.9)	(9.7)	100.0	(35.5)	26
Wealth index quintile								
Poorest	(*)	(*)	(*)	(*)	(*)	100.0	(*)	9
Second	(*)	(*)	(*)	(*)	(*)	100.0	(*)	11
Middle	(*)	(*)	(*)	(*)	(*)	100.0	(*)	16
Fourth	(54.7)	(20.9)	(0.0)	(14.2)	(10.2)	100.0	(24.5)	41
Richest	51.5	18.1	2.5	17.3	10.7	100.0	30.4	93
Ethnicity of household head								
Hausa	53.6	18.5	1.4	15.6	10.8	100.0	27.9	163
Igbo	(*)	(*)	(*)	(*)	(*)	100.0	(*)	1
Yoruba	(*)	(*)	(*)	(*)	(*)	100.0	(*)	2
Other ethnics groups	(*)	(*)	(*)	(*)	(*)	100.0	(*)	4

¹ MICS indicator 5.10 - Post-partum stay in health facility

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Post-natal Health Checks

Table RH.13: 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, Nigeria, 2016-17 Kano State

	Health check following birth while in facility or at home ^a	PNC visit for newborns ^b							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	Total		
Total	11.7	6.7	1.0	1.8	1.6	2.2	86.6	100.0	17.5	1087
Senatorial District										
Kano Central	20.7	8.6	1.9	2.5	2.0	1.7	82.9	100.0	26.3	393
Kano North	7.0	6.5	0.7	0.9	0.7	4.6	86.5	100.0	13.4	314
Kano South	6.1	4.9	0.5	1.8	1.8	0.6	90.4	100.0	11.7	380
Residence										
Urban	30.9	9.5	1.9	2.7	2.6	3.2	79.6	100.0	34.7	239
Rural	6.2	5.9	0.8	1.6	1.3	1.9	88.6	100.0	12.6	847
Mother's age at birth										
Less than 20	7.9	3.9	2.8	1.4	1.2	2.7	87.9	100.0	12.3	190
20-34	11.9	6.8	0.9	2.1	1.7	2.4	85.9	100.0	18.4	695
35-49	14.4	8.9	0.0	1.3	1.5	0.8	87.5	100.0	18.9	202
Place of delivery										
Home	2.1	4.5	1.1	1.7	1.7	2.0	88.9	100.0	8.6	913
Health facility	63.1	18.5	0.7	2.4	0.9	3.0	73.8	100.0	65.4	170
Public	58.7	17.5	0.3	1.7	1.1	2.8	76.6	100.0	61.5	136
Private	(80.7)	(22.3)	(2.1)	(5.1)	(0.0)	(4.1)	(62.7)	100.0	(80.7)	34
Other/Don't Know/Missing	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	0.0	3
Education										
None	5.3	2.3	2.1	2.0	2.9	3.1	87.4	100.0	10.7	196
Non-formal	4.5	6.0	0.2	1.3	1.4	1.5	89.5		10.8	533
Primary	13.2	9.5	0.4	0.6	1.8	2.6	85.0	100.0	19.5	165
Secondary	28.6	9.1	3.3	4.7	0.0	3.1	79.1	100.0	33.6	162
Higher	(81.4)	(19.9)	(0.0)	(0.0)	(2.4)	(0.0)	(77.7)	100.0	(81.4)	30
Wealth index quintile										
Poorest	3.7	3.6	0.2	1.9	1.5	2.2	90.7	100.0	8.4	234
Second	4.6	6.9	0.9	0.9	2.4	1.3	87.5	100.0	12.4	228
Middle	4.7	3.4	1.8	1.6	1.1	4.3	87.8	100.0	10.2	237
Fourth	10.6	6.9	0.0	1.2	1.7	0.3	90.0	100.0	16.8	218
Richest	43.2	15.0	2.7	4.1	1.1	2.7	73.6	100.0	47.7	169
Ethnicity of household head										
Hausa	11.3	6.7	1.1	1.9	1.5	2.0	86.8	100.0	17.1	1066
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	4
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	3
Other ethnics groups	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	14

¹ MICS indicator 5.11 - 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.

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table RH.14: 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, Nigeria, 2016-17 Kano State

	Location of first PNC visit for newborns					Provider of first PNC visit for newborns						Number of last live births in the last two years with a PNC visit within the first week of life
	Home	Public Sector	Private sector	Other location	Total	Doctor/ nurse/ midwife	Auxiliary midwife	Community health worker	Traditional birth attendant	Other	Total	
Total	47.5	44.0	8.4		100.0	55.5	3.4	7.0	34.1		100.0	121
Senatorial District												
Kano Central	(27.2)	(59.3)	(13.5)		100.0	(78.9)	(0.0)	(5.6)	(15.5)		100.0	59
Kano North	(74.3)	(17.7)	(8.0)		100.0	(29.2)	(9.1)	(2.7)	(59.0)		100.0	28
Kano South	(61.0)	(39.0)	(0.0)		100.0	(36.4)	(4.8)	(13.0)	(45.8)		100.0	34
Residence												
Urban	(24.2)	(55.8)	(20.0)		100.0	(79.5)	(2.0)	(5.2)	(13.3)		100.0	40
Rural	59.0	38.2	2.7		100.0	43.7	4.1	7.9	44.3		100.0	81
Mother's age at birth												
Less than 20	(*)	(*)	(*)		100.0	(*)	(*)	(*)	(*)		100.0	18
20-34	50.6	41.5	7.9		100.0	53.6	.7	6.9	38.8		100.0	80
35-49	(*)	(*)	(*)		100.0	(*)	(*)	(*)	(*)		100.0	23
Place of delivery												
Home	64.7	33.3	2.0		100.0	39.2	2.9	8.1	49.8		100.0	83
Health facility	(10.4)	(67.2)	(22.3)		100.0	(90.8)	(4.5)	(4.7)	(0.0)		100.0	38
Public	(11.0)	(89.0)	(0.0)		100.0	(93.3)	(3.0)	(3.7)	(0.0)		100.0	28
Private	(*)	(*)	(*)		100.0	(*)	(*)	(*)	(*)		100.0	10
Education												
None	(*)	(*)	(*)		100.0	(*)	(*)	(*)	(*)		100.0	19
Non-formal	68.7	29.5	1.9		100.0	33.7	2.9	7.6	55.8		100.0	48
Primary	(*)	(*)	(*)		100.0	(*)	(*)	(*)	(*)		100.0	20
Secondary	(20.8)	(61.8)	(17.4)		100.0	(84.6)	(0.0)	(6.1)	(9.3)		100.0	28
Higher	(*)	(*)	(*)		100.0	(*)	(*)	(*)	(*)		100.0	7
Wealth index quintile												
Poorest	(*)	(*)	(*)		100.0	(*)	(*)	(*)	(*)		100.0	17
Second	(*)	(*)	(*)		100.0	(*)	(*)	(*)	(*)		100.0	25
Middle	(*)	(*)	(*)		100.0	(*)	(*)	(*)	(*)		100.0	19
Fourth	(53.7)	(40.0)	(6.2)		100.0	(49.7)	(0.0)	(5.8)	(44.5)		100.0	21
Richest	(15.3)	(64.1)	(20.6)		100.0	(88.5)	(0.0)	(7.0)	(4.5)		100.0	39
Ethnicity of household head												
Hausa	47.4	44.0	8.5		100.0	55.6	3.5	7.1	33.8		100.0	119
Igbo					100.0						100.0	
Yoruba					100.0						100.0	
Other ethnics groups	(*)	(*)	(*)		100.0	(*)	(*)	(*)	(*)		100.0	2

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table RH.14A: 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, Nigeria, 2016-17 Kano State

	Percentage of children who were:		Timing of first bath				Total	Number of last born children in the last two years
	Dried (wiped) after birth	Given skin-to-skin contact with mother	Less than 6 hours after birth	6-23 hours after birth	More than 24 hours after birth	Don't know/Don't remember		
Total	61.6	25.4	89.4	7.2	1.3	2.2	100.0	1087
Senatorial District								
Kano Central	71.1	27.8	83.6	12.4	2.6	1.4	100.0	393
Kano North	42.2	29.3	91.8	4.3	0.2	3.6	100.0	314
Kano South	67.7	19.8	93.3	4.1	0.8	1.8	100.0	380
Residence								
Urban	75.2	34.5	77.9	17.4	4.3	0.4	100.0	239
Rural	57.7	22.9	92.6	4.3	0.4	2.7	100.0	847
Mother's age at birth								
Less than 20	57.5	24.5	92.9	4.4	0.0	2.7	100.0	190
20-34	63.3	26.5	88.6	7.2	1.8	2.4	100.0	695
35-49	59.5	22.5	88.4	9.7	0.8	1.0	100.0	202
Place of delivery								
Home	56.9	23.3	94.6	3.3	0.1	1.9	100.0	913
Public Health facility	87.8	34.4	61.9	25.9	8.5	3.6	100.0	136
Private Health facility	(87.4)	(43.4)	(60.3)	(36.0)	(3.7)	(0.0)	100.0	34
Other	(*)	(*)	(*)	(*)	(*)	(*)	100.0	2
Missing/Don't know	0.0	0.0	0.0	0.0	0.0	100.0	100.0	1
Education								
None	56.8	25.6	93.7	2.8	0.6	2.8	100.0	196
Non-formal	57.3	24.5	92.5	5.3	0.1	2.1	100.0	533
Primary	63.3	20.7	88.0	7.6	1.7	2.7	100.0	165
Secondary	74.8	31.6	80.0	14.7	3.8	1.6	100.0	162
Higher	(86.9)	(34.0)	(61.8)	(27.0)	(11.2)	(0.0)	100.0	30
Wealth index quintile								
Poorest	52.5	18.8	94.7	3.9	0.6	0.8	100.0	234
Second	54.1	25.2	93.4	2.6	0.0	4.0	100.0	228
Middle	62.1	28.8	91.2	6.2	0.0	2.6	100.0	237
Fourth	68.0	23.5	89.3	5.6	2.7	2.5	100.0	218
Richest	75.1	32.8	74.2	21.2	4.1	0.6	100.0	169
Ethnicity of household head								
Hausa	61.8	25.3	89.3	7.3	1.3	2.1	100.0	1066
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	100.0	4
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	100.0	3
Other ethnics groups	(*)	(*)	(*)	(*)	(*)	(*)	100.0	14

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table RH.14B: Cord cutting and care

Percent distribution of last live births delivered outside a facility in the two years preceding the survey by what instrument was used to cut the umbilical cord and what substance was applied to cord, Nigeria, 2016-17 Kano State

	Instrument used to cut the cord:					Percentage of children whose cord was cut with:		Substances applied to the cord [b]:						Percentage with nothing harmful applied to the cord	Number of last-born children in the last two years delivered outside a facility
	New blade	Used blade	Scissors	Other	Don't Know/ Missing	Boiled or sterilised instruments	A clean instrument [a]	Nothing	Chlorhexidine	Other non-harmful substance	Harmful substance	Others	Don't Know/ Missing		
Total	95.7	1.3	1.6	0.0	0.8	8.4	96.3	68.5	5.0	8.0	8.8	8.9	0.8	81.5	917
Senatorial District															
Kano Central	96.4	1.3	1.3	0.0	0.5	7.8	96.9	73.5	5.6	9.3	6.2	4.4	1.1	88.3	278
Kano North	95.7	0.9	1.1	0.0	1.6	5.4	96.0	78.5	3.4	4.4	7.6	5.9	0.2	86.3	286
Kano South	95.2	1.5	2.2	0.0	0.4	11.3	96.0	56.4	5.7	10.0	11.8	14.9	1.1	72.2	352
Residence															
Urban	94.6	2.7	1.7	0.0	1.0	8.2	95.2	72.0	2.0	9.6	10.2	4.9	1.3	83.6	137
Rural	95.9	1.0	1.6	0.0	0.8	8.4	96.5	67.9	5.5	7.7	8.6	9.6	0.7	81.1	780
Mother's age at birth															
Less than 20	95.8	0.5	1.7	0.0	2.1	6.6	95.8	66.2	4.5	7.3	10.5	10.8	0.6	78.1	167
20-34	95.8	1.5	1.5	0.0	0.4	8.1	96.7	69.1	5.8	7.7	8.1	8.3	0.9	82.6	587
35-49	95.4	1.3	1.9	0.0	0.9	11.3	95.4	68.5	2.6	9.9	9.5	8.9	0.5	81.0	162
Place of delivery															
Home	95.8	1.3	1.6	0.0	0.7	8.4	96.4	68.4	5.0	8.1	8.8	8.9	0.8	81.4	913
Other	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2

Table RH.14B: Cord cutting and care (continued)

Percent distribution of last live births delivered outside a facility in the two years preceding the survey by what instrument was used to cut the umbilical cord and what substance was applied to cord, Nigeria, 2016-17 Kano State

	Instrument used to cut the cord:					Percentage of children whose cord was cut with:		Substances applied to the cord [b]:						Percentage with nothing harmful applied to the cord	Number of last-born children in the last two years delivered outside a facility
	New blade	Used blade	Scissors	Other	Don't Know/ Missing	Boiled or sterilised instruments	A clean instrument [a]	Nothing	Chlorhexidine	Other non-harmful substance	Harmful substance	Others	Don't Know/ Missing		
Education															
None	94.6	2.4	2.7	0.0	0.0	9.3	94.6	69.4	6.4	8.5	10.0	5.8	0.0	84.2	185
Non-formal	96.0	0.8	1.3	0.0	0.9	7.9	96.4	69.1	4.7	6.6	8.8	10.1	0.5	80.5	498
Primary	96.5	1.8	0.7	0.0	1.0	8.2	98.3	64.2	5.4	8.7	8.6	10.9	2.3	78.2	136
Secondary	95.1	0.9	2.4	0.0	1.5	9.8	96.1	69.5	3.2	12.9	6.9	5.5	1.9	85.7	93
Higher	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	4
Wealth index quintile															
Poorest	96.0	0.9	2.2	0.0	1.0	7.7	96.0	68.7	6.3	6.2	8.5	10.0	0.3	81.2	225
Second	93.4	1.9	2.5	0.0	0.3	9.2	94.7	68.5	6.0	4.4	11.0	9.4	0.7	78.8	217
Middle	96.8	0.5	0.6	0.0	1.5	6.7	96.8	69.3	3.6	8.0	8.8	9.4	1.0	80.8	221
Fourth	97.1	2.5	0.4	0.0	0.0	10.6	98.4	66.9	4.8	13.1	8.2	6.4	0.7	84.8	177
Richest	95.2	0.0	3.0	0.0	1.9	7.8	95.2	69.4	2.7	12.2	5.0	8.4	2.3	84.4	76
Ethnicity of household head															
Hausa	95.7	1.2	1.6	0.0	0.8	8.5	96.3	68.4	5.1	8.1	8.8	8.8	0.8	81.6	903
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	3
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	
Other ethnics groups	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	10

[a] Clean instruments are all new blades and boiled or sterilised used blades or scissors

[b] Substances include: Chlorhexidine, other antiseptic (such as alcohol, spirit, gentian violet), mustard or other oil, animal dung and others. Mustard or other oil and animal dung are considered harmful

(*) Sample data are fewer than 25 unweighted cases

Table RH.14C: Content of postnatal care for newborns

Percent distribution of last live births delivered outside a facility in the two years preceding the survey by what instrument was used to cut the umbilical cord and what substance was applied to cord, Nigeria, 2016-17 Kano State

	Percentage of newborn receiving postnatal care signal function of:					Percentage of newborns who received a least 2 of the preceding signal postnatal care functions within 2 days after birth	Number of lastborn children in the last two years
	Cord examination	Temperature assessment	Counselling on and observation of breastfeeding	Weight assessment	Counselling on danger signs for newborns		
Total	17.1	11.8	12.7	9.3	11.6	15.3	1087
Senatorial District							
Kano Central	24.7	20.5	21.0	18.1	18.2	25.6	393
Kano North	19.2	8.0	8.6	5.6	8.9	11.1	314
Kano South	7.6	5.9	7.6	3.2	6.9	8.1	380
Residence							
Urban	35.4	28.5	29.2	27.3	27.7	37.0	239
Rural	11.9	7.1	8.1	4.2	7.0	9.1	847
Mother's age at birth							
Less than 20	15.4	9.2	14.3	5.0	9.5	13.3	190
20-34	18.0	11.0	12.8	10.0	11.7	14.9	695
35-49	15.6	17.0	10.8	10.6	13.0	18.3	202
Place of delivery							
Home	11.7	6.3	8.8	4.2	7.0	8.8	913
Public Health facility	47.5	42.0	36.3	36.3	35.1	49.1	136
Private Health facility	(43.4)	(38.4)	(26.1)	(38.4)	(40.4)	(54.9)	34
Other	(*)	(*)	(*)	(*)	(*)	(*)	2
Education							
None	7.4	7.1	8.7	2.8	5.7	8.2	196
Non-formal	11.8	6.9	7.1	4.7	6.7	8.9	533
Primary	19.1	10.9	15.4	11.3	13.2	16.9	165
Secondary	37.1	28.2	29.1	22.1	26.8	34.9	162
Higher	(55.3)	(44.8)	(35.7)	(51.8)	(45.3)	(60.1)	30
Wealth index quintile							
Poorest	8.4	3.9	5.2	2.1	4.8	5.8	234
Second	10.8	6.6	6.1	3.7	7.2	8.0	228
Middle	11.0	6.2	9.8	3.7	6.4	7.8	237
Fourth	19.2	12.2	12.2	11.1	11.2	17.7	218
Richest	43.5	36.9	36.7	32.1	34.6	45.6	169
Ethnicity of household head							
Hausa	17.0	11.3	12.2	8.9	11.3	14.7	1066
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	4
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	3
Other ethnics groups	(*)	(*)	(*)	(*)	(*)	(*)	14

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table RH.15: 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, *Nigeria, 2016-17 Kano State*

	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			
Total	13.3	3.3	1.0	0.9	0.5	1.5	92.6	100.0	17.3	1087
Senatorial District										
Kano Central	25.5	3.4	1.7	1.5	0.5	1.5	91.1	100.0	29.6	393
Kano North	6.8	2.3	0.5	0.6	0.3	1.6	94.5	100.0	9.8	314
Kano South	6.1	4.0	0.7	0.5	0.7	1.3	92.7	100.0	11.0	380
Residence										
Urban	37.9	4.1	1.8	2.0	0.8	1.2	89.6	100.0	42.5	239
Rural	6.4	3.1	0.8	0.6	0.4	1.6	93.5	100.0	10.2	847
Mother's age at birth										
Less than 20	10.0	1.6	1.8	0.2	0.4	3.3	92.6	100.0	12.8	190
20-34	13.5	3.3	1.1	1.2	0.7	1.1	92.5	100.0	18.0	695
35-49	15.8	4.8	0.0	0.3	0.0	1.2	93.0	100.0	19.3	202
Place of delivery										
Home	2.4	3.3	0.9	0.9	0.3	1.5	93.0	100.0	6.9	913
Health facility	72.3	3.5	1.4	0.7	1.6	1.5	90.5	100.0	73.5	170
Public	68.5	2.6	1.7	0.8	2.1	1.1	90.7	100.0	69.9	136
Private	(87.4)	(7.0)	(0.0)	(0.0)	(0.0)	(3.3)	(89.6)	100.0	(87.4)	34
Other/Don't know/Missing	0.0	0.0	0.0	0.0	0.0	0.0	100.0	100.0	0.0	3
Type of delivery										
Vaginal birth	12.4	3.3	1.0	0.9	0.5	1.4	92.7	100.0	16.5	1076
C-section	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	11
Education										
None	4.1	2.3	0.6	1.3	0.0	1.1	94.7	100.0	8.4	196
Non-formal	4.8	3.6	0.3	0.1	0.7	1.8	93.4	100.0	8.6	533
Primary	13.5	3.4	0.0	1.3	0.0	2.3	93.0	100.0	16.3	165
Secondary	39.6	3.4	5.0	2.6	0.6	0.4	87.2	100.0	46.2	162
Higher	(81.3)	(3.4)	(0.0)	(0.0)	(3.5)	(0.0)	(93.2)	100.0	(81.3)	30
Wealth index quintile										
Poorest	3.9	2.9	0.4	0.3	0.8	1.7	93.9	100.0	7.1	234
Second	4.3	3.5	0.5	0.0	0.7	0.7	94.2	100.0	8.2	228
Middle	3.9	1.4	0.3	1.5	0.0	2.7	94.1	100.0	6.8	237
Fourth	12.5	3.7	1.5	0.8	0.0	1.5	92.6	100.0	18.5	218
Richest	52.6	5.6	2.9	2.2	1.2	0.7	86.7	100.0	57.0	169
Ethnicity of household head										
Hausa	12.9	3.2	1.0	0.9	0.4	1.5	92.9	100.0	16.9	1066
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	4
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	3
Other ethnics groups	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	14

¹ MICS indicator 5.12 - 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.

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table RH.16: 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, Nigeria, 2016-17 Kano State

	Location of first PNC visit for mothers				Total	Provider of first PNC visit for mothers					Total	Number of women with a live birth in the last two years who received a PNC visit within one week of birth
	Home	Public Sector	Private sector	Other location		Doctor/nurse/midwife	Auxiliary midwife	Community health worker	Traditional birth attendant	Other		
Total	51.9	40.5	5.6	2.0	100.0	24.8	29.5	2.3	7.9	35.4	100.0	62
Senatorial District												
Kano Central	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	28
Kano North	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	11
Kano South	(67.5)	(27.1)	(0.0)	(5.4)	100.0	(13.4)	(16.4)	(2.7)	(12.5)	(55.1)	100.0	23
Residence												
Urban	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	21
Rural	(61.8)	(35.3)	(0.0)	(3.0)	100.0	(19.6)	(22.1)	(3.5)	(6.9)	(48.0)	100.0	41
Mother's age at birth												
Less than 20	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	8
20-34	(52.8)	(36.5)	(7.9)	(2.8)	100.0	(27.5)	(20.1)	(1.4)	(11.3)	(39.8)	100.0	44
35-49	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	10
Place of delivery												
Home	56.3	36.3	5.0	2.5	100.0	18.5	30.1	1.2	7.8	42.3	100.0	49
Health facility	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	12
Public	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	10
Private	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	2
Type of delivery												
Vaginal birth	51.9	40.5	5.6	2.0	100.0	24.8	29.5	2.3	7.9	35.4	100.0	62
Education												
None	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	8
Non-formal	(75.2)	(24.8)	(0.0)	(0.0)	100.0	(8.5)	(20.4)	(5.8)	(6.5)	(58.9)	100.0	25
Primary	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	8
Secondary	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	19
Higher	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	2
Wealth index quintile												
Poorest	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	10
Second	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	11
Middle	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	8
Fourth	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	13
Richest	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	20
Ethnicity of household head												
Hausa	49.3	42.7	5.9	2.1	100.0	26.1	29.0	2.5	8.4	34.0	100.0	59
Igbo												
Yoruba												
Other ethnics groups	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	100.0	3

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table RH.17: Post-natal health checks for mothers and newborns

Percent distribution 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, Nigeria, 2016-17 Kano State

	Post-natal health checks within two days of birth for:				Total	Number of women with a live birth in the last two years
	Both mothers and newborns	Mothers only	Newborns only	Neither mother nor newborn		
Total	13.1	4.3	4.4	78.3	100.0	1087
Senatorial District						
Kano Central	21.6	7.9	4.7	65.8	100.0	393
Kano North	7.9	1.9	5.5	84.7	100.0	314
Kano South	8.5	2.5	3.2	85.8	100.0	380
Residence						
Urban	31.8	10.7	2.8	54.7	100.0	239
Rural	7.8	2.5	4.8	84.9	100.0	847
Mother's age at birth						
Less than 20	9.4	3.5	2.9	84.3	100.0	190
20-34	13.4	4.7	5.1	76.9	100.0	695
35-49	15.5	3.8	3.4	77.3	100.0	202
Place of delivery						
Home	3.9	3.1	4.7	88.4	100.0	913
Health facility	62.5	11.0	2.9	23.6	100.0	170
Public	57.9	12.1	3.6	26.4	100.0	136
Private	(80.7)	(6.7)	(0.0)	(12.6)	100.0	34
Other/Don't know/Missing	0.0	0.0	0.0	100.0	100.0	3
Type of delivery						
Vaginal birth	12.6	3.9	4.4	79.1	100.0	1076
C-section	(*)	(*)	(*)	(*)	100.0	11
Education						
None	6.4	2.0	4.4	87.3	100.0	196
Non-formal	6.6	2.1	4.2	87.1	100.0	533
Primary	13.6	2.7	5.9	77.8	100.0	165
Secondary	30.1	16.0	3.5	50.3	100.0	162
Higher	(77.5)	(3.9)	(4.0)	(14.7)	100.0	30
Wealth index quintile						
Poorest	4.6	2.5	3.8	89.0	100.0	234
Second	7.5	.8	4.9	86.8	100.0	228
Middle	5.1	1.7	5.1	88.0	100.0	237
Fourth	12.2	6.3	4.6	76.9	100.0	218
Richest	44.5	12.5	3.2	39.8	100.0	169
Ethnicity of household head						
Hausa	12.8	4.0	4.3	78.9	100.0	1066
Igbo	(*)	(*)	(*)	(*)	100.0	4
Yoruba	(*)	(*)	(*)	(*)	100.0	3
Other ethnics groups	(*)	(*)	(*)	(*)	100.0	14

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

IX. Early Childhood Development

Early Childhood Care and Education

Table CD.1: Early childhood education

Percentage of children age 36-59 months who are attending an organized early childhood education programme, Nigeria, 2016-17 Kano State

	Percentage of children age 36-59 months attending early childhood education ¹	Number of children age 36-59 months
Total	18.1	1023
Senatorial District		
Kano Central	25.7	392
Kano North	14.8	259
Kano South	12.4	371
Sex		
Male	18.2	511
Female	18.0	512
Residence		
Urban	29.9	251
Rural	14.3	771
Age of child		
36-47 months	10.0	522
48-59 months	26.6	500
Mother's education		
None	11.9	188
Non-formal	14.7	535
Primary	17.7	123
Secondary	27.4	139
Higher	(65.4)	37
Wealth index quintile		
Poorest	11.2	223
Second	11.0	230
Middle	11.6	201
Fourth	21.1	182
Richest	39.2	187
Ethnicity of household head		
Hausa	18.0	1009
Igbo	(*)	2
Yoruba	(*)	1
Other ethnic group	(*)	12

¹ MICS indicator 6.1 - Attendance to early childhood education

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Quality of Care

Table CD.2: Support for learning

Percentage of children age 36-59 months with whom adult household members engaged in activities that promote learning and school readiness during the last three days, and engagement in such activities by biological fathers and mothers, Nigeria, 2016-17 Kano State

	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 living with their:		Number of children age 36-59 months	Percentage of children with whom biological fathers have engaged in four or more activities ²	Mean number of activities with biological fathers	Number of children age 36-59 months living with their biological fathers	Percentage of children with whom biological mothers have engaged in four or more activities ³	Mean number of activities with biological mothers	Number of children age 36-59 months living with their biological mothers
			Biological father	Biological mother							
Total	62.6	3.8	92.6	95.0	1023	7.8	0.9	947	20.4	1.7	972
Senatorial District											
Kano Central	70.9	4.2	91.3	96.2	392	7.1	0.8	358	22.7	1.9	378
Kano North	54.4	3.5	96.6	96.5	259	11.2	1.2	250	18.9	1.7	250
Kano South	59.6	3.7	91.3	92.8	371	6.2	0.7	339	18.9	1.5	345
Sex											
Male	61.7	3.8	93.5	95.0	511	8.3	0.9	477	16.9	1.5	485
Female	63.5	3.9	91.7	95.1	512	7.3	0.9	470	23.8	1.9	487
Residence											
Urban	73.2	4.4	92.6	96.9	251	6.2	0.9	233	29.4	2.4	243
Rural	59.2	3.7	92.6	94.4	771	8.3	0.9	714	17.4	1.5	728
Age (Months)											
36-47	64.1	3.9	92.8	95.5	522	8.5	0.9	485	20.8	1.7	499
48-59	61.1	3.8	92.4	94.5	500	7.1	0.8	462	19.9	1.7	473
Mother's education^a											
None	48.3	3.3	92.3	94.3	188	5.2	0.7	174	21.4	1.6	177
Non-formal	62.0	3.8	92.0	94.1	535	7.9	0.8	492	15.6	1.4	503
Primary	60.3	3.7	94.7	97.0	123	3.3	0.9	117	18.0	1.7	120
Secondary	78.3	4.6	91.7	97.5	139	10.6	1.0	128	30.2	2.3	136
Higher	(94.2)	5.3	(100.0)	(97.0)	37	(25.2)	1.7	37	(54.2)	3.5	36

Table CD.2: Support for learning (continued)

Percentage of children age 36-59 months with whom adult household members engaged in activities that promote learning and school readiness during the last three days, and engagement in such activities by biological fathers and mothers, Nigeria, 2016-17 Kano State

	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 living with their:		Number of children age 36-59 months	Percentage of children with whom biological fathers have engaged in four or more activities ²	Mean number of activities with biological fathers	Number of children age 36-59 months living with their biological fathers	Percentage of children with whom biological mothers have engaged in four or more activities ³	Mean number of activities with biological mothers	Number of children age 36-59 months living with their biological mothers
Father's education											
None	45.3	3.0	100.0	99.4	76	4.8	0.7	76	17.6	1.7	76
Non-formal	59.3	3.7	100.0	97.7	457	6.5	0.8	457	18.7	1.6	447
Primary	56.3	3.6	100.0	100.0	131	6.4	1.0	131	26.9	2.0	131
Secondary	66.8	4.1	100.0	97.4	161	12.5	1.1	161	18.9	1.7	157
Higher	84.8	4.8	100.0	96.9	117	13.1	1.3	117	29.8	2.4	113
Missing/Don't know	75.1	4.2	100.0	100.0	5	0.0	0.2	5	23.8	2.1	5
Wealth index quintile											
Poorest	48.4	3.3	93.2	93.3	223	6.0	0.7	208	15.1	1.3	208
Second	55.0	3.4	89.9	96.4	230	6.4	0.8	206	14.7	1.3	222
Middle	60.9	3.7	90.7	93.8	201	5.9	0.8	182	14.6	1.4	189
Fourth	67.3	4.2	96.9	96.2	182	9.0	1.0	176	23.3	1.9	175
Richest	86.3	4.9	93.1	95.8	187	12.7	1.1	174	37.1	2.8	179
Ethnicity of household head											
Hausa	62.5	3.8	92.8	95.0	1009	7.8	0.9	935	20.2	1.7	959
Igbo	(*)	6.0	(*)	(*)	2	(*)	1.2	2	(*)	2.4	2
Yoruba	(*)	6.0	(*)	(*)	1	(*)	5.5	1	(*)	4.5	1
Other ethnic group	(*)	4.0	(*)	(*)	12	(*)	0.7	9	(*)	1.8	11

¹ MICS indicator 6.2 - Support for learning

² MICS Indicator 6.3 - Father's support for learning

³ MICS Indicator 6.4 - Mother's support for learning

na: not applicable

^a The background characteristic "Mother's education" refers to the education level of the respondent to the Questionnaire for Children Under Five, and covers both mothers and primary caretakers, who are interviewed when the mother is not listed in the same household. Since indicator 6.4 reports on the biological mother's support for learning, this background characteristic refers to only the educational levels of biological mothers when calculated for the indicator in question.

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table CD.3: Learning materials

Percentage of children under age 5 by numbers of children's books present in the household, and by playthings that child plays with, Nigeria, 2016-17 Kano State

	Percentage of children living in households that have for the child:		Percentage of children who play with:				Number of children under age 5
	3 or more children's books 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	
Total	1.6	0.1	54.1	30.2	65.1	52.7	2559
Senatorial District							
Kano Central	3.9	0.1	60.0	43.8	63.5	58.3	962
Kano North	0.4	0.0	53.2	21.3	66.0	52.2	693
Kano South	0.3	0.0	48.5	22.5	66.2	47.1	904
Sex							
Male	1.6	0.1	54.0	29.8	66.0	53.4	1293
Female	1.7	0.1	54.2	30.6	64.2	52.0	1266
Residence							
Urban	5.9	0.2	59.8	51.2	60.4	58.5	603
Rural	0.3	0.0	52.3	23.7	66.6	50.9	1956
Age (Months)							
0-23	0.3	0.0	35.0	20.0	44.1	32.2	1052
24-59	2.6	0.1	67.4	37.3	79.8	67.0	1507
Mother's education							
None	0.0	0.0	48.8	15.0	63.4	45.5	452
Non-formal	0.4	0.0	54.6	24.3	68.0	52.9	1298
Primary	1.3	0.0	50.2	30.5	61.9	48.9	352
Secondary	5.9	0.2	61.7	57.6	62.7	61.4	379
Higher	13.1	0.9	61.1	82.1	52.6	65.8	77
Missing/Don't know	0.0	0.0	100.0	0.0	100.0	100.0	1
Wealth index quintile							
Poorest	0.0	0.0	43.9	13.5	65.1	41.6	530
Second	0.2	0.0	51.4	16.2	65.9	49.4	559
Middle	0.4	0.0	55.7	25.8	67.3	54.1	529
Fourth	0.7	0.0	58.6	37.7	64.3	56.5	487
Richest	7.8	0.3	62.7	64.0	62.4	63.9	455
Ethnicity of household head							
Hausa	1.5	0.1	54.3	30.0	65.2	52.7	2514
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	9
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	4
Other ethnic group	(8.0)	(0.0)	(43.6)	(33.5)	(56.3)	(48.5)	31

¹ MICS indicator 6.5 - Availability of children's books

² MICS indicator 6.6 - Availability of playthings

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table CD.4: Inadequate care

Percentage of children under age 5 left alone or left in the care of another child younger than 10 years of age for more than one hour at least once during the past week, Nigeria, 2016-17 Kano State

	Percentage of children under age 5:			Number of children under age 5
	Left alone in the past week	Left in the care of another child younger than 10 years of age in the past week	Left with inadequate care in the past week ¹	
Total	19.1	16.9	21.9	2559
Senatorial District				
Kano Central	21.4	18.0	24.1	962
Kano North	15.5	14.9	17.8	693
Kano South	19.5	17.3	22.7	904
Sex				
Male	20.4	18.1	23.4	1293
Female	17.8	15.6	20.3	1266
Residence				
Urban	19.5	14.4	20.6	603
Rural	19.0	17.7	22.3	1956
Age (Months)				
0-23	8.3	7.8	9.7	1052
24-59	26.7	23.3	30.4	1507
Mother's education				
None	22.0	18.8	24.5	452
Non-formal	19.4	18.7	23.1	1298
Primary	14.6	10.2	15.3	352
Secondary	18.5	14.2	20.4	379
Higher	21.4	19.9	23.6	77
Missing/Don't know	0.0	0.0	0.0	1
Wealth index quintile				
Poorest	19.2	16.4	21.6	530
Second	17.4	18.6	21.3	559
Middle	15.7	15.1	19.0	529
Fourth	20.3	16.3	23.3	487
Richest	23.9	18.1	24.9	455
Ethnicity of household head				
Hausa	19.1	16.9	21.7	2514
Igbo	(*)	(*)	(*)	9
Yoruba	(*)	(*)	(*)	4
Other ethnic group	(22.7)	(16.5)	(33.5)	31

¹ MICS indicator 6.7 - Inadequate care

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Developmental Status of Children

Table CD.5: Early child development index

Percentage of children age 36-59 months who are developmentally on track in literacy-numeracy, physical, social-emotional, and learning domains, and the early child development index score, Nigeria, 2016-17 Kano State

	Percentage of children age 36-59 months who are developmentally on track for indicated domains				Early child development index score ¹	Number of children age 36-59 months
	Literacy-numeracy	Physical	Social-Emotional	Learning		
Total	15.6	91.0	76.0	81.4	61.0	1023
Senatorial District						
Kano Central	21.2	93.2	78.8	82.9	68.6	392
Kano North	12.3	89.7	76.1	68.0	51.3	259
Kano South	12.1	89.5	72.9	89.1	59.9	371
Sex						
Male	14.8	89.9	73.7	82.8	60.0	511
Female	16.4	92.1	78.2	80.0	62.0	512
Residence						
Urban	27.4	95.4	79.9	85.2	75.2	251
Rural	11.8	89.5	74.7	80.2	56.4	771
Age (Months)						
36-47	8.3	90.3	78.3	77.2	58.0	522
48-59	23.3	91.7	73.6	85.8	64.2	500
Attendance to early childhood education						
Attending	47.4	91.9	64.6	92.9	72.0	185
Not attending	8.6	90.8	78.5	78.9	58.6	837
Mother's education						
None	8.9	84.8	79.0	74.9	51.7	188
Non-formal	11.1	90.5	72.6	82.0	56.5	535
Primary	15.6	93.0	82.1	81.8	70.5	123
Secondary	33.3	97.1	76.9	85.6	76.5	139
Higher	(49.5)	(100.0)	(84.8)	(89.1)	(83.9)	37
Wealth index quintile						
Poorest	6.6	89.5	71.4	74.5	45.8	223
Second	6.6	89.3	72.7	78.9	53.7	230
Middle	13.8	91.2	83.0	82.8	67.5	201
Fourth	17.2	91.4	75.1	85.5	65.9	182
Richest	37.9	94.2	78.6	87.3	76.5	187
Ethnicity of household head						
Hausa	15.5	90.9	76.3	81.3	61.0	1009
Igbo	(*)	(*)	(*)	(*)	(*)	2
Yoruba	(*)	(*)	(*)	(*)	(*)	1
Other ethnic group	(*)	(*)	(*)	(*)	(*)	12

¹ MICS indicator 6.8 - Early child development index

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

X. Literacy and Education

Literacy among Young Women and Men

Table ED.1: Literacy (young women)			
Percentage of women age 15-24 years who are literate, Nigeria, 2016-17 Kano State			
	Percentage literate ¹	Percentage not known	Number of women age 15-24 years
Total	46.1	4.6	1017
Senatorial District			
Kano Central	72.3	3.6	465
Kano North	26.1	0.9	229
Kano South	22.6	8.5	323
Residence			
Urban	89.7	0.0	328
Rural	25.4	6.7	689
Education			
None	0.0	0.0	116
Non-formal	0.3	12.6	336
Primary	14.7	3.6	114
Secondary	100.0	0.0	421
Higher	(100.0)	(*)	31
Age (Years)			
15-19	55.3	5.3	586
20-24	33.7	3.6	431
Wealth index quintile			
Poorest	3.4	4.8	143
Second	11.4	11.9	158
Middle	22.4	5.8	212
Fourth	63.8	3.2	257
Richest	95.4	0.0	245
Ethnicity of household head			
Hausa	44.7	4.7	983
Igbo	(*)	(*)	4
Yoruba	(*)	(*)	4
Other ethnic group	(*)	(*)	26
¹ MICS indicator 7.1; MDG indicator 2.3 - Literacy rate among young women			

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table ED.1M: Literacy (young men)

Percentage of men age 15-24 years who are literate, Nigeria, 2016-17 Kano State

	Percentage literate ¹	Percentage not known	Number of men age 15-24 years
Total	72.5	10.4	483
Senatorial District			
Kano Central	87.4	1.2	267
Kano North	69.4	4.6	88
Kano South	43.7	33.3	128
Residence			
Urban	93.3	1.1	205
Rural	57.2	17.2	278
Education			
None	(*)	(*)	3
Non-formal	4.6	51.8	85
Primary	13.9	9.0	57
Secondary	100.0	0.0	302
Higher	(100.0)	(0.0)	37
Age (Years)			
15-19	68.0	11.7	290
20-24	79.4	8.3	193
Wealth index quintile			
Poorest	30.7	41.0	70
Second	58.6	13.7	64
Middle	61.5	9.1	87
Fourth	87.3	3.8	118
Richest	93.8	0.0	143
Ethnicity of household head			
Hausa	72.2	10.5	477
Igbo			
Yoruba			
Other ethnic group	(*)	(*)	5

¹ MICS indicator 7.1; MDG indicator 2.3 - Literacy rate among young men^[M]

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

School Readiness

Table ED.2: School readiness

Percentage of children attending first grade of primary school who attended pre-school the previous year, Nigeria, 2016-17
Kano State

	Percentage of children attending first grade who attended preschool in previous year ¹	Number of children attending first grade of primary school
Total	23.8	320
Senatorial District		
Kano Central	27.8	144
Kano North	17.5	86
Kano South	23.3	91
Sex		
Male	23.9	160
Female	23.6	160
Residence		
Urban	36.1	84
Rural	19.4	237
Mother's education		
None	(5.3)	46
Non-formal	27.0	172
Primary	24.7	50
Secondary	(26.9)	45
Higher	(*)	7
Wealth index quintile		
Poorest	(18.4)	43
Second	12.2	58
Middle	30.3	74
Fourth	19.8	80
Richest	35.2	65
Ethnicity of household head		
Hausa	24.0	317
Igbo	(*)	2
Yoruba		
Other ethnic group	(*)	2
¹ MICS indicator 7.2 - School readiness		

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Primary and Secondary School Participation

Table ED.3: Primary school entry		
Percentage of children of primary school entry age entering grade 1 (net intake rate), Nigeria, 2016-17 Kano State		
	Percentage of children of primary school entry age entering grade 1 ¹	Number of children of primary school entry age
Total	35.4	543
Senatorial District		
Kano Central	45.4	207
Kano North	29.1	156
Kano South	29.3	180
Sex		
Male	34.3	275
Female	36.5	268
Residence		
Urban	34.3	275
Rural	36.5	268
Mother's education		
None	26.8	98
Non-formal	31.7	293
Primary	39.7	77
Secondary	54.4	61
Higher	(*)	13
Wealth index quintile		
Poorest	14.0	116
Second	31.7	131
Middle	36.9	110
Fourth	44.9	97
Richest	56.3	89
Ethnicity of household head		
Hausa	35.6	534
Igbo		
Yoruba		
Other ethnic group	(*)	9
¹ MICS indicator 7.3 - Net intake rate in primary education		

(*) Sample data are fewer than 25 unweighted cases

Table ED.4: Primary school attendance and out of school children

Percentage of children of primary school age attending primary or secondary school (adjusted net attendance ratio), percentage attending preschool, and percentage out of school, Nigeria, 2016-17 Kano State

	Male						Female						Total					
	Percentage of children:						Percentage of children:						Percentage of children:					
	Net attendance ratio (adjusted)	Not attending school or preschool	Attending preschool	Attending non formal education	Out of school ^a	Number of children	Net attendance ratio (adjusted)	Not attending school or preschool	Attending preschool	Attending non formal education	Out of school ^a	Number of children	Net attendance ratio (adjusted) ¹	Not attending school or preschool	Attending preschool	Attending non formal education	Out of school ^a	Number of children
Total	56.7	16.9	5.1	21.3	22.0	1320	53.0	16.3	3.2	27.4	19.6	1367	54.8	16.6	4.1	24.4	20.8	2687
Senatorial District																		
Kano Central	67.1	12.1	8.9	12.0	21.0	526	68.8	11.7	3.9	15.6	15.6	549	67.9	11.9	6.3	13.8	18.3	1075
Kano North	53.3	22.6	3.1	20.9	25.7	373	44.3	23.7	3.5	28.4	27.2	376	48.8	23.2	3.3	24.7	26.5	749
Kano South	46.7	17.9	2.0	33.3	20.0	420	40.9	15.8	2.1	41.2	17.9	442	43.7	16.8	2.1	37.4	18.9	862
Residence																		
Urban	69.6	12.4	11.2	6.9	23.5	332	76.1	11.5	4.1	8.3	15.6	339	72.9	11.9	7.6	7.6	19.5	671
Rural	52.4	18.5	3.0	26.1	21.5	988	45.4	17.9	2.9	33.7	20.9	1028	48.8	18.2	3.0	30.0	21.2	2015
Age at beginning of school year																		
6	35.7	25.5	12.6	26.2	38.1	275	37.3	20.8	11.5	30.4	32.3	268	36.5	23.2	12.0	28.2	35.2	543
7	44.8	21.9	8.0	25.3	29.9	264	49.5	19.8	4.0	26.7	23.8	239	47.1	20.9	6.1	25.9	27.0	503
8	64.9	11.2	3.3	20.5	14.6	225	59.6	12.5	1.1	26.8	13.5	235	62.2	11.9	2.2	23.7	14.0	460
9	74.0	10.6	0.0	15.4	10.6	195	59.7	16.8	0.0	23.4	16.8	196	66.9	13.7	0.0	19.4	13.7	391
10	63.4	14.6	1.2	20.8	15.8	237	54.0	13.4	0.4	32.3	13.7	265	58.4	14.0	0.7	26.9	14.7	503
11	73.6	12.0	0.7	13.6	12.8	124	64.7	13.9	0.0	21.4	13.9	164	68.6	13.1	0.3	18.0	13.4	288
Mother's education																		
None	47.9	35.1	4.3	12.7	39.4	284	36.2	43.3	1.6	18.9	44.9	267	42.2	39.1	3.0	15.7	42.1	551
Non-formal	52.6	12.0	2.8	32.6	14.8	695	48.0	11.0	2.4	38.6	13.4	755	50.2	11.5	2.6	35.7	14.0	1450
Primary	67.7	16.7	6.2	9.4	22.9	170	70.0	11.3	4.8	13.9	16.1	179	68.9	13.9	5.5	11.7	19.4	350
Secondary	77.3	8.1	13.1	1.4	21.2	146	84.0	3.4	7.4	5.1	10.9	138	80.6	5.9	10.4	3.2	16.2	284
Higher	(76.4)	(0.0)	(23.6)	(0.0)	(23.6)	23	(89.1)	(0.0)	(10.9)	(0.0)	(10.9)	26	83.1	0.0	16.9	0.0	16.9	49

Table ED.4: Primary school attendance and out of school children (continued)

Percentage of children of primary school age attending primary or secondary school (adjusted net attendance ratio), percentage attending preschool, and percentage out of school, Nigeria, 2016-17 Kano State

	Male						Female						Total					
	Net attendance ratio (adjusted)	Percentage of children:					Net attendance ratio (adjusted)	Percentage of children:					Net attendance ratio (adjusted) ¹	Percentage of children:				
		Not attending school or preschool	Attending preschool	Attending non formal education	Out of school ^a	Number of children		Not attending school or preschool	Attending preschool	Attending non formal education	Out of school ^a	Number of children		Not attending school or preschool	Attending preschool	Attending non formal education	Out of school ^a	Number of children
Total	56.7	16.9	5.1	21.3	22.0	1320	53.0	16.3	3.2	27.4	19.6	1367	54.8	16.6	4.1	24.4	20.8	2687
Wealth index quintile																		
Poorest	29.0	31.9	1.2	37.9	33.1	276	22.0	28.6	2.0	47.4	30.6	301	25.4	30.2	1.6	42.8	31.8	577
Second	50.9	15.0	2.7	31.4	17.7	283	43.2	16.7	1.6	38.4	18.3	304	46.9	15.9	2.1	35.1	18.0	587
Middle	61.4	16.2	3.0	19.4	19.2	280	52.0	14.7	3.6	29.7	18.2	272	56.8	15.4	3.3	24.5	18.7	552
Fourth	71.2	13.3	5.3	10.2	18.7	252	68.4	15.8	3.7	12.1	19.5	249	69.8	14.5	4.5	11.1	19.1	501
Richest	75.7	6.1	14.9	3.3	21.0	228	89.3	3.1	5.8	1.8	8.9	241	82.7	4.6	10.2	2.5	14.8	469
Ethnicity of household head																		
Hausa	57.0	17.0	4.9	21.1	21.9	1294	53.1	16.4	3.1	27.4	19.5	1347	55.0	16.7	4.0	24.3	20.7	2641
Igbo	(*)	(*)	(*)	(*)	(*)	3	(*)	(*)	(*)	(*)	(*)	2	(*)	(*)	(*)	(*)	(*)	5
Yoruba	(*)	(*)	(*)	(*)	(*)	1	(*)	(*)	(*)	(*)	(*)	1	(*)	(*)	(*)	(*)	(*)	3
Other ethnic group	(33.5)	(12.6)	(18.1)	(35.8)	(30.7)	21	(*)	(*)	(*)	(*)	(*)	17	(40.2)	(14.7)	(13.9)	(31.2)	(28.6)	39

¹ MICS indicator 7.4; MDG indicator 2.1 - Primary school net attendance ratio (adjusted)^a The percentage of children of primary school age out of school are those not attending school and those attending preschool

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table ED.5: Secondary school attendance and out of school children

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, Nigeria, 2016-17 Kano State

	Male					Female					Total				
	Percentage of children:					Percentage of children:					Percentage of children:				
	Net attendance ratio (adjusted)	Attending primary school	Percentage of children: Attending non formal education	Out of school ^a	Number of children	Net attendance ratio (adjusted)	Attending primary school	Percentage of children: Attending non formal education	Out of school ^a	Number of children	Net attendance ratio (adjusted) ¹	Attending primary school	Percentage of children: Attending non formal education	Out of school ^a	Number of children
Total	45.3	20.3	16.6	17.8	954	39.3	16.4	18.9	25.2	967	42.3	18.3	17.7	21.5	1922
Senatorial District															
Kano Central	55.9	19.5	10.6	14.0	458	56.5	17.4	11.7	14.4	488	56.2	18.4	11.2	14.2	947
Kano North	39.5	24.4	13.5	22.6	218	20.2	14.1	23.8	40.8	211	30.0	19.3	18.6	31.6	429
Kano South	32.4	18.5	28.7	20.4	279	22.9	16.4	28.0	32.3	268	27.7	17.5	28.4	26.2	546
Residence															
Urban	64.7	18.7	4.5	12.1	328	69.2	15.1	4.6	11.0	338	67.0	16.9	4.5	11.5	666
Rural	35.1	21.1	22.9	20.8	627	23.1	17.1	26.5	32.7	629	29.1	19.1	24.7	26.8	1256
Age at beginning of school year															
12	29.4	43.7	14.2	12.7	209	20.5	38.8	25.6	15.1	219	24.9	41.2	20.0	13.9	428
13	34.2	31.7	21.9	12.2	168	37.9	19.2	22.9	19.2	186	36.1	25.1	22.4	15.9	354
14	53.3	13.5	13.5	19.8	165	40.5	12.1	21.8	25.2	171	46.8	12.8	17.7	22.5	336
15	50.2	9.4	18.1	22.4	181	43.5	6.0	16.7	33.8	152	47.1	7.8	17.5	27.6	333
16	56.2	7.0	15.4	21.5	113	57.3	4.5	9.3	28.8	115	56.7	5.7	12.3	25.2	228
17	60.4	1.7	16.2	21.7	117	50.9	2.5	8.3	37.7	124	55.5	2.1	12.1	29.9	241
Mother's education															
None	32.7	25.8	14.3	27.2	177	34.1	19.8	11.9	33.1	159	33.3	23.0	13.1	30.0	335
Non-formal	38.0	20.5	25.2	16.3	467	32.0	19.1	33.0	16.0	417	35.2	19.8	28.9	16.1	884
Primary	54.5	27.6	1.5	16.4	116	56.4	21.3	6.8	14.9	108	55.4	24.5	4.1	15.7	224
Secondary	75.0	10.4	3.3	11.3	84	76.6	15.9	.9	6.6	99	75.8	13.4	2.0	8.8	183
Higher	(87.8)	(10.0)	(0.0)	(2.2)	32	(56.1)	(17.9)	(6.7)	(19.3)	25	73.9	13.5	2.9	9.7	57
Cannot be determined ^b	54.3	11.1	13.4	21.1	78	26.2	2.8	10.0	60.6	160	35.4	5.5	11.1	47.6	238

Table ED.5: Secondary school attendance and out of school children (continued)

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, Nigeria, 2016-17 Kano State

	Male					Female					Total				
	Percentage of children:					Percentage of children:					Percentage of children:				
	Net attendance ratio (adjusted)	Attending primary school	Percentage of children: Attending non formal education	Out of school ^a	Number of children	Net attendance ratio (adjusted)	Attending primary school	Percentage of children: Attending non formal education	Out of school ^a	Number of children	Net attendance ratio (adjusted) ¹	Attending primary school	Percentage of children: Attending non formal education	Out of school ^a	Number of children
Total	45.3	20.3	16.6	17.8	954	39.3	16.4	18.9	25.2	967	42.3	18.3	17.7	21.5	1922
Wealth index quintile															
Poorest	15.3	16.2	36.7	31.7	182	2.6	9.5	42.6	44.5	159	9.4	13.1	39.5	37.7	341
Second	30.4	25.1	22.4	22.0	165	11.3	20.1	35.7	31.9	173	20.6	22.6	29.2	27.1	338
Middle	43.3	24.5	16.3	15.9	188	29.7	16.7	23.0	30.6	165	36.9	20.9	19.4	22.8	354
Fourth	54.2	23.3	7.4	15.1	214	53.4	19.5	5.3	21.5	212	53.8	21.4	6.4	18.3	426
Richest	76.4	13.1	3.7	6.7	205	75.3	15.4	1.2	8.2	258	75.8	14.4	2.3	7.5	463
Ethnicity of household head															
Hausa	44.9	20.4	16.6	18.0	932	38.5	16.8	19.0	25.5	931	41.7	18.6	17.8	21.7	1863
Igbo	(*)	(*)	(*)	(*)	5	(*)	(*)	(*)	(*)	4	(*)	(*)	(*)	(*)	10
Yoruba	(*)	(*)	(*)	(*)	3	(*)	(*)	(*)	(*)	3	(*)	(*)	(*)	(*)	6
Other ethnic group	(*)	(*)	(*)	(*)	14	(59.3)	(5.4)	(13.6)	(21.7)	29	(61.5)	(7.9)	(13.1)	(17.5)	43

¹ MICS indicator 7.5 - Secondary school net attendance ratio (adjusted)^a The percentage of children of secondary school age out of school are those who are not attending primary, secondary, or higher education^b Children age 15 or higher at the time of the interview whose mothers were not living in the household

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table ED.6: Children reaching last grade of primary school

Percentage of children entering first grade of primary school who eventually reach the last grade of primary school (Survival rate to last grade of primary school), Nigeria, 2016-17 Kano State

	Percent attending grade 1 last school year who are in grade 2 this school year	Percent attending grade 2 last school year who are attending grade 3 this school year	Percent attending grade 3 last school year who are attending grade 4 this school year	Percent attending grade 4 last school year who are attending grade 5 this school year	Percent attending grade 5 last school year who are attending grade 6 this school year	Percent who reach grade 6 of those who enter grade 1 ¹
Total	98.7	99.8	98.3	97.9	98.6	93.6
Senatorial District						
Kano Central	98.5	100.0	98.2	100.0	98.1	94.9
Kano North	100.0	100.0	97.5	94.4	98.5	90.7
Kano South	98.0	99.3	99.2	97.1	100.0	93.7
Sex						
Male	98.7	100.0	98.9	98.4	100.0	96.0
Female	98.8	99.6	97.6	97.3	97.3	91.0
Residence						
Urban	97.6	100.0	96.7	98.9	97.2	90.6
Rural	99.4	99.7	99.3	97.3	99.3	95.1
Mother's education						
None	100.0	100.0	98.2	89.7	100.0	88.0
Non-formal	98.7	100.0	100.0	100.0	100.0	98.7
Primary	96.1	100.0	95.3	100.0	90.8	83.2
Secondary	100.0	100.0	97.0	100.0	100.0	97.0
Higher	100.0	100.0	100.0	100.0	100.0	100.0
Wealth index quintile						
Poorest	100.0	100.0	94.4	89.0	100.0	84.0
Second	97.8	100.0	100.0	97.7	100.0	95.6
Middle	96.4	100.0	94.7	100.0	100.0	91.3
Fourth	100.0	99.2	100.0	97.5	95.6	92.4
Richest	100.0	100.0	100.0	100.0	100.0	100.0
Ethnicity of household head						
Hausa	98.7	99.8	98.3	97.9	98.6	93.5
Igbo						
Yoruba						
Other ethnic group	100.0	100.0	100.0	100.0	100.0	100.0

¹ MICS indicator 7.6; MDG indicator 2.2 - Children reaching last grade of primary

Table ED.7: Primary school completion and transition to secondary school

Primary school completion rates and transition and effective transition rates to secondary school, Nigeria, 2016-17 Kano State

	Primary school completion rate ¹	Number of children of primary school completion age	Transition rate to secondary school ²	Number of children who were in the last grade of primary school the previous year	Effective transition rate to secondary school	Number of children who were in the last grade of primary school the previous year and are not repeating that grade in the current school year
Total	56.9	288	39.7	196	57.4	136
Senatorial District						
Kano Central	60.1	137	39.0	118	51.3	89
Kano North	67.7	70	44.5	42	(78.6)	24
Kano South	42.1	81	(36.5)	37	(*)	23
Sex						
Male	66.5	124	39.3	103	56.7	72
Female	49.7	164	40.2	93	58.1	64
Residence						
Urban	57.5	96	37.5	92	48.9	70
Rural	56.6	191	41.7	104	66.4	65
Mother's education						
None	36.6	66	(*)	23	(*)	12
Non-formal	59.0	140	48.7	88	65.7	66
Primary	(50.3)	44	(29.0)	33	(*)	19
Secondary	(67.7)	34	(*)	29	(*)	23
Higher	(*)	4	(*)	3	(*)	3
Wealth index quintile						
Poorest	(30.7)	44	(*)	9	(*)	5
Second	52.9	62	(30.1)	35	(*)	19
Middle	59.0	54	(46.0)	41	(61.9)	30
Fourth	76.2	64	39.3	53	(59.4)	35
Richest	57.8	64	44.3	58	(56.6)	46
Ethnicity of household head						
Hausa	57.5	281	39.5	194	57.0	135
Igbo						0
Yoruba						0
Other ethnic group	(*)	7	(*)	2	(*)	1

¹ MICS indicator 7.7 - Primary completion rate² MICS indicator 7.8 - Transition rate to secondary school

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table ED.8: Education gender parity

Ratio of adjusted net attendance ratios of girls to boys, in primary and secondary school, Nigeria, 2016-17 Kano State

	Primary school			Secondary school		
	Primary school adjusted net attendance ratio (NAR), girls	Primary school adjusted net attendance ratio (NAR), boys	Gender parity index (GPI) for primary school adjusted NAR ¹	Secondary school adjusted net attendance ratio (NAR), girls	Secondary school adjusted net attendance ratio (NAR), boys	Gender parity index (GPI) for secondary school adjusted NAR ²
Total	53.0	56.7	0.93	39.3	45.3	0.87
Senatorial District						
Kano Central	68.8	67.1	1.03	56.5	55.9	1.01
Kano North	44.3	53.3	0.83	20.2	39.5	0.51
Kano South	40.9	46.7	0.87	22.9	32.4	0.70
Residence						
Urban	76.1	69.6	1.09	69.2	64.7	1.07
Rural	45.4	52.4	0.87	23.1	35.1	0.66
Mother's education						
None	36.2	47.9	0.75	34.1	32.7	1.04
Non-formal	48.0	52.6	0.91	32.0	38.0	0.84
Primary	70.0	67.7	1.03	56.4	54.5	1.04
Secondary	84.0	77.3	1.09	76.6	75.0	1.02
Higher	89.1	76.4	1.17	56.1	87.8	0.64
Cannot be determined ^a	54.9	na	na	26.2	54.3	0.48
Wealth index quintile						
Poorest	22.0	29.0	0.76	2.6	15.3	0.17
Second	43.2	50.9	0.85	11.3	30.4	0.37
Middle	52.0	61.4	0.85	29.7	43.3	0.68
Fourth	68.4	71.2	0.96	53.4	54.2	0.99
Richest	89.3	75.7	1.18	75.3	76.4	0.98
Ethnicity of household head						
Hausa	53.1	57.0	0.93	38.5	44.9	0.86
Igbo	50.0	100.0	0.50	75.0	46.6	1.61
Yoruba	0.0	100.0	0.00	40.3	70.7	0.57
Other ethnic group	48.5	33.5	1.44	59.3	66.1	0.90

¹ MICS indicator 7.9; MDG indicator 3.1 - Gender parity index (primary school)² MICS indicator 7.10; MDG indicator 3.1 - Gender parity index (secondary school)^a Children age 15 or higher at the time of the interview whose mothers were not living in the household

na: not applicable

Table ED.9: Out of school gender parity

Percentage of girls in the total out of school population, in primary and secondary school, Nigeria, 2016-17 Kano State

	Primary school				Secondary school			
	Percentage of out of school children	Number of children of primary school age	Percentage of girls in the total out of school population of primary school age	Number of children of primary school age out of school	Percentage of out of school children	Number of children of secondary school age	Percentage of girls in the total out of school population of secondary school age	Number of children of secondary school age out of school
Total	20.8	2687	48.0	558	21.5	1922	58.9	413
Senatorial District								
Kano Central	18.3	1075	43.7	196	14.2	947	52.3	135
Kano North	26.5	749	51.6	198	31.6	429	63.7	135
Kano South	18.9	862	48.6	163	26.2	546	60.4	143
Residence								
Urban	19.5	671	40.4	131	11.5	666	48.6	77
Rural	21.2	2015	50.3	427	26.8	1256	61.2	337
Mother's education								
None	42.1	551	51.7	232	30.0	335	52.2	101
Non-formal	14.0	1450	49.6	204	16.1	884	46.7	143
Primary	19.4	350	42.5	68	15.7	224	(45.7)	35
Secondary	16.2	284	(32.5)	46	8.8	183	(*)	16
Higher	16.9	49	(*)	8	9.7	57	(*)	6
Cannot be determined ^a	(*)	3			47.6	238	85.4	113
Wealth index quintile								
Poorest	31.8	577	50.2	183	37.7	341	55.2	129
Second	18.0	587	52.7	106	27.1	338	60.3	92
Middle	18.7	552	48.0	103	22.8	354	62.8	81
Fourth	19.1	501	50.7	96	18.3	426	58.3	78
Richest	14.8	469	31.0	69	7.5	463	(60.4)	35
Ethnicity of household head								
Hausa	20.7	2641	48.0	546	21.7	1863	58.5	405
Igbo	(*)	5	(*)	1	(*)	10	(*)	1
Yoruba	(*)	3			(*)	6		
Other ethnic group	(28.6)	39	(*)	11	(17.5)	43	(*)	8

^a Children age 15 or higher at the time of the interview whose mothers were not living in the household

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

XI. Child Protection

Birth Registration

Table CP.1: Birth registration

Percentage of children under age 5 by whether birth is registered and percentage of children not registered whose mothers/caregivers know how to register birth, Nigeria, 2016-17 Kano State

	Children under age 5 whose birth is registered with civil authorities				Number of children under age 5	Children under age 5 whose birth is not registered	
	Has birth certificate		No birth certificate	Total registered ¹		Percent of children whose mother /caretaker knows how to register birth	Number of children under age 5 without birth registration
	Seen	Not seen					
Total	19.2	12.4	3.7	35.3	2559	22.0	1656
Senatorial District							
Kano Central	30.9	17.7	6.4	55.1	962	30.9	432
Kano North	11.6	10.7	2.0	24.3	693	22.3	525
Kano South	12.6	8.2	2.0	22.7	904	16.3	699
Sex							
Male	19.6	14.2	3.4	37.1	1293	21.7	813
Female	18.8	10.7	4.0	33.4	1266	22.4	842
Residence							
Urban	36.1	22.4	7.8	66.3	603	38.9	203
Rural	14.0	9.4	2.4	25.7	1956	19.7	1453
Age (Months)							
0-11	13.6	10.3	5.3	29.1	514	23.3	364
12-23	18.4	14.2	3.7	36.3	538	22.3	342
24-35	25.5	11.2	2.6	39.2	485	22.4	295
36-47	18.6	13.6	3.0	35.2	522	20.2	339
48-59	20.5	12.8	3.7	36.9	500	22.0	316
Mother's education							
None	7.5	11.3	3.7	22.4	452	20.7	351
Non-formal	12.6	9.5	1.5	23.6	1298	19.7	991
Primary	26.0	11.7	6.2	43.8	352	24.4	198
Secondary	40.4	23.3	7.9	71.6	379	40.8	107
Higher	63.8	18.3	7.4	89.5	77	(*)	8
Missing/Don't know	12.6	9.5	1.5	23.6	1298	19.7	991
Wealth index quintile							
Poorest	3.5	6.3	1.0	10.8	530	12.8	472
Second	9.0	6.8	1.9	17.8	559	20.1	460
Middle	12.6	11.4	3.8	27.8	529	22.3	382
Fourth	30.7	14.9	4.2	49.8	487	33.1	244
Richest	45.3	25.0	8.2	78.6	455	47.6	97
Ethnicity of household head							
Hausa	19.2	12.4	3.4	35.1	2514	22.1	1633
Igbo	(*)	(*)	(*)	(*)	9	(*)	5
Yoruba	(*)	(*)	(*)	(*)	4	(*)	1
Other ethnic group	(12.2)	(4.9)	(28.5)	(45.6)	31	(15.9)	17
¹ MICS indicator 8.1 - Birth registration							

¹ MICS indicator 8.1 - Birth registration

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Child Labour

Table CP.2: Children's involvement in economic activities

Percentage of children by involvement in economic activities during the last week, according to age groups, Nigeria, 2016-17 Kano State

	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	45.2	3318	59.5	12.2	1115	71.4	0.6	815
Senatorial District								
Kano Central	31.8	1450	53.4	6.7	487	63.0	0.0	418
Kano North	49.6	842	59.3	17.7	272	69.1	2.6	180
Kano South	60.5	1026	68.0	15.6	355	89.4	0.0	216
Sex								
Male	47.5	1634	62.0	10.0	489	74.2	0.8	399
Female	43.0	1684	57.5	14.0	626	68.7	0.3	416
Residence								
Urban	20.2	880	51.0	1.8	328	66.5	0.0	331
Rural	54.2	2439	63.0	16.6	786	74.7	1.0	484
School attendance								
Yes	48.2	2608	60.6	11.4	969	72.6	0.2	550
No	34.0	710	52.3	17.8	146	68.9	1.4	265
Mother's education								
None	47.6	626	79.0	6.5	192	79.1	0.0	132
Non-formal	51.0	1806	58.7	15.8	644	84.8	1.0	332
Primary	48.8	438	63.2	17.6	94	84.3	0.0	60
Secondary	14.3	398	37.6	0.0	121	53.3	0.0	78
Higher	(14.8)	47	44.7	8.0	64	(0.0)	(0.0)	29
Cannot be determined ^a	na	na	na	na	na			
Wealth index quintile								
Poorest	54.2	731	70.4	13.0	196	90.8	1.2	110
Second	62.3	639	60.4	28.8	168	81.6	1.4	170
Middle	54.3	665	61.8	15.8	245	76.7	0.5	157
Fourth	36.0	676	68.5	10.4	230	80.4	0.0	167
Richest	16.5	607	41.6	0.0	276	41.7	0.0	210
Ethnicity of household head								
Hausa	44.9	3255	59.9	11.6	1083	73.2	0.6	792
Igbo	(*)	16	(*)	(*)	3	na	na	0
Yoruba	(*)	2	(*)	(*)	2	(*)	(*)	2
Other ethnic group	79.5	45	(39.6)	(38.5)	28	(*)	(*)	21

na: not applicable

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table CP.3: Children's involvement in household chores

Percentage of children by involvement in household chores during the last week, according to age groups, Nigeria, 2016-17 Kano State

	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	81.5	5.5	3318	81.6	3.8	1115	83.5	1.9	815
Senatorial District									
Kano Central	82.2	2.9	1450	78.8	1.4	487	76.6	0.5	418
Kano North	80.3	5.9	842	72.8	5.6	272	89.3	0.0	180
Kano South	81.5	8.9	1026	92.4	5.6	355	91.9	6.3	216
Sex									
Male	81.9	4.1	1634	80.3	4.3	489	84.8	1.8	399
Female	81.1	6.9	1684	82.7	3.4	626	82.3	2.1	416
Residence									
Urban	80.8	2.3	880	79.5	2.1	328	76.0	0.0	331
Rural	81.7	6.7	2439	82.6	4.5	786	88.6	3.2	484
School attendance									
Yes	81.5	6.9	2608	82.1	3.1	969	82.4	1.3	550
No	81.6	.5	710	78.6	8.1	146	85.8	3.2	265
Mother's education									
None	84.3	5.2	626	92.0	6.0	192	76.8	0.0	132
Non-formal	80.0	6.3	1806	80.0	3.7	644	89.6	2.8	332
Primary	82.3	7.8	438	92.7	7.3	94	100.0	0.0	60
Secondary	84.0	.5	398	70.3	0.0	121	58.1	0.0	78
Higher	(73.7)	(0.0)	47	72.5	0.0	64	(29.2)	(0.0)	29
Cannot be determined ^a	na	na	na	na	na	na	91.2	3.6	179
Wealth index quintile									
Poorest	74.1	7.9	731	81.7	5.8	196	94.2	0.0	110
Second	84.9	7.7	639	75.4	10.1	168	89.0	0.0	170
Middle	86.0	4.1	665	90.8	2.7	245	85.2	8.6	157
Fourth	82.1	5.1	676	89.9	3.0	230	90.5	1.3	167
Richest	81.2	2.5	607	70.3	0.0	276	66.5	0.0	210
Ethnicity of household head									
Hausa	81.7	5.5	3255	81.5	3.8	1083	83.2	2.0	792
Igbo	(*)	(*)	16	(*)	(*)	3			0
Yoruba	(*)	(*)	2	(*)	(*)	2	(*)	(*)	2
Other ethnic group	87.3	6.0	45	(94.5)	(0.0)	28	(*)	(*)	21

^a Children age 15 or higher at the time of the interview whose mothers were not living in the household

na: not applicable

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table CP.4: 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, Nigeria, 2016-17 Kano State

	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	37.5	31.3	81.8	4.6	44.4	53.6	5248
Senatorial District							
Kano Central	35.8	21.0	80.5	2.2	29.5	38.2	2355
Kano North	35.1	36.3	80.0	5.0	48.6	57.3	1295
Kano South	41.9	42.3	85.3	7.8	62.8	73.3	1598
Sex							
Male	37.4	32.8	82.1	3.7	48.8	57.2	2522
Female	37.5	29.8	81.6	5.4	40.3	50.3	2726
Residence							
Urban	37.0	11.9	79.5	1.8	19.4	26.2	1539
Rural	37.6	39.3	82.8	5.7	54.7	65.0	3709
Age (Years)							
5-11	21.7	45.2	81.5	5.5	44.2	57.5	3318
12-14	59.5	12.2	81.6	3.8	42.8	46.5	1115
15-17	71.4	0.6	83.5	1.9	47.0	47.8	815
School attendance							
Yes	36.9	33.2	81.8	5.3	44.6	54.4	4127
No	39.4	24.2	82.2	2.1	43.4	50.9	1121
Mother's education							
None	50.4	32.7	84.8	4.6	59.8	70.7	950
Non-formal	34.9	36.9	81.1	5.3	48.1	57.9	2782
Primary	32.2	38.9	85.7	6.9	44.7	54.3	592
Secondary	31.5	9.5	77.8	0.3	11.6	18.6	597
Higher	24.8	8.6	63.9	0.0	11.1	13.7	140
Cannot be determined ^a	56.0	0.8	91.2	3.6	40.2	42.6	179

Table CP.4: Child labour (continued)

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, Nigeria, 2016-17 Kano State

	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	37.5	31.3	81.8	4.6	44.4	53.6	5248
Wealth index quintile							
Poorest	42.2	40.8	77.7	6.6	59.8	70.1	1038
Second	36.1	45.9	84.0	6.8	57.5	71.0	977
Middle	42.1	37.6	87.0	4.4	62.1	68.6	1067
Fourth	37.8	24.9	85.1	4.0	33.5	44.1	1074
Richest	29.4	9.1	75.6	1.4	11.3	17.2	1092
Ethnicity of household head							
Hausa	37.9	31.0	81.9	4.6	44.5	53.8	5130
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	19
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	6
Other ethnic group	20.0	49.5	92.3	2.9	45.4	53.4	93

¹ MICS indicator 8.2 - Child labour

^a Children age 15 or higher at the time of the interview whose mothers were not living in the household

(*) Sample data are fewer than 25 unweighted cases

Child Discipline

Table CP.5: Child discipline

Percentage of children age 1-14 years by child disciplining methods experienced during the last one month, Nigeria, 2016-17 Kano State

	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	11.2	74.1	67.7	26.2	82.5	6269
Senatorial District						
Kano Central	13.7	68.6	68.2	23.8	80.0	2566
Kano North	11.5	75.6	64.7	26.1	81.1	1682
Kano South	7.8	79.7	69.5	29.2	86.9	2021
Sex						
Male	11.3	73.9	69.9	27.7	83.7	3085
Female	11.2	74.2	65.6	24.6	81.4	3185
Residence						
Urban	17.0	60.9	60.2	15.8	74.4	1614
Rural	9.2	78.7	70.3	29.8	85.4	4655
Age (Years)						
1-2	14.7	64.6	48.9	14.2	70.6	890
3-4	9.6	79.8	71.9	26.4	86.3	946
5-9	12.0	74.6	70.1	29.4	83.8	2523
10-14	9.5	75.0	71.1	27.3	84.5	1910
Education of household head						
None	21.1	65.3	59.7	23.5	71.8	536
Non-formal	8.3	77.9	72.4	29.1	86.3	3109
Primary	12.1	73.9	61.4	24.7	80.7	785
Secondary	13.6	68.6	67.6	24.4	78.3	1089
Higher	12.3	71.9	61.2	20.1	82.1	711
Cannot be determined ^a	4.9	87.9	51.8	18.1	87.9	39
Wealth index quintile						
Poorest	10.0	77.6	68.1	29.6	82.5	1308
Second	7.3	79.3	70.8	32.1	85.8	1284
Middle	10.0	78.7	71.2	31.4	86.0	1261
Fourth	15.7	67.4	62.0	20.3	78.1	1233
Richest	13.5	66.5	66.2	16.4	79.9	1183
Ethnicity of household head						
Hausa	11.1	74.2	67.9	26.2	82.7	6146
Igbo	(*)	(*)	(*)	(*)	(*)	24
Yoruba	(*)	(*)	(*)	(*)	(*)	10
Other ethnic group	4.8	89.0	70.0	28.7	93.5	89

¹ MICS indicator 8.3 - Violent discipline

(*) Sample data are fewer than 25 unweighted cases

Table CP.6: Attitudes toward physical punishment

Percentage of respondents to the child discipline module who believe that physical punishment is needed to bring up, raise, or educate a child properly, Nigeria, 2016-17 Kano State

	Respondent believes that a child needs to be physically punished	Number of respondents to the child discipline module
Total	44.6	1455
Senatorial District		
Kano Central	39.6	610
Kano North	38.8	395
Kano South	56.4	450
Sex		
Male	41.7	557
Female	46.4	899
Residence		
Urban	34.7	380
Rural	48.1	1076
Age (Years)		
<25	42.6	192
25-39	46.2	605
40-59	44.8	504
60+	39.8	154
Respondent's relationship to selected child		
Mother	46.7	656
Father	40.6	484
Other	46.1	316
Respondent's education		
None	46.3	205
Non-formal	46.1	704
Primary	49.5	189
Secondary	36.9	246
Higher	40.1	107
Wealth index quintile		
Poorest	48.8	300
Second	47.1	308
Middle	42.4	296
Fourth	47.9	279
Richest	36.0	273
Ethnicity of household head		
Hausa	44.3	1420
Igbo	(*)	7
Yoruba	(*)	4
Other ethnic group	(55.2)	24

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Early Marriage and Polygyny

Table CP.7: Early marriage and polygyny (women)

Percentage of women age 15-49 years who first married or entered a marital union before their 15th birthday, percentages of women age 20-49 years who first married or entered a marital union before their 15th and 18th birthdays, percentage of women age 15-19 years currently married or in union, and the percentage of women who are in a polygynous marriage or union, Nigeria, 2016-17 Kano State

	Women age 15-49 years		Women age 20-49 years			Women age 15-19 years		Women age 15-49 years	
	Percentage married before age 15 ¹	Number of women age 15-49 years	Percentage married before age 15	Percentage married before age 18 ²	Number of women age 20-49 years	Percentage currently married/in union ³	Number of women age 15-19 years	Percentage in polygynous marriage/union ⁴	Number of women age 15-49 years currently married/in union
Total	30.8	2500	35.9	69.7	1914	30.8	586	48.2	1949
Senatorial District									
Kano Central	20.7	1093	27.1	59.3	794	12.3	299	39.4	723
Kano North	43.9	603	47.0	77.8	493	53.0	110	56.0	538
Kano South	34.6	803	38.3	76.6	627	48.2	177	51.5	688
Residence									
Urban	16.2	731	22.4	52.4	515	5.3	216	37.7	437
Rural	36.8	1769	40.9	76.1	1399	45.6	370	51.3	1512
Age (Years)									
15-19	14.1	586	na	na	na	30.8	586	37.2	180
20-24	27.6	431	27.6	69.0	431	na	na	38.5	364
25-29	35.4	432	35.4	75.1	432	na	na	43.0	410
30-34	41.7	354	41.7	73.3	354	na	na	53.8	336
35-39	39.7	286	39.7	69.3	286	na	na	54.7	277
40-44	37.1	222	37.1	60.0	222	na	na	58.1	212
45-49	37.7	190	37.7	64.6	190	na	na	59.6	170
Mother's education									
None	46.6	419	48.3	79.3	371	(80.3)	47	56.6	392
Non-formal	39.6	1081	41.0	76.5	919	56.3	162	53.2	985
Primary	32.1	294	34.8	78.1	230	51.4	63	44.4	252
Secondary	8.1	608	15.8	47.9	304	6.0	304	26.1	260
Higher	2.2	99	2.4	13.0	89	(*)	9	24.1	60

Table CP.7: Early marriage and polygyny (women) (continued)

Percentage of women age 15-49 years who first married or entered a marital union before their 15th birthday, percentages of women age 20-49 years who first married or entered a marital union before their 15th and 18th birthdays, percentage of women age 15-19 years currently married or in union, and the percentage of women who are in a polygynous marriage or union, Nigeria, 2016-17 Kano State

	Women age 15-49 years		Women age 20-49 years			Women age 15-19 years		Women age 15-49 years	
	Percentage married before age 15 ¹	Number of women age 15-49 years	Percentage married before age 15	Percentage married before age 18 ²	Number of women age 20-49 years	Percentage currently married/in union ³	Number of women age 15-19 years	Percentage in polygynous marriage/union ⁴	Number of women age 15-49 years currently married/in union
Wealth index quintile									
Poorest	45.8	447	48.5	78.3	375	56.1	72	55.1	412
Second	39.4	484	42.5	77.7	394	44.3	90	53.8	421
Middle	34.3	479	38.0	76.4	369	50.1	110	49.7	406
Fourth	26.5	530	34.4	74.1	375	21.5	155	45.2	371
Richest	12.4	560	16.9	43.6	401	7.3	159	34.5	340
Ethnicity of household head									
Hausa	30.9	2429	35.9	70.2	1863	31.4	566	48.7	1907
Igbo	(*)	9	25.4	(*)	7	(*)	2	(*)	7
Yoruba	(*)	8	7.0	(*)	5	(*)	2	(*)	4
Other ethnic group	29.2	55	38.7	(61.9)	38	(*)	16	(27.8)	31
¹ MICS indicator 8.4 - Marriage before age 15 ² MICS indicator 8.5 - Marriage before age 18 ³ MICS indicator 8.6 - Young women age 15-19 years currently married or in union ⁴ MICS indicator 8.7 - Polygyny									
na: not applicable									

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table CP.7M: Early marriage and polygyny (men)

Percentage of men age 15-49 years who first married or entered a marital union before their 15th birthday, percentages of men age 20-49 years who first married or entered a marital union before their 15th and 18th birthdays, percentage of men age 15-19 years currently married or in union, and the percentage of men who are in a polygynous marriage or union, Nigeria, 2016-17 Kano State

	Men age 15-49 years		Men age 20-49 years			Men age 15-19 years		Men age 15-49 years	
	Percentage married before age 15 ¹	Number of men age 15-49 years	Percentage married before age 15	Percentage married before age 18 ²	Number of men age 20-49 years	Percentage currently married/in union ³	Number of men age 15-19 years	Percentage in polygynous marriage/ union ⁴	Number of men age 15-49 years currently married/in union
Total	1.9	1099	2.5	4.1	809	0.0	290	34.7	474
Senatorial District									
Kano Central	1.1	538	1.3	2.3	387	0.0	151	0.0	151
Kano North	5.2	228	6.7	9.2	177	0.0	51	0.0	51
Kano South	1.0	333	1.4	3.1	245	0.0	88	0.0	88
Residence									
Urban	2.1	394	2.5	2.5	280	0.0	113	0.0	113
Rural	1.9	705	2.5	4.9	529	0.0	176	0.0	176
Age (Years)									
15-19	0.4	290	na	na	na	0.0	290	(*)	2
20-24	0.5	193	0.5	0.9	193	na	na	(*)	5
25-29	3.1	163	3.1	4.2	163	na	na	2.8	65
30-34	3.8	128	3.8	8.0	128	na	na	25.1	88
35-39	3.4	97	3.4	5.9	97	na	na	32.9	90
40-44	3.7	130	3.7	4.4	130	na	na	44.1	124
45-49	1.2	99	1.2	2.9	99	na	na	56.2	99
Education									
None	(7.4)	33	(7.6)	(9.8)	32	(*)	1	(28.0)	26
Non-formal	2.7	329	3.3	5.3	272	0.0	56	37.8	217
Primary	2.4	144	2.2	6.2	102	(.0)	42	41.5	76
Secondary	1.0	461	1.6	2.2	277	0.0	184	26.0	108
Higher	1.5	133	1.6	2.4	126	(*)	7	(33.1)	47

Table CP.7M: Early marriage and polygyny (men) (continued)

Percentage of men age 15-49 years who first married or entered a marital union before their 15th birthday, percentages of men age 20-49 years who first married or entered a marital union before their 15th and 18th birthdays, percentage of men age 15-19 years currently married or in union, and the percentage of men who are in a polygynous marriage or union, Nigeria, 2016-17 Kano State

	Men age 15-49 years		Men age 20-49 years			Men age 15-19 years		Men age 15-49 years	
	Percentage married before age 15 ¹	Number of men age 15-49 years	Percentage married before age 15	Percentage married before age 18 ²	Number of men age 20-49 years	Percentage currently married/in union ³	Number of men age 15-19 years	Percentage in polygynous marriage/ union ⁴	Number of men age 15-49 years currently married/in union
Total	1.9	1099	2.5	4.1	809	0.0	290	34.7	474
Wealth index quintile									
Poorest	1.6	172	2.2	5.5	126	0.0	46	39.7	91
Second	3.4	175	4.4	6.2	134	(0.0)	40	40.2	90
Middle	3.4	209	4.5	8.6	154	0.0	54	42.5	102
Fourth	0.9	241	0.6	0.6	173	0.0	68	25.6	87
Richest	1.1	303	1.5	1.5	222	0.0	81	25.5	105
Ethnicity of household head									
Hausa	2.0	1072	2.6	4.2	785	0.0	287	34.5	457
Igbo	(*)	2	(*)	(*)	2	na	0	(*)	2
Yoruba	(*)	3	(*)	(*)	3	na	0	(*)	3
Other ethnic group	(*)	22	(*)	(*)	19	(*)	3	(*)	12

¹ MICS indicator 8.4 - Marriage before age 15^[M]

² MICS indicator 8.5 - Marriage before age 18^[M]

³ MICS indicator 8.6 - Young men age 15-19 years currently married or in union^[M]

⁴ MICS indicator 8.7 - Polygyny^[M]

na: not applicable

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table CP.8: Trends in early marriage (women)

Percentage of women who were first married or entered into a marital union before age 15 and 18, by area and age groups, Nigeria, 2016-17 Kano State

	Urban				Rural				All			
	Percentage of women married before age 15	Number of women age 15-49 years	Percentage of women married before age 18	Number of women age 20-49 years	Percentage of women married before age 15	Number of women age 15-49 years	Percentage of women married before age 18	Number of women age 20-49 years	Percentage of women married before age 15	Number of women age 15-49 years	Percentage of women married before age 18	Number of women age 20-49 years
Total	16.2	731	52.4	515	36.8	1769	76.1	1399	30.8	2500	69.7	1914
Age (Years)												
15-19	1.4	216	na	na	21.6	370	na	na	14.1	586	na	na
20-24	7.9	112	43.8	112	34.5	319	77.8	319	27.6	431	69.0	431
25-29	18.6	118	56.8	118	41.6	314	81.9	314	35.4	432	75.1	432
30-34	34.6	92	52.6	92	44.3	261	80.7	261	41.7	354	73.3	354
35-39	27.0	84	48.6	84	44.9	202	78.0	202	39.7	286	69.3	286
40-44	(28.4)	55	(57.1)	55	40.0	167	60.9	167	37.1	222	60.0	222
45-49	(25.9)	54	(61.3)	54	42.3	136	66.0	136	37.7	190	64.6	190

na: not applicable

() Sample data are based on 25-49 unweighted cases

Table CP.8M: Trends in early marriage (men)

Percentage of men who were first married or entered into a marital union before age 15 and 18, by area and age groups, Nigeria, 2016-17 Kano State

	Urban				Rural				All			
	Percentage of men married before age 15	Number of men age 15-49 years	Percentage of men married before age 18	Number of men age 20-49 years	Percentage of men married before age 15	Number of men age 15-49 years	Percentage of men married before age 18	Number of men age 20-49 years	Percentage of men married before age 15	Number of men age 15-49 years	Percentage of men married before age 18	Number of men age 20-49 years
Total	2.1	394	2.5	280	1.9	705	4.9	529	1.9	1099	4.1	809
Age (Years)												
15-19	1.1	113	na	na	0.0	176	na	na	0.4	290	na	na
20-24	1.1	91	1.1	91	0.0	101	0.7	101	0.5	193	0.9	193
25-29	(0.0)	51	(0.0)	51	4.5	112	6.1	112	3.1	163	4.2	163
30-34	(5.2)	38	(5.2)	38	3.2	90	9.1	90	3.8	128	8.0	128
35-39	(4.8)	32	(4.8)	32	2.7	65	6.5	65	3.4	97	5.9	97
40-44	(2.8)	44	(2.8)	44	4.3	86	5.2	86	3.7	130	4.4	130
45-49	(*)	25	(*)	25	0.0	75	2.2	75	1.2	99	2.9	99

na: not applicable

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table CP.9: Spousal age difference

Percent distribution of women currently married/in union age 15-19 and 20-24 years according to the age difference with their husband or partner, Nigeria, 2016-17 Kano State

	Percentage of currently married/in union women age 15-19 years whose husband or partner is:						Number of women age 15-19 years currently married / in union	Percentage of currently married/in union women age 20-24 years whose husband or partner is:						Number of women age 20-24 years currently married / in union
	Younger	0-4 years older	5-9 years older	10+ years older ¹	Husband/Partner's age unknown	Total		Younger	0-4 years older	5-9 years older	10+ years older ²	Husband/Partner's age unknown	Total	
Total	6.0	4.2	27.8	56.8	5.2	100.0	180	2.9	5.1	31.8	57.1	3.1	100.0	364
Senatorial District														
Kano Central	(8.5)	(5.7)	(24.9)	(57.6)	(3.3)	100.0	37	2.0	8.3	32.8	56.9	0.0	100.0	113
Kano North	10.2	4.9	24.1	52.3	8.6	100.0	58	5.3	2.2	24.2	61.6	6.8	100.0	111
Kano South	2.1	3.0	31.6	59.6	3.7	100.0	85	1.8	4.8	37.0	53.7	2.7	100.0	141
Residence														
Urban	(*)	(*)	(*)	(*)	(*)	100.0	11	1.9	9.0	27.6	60.3	1.2	100.0	67
Rural	6.0	4.5	27.8	56.2	5.6	100.0	169	3.1	4.2	32.7	56.4	3.5	100.0	297
Age (Years)														
15-19	6.0	4.2	27.8	56.8	5.2	100.0	180	0.0	0.0	0.0	0.0	0.0	0.0	0
20-24	0.0	0.0	0.0	0.0	0.0	0.0	0	2.9	5.1	31.8	57.1	3.1	100.0	364
Education														
None	(21.0)	(5.7)	(10.0)	(63.4)	(0.0)	100.0	38	5.3	1.3	25.2	67.2	1.1	100.0	67
Non-formal	0.7	4.2	33.6	51.2	10.3	100.0	91	2.5	5.6	37.0	50.5	4.5	100.0	168
Primary	(2.4)	(4.8)	(28.9)	(64.0)	(0.0)	100.0	33	(6.3)	(6.4)	(31.4)	(54.1)	(1.7)	100.0	46
Secondary	(*)	(*)	(*)	(*)	(*)	100.0	18	0.0	6.7	25.3	65.1	2.9	100.0	79
Higher	0.0	0.0	0.0	0.0	0.0	0.0	0	(*)	(*)	(*)	(*)	(*)	100.0	4
Wealth index quintile														
Poorest	(7.9)	(3.9)	(31.9)	(50.8)	(5.4)	100.0	40	2.1	8.3	29.9	54.5	5.2	100.0	69
Second	(9.5)	(3.6)	(24.8)	(51.1)	(11.0)	100.0	40	8.3	1.1	32.1	54.7	3.8	100.0	66
Middle	4.5	2.9	30.1	59.8	2.9	100.0	55	0.0	4.7	35.2	56.9	3.2	100.0	96
Fourth	4.3	8.7	25.4	57.9	3.7	100.0	33	4.4	4.5	30.2	58.4	2.6	100.0	83
Richest	(*)	(*)	(*)	(*)	(*)	100.0	12	0.0	7.6	30.2	62.2	0.0	100.0	50
Ethnicity of household head														
Hausa	6.1	4.2	27.9	56.8	4.9	100.0	177	3.0	5.2	32.4	56.4	3.1	100.0	358
Igbo	0.0	0.0	0.0	0.0	0.0	0.0	0	(*)	(*)	(*)	(*)	(*)	100.0	2
Other ethnic group	(*)	(*)	(*)	(*)	(*)	100.0	3	(*)	(*)	(*)	(*)	(*)	100.0	4

¹ MICS indicator 8.8a - Spousal age difference (among women age 15-19)

² MICS indicator 8.8b - Spousal age difference (among women age 20-24)

na: not applicable

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Female Genital Mutilation/Cutting

Table CP.10: Female genital mutilation/cutting (FGM/C) among women

Percentage of women age 15-49 years by FGM/C status and percent distribution of women who had FGM/C by type of FGM/C, Nigeria, 2016-17 Kano State

	Percentage of women who had any form of FGM/C ¹	Number of women age 15-49 years	Percent distribution of women age 15-49 years who had FGM/C:				Form of FGM/C not determined	Total	Number of women age 15-49 years who had FGM/C
			Had flesh removed	Were nicked	Were sewn closed				
Total	30.9	2500	55.6	13.2	0.8		30.4	100.0	773
Senatorial District									
Kano Central	26.6	1093	52.0	7.1	1.4		39.5	100.0	290
Kano North	22.9	603	31.1	48.9	0.4		19.6	100.0	138
Kano South	42.9	803	68.6	4.0	0.4		27.0	100.0	344
Residence									
Urban	17.5	731	49.9	5.4	1.2		43.5	100.0	128
Rural	36.5	1769	56.8	14.7	0.7		27.8	100.0	646
Age (Years)									
15-19	27.9	586	56.9	11.8	0.5		30.7	100.0	163
20-24	30.3	431	56.9	14.4	1.3		27.5	100.0	131
25-29	32.3	432	57.1	13.1	1.1		28.7	100.0	139
30-34	33.1	354	47.2	16.1	1.0		35.8	100.0	117
35-39	29.5	286	62.4	11.9	0.0		25.6	100.0	84
40-44	29.6	222	48.4	12.7	0.0		38.9	100.0	66
45-49	38.2	190	60.2	11.5	1.3		26.9	100.0	72
Education									
None	27.9	419	48.3	34.9	0.5		16.2	100.0	117
Non-formal	39.7	1081	57.5	7.8	0.7		34.0	100.0	429
Primary	29.8	294	60.6	16.7	0.0		22.7	100.0	88
Secondary	21.6	608	54.9	9.9	2.0		33.2	100.0	131
Higher	8.1	99	(*)	(*)	(*)		(*)	100.0	8
Wealth index quintile									
Poorest	38.1	447	65.4	12.3	0.5		21.8	100.0	170
Second	40.5	484	57.1	12.5	0.9		29.5	100.0	196
Middle	36.1	479	51.8	14.6	0.9		32.8	100.0	173
Fourth	25.6	530	53.9	19.5	0.0		26.6	100.0	136
Richest	17.5	560	45.2	5.0	2.1		47.8	100.0	98
Ethnicity of household head									
Hausa	31.4	2429	55.7	13.4	0.7		30.2	100.0	764
Igbo	(*)	9	(*)	(*)	(*)		(*)	100.0	1
Yoruba	(*)	8	(*)	(*)	(*)		(*)	100.0	1
Other ethnic group	13.7	55	(*)	(*)	(*)		(*)	100.0	7

¹ MICS indicator 8.10 - Prevalence of FGM/C among women

(*) Sample data are fewer than 25 unweighted cases

Table CP.11: Female genital mutilation/cutting (FGM/C) among girls

Percentage of daughters age 0-14 years by FGM/C status and percent distribution of daughters who had FGM/C by type of FGM/C, Nigeria, 2016-17 Kano State

	Percentage of daughters who had any form of FGM/C ¹	Number of daughters age 0-14 years	Percent distribution of daughters age 0-14 years who had FGM/C:				Form of FGM/C not determined	Total	Number of daughters age 0-14 years who had FGM/C
			Had flesh removed	Were nicked	Were sewn closed				
Total	71.0	1488	71.8	21.4	0.8	6.0	100.0	1056	
Senatorial District									
Kano Central	57.0	637	86.8	4.9	0.0	8.4	100.0	363	
Kano North	84.9	284	32.8	56.6	0.0	10.6	100.0	241	
Kano South	79.6	567	80.7	15.8	1.9	1.6	100.0	452	
Residence									
Urban	37.0	382	68.8	18.3	0.0	12.9	100.0	142	
Rural	82.7	1106	72.3	21.9	0.9	4.9	100.0	914	
Age (Years)									
0-4	72.4	623	71.9	19.9	0.8	7.4	100.0	451	
5-9	72.5	493	71.6	23.0	1.1	4.4	100.0	357	
10-14	66.6	372	72.1	21.8	0.5	5.7	100.0	248	
Mother's Education									
None	86.7	235	39.8	47.7	0.9	11.6	100.0	204	
Non-formal	78.5	775	83.6	11.7	1.1	3.7	100.0	609	
Primary	76.9	193	77.3	18.3	0.0	4.5	100.0	149	
Secondary	40.1	231	57.2	32.8	0.0	10.0	100.0	92	
Higher	4.1	54	(*)	(*)	(*)	(*)	100.0	2	
Mother's FGM/C experience									
No FGM/C	31.9	502	31.2	51.0	1.5	16.3	100.0	160	
Had FGM/C	90.8	986	79.1	16.1	0.7	4.1	100.0	896	
Wealth index quintile									
Poorest	82.6	295	67.6	26.9	1.4	4.1	100.0	244	
Second	85.3	316	74.2	18.9	0.3	6.5	100.0	270	
Middle	87.8	291	74.4	18.2	1.2	6.3	100.0	256	
Fourth	67.5	270	67.9	27.9	0.7	3.6	100.0	182	
Richest	33.1	316	76.2	11.5	0.0	12.3	100.0	104	
Ethnicity of household head									
Hausa	71.0	1469	72.2	21.0	0.8	6.0	100.0	1043	
Igbo	(*)	7	(*)	(*)	(*)	(*)	100.0	5	
Yoruba	(*)	1	(*)	(*)	(*)	(*)	100.0	1	
Other ethnic group	(*)	12	(*)	(*)	(*)	(*)	100.0	7	
¹ MICS indicator 8.11 - Prevalence of FGM/C among girls									

¹ MICS indicator 8.11 - Prevalence of FGM/C among girls

(*) Sample data are fewer than 25 unweighted cases

Table CP.12: Approval of female genital mutilation/cutting (FGM/C)

Percentage of women age 15-49 years who have heard of FGM/C, and percent distribution of women according to attitudes towards whether the practice of FGM/C should be continued, Nigeria, 2016-17
Kano State

Kano State	Percentage of women who have heard of FGM/C	Number of women age 15-49 years	Percent distribution of women who believe the practice of FGM/C should be:					Number of women age 15-49 years who have heard of FGM/C
			Continued ¹	Discontinued	Depends	Don't Know/Missing	Total	
Total	48.3	2500	59.0	34.1	5.9	1.1	100.0	1208
Senatorial District								
Kano Central	51.9	1093	44.5	49.8	4.2	1.5	100.0	568
Kano North	33.4	603	71.5	17.3	9.3	1.9	100.0	201
Kano South	54.7	803	72.0	21.4	6.5	0.1	100.0	440
Residence								
Urban	49.8	731	26.4	65.9	5.3	2.4	100.0	364
Rural	47.7	1769	73.1	20.3	6.1	0.5	100.0	844
Age (Years)								
15-19	44.0	586	52.1	40.2	6.8	0.8	100.0	258
20-24	45.9	431	60.5	31.8	6.6	1.1	100.0	198
25-29	50.8	432	64.5	27.1	7.0	1.4	100.0	220
30-34	52.6	354	62.8	31.6	4.3	1.3	100.0	186
35-39	47.6	286	61.7	34.4	3.3	0.5	100.0	136
40-44	49.9	222	49.8	39.9	8.3	2.0	100.0	111
45-49	52.9	190	61.3	35.2	3.5	0.0	100.0	100
Education								
None	43.1	419	74.0	18.3	6.8	0.8	100.0	180
Non-formal	48.8	1081	74.3	20.8	4.4	0.5	100.0	527
Primary	48.7	294	54.2	31.6	12.6	1.6	100.0	143
Secondary	49.2	608	36.1	58.2	5.0	0.8	100.0	299
Higher	59.8	99	4.3	84.5	4.8	6.4	100.0	59
FGM/C experience								
No FGM/C	25.2	1727	21.8	65.6	10.0	2.6	100.0	435
Had FGM/C	100.0	773	80.0	16.3	3.5	0.2	100.0	773
Wealth index quintile								
Poorest	45.7	447	73.6	21.9	4.4	0.0	100.0	204
Second	50.1	484	80.2	13.0	6.2	0.6	100.0	243
Middle	46.7	479	75.3	19.2	5.2	0.3	100.0	224
Fourth	44.4	530	50.1	37.9	10.6	1.4	100.0	236
Richest	54.0	560	27.0	67.2	3.4	2.4	100.0	302
Ethnicity of household head								
Hausa	48.8	2429	59.8	33.4	5.9	0.9	100.0	1185
Igbo	(*)	9	(*)	(*)	(*)	(*)	100.0	4
Yoruba	(*)	8	(*)	(*)	(*)	(*)	100.0	3
Other ethnic group	31.4	55	(*)	(*)	(*)	(*)	100.0	17
¹ MICS indicator 8.9 - Approval for FGM/C								

¹ MICS indicator 8.9 - Approval for FGM/C

(*) Sample data are fewer than 25 unweighted cases

Attitudes toward Domestic Violence

Table CP.13: 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, Nigeria, 2016-17 Kano State

	Percentage of women age 15-49 years who believe a husband is justified in beating his wife:						Number of women age 15-49 years
	If she goes out without telling him	If she neglects the children	If she argues with him	If she refuses sex with him	If she burns the food	For any of these five reasons ¹	
Total	18.8	19.5	24.1	25.8	18.2	34.7	2500
Senatorial District							
Kano Central	15.4	16.6	19.9	19.3	13.1	29.6	1093
Kano North	30.8	31.7	40.8	42.5	33.9	52.6	603
Kano South	14.4	14.3	17.2	22.1	13.4	28.2	803
Residence							
Urban	12.7	13.6	16.6	16.0	11.6	26.9	731
Rural	21.4	21.9	27.2	29.9	21.0	37.9	1769
Age (Years)							
15-19	13.8	14.7	19.9	19.0	13.2	27.9	586
20-24	20.6	21.5	23.8	26.0	21.0	37.4	431
25-29	20.3	21.6	26.5	30.2	20.4	36.5	432
30-34	22.7	25.2	28.1	30.3	23.5	39.6	354
35-39	19.0	20.9	25.6	28.3	19.2	35.2	286
40-44	18.3	15.4	23.8	25.0	15.2	34.5	222
45-49	19.4	17.1	22.8	25.3	15.0	35.6	190
Marital/Union status							
Currently married/in union	20.7	21.2	25.9	28.7	20.5	37.0	1949
Formerly married/in union	18.6	23.3	26.7	23.6	9.5	39.1	65
Never married/in union	11.2	12.4	16.8	14.4	10.3	25.1	482
Missing	0.0	0.0	0.0	0.0	0.0	0.0	4
Education							
None	21.5	24.0	27.5	28.9	21.3	35.8	419
Non-formal	21.8	21.4	27.6	30.9	21.3	40.0	1081
Primary	19.2	20.4	23.3	24.7	19.3	34.0	294
Secondary	13.3	13.9	18.7	16.7	11.8	26.7	608
Higher	7.7	11.0	7.5	16.7	7.9	23.0	99
Wealth index quintile							
Poorest	23.4	23.5	28.0	33.0	21.1	43.8	447
Second	21.9	21.6	28.4	30.8	22.0	37.6	484
Middle	25.0	26.3	32.5	35.4	26.8	42.5	479
Fourth	15.8	17.5	20.9	18.7	14.8	30.4	530
Richest	10.0	10.6	13.2	14.2	8.6	22.2	560
Ethnicity of household head							
Hausa	18.9	19.5	24.1	25.8	18.3	34.6	2429
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	9
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	8
Other ethnic group	20.0	20.0	30.0	34.6	19.3	47.3	55

¹ MICS indicator 8.12 - Attitudes towards domestic violence

(*) Sample data are fewer than 25 unweighted cases

Table CP.13M: 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, Nigeria, 2016-17 Kano State

	Percentage of men age 15-49 years who believe a husband is justified in beating his wife:						Number of men age 15-49 years
	If she goes out without telling him	If she neglects the children	If she argues with him	If she refuses sex with him	If she burns the food	For any of these five reasons ¹	
Total	13.6	13.5	12.2	13.9	13.2	22.0	1099
Senatorial District							
Kano Central	13.6	13.7	12.9	12.1	11.8	22.2	538
Kano North	1.4	2.5	2.1	6.4	2.8	9.4	228
Kano South	22.1	20.6	18.0	22.0	22.7	30.3	333
Residence							
Urban	13.8	14.0	12.6	12.3	12.4	22.8	394
Rural	13.5	13.2	12.0	14.9	13.7	21.5	705
Age (Years)							
15-19	19.0	21.5	18.6	21.5	19.8	29.7	290
20-24	14.5	14.8	14.0	19.0	16.8	27.7	193
25-29	13.0	9.3	10.2	10.9	10.3	21.2	163
30-34	11.4	6.8	7.7	8.0	7.8	13.9	128
35-39	10.6	12.0	10.8	9.8	12.5	19.5	97
40-44	10.2	9.5	9.5	6.9	6.6	12.4	130
45-49	7.9	9.7	4.1	8.0	8.1	15.0	99
Marital/Union status							
Currently married/in union	9.1	8.4	6.5	7.2	7.5	13.8	474
Formerly married/in union	(*)	(*)	(*)	(*)	(*)	(*)	4
Never married/in union	17.2	17.4	16.7	19.2	17.7	28.4	620
Missing/Don't know	0.0	0.0	0.0	0.0	0.0	0.0	1
Education							
None	(12.6)	(9.9)	(14.2)	(12.6)	(12.6)	(14.2)	33
Non-formal	15.0	13.8	13.4	14.9	15.8	21.9	329
Primary	12.9	13.2	9.8	14.5	10.4	22.6	144
Secondary	13.5	15.2	12.7	14.7	13.9	22.6	461
Higher	11.8	8.2	9.5	8.6	7.9	21.5	133
Wealth index quintile							
Poorest	15.0	13.7	12.0	16.9	16.3	22.0	172
Second	16.5	17.6	17.8	19.7	18.0	25.7	175
Middle	13.0	10.9	10.1	12.8	11.2	18.8	209
Fourth	11.5	16.7	15.2	15.4	14.3	25.3	241
Richest	13.4	10.2	8.2	8.6	9.3	19.5	303
Ethnicity of household head							
Hausa	13.8	13.7	12.5	14.2	13.5	22.2	1072
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	2
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	3
Other ethnic group	(*)	(*)	(*)	(*)	(*)	(*)	22

¹ MICS indicator 8.12 - Attitudes towards domestic violence^[M]

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Children's Living Arrangements

Table CP.14: 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, Nigeria, 2016-17 Kano State

	Living with both parents	Living with neither biological parent				Living with mother only		Living with father only		Missing information on father/mother	Total	Living with neither biological parent 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	86.2	0.6	0.8	3.5	1.1	1.4	2.7	2.5	1.2	0.0	100.0	6.0	6.4	7660
Senatorial District														
Kano Central	85.2	0.6	0.9	3.5	1.3	1.3	4.4	2.0	0.8	0.0	100.0	6.3	8.0	3196
Kano North	88.5	0.7	0.5	3.1	1.3	0.3	1.5	1.8	2.2	0.0	100.0	5.6	6.3	2022
Kano South	85.6	0.4	1.0	3.8	0.7	2.6	1.4	3.8	0.9	0.0	100.0	5.8	4.3	2441
Sex														
Male	88.0	0.3	0.7	2.0	1.1	1.3	2.7	2.7	1.2	0.0	100.0	4.0	6.0	3803
Female	84.4	0.9	1.0	4.9	1.2	1.5	2.6	2.3	1.2	0.0	100.0	7.9	6.8	3857
Residence														
Urban	84.7	0.8	1.3	4.0	1.1	1.2	4.6	1.1	1.1	0.0	100.0	7.3	8.9	2077
Rural	86.7	0.5	0.6	3.3	1.1	1.5	2.0	3.0	1.2	0.0	100.0	5.5	5.4	5582
Age (Years)														
0-4	93.4	0.4	0.1	1.5	0.2	2.1	1.4	0.8	0.2	0.0	100.0	2.1	2.2	2555
5-9	87.4	0.4	0.8	2.7	1.1	1.2	2.0	3.5	1.0	0.0	100.0	4.9	5.3	2357
10-14	82.7	0.4	1.3	3.8	1.7	1.1	3.9	3.2	1.9	0.0	100.0	7.2	9.2	1930
15-17	68.7	2.1	2.2	11.1	2.8	0.9	5.6	3.4	3.2	0.0	100.0	18.1	15.9	818
Wealth index quintile														
Poorest	89.2	0.5	0.5	3.3	1.0	1.1	0.7	2.1	1.5	0.0	100.0	5.3	4.2	1544
Second	84.9	0.5	0.9	3.3	1.3	2.6	2.5	3.2	0.8	0.0	100.0	6.0	6.0	1581
Middle	85.8	0.5	1.0	3.7	0.7	1.3	2.7	2.9	1.4	0.0	100.0	5.9	6.3	1539
Fourth	84.7	0.6	0.7	3.4	1.5	0.9	4.1	2.8	1.3	0.0	100.0	6.2	8.2	1508
Richest	86.4	0.8	0.8	3.6	1.1	1.2	3.5	1.6	1.0	0.0	100.0	6.3	7.2	1487
Ethnicity of household head														
Hausa	86.3	0.6	0.8	3.4	1.1	1.5	2.6	2.5	1.2	0.0	100.0	6.0	6.3	7502
Igbo	(95.1)	(0.0)	(0.0)	(4.9)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	(4.9)	(0.0)	26
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	13
Other ethnic group	79.9	0.0	0.0	3.8	0.0	0.3	11.2	4.2	0.0	0.6	100.0	3.8	11.2	119

¹ MICS indicator 8.13 - Children's living arrangements

² MICS indicator 8.14 - Prevalence of children with one or both parents dead

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table CP.15: Children with parents living abroad

Percent distribution of children age 0-17 years by residence of parents in another country, Nigeria, 2016-17 Kano State

	Percent distribution of children age 0-17 years:					Percentage of children age 0-17 years with at least one parent living abroad ¹	Number of children age 0-17 years
	With at least one parent living abroad		With neither parent living abroad		Total		
	Only mother abroad	Only father abroad	Both mother and father abroad				
Total	0.1	0.0	0.0	99.9	100.0	0.1	7660
Senatorial District							
Kano Central	0.1	0.0	0.0	99.9	100.0	0.1	3196
Kano North	0.0	0.0	0.0	100.0	100.0	0.0	2022
Kano South	0.2	0.0	0.0	99.8	100.0	0.2	2441
Sex							
Male	0.1	0.0	0.0	99.9	100.0	0.1	3803
Female	0.1	0.0	0.0	99.9	100.0	0.1	3857
Residence					100.0		
Urban	0.2	0.0	0.0	99.8	100.0	0.2	2077
Rural	0.1	0.0	0.0	99.9	100.0	0.1	5582
Age (Years)					100.0		
0-4	0.0	0.0	0.0	100.0	100.0	0.0	2555
5-9	0.0	0.0	0.0	100.0	100.0	0.0	2357
10-14	0.2	0.0	0.0	99.8	100.0	0.2	1930
15-17	0.6	0.0	0.1	99.3	100.0	0.7	818
Wealth index quintile					100.0		
Poorest	0.0	0.0	0.0	100.0	100.0	0.0	1544
Second	0.2	0.0	0.0	99.7	100.0	0.3	1581
Middle	0.0	0.0	0.0	100.0	100.0	0.0	1539
Fourth	0.0	0.0	0.0	100.0	100.0	0.0	1508
Richest	0.2	0.0	0.0	99.7	100.0	0.3	1487
Ethnicity of household head					100.0		
Hausa	0.1	0.0	0.0	99.9	100.0	0.1	7502
Igbo	(0.0)	(0.0)	(0.0)	(100.0)	100.0	(0.0)	26
Yoruba	(*)	(*)	(*)	(*)	100.0	(*)	13
Other ethnic group	0.0	0.0	0.0	100.0	100.0	0.0	119

¹ MICS indicator 8.15 - Children with at least one parent living abroad

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

XII. HIV/AIDS and Sexual Behaviour

Knowledge about HIV Transmission and Misconceptions about HIV

Table HA.1: Knowledge about HIV transmission, misconceptions about HIV, and comprehensive knowledge about HIV transmission (women)

Percentage of women age 15-49 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can be HIV-positive, percentage who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission, Nigeria, 2016-17 Kano State

	Percentage who have heard of AIDS	Percentage who know transmission can be prevented by:			Percentage who know that a healthy looking person can be HIV-positive	Percentage who know that HIV cannot be transmitted by:			Percentage who reject the two most common misconceptions and know that a healthy looking person can be HIV-positive	Percentage with comprehensive knowledge ¹	Number of women age 15-49
		Having only one faithful uninfected sex partner	Using a condom every time	Both		Mosquito bites	Supernatural means	Sharing food with someone with HIV			
Total	75.3	59.5	33.1	30.3	50.4	54.4	55.7	54.7	30.0	15.7	2500
Senatorial District											
Kano Central	85.6	72.1	47.8	44.4	61.0	66.7	68.5	66.4	40.9	26.3	1093
Kano North	68.4	50.8	16.8	14.8	40.8	39.5	44.3	46.5	22.1	6.4	603
Kano South	66.5	48.9	25.4	22.8	43.2	49.0	47.0	45.1	21.0	8.2	803
Residence											
Urban	88.5	74.8	51.4	48.1	65.5	70.6	72.7	70.3	45.8	29.3	731
Rural	69.9	53.2	25.6	22.9	44.2	47.8	48.7	48.3	23.5	10.0	1769
Age (Years)											
15-24 ¹	74.6	58.5	32.5	29.2	47.5	54.7	56.1	54.1	29.5	15.5	1017
15-19	74.0	57.2	31.8	28.7	47.2	54.7	54.9	52.3	29.2	16.4	586
20-24	75.5	60.3	33.3	30.0	47.9	54.8	57.7	56.4	29.8	14.4	431
25-29	77.4	60.4	32.8	30.6	55.3	57.8	59.3	56.8	33.9	16.2	432
30-39	77.7	60.6	36.2	32.6	51.3	53.9	55.4	55.6	28.2	15.7	640
40-49	71.1	59.4	30.3	29.0	51.1	51.1	51.4	52.9	29.9	15.4	412

Table HA.1: Knowledge about HIV transmission, misconceptions about HIV, and comprehensive knowledge about HIV transmission (women) (continued)

Percentage of women age 15-49 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can be HIV-positive, percentage who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission, Nigeria, 2016-17 Kano State

	Percentage who have heard of AIDS	Percentage who know transmission can be prevented by:			Percentage who know that a healthy looking person can be HIV-positive	Percentage who know that HIV cannot be transmitted by:			Percentage who reject the two most common misconceptions and know that a healthy looking person can be HIV-positive	Percentage with comprehensive knowledge ¹	Number of women age 15-49
		Having only one faithful uninfected sex partner	Using a condom every time	Both		Mosquito bites	Supernatural means	Sharing food with someone with HIV			
Marital status											
Ever married/in union	74.8	59.0	31.9	29.2	50.2	53.4	54.6	53.9	28.9	14.5	2014
Never married/in union	77.6	61.9	38.6	35.0	51.7	59.0	60.7	58.5	34.5	20.6	482
Education											
None	60.6	42.4	20.3	17.5	36.8	41.0	37.1	45.1	23.9	9.6	419
Non-formal	71.7	55.3	25.8	23.3	44.6	48.5	49.0	49.0	22.9	9.9	1081
Primary	78.0	64.7	35.8	33.4	55.4	52.9	59.6	55.6	30.0	15.1	294
Secondary	87.4	72.6	48.9	45.3	63.5	69.5	73.0	66.9	41.8	26.1	608
Higher	95.4	81.8	62.2	58.6	77.0	88.0	90.6	80.4	61.3	42.0	99
Wealth index quintile											
Poorest	57.1	37.3	14.1	12.1	28.8	35.8	34.9	35.5	13.0	3.7	447
Second	69.5	50.7	22.6	19.7	42.1	47.6	47.0	47.4	21.8	8.1	484
Middle	71.3	55.9	26.3	23.3	42.4	47.4	51.7	50.9	23.3	7.9	479
Fourth	84.9	72.4	40.6	37.8	61.9	59.5	62.4	63.4	35.0	19.6	530
Richest	89.3	75.7	56.2	52.8	70.9	76.4	77.0	71.6	51.6	34.6	560
Ethnicity of household head											
Hausa	75.4	59.4	32.8	29.9	50.2	54.5	55.9	54.9	29.9	15.5	2429
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	9
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	8
Other ethnic group	67.1	66.6	45.4	45.4	53.1	47.6	41.2	44.5	33.8	21.6	55

¹MICS indicator 9.1; MDG indicator 6.3 - Knowledge about HIV prevention among young women

(*) Sample data are fewer than 25 unweighted cases

Table HA.1M: Knowledge about HIV transmission, misconceptions about HIV, and comprehensive knowledge about HIV transmission (men)

Percentage of men age 15-49 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can be HIV-positive, percentage who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission, Nigeria, 2016-17 Kano State

	Percentage who have heard of AIDS	Percentage who know transmission can be prevented by:			Percentage who know that a healthy looking person can be HIV-positive	Percentage who know that HIV cannot be transmitted by:			Percentage who reject the two most common misconceptions and know that a healthy looking person can be HIV-positive	Percentage with comprehensive knowledge ¹	Number of men age 15-49
		Having only one faithful uninfected sex partner	Using a condom every time	Both		Mosquito bites	Supernatural means	Sharing food with someone with HIV			
Total	91.9	72.3	65.3	57.5	64.7	66.8	73.0	64.2	37.0	27.4	1099
Senatorial District											
Kano Central	95.8	76.3	70.1	63.2	66.8	68.9	76.5	63.9	36.2	27.9	538
Kano North	88.3	68.8	59.2	53.2	74.2	73.1	72.2	65.0	48.7	35.1	228
Kano South	88.0	68.4	61.7	51.3	54.8	59.1	67.9	64.3	30.2	21.3	333
Residence											
Urban	95.4	76.7	73.4	66.0	71.4	71.7	76.0	63.4	41.3	33.8	394
Rural	89.9	69.9	60.8	52.8	60.9	64.0	71.3	64.7	34.5	23.9	705
Age (Years)											
15-24 ¹	89.5	65.2	64.4	54.0	63.3	61.0	67.1	57.7	32.6	23.3	483
15-19	89.3	60.6	60.9	49.6	60.5	57.9	62.7	52.0	28.1	18.7	290
20-24	89.8	72.1	69.7	60.6	67.6	65.6	73.8	66.2	39.3	30.4	193
25-29	93.0	75.6	60.1	53.7	60.2	69.8	78.7	71.4	36.8	28.0	163
30-39	93.7	79.5	69.6	64.3	67.5	71.1	78.0	70.1	42.3	33.6	225
40-49	94.3	78.0	66.8	60.8	68.0	72.5	76.5	67.1	41.0	29.5	229
Marital status											
Ever married/in union	93.7	77.3	66.2	60.5	66.4	71.1	76.1	68.7	41.1	30.8	478
Never married/in union	90.4	68.5	64.6	55.1	63.5	63.3	70.5	60.9	33.8	24.8	620

Table HA.1M: Knowledge about HIV transmission, misconceptions about HIV, and comprehensive knowledge about HIV transmission (men) (continued)

Percentage of men age 15-49 years who know the main ways of preventing HIV transmission, percentage who know that a healthy looking person can be HIV-positive, percentage who reject common misconceptions, and percentage who have comprehensive knowledge about HIV transmission, Nigeria, 2016-17 Kano State

	Percentage who have heard of AIDS	Percentage who know transmission can be prevented by:			Percentage who know that a healthy looking person can be HIV-positive	Percentage who know that HIV cannot be transmitted by:			Percentage who reject the two most common misconceptions and know that a healthy looking person can be HIV-positive	Percentage with comprehensive knowledge ¹	Number of men age 15-49
		Having only one faithful uninfected sex partner	Using a condom every time	Both		Mosquito bites	Supernatural means	Sharing food with someone with HIV			
Education											
None	(91.3)	(63.9)	(56.8)	(48.3)	(65.7)	(84.7)	(81.3)	(71.8)	(46.9)	(31.4)	33
Non-formal	85.0	60.8	51.6	43.1	54.7	54.5	62.4	57.0	25.3	14.1	329
Primary	94.9	77.0	68.0	61.6	72.2	69.6	76.6	67.2	42.4	31.7	144
Secondary	94.5	74.5	68.3	59.1	67.4	70.3	76.0	65.5	40.8	31.1	461
Higher	96.7	90.6	88.2	85.2	71.8	77.5	83.0	72.4	44.3	41.8	133
Wealth index quintile											
Poorest	83.0	55.9	50.5	40.2	54.2	54.0	60.1	57.5	27.0	16.8	172
Second	86.1	61.9	55.4	45.8	57.7	63.0	67.8	62.1	33.8	21.1	175
Middle	94.3	80.0	68.2	61.9	68.5	67.2	76.5	67.7	40.9	30.3	209
Fourth	95.8	75.4	69.9	60.7	65.2	72.3	80.6	67.1	37.6	28.4	241
Richest	95.4	79.9	73.9	68.5	71.6	71.5	74.9	64.6	41.2	34.4	303
Ethnicity of household head											
Hausa	91.8	71.9	64.8	56.8	64.2	66.6	73.0	64.0	36.5	26.8	1072
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	3
Other ethnic group	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	22

¹MICS indicator 9.1; MDG indicator 6.3 - Knowledge about HIV prevention among young men^[M]

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table HA.2: Knowledge of mother-to-child HIV transmission (women)

Percentage of women age 15-49 years who correctly identify means of HIV transmission from mother to child, Nigeria, 2016-17 Kano State

	Percentage of women age 15-49 who have heard of AIDS and:								Number of women age 15-49
	Know HIV can be transmitted from mother to child:							Do not know any of the specific means of HIV transmission from mother to child	
	During pregnancy	During delivery	By breastfeeding	By at least one of the three means	By all three means ¹	By at least one of the three means and that risk can be reduced by mother taking special drugs	By breastfeeding and that risk can be reduced by mother taking special drugs		
Total	47.9	49.5	52.5	58.3	42.5	46.5	43.0	17.0	2500
Senatorial District									
Kano Central	60.8	63.3	64.4	72.7	53.5	59.4	54.3	12.8	1093
Kano North	26.6	27.3	32.8	38.6	20.8	24.7	21.2	29.7	603
Kano South	46.4	47.4	51.3	53.5	43.7	45.4	44.0	13.0	803
Residence									
Urban	61.8	62.7	65.1	74.6	52.8	60.8	54.6	13.9	731
Rural	42.2	44.0	47.4	51.6	38.2	40.7	38.2	18.3	1769
Age group (Years)									
15-24	44.4	46.7	50.5	55.4	39.6	44.0	41.0	19.2	1017
15-19	44.3	46.8	51.2	55.5	39.5	43.3	41.0	18.5	586
20-24	44.6	46.6	49.6	55.3	39.7	44.8	41.0	20.1	431
25-29	52.0	53.6	54.9	62.1	46.5	47.9	44.1	15.3	432
30-39	49.9	51.3	54.4	61.2	43.9	47.9	43.9	16.5	640
40-49	49.3	49.4	52.1	57.1	43.0	49.4	45.3	13.9	412
Marital status									
Ever married/in union	47.8	49.3	52.2	58.3	42.2	46.6	42.9	16.5	2014
Never married/in union	48.8	50.2	54.0	58.6	43.4	46.4	43.5	19.0	482
Education									
None	30.8	32.4	36.3	40.7	27.2	31.3	29.0	19.9	419
Non-formal	47.0	47.5	50.9	54.5	42.8	43.1	40.9	17.1	1081
Primary	45.2	48.2	50.3	57.0	39.7	44.1	41.5	21.0	294
Secondary	59.0	61.2	64.3	73.7	50.9	59.6	53.1	13.7	608
Higher	71.1	75.9	73.3	84.3	60.1	75.2	68.3	11.1	99
Wealth index quintile									
Poorest	30.0	30.4	33.9	35.9	27.7	27.9	26.4	21.2	447
Second	41.6	42.0	45.9	49.6	37.3	37.7	36.5	19.8	484
Middle	41.4	43.8	47.3	51.5	37.4	39.2	36.5	19.8	479
Fourth	55.2	56.7	61.5	68.8	48.3	55.3	50.2	16.0	530
Richest	66.4	69.3	69.1	79.7	57.4	67.0	60.6	9.6	560
Ethnicity of household head									
Hausa	47.8	49.6	52.4	58.0	42.6	46.3	42.8	17.4	2429
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	9
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	8
Other ethnic group	49.2	46.9	54.7	63.3	35.3	49.3	46.4	3.8	55
¹ MICS indicator 9.2 - Knowledge of mother-to-child transmission of HIV									

¹ MICS indicator 9.2 - Knowledge of mother-to-child transmission of HIV

(*) Sample data are fewer than 25 unweighted cases

Table HA.2M: Knowledge of mother-to-child HIV transmission (men)

Percentage of men age 15-49 years who correctly identify means of HIV transmission from mother to child, Nigeria, 2016-17 Kano State

	Percentage of men age 15-49 who have heard of AIDS and:								Numb er of men age 15-49
	Know HIV can be transmitted from mother to child:					By at least one of the three means and that risk can be reduced by mother taking special drugs	By breastfeedi ng and that risk can be reduced by mother taking special drugs	Do not know any of the specific means of HIV transmission from mother to child	
	During pregnancy	During delivery	By breastfee ding	By at least one of the three means	By all three means ¹				
Total	41.8	44.9	48.0	55.3	34.2	40.6	36.5	36.6	1099
Senatorial District									
Kano Central	49.6	51.6	56.3	63.3	41.3	48.9	44.8	32.4	538
Kano North	31.8	37.4	40.6	43.7	29.2	30.4	28.9	44.6	228
Kano South	35.9	39.2	39.5	50.3	26.1	34.2	28.4	37.7	333
Residence									
Urban	46.4	49.5	53.1	60.6	38.7	44.5	40.0	34.8	394
Rural	39.2	42.4	45.1	52.4	31.6	38.5	34.6	37.6	705
Age group (Years)									
15-24	40.3	43.4	45.5	52.6	33.1	39.3	35.3	36.9	483
15-19	42.5	44.2	46.4	53.5	35.1	39.8	36.3	35.8	290
20-24	37.0	42.3	44.2	51.3	30.0	38.4	33.8	38.5	193
25-29	42.7	43.3	51.0	60.7	31.5	40.4	36.4	32.2	163
30-39	41.2	46.0	49.7	57.5	32.6	43.0	37.9	36.2	225
40-49	44.7	48.1	49.3	54.9	39.8	41.3	37.8	39.4	229
Marital status									
Ever married/in union	41.7	46.9	48.8	55.3	35.8	41.3	37.8	38.4	478
Never married/in union	41.9	43.4	47.4	55.4	33.0	40.2	35.6	35.0	620
Education									
None	(42.1)	(37.1)	(35.7)	(45.9)	(29.6)	(32.8)	(25.1)	(45.4)	33
Non-formal	41.8	43.5	45.8	52.2	34.8	36.9	34.3	32.8	329
Primary	35.3	41.8	40.7	48.0	30.1	32.2	27.9	46.9	144
Secondary	42.7	46.6	51.0	57.9	35.8	43.7	39.9	36.6	461
Higher	45.4	47.8	53.8	64.2	32.5	50.4	42.4	32.5	133
Wealth index quintile									
Poorest	37.3	40.2	40.4	46.9	29.4	31.7	30.2	36.1	172
Second	38.6	40.6	43.7	51.4	31.0	36.4	32.2	34.7	175
Middle	42.1	43.7	49.6	54.0	35.8	41.1	38.8	40.3	209
Fourth	42.2	47.2	49.2	60.0	31.9	41.5	35.3	35.8	241
Richest	45.6	49.0	52.6	59.5	39.3	47.1	42.0	36.0	303
Ethnicity of household head									
Hausa	41.9	45.1	47.9	55.3	34.4	40.6	36.5	36.6	1072
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	3
Other ethnic group	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	22
¹ MICS indicator 9.2 - Knowledge of mother-to-child transmission of HIV ^[M]									

¹ MICS indicator 9.2 - Knowledge of mother-to-child transmission of HIV^[M]

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Accepting Attitudes toward People Living with HIV

Table HA.3: Accepting attitudes toward people living with HIV (women)

Percentage of women age 15-49 years who have heard of AIDS who express an accepting attitude towards people living with HIV, Nigeria, 2016-17 Kano State

	Percentage of women who:								Number of women age 15-49 who have heard of AIDS
	Are willing to care for a family member with AIDS in own home	Would buy fresh vegetables from a shopkeeper or vendor who is HIV-positive	Believe that a female teacher who is HIV-positive and is not sick should be allowed to continue teaching	Would not want to keep secret that a family member is HIV-positive	Agree with at least one accepting attitude	Express accepting attitudes on all four indicators ¹	Think children living with HIV should be able to attend school with children who are HIV-negative	Report discriminatory attitudes towards people living with HIV [a]	
Total	77.9	46.1	64.9	34.3	96.0	7.2	63.2	60.5	1883
Senatorial District									
Kano Central	82.8	54.5	74.7	32.6	97.5	9.3	70.1	51.9	936
Kano North	66.6	38.5	43.7	47.9	92.1	8.5	51.1	71.8	412
Kano South	77.9	37.3	64.0	27.0	96.3	2.6	60.6	66.8	535
Residence									
Urban	84.9	53.1	75.1	31.4	97.4	9.8	71.7	51.1	647
Rural	74.2	42.4	59.5	35.9	95.3	5.8	58.8	65.4	1236
Age (Years)									
15-24	77.1	43.4	65.8	31.8	95.6	6.4	63.2	62.5	759
15-19	77.7	43.7	68.6	31.3	94.7	6.5	62.6	62.4	434
20-24	76.3	43.1	62.1	32.5	96.6	6.2	64.0	62.7	325
25-29	77.3	47.7	61.1	36.1	96.5	6.1	62.4	59.9	334
30-39	79.7	49.3	63.6	32.4	94.9	7.5	62.5	58.9	497
40-49	77.5	45.7	68.9	42.3	98.5	10.0	65.4	58.6	293
Marital status									
Ever married/in union	77.5	45.4	62.7	35.8	96.1	7.4	62.7	61.5	1507
Never married/in union	79.4	48.7	73.3	28.7	95.6	6.3	65.5	56.6	374
Education									
None	76.4	32.8	51.1	52.2	95.9	9.7	56.9	73.4	253
Non-formal	73.8	40.2	59.1	31.6	94.6	4.9	56.9	66.9	775
Primary	77.6	48.8	60.9	36.4	96.0	5.9	66.0	62.1	229
Secondary	82.5	56.6	77.9	30.4	97.5	8.4	70.6	48.2	531
Higher	90.1	64.7	85.3	26.1	99.3	15.4	83.7	38.8	94
Wealth index quintile									
Poorest	68.3	32.6	42.3	36.2	91.7	2.0	43.1	75.6	255
Second	71.7	34.8	54.4	32.3	94.7	4.5	56.4	70.7	336
Middle	73.3	45.0	59.7	39.0	94.6	7.9	60.0	65.7	341
Fourth	82.6	52.1	71.3	38.2	98.4	9.6	69.0	55.0	450
Richest	85.8	55.9	81.2	28.2	97.8	9.0	75.1	47.4	500
Ethnicity of household head									
Hausa	77.7	46.0	64.8	34.1	96.1	6.9	62.9	60.7	1831
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	8
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	7
Other ethnic group	(83.9)	(45.0)	(69.3)	(49.7)	(88.1)	(22.6)	(68.3)	(57.5)	37

¹ MICS indicator 9.3 - Accepting attitudes towards people living with HIV

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table HA.3M: Accepting attitudes toward people living with HIV (men)

Percentage of men age 15-49 years who have heard of AIDS who express an accepting attitude towards people living with HIV, Nigeria, 2016-17 Kano State

	Percentage of men who:								Number of men age 15-49 who have heard of AIDS
	Are willing to care for a family member with AIDS in own home	Would buy fresh vegetables from a shopkeeper or vendor who is HIV-positive	Believe that a female teacher who is HIV-positive and is not sick should be allowed to continue teaching	Would not want to keep secret that a family member is HIV-positive	Agree with at least one accepting attitude	Express accepting attitudes on all four indicators ¹	Think children living with HIV should be able to attend school with children who are HIV-negative	Report discriminatory attitudes towards people living with HIV [a]	
Total	75.7	67.3	74.5	43.1	96.8	21.3	74.4	37.0	1010
Senatorial District									
Kano Central	77.3	68.7	74.3	36.6	95.5	18.7	72.2	35.3	515
Kano North	89.9	80.9	83.6	55.2	99.2	36.9	88.7	25.7	201
Kano South	63.1	55.6	68.6	46.3	97.3	15.2	68.4	48.0	293
Residence									
Urban	81.2	73.8	80.6	33.0	96.1	18.8	76.4	31.2	375
Rural	72.4	63.5	70.9	49.1	97.1	22.8	73.2	40.5	634
Age (Years)									
15-24	74.1	62.9	71.7	43.9	96.2	20.7	74.1	40.6	432
15-19	69.1	60.1	68.3	46.5	94.8	19.3	73.1	43.3	259
20-24	81.6	67.1	76.8	40.0	98.3	22.8	75.6	36.6	173
25-29	75.0	68.2	75.1	36.4	92.6	22.2	72.5	35.6	151
30-39	76.8	69.1	78.5	44.4	98.0	23.6	74.7	35.5	211
40-49	78.3	73.8	75.9	45.0	99.6	19.7	76.0	32.4	216
Marital status									
Ever married/in union	75.9	71.1	75.5	47.7	97.5	23.5	74.9	34.6	448
Never married/in union	75.5	64.5	73.9	39.3	96.1	19.6	74.2	38.8	560
Education									
None	(80.8)	(80.7)	(82.7)	(46.8)	(97.3)	(26.2)	(81.4)	(23.4)	30
Non-formal	63.3	58.2	65.2	50.0	96.6	16.0	64.9	46.0	279
Primary	77.6	69.3	73.1	53.3	96.5	32.3	78.9	40.3	136
Secondary	79.1	67.2	77.4	38.0	96.1	20.8	76.7	35.4	436
Higher	88.1	82.3	84.7	33.8	99.4	21.9	80.9	22.9	128
Wealth index quintile									
Poorest	62.2	56.4	63.9	56.0	96.7	17.3	67.5	47.3	143
Second	67.9	62.4	67.6	55.2	98.9	23.7	67.0	42.2	150
Middle	78.7	61.1	69.8	45.3	98.1	23.5	74.8	43.5	197
Fourth	78.1	70.4	80.9	38.2	96.7	19.5	76.3	31.5	231
Richest	82.5	77.1	81.5	32.9	94.8	22.0	79.8	29.3	289
Ethnicity of household head									
Hausa	75.2	66.8	74.2	43.6	96.7	21.5	73.9	37.5	984
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	3
Other ethnic group	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	21

¹ MICS indicator 9.3 - Accepting attitudes towards people living with HIV^[M]

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Knowledge of a Place for HIV Testing, Counselling and Testing during Antenatal Care

Table HA.4: Knowledge of a place for HIV testing (women)

Percentage of women age 15-49 years who know where to get an HIV test, percentage who have ever been tested, percentage who have ever been tested and know the result of the most recent test, percentage who have been tested in the last 12 months, and percentage who have been tested in the last 12 months and know the result, Nigeria, 2016-17 Kano State

	Percentage of women who:					Number of women age 15-49
	Know a place to get tested ¹	Have ever been tested	Have ever been tested and know the result of the most recent test	Have been tested in the last 12 months	Have been tested in the last 12 months and know the result ^{2,3}	
Total	44.7	25.6	15.4	10.7	6.9	2500
Senatorial District						
Kano Central	58.6	36.1	23.9	14.2	9.6	1093
Kano North	27.3	10.5	6.6	3.5	2.6	603
Kano South	38.8	22.4	10.4	11.3	6.4	803
Residence						
Urban	64.0	39.9	28.7	16.0	11.9	731
Rural	36.7	19.6	9.9	8.4	4.8	1769
Age (Years)						
15-24	40.4	16.7	9.0	7.7	4.4	1017
15-19	34.2	7.2	3.7	3.6	1.9	586
20-24	48.8	29.7	16.3	13.2	7.8	431
25-29	48.7	32.6	19.7	16.0	10.4	432
30-39	49.9	35.5	23.1	14.5	9.5	640
40-49	42.9	24.6	14.6	6.4	5.1	412
Age and sexual activity in the last 12 months						
Sexually active	46.7	30.0	17.8	12.9	8.3	1955
15-24 ³	43.7	26.0	13.7	12.5	7.0	551
15-19	34.6	14.3	5.6	8.0	3.1	183
20-24	48.1	31.9	17.8	14.8	9.0	368
25-49	47.8	31.5	19.4	13.1	8.8	1403
Sexually inactive	37.6	9.7	6.7	2.4	1.7	545
Marital status						
Ever married/in union	46.4	30.0	17.9	12.7	8.1	2014
Never married/in union	37.8	6.9	5.1	2.3	1.9	482
Education						
None	31.6	13.5	7.4	6.0	3.7	419
Non-formal	38.3	22.8	10.0	9.3	4.7	1081
Primary	50.9	31.7	21.8	13.6	9.8	294
Secondary	55.7	30.6	22.5	11.9	8.8	608
Higher	83.4	58.0	46.0	28.9	23.5	99
Wealth index quintile						
Poorest	23.1	8.9	3.8	3.4	1.5	447
Second	35.0	16.0	6.3	6.2	2.9	484
Middle	36.9	21.5	9.3	10.8	5.1	479
Fourth	51.9	30.0	20.5	13.9	10.4	530
Richest	70.2	46.4	32.9	17.0	12.7	560
Ethnicity of household head						
Hausa	44.4	25.4	15.0	10.8	6.9	2429
Igbo	(*)	(*)	(*)	(*)	(*)	9
Yoruba	(*)	(*)	(*)	(*)	(*)	8
Other ethnic group	49.7	25.6	22.4	3.5	1.3	55

¹ MICS indicator 9.4 - Women who know where to be tested for HIV

² MICS indicator 9.5 - Women who have been tested for HIV and know the results

³ MICS indicator 9.6 - Sexually active young women who have been tested for HIV and know the results

(*) Sample data are fewer than 25 unweighted cases

Table HA.4M: Knowledge of a place for HIV testing (men)

Percentage of men age 15-49 years who know where to get an HIV test, percentage who have ever been tested, percentage who have ever been tested and know the result of the most recent test, percentage who have been tested in the last 12 months, and percentage who have been tested in the last 12 months and know the result, Nigeria, 2016-17 Kano State

	Percentage of men who:					Number of men age 15-49
	Know a place to get tested ¹	Have ever been tested	Have ever been tested and know the result of the most recent test	Have been tested in the last 12 months	Have been tested in the last 12 months and know the result ^{2,3}	
Total	47.0	12.6	9.9	7.1	5.8	1099
Senatorial District						
Kano Central	44.6	16.9	12.2	9.7	7.3	538
Kano North	60.3	7.2	5.9	3.6	3.6	228
Kano South	41.8	9.5	9.0	5.3	4.7	333
Residence						
Urban	47.3	18.4	13.5	10.9	8.2	394
Rural	46.9	9.4	8.0	5.0	4.4	705
Age (Years)						
15-24	40.2	8.6	7.3	4.6	4.2	483
15-19	33.6	4.5	4.2	3.6	3.6	290
20-24	50.1	14.8	12.0	6.2	5.2	193
25-29	47.2	16.8	11.5	7.3	5.0	163
30-39	55.4	17.1	13.5	10.4	8.9	225
40-49	52.9	13.7	10.9	8.9	6.5	229
Age and sexual activity in the last 12 months						
Sexually active	51.9	13.8	11.5	7.2	6.1	499
15-24 ³	(67.5)	(28.1)	(28.1)	(16.1)	(16.1)	29
15-19	(*)	(*)	(*)	(*)	(*)	8
20-24	(*)	(*)	(*)	(*)	(*)	20
25-49	50.9	13.0	10.5	6.7	5.5	470
Sexually inactive	42.9	11.7	8.7	7.0	5.5	600
Marital status						
Ever married/in union	51.1	13.6	11.1	7.0	5.9	478
Never married/in union	43.7	11.9	9.0	7.2	5.7	620
Education						
None	(49.5)	(2.5)	(0.0)	(0.0)	(0.0)	33
Non-formal	32.4	7.1	5.9	2.2	2.2	329
Primary	54.6	8.5	6.7	5.0	4.2	144
Secondary	49.3	11.9	9.2	7.4	5.9	461
Higher	66.3	35.8	28.4	22.2	17.3	133
Wealth index quintile						
Poorest	35.0	5.4	2.8	0.8	0.8	172
Second	40.3	6.2	5.8	3.9	3.5	175
Middle	48.6	7.7	6.7	2.5	2.0	209
Fourth	49.3	12.0	11.6	8.4	7.9	241
Richest	54.7	24.3	17.3	14.6	10.9	303
Ethnicity of household head						
Hausa	46.3	12.0	9.6	6.4	5.3	1072
Igbo	(*)	(*)	(*)	(*)	(*)	2
Yoruba	(*)	(*)	(*)	(*)	(*)	3
Other ethnic group	(*)	(*)	(*)	(*)	(*)	22

¹ MICS indicator 9.4 - Men who know where to be tested for HIV^[M]

² MICS indicator 9.5 - Men who have been tested for HIV and know the results^[M]

³ MICS indicator 9.6 - Sexually active young men who have been tested for HIV and know the results^[M]

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table HA.5: HIV counselling and testing during antenatal care

Percentage of women age 15-49 with a live birth in the last 2 years who received antenatal care from a health professional during the last pregnancy, percentage who received HIV counselling, percentage who were offered and tested for HIV, percentage who were offered, tested and received the results of the HIV test, and percentage who received counselling and were offered, accepted and received the results of the HIV test, Nigeria, 2016-17 Kano State

	Percentage of women who:					Number of women age 15-49 with a live birth in the last 2 years
	Received antenatal care from a health care professional for last pregnancy	Received HIV counselling during antenatal care ¹	Were offered an HIV test and were tested for HIV during antenatal care	Were offered an HIV test and were tested for HIV during antenatal care, and received the results ²	Received HIV counselling, were offered an HIV test, accepted and received the results	
Total	65.1	27.1	26.7	18.6	15.4	1087
Senatorial District						
Kano Central	79.1	43.8	46.1	36.2	29.3	393
Kano North	58.5	7.0	7.3	5.3	3.7	314
Kano South	56.1	26.6	22.6	11.5	10.7	380
Residence						
Urban	82.9	45.4	53.7	43.5	32.4	239
Rural	60.1	22.0	19.1	11.6	10.6	847
Age (Years)						
15-24	67.6	24.9	22.6	13.9	12.0	353
15-19	70.1	17.3	13.3	6.3	6.3	97
20-24	66.7	27.8	26.1	16.8	14.1	256
25-29	64.4	27.7	28.1	20.7	16.2	268
30-39	66.1	30.4	30.4	22.3	18.8	354
40-49	55.6	22.7	24.6	17.0	13.9	111
Marital status						
Ever married/in union	65.2	27.3	26.8	18.7	15.5	1082
Never married/in union	(*)	(*)	(*)	(*)	(*)	3
Education						
None	56.1	13.4	11.8	6.6	5.0	196
Non-formal	56.3	23.7	21.4	12.3	10.9	533
Primary	75.8	28.4	31.6	25.8	19.3	165
Secondary	88.9	46.4	49.9	40.4	32.7	162
Higher	(92.5)	(66.6)	(66.4)	(53.5)	(49.7)	30
Wealth index quintile						
Poorest	42.6	10.6	8.1	4.1	3.9	234
Second	55.9	18.8	15.8	8.9	8.4	228
Middle	63.6	22.1	18.2	9.3	8.1	237
Fourth	82.2	37.0	41.2	30.8	24.1	218
Richest	88.7	55.6	60.4	49.1	39.9	169
Ethnicity of household head						
Hausa	65.0	26.9	26.6	18.4	15.1	1066
Igbo	(*)	(*)	(*)	(*)	(*)	4
Yoruba	(*)	(*)	(*)	(*)	(*)	3
Other ethnic group	(*)	(*)	(*)	(*)	(*)	14
¹ MICS indicator 9.7 - HIV counselling during antenatal care						
² MICS indicator 9.8 - HIV testing during antenatal care						

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Sexual Behaviour Related to HIV Transmission

Table HA.6: Sex with multiple partners (women)

Percentage of women age 15-49 years who ever had sex, percentage who had sex in the last 12 months, percentage who had sex with more than one partner in the last 12 months, mean number of sexual partners in lifetime for women who have ever had sex, and among those who had sex with multiple partners in the last 12 months, the percentage who used a condom at last sex, Nigeria, 2016-17 Kano State

	Percentage of women who:			Number of women age 15-49 years	Mean number of sexual partners in lifetime	Number of women age 15-49 years who have ever had sex	Percentage of women who had more than one sexual partner in the last 12 months reporting that a condom was used the last time they had sex ²	Number of women age 15-49 years who had more than one sexual partner in the last 12 months
	Ever had sex	Had sex in the last 12 months	Had sex with more than one partner in last 12 months ¹					
Total	81.4	78.2	0.6	2500	1	2035	(*)	15
Senatorial District								
Kano Central	70.9	66.7	0.5	1093	1	775	(*)	5
Kano North	90.5	88.6	1.2	603	1	546	(*)	7
Kano South	88.9	86.1	0.3	803	1	714	(*)	2
Residence								
Urban	65.3	60.4	0.7	731	1	477	(*)	5
Rural	88.1	85.6	0.5	1769	1	1558	(*)	10
Age (Years)								
15-24	55.3	54.3	0.4	1017	1	563	(*)	4
15-19	31.9	31.2	0.1	586	1	187	(*)	
20-24	87.1	85.8	0.8	431	1	375	(*)	4
25-29	97.8	95.4	0.8	432	1	422	(*)	3
30-39	99.8	95.1	0.8	640	1	638	(*)	5
40-49	100.0	93.1	0.6	412	2	412	(*)	2
Marital status								
Ever married/in union	100.0	96.7	0.6	2014	1	2014	(*)	13
Never married/in union	3.6	1.3	0.4	482	1	17	(*)	2
Education								
None	97.8	93.3	0.6	419	1	409	(*)	3
Non-formal	93.5	90.6	0.7	1081	1	1011	(*)	7
Primary	88.9	87.4	1.0	294	1	261	(*)	3
Secondary	47.4	44.3	0.3	608	1	288	(*)	2
Higher	66.8	60.7	0.0	99	1	66	(*)	0
Wealth index quintile								
Poorest	93.4	91.5	0.6	447	1	418	(*)	3
Second	89.3	86.4	1.1	484	1	432	(*)	5
Middle	88.5	85.7	0.2	479	1	423	(*)	1
Fourth	74.4	70.8	0.8	530	1	394	(*)	4
Richest	65.7	61.3	0.3	560	1	368	(*)	2
Ethnicity of household head								
Hausa	81.8	78.6	0.5	2429	1	1987	(*)	13
Igbo	(*)	(*)	(*)	9	1	7	(*)	0
Yoruba	(*)	(*)	(*)	8	1	4	(*)	0
Other ethnic group	67.4	65.6	3.3	55	1	37	(*)	2

¹ MICS indicator 9.12 - Multiple sexual partnerships

² MICS indicator 9.13 - Condom use at last sex among people with multiple sexual partnerships

(*) Sample data are fewer than 25 unweighted cases

Table HA.6M: Sex with multiple partners (men)

Percentage of men age 15-49 years who ever had sex, percentage who had sex in the last 12 months, percentage who had sex with more than one partner in the last 12 months, mean number of sexual partners in lifetime for men who have ever had sex, and among those who had sex with multiple partners in the last 12 months, the percentage who used a condom at last sex, Nigeria, 2016-17 Kano State

	Percentage of men who:				Mean number of sexual partners in lifetime	Number of men age 15-49 years who have ever had sex	Percentage of men who had more than one sexual partner in the last 12 months reporting that a condom was used the last time they had sex ²	Number of men age 15-49 years who had more than one sexual partner in the last 12 months
	Ever had sex	Had sex in the last 12 months	Had sex with more than one partner in last 12 months ¹	Number of men age 15-49 years				
Total	52.3	49.5	3.2	1099	2	575	(35.7)	35
Senatorial District								
Kano Central	42.9	39.6	3.4	538	3	231	(*)	18
Kano North	55.6	53.4	1.3	228	2	127	(*)	3
Kano South	65.3	63.0	4.2	333	2	218	(*)	14
Residence								
Urban	36.2	33.1	2.8	394	3	142	(*)	11
Rural	61.3	58.7	3.4	705	2	433	(47.7)	24
Age (Years)								
15-24	14.9	13.2	2.4	483	2	72	(*)	12
15-19	9.5	9.3	1.1	290	1	27	(*)	3
20-24	23.1	19.0	4.5	193	2	45	(*)	9
25-29	53.3	47.7	2.0	163	3	87	(*)	3
30-39	84.7	80.9	4.7	225	2	190	(*)	10
40-49	98.7	96.8	4.3	229	3	226	(*)	10
Marital status								
Ever married/in union	99.4	97.0	4.3	478	2	475	(*)	21
Never married/in union	16.1	13.0	2.3	620	2	100	(*)	15
Education								
None	(85.3)	(82.6)	(9.3)	33	2	28	(*)	3
Non-formal	74.7	71.6	3.3	329	3	245	(*)	11
Primary	61.7	59.8	2.2	144	2	89	(*)	3
Secondary	32.3	29.6	3.2	461	2	149	(*)	15
Higher	48.3	44.9	2.6	133	2	64	(*)	3
Wealth index quintile								
Poorest	61.7	60.1	3.2	172	2	106	(*)	6
Second	60.0	56.1	1.9	175	2	105	(*)	3
Middle	65.1	60.4	4.2	209	2	136	(*)	9
Fourth	42.4	40.1	1.9	241	3	102	(*)	5
Richest	41.7	39.8	4.3	303	3	126	(*)	13
Ethnicity of household head								
Hausa	51.6	48.9	2.8	1072	2	553	(38.6)	30
Igbo	(*)	(*)	(*)	2	4	2		0
Yoruba	(*)	(*)	(*)	3	6	3	(*)	2
Other ethnic group	(*)	(*)	(*)	22	2	17	(*)	4

¹ MICS indicator 9.12 - Multiple sexual partnerships^[M]

² MICS indicator 9.13 - Condom use at last sex among people with multiple sexual partnerships^[M]

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

HIV Indicators for Young Women and Young Men

Table HA.7: Key HIV and AIDS indicators (young women)

Percentage of women age 15-24 years by key HIV and AIDS indicators, Nigeria, 2016-17 Kano State

	Percentage of women age 15-24 years who:							Percentage of sexually active young women who have been tested for HIV in the last 12 months and know the result ²	Number of women age 15-24 years who had sex in the last 12 months	Percentage who express attitudes towards people living with HIV on all four indicators ^a	Percentage who report discriminatory attitudes towards people living with HIV [a]	Number of women age 15-24 years who have heard of AIDS
	Have comprehensive knowledge ¹	Know all three means of HIV transmission from mother to child	Know a place to get tested for HIV	Have ever been tested and know the result of the most recent test	Have been tested for HIV in the last 12 months and know the result	Had sex in the last 12 months	Number of women age 15-24 years					
Total	15.5	39.6	40.4	9.0	4.4	54.3	1017	7.0	553	6.4	62.5	759
Senatorial District												
Kano Central	24.9	50.3	51.5	12.0	6.0	32.7	465	14.2	152	5.9	56.8	398
Kano North	7.3	16.9	27.0	5.5	1.5	74.6	229	2.0	171	11.9	68.4	157
Kano South	7.9	40.3	34.0	7.3	4.2	71.2	323	5.9	230	3.0	69.3	203
Residence												
Urban	26.7	49.3	56.0	14.2	7.9	24.0	328	26.7	79	8.0	55.3	289
Rural	10.2	35.0	33.0	6.6	2.7	68.8	689	3.7	474	5.4	67.0	470
Age (Years)												
15-19	16.4	39.5	34.2	3.7	1.9	31.2	586	3.1	183	6.5	62.4	434
15-17	15.2	38.3	32.1	1.5	0.7	21.7	376	0.9	82	5.4	64.9	273
18-19	18.5	41.8	38.1	7.6	3.9	48.2	210	4.8	101	8.5	58.2	160
20-24	14.4	39.7	48.8	16.3	7.8	85.8	431	8.9	370	6.2	62.7	325
20-22	13.8	38.7	46.7	15.4	7.2	85.3	319	8.2	272	6.0	64.9	237
23-24	16.1	42.7	54.7	18.9	9.5	87.1	112	10.9	98	6.9	56.7	88
Marital status												
Ever married/in union	11.2	36.8	43.8	13.3	6.8	98.6	555	6.9	547	6.3	67.2	401
Never married/in union	20.8	43.1	36.5	3.9	1.5	1.0	461	(*)	4	6.5	57.3	358

Table HA.7: Key HIV and AIDS indicators (young women) (continued)

Percentage of women age 15-24 years by key HIV and AIDS indicators, Nigeria, 2016-17 Kano State

	Percentage of women age 15-24 years who:							Percentage of sexually active young women who have been tested for HIV in the last 12 months and know the result ²	Number of women age 15-24 years who had sex in the last 12 months	Percentage who express attitudes towards people living with HIV on all four indicators ^a	Percentage who report discriminatory attitudes towards people living with HIV [a]	Number of women age 15-24 years who have heard of AIDS
	Have comprehensive knowledge ¹	Know all three means of HIV transmission from mother to child	Know a place to get tested for HIV	Have ever been tested and know the result of the most recent test	Have been tested for HIV in the last 12 months and know the result	Had sex in the last 12 months	Number of women age 15-24 years					
Education												
None	6.6	24.3	29.0	3.8	2.8	91.9	116	3.0	106	4.2	85.5	64
Non-formal	7.5	36.3	30.9	5.7	2.4	77.3	336	3.1	260	3.6	72.2	219
Primary	10.2	34.3	41.5	9.5	4.6	71.0	114	6.4	81	9.3	65.3	81
Secondary	23.5	47.0	48.0	12.5	6.0	24.0	421	21.4	101	7.9	52.5	367
Higher	(47.6)	(51.7)	(80.3)	(16.5)	(10.3)	(15.8)	31	(13.1)	5	(4.1)	58.8	28
Wealth index quintile												
Poorest	4.5	22.6	22.0	5.6	1.3	78.4	143	1.6	112	3.1	75.3	74
Second	6.5	32.7	30.9	4.8	2.9	66.0	158	4.4	104	5.9	73.2	99
Middle	7.8	33.8	28.8	2.9	1.3	72.5	212	1.8	154	6.1	71.0	150
Fourth	18.1	47.0	46.3	12.6	7.8	45.8	257	15.1	118	8.6	54.7	218
Richest	31.7	51.3	61.1	15.4	6.3	26.1	245	18.1	64	5.7	55.4	217
Ethnicity of household head												
Hausa	15.2	40.0	40.2	8.8	4.4	55.1	983	6.9	542	6.1	62.9	731
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	4	(*)	2	(*)	(*)	4
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	4		0	(*)	(*)	4
Other ethnic group	(*)	(*)	(*)	(*)	(*)	(*)	26	(*)	9	(*)	(*)	20
¹ MICS indicator 9.1; MDG indicator 6.3 - Knowledge about HIV prevention among young women												
² MICS indicator 9.6 - Sexually active young women who have been tested for HIV and know the results												
^a Refer to Table HA.3 for the four indicators.												

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table HA.7M: Key HIV and AIDS indicators (young men)

Percentage of men age 15-24 years by key HIV and AIDS indicators, Nigeria, 2016-17 Kano State

	Percentage of men age 15-24 years who:						Number of men age 15-24 years	Percentage of sexually active young men who have been tested for HIV in the last 12 months and know the result ²	Number of men age 15-24 years who had sex in the last 12 months	Percentage who express attitudes towards people living with HIV on all four indicators ^a	Percentage who report discriminatory attitudes towards people living with HIV [a]	Number of men age 15-24 who have heard of AIDS
	Have comprehensive knowledge ¹	Know all three means of HIV transmission from mother to child	Know a place to get tested for HIV	Have ever been tested and know the result of the most recent test	Have been tested for HIV in the last 12 months and know the result	Had sex in the last 12 months						
Total	23.3	33.1	40.2	7.3	4.2	13.2	483	8.5	64	20.7	40.6	432
Senatorial District												
Kano Central	26.0	37.4	38.4	9.0	5.9	13.1	267	11.3	35	18.0	40.3	250
Kano North	27.1	27.6	58.0	3.1	3.1	1.8	88	(*)	2	39.6	24.6	76
Kano South	15.3	27.8	31.6	6.5	1.6	21.1	128	(5.4)	27	13.5	52.9	106
Residence												
Urban	28.9	37.2	37.2	9.4	6.3	9.9	205	(*)	20	17.5	34.8	193
Rural	19.3	30.1	42.4	5.7	2.7	15.6	278	(3.4)	43	23.3	45.3	239
Age (Years)												
15-19	18.7	35.1	33.6	4.2	3.6	9.3	290	(3.1)	27	19.3	43.3	259
15-17	18.0	30.2	31.6	4.1	3.5	9.1	200	(*)	18	21.1	45.9	172
18-19	20.1	46.1	38.0	4.3	3.7	9.6	90	(*)	9	15.8	38.4	87
20-24	30.4	30.0	50.1	12.0	5.2	19.0	193	(12.5)	37	22.8	36.6	173
20-22	26.8	30.0	45.7	10.1	4.5	16.7	137	(*)	23	19.5	38.6	123
23-24	39.3	29.9	61.2	16.8	7.0	24.6	56	(*)	14	(30.6)	31.6	50
Marital status												
Ever married/in union	(*)	(*)	(*)	(*)	(*)	(*)	8	(*)	6	(*)	(*)	7
Never married/in union	23.2	33.4	39.9	7.2	4.3	12.2	474	9.4	58	20.6	40.7	424

Table HA.7M: Key HIV and AIDS indicators (young men) (continued)

Percentage of men age 15-24 years by key HIV and AIDS indicators, Nigeria, 2016-17 Kano State

	Percentage of men age 15-24 years who:							Percentage of sexually active young men who have been tested for HIV in the last 12 months and know the result ²	Number of men age 15-24 years who had sex in the last 12 months	Percentage who express accepting attitudes towards people living with HIV on all four indicators ^a	Percentage who report discriminatory attitudes towards people living with HIV [a]	Number of men age 15-24 who have heard of AIDS
	Have comprehensive knowledge ¹	Know all three means of HIV transmission from mother to child	Know a place to get tested for HIV	Have ever been tested and know the result of the most recent test	Have been tested for HIV in the last 12 months and know the result	Had sex in the last 12 months	Number of men age 15-24 years					
Education												
None	(*)	(*)	(*)	(*)	(*)	(*)	3	(*)	1	(*)	(*)	2
Non-formal	10.9	26.7	26.3	4.6	1.0	20.1	85	(*)	17	16.5	52.5	62
Primary	24.8	29.0	38.0	4.0	2.1	14.9	57	(*)	8	36.3	40.1	51
Secondary	25.9	35.5	41.9	6.6	5.3	10.1	302	(15.1)	30	19.1	39.6	281
Higher	(31.1)	(30.9)	(62.0)	(24.8)	(6.3)	(18.4)	37	(*)	7	(19.6)	(31.2)	36
Wealth index quintile												
Poorest	13.8	24.9	33.1	2.9	0.0	19.2	70	(*)	13	19.8	48.3	57
Second	17.8	28.0	43.9	3.8	2.2	8.5	64	(*)	5	24.4	51.8	51
Middle	21.9	33.2	39.7	5.2	1.6	23.0	87	(*)	20	24.3	49.8	80
Fourth	25.7	32.8	37.0	6.2	3.9	9.1	118	(*)	11	17.1	35.1	110
Richest	29.4	39.5	44.9	13.2	9.1	9.7	143	(*)	14	20.4	32.2	135
Ethnicity of household head												
Hausa	23.2	33.4	40.2	6.9	3.8	12.7	477	5.5	60	20.9	40.8	428
Igbo												
Yoruba												
Other ethnic group	(*)	(*)	(*)	(*)	(*)	(*)	5	(*)	3	(*)	(*)	4

¹ MICS indicator 9.1; MDG indicator 6.3 - Knowledge about HIV prevention among young men^[M]
² MICS indicator 9.6 - Sexually active young men who have been tested for HIV and know the results^[M]
^a Refer to Table HA.3M for the four indicators.

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table HA.8: Key sexual behaviour indicators (young women)

Percentage of women age 15-24 years by key sexual behaviour indicators, Nigeria, 2016-17 Kano State

	Percentage of women age 15-24 years who:			Number of women age 15-24 years	Percentage of women who never had sex ²	Number of never-married women age 15-24 years	Percentage of women age 15-24 years who in the last 12 months had sex with:		Number of women age 15-24 years who had sex in the last 12 months	Percentage reporting the use of a condom during the last sexual intercourse with a non-marital, non-cohabiting partner in the last 12 months ⁵	Number of women age 15-24 years who had sex with a non-marital, non-cohabiting partner in the last 12 months	Percentage reporting that a condom was used the last time they had sex	Number of women age 15-24 years who had sex with more than one partner in the last 12 months
	Had sex before age 15 ¹	Ever had sex	Had sex with more than one partner in last 12 months				A man 10 or more years older ³	A non-marital, non-cohabiting partner ⁴					
Total	15.5	55.3	0.4	1017	98.6	461	60.8	0.3	553	(*)	3	(*)	4
Senatorial District													
Kano Central	6.8	33.8	0.4	465	98.7	312	61.1	0.7	152	(*)	3	(*)	2
Kano North	26.8	75.0	0.6	229	99.0	58	62.8	0.0	171		0	(*)	1
Kano South	20.0	72.3	0.2	323	98.1	91	59.2	0.0	230		0	(*)	1
Residence													
Urban	5.6	25.3	0.5	328	98.3	249	69.2	1.0	79	(*)	3	(*)	2
Rural	20.2	69.6	0.3	689	98.9	212	59.4	0.0	474		0	(*)	2
Age (Years)													
15-19	11.0	31.9	0.1	586	99.2	402	56.7	0.2	183	(*)	1	0.0	
15-17	10.1	22.1	0.0	376	99.1	295	58.3	0.4	82	(*)	1		
18-19	12.5	49.6	0.1	210	99.4	106	55.4	0.0	101		0	0.0	
20-24	21.7	87.1	0.8	431	94.4	59	62.8	0.4	370	(*)	2	(*)	4
20-22	20.3	86.3	0.9	319	(92.9)	47	66.6	0.6	272	(*)	2	(*)	3
23-24	25.6	89.3	0.6	112	(*)	12	52.3	0.0	98		0	(*)	1
Marital status													
Ever married/in union	28.0	100.0	0.4	555		0	61.2	0.0	547		0	(*)	2
Never married/in union	0.5	1.4	0.4	461	98.6	461	(*)	(*)	4	(*)	3	(*)	2

Table HA.8: Key sexual behaviour indicators (young women) (continued)

Percentage of women age 15-24 years by key sexual behaviour indicators, Nigeria, 2016-17 Kano State

	Percentage of women age 15-24 years who:					Number of never-married women age 15-24 years	Percentage of women age 15-24 years who in the last 12 months had sex with:		Number of women age 15-24 years who had sex in the last 12 months	Percentage reporting the use of a condom during the last sexual intercourse with a non-marital, non-cohabiting partner in the last 12 months ⁵	Number of women age 15-24 years who had sex with a non-marital, non-cohabiting partner in the last 12 months	Percentage reporting that a condom was used the last time they had sex	Number of women age 15-24 years who had sex with more than one partner in the last 12 months
				Number of women age 15-24 years	Percentage of women who never had sex ²		A man 10 or more years older ³	A non-marital, non-cohabiting partner ⁴					
	Had sex before age 15 ¹	Ever had sex	Had sex with more than one partner in last 12 months										
Education													
None	32.5	91.9	0.8	116	(*)	10	69.8	0.0	106		0	(*)	1
Non-formal	26.2	79.4	0.3	336	96.4	72	54.6	0.4	260	(*)	1	(*)	1
Primary	19.2	71.5	0.0	114	(98.1)	33	59.8	0.0	81		0		
Secondary	2.4	24.5	0.4	421	99.2	320	68.1	0.4	101	(*)	2	(*)	2
Higher	(0.0)	(15.8)	(0.0)	31	(100.0)	26	(*)	(*)	5		0		
Wealth index quintile													
Poorest	30.1	79.4	1.0	143	(96.3)	31	57.4	0.0	112		0	(*)	1
Second	27.0	67.1	0.4	158	(100.0)	52	58.4	0.0	104		0	(*)	1
Middle	20.6	74.0	0.0	212	95.4	58	59.8	0.7	154	(*)	1		
Fourth	7.4	47.2	0.0	257	99.3	137	60.9	0.0	118		0		
Richest	3.7	26.1	0.7	245	99.0	183	73.0	0.7	64	(*)	2	(*)	2
Ethnicity of household head													
Hausa	15.4	56.1	0.2	983	98.9	436	60.6	0.1	542	(*)	1	(*)	2
Igbo	(*)	(*)	(*)	4	(*)	2	(*)	(*)	2		0		
Yoruba	(*)	(*)	(*)	4	(*)	4		0.0			0		
Other ethnic group	(*)	(*)	(*)	26	(*)	20	(*)	(*)	9	(*)	2	(*)	2

¹ MICS indicator 9.10 - Sex before age 15 among young women

² MICS indicator 9.9 - Young women who have never had sex

³ MICS indicator 9.11 - Age-mixing among sexual partners

⁴ MICS indicator 9.14 - Sex with non-regular partners

⁵ MICS indicator 9.15; MDG indicator 6.2 - Condom use with non-regular partners

na: not applicable

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table HA.8M: Key sexual behaviour indicators (young men)

Percentage of men age 15-24 years by key sexual behaviour indicators, Nigeria, 2016-17 Kano State

	Percentage of men age 15-24 years who:											
	Had sex before age 15 ¹	Ever had sex	Had sex with more than one partner in last 12 months	Number of men age 15-24 years	Percentage of men who never had sex ²	Number of never-married men age 15-24 years	Percentage who in the last 12 months had sex with a non-marital, non-cohabiting partner ³	Number of men age 15-24 years who had sex in the last 12 months	Percentage reporting the use of a condom during the last sexual intercourse with a non-marital, non-cohabiting partner in the last 12 months ⁴	Number of men age 15-24 years who had sex with a non-marital, non-cohabiting partner in last 12 months	Percentage reporting that a condom was used the last time they had sex	Number of men age 15-24 years who had sex with more than one partner in the last 12 months
Total	0.4	14.9	2.4	483	86.2	474	11.1	64	80.3	54	(*)	12
Senatorial District												
Kano Central	0.8	15.5	3.0	267	84.6	263	(12.2)	35	(*)	33	(*)	8
Kano North	0.0	2.8	0.0	88	100.0	85	(*)	2		0		
Kano South	0.0	22.0	3.0	128	79.9	125	(16.3)	27	(65.9)	21	(*)	4
Residence												
Urban	1.0	11.0	1.0	205	89.3	201	(*)	20	(*)	21	(*)	2
Rural	0.0	17.8	3.5	278	83.9	272	(11.7)	43	(74.2)	32	(*)	10
Age (Years)												
15-19	0.0	9.5	1.1	290	90.8	288	(8.4)	27	(*)	24	(*)	3
15-17	0.0	9.1	0.3	200	90.8	199	(*)	18	(*)	16	(*)	1
18-19	0.0	10.2	2.8	90	90.7	89	(*)	9	(*)	8	(*)	3
20-24	1.1	23.1	4.5	193	79.1	186	(15.2)	37	(88.5)	29	(*)	9
20-22	0.8	21.8	3.5	137	79.8	134	(*)	23	(*)	18	(*)	5
23-24	1.7	26.2	6.9	56	(77.0)	52	(*)	14	(*)	11	(*)	4
Marital status												
Ever married/in union	(*)	(*)	(*)	8		0	(*)	6		0		
Never married/in union	0.2	13.8	2.5	474	86.2	474	11.3	58	80.3	54	(*)	12

Table HA.8M: Key sexual behaviour indicators (young men) (continued)

Percentage of men age 15-24 years by key sexual behaviour indicators, Nigeria, 2016-17 Kano State

	Percentage of men age 15-24 years who:											
	Had sex before age 15 ¹	Ever had sex	Had sex with more than one partner in last 12 months	Number of men age 15-24 years	Percentage of men who never had sex ²	Number of never-married men age 15-24 years	Percentage who in the last 12 months had sex with a non-marital, non-cohabiting partner ³	Number of men age 15-24 years who had sex in the last 12 months	Percentage reporting the use of a condom during the last sexual intercourse with a non-marital, non-cohabiting partner in the last 12 months ⁴	Number of men age 15-24 years who had sex with a non-marital, non-cohabiting partner in last 12 months	Percentage reporting that a condom was used the last time they had sex	Number of men age 15-24 years who had sex with more than one partner in the last 12 months
Education												
None	(*)	(*)	(*)	3	(*)	2	(*)	1	(*)	1		
Non-formal	0.0	22.9	1.9	85	79.9	82	(*)	17	(*)	12	(*)	2
Primary	0.0	17.5	2.0	57	83.3	55	(*)	8	(*)	8	(*)	1
Secondary	0.7	11.3	2.8	302	89.2	299	(8.6)	30	(*)	26	(*)	8
Higher	(0.0)	(18.4)	(1.5)	37	(81.6)	37	(*)	7	(*)	7	(*)	1
Wealth index quintile												
Poorest	0.0	19.2	0.9	70	84.5	67	(*)	13	(*)	8	(*)	1
Second	0.0	11.4	1.9	64	89.8	63	(*)	5	(*)	6	(*)	1
Middle	0.0	27.9	5.8	87	73.4	86	(*)	20	(*)	15	(*)	5
Fourth	0.0	11.0	1.0	118	88.9	117	(*)	11	(*)	11	(*)	1
Richest	1.4	9.7	2.6	143	90.8	141	(*)	14	(*)	13	(*)	4
Ethnicity of household head												
Hausa	0.2	14.4	2.0	477	86.7	469	10.6	60	(81.1)	50	(*)	10
Igbo												
Yoruba												
Other ethnic group	(*)	(*)	(*)	5	(*)	5	(*)	3	(*)	3	(*)	2

¹ MICS indicator 9.10 - Sex before age 15 among young men^[M]
² MICS indicator 9.9 - Young men who have never had sex^[M]
³ MICS indicator 9.14 - Sex with non-regular partners^[M]
⁴ MICS indicator 9.15; MDG indicator 6.2 - Condom use with non-regular partners^[M]

na: not applicable

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Orphans

Table HA.9: School attendance of orphans and non-orphans

School attendance of children age 10-14 years by orphanhood, Nigeria, 2016-17 Kano State								
	Percentage of children whose mother and father have died (orphans)	Percentage of children whose parents are still alive and who are living with at least one parent (non-orphans)	Number of children age 10-14 years	Percentage of children whose mother and father have died (orphans) and are attending school	Total number of orphan children age 10-14 years	Percentage of children whose parents are still alive, who are living with at least one parent (non-orphans), and who are attending school	Total number of non-orphan children age 10-14 years	Orphans to non-orphans school attendance ratio ¹
Total	1.7	86.9	1930	(89.7)	33	83.7	1678	1.07
Sex								
Male	1.8	88.0	917	(*)	16	85.4	807	1.10
Female	1.7	85.9	1013	(*)	17	82.2	871	1.05
Residence								
Urban	2.4	79.9	586	(*)	14	90.2	468	1.02
Rural	1.4	90.0	1344	(*)	19	81.3	1209	1.09

¹ MICS indicator 9.16; MDG indicator 6.4 - Ratio of school attendance of orphans to school attendance of non-orphans

See Table CP.14 for further overall results related to children's living arrangements and orphanhood

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Male Circumcision

Table HA.10: Male circumcision

Percentage of men age 15-49 years who report having been circumcised, and percent distribution of men by age of circumcision, Nigeria, 2016-17 Kano State

	Percent circumcised ¹	Number of men age 15-49 years	Age at circumcision:					Total	Number of men age 15-49 years who have been circumcised
			During infancy	1-4 years	5-9 years	10-14 years	Don't Know/Missing		
Total	99.3	1099	4.1	14.7	73.9	1.4	5.8	100.0	1091
Senatorial District									
Kano Central	99.4	538	7.3	20.5	61.4	1.1	9.7	100.0	535
Kano North	98.0	228	1.2	8.4	84.8	1.6	4.0	100.0	223
Kano South	100.0	333	0.9	9.6	86.9	1.9	0.8	100.0	333
Residence									
Urban	99.2	394	6.4	22.7	58.2	0.3	12.4	100.0	390
Rural	99.4	705	2.8	10.3	82.7	2.1	2.1	100.0	701
Age (Years)									
15-24	99.0	483	5.0	21.0	66.1	0.9	7.1	100.0	478
15-19	99.5	290	5.2	24.3	66.0	0.4	4.2	100.0	288
20-24	98.2	193	4.6	16.0	66.2	1.6	11.5	100.0	189
25-29	99.5	163	3.2	13.3	78.0	2.5	2.9	100.0	162
30-39	99.8	225	3.7	8.4	82.9	1.2	3.8	100.0	224
40-49	99.4	229	3.3	8.7	78.7	2.1	7.2	100.0	228
Education									
None	(100.0)	33	(0.0)	(0.0)	(88.3)	(2.4)	(9.3)	100.0	33
Non-formal	99.6	329	1.5	9.0	83.3	2.4	3.8	100.0	327
Primary	99.7	144	1.7	16.2	80.8	0.7	0.5	100.0	143
Secondary	99.3	461	5.2	17.9	66.7	1.3	9.0	100.0	458
Higher	98.2	133	10.6	19.9	64.8	0.0	4.7	100.0	130
Wealth index quintile									
Poorest	98.4	172	1.3	8.8	84.6	2.8	2.5	100.0	170
Second	100.0	175	1.0	8.4	85.2	1.5	3.9	100.0	175
Middle	99.8	209	2.6	14.2	79.5	2.0	1.7	100.0	208
Fourth	99.5	241	1.4	14.4	76.2	1.3	6.7	100.0	240
Richest	99.0	303	10.7	22.3	55.7	0.3	10.9	100.0	299
Ethnicity of household head									
Hausa	99.3	1072	3.8	14.7	74.3	1.5	5.8	100.0	1064
Igbo	(*)	2	(*)	(*)	(*)	(*)	(*)	100.0	2
Yoruba	(*)	3	(*)	(*)	(*)	(*)	(*)	100.0	3
Other ethnic group	(*)	22	(*)	(*)	(*)	(*)	(*)	100.0	22
¹ MICS indicator 9.17 - Male circumcision									
na: not applicable									

. () Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table HA.11: Provider and location of circumcision

Percent distribution of circumcised men age 15-49 by person performing circumcision and the location where circumcision was performed, Nigeria, 2016-17 Kano State

	Person performing circumcision:								Place of circumcision:							Number of men age 15-49 years who have been circumcised
	Doctor	Nurse/ midwife	Other health professionals	Traditional circumciser	Traditiona l birth attendant	Other traditional	Don't Know/ Missing	Total	Health facility	Home of a health worker / professional	At home	Ritual site	Other home /place	Don't Know/ Missing	Total	
Total	9.3	1.4	1.1	86.2	1.5	0.2	0.4	100.0	10.4	2.7	84.5	1.0	1.0	0.4	100.0	1091
Senatorial District																
Kano Central	17.9	1.7	1.4	76.6	2.0	0.2	0.2	100.0	19.3	4.7	73.2	0.8	1.8	0.2	100.0	535
Kano North	0.3	2.1	1.3	92.5	1.9	0.6	1.2	100.0	1.5	1.5	93.2	2.0	0.7	1.0	100.0	223
Kano South	1.4	0.3	0.5	97.2	0.3	0.0	0.2	100.0	2.0	0.3	96.8	0.8	0.0	0.2	100.0	333
Residence																
Urban	19.0	1.9	0.9	75.1	2.5	0.3	0.3	100.0	20.6	6.0	69.8	0.8	2.4	0.3	100.0	390
Rural	3.9	1.0	1.2	92.3	0.9	0.2	0.5	100.0	4.7	0.8	92.7	1.2	0.2	0.4	100.0	701
Age (Years)																
15-24	11.7	2.0	1.3	83.4	0.9	0.1	0.5	100.0	12.6	4.2	80.7	0.5	1.7	0.3	100.0	478
15-19	11.4	1.2	1.4	84.3	1.1	0.0	0.6	100.0	12.1	3.5	82.4	0.0	1.7	0.2	100.0	288
20-24	12.2	3.1	1.2	82.1	0.7	0.3	0.4	100.0	13.3	5.4	78.0	1.2	1.7	0.4	100.0	189
25-29	9.8	1.1	0.7	85.5	1.9	1.1	0.0	100.0	11.6	3.1	81.7	2.5	1.1	0.0	100.0	162
30-39	8.4	1.0	1.1	88.8	0.7	0.0	0.0	100.0	9.6	0.5	87.9	1.7	0.4	0.0	100.0	224
40-49	4.8	0.6	0.9	89.8	3.1	0.0	0.9	100.0	5.7	1.4	91.2	0.6	0.0	1.2	100.0	228
Education																
None	(0.0)	(1.7)	(0.0)	(98.3)	(0.0)	(0.0)	(0.0)	100.0	(1.7)	(0.0)	(95.5)	(2.7)	(0.0)	(0.0)	100.0	33
Non-formal	0.7	0.0	1.0	95.4	2.1	0.4	0.4	100.0	0.8	0.0	96.8	1.5	0.3	0.6	100.0	327
Primary	6.9	1.3	2.6	88.3	0.8	0.0	0.0	100.0	7.2	1.7	90.6	0.0	0.5	0.0	100.0	143
Secondary	11.6	2.1	0.9	83.8	1.3	0.0	0.4	100.0	13.2	5.1	79.8	0.4	1.3	0.2	100.0	458
Higher	28.1	2.1	0.7	65.7	1.6	0.8	1.0	100.0	30.2	2.8	60.5	2.9	2.6	1.0	100.0	130

Table HA.11: Provider and location of circumcision (continued)

Percent distribution of circumcised men age 15-49 by person performing circumcision and the location where circumcision was performed, Nigeria, 2016-17 Kano State

	Person performing circumcision:								Place of circumcision:							Number of men age 15-49 years who have been circumcised
	Doctor	Nurse/ midwife	Other health professionals	Traditional circumciser	Traditiona l birth attendant	Other traditional	Don't Know/ Missing	Total	Health facility	Home of a health worker / professional	At home	Ritual site	Other home /place	Don't Know/ Missing	Total	
Wealth index quintile																
Poorest	0.4	0.0	0.4	97.8	0.9	0.4	0.0	100.0	1.1	0.0	96.3	1.2	0.9	0.5	100.0	170
Second	0.4	0.3	1.1	97.0	0.7	0.4	0.0	100.0	1.1	0.0	97.6	1.3	0.0	0.0	100.0	175
Middle	4.1	0.9	1.8	90.3	1.4	0.0	1.5	100.0	4.4	1.1	91.7	1.9	0.0	1.0	100.0	208
Fourth	9.9	0.0	2.3	86.5	1.3	0.0	0.0	100.0	10.3	3.9	85.0	0.8	0.0	0.0	100.0	240
Richest	22.7	4.1	0.0	70.1	2.4	0.4	0.4	100.0	25.3	5.9	64.9	0.4	3.1	0.4	100.0	299
Ethnicity of household head																
Hausa	9.0	1.1	1.0	87.0	1.3	0.2	0.4	100.0	9.9	2.7	85.0	1.1	1.0	0.4	100.0	1064
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	(*)	100.0	2
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	(*)	100.0	3
Other ethnic group	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	(*)	100.0	22

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

XIII. Access to Mass Media and Use of Information/Communication Technology

Access to Mass Media

Table MT.1: Exposure to mass media (women)							
Percentage of women age 15-49 years who are exposed to specific mass media on a weekly basis, Nigeria, 2016-17 Kano State							
	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	None of the media at least once a week	Number of women age 15-49 years
Total	5.9	51.7	24.0	3.8	55.8	44.1	2500
Age(Years)							
15-19	10.2	55.8	33.3	5.9	62.9	37.0	586
20-24	5.6	48.1	21.4	3.4	51.8	48.0	431
25-29	5.8	52.5	21.8	3.5	56.5	43.5	432
30-34	3.5	50.8	21.8	2.9	52.0	48.0	354
35-39	4.3	48.6	22.1	3.5	53.7	46.3	286
40-44	3.7	53.0	19.7	3.3	55.7	44.3	222
45-49	3.2	49.6	17.7	2.2	52.0	48.0	190
Senatorial District							
Kano Central	10.7	69.2	45.8	7.5	75.2	24.8	1093
Kano North	3.3	36.4	8.9	1.9	39.4	60.4	603
Kano South	1.5	39.2	5.5	0.3	41.7	58.3	803
Residence							
Urban	13.7	81.8	59.6	10.2	89.7	10.3	731
Rural	2.7	39.2	9.2	1.2	41.8	58.1	1769
Education							
None	0.0	31.6	9.3	0.0	33.2	66.6	419
Non-formal	0.6	41.1	6.5	0.2	42.6	57.4	1081
Primary	3.3	54.9	22.6	1.4	59.0	41.0	294
Secondary	15.2	77.1	55.6	9.3	86.8	13.1	608
Higher	39.8	86.4	86.5	33.5	96.4	3.6	99
Wealth index quintile							
Poorest	0.3	25.4	0.5	0.0	25.8	74.1	447
Second	1.1	32.5	2.7	0.0	34.5	65.4	484
Middle	1.4	40.0	4.7	0.5	42.1	57.9	479
Fourth	5.0	68.7	26.8	1.4	74.6	25.4	530
Richest	19.4	83.1	74.9	15.4	92.2	7.8	560
Ethnicity of household head							
Hausa	5.3	51.2	23.1	3.4	55.1	44.8	2429
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	9
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	8
Other ethnic group	25.6	65.2	53.5	17.9	75.8	24.2	55
¹ MICS indicator 10.1 - Exposure to mass media							

(*) Sample data are fewer than 25 unweighted cases

Use of Information/Communication Technology

Table MT.1M: Exposure to mass media (men)

Percentage of men age 15-49 years who are exposed to specific mass media on a weekly basis, Nigeria, 2016-17 Kano State

	Percentage of men age 15-49 years who:			All three media at least once a week ¹	Any media at least once a week	None of the 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	25.6	66.5	44.9	19.9	74.0	25.8	1099
Age(Years)							
15-19	23.0	58.7	47.7	16.1	68.4	31.1	290
20-24	33.8	68.6	52.0	26.7	75.2	24.8	193
25-29	28.8	64.6	44.1	20.7	74.6	25.4	163
30-34	29.2	67.8	45.1	24.3	76.4	23.6	128
35-39	17.9	66.2	33.3	15.3	70.8	29.2	97
40-44	24.8	76.3	42.3	22.0	79.2	20.8	130
45-49	16.0	73.8	38.6	13.0	79.8	19.3	99
Senatorial District							
Kano Central	39.8	76.9	62.4	33.7	84.6	15.4	538
Kano North	12.2	69.8	33.5	7.2	76.7	23.3	228
Kano South	11.8	47.4	24.4	6.4	55.0	44.4	333
Residence							
Urban	43.5	72.8	68.3	37.5	81.8	18.2	394
Rural	15.6	62.9	31.8	10.1	69.6	30.1	705
Education							
None	(7.4)	(67.4)	(23.3)	(3.8)	(76.4)	(21.2)	33
Non-formal	3.4	54.3	24.1	3.2	57.3	42.3	329
Primary	9.2	62.6	31.9	5.2	72.1	27.9	144
Secondary	34.5	70.9	55.7	25.6	80.5	19.5	461
Higher	71.9	85.1	78.3	61.7	93.8	6.2	133
Wealth index quintile							
Poorest	3.6	41.6	13.6	0.9	45.6	53.1	172
Second	5.6	61.4	24.6	2.8	69.4	30.6	175
Middle	14.0	68.3	34.7	8.9	74.3	25.7	209
Fourth	33.4	71.1	54.7	25.5	81.5	18.5	241
Richest	51.4	78.6	73.6	43.8	86.4	13.6	303
Ethnicity of household head							
Hausa	25.0	65.8	44.5	19.5	73.5	26.3	1072
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	2
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	3
Other ethnic group	(*)	(*)	(*)	(*)	(*)	(*)	22

¹ MICS indicator 10.1 - Exposure to mass media^[M]

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table MT.2: Use of computers and internet (women)

Percentage of young women age 15-24 years who have ever used a computer and the internet, percentage who have used during the last 12 months, and percentage who have used at least once weekly during the last one month, Nigeria, 2016-17 Kano State

	Percentage of women age 15-24 years who have:						Number of women age 15-24 years
	Ever used a computer	Used a computer during the last 12 months ¹	Used a computer at least once a week during the last one month	Ever used the internet	Used the internet during the last 12 months ²	Used the internet at least once a week during the last one month	
Total	11.2	7.9	5.7	8.8	7.2	4.9	1017
Age(Years)							
15-19	13.4	10.4	7.3	9.4	8.2	5.4	586
20-24	8.1	4.6	3.4	7.9	5.8	4.3	431
Senatorial District							
Kano Central	20.1	14.5	9.8	15.6	13.2	8.7	465
Kano North	3.7	3.4	3.0	2.4	2.4	2.4	229
Kano South	3.6	1.7	1.7	3.4	1.9	1.3	323
Residence							
Urban	23.6	16.5	11.0	19.7	16.3	10.5	328
Rural	5.2	3.8	3.1	3.6	2.9	2.3	689
Education							
None	0.0	0.0	0.0	0.0	0.0	0.0	116
Non-formal	0.7	0.3	0.0	0.3	0.0	0.0	336
Primary	0.0	0.0	0.0	1.0	1.0	0.0	114
Secondary	21.7	15.6	11.3	16.1	13.1	8.5	421
Higher	(64.1)	(46.8)	(33.5)	(63.0)	(55.0)	(46.4)	31
Wealth index quintile							
Poorest	0.4	0.0	0.0	0.0	0.0	0.0	143
Second	1.3	1.3	0.7	0.7	0.7	0.7	158
Middle	2.8	0.5	0.5	1.6	1.6	0.5	212
Fourth	11.9	8.1	5.9	7.1	5.6	3.5	257
Richest	30.3	23.1	16.4	27.1	22.1	15.8	245
Ethnicity of household head							
Hausa	9.9	6.8	5.0	7.6	6.0	4.2	983
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	4
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	4
Other ethnic group	(*)	(*)	(*)	(*)	(*)	(*)	26
¹ MICS indicator 10.2 - Use of computers							
² MICS indicator 10.3 - Use of internet							

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table MT.2M: Use of computers and internet (men)

Percentage of young men age 15-24 years who have ever used a computer and the internet, percentage who have used during the last 12 months, and percentage who have used at least once weekly during the last one month, Nigeria, 2016-17 Kano State

	Percentage of men age 15-24 years who have:						Number of men age 15-24 years
	Ever used a computer	Used a computer during the last 12 months ¹	Used a computer at least once a week during the last one month	Ever used the internet	Used the internet during the last 12 months ²	Used the internet at least once a week during the last one month	
Total	18.8	16.3	12.5	35.5	32.9	25.9	483
Age(Years)							
15-19	13.9	11.7	9.1	26.3	24.1	19.3	290
20-24	26.2	23.1	17.6	49.4	46.2	35.9	193
Senatorial District							
Kano Central	28.1	24.8	18.4	46.3	43.0	32.7	267
Kano North	9.7	8.9	8.9	31.8	31.8	27.4	88
Kano South	5.8	3.6	2.7	15.6	12.7	10.7	128
Residence							
Urban	30.1	27.7	21.1	46.3	43.0	32.6	205
Rural	10.5	7.9	6.1	27.6	25.5	21.0	278
Education							
None	(*)	(*)	(*)	(*)	(*)	(*)	3
Non-formal	0.0	0.0	0.0	1.9	1.2	0.0	85
Primary	2.1	2.1	2.1	8.4	8.4	7.3	57
Secondary	23.2	19.2	14.3	44.6	40.6	31.8	302
Higher	(54)	(54)	(43)	(83)	(83)	(68)	37
Wealth index quintile							
Poorest	2.1	.9	.9	9.8	7.1	5.0	70
Second	6.9	4.5	1.9	13.5	12.7	9.5	64
Middle	11.3	6.5	4.6	35.3	32.0	27.1	87
Fourth	27.0	25.1	20.0	49.9	45.4	38.4	118
Richest	30.2	27.9	21.4	46.3	44.9	32.5	143
Ethnicity of household head							
Hausa	18.6	16.0	12.4	35.3	32.6	25.8	477
Igbo							
Yoruba							
Other ethnic group	(*)	(*)	(*)	(*)	(*)	(*)	5
¹ MICS indicator 10.2 - Use of computers ^[M]							
² MICS indicator 10.3 - Use of internet ^[M]							

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

XIV. Subjective well-being

Table SW.1: Domains of life satisfaction (women)

Percentage of women age 15-24 years who are very or somewhat satisfied in selected domains of satisfaction, Nigeria, 2016-17 Kano State

	Percentage of women age 15-24 years who are very or somewhat satisfied in selected domains:						Percentage of women age 15-24 years who:									
	Family life	Friendships	Health	Living environment	Treatment by others	The way they look	Are attending school	Have a job	Have an income	Number of women age 15-24 years	Percentage of women age 15-24 years who are very or somewhat satisfied with school	Number of women age 15-24 years attending school	Percentage of women age 15-24 years who are very or somewhat satisfied with their job	Number of women age 15-24 years who have a job	Percentage of women age 15-24 years who are very or somewhat satisfied with their income	Number of women age 15-24 years who have an income
Total	87.5	86.5	87.7	90.3	86.4	90.0	33.8	21.7	38.8	1017	92.8	343	84.1	220	75.3	395
Age (Years)																
15-19	88.9	87.9	86.6	90.6	85.5	89.4	49.8	18.4	36.4	586	92.5	291	84.9	108	77.7	213
20-24	85.6	84.7	89.1	90.0	87.7	90.9	12.0	26.1	42.2	431	94.3	52	83.4	113	72.5	182
Senatorial District																
Kano Central	89.1	89.1	89.0	92.9	90.7	90.8	52.0	20.0	32.3	465	94.2	242	82.0	93	72.4	150
Kano North	82.8	82.3	87.4	86.5	79.1	88.9	17.7	20.5	40.7	229	(94.6)	40	77.8	47	66.2	93
Kano South	88.6	85.9	85.9	89.3	85.5	89.6	18.9	24.9	47.0	323	85.9	61	90.3	80	83.8	152
Residence																
Urban	88.5	88.5	89.2	93.4	90.8	92.0	60.1	18.5	33.7	328	93.7	197	80.8	61	75.1	110
Rural	87.0	85.6	87.0	88.9	84.4	89.1	21.2	23.2	41.3	689	91.6	146	85.4	160	75.4	285
Marital Status																
Ever married/in union	85.3	84.8	86.4	89.0	84.3	90.3	6.0	22.1	40.2	555	(95.7)	33	84.0	122	74.1	223
Never married/in union	90.1	88.6	89.1	91.9	88.9	89.6	67.2	21.2	37.0	461	92.5	310	84.3	98	76.7	171
Missing	100.0	100.0	100.0	100.0	100.0	100.0	0.0	0.0	100.0	2		0		0	100.0	2

Table SW.1: Domains of life satisfaction (women) continued

Percentage of women age 15-24 years who are very or somewhat satisfied in selected domains of satisfaction, Nigeria, 2016-17 Kano State

	Percentage of women age 15-24 years who are very or somewhat satisfied in selected domains:						Percentage of women age 15-24 years who:				Percentage of women age 15-24 years who are very or somewhat satisfied with school	Number of women age 15-24 years attending school	Percentage of women age 15-24 years who are very or somewhat satisfied with their job	Number of women age 15-24 years who have a job	Percentage of women age 15-24 years who are very or somewhat satisfied with their income	Number of women age 15-24 years who have an income
	Family life	Friendships	Health	Living environment	Treatment by others	The way they look	Are attending school	Have a job	Have an income	Number of women age 15-24 years						
Education																
None	86.1	93.0	91.1	91.2	82.2	94.8	1.9	22.2	35.0	116	(*)	2	(91.4)	26	(80.9)	40
Non-formal	84.1	81.9	83.6	86.8	84.9	87.3	13.4	23.9	42.6	336	(87.3)	45	78.7	80	70.5	143
Primary	83.9	84.9	85.4	87.5	80.8	86.8	20.2	24.4	47.0	114	(*)	23	(88.6)	28	80.3	54
Secondary	91.6	88.8	90.3	93.6	89.8	91.9	59.4	18.7	33.6	421	93.9	250	86.5	78	79.3	141
Higher	(87.2)	(88.2)	(91.4)	(92.1)	(93.4)	(86.5)	(76.2)	(25.7)	(53.7)	31	(90.0)	23	(*)	8	(*)	16
Wealth index quintile																
Poorest	85.3	84.7	86.3	85.5	80.8	87.0	8.7	19.9	41.7	143	(*)	13	(85.4)	28	74.1	60
Second	88.5	87.5	85.8	90.7	82.3	91.3	25.7	22.8	42.8	158	(93.2)	41	(84.3)	36	83.0	68
Middle	84.7	84.2	88.4	88.8	87.3	91.6	19.0	23.3	37.5	212	(87.6)	40	83.2	49	76.0	80
Fourth	85.0	85.8	85.6	89.9	85.7	88.4	41.7	21.2	37.1	257	94.5	107	89.2	55	75.3	95
Richest	93.3	89.7	91.2	94.7	92.4	91.2	58.0	21.0	37.7	245	93.3	142	(78.8)	52	69.9	92
Ethnicity of household head																
Hausa	87.8	87.0	87.6	90.2	86.9	90.6	33.1	21.0	37.9	983	93.2	325	86.0	206	76.3	373
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	4	(*)	2	(*)	1	(*)	3
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	4	(*)	2	(*)	2	(*)	3
Other ethnic group	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	26	(*)	15	(*)	11	(*)	17

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table SW.1M: Domains of life satisfaction (men)

Percentage of men age 15-24 years who are very or somewhat satisfied in selected domains of satisfaction, Nigeria, 2016-17 Kano State

	Percentage of men age 15-24 years who are very or somewhat satisfied in selected domains:						Percentage of men age 15-24 years who:					Percentage of men age 15-24 years who are very or somewhat satisfied with school			Percentage of men age 15-24 years who are very or somewhat satisfied with their income		
	Family life	Friendships	Health	Living environment	Treatment by others	The way they look	Are attending school	Have a job	Have an income	Number of men age 15-24 years		Percentage of men age 15-24 years who are very or somewhat satisfied with school	Number of men age 15-24 years attending school		Percentage of men age 15-24 years who are very or somewhat satisfied with their income	Number of men age 15-24 years who have an income	
Total	90.1	89.9	92.7	83.2	86.2	94.6	55.0	54.4	54.5	483		86.7	265	78.4	263	72.3	263
Age (Years)																	
15-19	91.5	90.5	95.0	83.0	87.6	95.5	64.4	46.4	44.7	290		83.5	187	78.5	134	73.1	130
20-24	88.1	88.9	89.3	83.4	84.2	93.3	40.9	66.6	69.3	193		94.4	79	78.3	128	71.6	134
Senatorial District																	
Kano Central	90.9	91.2	94.3	92.8	90.7	95.2	59.5	53.0	52.8	267		92.4	159	87.2	141	83.5	141
Kano North	91.2	94.4	95.0	75.1	91.3	93.8	51.8	49.5	50.4	88		84.8	46	80.5	44	73.6	44
Kano South	87.7	84.0	87.8	68.8	73.4	93.9	47.8	60.7	61.1	128		73.4	61	61.1	78	51.5	78
Residence																	
Urban	89.3	91.3	94.3	94.3	91.1	94.8	61.5	47.7	47.9	205		91.3	126	84.9	98	81.4	98
Rural	90.7	88.8	91.5	75.0	82.6	94.5	50.2	59.4	59.4	278		82.6	139	74.5	165	67.0	165
Marital Status																	
Ever married/in union	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	8		(*)	1	(*)	8	(*)	7
Never married/in union	90.1	90.1	93.0	83.5	86.4	94.5	55.9	53.6	53.9	474		86.7	265	78.2	254	72.7	255
Missing	100.0	0.0	100.0	100.0	100.0	100.0	0.0	100.0	100.0	1			0	100.0	1	100.0	1
Education																	
None	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	3			0	(*)	3	(*)	3
Non-formal	89.6	83.1	88.2	63.9	76.9	93.7	39.3	77.5	78.0	85		(79.8)	33	74.0	66	66.5	66
Primary	86.1	88.8	85.8	74.9	82.8	90.0	44.7	42.0	38.8	57		(76.6)	25	(68.2)	24	(65.2)	22
Secondary	91.0	92.8	95.9	89.5	90.6	95.7	60.2	51.4	51.8	302		88.6	181	83.9	155	76.7	156
Higher	(92.2)	(82.0)	(86.8)	(89.9)	(78.2)	(94.6)	(69.4)	(41.5)	(43.5)	37		(*)	26	(*)	15	(*)	16

Table SW.1M: Domains of life satisfaction (men) - continued

Percentage of men age 15-24 years who are very or somewhat satisfied in selected domains of satisfaction, Nigeria, 2016-17 Kano State

	Percentage of men age 15-24 years who are very or somewhat satisfied in selected domains:						Percentage of men age 15-24 years who:			Number of men age 15-24 years	Percentage of men age 15-24 years who are very or somewhat satisfied with school	Number of men age 15-24 years attending school	Percentage of men age 15-24 years who are very or somewhat satisfied with their job	Number of men age 15-24 years who have a job	Percentage of men age 15-24 years who are very or somewhat satisfied with their income	Number of men age 15-24 years who have an income	
	Family life	Friendships	Health	Living environment	Treatment by others	The way they look	Are attending school	Have a job	Have an income								
Wealth index quintile																	
Poorest	92.5	82.1	87.7	60.2	77.1	91.8		40.5	64.7	65.0	70	(80.3)	29	(77.9)	46	(61.9)	46
Second	86.8	90.3	92.5	74.8	80.7	93.1		57.5	63.3	60.6	64	(86.6)	37	(71.7)	40	(65.7)	39
Middle	90.0	90.5	92.1	84.7	84.9	98.6		41.0	62.5	65.5	87	(80.9)	36	75.8	54	71.9	57
Fourth	92.3	95.2	94.4	92.0	93.0	96.3		60.2	52.7	53.2	118	89.7	71	84.6	62	82.6	63
Richest	88.6	88.7	94.2	90.0	88.3	92.8		65.3	41.9	41.2	143	88.6	94	79.1	60	74.4	59
Ethnicity of household head																	
Hausa	90.0	89.7	92.6	83.0	86.3	94.5		54.9	54.8	54.9	477	86.5	262	78.3	262	72.2	262
Other ethnic group	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	5	(*)	3	(*)	1	(*)	1

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table SW.2: Overall life satisfaction and happiness (women)

Percentage of women age 15-24 years who are very or somewhat satisfied with their life overall, the average overall life satisfaction score, and percentage of women age 15-24 years who are very or somewhat happy, Nigeria, 2016-17 Kano State

	Percentage of women with overall life satisfaction ¹	Average life satisfaction score	Percentage of women who are very or somewhat happy ²	Number of women age 15-24 years
Total	89.6	1.5	91.2	1017
Age (Years)				
15-19	89.9	1.5	91.3	586
20-24	89.2	1.6	91.0	431
Senatorial District				
Kano Central	91.2	1.5	91.9	465
Kano North	85.6	1.5	89.6	229
Kano South	90.2	1.6	91.3	323
Residence				
Urban	90.8	1.5	91.6	328
Rural	89.1	1.6	91.0	689
Marital Status				
Ever married/in union	88.1	1.6	90.6	555
Never married/in union	91.5	1.5	91.9	461
Missing	100.0	1.0	100.0	2
Education				
None	88.0	1.5	95.8	116
Non-formal	89.1	1.7	87.9	336
Primary	89.9	1.6	88.7	114
Secondary	90.1	1.4	93.3	421
Higher	(93.4)	(1.5)	(91.5)	31
Wealth index quintile				
Poorest	89.0	1.5	91.0	143
Second	90.0	1.6	91.7	158
Middle	90.8	1.5	91.1	212
Fourth	87.3	1.6	91.6	257
Richest	91.2	1.4	90.6	245
Ethnicity of household head				
Hausa	89.5	1.5	91.5	983
Igbo	(*)	(*)	(*)	4
Yoruba	(*)	(*)	(*)	4
Other ethnic group	(*)	(*)	(*)	26

¹ MICS Indicator 11.1 - Life satisfaction

² MICS indicator 11.2 - Happiness

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table SW.2M: Overall life satisfaction and happiness (men)

Percentage of men age 15-24 years who are very or somewhat satisfied with their life overall, the average overall life satisfaction score, and percentage of men age 15-24 years who are very or somewhat happy, Nigeria, 2016-17 Kano State

	Percentage of men with overall life satisfaction ¹	Average life satisfaction score	Percentage of men who are very or somewhat happy ²	Number of men age 15-24 years
Total	87.6	1.6	90.9	483
Age (Years)				
15-19	87.5	1.6	92.1	290
20-24	87.7	1.6	89.2	193
Senatorial District				
Kano Central	93.6	1.4	93.5	267
Kano North	72.6	1.8	89.1	88
Kano South	85.3	1.8	86.8	128
Residence				
Urban	94.1	1.4	92.4	205
Rural	82.8	1.8	89.9	278
Marital Status				
Ever married/in union	(*)	(*)	(*)	8
Never married/in union	87.5	1.6	91.0	474
Missing	100.0	2.0	100.0	1
Education				
None	(*)	(*)	(*)	3
Non-formal	88.0	1.8	89.6	85
Primary	74.6	1.8	92.1	57
Secondary	90.6	1.5	91.8	302
Higher	(86.7)	(1.6)	(87.4)	37
Wealth index quintile				
Poorest	78.7	1.9	96.0	70
Second	84.5	1.7	90.3	64
Middle	82.9	1.8	85.8	87
Fourth	92.2	1.5	89.3	118
Richest	92.3	1.4	93.2	143
Ethnicity of household head				
Hausa	87.4	1.6	90.8	477
Other ethnic group	(*)	(*)	(*)	5
¹ MICS Indicator 11.1 - Life satisfaction ^[M]				
² MICS indicator 11.2 - Happiness ^[M]				

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table SW.3: Perception of a better life (women)

Percentage of women age 15-24 years who think that their lives improved during the last one year and those who expect that their lives will get better after one year, Nigeria, 2016-17 Kano State

	Percentage of women who think that their life			Number of women age 15-24 years
	Improved during the last one year	Will get better after one year	Both ¹	
Total	79.3	86.4	74.0	1017
Age (Years)				
15-19	82.3	88.4	77.7	586
20-24	75.2	83.6	68.9	431
Senatorial District				
Kano Central	79.6	89.7	78.2	465
Kano North	77.2	82.5	68.2	229
Kano South	80.4	84.3	72.1	323
Residence				
Urban	79.1	90.5	77.2	328
Rural	79.4	84.4	72.4	689
Marital Status				
Ever married/in union	78.1	84.8	72.2	555
Never married/in union	80.6	88.2	76.1	461
Missing	100.0	100.0	100.0	2
Education				
None	79.5	82.1	70.3	116
Non-formal	77.6	86.2	72.8	336
Primary	75.5	80.9	67.1	114
Secondary	81.5	88.5	77.3	421
Higher	(80.4)	(94.5)	(80.4)	31
Wealth index quintile				
Poorest	79.7	85.5	76.0	143
Second	81.6	83.8	71.4	158
Middle	79.8	84.9	72.8	212
Fourth	77.2	84.5	71.2	257
Richest	79.3	91.7	78.3	245
Ethnicity of household head				
Hausa	79.9	86.6	74.5	983
Igbo	(*)	(*)	(*)	4
Yoruba	(*)	(*)	(*)	4
Other ethnic group	(*)	(*)	(*)	26

¹ MICS indicator 11.3 - Perception of a better life

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table SW.3M: Perception of a better life (men)

Percentage of men age 15-24 years who think that their lives improved during the last one year and those who expect that their lives will get better after one year, Nigeria, 2016-17 Kano State

	Percentage of men who think that their life			Number of men age 15-24 years
	Improved during the last one year	Will get better after one year	Both ¹	
Total	69.4	85.9	66.6	483
Age (Years)				
15-19	67.8	84.0	64.6	290
20-24	71.8	88.7	69.7	193
Senatorial District				
Kano Central	79.8	93.6	77.9	267
Kano North	37.3	55.7	33.0	88
Kano South	69.8	90.5	66.2	128
Residence				
Urban	81.2	95.8	80.8	205
Rural	60.6	78.6	56.2	278
Marital Status				
Ever married/in union	(*)	(*)	(*)	8
Never married/in union	69.6	85.6	66.8	474
Education				
None	(*)	(*)	(*)	3
Non-formal	68.8	80.8	61.2	85
Primary	58.0	82.8	58.0	57
Secondary	73.0	89.5	71.3	302
Higher	(58.7)	(71.7)	(54.3)	37
Wealth index quintile				
Poorest	63.7	82.9	57.6	70
Second	65.0	82.8	61.1	64
Middle	56.8	77.0	54.3	87
Fourth	73.5	87.8	72.0	118
Richest	78.4	92.6	76.6	143
Ethnicity of household head				
Hausa	69.7	85.7	66.9	477
Other ethnic group	(*)	(*)	(*)	5
¹ MICS indicator 11.3 - Perception of a better life ^[M]				

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

XV. Tobacco and Alcohol Use

Table TA.1: Current and ever use of tobacco (women)

Percentage of women age 15-49 years by pattern of use of tobacco, Nigeria, 2016-17 Kano State

	Never smoked cigarettes or used other tobacco products	Ever users				Users of tobacco products at any time during the last one month				Number of women age 15-49 years
		Only cigarettes	Cigarettes and other tobacco products	Only other tobacco products	Any tobacco product	Only cigarettes	Cigarettes and other tobacco products	Only other tobacco products	Any tobacco product ¹	
Total	99.3	0.1	0.1	0.4	0.5	0.0	0.0	0.0	0.0	2500
Age (Years)										
15-19	99.2	0.0	0.3	0.2	0.5	0.0	0.0	0.0	0.0	586
20-24	99.1	0.4	0.0	0.1	0.5	0.0	0.0	0.0	0.0	431
25-29	99.5	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	432
30-34	99.0	0.0	0.0	0.9	0.9	0.0	0.0	0.0	0.0	354
35-39	98.6	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	286
40-44	99.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	222
45-49	100.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	190
Senatorial District										
Kano Central	98.8	0.2	0.2	0.6	1.0	0.0	0.0	0.0	0.0	1093
Kano North	99.8	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	603
Kano South	99.4	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	803
Residence										
Urban	98.6	0.2	0.2	0.8	1.2	0.0	0.0	0.0	0.0	731
Rural	99.5	0.0	0.0	0.2	0.2	0.0	0.0	0.0	0.0	1769
Education										
None	99.3	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	419
Non-formal	99.4	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	1081
Primary	99.5	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	294
Secondary	98.8	0.3	0.3	0.4	1.0	0.0	0.0	0.0	0.0	608
Higher	99.3	0.0	0.0	0.7	0.7	0.0	0.0	0.0	0.0	99
Under-5s in the same household										
At least one	99.3	0.1	0.1	0.3	0.5	0.0	0.0	0.0	0.0	2001
None	99.1	0.0	0.0	0.4	0.4	0.0	0.0	0.0	0.0	499
Wealth index quintile										
Poorest	99.6	0.0	0.0	0.1	0.1	0.0	0.0	0.0	0.0	447
Second	99.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	484
Middle	98.9	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	479
Fourth	99.5	0.0	0.0	0.3	0.3	0.0	0.0	0.0	0.0	530
Richest	98.5	0.3	0.3	0.8	1.5	0.0	0.0	0.0	0.0	560
Ethnicity of household head										
Hausa	99.4	0.0	0.0	0.4	0.4	0.0	0.0	0.0	0.0	2429
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	9
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	8
Other ethnic group	93.5	3.3	3.3	0.0	6.5	0.0	0.0	0.0	0.0	55

¹ MICS indicator 12.1 - Tobacco use

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Table TA.1M: Current and ever use of tobacco (men)

Percentage of men age 15-49 years by pattern of use of tobacco, Nigeria, 2016-17 Kano State

	Never smoked cigarette s or used other tobacco products	Ever users				Users of tobacco products at any time during the last one month				Number of men age 15-49 years
		Only cigarettes	Cigarette s and other tobacco products	Only other tobacco products	Any tobacco product	Only cigarettes	Cigarette s and other tobacco products	Only other tobacco products	Any tobacco product ¹	
Total	87.2	6.1	1.4	3.1	10.6	2.3	0.4	1.3	4.0	1099
Age (Years)										
15-19	96.1	0.5	0.6	1.5	2.6	0.2	0.0	0.3	0.5	290
20-24	81.3	6.8	2.3	4.1	13.2	3.9	2.0	2.9	8.8	193
25-29	79.0	11.0	1.3	6.9	19.3	3.8	0.0	2.3	6.1	163
30-34	80.8	11.5	1.7	3.6	16.8	3.1	0.4	2.6	6.1	128
35-39	90.3	5.1	1.2	1.6	7.9	0.0	0.0	0.0	0.0	97
40-44	93.0	4.5	1.7	0.8	7.0	2.6	0.0	0.8	3.4	130
45-49	83.4	9.2	1.8	3.1	14.1	3.2	0.0	0.0	3.2	99
Senatorial District										
Kano Central	88.5	5.0	1.6	2.9	9.5	1.1	0.5	1.4	3.0	538
Kano North	88.3	9.7	0.0	1.7	11.4	1.4	0.0	0.0	1.4	228
Kano South	84.4	5.4	2.1	4.3	11.9	4.7	0.5	2.2	7.4	333
Residence										
Urban	90.7	5.1	1.3	0.4	6.9	1.4	0.3	0.4	2.1	394
Rural	85.2	6.7	1.5	4.5	12.7	2.7	0.5	1.8	5.0	705
Education										
None	(67.6)	(21.0)	(2.7)	(8.6)	(32.4)	(0.0)	(0.0)	(6.2)	(6.2)	33
Non-formal	86.5	5.4	1.7	4.4	11.4	2.9	0.2	1.4	4.5	329
Primary	88.7	5.2	1.4	3.5	10.1	2.4	0.8	2.3	5.5	144
Secondary	89.1	5.3	1.0	2.2	8.4	2.0	0.2	1.0	3.3	461
Higher	85.1	8.0	2.1	1.2	11.3	1.8	1.2	0.0	3.0	133
Under-5s in the same household										
At least one	88.0	5.6	1.0	3.1	9.7	2.3	0.2	1.4	3.9	776
None	85.1	7.4	2.4	3.1	12.9	2.1	0.8	1.2	4.2	323
Wealth index quintile										
Poorest	88.8	3.6	0.9	4.9	9.5	1.8	0.0	1.3	3.1	172
Second	88.0	6.4	1.6	3.3	11.3	1.7	0.0	1.4	3.0	175
Middle	84.5	9.1	0.7	2.4	12.2	3.2	0.8	1.4	5.4	209
Fourth	84.2	6.5	1.8	4.0	12.4	2.7	0.0	1.6	4.2	241
Richest	90.1	5.0	1.7	1.6	8.3	1.9	0.9	1.1	3.9	303
Ethnicity of household head										
Hausa	87.5	5.9	1.2	3.1	10.2	2.2	0.3	1.4	3.9	1072
Igbo	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	2
Yoruba	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	3
Other ethnic group	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	22

¹ MICS indicator 12.1 - Tobacco use^[M]

() Sample data are based on 25-49 unweighted cases

(*) Sample data are fewer than 25 unweighted cases

Appendix A. Sample Design

The major features of the sample design are described in this appendix. Sample design features include target sample size, sample allocation, sampling frame and listing, choice of domains, sampling stages, stratification, and the calculation of sample weights.

The primary objective of the sample design used for the Nigeria Multiple Indicator Cluster Survey (MICS) for Kano state was to produce statistically reliable estimates of most indicators, at the state and senatorial district levels.

A multi-stage, stratified cluster sampling approach was used for the selection of the survey sample.

Sample Size and Sample Allocation

The sample size for the Kano-Nigeria MICS was calculated as 1,920 households. Determination of the number of sample households (denoted as n), generally uses the following formula that is based on the parameters of the distribution of a characteristic adopted as the design variable and on a number of other parameters that affect the precision. The required sample size n is given as:

$$n = \frac{4 * r * (1 - r) * deff}{(RME * r)^2 * pb * AveSize * RR}$$

where:

- r = Predicted value of indicator (in target/base population)
- $deff$ = Design effect
- RME = Relative margin of error at 95% confidence level
- pb = Proportion of target/base population in total population
- $AveSize$ = Average household size
- RR = Response rate

The principal domain of reporting to which the sample size n refers in this calculation is the state. For this sample design, determination of the sample size is based on the indicator stunting prevalence in under-5 children as the design variable. The results from the Nigeria MICS4 of 2011 reported stunting prevalence at 35.8 percent at the national level. This estimate had a relatively high design effect ($deff$) of 4.85, indicating a large clustering effect for this characteristic. However, with the more efficient sample design for the MICS 2016-17 it was expected that the $deff$ will be lower, so a value of 3.5 was assumed for the $deff$ in calculating the sample size. The value for pb (percentage of children aged 0-4 years in the total population) based on the results of the Nigeria MICS4 2011 and NDHS 2013 is 17.1;

and Average Size (average household size) is 5.0. For state-level results, it is reasonable to use a relative margin of error (RME) of 18%. Based on previous survey results, the household response rate is assumed to be 95%.

For each of the 3 senatorial districts a sample of 40 EAs was selected at the first stage and 16 households was selected per sample EA at the second stage, which gives a sample size of 640 households in each of these districts from the NISH2 master sample, for a total of 120 sample EAs and 1,920 sample households in the state. The selection of 16 households per EA slightly reduces the design effects compared to the MICS 2011, in which 20 households were selected per EA

Sampling Frame and Selection of Clusters

The Kano-Nigeria MICS sample clusters were selected from the NISH2 master sample, based on the 2006 census frame. For the NISH2 master sample census enumeration areas were defined as primary sampling units (PSUs), stratified by state. The first stage of sampling for MICS was thus completed by selecting the required number of enumeration areas from the NISH2 master sample for each of the 3 senatorial districts of the state which cut across urban and rural areas.

Listing Activities

Since the sampling frame (the 2006 Census) was not up-to-date, a new listing of households was conducted in November, 2015 for all the sample enumeration areas prior to the selection of households. For this purpose, listing teams were formed who visited all of the selected enumeration areas and listed all households in each enumeration area. Selected staff of the National Bureau of Statistics (NBS) in Kano state carried out the listing exercise. Twelve (12) teams were constituted that carried out the listing exercise in the state. Each team comprises of 2 enumerators and one (1) supervisor who supervised two (2) teams and there were six (6) supervisors. The listing exercise lasted for twelve (12) days.

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 N (the total number of households in each enumeration area) at the National Bureau of Statistics (Field Services and Methodology Department), where the selection of 16 households in each enumeration area was carried out using random systematic selection procedures.

The survey also included a questionnaire for individual men aged 15 to 49 years. It was administered in eight out of sixteen sampled households. Households with even number in each sample cluster were selected and all eligible men were interviewed

Within Kano state, a sub-sample of 30 enumeration areas was systematically selected for the water quality testing. Within each of these sample EAs a systematic sub-sample of 3 households out of the 16 MICS sample households was selected for the water quality tests.

Calculation of Sample Weights

The NISH2 master sample EAs were stratified by senatorial district and the EAs were selected within each senatorial district. Therefore the corresponding probability of selection for the Kano-Nigeria MICS 2016 sample households is expressed as follows:

$$P_{SDi} = \frac{n_{SL}}{N_{SL}} \times \frac{200 \times \left(\frac{N_{SL}}{n_{SL}} \right)}{\sum_{LS} N_{SL}} \times \frac{n'_{SD}}{n_{SD}} \times \frac{m_{SDi}}{M'_{SDi}} = \frac{200}{N_S} \times \frac{n'_{SD}}{n_{SD}} \times \frac{m_{SDi}}{M'_{SDi}}$$

where:

p_{SDi} =	overall sampling probability for households selected based on the NISH2 master sample in the i-th sample EA in senatorial district D within state S
n'_{SD} =	number of sample EAs selected for the Kano-Nigeria MICS 2016 from the NISH2 master sample for senatorial district D of state S, generally equal to 40
n_{SD} =	total number of NISH2 master sample EAs in senatorial district D of state S
m_{SDi} =	total number of sample households selected in the i-th sample EA in senatorial district D of state S (generally equal to 16)
M'_{SDi} =	number of households listed in the i-th sample EA in senatorial district D of state S

Since the updated number of households in the listing varies by sample enumeration area, individual overall probabilities of selection for households in each sample enumeration area (cluster) were calculated.

The basic weight for the Kano-Nigeria MICS 2016 sample households is the inverse of the overall probability of selection, calculated as follows:

$$W_{SDi} = \frac{1}{P_{SDi}}$$

It is also important to adjust the basic weights for the households to take into account the non-response at the stratum level. The final adjusted (raw) weight for the sample households in each sample EA is expressed as follows:

$$W'_{SD} = W_{SD} \times \frac{m'_{SD}}{m''_{SD}}$$

where:

m'_{SD} = total number of in-scope sample households selected in senatorial district D of state S

m''_{SD} = number of sample households with completed MICS questionnaires in senatorial district D of state S

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 Kano-Nigeria MICS are shown in Table HH.1 in this report.

Following the adjustment of the raw household weights for non-response, these weights are generally normalized (standardized) so that relative weights are used for the analysis of the survey data. In this way the sum of the relative weights is equal to the number of sample households at the state level. The household weights were normalized by dividing each weight by the average weight at the state level (that is, the sum of the weights for all sample households divided by the number of sample households).

Given that sometimes it is not possible to complete a woman questionnaire for each eligible woman identified in a sample household, it is also necessary to have a separate woman weight with an additional nonresponse adjustment factor applied to the household weight at the stratum level. The adjusted woman weight is expressed as follows:

$$W_{fSD} = W'_{SD} \times \frac{f_{SD}}{f'_{SD}}$$

where:

f_{SD} = total number of women age 15 to 49 years identified in the roster for all sample households in senatorial district D of state S

f'_{SD} = number of women with completed interviews for all sample households in senatorial district D of state S

There were cases where a child questionnaire was not completed for all the children under 5 years in some sample households. Therefore a separate child weight with an additional non-response adjustment factor applied to the adjusted household weight at the stratum level was used. The adjusted child weight is expressed as follows:

$$W_{cSDi} = W'_{SDi} \times \frac{C_{SD}}{C'_{SD}}$$

where:

- C_{SD} = total number of children under 5 years identified in the roster for all sample households in senatorial district D of state S
- C'_{SD} = number of children under 5 years with completed interviews for all sample households in senatorial district D of state S

The adjusted raw weights for the men questionnaires were calculated in the same way as the women weights. However, the total number of sample men in the numerator of the non-response adjustment factor is from the roster for all sample households in the stratum, whereas the total number of completed men questionnaires in the stratum in the denominator of the adjustment factor is based on the 50% sub-sample of households selected for the men interviews. Therefore, this adjustment factor includes an additional implicit weighting factor of 2 to reflect the sub-sample rate.

The non-response adjustment factors for the individual women, men, and under-5 questionnaires were applied to the adjusted household weights. Numbers of eligible women, men, and under-5 children were obtained from the roster of household members in the Household Questionnaire for households where interviews were completed.

For the water quality tests (both for home consumption and at source), first a sub-sample of 30 of the 120 MICS sampled EAs in Kano State was selected. Within each of these sample EAs a sub-sample of 3 households was selected for the water quality tests from the 16 MICS sample households. Therefore, the basic (adjusted) household weight would be multiplied by the inverse of these sub-sampling rates as follows:

$$W_{wqSDi} = W_{SDi} \times 4 \times \frac{16}{3} = W_{SDi} \times \frac{64}{3}$$

Where:

- W_{wqSDi} = basic weight for the sub-sample of households selected for the water quality tests in the i- th sample EA in senatorial district D of Kano State
- W_{SDi} = unadjusted raw weight for the MICS sample households in the i-th sample EA in senatorial district D of Kano State

Since the response rate can be different for the water quality tests for home consumption and at the source, the basic weights for each were adjusted separately for non-response at the stratum level as follows:

$$W'_{wqSDi} = W_{wqSDi} \times \frac{m_{wqSD}}{m'_{wqSD}}$$

Where:

W'_{wqSDi} = adjusted weight for the sub-sample of households selected for the water quality tests in the i-th sample EA in senatorial district D of Kano State (separately for water quality tests for home consumption and at the source)

m_{wqSD} = number of valid (occupied) sample households selected for water quality tests in senatorial district D of Kano State

m'_{wqSD} = number of sample households with completed water quality tests in senatorial district D of Kano State

The women, men, child and water quality tests weights are normalized in the same way as the household weights. In this case the full (raw) weights were divided by the average women, men, child or water quality tests weight, respectively.

Sample weights were appended to all data sets and analyses were performed by weighting households, women, men, or under-5s with these sample weights.

Appendix B. List of Personnel Involved in the Survey

Statistician-General of the Federation

Dr. Yemi Kale

Project Director

Dr. Isiaka Olarewaju

Project Coordinators

1. Adeyemi Adeniran - National Coordinator
2. Samanja B. Mauda - Field Services & Methodology
3. Adebisi Adebayo Tunde - Sampling Expert
4. Fafunmi Elisha A. - ICT
5. Harry Simon B. - CPTC
6. Eweama Patricia M. - DSSD
7. Nemi Okujagu - TA-SG

UNICEF Staff- Technical Support

1. Denis Jobin
2. Adeniyi Olaleye
3. Raymond Akor
4. Binta Isah-Ismail
5. Danjuma Al-Mustapha
6. Maureen Zubie-Okolo
7. Oluchi Ally
8. Ghislain Mbep
9. Michele Seroussi- Regional Office
10. Achraf Mohamed Mrabet- Regional office
11. Issa Kone – Regional Office
12. Denis Businge – MICS 5 Consultant

Statistician General of Kano State

Ali Sani Fanni

Monitors

- | | | |
|---|------------------------|---------------------------|
| 1 | Baballe Ammani | Permanent Sec. (MoPB) |
| 2 | Umar F. Mohammed | D-Field services (KANBUS) |
| 3 | Dambatta Mustapha Abba | DD Data Bank (KANBUS) |
| 4 | Ayuba S. Ibrahim | NBS State Officer |

Independent Monitors

- | | | |
|---|------------------|-----------------|
| 1 | Rabiu Abdullahi | SSGS |
| 2 | Hussaini Habu B. | DD (DS) |
| 3 | Kubura Dankani | D Women Affairs |
| 4 | Hamza Ahmad | D Kano MoH |

Report writing team

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- 4 Shamsudeen Lawal
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- 6 Uba M. Mohammed
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- 8 Dambatta Mustapha Abba
- 9 Hamisu Hussaini
- 10 Aliyu Mohd Abdullahi
- 11 Salihu Hussain Dogarai
- 12 Faruk Sani
- 13 Aminu Abubakar
- 14 Sani Usman
- 15 Muhammad Tasi'u Idris

Trainers

- | | | |
|----|----------------------------|----------------------|
| 1 | Samanja B. Mauda | Coordinator |
| 2 | Ogundiya Kola John | Lead Trainer |
| 3 | Kanu Christiana Ngozi | Trainer |
| 4 | Aimola Oluwanikemi Olusoji | Trainer |
| 5 | Shamsuddeen Lawal | Trainer |
| 6 | Simon Appolonia | Trainer |
| 7 | Lateef Olasunkanmi | Trainer |
| 8 | Oluyomi Samuel Olanrewaju | Technical Rapporteur |
| 9 | Omoniyi Ronke | CAPi Manager |
| 10 | Bakare Saheed | CAPi Manager |
| 11 | Amina Musa | WQT Expert |
| 12 | Samuel Daniel Laumu | WQT Expert |

Kano State List of Field Officers

S/N	Name	Sex	Expected role
1	Ayuba S. Ibrahim	Male	NBS State Officer
2	Kubura Abdulkareem	Female	Supervisor
3	Aisha Abubakar Kabir	Female	Supervisor
4	Victoria Baita	Female	Supervisor
5	Abubakar Jibril	Male	Supervisor
6	Safiya A. Mohammed	Female	Measurer
7	Sule Nana Hauwa	Female	Measurer
8	Rakiya Ahmed Daneji	Female	Measurer
9	Baraatu Zubairu	Female	Measurer
10	Khadija Aliyu Abubakar	Female	Interviewer
11	Aisha Adamu	Female	Interviewer
12	Sumayya Aliyu Yahya	Female	Interviewer
13	Abel Eunice	Female	Interviewer
14	Faizah Isa Suleiman	Female	Interviewer
15	Bilkisu Odeyemi	Female	Interviewer
16	Aisha Mustapha Hassan	Female	Interviewer
17	Iyabo Abdulganiyu	Female	Interviewer
18	Rukayya Yakubu Ahmad	Female	Interviewer
19	Grace Kamin	Female	Interviewer
20	Habiba Umar Ismaila	Female	Interviewer
21	Maryam Umar Nuhu	Female	Interviewer
22	Emmanuel Umolo	Male	Interviewer
23	Abubakar Saleem	Male	Interviewer
24	Suleiman Mohammed	Male	Interviewer
25	Anas tukur usman	Male	Interviewer
26	Jamila Abdulkadir Sulaiman	Female	On standby
27	Hasiya Sani Fane	Female	On standby
28	Rahama Lawan Aliyu	Female	On standby
29	Rahina Mohd Sulaiman	Female	On standby
30	Hafsat Tahir Mohd	Female	On standby
31	Abubakar Umar	Male	On standby

Appendix C. Estimates of Sampling Errors

The sample of respondents selected in the Nigeria Multiple Indicator Cluster Survey for Kano state is only one of the samples that could have been selected from the same population, using the same design and size. Each of these samples would yield results that differ somewhat from the results of the actual sample selected. Sampling errors are a measure of the variability between the estimates from all possible samples. The extent of 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 5.0, SPSS Version 21 Complex Samples module and CMRJack¹⁷ have been used.

The results are shown in the tables that follow. In addition to the sampling error measures described above, the tables also include weighted and unweighted counts of denominators for each indicator. Given the use of normalized weights, by comparing the weighted and unweighted counts it is possible to determine whether a particular domain has been under-sampled or over-sampled compared to the average sampling rate. If the weighted count is smaller than the unweighted count, this means that the particular domain had been over-sampled. As explained later in the footnote of Table SE.1, there is an exception in the case of indicators 4.1 and 4.3, for which the unweighted count represents the number of sample households, and the weighted counts reflect the total population.

¹⁷ CMRJack is a software developed by FAFO, an independent and multidisciplinary research foundation. CMRJack produces mortality estimates and standard errors for surveys with complete birth histories or summary birth histories. See http://www.fafo.no/ais/child_mortality/index.html

Sampling errors are calculated for indicators of primary interest, for the Kano state, for urban and rural areas, and for all the senatorial districts. Three of the selected indicators are based on households members, 12 are based on women, 3 are based on men, and 4 are based on children under 5. Table SE.1 shows the list of indicators for which sampling errors are calculated, including the base population (denominator) for each indicator. Tables SE.2 to SE.10 show the calculated sampling errors for selected domains.

Table SE.1: Indicators selected for sampling error calculations

List of indicators selected for sampling error calculations, and base populations (denominators) for each indicator, Kano-Nigeria, 2016-17

MICS5 Indicator	Base Population
Household members	
4.1 Use of improved drinking water sources	All household members ^a
4.3 Use of improved sanitation	All household members ^a
7.4 Primary school net attendance ratio (adjusted)	Children of primary school age
Women	
1.2 Infant mortality rate	Children of interviewed women exposed to the risk of mortality during the first year of life
1.5 Under five mortality rate	Children of interviewed women exposed to the risk of mortality during the first five years of life
5.1 Adolescent birth rate	Women years of exposure to childbirth during ages 15-19 years
5.3 Contraceptive prevalence rate	Women age 15-49 years who are currently married or in union
5.4 Unmet need	Women age 15-49 years who are currently married or in union
5.5a Antenatal care coverage (1+ times, skilled provider)	Women age 15-49 years with a live birth in the last 2 years
5.5b Antenatal care coverage (4+ times, any provider)	Women age 15-49 years with a live birth in the last 2 years
5.7 Skilled attendant at delivery	Women age 15-49 years with a live birth in the last 2 years
5.13 Maternal mortality ratio	Women age 15-49 years
7.1 Literacy rate (young women)	Women age 15-24 years
9.1 Knowledge about HIV prevention (young women)	Women age 15-24 years
9.15 Condom use with non-regular partners	Women age 15-24 years who had a non-marital, non-cohabiting partner in the last 12 months
Men	
7.1 Literacy rate (young men)	Men age 15-24 years
9.1 Knowledge about HIV prevention (young men)	Men age 15-24 years
9.15 Condom use with non-regular partners	Men age 15-24 years who had a non-marital, non-cohabiting partner in the last 12 months
Under-5s	
2.1a Underweight prevalence (moderate and severe)	Children under age 5 years
2.1b Underweight prevalence (severe)	Children under age 5 years
3.18 Children under age 5 who slept under an ITN	Children under age 5 years who spent the previous night in the household
3.22 Anti-malarial treatment of children under age 5	Children under age 5 years with fever in the last 2 weeks
^a To calculate the weighted results of MICS Indicators 4.1 and 4.3, the household weight is multiplied by the number of household members in each household. Therefore the unweighted base population presented in the SE tables reflect the unweighted number of households, whereas the weighted numbers reflect the household population.	

Table SE.2: Sampling errors: Total sample

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Nigeria, 2016-17 Kano State

	MICS Indicator	MDG Indicator	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deft)	Weighted count	Unweighted count	Confidence limits	
										Lower bound r - 2se	Upper bound r + 2se
Household members											
Use of improved drinking water sources	4.1	7.8	0.5792	0.0289	0.050	6.396	2.529	13365	1867	0.521	0.637
Use of improved sanitation	4.3	7.9	0.5509	0.0207	0.038	3.239	1.800	13365	1867	0.509	0.592
Primary school net attendance ratio (adjusted)	7.4	2.1	0.5484	0.0273	0.050	8.147	2.854	2687	2701	0.494	0.603
Women											
Infant mortality rate	1.2	4.2	112	6.963	0.062	na	na		na	98	126
Under five mortality rate	1.5	4.1	203	11.930	0.059	na	na		na	179	227
Adolescent birth rate	5.1	5.4	169	14.533	0.086	na	na		na	140	198
Contraceptive prevalence rate	5.3	5.3	0.0634	0.0088	0.139	2.627	1.621	1949	1999	0.046	0.081
Unmet need	5.4	5.6	0.3078	0.0131	0.042	1.604	1.266	1949	1999	0.282	0.334
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.4469	0.0237	0.053	2.543	1.595	1087	1119	0.399	0.494
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.1976	0.0202	0.102	2.876	1.696	1087	1119	0.157	0.238
Skilled attendant at delivery	5.7	5.2	0.6510	0.0248	0.038	3.029	1.740	1087	1119	0.601	0.701
Literacy rate (young women)	7.1	2.3	0.4611	0.0390	0.085	6.147	2.479	1017	1005	0.383	0.539
Knowledge about HIV prevention (young women)	9.1	6.3	0.1552	0.0151	0.097	1.748	1.322	1017	1005	0.125	0.185
Condom use with non-regular partners	9.15	6.2	0.5517	0.4946	0.897	0.989	0.995	3	2	0.000	1.000
Men											
Literacy rate (young men)	7.1	2.3	0.7253	0.0333	0.046	2.635	1.623	483	475	0.659	0.792
Knowledge about HIV prevention (young men)	9.1	6.3	0.2335	0.0261	0.112	1.809	1.345	483	475	0.181	0.286
Condom use with non-regular partners	9.15	6.2	0.8032	0.0551	0.069	0.940	0.969	54	50	0.693	0.913
Under-5s											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.4033	0.0156	0.039	2.552	1.598	2510	2510	0.372	0.435
Underweight prevalence (severe)	2.1b	1.8	0.1612	0.0110	0.068	2.246	1.499	2510	2510	0.139	0.183
Children under age 5 who slept under an ITN	3.18	6.7	0.6178	0.0186	0.030	3.737	1.933	2543	2542	0.580	0.655
Anti-malarial treatment of children under age 5	3.22	6.8	0.3899	0.0230	0.059	2.016	1.420	906	904	0.344	0.436
na: not applicable											

Table SE.3: Sampling errors: Urban											
Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Nigeria, 2016-17 Kano State											
	MICS Indicator	MDG Indicator	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deft)	Weighted count	Unweighted count	Confidence limits	
										Lower bound r - 2se	Upper bound r + 2se
Household members											
Use of improved drinking water sources	4.1	7.8	0.6342	0.0540	0.085	5.415	2.327	3748	431	0.526	0.742
Use of improved sanitation	4.3	7.9	0.8035	0.0250	0.031	1.702	1.305	3748	431	0.754	0.854
Primary school net attendance ratio (adjusted)	7.4	2.1	0.7287	0.0329	0.045	3.155	1.776	671	577	0.663	0.795
Women											
Infant mortality rate	1.2	4.2	79	15.929	0.203	na	na		na	47	110
Under five mortality rate	1.5	4.1	110	19.909	0.181	na	na		na	70	150
Adolescent birth rate	5.1	5.4	62	12.867	0.209	na	na		na	36	87
Contraceptive prevalence rate	5.3	5.3	0.1514	0.0231	0.153	1.563	1.250	437	376	0.105	0.198
Unmet need	5.4	5.6	0.3919	0.0265	0.068	1.109	1.053	437	376	0.339	0.445
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.5469	0.0548	0.100	2.543	1.595	239	211	0.437	0.656
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.5066	0.0450	0.089	1.702	1.305	239	211	0.417	0.597
Skilled attendant at delivery	5.7	5.2	0.8289	0.0324	0.039	1.559	1.248	239	211	0.764	0.894
Literacy rate (young women)	7.1	2.3	0.8975	0.0237	0.026	1.721	1.312	328	283	0.850	0.945
Knowledge about HIV prevention (young women)	9.1	6.3	0.2670	0.0276	0.103	1.097	1.048	328	283	0.212	0.322
Condom use with non-regular partners	9.15	6.2	0.5517	0.4946	0.897	0.989	0.995	3	2	0.000	1.000
Men											
Literacy rate (young men)	7.1	2.3	0.9332	0.0251	0.027	1.741	1.319	205	173	0.883	0.983
Knowledge about HIV prevention (young men)	9.1	6.3	0.2885	0.0467	0.162	1.827	1.352	205	173	0.195	0.382
Condom use with non-regular partners	9.15	6.2	0.8972	0.0694	0.077	0.887	0.942	21	18	0.758	1.000
Under-5s											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.3148	0.0277	0.088	1.788	1.337	593	505	0.260	0.370
Underweight prevalence (severe)	2.1b	1.8	0.1009	0.0199	0.197	2.203	1.484	593	505	0.061	0.141
Children under age 5 who slept under an ITN	3.18	6.7	0.5661	0.0421	0.074	3.682	1.919	601	512	0.482	0.650
Anti-malarial treatment of children under age 5	3.22	6.8	0.4670	0.0511	0.109	1.668	1.292	189	160	0.365	0.569
na: not applicable											

Table SE.4: Sampling errors: Rural

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Nigeria, 2016-17 Kano State

	MICS Indicator	MDG Indicator	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deft)	Weighted count	Unweighted count	Confidence limits	
										Lower bound r - 2se	Upper bound r + 2se
Household members											
Use of improved drinking water sources	4.1	7.8	0.5578	0.0343	0.062	6.855	2.618	9617	1436	0.489	0.626
Use of improved sanitation	4.3	7.9	0.4525	0.0234	0.052	3.163	1.778	9617	1436	0.406	0.499
Primary school net attendance ratio (adjusted)	7.4	2.1	0.4883	0.0332	0.068	9.385	3.063	2015	2124	0.422	0.555
Women											
Infant mortality rate	1.2	4.2	122	7.5266	0.0616	na	na		na	107	137
Under five mortality rate	1.5	4.1	231	12.7436	0.0552	na	na		na	206	257
Adolescent birth rate	5.1	5.4	218	17.0566	0.0784	na	na		na	183	252
Contraceptive prevalence rate	5.3	5.3	0.0379	0.0083	0.218	3.052	1.747	1512	1623	0.021	0.055
Unmet need	5.4	5.6	0.2835	0.0143	0.051	1.644	1.282	1512	1623	0.255	0.312
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.4186	0.0263	0.063	2.571	1.603	847	908	0.366	0.471
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.1103	0.0129	0.117	1.546	1.243	847	908	0.084	0.136
Skilled attendant at delivery	5.7	5.2	0.6007	0.0285	0.047	3.062	1.750	847	908	0.544	0.658
Literacy rate (young women)	7.1	2.3	0.2536	0.0430	0.170	7.046	2.654	689	722	0.168	0.340
Knowledge about HIV prevention (young women)	9.1	6.3	0.1021	0.0168	0.164	2.209	1.486	689	722	0.069	0.136
Condom use with non-regular partners	9.15	6.2						0	0	0.000	0.000
Men											
Literacy rate (young men)	7.1	2.3	0.5720	0.0453	0.079	2.521	1.588	278	302	0.481	0.663
Knowledge about HIV prevention (young men)	9.1	6.3	0.1929	0.0285	0.148	1.565	1.251	278	302	0.136	0.250
Condom use with non-regular partners	9.15	6.2	0.7420	0.0768	0.104	0.955	0.977	32	32	0.588	0.896
Under-5s											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.4307	0.0182	0.042	2.709	1.646	1917	2005	0.394	0.467
Underweight prevalence (severe)	2.1b	1.8	0.1799	0.0129	0.072	2.259	1.503	1917	2005	0.154	0.206
Children under age 5 who slept under an ITN	3.18	6.7	0.6337	0.0194	0.031	3.275	1.810	1942	2030	0.595	0.672
Anti-malarial treatment of children under age 5	3.22	6.8	0.3695	0.0252	0.068	2.026	1.424	717	744	0.319	0.420

na: not applicable

Table SE.5: Sampling errors: Kano Central

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Nigeria, 2016-17 Kano State

	MICS Indicator	MDG Indicator	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deft)	Weighted count	Unweighted count	Confidence limits	
										Lower bound r - 2se	Upper bound r + 2se
Household members											
Use of improved drinking water sources	4.1	7.8	0.6284	0.0441	0.070	5.117	2.262	5772	616	0.540	0.717
Use of improved sanitation	4.3	7.9	0.7303	0.0330	0.045	3.401	1.844	5772	616	0.664	0.796
Primary school net attendance ratio (adjusted)	7.4	2.1	0.6793	0.0361	0.053	5.018	2.240	1075	838	0.607	0.752
Women											
Infant mortality rate	1.2	4.2	97	11.672	0.120	na	na		na	74	121
Under five mortality rate	1.5	4.1	159	19.242	0.121	na	na		na	121	198
Adolescent birth rate	5.1	5.4	78	15.256	0.196	na	na		na	47	108
Contraceptive prevalence rate	5.3	5.3	0.1147	0.0211	0.184	2.454	1.567	723	559	0.072	0.157
Unmet need	5.4	5.6	0.3672	0.0261	0.071	1.630	1.277	723	559	0.315	0.419
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.5015	0.0405	0.081	1.993	1.412	393	305	0.421	0.582
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.3474	0.0518	0.149	3.592	1.895	393	305	0.244	0.451
Skilled attendant at delivery	5.7	5.2	0.7912	0.0402	0.051	2.977	1.726	393	305	0.711	0.872
Literacy rate (young women)	7.1	2.3	0.7229	0.0596	0.082	6.580	2.565	465	372	0.604	0.842
Knowledge about HIV prevention (young women)	9.1	6.3	0.2488	0.0250	0.100	1.239	1.113	465	372	0.199	0.299
Condom use with non-regular partners	9.15	6.2	0.5517	0.4946	0.897	0.989	0.995	3	2	0.000	1.000
Men											
Literacy rate (young men)	7.1	2.3	0.8739	0.0351	0.040	2.305	1.518	267	207	0.804	0.944
Knowledge about HIV prevention (young men)	9.1	6.3	0.2596	0.0388	0.149	1.612	1.270	267	207	0.182	0.337
Condom use with non-regular partners	9.15	6.2	0.8955	0.0563	0.063	0.780	0.883	33	24	0.783	1.000
Under-5s											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.3554	0.0313	0.088	3.109	1.763	943	727	0.293	0.418
Underweight prevalence (severe)	2.1b	1.8	0.1206	0.0161	0.134	1.779	1.334	943	727	0.088	0.153
Children under age 5 who slept under an ITN	3.18	6.7	0.6320	0.0337	0.053	3.594	1.896	960	739	0.565	0.699
Anti-malarial treatment of children under age 5	3.22	6.8	0.4408	0.0446	0.101	1.964	1.402	321	244	0.352	0.530

na: not applicable

Table SE.6: Sampling errors: Kano North

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Nigeria, 2016-17 Kano State

	MICS Indicator	MDG Indicator	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deft)	Weighted count	Unweighted count	Confidence limits	
										Lower bound r - 2se	Upper bound r + 2se
Household members											
Use of improved drinking water sources	4.1	7.8	0.6414	0.0541	0.084	7.903	2.811	3431	622	0.533	0.750
Use of improved sanitation	4.3	7.9	0.5080	0.0329	0.065	2.687	1.639	3431	622	0.442	0.574
Primary school net attendance ratio (adjusted)	7.4	2.1	0.4883	0.0537	0.110	10.134	3.183	749	879	0.381	0.596
Women											
Infant mortality rate	1.2	4.2	143	12.164	0.085	na	na		na	119	167
Under five mortality rate	1.5	4.1	260	20.540	0.079	na	na		na	219	301
Adolescent birth rate	5.1	5.4	244	25.423	0.104	na	na		na	193	295
Contraceptive prevalence rate	5.3	5.3	0.0370	0.0129	0.348	2.945	1.716	538	634	0.011	0.063
Unmet need	5.4	5.6	0.2380	0.0198	0.083	1.372	1.172	538	634	0.198	0.278
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.3639	0.0432	0.119	2.997	1.731	314	372	0.277	0.450
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.1263	0.0209	0.166	1.473	1.214	314	372	0.084	0.168
Skilled attendant at delivery	5.7	5.2	0.5850	0.0552	0.094	4.649	2.156	314	372	0.475	0.695
Literacy rate (young women)	7.1	2.3	0.2609	0.0689	0.264	6.606	2.570	229	269	0.123	0.399
Knowledge about HIV prevention (young women)	9.1	6.3	0.0646	0.0220	0.341	2.156	1.468	229	269	0.020	0.109
Condom use with non-regular partners	9.15	6.2						0	0	0.000	0.000
Men											
Literacy rate (young men)	7.1	2.3	0.6938	0.0673	0.097	2.220	1.490	88	105	0.559	0.828
Knowledge about HIV prevention (young men)	9.1	6.3	0.2707	0.0601	0.222	1.905	1.380	88	105	0.150	0.391
Condom use with non-regular partners	9.15	6.2						0	0	0.000	0.000
Under-5s											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.4927	0.0253	0.051	2.009	1.417	674	785	0.442	0.543
Underweight prevalence (severe)	2.1b	1.8	0.2385	0.0246	0.103	2.617	1.618	674	785	0.189	0.288
Children under age 5 who slept under an ITN	3.18	6.7	0.5613	0.0255	0.045	2.116	1.455	690	801	0.510	0.612
Anti-malarial treatment of children under age 5	3.22	6.8	0.3426	0.0348	0.102	1.448	1.203	224	270	0.273	0.412

na: not applicable

Table SE.7: Sampling errors: Kano South

Standard errors, coefficients of variation, design effects (deff), square root of design effects (deft), and confidence intervals for selected indicators, Nigeria, 2016-17 Kano State

	MICS Indicator	MDG Indicator	Value (r)	Standard error (se)	Coefficient of variation (se/r)	Design effect (deff)	Square root of design effect (deft)	Weighted count	Unweighted count	Confidence limits	
										Lower bound r - 2se	Upper bound r + 2se
Household members											
Use of improved drinking water sources	4.1	7.8	0.4598	0.0552	0.120	7.713	2.777	4162	629	0.349	0.570
Use of improved sanitation	4.3	7.9	0.3376	0.0382	0.113	4.095	2.024	4162	629	0.261	0.414
Primary school net attendance ratio (adjusted)	7.4	2.1	0.4373	0.0573	0.131	13.099	3.619	862	984	0.323	0.552
Women											
Infant mortality rate	1.2	4.2	104	11.514	0.111	na	na		na	81	127
Under five mortality rate	1.5	4.1	205	19.096	0.093	na	na		na	167	243
Adolescent birth rate	5.1	5.4	241	21.261	0.088	na	na		na	198	284
Contraceptive prevalence rate	5.3	5.3	0.0301	0.0085	0.283	2.006	1.416	688	806	0.013	0.047
Unmet need	5.4	5.6	0.3000	0.0189	0.063	1.368	1.170	688	806	0.262	0.338
Antenatal care coverage (1+ times, skilled provider)	5.5a	5.5	0.4591	0.0394	0.086	2.751	1.659	380	442	0.380	0.538
Antenatal care coverage (4+ times, any provider)	5.5b	5.5	0.1017	0.0178	0.175	1.527	1.236	380	442	0.066	0.137
Skilled attendant at delivery	5.7	5.2	0.5606	0.0367	0.065	2.409	1.552	380	442	0.487	0.634
Literacy rate (young women)	7.1	2.3	0.2263	0.0545	0.241	6.154	2.481	323	364	0.117	0.335
Knowledge about HIV prevention (young women)	9.1	6.3	0.0700	0.0240	0.343	3.219	1.794	323	364	0.022	0.118
Condom use with non-regular partners	9.15	6.2						0	364	0.000	0.000
Men											
Literacy rate (young men)	7.1	2.3	0.4372	0.0724	0.166	3.453	1.858	128	163	0.292	0.582
Knowledge about HIV prevention (young men)	9.1	6.3	0.1533	0.0338	0.220	1.424	1.193	128	163	0.086	0.221
Condom use with non-regular partners	9.15	6.2	0.6590	0.1070	0.162	1.273	1.128	21	26	0.445	0.873
Under-5s											
Underweight prevalence (moderate and severe)	2.1a	1.8	0.3865	0.0210	0.054	1.862	1.364	892	998	0.344	0.429
Underweight prevalence (severe)	2.1b	1.8	0.1459	0.0158	0.109	2.006	1.416	892	998	0.114	0.178
Children under age 5 who slept under an ITN	3.18	6.7	0.6461	0.0334	0.052	4.877	2.208	893	1002	0.579	0.713
Anti-malarial treatment of children under age 5	3.22	6.8	0.3740	0.0364	0.097	2.206	1.485	361	390	0.301	0.447

na: not applicable

Appendix D. Data Quality Tables

Table DQ.1: Age distribution of household population									
Single-year age distribution of household population by sex, Nigeria, 2016-17 Kano State									
	Males		Females			Males		Females	
	Number	Percent	Number	Percent		Number	Percent	Number	Percent
Age (Years)					Age (Years)				
0	258	3.9	261	3.8	45	120	1.8	96	1.4
1	266	4.1	272	4.0	46	24	0.4	20	0.3
2	256	3.9	222	3.3	47	34	0.5	27	0.4
3	258	3.9	262	3.9	48	37	0.6	25	0.4
4	250	3.8	248	3.6	49	17	0.3	34	0.5
5	226	3.4	228	3.3	50	113	1.7	142	2.1
6	273	4.2	265	3.9	51	20	0.3	28	0.4
7	266	4.1	260	3.8	52	30	0.5	59	0.9
8	233	3.6	236	3.5	53	18	0.3	31	0.5
9	179	2.7	191	2.8	54	18	0.3	33	0.5
10	259	3.9	275	4.0	55	59	0.9	89	1.3
11	118	1.8	151	2.2	56	15	0.2	11	0.2
12	208	3.2	241	3.6	57	11	0.2	7	0.1
13	179	2.7	174	2.6	58	8	0.1	10	0.1
14	152	2.3	173	2.5	59	3	0.0	11	0.2
15	189	2.9	149	2.2	60	96	1.5	102	1.5
16	125	1.9	122	1.8	61	13	0.2	10	0.1
17	105	1.6	127	1.9	62	24	0.4	17	0.2
18	126	1.9	132	1.9	63	17	0.3	9	0.1
19	62	0.9	88	1.3	64	14	0.2	11	0.2
20	180	2.7	210	3.1	65	44	0.7	26	0.4
21	52	0.8	42	0.6	66	15	0.2	4	0.1
22	69	1.1	80	1.2	67	13	0.2	3	0.0
23	55	0.8	63	0.9	68	14	0.2	5	0.1
24	49	0.7	54	0.8	69	14	0.2	7	0.1
25	142	2.2	208	3.1	70	93	1.4	47	0.7
26	50	0.8	69	1.0	71	15	0.2	1	0.0
27	64	1.0	67	1.0	72	6	0.1	4	0.1
28	53	0.8	69	1.0	73	6	0.1	3	0.0
29	41	0.6	37	0.5	74	5	0.1	2	0.0
30	166	2.5	215	3.2	75	18	0.3	7	0.1
31	33	0.5	29	0.4	76	2	0.0	1	0.0
32	32	0.5	45	0.7	77	3	0.1	0	0.0
33	33	0.5	35	0.5	78	2	0.0	3	0.0
34	36	0.5	39	0.6	79	2	0.0	1	0.0
35	126	1.9	145	2.1	80	60	0.9	22	0.3
36	22	0.3	45	0.7	81	3	0.0	0	0.0
37	29	0.4	38	0.6	82	3	0.0	3	0.0
38	28	0.4	49	0.7	83	1	0.0	0	0.0
39	22	0.3	20	0.3	84	0	0.0	2	0.0
40	154	2.4	142	2.1	85+	25	0.4	16	0.2
41	22	0.3	20	0.3					
42	42	0.6	33	0.5	Don't know/missing	7	0.1	4	0.1
43	24	0.4	19	0.3					
44	13	0.2	17	0.3	Total	6567	100.0	6798	100.0

Figure DQ.1: Household population by single ages, Nigeria, 2016-17 Kano State

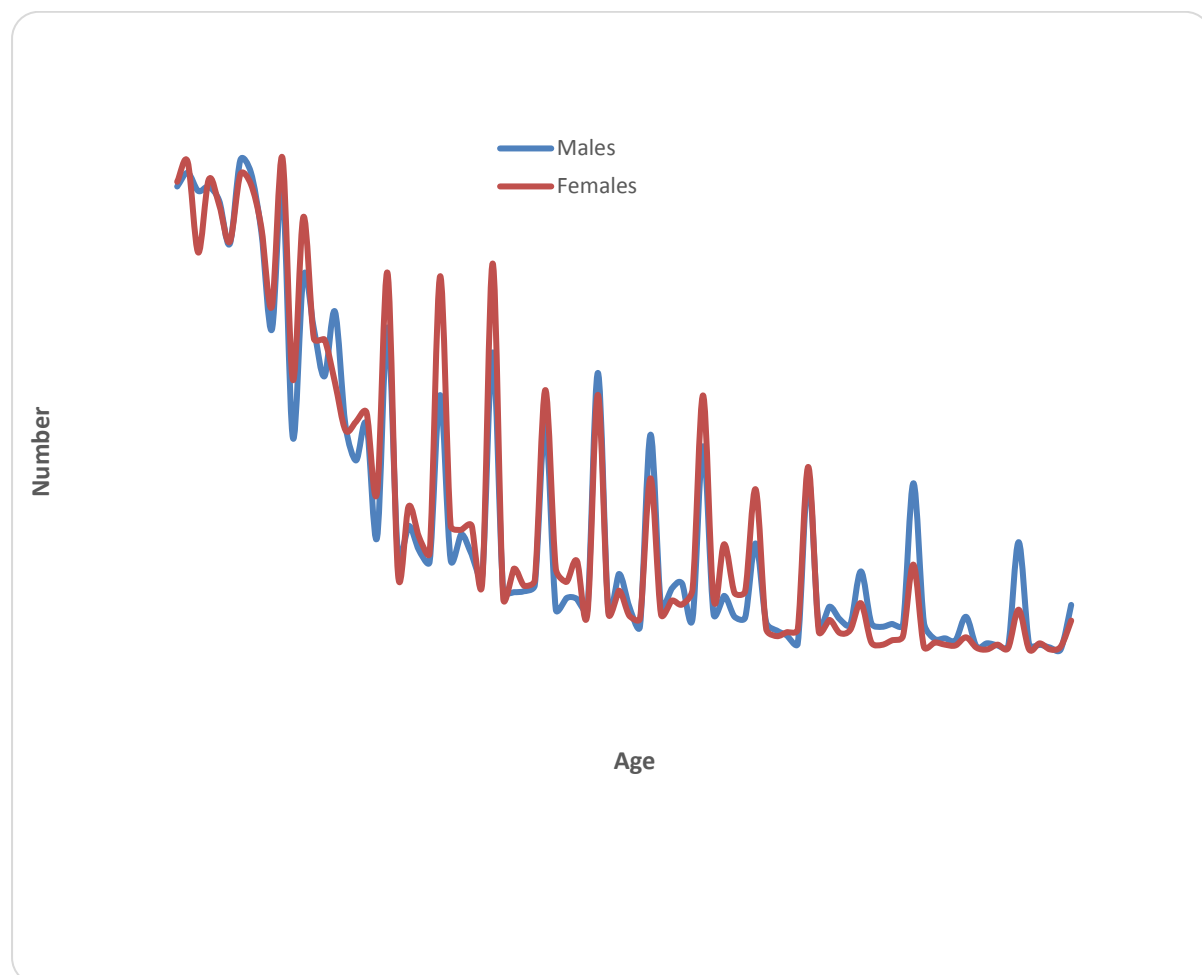


Table DQ.2: Age distribution of eligible and interviewed women

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, Nigeria, 2016-17 Kano State

	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 (Years)	1013			
10-14	1013	na	na	na
15-19	618	592	23.4	95.7
20-24	448	437	17.3	97.4
25-29	450	437	17.3	97.0
30-34	363	358	14.2	98.5
35-39	297	289	11.4	97.4
40-44	231	224	8.9	97.1
45-49	201	193	7.6	95.8
50-54	293	na	na	na
Total (15-49)	2609	2529	100.0	96.9
Ratio of 50-54 to 45-49	1.46	na	na	na
na: not applicable				

Table DQ.3: 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, Nigeria, 2016-17 Kano State

	Household population of men age 10-54 years		Interviewed men age 15-49 years		Percentage of eligible men interviewed (Completion rate)
	All households Number	Selected households Number	Number	Percent	
Age (Years)					
10-14	917	454	na	na	na
15-19	607	308	292	26.4	94.6
20-24	405	216	191	17.3	88.6
25-29	350	183	164	14.8	89.9
30-34	299	147	129	11.6	87.6
35-39	227	112	99	8.9	88.3
40-44	255	141	131	11.8	93.1
45-49	232	111	101	9.1	91.0
50-54	199	95	na	na	na
Total (15-49)	199	95	1107	100.0	90.9
Ratio of 50-54 to 45-49	0.86	0.86	na	na	na
na: not applicable					

Table DQ.4: Age distribution of children in household 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, Nigeria, 2016-17 Kano State

	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 (Years)				
0	520	514	20.2	98.9
1	538	533	21.0	99.1
2	478	478	18.8	100.0
3	521	517	20.4	99.3
4	498	496	19.6	99.6
5	454	na	na	na
6	538	na	na	na
7	526	na	na	na
Total (0-4)	2555	2538	100.0	99.4
Ratio of 5 to 4	0.91	na	na	na
na: not applicable				

Table DQ.5: Birth date reporting: Household population

Percent distribution of household population by completeness of date of birth information, Nigeria, 2016-17 Kano State

	Completeness of reporting of month and year of birth				Total	Number of household members
	Year and month of birth	Year of birth only	Month of birth only	Both missing		
Total	76.6	23.2	0.0	0.2	100.0	13365
Age (Years)						
0-4	98.2	1.8	0.0	0.1	100.0	2555
5-14	87.7	12.3	0.0	0.0	100.0	4287
15-24	76.9	23.1	0.0	0.1	100.0	2079
25-49	60.4	39.5	0.0	0.2	100.0	2905
50-64	43.5	55.8	0.0	0.7	100.0	1030
65-84	43.5	63.6	0.0	1.9	100.0	458
85+	43.5	70.7	0.0	0.0	100.0	41
Don't know/Missing	43.5	18.6	0.0	65.0	100.0	11
Senatorial District						
Kano Central	43.5	21.4	0.0	0.4	100.0	5772
Kano North	43.5	20.2	0.0	0.2	100.0	3431
Kano South	43.5	28.1	0.0	0.0	100.0	4162
Residence						
Urban	43.5	19.1	0.0	0.2	100.0	3748
Rural	43.5	24.8	0.0	0.3	100.0	9617

Table DQ.6: Birth date and age reporting: Women

Percent distribution of women age 15-49 years by completeness of date of birth/age information, Nigeria, 2016-17 Kano State

	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/Don't Know /Missing		
Total	64.2	35.6	0.0	0.1	0.0	100.0	2500
Senatorial District							
Kano Central	68.7	31.2	0.0	0.0	0.1	100.0	1093
Kano North	64.7	34.8	0.0	0.5	0.0	100.0	603
Kano South	57.8	42.2	0.0	0.0	0.0	100.0	803
Residence							
Urban	74.8	25.0	0.0	0.0	0.2	100.0	731
Rural	59.9	40.0	0.0	0.2	0.0	100.0	1769

Table DQ.7: Birth date and age reporting: Men

Percent distribution of men age 15-49 years by completeness of date of birth/age information, Nigeria, 2016-17 Kano State

	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/Don't Know /Missing		
Total	70.4	29.6	0.0	0.0	0.0	100.0	1099
Senatorial District							
Kano Central	76.5	23.5	0.0	0.0	0.0	100.0	538
Kano North	73.4	26.6	0.0	0.0	0.0	100.0	228
Kano South	58.5	41.5	0.0	0.0	0.0	100.0	333
Residence							
Urban	80.7	19.3	0.0	0.0	0.0	100.0	394
Rural	64.7	35.3	0.0	0.0	0.0	100.0	705

Table DQ.8: Birth date and age reporting: Under-5s

Percent distribution children under 5 by completeness of date of birth/age information, Nigeria, 2016-17 Kano State

	Completeness of reporting of date of birth and age					Total	Number of under-5 children
	Year and month of birth	Year of birth and age	Year of birth only	Age only	Other/Don't Know/Missing		
Total	99.6	0.3	0.0	0.0	0.0	100.0	2559
Senatorial District							
Kano Central	99.8	0.2	0.0	0.0	0.0	100.0	962
Kano North	99.3	0.5	0.0	0.1	0.0	100.0	693
Kano South	99.7	0.1	0.0	0.0	0.0	100.0	904
Residence							
Urban	99.7	0.3	0.0	0.0	0.0	100.0	603
Rural	99.6	0.3	0.0	0.0	0.0	100.0	1956

Table DQ.9: Birth date reporting: Children, adolescents and young people

Percent distribution of children, adolescents and young people age 5-24 years by completeness of date of birth information, Nigeria, 2016-17 Kano State

	Completeness of reporting of month and year of birth				Total	Number of children, adolescents and young people age 5-24 years
	Year and month of birth	Year of birth only	Month of birth only	Both missing		
Total	84.1	15.8	0.0	0.0	100.0	6366
Senatorial District						
Kano Central	86.6	13.4	0.0	0.0	100.0	2862
Kano North	90.9	9.0	0.0	0.2	100.0	1599
Kano South	74.7	25.3	0.0	0.0	100.0	1906
Residence						
Urban	86.9	13.1	0.0	0.0	100.0	1913
Rural	82.9	17.0	0.0	0.1	100.0	4453

Table DQ.10: 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, Nigeria, 2016-17 Kano State

	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/Don't Know/ Missing	Total	Number of first births	Year and month of birth	Year of birth only	Other/ Don't Know/ Missing	Total	Number of last births
Total	83.2	14.5	0.2	2.2	100.0	1908	93.8	5.5	0.7	100.0	1699
Senatorial District											
Kano Central	85.4	11.8	0.0	2.8	100.0	731	93.5	5.9	0.6	100.0	671
Kano North	90.0	9.4	0.2	0.4	100.0	518	95.1	4.5	0.3	100.0	455
Kano South	75.4	21.5	0.3	2.8	100.0	659	93.2	5.8	1.0	100.0	573
Residence											
Urban	89.4	9.8	0.2	0.6	100.0	454	93.9	5.8	0.3	100.0	418
Rural	81.2	16.0	0.2	2.6	100.0	1454	93.8	5.4	0.8	100.0	1282

Table DQ.11: Completeness of reporting

Percentage of observations that are missing information for selected questions and indicators, Nigeria, 2016-17 Kano State

Questionnaire and type of missing information	Reference group	Percent with missing/incomplete information	Number of cases
Household			
Salt test result	All households interviewed that have salt		
Starting time of interview	All households interviewed		
Ending time of interview	All households interviewed		
Women			
Date of first marriage/union	All ever married women age 15-49		
Only month		23.6	2018
Both month and year		12.1	2018
Age at first marriage/union	All ever married women age 15-49 with year of first marriage not known	0.7	2018
Age at first intercourse	All women age 15-24 who have ever had sex	0.9	563
Time since last intercourse	All women age 15-24 who have ever had sex	1.2	563
Starting time of interview	All women interviewed	0.0	2500
Ending time of interview	All women interviewed	0.0	2500
Men			
Date of first marriage/union	All ever married men age 15-49		
Only month		16.8	479
Both month and year		7.2	479
Age at first marriage/union	All ever married men age 15-49 with year of first marriage not known	2.9	479
Age at first intercourse	All men age 15-24 who have ever had sex	12.5	72
Time since last intercourse	All men age 15-24 who have ever had sex	60.9	72
Starting time of interview	All men interviewed	0.0	1099
Ending time of interview	All men interviewed	0.0	1099
Under-5			
Starting time of interview	All under-5 children	0.0	2559
Ending time of interview	All under-5 children	0.0	2559
^a Includes "Don't know" responses			

Table DQ.12: Completeness of information for anthropometric indicators: Underweight

Percent distribution of children under 5 by completeness of information on date of birth and weight, Nigeria, 2016-17 Kano State

	Valid weight and date of birth	Reason for exclusion from analysis				Total	Percent of children excluded from analysis	Number of children under 5
		Weight not measured	Incomplete date of birth	Weight not measured and incomplete date of birth	Flagged cases (outliers)			
Total	98.1	1.2	0.4	0.0	0.4	100.0	1.9	2559
Age (Months)								
<6	98.6	0.7	0.0	0.0	0.7	100.0	1.4	271
6-11	99.7	0.3	0.0	0.0	0.0	100.0	0.3	243
12-23	98.9	0.8	0.2	0.0	0.1	100.0	1.1	538
24-35	98.6	0.9	0.3	0.0	0.2	100.0	1.4	485
36-47	97.6	1.9	0.4	0.0	0.0	100.0	2.4	522
48-59	96.1	1.6	1.0	0.0	1.3	100.0	3.9	500

Table DQ.13: 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, Nigeria, 2016-17 Kano State

	Valid length/height and date of birth	Reason for exclusion from analysis				Total	Percent of children excluded from analysis	Number of children under 5
		Length/Height not measured	Incomplete date of birth	Length/Height not measured, incomplete date of birth	Flagged cases (outliers)			
Total	97.2	1.1	0.4	0.0	1.3	100.0	2.8	2559
Age (Months)								
<6	98.2	0.7	0.0	0.0	1.1	100.0	1.8	271
6-11	98.6	0.3	0.0	0.0	1.1	100.0	1.4	243
12-23	97.7	0.8	0.2	0.0	1.3	100.0	2.3	538
24-35	97.3	0.8	0.3	0.0	1.6	100.0	2.7	485
36-47	97.1	1.9	0.4	0.0	0.6	100.0	2.9	522
48-59	95.4	1.6	1.0	0.0	2.0	100.0	4.6	500

Table DQ.14: Completeness of information for anthropometric indicators: Wasting

Percent distribution of children under 5 by completeness of information on weight and length or height, Nigeria, 2016-17 Kano State

	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	98.0	0.0	0.0	1.1	0.8	100.0	2.0	2559
Age (Months)								
<6	97.1	0.0	0.0	0.7	2.1	100.0	2.9	271
6-11	98.6	0.0	0.0	0.3	1.1	100.0	1.4	243
12-23	98.3	0.0	0.0	0.8	0.9	100.0	1.7	538
24-35	98.9	0.1	0.0	0.8	0.2	100.0	1.1	485
36-47	98.1	0.0	0.0	1.9	0.0	100.0	1.9	522
48-59	97.1	0.0	0.0	1.6	1.3	100.0	2.9	500

Table DQ.15: Heaping in anthropometric measurements

Distribution of weight and height/length measurements by digits reported for the decimal points, Nigeria, 2016-17 Kano State

	Weight		Height or length	
	Number	Percent	Number	Percent
Total	2523	100.0	2523	100.0
Digits				
0	277	11.0	312	12.4
1	243	9.6	246	9.7
2	325	12.9	308	12.2
3	250	9.9	272	10.8
4	237	9.4	259	10.3
5	246	9.8	320	12.7
6	269	10.7	214	8.5
7	223	8.8	210	8.3
8	222	8.8	229	9.1
9	231	9.1	153	6.1
0 or 5	523	20.7	633	25.1

Table DQ.16: Observation of birth certificates

Percent distribution of children under 5 by presence of birth certificates, and percentage of birth certificates seen, Nigeria, 2016-17 Kano State

	Child has birth certificate		Child does not have birth certificate	Don't Know/ Missing	Total	Percentage of birth certificates seen by the interviewer (1)/ (1+2) *100	Number of children under age 5
	Seen by the interviewer (1)	Not seen by the interviewer (2)					
Total	19.2	12.4	68.0	0.3	100.0	60.7	2559
Senatorial District							
Kano Central	30.9	17.7	50.9	0.5	100.0	63.6	962
Kano North	11.6	10.7	77.4	0.3	100.0	52.1	693
Kano South	12.6	8.2	79.1	0.2	100.0	60.6	904
Residence							
Urban	36.1	22.4	41.3	0.2	100.0	61.7	603
Rural	14.0	9.4	76.3	0.4	100.0	59.9	1956
Child's age (Months)							
0-5	13.8	11.4	74.9	0.0	100.0	54.8	271
6-11	13.3	9.0	77.7	0.0	100.0	59.6	243
12-23	18.4	14.2	67.1	0.3	100.0	56.3	538
24-35	25.5	11.2	63.0	0.4	100.0	69.5	485
36-47	18.6	13.6	67.0	0.9	100.0	57.8	522
48-59	20.5	12.8	66.6	0.1	100.0	61.6	500

Table DQ.17: Observation of vaccination cards

Percent distribution of children age 0-35 months by presence of a vaccination card, and the percentage of vaccination cards seen by the interviewers, Nigeria, 2016-17 Kano State

	Child has vaccination card		Don't Know/ Missing	Total	Percentage of vaccination cards seen by the interviewer (1)/ (1+2) *100	Number of children age 0-35 months
	Seen by the interviewer (1)	Not seen by the interviewer (2)				
Total	20.0	10.2	0.5	100.0	66.2	1536
Senatorial District						
Kano Central	26.0	13.0	1.3	100.0	66.6	570
Kano North	16.1	11.8	0.2	100.0	57.6	434
Kano South	16.9	5.9	0.0	100.0	74.2	533
Residence						
Urban	31.9	17.0	0.9	100.0	65.2	351
Rural	16.5	8.2	0.4	100.0	66.9	1185
Child's age (Months)						
0-5	27.7	4.3	0.0	100.0	86.5	271
6-11	27.5	8.3	0.0	100.0	76.8	243
12-23	20.6	9.1	0.4	100.0	69.5	538
24-35	11.4	15.8	1.2	100.0	41.9	485

Table DQ.18: Observation of women's health cards							
Percent distribution of women with a live birth in the last 2 years by presence of a health card, and the percentage of health cards seen by the interviewers, Nigeria, 2016-17 Kano State							
	Woman does not have health card	Woman has health card		Don't Know /Missing	Total	Percent of health cards seen by the interviewer (1)/ (1+2) *100	Number of women with a live birth in the last two years
		Seen by the interviewer (1)	Not seen by the interviewer (2)				
Total	60.1	14.4	24.9	0.6	100.0	36.6	1087
Senatorial District							
Kano Central	53.9	12.7	32.6	0.8	100.0	28.1	393
Kano North	57.0	18.0	24.1	0.9	100.0	42.8	314
Kano South	69.0	13.0	17.7	0.2	100.0	42.4	380
Residence							
Urban	56.4	12.1	31.0	0.5	100.0	28.1	239
Rural	61.1	15.0	23.2	0.7	100.0	39.3	847
Age (Years)							
15-24	57.8	16.6	25.5	0.2	100.0	39.4	353
25-34	61.7	12.9	24.4	1.0	100.0	34.5	468
35-49	60.2	14.1	25.2	0.4	100.0	35.8	266

Table DQ.19: Observation of bednets and places for handwashing								
Percentage of bednets in all households observed by the interviewers, and percent distribution of places for handwashing observed by the interviewers in all interviewed households, Nigeria, 2016-17 Kano State								
	Percentage of bednets observed by interviewer	Total number of bednets	Place for handwashing					Number of households interviewed
			Not observed					
			Observed	Not in the dwelling, plot or yard	No permission to see	Other reason	Total	
Total	82.7	4244	43.6	3.1	3.8	1.0	100.0	1867
Senatorial District								
Kano Central	86.2	1789	57.9	2.7	5.2	0.6	100.0	786
Kano North	76.1	1152	34.6	3.8	4.2	1.6	100.0	527
Kano South	83.8	1303	31.8	3.1	1.3	1.2	100.0	554
Residence								
Urban	83.0	1072	63.2	2.4	7.3	0.2	100.0	500
Rural	82.6	3173	36.4	3.4	2.5	1.3	100.0	1367
Wealth index quintile								
Poorest	81.9	844	28.8	3.6	2.7	1.5	100.0	382
Second	83.3	858	29.8	3.5	3.0	1.4	100.0	376
Middle	84.7	850	42.7	3.4	1.9	1.5	100.0	385
Fourth	81.4	888	52.9	3.5	3.4	0.3	100.0	365
Richest	82.3	805	65.3	1.6	8.0	0.3	100.0	360

Table DQ.20: Respondent to the under-5 questionnaire

Distribution of children under five by respondent to the under-5 questionnaire, Nigeria, 2016-17 Kano State

	Mother in the household	Mother not in the household and primary caretaker identified:			Total	Number of children under 5
		Father	Other adult female	Other adult male		
Total	96.9	0.2	2.7	0.3	100.0	2555
Age (Years)						
0	99.5	0.0	0.5	0.0	100.0	520
1	98.8	0.0	1.0	0.3	100.0	538
2	96.0	0.3	3.4	0.4	100.0	478
3	95.6	0.3	3.8	0.3	100.0	521
4	94.5	0.2	4.9	0.4	100.0	498

Table DQ.22: School attendance by single age

Distribution of household population age 5-24 years by educational level and and grade attended in the current (or most recent) school year, Nigeria, 2016-17 Kano State

	Not attending school	Currently attending														Higher than secondary	Non-formal	Don't Know/ Missing	Total	Number of household members
		Preschool	Primary school Grade						Secondary school Grade											
			1	2	3	4	5	6	1	2	3	4	5	6						
Age at beginning of school year																				
5	35.7	25.1	14.5	2.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.3	0.0	100.0	462	
6	23.2	12.0	19.8	15.5	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.2	0.0	100.0	543	
7	20.9	6.1	14.0	21.6	10.6	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.9	0.0	100.0	503	
8	11.9	2.2	8.2	21.0	25.0	8.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.7	0.0	100.0	460	
9	13.7	0.0	3.7	17.4	21.1	14.4	9.4	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	19.4	0.0	100.0	391	
10	14.0	0.7	2.7	6.6	11.8	16.5	11.9	7.5	1.4	0.0	0.0	0.0	0.0	0.0	0.0	26.9	0.0	100.0	503	
11	17.1	0.3	1.6	5.1	8.4	11.8	11.5	12.0	8.3	5.8	0.0	0.0	0.0	0.0	0.0	18.0	0.0	100.0	288	
12	13.9	0.0	0.2	2.1	5.2	10.0	10.3	13.4	10.9	12.3	1.7	0.0	0.0	0.0	0.0	20.0	0.0	100.0	428	
13	16.1	0.0	0.0	0.0	2.4	5.2	7.3	10.3	11.1	11.2	12.5	1.0	0.4	0.0	0.0	22.4	0.3	100.0	354	
14	22.8	0.0	0.0	0.5	1.4	1.7	2.5	6.7	8.6	16.1	12.5	5.2	3.8	0.6	0.0	17.7	0.0	100.0	336	
15	27.6	0.0	0.0	0.2	0.7	0.6	1.2	5.1	2.6	9.1	14.0	12.4	5.4	3.6	0.0	17.5	0.0	100.0	333	
16	25.2	0.0	0.0	0.5	0.0	0.7	1.1	3.4	2.2	6.2	9.8	17.3	13.1	7.9	0.3	12.3	0.0	100.0	228	
17	40.5	0.0	0.0	0.6	0.0	0.6	0.4	0.5	0.5	2.2	4.0	11.5	10.2	16.1	0.8	12.1	0.0	100.0	241	
18	55.3	0.0	0.0	0.0	0.0	0.5	0.4	0.0	0.0	1.8	3.5	3.5	5.7	16.3	1.5	11.5	0.0	100.0	240	
19	54.4	0.0	0.0	0.0	0.0	0.0	0.4	0.9	0.5	0.9	0.9	4.0	4.4	16.4	6.8	10.6	0.0	100.0	180	
20	77.6	0.0	0.0	0.0	0.0	0.0	0.4	0.8	0.0	0.9	1.5	1.4	1.1	2.9	4.3	9.1	0.0	100.0	351	
21	68.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.9	1.6	0.0	0.0	9.9	15.0	2.6	0.0	100.0	105	
22	68.7	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.5	0.7	2.9	2.3	9.8	7.3	7.0	0.0	100.0	142	
23	74.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	0.0	0.0	0.0	1.2	0.6	4.0	14.3	5.0	0.0	100.0	113	
24 ^a	79.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	11.0	8.4	0.0	100.0	98	

^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

Table DQ.23: 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, Nigeria, 2016-17 Kano State

	Children Ever Born			Children Living			Children Deceased			Number of women
	Sons	Daughters	Sex ratio at birth	Sons	Daughters	Sex ratio	Sons	Daughters	Sex ratio	
Total	4975	4737	1.05	3837	3775	1.02	1138	963	1.18	2500
Age (Years)										
15-19	85	77	1.10	65	65	0.99	20	12	1.71	586
20-24	419	403	1.04	345	343	1.01	73	60	1.23	431
25-29	804	815	0.99	627	663	0.95	177	151	1.17	432
30-34	965	922	1.05	760	754	1.01	205	168	1.22	354
35-39	1033	991	1.04	802	795	1.01	231	196	1.18	286
40-44	858	819	1.05	647	634	1.02	212	186	1.14	222
45-49	811	711	1.14	591	520	1.13	220	190	1.16	190

Table DQ.24: 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, Nigeria, 2016-17 Kano State

	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	7613	2099	9712	88.7	70.8	84.8	102.4	120.2	106.0	na	na	na
Years												
0	497	38	535	98.8	86.4	97.9	96.9	93.7	96.7	na	na	na
1	502	54	557	98.8	84.3	97.4	98.7	221.4	106.3	105.9	87.6	103.8
2	452	86	538	96.3	73.7	92.7	114.0	75.7	106.8	92.7	102.3	94.1
3	473	113	586	94.7	78.2	91.5	97.0	121.6	101.3	102.9	106.6	103.6
4	467	127	594	95.0	72.8	90.3	100.9	126.4	105.9	105.9	117.6	108.2
5	409	102	511	89.6	68.8	85.5	100.8	144.7	108.3	89.2	88.8	89.1
6	449	104	553	89.9	66.4	85.5	102.7	138.7	108.7	104.4	94.6	102.4
7	452	118	570	87.2	60.8	81.8	99.5	80.3	95.2	105.6	108.3	106.2
8	407	113	520	89.6	73.9	86.2	102.9	122.4	106.9	110.2	103.9	108.8
9	286	100	386	86.0	66.7	81.0	95.9	167.9	110.6	15.8	16.0	15.8
10+	3219	1144	4363	82.7	70.2	79.4	104.4	119.1	108.0	na	na	na
Five-year periods												
0-4	2392	417	2809	96.8	77.2	93.9	101.1	117.3	103.4	na	na	na
5-9	2002	538	2540	88.6	67.2	84.1	100.7	124.9	105.3	na	na	na
10-14	1552	409	1961	85.2	73.7	82.8	96.2	124.9	101.6	na	na	na
15-19	875	356	1231	83.5	68.7	79.2	105.6	114.2	108.0	na	na	na
20+	792	379	1171	77.0	67.7	74.0	120.8	117.6	119.8	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.25: 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), Nigeria, 2016-17 Kano State

	Number of years preceding the survey				Total (0–19)
	0–4	5–9	10–14	15–19	
Age at death (days)					
0	51	23	20	16	110
1	48	25	17	11	101
2	23	13	7	8	51
3	7	16	6	10	39
4	10	5	3	3	21
5	10	8	1	6	25
6	3	5	6	5	19
7	3	9	3	2	17
8	5	4	0	2	11
9	4	8	1	1	13
10	3	5	2	4	14
11	1	1	1	1	4
12	5	1	1	2	9
13	0	3	1	3	7
14	3	6	2	5	16
15	1	2	4	2	9
16	1	3	0	0	5
17	2	1	0	0	3
18	2	0	0	0	2
19	2	2	1	1	6
20	2	5	5	3	15
21	1	1	0	1	3
22	1	0	1	2	3
23	1	1	0	0	3
24	0	0	1	1	2
25	1	0	0	2	2
26	na	na	na	na	na
27	0	1	1	0	2
28	1	0	1	2	4
29	0	2	0	0	2
30	3	1	3	1	8
Total 0–30 days	194	149	88	93	524
Percent early neonatal ^a	78.5	62.4	69.5	62.8	69.6

^a Deaths during the first 7 days (0-6), divided by deaths during the first month (0-30 days)

Table DQ.26: 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), Nigeria, 2016-17 Kano State

	Number of years preceding the survey				Total (0-19)
	0-4	5-9	10-14	15-19	
Age at death (months)					
0 ^a	194	149	88	93	524
1	18	20	8	13	58
2	15	16	15	11	57
3	6	10	19	9	44
4	13	13	10	8	45
5	6	10	9	8	34
6	7	13	9	12	39
7	12	11	11	4	38
8	11	6	11	5	33
9	6	9	9	9	32
10	8	11	6	7	32
11	2	4	7	4	18
12	11	18	9	6	45
13	3	3	0	1	7
14	1	4	4	3	12
15	3	6	6	3	18
16	0	2	2	3	8
17	3	4	6	2	16
18	4	4	9	5	22
19	2	2	2	0	5
20	4	5	4	4	17
21	0	1	0	1	1
22	1	5	3	1	10
23	2	1	1	0	3
Total 0-11 months	298	272	200	184	954
Percent neonatal ^b	65.1	54.8	44.1	50.4	54.9

^a Includes deaths under one month reported in days

^b Deaths under one month, divided by deaths under one year

Appendix E. Nigeria MICS Indicators: Numerators and Denominators

MICS INDICATOR ^[M]		Module	Numerator	Denominator	MDG Indicator Reference
MORTALITY					
1.1	Neonatal mortality rate	BH	Probability of dying within the first month of life		
1.2	Infant mortality rate	CM - BH	Probability of dying between birth and the first birthday		MDG 4.2
1.3	Post-neonatal mortality rate	BH	Difference between infant and neonatal mortality rates		
1.4	Child mortality rate	BH	Probability of dying between the first and the fifth birthdays		
1.5	Under-five mortality rate	CM - BH	Probability of dying between birth and the fifth birthday		MDG 4.1

NUTRITION					
2.1a 2.1b	Underweight prevalence	AN	Number of children under age 5 who fall below (a) minus two standard deviations (moderate and severe) (b) minus three standard deviations (severe) of the median weight for age of the WHO standard	Total number of children under age 5	MDG 1.8
2.2a 2.2b	Stunting prevalence	AN	Number of children under age 5 who fall below (a) minus two standard deviations (moderate and severe) (b) below minus three standard deviations (severe) of the median height for age of the WHO standard	Total number of children under age 5	
2.3a 2.3b	Wasting prevalence	AN	Number of children under age 5 who fall below (a) minus two standard deviations (moderate and severe) (b) minus three standard deviations (severe) of the median weight for height of the WHO standard	Total number of children under age 5	
2.4	Overweight prevalence	AN	Number of children under age 5 who are above two standard deviations of the median weight for height of the WHO standard	Total number of children under age 5	
2.5	Children ever breastfed	MN	Number of women with a live birth in the last 2 years who breastfed their last live-born child at any time	Total number of women with a live birth in the last 2 years	

2.6	Early initiation of breastfeeding	MN	Number of women with a live birth in the last 2 years who put their last newborn to the breast within one hour of birth	Total number of women with a live birth in the last 2 years	
2.7	Exclusive breastfeeding under 6 months	BD	Number of infants under 6 months of age who are exclusively breastfed	Total number of infants under 6 months of age	
2.8	Predominant breastfeeding under 6 months	BD	Number of infants under 6 months of age who received breast milk as the predominant source of nourishment during the previous day	Total number of infants under 6 months of age	
2.9	Continued breastfeeding at 1 year	BD	Number of children age 12-15 months who received breast milk during the previous day	Total number of children age 12-15 months	
2.10	Continued breastfeeding at 2 years	BD	Number of children age 20-23 months who received breast milk during the previous day	Total number of children age 20-23 months	
2.11	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		
2.12	Age-appropriate breastfeeding	BD	Number of children age 0-23 months appropriately fed during the previous day	Total number of children age 0-23 months	
2.13	Introduction of solid, semi-solid or soft foods	BD	Number of infants age 6-8 months who received solid, semi-solid or soft foods during the previous day	Total number of infants age 6-8 months	
2.14	Milk feeding frequency for non-breastfed children	BD	Number of non-breastfed children age 6-23 months who received at least 2 milk feedings during the previous day	Total number of non-breastfed children age 6-23 months	
2.15	Minimum meal frequency	BD	Number 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 or more during the previous day	Total number of children age 6-23 months	

2.16	Minimum dietary diversity	BD	Number of children age 6–23 months who received foods from 4 or more food groups during the previous day	Total number of children age 6–23 months	
2.17a 2.17b	Minimum acceptable diet	BD	(a) Number of breastfed children age 6–23 months who had at least the minimum dietary diversity and the minimum meal frequency during the previous day (b) Number of non-breastfed children age 6–23 months who received at least 2 milk feedings and had at least the minimum dietary diversity not including milk feeds and the minimum meal frequency during the previous day	(a) Number of breastfed children age 6–23 months (b) Number of non-breastfed children age 6–23 months	
2.18	Bottle feeding	BD	Number of children age 0-23 months who were fed with a bottle during the previous day	Total number of children age 0-23 months	
2.19	Iodized salt consumption	SI	Number of households with salt testing 15 parts per million or more of iodide/iodate	Total number of households in which salt was tested or where there was no salt	
2.20	Low-birth weight infants	MN	Number of most recent live births in the last 2 years weighing below 2,500 grams at birth	Total number of most recent live births in the last 2 years	
2.21	Infants weighed at birth	MN	Number of most recent live births in the last 2 years who were weighed at birth	Total number of most recent live births in the last 2 years	

CHILD HEALTH					
3.1	Tuberculosis immunization coverage	IM	Number of children age 12-23 months who received BCG vaccine by their first birthday	Total number of children age 12-23 months	
3.2	Polio immunization coverage	IM	Number of children age 12-23 months who received the third dose of OPV vaccine (OPV3) by their first birthday	Total number of children age 12-23 months	
3.3	Diphtheria, pertussis and tetanus (DPT) immunization coverage	IM	Number of children age 12-23 months who received the third dose of DPT vaccine (DPT3) by their first birthday	Total number of children age 12-23 months	
3.4	Measles immunization coverage	IM	Number of children age 12-23 months who received measles vaccine by their first birthday	Total number of children age 12-23 months	MDG 4.3
3.5	Hepatitis B immunization coverage	IM	Number of children age 12-23 months who received the third dose of Hepatitis B vaccine (HepB3) by their first birthday	Total number of children age 12-23 months	
3.6	Haemophilus influenzae type B (Hib) immunization coverage	IM	Number of children age 12-23 months who received the third dose of Hib vaccine (Hib3) by their first birthday	Total number of children age 12-23 months	

3.7	Yellow fever immunization coverage	IM	Number of children age 12-23 months who received yellow fever vaccine by their first birthday	Total number of children age 12-23 months	
3.8	Full immunization coverage	IM	Number of children age 12-23 months who received all vaccinations recommended in the national immunization schedule by their first birthday	Total number of children age 12-23 months	
3.9	Neonatal tetanus protection	MN	Number 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 prior to the most recent birth	Total number of women age 15-49 years with a live birth in the last 2 years	
3.10	Care-seeking for diarrhoea	CA	Number 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	Total number of children under age 5 with diarrhoea in the last 2 weeks	
3.11	Diarrhoea treatment with oral rehydration salts (ORS) and zinc	CA	Number of children under age 5 with diarrhoea in the last 2 weeks who received ORS and zinc	Total number of children under age 5 with diarrhoea in the last 2 weeks	
3.12	Diarrhoea treatment with oral rehydration therapy (ORT) and continued feeding	CA	Number of children under age 5 with diarrhoea in the last 2 weeks who received ORT (ORS packet, pre-packaged ORS fluid, recommended homemade fluid or increased fluids) and continued feeding during the episode of diarrhoea	Total number of children under age 5 with diarrhoea in the last 2 weeks	
3.13	Care-seeking for children with acute respiratory infection (ARI) symptoms	CA	Number 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	Total number of children under age 5 with ARI symptoms in the last 2 weeks	
3.14	Antibiotic treatment for children with ARI symptoms	CA	Number of children under age 5 with ARI symptoms in the last 2 weeks who received antibiotics	Total number of children under age 5 with ARI symptoms in the last 2 weeks	
3.15	Use of solid fuels for cooking	HC	Number of household members in households that use solid fuels as the primary source of domestic energy to cook	Total number of household members	
3.16a 3.16b	Household availability of insecticide-treated nets (ITNs)	TN	Number of households with (a) at least one ITN (b) at least one ITN for every two people	Total number of households	
3.17a 3.17b	Household vector control	TN - IR	Number of households (a) with at least one ITN or that have been sprayed by IRS in the last 12 months (b) with at least one ITN for every two people or that have been sprayed by IRS in the last 12 months	Total number of households	

3.18	Children under age 5 who slept under an ITN	TN	Number of children under age 5 who slept under an ITN the previous night	Total number of children under age 5 who spent the previous night in the interviewed households	MDG 6.7
3.19	Population that slept under an ITN	TN	Number of household members who slept under an ITN the previous night	Total number of household members who spent the previous night in the interviewed households	
3.20	Care-seeking for fever	CA	Number 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	Total number of children under age 5 with fever in the last 2 weeks	
3.21	Malaria diagnostics usage	CA	Number of children under age 5 with fever in the last 2 weeks who had a finger or heel stick for malaria testing	Total number of children under age 5 with fever in the last 2 weeks	
3.22	Anti-malarial treatment of children under age 5	CA	Number of children under age 5 with fever in the last 2 weeks who received any antimalarial treatment	Total number of children under age 5 with fever in the last 2 weeks	MDG 6.8
3.23	Treatment with Artemisinin-based Combination Therapy (ACT) among children who received anti-malarial treatment	CA	Number of children under age 5 with fever in the last 2 weeks who received ACT (or other first-line treatment according to national policy)	Total number of children under age 5 with fever in the last 2 weeks who received any anti-malarial drugs	
3.24	Pregnant women who slept under an ITN	TN – CP	Number of pregnant women who slept under an ITN the previous night	Total number of pregnant women	
3.25	Intermittent preventive treatment for malaria during pregnancy	MN	Number of women age 15-49 years who received three or more doses of SP/Fansidar, at least one of which was received during an ANC visit, to prevent malaria during their last pregnancy that led to a live birth in the last 2 years	Total number of women age 15-49 years with a live birth in the last 2 years	

WATER AND SANITATION					
4.1	Use of improved drinking water sources	WS	Number of household members using improved sources of drinking water	Total number of household members	MDG 7.8
4.2	Water treatment	WS	Number of household members in households using unimproved drinking water who use an appropriate treatment method	Total number of household members in households using unimproved drinking water sources	
4.3	Use of improved sanitation	WS	Number of household members using improved sanitation facilities which are not shared	Total number of household members	MDG 7.9
4.4	Safe disposal of child's faeces	CA	Number of children age 0-2 years whose last stools were disposed of safely	Total number of children age 0-2 years	
4.5	Place for handwashing	HW	Number of households with a specific place for hand washing where water and soap or other cleansing agent are present	Total number of households	
4.6	Availability of soap or other cleansing agent	HW	Number of households with soap or other cleansing agent	Total number of households	

REPRODUCTIVE HEALTH					
5.1	Adolescent birth rate	CM - BH	Age-specific fertility rate for women age 15-19 years		MDG 5.4
5.2	Early childbearing	CM - BH	Number of women age 20-24 years who had at least one live birth before age 18	Total number of women age 20-24 years	
5.3	Contraceptive prevalence rate	CP	Number of women age 15-49 years currently married or in union who are using (or whose partner is using) a (modern or traditional) contraceptive method	Total number of women age 15-49 years who are currently married or in union	MDG 5.3
5.4	Unmet need	UN	Number of women age 15-49 years who are currently married or in union who are fecund and want to space their births or limit the number of children they have and who are not currently using contraception	Total number of women age 15-49 years who are currently married or in union	MDG 5.6
5.5a 5.5b	Antenatal care coverage	MN	Number 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	Total number of women age 15-49 years with a live birth in the last 2 years	MDG 5.5
5.6	Content of antenatal care	MN	Number 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	Total number of women age 15-49 years with a live birth in the last 2 years	

5.7	Skilled attendant at delivery	MN	Number 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	Total number of women age 15-49 years with a live birth in the last 2 years	MDG 5.2
5.8	Institutional deliveries	MN	Number 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	Total number of women age 15-49 years with a live birth in the last 2 years	
5.9	Caesarean section	MN	Number of women age 15-49 years whose most recent live birth in the last 2 years was delivered by caesarean section	Total number of women age 15-49 years with a live birth in the last 2 years	
5.10	Post-partum stay in health facility	PN	Number of women age 15-49 years who stayed in the health facility for 12 hours or more after the delivery of their most recent live birth in the last 2 years	Total number of women age 15-49 years with a live birth in the last 2 years	
5.11	Post-natal health check for the newborn	PN	Number of last live births in the last 2 years who received a health check while in facility or at home following delivery, or a post-natal care visit within 2 days after delivery	Total number of last live births in the last 2 years	
5.12	Post-natal health check for the mother	PN	Number of women age 15-49 years who received a health check while in facility or at home following delivery, or a post-natal care visit within 2 days after delivery of their most recent live birth in the last 2 years	Total number of women age 15-49 years with a live birth in the last 2 years	
5.13	Maternal mortality ratio	MM	Deaths during pregnancy, childbirth, or within two months after delivery or termination of pregnancy, per 100,000 births within the 7-year period preceding the survey		MDG5.1

CHILD DEVELOPMENT					
6.1	Attendance to early childhood education	EC	Number of children age 36-59 months who are attending an early childhood education programme	Total number of children age 36-59 months	
6.2	Support for learning	EC	Number of children age 36-59 months with whom an adult has engaged in four or more activities to promote learning and school readiness in the last 3 days	Total number of children age 36-59 months	
6.3	Father's support for learning	EC	Number of children age 36-59 months whose biological father has engaged in four or more activities to promote learning and school readiness in the last 3 days	Total number of children age 36-59 months	
6.4	Mother's support for learning	EC	Number of children age 36-59 months whose biological mother has engaged in four or more activities to promote learning and school readiness in the last 3 days	Total number of children age 36-59 months	
6.5	Availability of children's books	EC	Number of children under age 5 who have three or more children's books	Total number of children under age 5	

6.6	Availability of playthings	EC	Number of children under age 5 who play with two or more types of playthings	Total number of children under age 5	
6.7	Inadequate care	EC	Number of children under age 5 left alone or in the care of another child younger than 10 years of age for more than one hour at least once in the last week	Total number of children under age 5	
6.8	Early child development index	EC	Number of children 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	Total number of children age 36-59 months	

LITERACY AND EDUCATION					
7.1	Literacy rate among young women ^[M]	WB	Number of women age 15-24 years who are able to read a short simple statement about everyday life or who attended secondary or higher education	Total number of women age 15-24 years	MDG 2.3
7.2	School readiness	ED	Number of children in first grade of primary school who attended pre-school during the previous school year	Total number of children attending the first grade of primary school	
7.3	Net intake rate in primary education	ED	Number of children of school-entry age who enter the first grade of primary school	Total number of children of school-entry age	
7.4	Primary school net attendance ratio (adjusted)	ED	Number of children of primary school age currently attending primary or secondary school	Total number of children of primary school age	MDG 2.1
7.5	Secondary school net attendance ratio (adjusted)	ED	Number of children of secondary school age currently attending secondary school or higher	Total number of children of secondary school age	
7.6	Children reaching last grade of primary	ED	Proportion of children entering the first grade of primary school who eventually reach last grade		MDG 2.2
7.7	Primary completion rate	ED	Number of children attending the last grade of primary school (excluding repeaters)	Total number of children of primary school completion age (age appropriate to final grade of primary school)	
7.8	Transition rate to secondary school	ED	Number of children attending the last grade of primary school during the previous school year who are in the first grade of secondary school during the current school year	Total number of children attending the last grade of primary school during the previous school year	
7.9	Gender parity index (primary school)	ED	Primary school net attendance ratio (adjusted) for girls	Primary school net attendance ratio (adjusted) for boys	MDG 3.1
7.10	Gender parity index (secondary school)	ED	Secondary school net attendance ratio (adjusted) for girls	Secondary school net attendance ratio (adjusted) for boys	MDG 3.1

CHILD PROTECTION					
8.1	Birth registration	BR	Number of children under age 5 whose births are reported registered	Total number of children under age 5	
8.2	Child labour	CL	Number of children age 5-17 years who are involved in child labour	Total number of children age 5-17 years	
8.3	Violent discipline	CD	Number of children age 1-14 years who experienced psychological aggression or physical punishment during the last one month	Total number of children age 1-14 years	
8.4	Marriage before age 15 ^[M]	MA	Number of women age 15-49 years who were first married or in union before age 15	Total number of women age 15-49 years	
8.5	Marriage before age 18 ^[M]	MA	Number of women age 20-49 years who were first married or in union before age 18	Total number of women age 20-49 years	
8.6	Young women age 15-19 years currently married or in union ^[M]	MA	Number of women age 15-19 years who are married or in union	Total number of women age 15-19 years	
8.7	Polygyny ^[M]	MA	Number of women age 15-49 years who are in a polygynous union	Total number of women age 15-49 years who are married or in union	
8.8a 8.8b	Spousal age difference	MA	Number of women who are married or in union and whose spouse is 10 or more years older, (a) among women age 15-19 years, (b) among women age 20-24 years	Total number of women who are married or in union (a) age 15-19 years, (b) age 20-24 years	
8.9	Approval for female genital mutilation/cutting (FGM/C)	FG	Number of women age 15-49 years who state that FGM/C should be continued	Total number of women age 15-49 years who have heard of FGM/C	
8.10	Prevalence of FGM/C among women	FG	Number of women age 15-49 years who report to have undergone any form of FGM/C	Total number of women age 15-49 years	
8.11	Prevalence of FGM/C among girls	FG	Number of daughters age 0-14 years who have undergone any form of FGM/C, as reported by mothers age 15-49 years	Total number of daughters age 0-14 years of mothers age 15-49 years	
8.12	Attitudes towards domestic violence ^[M]	DV	Number of women who state that a husband is justified in hitting or beating his wife in at least one of the following circumstances: (1) she goes out without telling him, (2) she neglects the children, (3) she argues with him, (4) she refuses sex with him, (5) she burns the food	Total number of women age 15-49 years	
8.13	Children's living arrangements	HL	Number of children age 0-17 years living with neither biological parent	Total number of children age 0-17 years	
8.14	Prevalence of children with one or both parents dead	HL	Number of children age 0-17 years with one or both biological parents dead	Total number of children age 0-17 years	
8.15	Children with at least one parent living abroad	HL	Number of children 0-17 years with at least one biological parent living abroad	Total number of children 0-17 years	

HIV/AIDS AND SEXUAL BEHAVIOUR					
9.1	Knowledge about HIV prevention among young women ^[M]	HA	Number of women age 15-24 years who correctly identify ways of preventing the sexual transmission of HIV, and who reject major misconceptions about HIV transmission	Total number of women age 15-24 years	MDG 6.3
9.2	Knowledge of mother-to-child transmission of HIV ^[M]	HA	Number of women age 15-49 years who correctly identify all three means of mother-to-child transmission of HIV	Total number of women age 15-49 years	
9.3	Accepting attitudes towards people living with HIV ^[M]	HA	Number of women age 15-49 years expressing accepting attitudes on all four questions toward people living with HIV	Total number of women age 15-49 years who have heard of HIV	
9.4	Women who know where to be tested for HIV ^[M]	HA	Number of women age 15-49 years who state knowledge of a place to be tested for HIV	Total number of women age 15-49 years	
9.5	Women who have been tested for HIV and know the results ^[M]	HA	Number of women age 15-49 years who have been tested for HIV in the last 12 months and who know their results	Total number of women age 15-49 years	
9.6	Sexually active young women who have been tested for HIV and know the results ^[M]	HA	Number of women age 15-24 years who have had sex in the last 12 months, who have been tested for HIV in the last 12 months and who know their results	Total number of women age 15-24 years who have had sex in the last 12 months	
9.7	HIV counseling during antenatal care	HA	Number of women age 15-49 years who had a live birth in the last 2 years and received antenatal care during the pregnancy of their most recent birth, reporting that they received counseling on HIV during antenatal care	Total number of women age 15-49 years who had a live birth in the last 2 years	
9.8	HIV testing during antenatal care	HA	Number of women age 15-49 years who had a live birth in the last 2 years and received antenatal care during the pregnancy of their most recent birth, reporting that they were offered and accepted an HIV test during antenatal care and received their results	Total number of women age 15-49 years who had a live birth in the last 2 years	
9.9	Young women who have never had sex ^[M]	SB	Number of never married women age 15-24 years who have never had sex	Total number of never married women age 15-24 years	
9.10	Sex before age 15 among young women ^[M]	SB	Number of women age 15-24 years who had sexual intercourse before age 15	Total number of women age 15-24 years	
9.11	Age-mixing among sexual partners	SB	Number of women age 15-24 years who had sex in the last 12 months with a partner who was 10 or more years older	Total number of women age 15-24 years who had sex in the last 12 months	
9.12	Multiple sexual partnerships ^[M]	SB	Number of women age 15-49 years who had sexual intercourse with more than one partner in the last 12 months	Total number of women age 15-49 years	

9.13	Condom use at last sex among people with multiple sexual partnerships ^[M]	SB	Number of women age 15-49 years who report having had more than one sexual partner in the last 12 months who also reported that a condom was used the last time they had sex	Total number of women age 15-49 years who reported having had more than one sexual partner in the last 12 months	
9.14	Sex with non-regular partners ^[M]	SB	Number of sexually active women age 15-24 years who had sex with a non-marital, non-cohabitating partner in the last 12 months	Total number of women age 15-24 years who had sex in the last 12 months	
9.15	Condom use with non-regular partners ^[M]	SB	Number of women age 15-24 years reporting the use of a condom during the last sexual intercourse with a non-marital, non-cohabiting sex partner in the last 12 months	Total number of women age 15-24 years who had sex with a non-marital, non-cohabiting partner in the last 12 months	MDG 6.2
9.16	Ratio of school attendance of orphans to school attendance of non-orphans	HL - ED	Proportion attending school among children age 10-14 years who have lost both parents	Proportion attending school among children age 10-14 years whose parents are alive and who are living with one or both parents	MDG 6.4
9.17	Male circumcision	MMC	Number of men age 15-49 years who report having been circumcised	Total number of men age 15-49 years	

ACCESS TO MASS MEDIA AND USE OF INFORMATION/COMMUNICATION TECHNOLOGY

10.1	Exposure to mass media ^[M]	MT	Number of women age 15-49 years who, at least once a week, read a newspaper or magazine, listen to the radio, and watch television	Total number of women age 15-49 years	
10.2	Use of computers ^[M]	MT	Number of young women age 15-24 years who used a computer during the last 12 months	Total number of women age 15-24 years	
10.3	Use of internet ^[M]	MT	Number of young women age 15-24 who used the internet during the last 12 months	Total number of women age 15-24 years	

SUBJECTIVE WELL-BEING

11.1	Life satisfaction ^[M]	LS	Number of women age 15-24 years who are very or somewhat satisfied with their life, overall	Total number of women age 15-24 years	
11.2	Happiness ^[M]	LS	Number of women age 15-24 years who are very or somewhat happy	Total number of women age 15-24 years	
11.3	Perception of a better life ^[M]	LS	Number of women age 15-24 years whose life improved during the last one year, and who expect that their life will be better after one year	Total number of women age 15-24 years	

TOBACCO AND ALCOHOL USE					
12.1	Tobacco use ^[M]	TA	Number of women age 15-49 years who smoked cigarettes, or used smoked or smokeless tobacco products at any time during the last one month	Total number of women age 15-49 years	
12.2	Smoking before age 15 ^[M]	TA	Number of women age 15-49 years who smoked a whole cigarette before age 15	Total number of women age 15-49 years	
12.3	Use of alcohol ^[M]	TA	Number of women age 15-49 years who had at least one alcoholic drink at any time during the last one month	Total number of women age 15-49 years	
12.4	Use of alcohol before age 15 ^[M]	TA	Number of women age 15-49 years who had at least one alcoholic drink before age 15	Total number of women age 15-49 years	