Jamaica

Multiple Indicator Cluster Survey 2011

MICS

unicef
unite for children

Jamaica Multiple Indicator Cluster Survey 2011

STATIN
Statistical Institute of Jamaica

UNICEF
United Nations Children's Fund

The Jamaica Multiple Indicator Cluster Survey (MICS) was carried out in 2011 by the Statistical Institute of Jamaica. Financial and technical support was provided by the United Nations Children's Fund (UNICEF), the United Nations Population Fund (UNFPA) and other UN partners.

MICS is an international household survey programme developed by UNICEF. The Jamaica MICS was conducted as part of the fourth global round of MICS surveys (MICS4). MICS provides up-to-date information on the situation of children and women and measures key indicators that allow countries to monitor progress towards the Millennium Development Goals (MDGs) and other internationally agreed upon commitments. Additional information on the global MICS project may be obtained from www.childinfo.org.

Statistical Institute of Jamaica (STATIN) and United Nations Children's Fund (UNICEF) 2013. Jamaica Multiple Indicator Cluster Survey 2011: Final Report. Kingston, Jamaica: STATIN and UNICEF.

Statistical Institute of Jamaica
7 Cecelio Ave., Kingston 10, Jamaica
Telephone: (876) 926-5311
Fax: (876) 926-1138
Website: www.statinja.gov.jm
Email: info@statinja.gov.jm

United Nations Children's Fund
60 Knutsford Boulevard, Kingston 5, Jamaica
Telephone: (876) 926-7584
Fax: (876) 929-8084
Website: http://www.unicef.org/jamaica/
Email: kingston@unicef.org

NATIONAL LIBRARY OF JAMAICA CATALOGUING IN PUBLICATION DATA

JAMAICA MULTIPLE INDICATOR CLUSTER SURVEY 2011: FINAL REPORT

ISBN#: 978-976-8213-91-4

Table of Contents

List of Tables i

List of Figures iii

List of Abbreviations iv

Acknowledgements 1

Summary Table of Findings 2

Executive Summary 5

I. Introduction 14

Background 14

Survey Objectives 15

II. Sample and Survey Methodology 18

Questionnaires 19

Recruitment and Training of Field Staff 20

Fieldwork 20

Data Processing 20

III. Sample Coverage and the Characteristics of Households and Respondents 24

Sample Coverage 24

Characteristics of Households 25

Characteristics of Female Respondents 15-49 Years of Age and Children Under-5 28

IV. Nutrition 34

Nutritional Status 34

Breastfeeding and Infant and Young Child Feeding 34

Low Birth Weight 42

V. Child Health 46

Vaccinations 46

Neonatal Tetanus Protection 50

Oral Rehydration Treatment 52

Care Seeking and Antibiotic Treatment of Pneumonia 55

Solid Fuel Use 57

VI. Water and Sanitation 62

Use of Improved Water Sources 62

Use of Improved Sanitation Facilities 69

Hand Washing 74

VII. Reproductive Health 80
Fertility 80
Early Childbearing 82
Antenatal Care 85
Assistance at Delivery 89
Place of Delivery 91
VIII. Child Development 94
Early Childhood Education and Learning 94
Early Childhood Development 99
IX. Literacy and Education 104
Literacy Among Young Women 104
School Readiness 104
Primary and Secondary School Participation 105
X. Child Protection 114
Child Labour 114
Child Discipline 118
Early Marriage 118
Domestic Violence 124
XI. Life Satisfaction 128
Life Satisfaction among Young Women 128
Satisfaction with Family Life 128
Satisfaction with Friendship and Satisfaction with School 128
Satisfaction with Living Environment and Satisfaction with Current Job 128
Life Overall 130
Satisfied with Income 130
Life Satisfaction and Happiness 130
Perception of a Better Life 132
XII. Appendices 136
Appendix A: Sample Design 136
Appendix B: List of Personnel Involved in the Survey 141
Appendix C: Estimates of Sampling Errors 143
Appendix D: Data Quality Tables 148
Appendix E: MICS Indicators – Numerators and Denominators 155
Appendix F: Questionnaires 160

List of Tables

Table SD.1: Distribution of enumeration divisions (EDs) by parish 20
Table HH.1: Results of household and individual interviews 26
Table HH.2: Household age distribution by sex 27
Table HH.3a: Household composition (i) 29
Table HH.3b: Household composition (ii) 30
Table HH.4: Women's background characteristics 32
Table HH.5 Children's background characteristics 33
Table NU.1: Initial breastfeeding 37
Table NU.2: Breastfeeding 38
Table NU.3: Duration of breastfeeding 40
Table NU.4: Age appropriate breastfeeding 41
Table NU.5: Introduction of solid, semi-solid or soft food 42
Table NU.6: Minimum meal frequency 43
Table NU.7: Bottle feeding 44
Table NU.8: Low birth weight infants 44
Table CH.1: Vaccinations in first year of life 48
Table CH.2: Vaccinations by background characteristics 51
Table CH.3: Neonatal tetanus protection 52
Table CH.4: Oral rehydration solutions and recommended homemade fluids 56
Table CH.5: Feeding practices during diarrhoea 57
Table CH.6: Oral rehydration therapy with continued feeding and other treatments 58
Table CH.7: Care seeking for suspected pneumonia and antibiotic use during suspected pneumonia 60
Table CH.9: Solid fuel use 62
Table CH.10: Solid fuel use by place of cooking 63
Table WS.1a: Use of improved water sources (i) 67
Table WS.1b: Use of improved water sources (ii) 68
Table WS.2: Household water treatment 70
Table WS.3: Time to source of water 71
Table WS.4: Person collecting water 73
Table WS.5: Types of sanitation facilities 75
Table WS.6: Use and sharing of sanitation facilities 76
Table WS.7: Disposal of child's faeces 78
Table WS.8: Drinking water and sanitation ladders 80
Table WS.9: Water and soap at place for hand washing 81
Table WS.10: Availability of soap 82
Table RH.1a: Fertility 86
Table RH.1b: Adolescent fertility 87
Table RH.2: Early childbearing 88
Table RH.3: Trends in early childbearing 90
Table RH.4: Antenatal care provider 92
Table RH.5: Number of antenatal care visits 93
Table RH.6: Content of antenatal care 94
Table RH.7: Assistance during delivery 97
Table RH.8: Place of delivery 99

Table CD.1: Early childhood education 102
Table CD.2: Support for learning 103
Table CD.3: Learning materials 105
Table CD.4: Inadequate care 107
Table CD.5: Early child development index 108
Table ED.1: Literacy among young women 112
Table ED.2: School readiness 113
Table ED.3: Primary school entry 114
Table ED.4: Primary school attendance 115
Table ED.5: Secondary school attendance 116
Table ED.6: Children reaching last grade of primary school 117
Table ED.7: Primary school completion and transition to secondary school 118
Table ED.8: Education gender parity 119
Table CP.1a: Child labour by type of work 123
Table CP.1b: Child labour, currently working 124
Table CP.2: Child labour and school attendance 125
Table CP.3: Child discipline 127
Table CP.4: Early marriage 130
Table CP.5a: Trends in early marriage: Percentage of women who were first married or entered into a marital union before age 15 131
Table CP.5b: Trends in early marriage: Percentage of women who were first married or entered into a marital union before age 18 132
Table CP.6: Spousal age difference 133
Table CP.7: Attitudes towards domestic violence 134
Table SW.1: Domains of life satisfaction 139
Table SW.2: Life satisfaction and happiness 141
Table SW.3: Perception of a better life 143
Table SD.2: Estimated sample sizes based on two indicators 147
Table SD.3: Allocation of Sample Clusters (Primary Sampling Units) by Parish and Area 148
Table SE.1: Sampling errors: Total sample 153
Table SE.2: Sampling errors: Kingston Metropolitan Area (KMA) 154
Table SE.3: Sampling errors: Urban Areas 155
Table SE.4: Sampling errors: Other Towns 156
Table SE.5: Sampling errors: Rural Areas 157
Table DQ.1: Age distribution of household population 158
Table DQ.2: Age distribution of eligible and interviewed women 159
Table DQ.3: Age distribution of under-5s in household and under-5 questionnaires 160
Table DQ.4: Observation of places for hand washing 160
Table DQ.5: Observation of women's health cards 161
Table DQ.6: Observation of vaccination cards 162
Table DQ.7: Presence of mother in the household and the person interviewed for the under-5 Questionnaire 162
Table DQ.8: Selection of children age 2-14 years for the child discipline module 163
Table DQ.9: School attendance by single age 164

List of Figures

Figure HH.1: Age and sex distribution of household population 28
Figure NU.1: Per cent distribution of children under age 2 by feeding pattern by age, Jamaica, 2011 39
Figure CH.1: Percentage of children aged 18-23 months who received the recommended vaccinations by 18 months, January, 2011 49
Figure CH.2: Percentage of women with a live birth in the last 12 months who are protected against neonatal tetanus, January, 2011 54

List of Abbreviations

BCG	Bacillis-Cereus-Geuerin (Tuberculosis)
CSPro	Census and Survey Processing System
DPT	Diphtheria Pertussis Tetanus
ECDI	Early Child Development Index
EPI	Expanded Programme on Immunization
GPI	Gender Parity Index
HepB	Hepatitis B
HiB	Haemophilus Influenzae
HIV	Human Immunodeficiency Virus
ILO	International Labour Organization
IQ	Intelligence Quotient
JMP	Joint Monitoring Programme
KMA	Kingston Metropolitan Area
LPG	Liquefied Petroleum Gas
MDG	Millennium Development Goals
MICS	Multiple Indicator Cluster Survey
MOH	Ministry of Health
NAR	Net Attendance Ratio
ORS	Oral Rehydration Salts
ORT	Oral Rehydration Therapy
PAHO	Pan American Health Organization
Polio	Poliomyelitis
pps	Probability Proportional to Size
PSU	Primary Sampling Unit
RHF	Recommended Home Fluid
SPSS	Statistical Package for Social Sciences
STATIN	Statistical Institute of Jamaica
STI	Sexually Transmitted Infection
UNAIDS	United Nations Programme on HIV/AIDS
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund
WFFC	World Fit For Children
WHO	World Health Organization

Acknowledgement

The Statistical Institute of Jamaica (STATIN) expresses its appreciation to UNICEF for involving the Institute in another round of the Multiple Indicators Cluster Survey (MICS). In particular we would like to acknowledge the technical assistance and guidance as well as administrative and financial support provided during this process.

We are especially thankful for the support that was provided by the other UN member organizations of the Steering Committee in particular UNAIDS, UNFPA, UNDP and UNESCO. We express our gratitude for the contributions made by the individuals who guided us in the finalization of the questionnaires and served on the Steering Committee. The organizations represented on the Steering Committee were: the Cabinet Office, Early Childhood Commission, Planning Institute of Jamaica, Caribbean Child Development Centre of the West Indies, PAHO, Child Development Agency, the Ministry of Health, the National HIV/AIDS Prevention Programme, the Ministry of Education, the ILO, Children First, the Dispute Resolution Foundation and the Jamaica Youth Advocacy and Participation Initiative. We would also like to make special mention of the personnel from the Ministry of Health, who assisted in the training of the interviewers in the health related modules of the questionnaires.

Finally, the help and assistance offered on the MICS project by the various units and divisions within STATIN are also acknowledged. These include the Surveys Division who spearheaded the project, the Corporate Services Division, the Cartography Unit, the STATIN Printing Unit, the Communications and Marketing Unit, the Information and Technology Division and the Research, Design & Evaluation Division. The Field Services Division also assisted by providing logistics support and in providing office space during the interviewing and training phases of the survey. It is with gratitude that we extend thanks and appreciation to all the individuals who have contributed in making this survey a success.

SUMMARY TABLE OF FINDINGS

MULTIPLE INDICATOR CLUSTER SURVEYS (MICS) AND MILLENNIUM DEVELOPMENT GOALS (MDG) INDICATORS, JAMAICA, 2011

Topic	MICS4 Indicator Number	MDG Indicator Number	Indicator	Value	
NUTRITITION					
Breastfeeding and infant feeding	2.4		Children ever breastfed	95.4	per cent
	2.5		Early initiation of breastfeeding	64.7	per cent
	2.6		Exclusive breastfeeding under 6 months	23.8	per cent
	2.7		Continued breastfeeding at 1 year	44.4	per cent
	2.8		Continued breastfeeding at 2 years	31.2	per cent
	2.9		Predominant breastfeeding under 6 months	42.5	per cent
	2.10		Duration of breastfeeding	12.5	Months
	2.11		Bottle feeding	69.4	per cent
	2.12		Introduction of solid, semi-solid or soft foods	54.6	per cent
	2.13		Minimum meal frequency	42.0	per cent
	2.14		Age-appropriate breastfeeding	31.2	per cent
	2.15		Milk feeding frequency for non-breastfed children	77.3	per cent
Low-birth weight	2.18		Low-birth weight infants	16.4	per cent
	2.19		Infants weighed at birth	96.5	per cent
CHILD HEALTH					
Vaccinations	3.1		Tuberculosis immunization coverage	99.5	per cent
	3.2		Polio immunization coverage	91.1	per cent
	3.3		Immunization coverage for diphtheria, pertussis and tetanus (DPT)	89.9	per cent
	3.4	*4.3*	Measles immunization coverage	91.7	per cent
	3.5		Hepatitis B immunization coverage	84.5	per cent
Tetanus toxoid	3.7		Neonatal tetanus protection	38.2	per cent
Care of illness	3.8		Oral rehydration therapy with continued feeding	43.3	per cent
	3.9		Care seeking for suspected pneumonia	82.3	per cent
	3.10		Antibiotic treatment of suspected pneumonia	58.5	per cent
Solid fuel use	3.11		Solid fuels	13.7	per cent

Topic	MICS4 Indicator Number	MDG Indicator Number	Indicator	Value	
WATER AND SANITATION					
Water and sanitation	4.1	*7.8*	Use of improved drinking water sources	94.6	per cent
	4.2		Water treatment	49.7	per cent
	4.3	*7.9*	Use of improved sanitation	86.5	per cent
	4.4		Safe disposal of child's faeces	28.2	per cent
	4.5		Place for hand washing	80.1	per cent
	4.6		Availability of soap	88.5	per cent
REPRODUCTIVE HEALTH					
Fertility	5.1	*5.4*	Adolescent Birth Rate	70	per 1000 women
	5.2		Early Childbearing	14.9	per cent
			Total Fertility Rate	2.2	Births
Maternal and newborn health		*5.5*	Antenatal care coverage		
	5.5a		At least once by skilled personnel	97.7	per cent
	5.5b		At least four times by any provider	85.6	per cent
	5.6		Content of antenatal care	97.4	per cent
	5.7	*5.2*	Skilled attendant at delivery	99.1	per cent
	5.8		Institutional deliveries	98.6	per cent
	5.9		Caesarean section	21.2	per cent
CHILD DEVELOPMENT					
Child development	6.1		Support for learning	87.6	per cent
	6.2		Father's support for learning	27.5	per cent
	6.3		Learning materials: children's books	54.7	per cent
	6.4		Learning materials: playthings	60.7	per cent
	6.5		Inadequate care	1.8	per cent
	6.6		Early child development index	89.1	per cent
	6.7		Attendance to early childhood education	91.5	per cent

Topic	MICS4 Indicator Number	MDG Indicator Number	Indicator		Value
EDUCATION					
Literacy and education	7.1	*2.3*	Literacy rate among young women	99.6	per cent
	7.2		School readiness	93.6	per cent
	7.3		Net intake rate in primary education	88.9	per cent
	7.4	*2.1*	Primary school net attendance rate (adjusted)	98.0	per cent
	7.5		Secondary school net attendance rate (adjusted)	91.5	per cent
	7.6	*2.2*	Children reaching last grade of primary	99.3	per cent
	7.7		Primary completion rate	112.3	per cent
	7.8		Transition rate to secondary school	95.0	per cent
	7.9		Gender parity index (primary school)	1.02	Ratio
	7.10		Gender parity index (secondary school)	1.02	Ratio
CHILD PROTECTION					
Child Labour	8.2		Child labour	10.6	per cent
	8.3		School attendance among child labourers	100.0	per cent
	8.4		Child labour among students	10.7	per cent
Child discipline	8.5		Violent discipline	84.5	per cent
Early marriage and polygamy	8.6		Marriage before age 15	1.1	per cent
	8.7		Marriage before age 18	8.4	per cent
	8.8		Young women age 15-19 currently married or in union	3.4	per cent
			Spousal age difference		
	8.10a		Women age 15-19	18.9	per cent
	8.10b		Women age 20-24	28.9	per cent
Domestic violence	8.14		Attitudes towards domestic violence	4.9	per cent
SUBJECTIVE WELL-BEING					
	SW1		Life Satisfaction	73.0	per cent
	SW2		Happiness	87.6	per cent
	SW3		Perception of a better life	63.7	per cent

Executive Summary

The Multiple Indicator Cluster Survey (MICS) is an international household survey programme developed by UNICEF. MICS is designed to collect statistically sound, internationally comparable estimates of key indicators that are used to assess the situation of children and women in the areas of health, education, child protection and HIV/AIDS. MICS also provides a tool to monitor the progress towards national goals and global commitments aimed at promoting the welfare of children, including the Millennium Development Goals (MDGs).

Since the inception of MICS, three survey rounds have been carried out (1995, 2000 and 2005-6). As part of the global effort to increase the availability of high quality data, UNICEF launched the 4th round of MICS surveys (MICS4) in 2009. MICS4 helps countries to capture rapid changes in key indicators as the MDG target year 2015 approaches and aims to expand the evidence-base for policies and programmes.

Jamaica participated in the second, third and this, the fourth round of the Multiple Indicator Cluster Survey in 2000, 2005 and 2011 respectively. As a signatory to the Millennium Declaration (MDG) and the World Fit for Children Declaration and Plan of Action, Jamaica participated in the MICS with the following objectives:

- To assess the situation of women and children.
- To provide data to monitor the country's progress towards the MDG and the World Fit For Children Declaration.
- To contribute to the improvement of data and monitoring systems in Jamaica and to strengthen technical expertise in the design, implementation, and analysis of such systems.
- To assist with monitoring the progress towards the GOJ-UNICEF Country Programme Action Plan.

Sample Coverage and The Characteristics of Household and Respondents

The Jamaica MICS4 was based on a nationally representative sample which was designed to provide estimates at the national and area level (i.e. urban, rural, KMA). A total of 7,289 households were selected in the sample for the Jamaica MICS4, of which 6,300 were found to be occupied. Within these occupied households, 5,960 household interviews were successfully completed yielding a household response rate of 94.6 per cent. In the 5,960 households interviewed, 18,947 household members were listed, indicating a mean household size of 3.2. Of these, 9,226 were males, and 9,721 were females. A total of 5,143 eligible women (aged 15-49 years old) were identified in these households, of which 5,032 women participated in the survey. This resulted in a response rate of 97.8 per cent for women. One thousand, six hundred and fifty-one (1,651) eligible children under-5 were identified and 1,639 questionnaires completed on their behalf, yielding a response rate of 99.3 per cent.

The majority of households were located in urban areas (55.6%) and headed by males (53.8%). Approximately 60 per cent of household heads indicated having received secondary education and close to 17 per cent having tertiary education. The data also revealed that a large percentage of women were never married or in a union (48.1%) but had given birth (65.7%), though not within the past two years (87.8%). The majority of these women had also attained secondary education (72.6%) and lived in urban

areas (58.2%). The majority of children under-5 were male (52.1%), and had mothers who were educated to the secondary level (75.3%). The data also revealed that the majority of children under-5 were located in urban areas (56.6%) and the least found in other towns (19.6%).Almost all mothers (96.5%) of children less than five years old had secondary level education.

Nutrition

Breastfeeding

Breastfeeding at birth is associated with improved child health. The survey showed 64.7 per cent of babies were breastfed for the first time within one hour of birth, while 82.5 per cent of newborns started breastfeeding within one day of birth. The proportion of newborns who received a pre-lacteal feed during the first three days after delivery was 22.0 per cent at the national level.

Low Birth Weight

Overall, 96.5 per cent of births were weighed at birth and approximately 16.4 per cent of infants were estimated to weigh less than 2500 grams at birth.

Child Health

Immunization

In Jamaica, 86.1 per cent of children had received all vaccinations at the time of the survey (excluding Hib). However, 79.8 per cent were fully vaccinated by 12 months. A higher percentage of children from rural areas had received all vaccinations (88.9%) than those from urban areas (83.8%).Vaccination cards were seen for 78 per cent of children aged 18-29 months. Almost all children (99.5%) 18-29 months received the BCG vaccine by 12 months of age. Coverage for Polio and DPT by 12 months was also above 90 per cent.

Approximately 38 per cent of women who had a live birth within the last two years were protected against tetanus. Regional distribution saw higher coverage outside the KMA (29.2%) with other towns and rural areas at 45.4 per cent and 40.5 per cent respectively. The data also revealed that the richest quintile recorded the lowest percentage of recent mothers who were protected from tetanus (29.5%) and the poorest quintile the highest 48.1%).

Children Age 0-59 Months with Diarrhoea in the Last Two Weeks

Diarrhoea is the second leading cause of death among children under five worldwide. Approximately six per cent (5.7%) of the children under age five had diarrhoea in the two weeks preceding the survey. The recommended treatment for diarrhoea in children is oral rehydration therapy (ORS packet recommended homemade fluid or increased fluids) with continued feeding. Forty-three per cent of children with diarrhoea received this treatment. This was more common in rural areas (53.2 per cent) than urban areas (35.7 per cent).

Antibiotic Treatment of Suspected Pneumonia

Five per cent (5.2 per cent) of children under age five had symptoms consistent with pneumonia during the two weeks preceding the survey. Overall, 58.5 per cent of children with suspected pneumonia received antibiotics.

Solid Fuel Use

Liquefied Petroleum Gas (LPG) was the primary fuel used for cooking, with 82.2 per cent of households mainly using this fuel. This was followed by wood (7.8%), charcoal (5.0%) and electricity (3.4%).

Water and Sanitation

Water

More than 94 per cent of households in Jamaica use an improved water source. For 86.5 per cent of households, the drinking water source was on the premises. Improved sources of drinking water include piped water, tube well/borehole, protected well or spring, or rainwater collection. Bottled water is considered as an improved water source only if the household is using an improved water source for other purposes, such as handwashing and cooking. Across wealth quintiles, poorer quintiles were less likely to have water piped into their dwellings, yards or plots than those in richer households (65.9% of households in the poorest quintile as opposed to 97.8% in the richest).In 59.6 per cent of households, an adult male was usually the person collecting the water, when the source of drinking water is not on the premises. Adult females collected water in 32.6 per cent of the cases.

Improved Sanitation Facilities

An improved sanitation facility hygienically separates human excreta from human contact. Overall, 86.5 per cent of households use an improved sanitation facility. While there was no marked difference in urban versus rural areas, it was observed that a noticeably higher proportion of urban households (91.1 per cent) had flushed toilet piped to sewer or septic tank than those in rural areas (62.4 per cent).

Safe disposal of children's faeces occurred in approximately 28 per cent of all households. This low occurrence is due to the high use of disposable diapers by caretakers which are usually disposed of in the garbage (66.5%). Whereas in the poorest quintile, 40.4 per cent of children's stool was disposed of safely, in the richest quintile, 28.1 per cent children's stool was disposed of safely.

Hand Washing with Water and/or Soap

The percentage of households who allowed the interviewer to observe the place for hand washing was 65.5 per cent. Of those observed, 80.1 per cent had both water and soap at the place for hand washing.

Reproductive Health

Early Childbearing

The data revealed that 8.9 per cent of women aged 15-19 years old had a live birth, with poorer households (11.4%) having more live births in this age group than richer households (3.7%). Less than 1 per cent have had a live birth before age 15.

Fewer than 15 per cent of women in the 20-24 years age group reported that they had a live birth before age 18. In the poorest quintile, 23.7 per cent of women between 20 and 24 years old indicated that they had a live birth before the age of 18 years. This proportion declined as wealth increased, with the richest quintile recording 2.2 per cent.

Antenatal Care

Ninety-eight per cent of women age 15-49 years with a live birth in the two years preceding the survey received antenatal care (ANC) at least once by skilled personnel and 85.6 per cent received ANC at least 4 times by any provider. Mothers from the poorest households (77.3%) are less likely than more advantageous mothers (89.3 %) to receive antenatal care four or more times. Among those women who have given birth to a child during the two years preceding the survey, 97.4 per cent reported that a blood test was taken during antenatal care visits, 98.4 per cent reported that their blood pressure was checked, and, in 98 per cent of cases, urine specimen was taken.

Assistance at Delivery

About 99.1 per cent of births occurring in the two years preceding the MICS survey were delivered by any skilled personnel: 54.3 per cent were delivered with assistance by a nurse /midwife; and doctors assisted with the delivery of 44.3 per cent of births. Some 98.6 per cent of births in Jamaica are delivered in either a public or private health facility: 90.2 per cent of deliveries occurred in public sector facilities and 8.4 per cent occurred in private sector facilities.

Among women aged 15–49 years who had a live birth in the two years preceding the survey, 21.2 per cent were delivered by C-section. Some 20.8 per cent of women in the 20-34 age groups reported a delivery by C-section, while 14.3 per cent of those less than 20 years had a C-section.

Child Development

Early Childhood Education and Learning

Among children aged 36-59 months, 91.5 per cent were attending an early childhood institution; 93.8 per cent in rural areas and 87.9 per cent in the other towns.

Young children's development in four key domains was assessed in the survey: literacy-numeracy, physical, social-emotional and learning. The Early Child Development Index (ECDI) is the percentage of children who are developmentally on track in at least three of these four domains. In Jamaica, the overall ECDI score is 89.1 per cent; with 65.5 per cent for literacy-numeracy, 98.4 per cent for physical, 78.5 per cent for social-emotional and 97.2 per cent for learning. In each individual domain, the higher score is associated with children living in the richest households, with children attending preschool, older children, and among girls.

The ECDI was lower for boys (85.9%) than girls (93.0%). Higher ECDI is seen in children attending pre-school (90.2% compared with 77.8% for those who are not attending pre-school). Children living in poorest households have lower ECDI (79.1%) compared with children living in richest households (97.1%).

FATHER'S ENGAGEMENT IN ACTIVITIES

In Jamaica, 57.8 per cent of the children aged 36-59 months were not living with their natural fathers. On average, 27.5 per cent of fathers were engaged in one or more activities with their children in the 36-59 months age group. There was an upward trend in the proportion of fathers who engaged their 36-59 month old children, with 15.5 per cent in the poorest quintile and 46.3 per cent in the richest. The average number of activities which the father engaged in with the child was 1.0, compared with 5.3 for any adult household member.

Only 54.7 per cent of children under-5 years were living in households where at least 3 children's books were present; but this figure fell to 30.4 per cent for 10 or more children's books. The data shows that 27.2 per cent of children aged 0-23 months had 3 or more children's books, while 72.7 per cent of children aged 24-59 months had 3 or more children's books.

Some 60.7 per cent of children aged 0-59 months had 2 or more play things in their homes. The proportion of children who played with household objects or objects found outside was 59.7 per cent.

Literacy and Education

LITERACY AMONG YOUNG WOMEN

Literacy was assessed on the ability of women, aged 15- 24 years, to read a short simple statement or on school attendance i.e. young women who completed grade nine or higher in secondary school were assumed to be literate. Women who could not read the sentence at all were classified as illiterate. 94.4 per cent of the young women 15-24 years were found to be literate, based on these criteria.

SCHOOL READINESS

Overall, 93.6 per cent of children who are currently attending the first grade of primary school attended pre-school the previous year. The proportion among males (94.6%) is slightly higher than females (92.4%).

SCHOOL ATTENDANCE

The net attendance ratio in Jamaica is high for both the primary and secondary level. Ninety-eight per cent of children of primary school age are attending primary school and 91.5 per cent of children of secondary school age are attending secondary school. The data revealed that there was a small gender disparity in primary and secondary school attendance; the Gender Parity Index (GPI) is 1.02 for both levels.

The net intake rate for primary schools refers to the proportion of children of primary school entry age entering grade 1. Age 6 is the official school starting age in Jamaica. The net intake rate for primary school was 88.9 per cent. A higher proportion of females (91.7%) than males (86.5%) attended at this level. The survival rate to grade six was 99.3 per cent, indicating that almost all children who enter grade 1 continue their education to grade 6.The transition rate to secondary school however declines to 95.0 per cent, indicating that only 95 per cent of children who complete primary school go on to secondary school. The transition rate to secondary school is higher among males (98.2%) than females (91.6%).

Secondary school net attendance ratio: 91.5 per cent of children of secondary school age were attending school. Females (92.3%) had a higher attendance rate than their male counterparts (90.8%).Attendance rate is lowest at age 12 years (77.8%) and highest at age 14 years (98.6%).

Net attendance rate: At the primary level, the adjusted net attendance rate (NAR) for girls is marginally higher (at 98.7) than for boys (97.2).

Child Protection

Child Labour

Children in the age group 5 -11 years are considered to be engaged in child labour if they were involved in economic activities for one or more hours per week or did household chores for 28 or more hours per week. Children aged 12 - 14 years are considered to be engaged in child labour if they were involved in economic activities for 14 or more hours or did household chores for 28 or more hours. In Jamaica, 10.6 per cent of children between the age of 5 and 14 years were engaged in child labour. The highest percentage (12.2%) was in the rural area, while in urban areas, the percentage was below the national average at 9.1 per cent. More children in the younger age group 5-11 years (15.2%) were involved in child labour than the age group 12-14 years (0.3%).The majority of the child labourers age 5-11 were involved in economic activity for at least one hour in the week prior to the survey. Nevertheless all of the children involved in child labour activities were also attending school.

Violent Discipline

Overall, 84.5 per cent of children age 2-14 years experienced some form of violent discipline, which includes both psychological aggression and physical punishment. Comparing the findings for girls and boys, a slightly higher percentage of boys (86.2%) experienced violent discipline when compared with girls (82.1%).

Children from poorer households were more likely to have experienced some form of violent discipline. The data showed that 90.1 per cent of children in the poorest quintile compared to 75.9 per cent of children in the richest quintile were subjected to violent disciple.

In Jamaica, 71.9 per cent of children age 2-14 years were subjected to at least one form of psychological or physical punishment by their mothers/caretakers or other household members. While only 27.0 per cent of mothers/caretakers believed that children need to be physically punished, the percentage of children who were subjected to physical punishment more than doubled this rate (68.4%) and only 5.7 per cent were subjected to severe physical punishment. This perception was more prevalent in the poorest two quintiles (poorest - 32.8%; second - 29.7%), than the richest two wealth quintiles (fourth - 25.7%; wealthiest - 17.7%). Male children were more likely to be subjected to both “any physical punishment” and “severe physical punishment” (71.4 and 6.7%) than female children (65.2 and 4.7%).

Early Marriage

In Jamaica, 8.4 per cent of women aged 20-49 years were first married or in union (living together with a man as if married) before the age of 18 years. This practice was more prevalent in poorer households; where 15.1 per cent of women from the poorest households were married before age 18, compared to 3.6 per cent of women from the richest households.

Women who were married or in a union before age 15 years was 1.1 per cent. The percentage of women 15-19 years currently married/ in union is 3.4 per cent.

Domestic Violence

Overall, 4.9 per cent of women in Jamaica feel that their husband/partner has a right to hit or beat them for at least one of a variety of reasons. These women in most cases agree and justify violence in instances when they neglect the children (4.0%), or if they demonstrate their autonomy, e.g. go out without telling their husbands (0.4%) or argue with them (0.9%).

Life Satisfaction

Satisfaction with Family Life

Overall, 92.1 per cent of young women aged 15-24 years were very satisfied or somewhat satisfied with family life. Women in the age group 15-19 years had a higher percentage (94.2%) than those in the 20-24 years age group (89.5%).

Satisfaction with Friendship and Satisfaction with School

The proportion of young women (15-24 years) who were very satisfied or somewhat satisfied with friendship or school in Jamaica was 92.9 per cent and 91.5 per cent, respectively.

Satisfaction with Living Environment and Satisfaction with Current Job

Approximately 83 per cent of women aged 15-24 years were very satisfied or somewhat satisfied with their living environment, while 81 per cent were very satisfied or somewhat satisfied with their current job.

Life Overall

Some ninety-one per cent of women aged 15-24 who responded to the life satisfaction question say they were satisfied with life overall. However, those in the sub-group 15-19 years had a higher percentage (92.4%) than those in the 20-24 age group (88.3%).

Satisfied with Income

The proportion of women aged 15-24 years who were very satisfied or somewhat satisfied with their income was 63.7 per cent, nationally. Also in the 15-24 age group, ever married/in union women had a higher level of satisfaction with their current income (65.8%) than those never married/in union (62.8%). Approximately 74 per cent of these young women did not have any income.

Life Satisfaction and Happiness

Overall, 73 per cent of women had life satisfaction Eighty seven point six (87.6), per cent of women were happy or very happy; with women age 15-19 being more happy (90.5%) than women age 20-24 (84.0%).

Perception of a better life

Some 65 per cent of women in the age group 15-24 years were of the opinion that their life improved over the last one year. The proportion of young women (15-24 years) who believed that their life will get better after one year was 94.7 per cent.

1. Introduction

I. Introduction

BACKGROUND

This report is based on the Jamaica Multiple Indicator Cluster Survey, conducted in 2011 by the Statistical Institute of Jamaica (STATIN). The survey provides valuable information on the situation of children and women in Jamaica, and was based, in large part, on the needs to monitor progress towards goals and targets emanating from recent international agreements: the Millennium Declaration, adopted by all 191 United Nations Member States in September 2000, and the Plan of Action of A World Fit For Children, adopted by 189 Member States at the United Nations Special Session on Children in May 2002. Both of these commitments build upon promises made by the international community at the 1990 World Summit for Children.

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

A Commitment to Action: National and International Reporting Responsibilities

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

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

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

The Plan of Action (paragraph 61) also calls for the specific involvement of UNICEF in the preparation of periodic progress reports: *"… As the world's lead agency for children, the United Nations Children's Fund is requested to continue to prepare and disseminate, in close collaboration with Governments, relevant funds, programmes and the specialized agencies of the United Nations system, and all other relevant actors, as appropriate, information on the progress made in the implementation of the Declaration and the Plan of Action."*

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

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

The Government of Jamaica (GoJ) continues to demonstrate its commitment under the Millennium Declaration and the World Fit for Children Declaration and Plan of Action to which it is a signatory. In partnership with agencies such as UNICEF, Jamaica has made progress towards achieving the goals set under these international treaties.

The primary goal of the Government of Jamaica/UNICEF Country Programme 2007-2011 was to contribute to the realization of children's rights to survival, development, protection and participation through the nurturing of an enabling and protective environment. This Country Programme allowed for the strengthening of frameworks for policy, legislation, monitoring, knowledge generation and institutions. The following are some of the outcomes of the 2007-2011 GOJ/UNICEF Country Programme: monitoring, knowledge generation and institutions, as exemplified in: (a) the development and implementation of the National Strategic Plan for Safe Motherhood and the National Strategic Plan for HIV/AIDS 2007-2012, which for the first time included orphans and children made vulnerable by HIV; (b) the development of the National Parenting Policy and National Safe Schools Policy; (c) the development of the National Strategic Plan for Pre-adolescent and Adolescent Health, which is the first such planning tool in the English-speaking Caribbean; (d) the establishment and operationalization of the Office of the Children's Registry, an organization which receives reports on child abuse and makes appropriate referrals; (e) the institutionalization of JamStats (the Jamaican DevInfo adaptation) and the use of DevInfo in data management by planning experts, other professionals and students; (f) the development and annual organization of the Caribbean Child Research Conference, which has strengthened links among academicians, professionals and practitioners, policy-makers and students, facilitated the exchange of information and best practices and engaged the meaningful participation of children; and (g) the development of a standardized framework for training and certification of early childhood practitioners and community health workers for the benefit of children aged 0-6.

The GOJ/UNICEF Country Programme for the period 2012-2016, continues to builds upon results achieved during previous programmes of cooperation. This country programme will support national efforts towards social inclusion of vulnerable and marginalized families and children, especially those living in poor rural communities, as well as boys and girls affected by violence and crime and other children whose rights are systematically violated. It will contribute towards improved fulfilment of children's rights to survival, development, protection and participation in Jamaica.

The main findings of the MICS4 will complement other baseline data and will be used to monitor the progress to achieving the planned results of the GOJ/UNICEF Country Programme as well as the MDGs, the Millennium Declaration, and the outcomes of A World Fit for Children (WFFC).

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

SURVEY OBJECTIVES

The 2011 Jamaica Multiple Indicator Cluster Survey has as its primary objectives:

- To provide up-to-date information for assessing the situation of children and women in Jamaica;
- To furnish data needed for monitoring progress toward goals established in the Millennium Declaration and other internationally agreed upon goals, as a basis for future action;
- To contribute to the improvement of data and monitoring systems in Jamaica and to strengthen technical expertise in the design, implementation, and analysis of such systems.
- To generate data on the situation of children and women, including the identification of vulnerable groups and of disparities, to inform policies and interventions.

II.

Sample and Survey Methodology

II. Sample And Survey Methodology

The sample for the Jamaica Multiple Indicator Cluster Survey (MICS) was designed to provide estimates for a large number of indicators on the situation of children and women at the national level, and for three regions of Jamaica: (a) the Kingston Metropolitan Area (KMA), comprising the whole of Kingston, St. Andrew urban, Spanish Town, and Portmore; (b) other towns; and (c) rural areas. The urban and rural areas within each parish were identified as the main sampling strata and the sample was selected in two stages. A sub-sample of the Jamaica master sample of enumeration districts (EDs), based on the 2001 Jamaica Census frame was selected systematically with probability proportional to size within each stratum. A total of 360 sample EDs were selected for the Jamaica MICS4.After a household listing was carried out within the sample EDs, a systematic sample of 20 households was selected in each ED, for a total sample size of 7200 households. The sample is not self-weighting. For reporting all survey results, sample weights are used. A more detailed description of the sample design and weighting procedures can be found in Appendix A.

TABLE SD.1: DISTRIBUTION OF ENUMERATION DIVISIONS (EDS) BY PARISH

Parish	Greater KMA	Other Urban Areas	Rural	Total
Kingston	14	-	-	**14**
St Andrew	66	-	6	**72**
St Thomas	-	4	8	**12**
Portland	-	2	8	**10**
St Mary	-	6	8	**14**
St Ann	-	6	14	**20**
Trelawny	-	4	6	**10**
St James	-	22	8	**30**
Hanover	-	2	8	**10**
Westmoreland	-	6	14	**20**
St Elizabeth	-	4	14	**18**
Manchester	-	14	14	**28**
Clarendon	-	18	16	**34**
St Catherine	40	12	16	**68**
Total	**120**	**100**	**140**	**360**

Questionnaires

MICS uses three questionnaires; 1) a household questionnaire which was used to collect information on all de jure household members (usual residents), the household, and the dwelling; 2) a women's questionnaire administered in each household to all women age 15-49 years; and 3) an under-5 questionnaire, administered to mothers or caretakers for all children under 5 living in the household . The modules included were first decided on by the Technical Committee from STATIN. These were later presented to the Steering Committee for approval. The questionnaires were further refined based on the results of the pre-test and again submitted to and approved by the Steering Committee. The final version of the questionnaires included and excluded the modules listed below.

Modules Included	Modules Excluded
Household Questionnaire	
Household Listing Form	
Education	
Water and Sanitation	Insecticide Treated Nets
Household Characteristics	Indoor Residual Spraying
Child Labour	Salt Iodization
Child Discipline	
Hand Washing	
Woman's Questionnaire	
Woman's Background	Female Genital Mutilation/Cutting (Not relevant)
Child Mortality (Part of module)	Sexual Behaviour(Covered in 2009 RHS)
Desire for Last Birth	HIV/AIDS(Covered in 2009 RHS)
Maternal and Newborn Health	Illness symptoms
Attitude towards Domestic Violence	Contraception (Covered in 2009 RHS)
Marriage and Union	Unmet need (Covered in 2009 RHS)
Life Satisfaction/Youth	
Under-Five Questionnaire	
Age	Malaria (Not relevant)
Early Child Development	Vitamin A (Not relevant)
Breastfeeding	Birth Registration (Covered in 2008 JSLC)
Care of illness	Anthropometry (Covered in 2008 JSLC)
Immunization	

[1] The terms "children under 5", "children age 0-4 years", and "children age 0-59 months" are used interchangeably in this report.

[2] The model MICS4 questionnaires can be found at www.childinfo.org/mics4_questionnaire.html

Recruitment and Training of Field Staff

Recruitment

Fieldwork staff was selected from a cadre of existing personnel strategically located across the island. These represent persons who have had experience working on previous household surveys including MICS3.The supervisors were chosen from the participants being trained, based on their mastery of the training content and their demonstrated administrative capabilities and good interpersonal skills.

Training of Field Staff

In order to standardize the training for the main survey, a training of trainers was first conducted. These trainers were then deployed to train the prospective interviewers and supervisors at four locations during the period December 6 – 14, 2010. The four training locations were in Kingston, Linstead, Mandeville and Savanna-la-Mar. The class sizes varied between 20 to 30 trainees, based on the number of participants.

Training included lectures on interviewing techniques and the content and concepts of the questionnaires and mock interviews between trainees and persons who volunteered their time so that good practice was obtained in asking the relevant questions. A test was administered at the end of the training session, and based on the test results and the trainees' participation, 18 supervisors and 73 interviewers were selected.

Training of Field Supervisors

The selected supervisors participated in an additional one day training on December 22, 2010 in order to make them aware of the task at hand, what is expected and how they were expected to carry out their duties and responsibilities.

Fieldwork

Interviewing started on January 3, 2011, and ended on March 15, 2011. A total 5,960 household questionnaires, 5,032 individual women and 1,639 children under-five questionnaires was completed. There were, however, some problems during the period of the fieldwork, e.g.

- Violence in sections of St James and Westmoreland.
- Some upper income areas with gated communities did not grant access to interviewers.

Data Processing

The MICS4 data processing system was designed to deliver the first results of the survey within a few weeks of the completion of the field work, since the data was processed in tandem with the fieldwork.

The questionnaires from the field were first manually edited/coded by four clerks who, based on predetermined standards, checked the questionnaires for completeness and thoroughness and, where necessary, inserted codes.

After this process was completed, the questionnaires were sent to the data processing unit where the information was transferred to microcomputers by four data entry operators, supervised by two programmers using the software package CSPro. This process was started on January 31, 2011 and

ended on April 4, 2011. In order to ensure accuracy and minimize data entry errors, the questionnaires were entered separately by two data clerks and the programme highlighted any inconsistency in the data entered. These inconsistencies were eliminated by checking with the original questionnaire and the clerk whose data was incorrect made the necessary correction(s). This process continued until both sets of data were identical. Internal consistency checks were then followed to ensure that the quality of the data was maintained. Data were analysed using the Statistical Package for Social Sciences (SPSS) software program, Version 18, and the model syntax and tabulation plans developed by UNICEF were used for this purpose.

III.

Sample Coverage and Characteristics of Households and Respondents

III. Sample Coverage And The Characteristics Of Households And Respondents

SAMPLE COVERAGE

Of the 7,289 households selected for the sample, 6,300 were found to be occupied. Of these, 5,960 were successfully interviewed yielding a household response rate of 94.6 per cent. In the interviewed households, 5,143 women (age 15-49 years) were identified. Of these 5,032 were successfully interviewed, yielding a response rate of 97.8 per cent. In addition, 1,651 children under age five were listed in the household questionnaire. Questionnaires were completed for 1,639 of these children, which corresponds to a response rate of 99.3 per cent. Overall response rates of 92.6 and 93.9 were calculated for the women's and under-5's interviews respectively (Table HH1).

TABLE HH.1: RESULTS OF HOUSEHOLD, WOMEN'S AND UNDER-FIVE INTERVIEWS
NUMBER OF HOUSEHOLDS, WOMEN AND CHILDREN UNDER 5 BY RESULTS OF THE HOUSEHOLD, WOMEN'S AND UNDER-FIVE'S INTERVIEWS, AND HOUSEHOLD, WOMEN'S AND UNDER-FIVE'S RESPONSE RATES, JAMAICA, 2011

	Region			Area		Total
	KMA	Other towns	Rural	Urban	Rural	
Households Sampled	2,452	2,013	2,824	4,465	2,824	7,289
Households Occupied	2,090	1,762	2,448	3,852	2,448	6,300
Households Interviewed	1,963	1,657	2,340	3,620	2,340	5,960
Household Response Rate	93.9	94.0	95.6	94.0	95.6	94.6
Women Eligible	1,817	1,405	1,921	3,222	1,921	5,143
Women Interviewed	1,782	1,372	1,878	3,154	1,878	5,032
Women Response Rate	98.1	97.7	97.8	97.9	97.8	97.8
Women's Overall Response Rate	92.1	91.8	93.4	92.0	93.4	92.6
Children under 5 Eligible	520	464	667	984	667	1,651
Children under 5 Mother/Caretaker Interviewed	517	458	664	975	664	1,639
Child Response Rate	99.4	98.7	99.6	99.1	99.6	99.3
Children's Overall Response Rate	93.4	92.8	95.2	93.1	95.2	93.9

The overall response rates were greater than 90% in all three areas, with the Rural Areas recording higher rates than the Kingston Metropolitan Area and Other Towns.

CHARACTERISTICS OF HOUSEHOLDS

The weighted age and sex distribution of survey population is provided in Table HH.2.The distribution is also used to produce the population pyramid in Figure HH.1. In the 5,960 households successfully interviewed in the survey, 18,947 household members were listed. Of these, 9,226 were males, and 9,721 were females.

TABLE HH.2: HOUSEHOLD AGE DISTRIBUTION BY SEX

PER CENT AND FREQUENCY DISTRIBUTION OF THE HOUSEHOLD POPULATION BY FIVE-YEAR AGE GROUPS, DEPENDENCY AGE GROUPS, BY CHILD (AGE 0-17 YEARS) AND ADULT POPULATIONS (AGE 18 OR MORE), BY SEX, JAMAICA, 2011

	Males		Females		Total	
	Number	Per cent	Number	Per cent	Number	Per cent
Age						
0-4	826	9.0	750	7.7	1,576	8.3
5-9	849	9.2	878	9.0	1,726	9.1
10-14	948	10.3	981	10.1	1,929	10.2
15-19	946	10.3	910	9.4	1,856	9.8
20-24	708	7.7	738	7.6	1,447	7.6
25-29	642	7.0	736	7.6	1,378	7.3
30-34	543	5.9	671	6.9	1,215	6.4
35-39	636	6.9	746	7.7	1,382	7.3
40-44	590	6.4	707	7.3	1,297	6.8
45-49	578	6.3	591	6.1	1,169	6.2
50-54	452	4.9	497	5.1	949	5.0
55-59	378	4.1	330	3.4	708	3.7
60-64	293	3.2	270	2.8	563	3.0
65-69	205	2.2	238	2.4	443	2.3
70-74	190	2.1	213	2.2	402	2.1
75-79	172	1.9	189	1.9	361	1.9
80-84	106	1.2	125	1.3	231	1.2
85+	70	0.8	126	1.3	197	1.0
Missing/DK	92	1.0	25	0.3	117	0.6
Dependency Age Groups						
0-14	2,623	28.4	2,609	26.8	5,232	27.6
15-64	5,768	62.5	6,196	63.7	11,964	63.1
65+	743	8.1	891	9.2	1,634	8.6
Missing/DK	92	1.0	25	0.3	117	0.6
Children and Adult Populations						
Children age 0-17 years	3,230	35.0	3,188	32.8	6,418	33.9
Adults age 18+ years	5,904	64.0	6,507	66.9	12,412	65.5
Missing/DK	92	1.0	25	0.3	117	0.6
Total	**9,226**	**100.0**	**9,721**	**100.0**	**18,947**	**100.0**

Table HH.2 shows the male/female difference across various characteristics. There are more males in certain categories, most notably in the 0-4 and, 15-19 age groups and in the dependency age (0-14) and child population (children age 0-17). A population pyramid of the number of males and females in each age group is presented in Figure HH.1

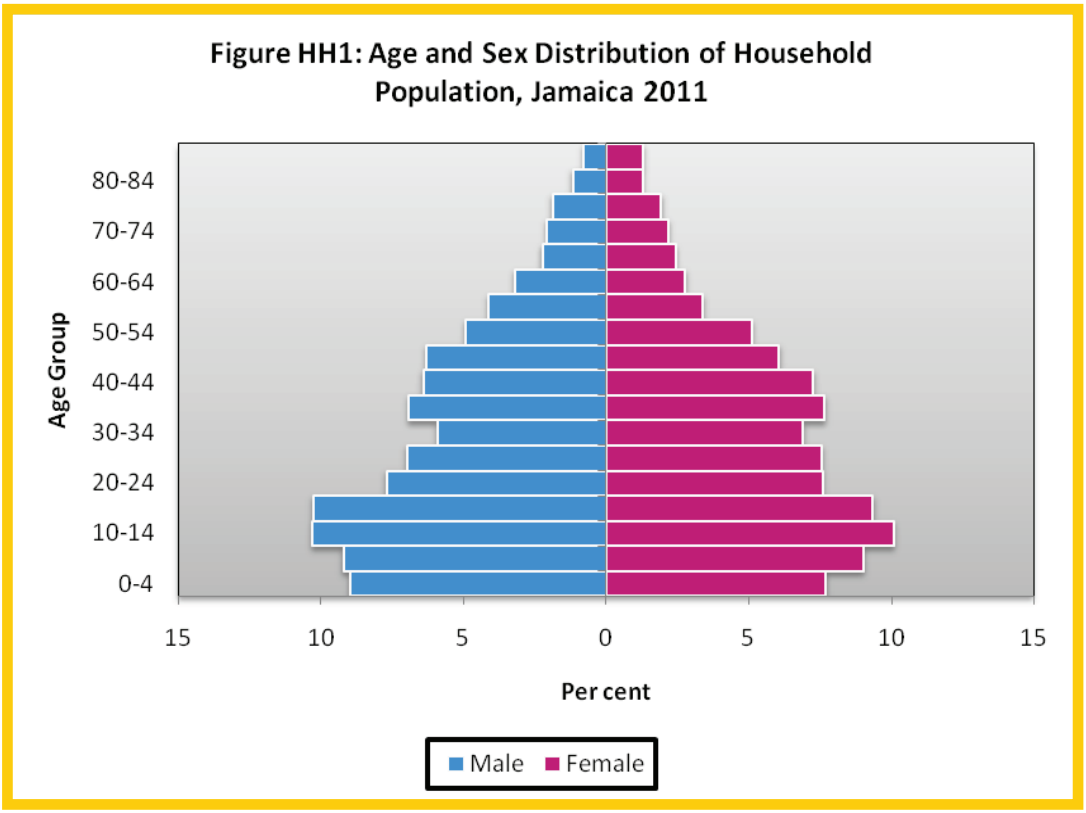


Table HH.3 - HH.5 provide basic information on the households, female respondents age 15-49, and children under-5 by presenting the unweighted, as well as the weighted numbers. Information on the basic characteristics of households, women and children under-5 interviewed in the survey was essential for the interpretation of findings presented later in the report and also can provide an indication of the representativeness of the survey. The remaining tables in this report are presented only with weighted numbers. See Appendix A for more details about weighting.

Table HH.3a provides basic background information on the households. Within households, the sex of the household head, area and education of the household head are shown in the table. These background characteristics are used in subsequent tables in this report; the figures in the table are also intended to show the numbers of observations by major categories of analysis in the report.

TABLE HH.3A: HOUSEHOLD COMPOSITION
PER CENT DISTRIBUTION OF HOUSEHOLDS BY SELECTED CHARACTERISTICS, JAMAICA, 2011

	Weighted per cent	Number of households weighted	Number of households unweighted
Sex of Household Head			
Male	53.8	3,209	3,186
Female	46.2	2,751	2,774
Area			
Urban			
KMA	35.0	2,084	1,963
Other towns	20.7	1,232	1,657
Urban total	***55.6***	***3,316***	***3,620***
Rural	44.4	2,644	2,340
Number of Household Members			
1	25.2	1,504	1,474
2	19.2	1,144	1,137
3	18.0	1,076	1,050
4	16.0	956	928
5	9.3	553	596
6	5.2	309	339
7	3.1	183	186
8	1.9	115	119
9	0.6	39	47
10+	1.3	80	84
Education of household head			
None/Primary	21.5	1,281	1,292
Secondary	60.2	3,589	3,660
Tertiary	16.9	1,005	919
Missing/DK	1.4	85	89
Total	**100**	**5,960**	**5,960**

The weighted and unweighted numbers of households are equal, since sample weights were normalized (See Appendix A). The table shows the proportions of households with at least one child under 18, at least one child under 5, and at least one eligible woman age 15-49. The weighted average household size estimated by the survey is also shown in the table.

The Table (HH.3a) shows that there were more male-headed households, recording a little over a half (53.8%) of the total composition. Additionally, most of the respondents were found in urban areas (55.6%). Note that within the households, a substantial percentage (25.2%) stated that their households comprised only one (1) person. The figures for the number of household members declined at higher orders indicating that larger households are relatively rare.

Another key finding was that approximately 60.2 per cent of household heads indicated having received secondary education and close to 16.9 per cent have tertiary education.

As shown in Table HH.3b, the mean household size is 3.2; but households with at least one child age 0-4 years is 21.8 per cent; 52.3 per cent of households have at least one child age 0-17 years, and for households with at least one woman age 15-49 years it is 59.8 per cent.

TABLE HH.3B: HOUSEHOLD COMPOSITION

PER CENT DISTRIBUTION OF HOUSEHOLDS BY SELECTED CHARACTERISTICS, JAMAICA, 2011

	Weighted per cent	Number of households weighted	Number of households unweighted
At least one child age 0-4 years	21.8	5,960	5,960
At least one child age 0-17 years	52.3	5,960	5,960
At least one woman age 15-49 years	59.8	5,960	5,960
Mean household size	3.2	5,960	5,960

CHARACTERISTICS OF FEMALE RESPONDENTS 15-49 YEARS OF AGE AND CHILDREN UNDER-5

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

Table HH.4 provides background characteristics of female respondents 15-49 years of age. The table includes information on the distribution of women according to area, age, marital status, motherhood status, births in the last two years, education[3] and wealth index quintiles[4]. The majority of women (58.2%) resided in the urban areas. There was a fairly even distribution across the age groups with the highest (17.8%) found in the 15-19 age group and the lowest (11.7%) in the 45-49 age group.

The marital/union status shows that approximately 48.1 per cent of women have never been married or in a union. However, over a half (65.7%) of all the female respondents had ever given birth to a child, but

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

[4] Principal components analysis was 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 assign weights (factor scores) to each of the household assets. Each household was then assigned a wealth score based on these weights and the assets owned by that household. The survey household population was then ranked according to the wealth score of the household they are living in, and was finally divided into 5 equal parts (quintiles) from lowest (poorest) to highest (richest). The assets used in these calculations were as follows: radio, TV, non-mobile telephone, fridge, chair, table, sofa, cabinet, bed, stove, microwave, Air Conditioner, fan, washing machine, clothes dryer, dishwasher, water heater, watch, bike, mobile telephone, car, motor cycle or scooter, cart, boat, and ownership of dwelling, agricultural land, livestock, and bank accounts. The wealth index is assumed to capture the underlying long-term wealth through information on the household assets, and is intended to produce a ranking of households by wealth, from poorest to richest. The wealth index does not provide information on absolute poverty, current income or expenditure levels. The wealth scores calculated are applicable for only the particular data set they are based on. Further information on the construction of the wealth index can be found in Rutstein and Johnson, 2004, Filmer and Pritchett, 2001, and Gwatkinet. Al., 2000.

within the last two (2) years, approximately 87.8 per cent have not given birth to a child. It is noteworthy that the majority of women, 72.6 per cent, received a secondary education and 25.6 per cent received a tertiary education. Wealth is fairly even across the groups with the fewest women (16.5%) in the households of the poorest wealth quintile.

TABLE HH.4: WOMEN'S BACKGROUND CHARACTERISTICS
PER CENT AND FREQUENCY DISTRIBUTION OF WOMEN AGE 15-49 YEARS BY BACKGROUND CHARACTERISTICS, JAMAICA, 2011

	Weighted per cent	Number of women weighted	Number of women unweighted
Area			
Urban			
KMA	37.7	1,899	1,782
Other towns	20.5	1,030	1,372
Urban total	***58.2***	***2,928***	***3,154***
Rural	41.8	2,104	1,878
Age			
15-19	17.8	894	915
20-24	14.5	732	753
25-29	14.5	728	722
30-34	13.1	659	682
35-39	14.5	732	706
40-44	13.9	698	659
45-49	11.7	589	595
Marital/ Union Status			
Currently married/in union*	34.7	1,744	1,739
Widowed	0.5	26	34
Divorced	1.0	52	48
Separated	15.7	790	813
Never married/in union*	48.1	2,420	2,398
Motherhood Status			
Ever gave birth	65.7	3,306	3,337
Never gave birth	34.3	1,726	1,695
Birth in the last two years			
Had a birth in last two years	12.2	614	630
Had no birth in last two years	87.8	4,418	4,402
Education			
None/Primary	1.8	90	91
Secondary	72.6	3,652	3,718
Tertiary	25.6	1,290	1,223
Wealth Index Quintiles			
Poorest	16.5	832	858
Second	20.6	1,038	1,028
Middle	20.5	1,029	1,043
Fourth	21.1	1,064	1,102
Richest	21.2	1,069	1,001
Total	**100.0**	**5,032**	**5,032**

*Union refers to married or living with a partner as if married

Some background characteristics of children under 5 are presented in Table HH.5. These include the distribution of children by several attributes: sex, area, age, mother's or caretaker's education and wealth of the household. Table HH.5 shows marginally more males (52.1%) than females (47.9%). The majority of children under-5 were located in urban areas (56.6%) of which, 37.0 per cent were from the KMA and 19.6 per cent from other towns. By age, the highest proportion of children under-5 years old were from the 48-59 months age group (22.8%) and the lowest (9.8%) in the 6-11 months age group.

TABLE HH.5: UNDER-5'S BACKGROUND CHARACTERISTICS
PER CENT AND FREQUENCY DISTRIBUTION OF CHILDREN UNDER FIVE YEARS OF AGE
BY SELECTED CHARACTERISTICS, JAMAICA, 2011

	Weighted Percent	Number of Children	
		Weighted	Unweighted
Sex			
Male	52.1	854	861
Female	47.9	785	778
Area			
Urban			
KMA	37.0	606	517
Other towns	19.6	321	458
Urban total	***56.6***	***927***	***975***
Rural	43.4	712	664
Age			
0-5	10.3	168	167
6-11	9.8	160	161
12-23	19.6	321	315
24-35	20.0	327	325
36-47	17.6	289	304
48-59	22.8	373	367
Mother's Education			
None/Primary	2.9	47	58
Secondary	75.3	1,235	1,243
Tertiary	21.7	356	337
Missing/DK	0.0	0	1
Wealth Index Quintiles			
Poorest	21.8	358	387
Second	24.2	396	379
Middle	21.5	352	351
Fourth	16.7	274	287
Richest	15.9	260	235
Total	**100.0**	**1,639**	**1,639**

Additionally, in terms of household wealth, the poorer quintiles had more children under-5 (poorest – 21.8% and second - 24.2%) than those in richer quintiles (fourth - 16.7% and richest - 15.9%).

IV.

Nutrition

IV. Nutrition

Nutritional Status

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

Malnutrition is associated with more than half of all child deaths worldwide. Undernourished children are more likely to die from common childhood ailments, and for those who survive, have recurring sicknesses and faltering growth. Three-quarters of the children who die from causes related to malnutrition were only mildly or moderately malnourished – showing no outward sign of their vulnerability. The Millennium Development target is to reduce by half the proportion of people who suffer from hunger between 1990 and 2015. A reduction in the prevalence of malnutrition will also assist in the goal to reduce child mortality.

Breastfeeding and Infant and Young Child Feeding

Breastfeeding for the first few years of life protects children from infection, provides an ideal source of nutrients, and is economical and safe. However, many mothers stop breastfeeding too soon and there are often pressures to switch to infant formula, which can contribute to growth faltering and micronutrient malnutrition and is unsafe if clean water is not readily available.

WHO/UNICEF have the following feeding recommendations:

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

It is also recommended that breastfeeding be initiated within one hour of birth.

The indicators related to recommended child feeding practices are as follows:

- Early initiation of breastfeeding (within 1 hour of birth)
- Exclusive breastfeeding rate (< 6 months)
- Predominant breastfeeding (< 6 months)
- Continued breastfeeding rate (at 1 year and at 2 years)
- Duration of breastfeeding
- Age-appropriate breastfeeding (0-23 months)
- Introduction of solid, semi-solid and soft foods (6-8 months)
- Minimum meal frequency (6-23 months)
- Milk feeding frequency for non-breastfeeding children (6-23 months)
- Bottle feeding (0-23 months)

TABLE NU.1: INITIAL BREASTFEEDING

PERCENTAGE OF LAST-BORN CHILDREN IN THE 2 YEARS PRECEDING THE SURVEY WHO WERE EVER BREASTFED, PERCENTAGE WHO WERE BREASTFED WITHIN ONE HOUR OF BIRTH AND WITHIN ONE DAY OF BIRTH, AND PERCENTAGE WHO RECEIVED A PRELACTEAL FEED, JAMAICA, 2011

	Percentage ever breastfed [1]	Percentage who were first breastfed: Within one hour of birth [2]	Percentage who were first breastfed: Within one day of birth	Percentage who received a prelacteal feed	Number of last-born children in the two years preceding the survey
Area					
Urban					
KMA	96.7	66.5	82.6	20.3	187
Other towns	96.0	58.7	84.2	24.6	151
Urban total	***96.4***	***63.0***	***83.3***	***22.2***	***338***
Rural	94.2	66.8	81.5	21.8	276
Months Since Last Birth					
0-11 months	96.0	64.2	83.8	23.1	306
12-23 months	94.6	66.1	80.4	20.8	293
Assistance at Delivery					
Skilled attendant	95.4	65.0	82.5	22.0	608
Traditional birth attendant	(*)	(*)	(*)	(*)	1
Other	(*)	(*)	(*)	(*)	3
Missing	(*)	(*)	(*)	(*)	2
Place of Delivery					
Public sector health facility	95.1	64.9	82.3	21.1	554
Private sector health facility	(98.8)	(66.2)	(85.4)	(33.5)	51
Home	(*)	(*)	(*)	(*)	7
Other/Missing	(*)	(*)	(*)	(*)	2
Mother's Education					
None/Primary	(*)	(*)	(*)	(*)	9
Secondary	94.8	67.1	82.2	19.9	474
Tertiary	98.1	55.2	83.3	30.1	131
Wealth Index Quintiles					
Poorest	96.1	67.2	88.3	18.1	145
Second	91.1	67.0	75.7	17.9	146
Middle	97.7	64.9	84.8	26.8	131
Fourth	96.0	55.1	78.3	22.0	98
Richest	97.1	67.2	85.4	27.8	94
Total	95.4	64.7	82.5	22.0	614

[1] MICS indicator 2.4
[2] MICS indicator 2.5
(*) Figures that are based on less than 25 unweighted cases

Table NU.1 provides the proportion of children born in the last two years who were ever breastfed, those who were first breastfed within one hour and one day of birth, and those who received a prelacteal feed. Although a very important step in management of lactation and establishment of a physical and emotional relationship between the baby and the mother, only 64.7 per cent of babies were breastfed for the first time within one hour of birth, while 82.5 per cent of newborns in Jamaica start breastfeeding within one

day of birth. The proportion of newborns who received a prelacteal feed during the first three days after delivery was 22.0 per cent at the national level.

In the rural areas, 66.8 per cent of babies were breastfed within one hour of birth; this was followed by KMA (66.5%) and other towns (58.7%). Nationally, if breastfed within one day of birth, newborns were more likely to be breastfed within the first hour. The percentages of babies who were breastfed within one day were 81.5 per cent, 82.6 per cent and 84.2 per cent for rural, KMA and other towns, respectively. Babies who received a prelacteal feed within three days were highest in other towns with 24.6 per cent, followed by rural areas (21.8%) and KMA (20.3%). Prelacteal feeds were most common among the wealthiest women and least common among the poorest women.

TABLE NU.2: BREASTFEEDING

PERCENTAGE OF LIVING CHILDREN ACCORDING TO BREASTFEEDING STATUS AT SELECTED AGE GROUPS, JAMAICA, 2011

	Children 0-5 months			Children 12-15 months		Children 20-23 months	
	Per cent exclusively breastfed [1]	Per cent predominantly breastfed [2]	Number of children	Per cent breastfed (Continued breastfeeding at 1 year) [3]	Number of children	Per cent breastfed (Continued breastfeeding at 2 years) [4]	Number of children
Sex							
Male	23.3	36.7	87	34.6	57	(31.5)	48
Female	24.3	48.8	81	52.9	65	(30.8)	41
Area							
Urban							
KMA	(27.1)	(38.8)	51	(43.7)	44	(27.8)	29
Other towns	21.4	46.8	49	(13.0)	27	(38.1)	22
Urban total	***24.3***	***42.8***	***100***	***32.0***	***71***	***32.2***	***51***
Rural	23.0	42.2	69	(61.6)	51	(30.0)	38
Mother's Education							
None/Primary	(*)	(*)	3	(*)	2	(*)	2
Secondary	26.2	47.7	116	39.8	97	35.1	71
Tertiary	(17.5)	(29.6)	48	(*)	23	(*)	15
Missing/DK	-	-	0	(*)	0	-	0
Wealth Index Quintiles							
Poorest	(20.6)	(45.5)	25	(44.8)	35	(*)	19
Second	(32.8)	(67.4)	41	(*)	28	(*)	15
Middle	(15.8)	(28.0)	48	(*)	19	(*)	24
Fourth	(25.9)	(35.8)	30	(*)	20	(*)	20
Richest	(*)	(*)	24	(*)	20	(*)	12
Total	**23.8**	**42.5**	**168**	**44.4**	**122**	**31.2**	89

[1] MICS indicator 2.6
[2] MICS indicator 2.9
[3] MICS indicator 2.7
[4] MICS indicator 2.8
( ) Figures that are based on 25-49 unweighted cases
(*) Figures that are based on less than 25 unweighted cases

In Table NU.2, breastfeeding status is based on the reports of mothers/caretakers of children's consumption of food and fluids in the 24 hours prior to the interview. Exclusively breastfed refers to infants who received only breast milk (and vitamins, mineral supplements, or medicine). The table shows exclusive breastfeeding of infants during the first six months of life, as well as continued breastfeeding of children at 12-15 and 20-23 months of age.

The percentage of children aged less than six months who were exclusively breastfed was 23.8 per cent, a level considerably lower than recommended. By age 12-15 months, 44.4 per cent of children were still

being breastfed and by age 20-23 months, the proportion still being breastfed fell to 31.2 per cent. Overall, differences appeared small and were based on small numbers of cases which limits the analysis on these specific indicators.

In the four categories, 'exclusively breastfed', 'predominantly breastfed', 'continued breastfeeding at one year', and 'breastfed at age two', KMA had the highest percentage of children, who were 'exclusively breastfed' (27.1%); the highest percentage of those 'predominantly breastfed' in the 0-5 month age group (46.8%) were in other towns, 61.6 per cent who 'continued breastfeeding at one year' were in the rural areas, and 38.1 per cent who were 'breastfed at age two' were in other towns. Other differentials showed small differences and were based on small denominators.

Figure NU.1 shows the detailed pattern of breastfeeding by the child's age in months. Even at the earliest ages, the majority of children were receiving liquids or foods other than breast milk. By the end of the sixth month, the percentage of children 'exclusively breastfed' was below seven per cent. Only about 28 per cent of children were receiving breast milk after 2 years.

Figure NU1. Percentage distribution of children under age 2 by feeding pattern by age group, Jamaica 2011

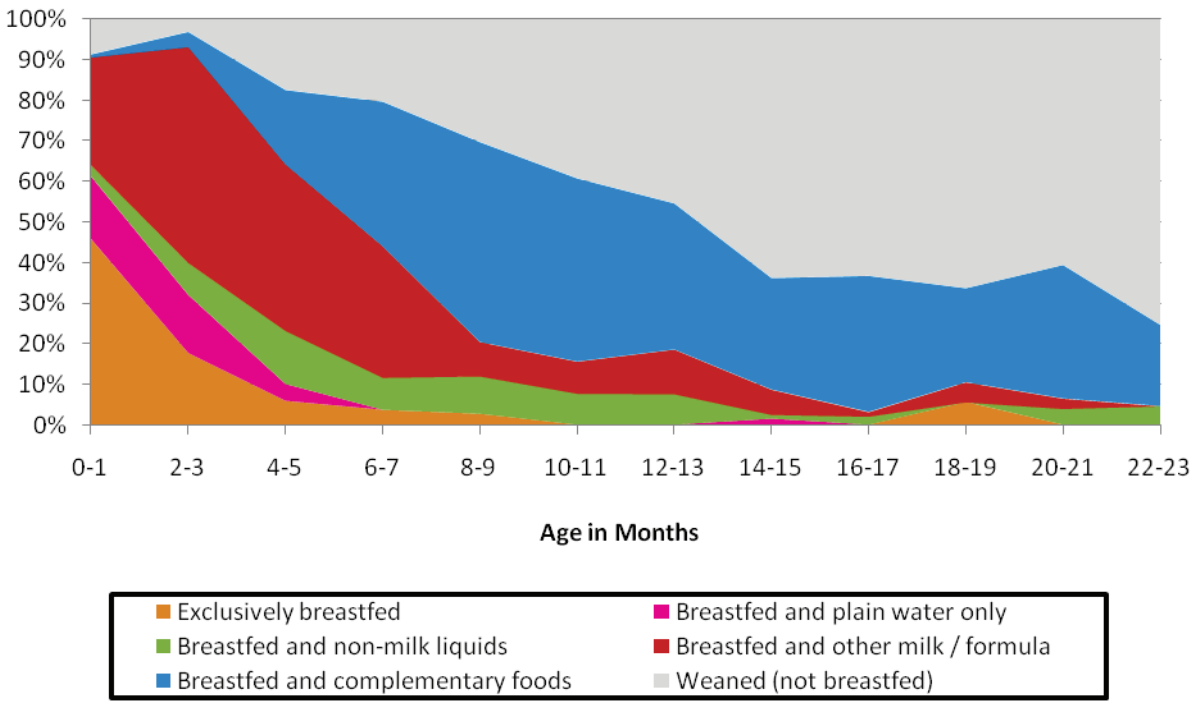


Table NU.3 shows the median duration of breastfeeding by selected background characteristics. Among children under age 3, the mean duration was 15.5 months for any breastfeeding, 1.6 months for exclusive breastfeeding, and 3.2 months for predominant breastfeeding. There was no difference in median duration for those exclusively breastfed (0.7 month each) and little difference by sex for predominant breastfeeding. The median duration for any breastfeeding among females and males were 14.2 and 10.9 months, respectively.

In the any breastfeeding category for children under age 3, the median duration was 14.5 months in rural areas, followed by 10.6 months in other towns, 10.5 months in urban areas and 10.4 months in KMA. Of those predominantly breastfed, rural areas and KMA had a median of 1.8 months, while it was 1.9 months in urban areas and 2.1 months in other towns. The median time for children whose mothers had at the minimum a secondary education was 14.8 months, but the median for exclusively and predominantly breastfed were 0.5 and 1.0 month, respectively.

TABLE NU.3: DURATION OF BREASTFEEDING

MEDIAN DURATION OF ANY BREASTFEEDING, EXCLUSIVE BREASTFEEDING, AND PREDOMINANT BREASTFEEDING AMONG CHILDREN AGE 0-35 MONTHS, JAMAICA, 2011

	Median duration (in months) of			Number of children age 0-35 months
	Any breastfeeding [1]	Exclusive breastfeeding	Predominant breastfeeding	
Sex				
Male	10.9	0.7	1.6	495
Female	14.2	0.7	2.4	482
Area				
Urban				
KMA	10.4	1.3	1.8	345
Other towns	10.6	0.5	2.1	211
Urban total	***10.5***	***0.7***	***1.9***	***556***
Rural	14.5	0.7	1.8	421
Mother's Education				
None/Primary	21.1	2.3	4.3	750
Secondary+	14.8	0.5	1.0	227
Missing/DK	(*)	(*)	(*)	0
Wealth Index Quintiles				
Poorest	13.0	1.3	2.3	203
Second	12.5	1.3	3.8	230
Middle	12.7	0.5	0.7	215
Fourth	16.3	0.7	0.7	161
Richest	11.8	1.4	2.0	167
Median	12.5	0.7	1.9	977
Mean for all children (0-35 months)	15.5	1.6	3.2	977

[1] MICS indicator 2.10
( ) Figures that are based on 25-49 unweighted cases
(*) Figures that are based on less than 25 unweighted cases

Overall, there was no systematic pattern of duration of breastfeeding by household wealth status.

The adequacy of infant feeding in children under-24 months is provided in Table NU.4.Different criteria of adequate feeding are used depending on the age of the child. For infants aged 0-5 months, exclusive breastfeeding is considered as adequate feeding, while infants aged 6-23 months are considered to be adequately fed if they are receiving breast milk and solid, semi-solid or soft food. According to these feeding patterns, only 33.8 per cent of children aged 6-23 months are being adequately fed. Adequate feeding among all infants age 0-5 months drops to 23.8 per cent. Combining these two groups, some 31.2 per cent of children age 0-23 months were appropriately breastfed.

For children aged 0-5 months, exclusive breastfeeding did not vary much by sex, but in the age group 6-23 months more girls were currently breastfed and receiving solid, semi-solid, or soft foods (38.8%) than boys (28.8%). In the 0-23 month age group, more girls were appropriately breastfed (35.2%) than boys

(27.3%). By area, children 0-23 months in rural areas were most likely to be appropriately breastfed but among children in rural areas 0-5 months, they were least likely to be exclusively breastfed.

A breakdown of children age 0-5 months, 'exclusively breastfed' shows no distinctive difference among wealth quintiles, across the three age groups.

TABLE NU.4: AGE-APPROPRIATE BREASTFEEDING

PERCENTAGE OF CHILDREN AGE 0-23 MONTHS WHO WERE APPROPRIATELY BREASTFED DURING THE PREVIOUS DAY, JAMAICA, 2011

	Children age 0-5 months		Children age 6-23 months		Children age 0-23 months	
	Per cent exclusively breastfed [1]	Number of children	Per cent currently breastfeeding and receiving solid, semi-solid or soft foods	Number of children	Per cent appropriately breastfed [2]	Number of children
Sex						
Male	23.3	87	28.8	240	27.3	328
Female	24.3	81	38.8	241	35.2	322
Area						
Urban						
KMA	27.1	51	34.2	176	32.6	226
Other towns	(21.4)	49	24.8	98	23.7	148
Urban total	***24.3***	***100***	***30.8***	***274***	***29.1***	***374***
Rural	23.0	69	37.7	208	34.1	276
Mother's Education						
None/Primary	(*)	3	(*)	7	(*)	10
Secondary	26.2	116	33.0	383	31.4	499
Tertiary	(17.5)	48	38.3	92	31.1	141
Mother not in household	(*)	0	(*)	0	(*)	0
Missing/DK	-	0	(*)	0	(*)	0
Wealth Index Quintiles						
Poorest	(20.6)	25	32.6	118	30.5	142
Second	(32.8)	41	33.4	112	33.2	153
Middle	(15.8)	48	37.5	93	30.1	142
Fourth	(25.9)	30	38.2	81	34.9	110
Richest	(24.9)	24	27.4	78	26.8	102
Total	**23.8**	**168**	**33.8**	**482**	**31.2**	**650**

[1] MICS indicator 2.6
[2] MICS indicator 2.14
( ) Figures that are based on 25-49 unweighted cases
(*) Figures that are based on less than 25 unweighted cases

Adequate complementary feeding of children from 6 months to two years of age is particularly important for growth and development and the prevention of under nutrition. Continued breastfeeding beyond six months should be accompanied by consumption of nutritionally adequate, safe and appropriate complementary foods that help meet nutritional requirements when breast milk is no longer sufficient. It is required that for breastfed children, two or more meals of solid, semi-solid or soft foods are needed if they are six to eight months old, and three or more meals if they are 9-23 months of age. For children 6-23 months and older who are not breastfed, four or more meals of solid, semi-solid or soft foods or milk feeds are needed.

Nationally, 54.6 per cent of children age 6-8 month received solid, semi-solid, or soft foods (see Table NU.5).

TABLE NU.5: INTRODUCTION OF SOLID, SEMI-SOLID OR SOFT FOOD
PERCENTAGE OF INFANTS AGE 6-8 MONTHS WHO RECEIVED SOLID, SEMI-SOLID OR SOFT FOODS DURING THE PREVIOUS DAY, JAMAICA, 2011

	Currently breastfeeding		Currently not breastfeeding		All	
	Per cent receiving solid, semi-solid or soft foods	Number of children age 6-8 months	Per cent receiving solid, semi-solid or soft foods	Number of children age 6-8 months	Per cent receiving solid, semi-solid or soft foods [1]	Number of children age 6-8 months
Sex						
Male	(60.3)	28	(*)	12	(54.8)	40
Female	(50.5)	29	(*)	7	(54.4)	36
Area						
Urban						
KMA	(*)	21	(*)	9	(*)	30
Other towns	(*)	8	(*)	3	(*)	11
Urban total	***(59.1)***	***29***	***(*)***	***12***	***(53.1)***	***41***
Rural	(*)	28	(*)	7	(56.3)	35
Total	**55.3**	**57**	**(*)**	**19**	**54.6**	**76**

[1] MICS indicator 2.12
( ) Figures that are based on 25-49 unweighted cases
(*) Figures that are based on less than 25 unweighted cases

Table NU.6 presents the proportion of children age 6-23 months who received semi-solid or soft foods the minimum number of times or more during the previous day according to breastfeeding status (see note in Table NU.6 for a definition of minimum number of times for different age groups). Overall, about two-fifth of the children age 6-23 months (42.0%) received solid, semi-solid and soft foods the minimum number of times.

Among breastfed children age 6-23 months, nearly one-sixth of them (16.4%) received solid, semi-solid and soft foods the minimum number of times and this proportion was higher among males (18.2%) compared to females (14.9%). In terms of the distribution of these children according to their location, 28.4 per cent were in other towns, 17.5 per cent in KMA and 11.6 per cent in rural areas. A breakdown of the age group shows some fluctuations in the figures. In the 6-8 month age sub-group, 32.0 per cent were breastfed and solid, semi-solid and soft foods the minimum number of times, but in the 9-11 month sub-group, the percentage fell to 3.2 per cent. It increased to 13.2 per cent in the 12-17 month sub-group and 18.1 per cent in the 18-23 month sub-group. By household wealth, there was no overall pattern.

Among non-breastfeeding children, nearly seven in ten children were receiving solid, semi-solid and soft foods or milk feeds 4 times or more. In this category, there were more females (69.7%) than males (62.5%); while among the age sub-groups, the lowest percentage was in the 18-23 month (54.4%) and the highest in the 9-11 month (79.1%). KMA had the highest percentage of these children (69.6), followed by rural areas (67.5%) and 57.4 per cent in other towns. There was no overall pattern by household wealth.

TABLE NU.6: MINIMUM MEAL FREQUENCY

PERCENTAGE OF CHILDREN AGE 6-23 MONTHS WHO RECEIVED SOLID, SEMI-SOLID, OR SOFT FOODS (AND MILK FEEDS FOR NON-BREASTFEEDING CHILDREN) THE MINIMUM NUMBER OF TIMES OR MORE DURING THE PREVIOUS DAY, ACCORDING TO BREASTFEEDING STATUS, JAMAICA, 2011

	Currently breastfeeding		Currently not breastfeeding			All	
	Per cent receiving solid, semi-solid and soft foods the minimum number of times	Number of children age 6-23 months	Per cent receiving at least 2 milk feeds [1]	Per cent receiving solid, semi-solid and soft foods or milk feeds 4 times or more	Number of children age 6-23 months	Per cent with minimum meal frequency [2]	Number of children age 6-23 months
Sex							
Male	18.2	107	75.3	62.5	133	42.7	240
Female	14.9	125	79.5	69.7	116	41.3	241
Age							
6-8 months	32.0	57	(*)	(*)	19	42.5	76
9-11 months	3.2	54	(86.6)	(79.1)	30	30.2	84
12-17 months	13.2	77	83.3	70.7	107	46.7	184
18-23 months	(18.1)	44	64.7	54.4	93	42.7	137
Area							
Urban							
KMA	17.5	79	80.8	69.6	96	46.1	176
Other towns	(28.4)	38	73.1	57.4	60	46.1	98
Urban total	***21.1***	***118***	***77.8***	***64.9***	***156***	***46.1***	***274***
Rural	11.6	115	76.3	67.5	93	36.6	208
Mother's Education							
None/Primary	(*)	1	(*)	(*)	6	(*)	7
Secondary	15.1	188	78.8	68.4	195	42.3	383
Tertiary	(21.7)	43	(72.5)	(54.6)	49	39.2	92
Missing/DK	(*)	0	-	-	0	(*)	0
Wealth Index Quintiles							
Poorest	10.2	61	71.5	61.0	56	34.5	118
Second	16.5	58	83.0	68.8	54	41.5	112
Middle	(25.0)	45	80.3	71.5	48	48.8	93
Fourth	(13.5)	39	(74.8)	(56.2)	42	35.5	81
Richest	(19.7)	28	(76.9)	(71.0)	50	52.6	78
Total	**16.4**	**232**	**77.3**	**65.9**	**249**	**42.0**	**482**

[1] MICS indicator 2.15
[2] MICS indicator 2.13
( ) Figures that are based on 25-49 unweighted cases
(*) Figures that are based on less than 25 unweighted cases

The continued practice of bottle-feeding is a concern because of the possible contamination due to unsafe water and lack of hygiene in preparation. Table NU.7 shows that bottle-feeding is still prevalent in Jamaica. Some 63.5 per cent of children under-6 months were fed using a bottle with a nipple, while 68.6 per cent of children 12-23 months used this method for feeding, while among all children 0-23, 69.4 per cent use a bottle with a nipple. Among children 0-23 months, more females (72.1%) than males (66.7%) used a bottle with a nipple. With regards to areas, 72.0 per cent of children 0-23 months in the KMA used a bottle with a nipple, 70.6 per cent in other towns and 66.5 per cent in rural areas. In terms of household wealth, bottle feeding was highest in the middle group (78.3%), but in poorest and richest quintiles it was 63.7 and 63.9 per cent, respectively.

TABLE NU.7: BOTTLE FEEDING

PERCENTAGE OF CHILDREN AGE 0-23 MONTHS WHO WERE FED WITH A BOTTLE WITH A NIPPLE DURING THE PREVIOUS DAY, JAMAICA, 2011

	Percentage of children age 0-23 months fed with a bottle with a nipple [1]	Number of children age 0-23 months:
Sex		
Male	66.7	328
Female	72.1	322
Age		
0-5 months	63.5	168
6-11 months	77.1	160
12-23 months	68.6	321
Area		
Urban		
KMA	72.0	226
Other towns	70.6	148
Urban total	***71.4***	***374***
Rural	66.5	276
Mother's Education		
None/Primary	(*)	10
Secondary	69.2	499
Tertiary	70.6	141
Missing/DK	(*)	0
Wealth Index Quintiles		
Poorest	63.7	142
Second	69.1	153
Middle	78.3	142
Fourth	70.6	110
Richest	63.9	102
Total	**69.4**	**650**

[1] MICS indicator 2.11

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

LOW BIRTH WEIGHT

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

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

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

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

TABLE NU.8: LOW BIRTH WEIGHT INFANTS

PERCENTAGE OF LAST-BORN CHILDREN IN THE 2 YEARS PRECEDING THE SURVEY THAT ARE ESTIMATED TO HAVE WEIGHED BELOW 2500 GRAMS AT BIRTH AND PERCENTAGE OF LIVE BIRTHS WEIGHED AT BIRTH, JAMAICA, 2011

	Per cent of live births:		Number of live births in the last 2 years
	Below 2500 grams [1]	Weighed at birth [2]	
Area			
Urban			
KMA	15.8	95.9	187
Other towns	18.3	98.8	151
Urban total	***16.9***	***97.2***	***338***
Rural	15.8	95.6	276
Education			
None/Primary	(*)	(*)	9
Secondary	17.2	97.0	474
Tertiary	13.9	95.7	131
Wealth Index Quintiles			
Poorest	19.3	93.3	145
Second	15.4	97.6	146
Middle	14.6	98.3	131
Fourth	14.5	98.0	98
Richest	17.9	95.4	94
Total	**16.4**	**96.5**	**614**

[2] MICS indicator 2.19

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

International data indicate that many infants are not weighed at birth and those who are weighed may be a biased sample of all births, the reported birth weights usually cannot be used to estimate the prevalence of low birth weight among all children. Therefore for consistency across countries, the percentage of births weighing below 2500 grams is estimated from two items in the questionnaire: the mother's assessment of the child's size at birth (i.e., very small, smaller than average, average, larger than average, very large) and the mother's recall of the child's weight or the weight as recorded on a health card if the child was weighed at birth[5].

Overall, 96.5 per cent of births were weighed at birth and 16.4 per cent of infants were estimated to weigh less than 2500 grams at birth (Table NU.8).The percentage of low birth weight did not vary much by areas or by quintile groups.

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

V.

Child Health

V. Child Health

VACCINATIONS

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

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

TABLE CH.1: VACCINATIONS IN FIRST YEAR OF LIFE

PERCENTAGE OF CHILDREN AGE 18-29 MONTHS IMMUNIZED AGAINST CHILDHOOD DISEASES AT ANY TIME BEFORE THE SURVEY AND BEFORE THE FIRST BIRTHDAY (AND BY 18 MONTHS FOR MEASLES), JAMAICA, 2011

	Vaccinated at any time before the survey according to: Vaccination card	Vaccinated at any time before the survey according to: Mother's report	Vaccinated at any time before the survey according to: Either	Vaccinated by 12 months of age
BCG [1]	77.8	21.7	99.5	99.5
Polio 1	75.9	21.1	97.0	96.6
Polio 2	75.9	21.1	97.0	96.3
Polio 3 [2]	76.2	15.9	92.0	91.1
DPT 1	77.8	19.9	97.7	96.8
DPT 2	77.8	19.5	97.3	96.4
DPT 3 [3]	77.8	13.7	91.5	89.9
Measles [4]	76.3	17.8	94.1	91.7
HepB 1	78.7	15.2	93.9	93.0
HepB 2	78.5	12.6	91.1	90.3
HepB 3 [5]	78.5	9.9	88.4	84.5
Hib 1*	74.7	na	74.7	74.2
Hib 2*	74.2	na	74.2	73.9
Hib 3*	74.2	na	74.2	71.4
All vaccinations	73.0	0.0	73.0	67.6
All vaccinations excluding Hib	74.9	11.1	86.1	79.8
No vaccinations	0.0	0.5	0.5	0.5
Number of children age 18-29 months	320	320	320	320

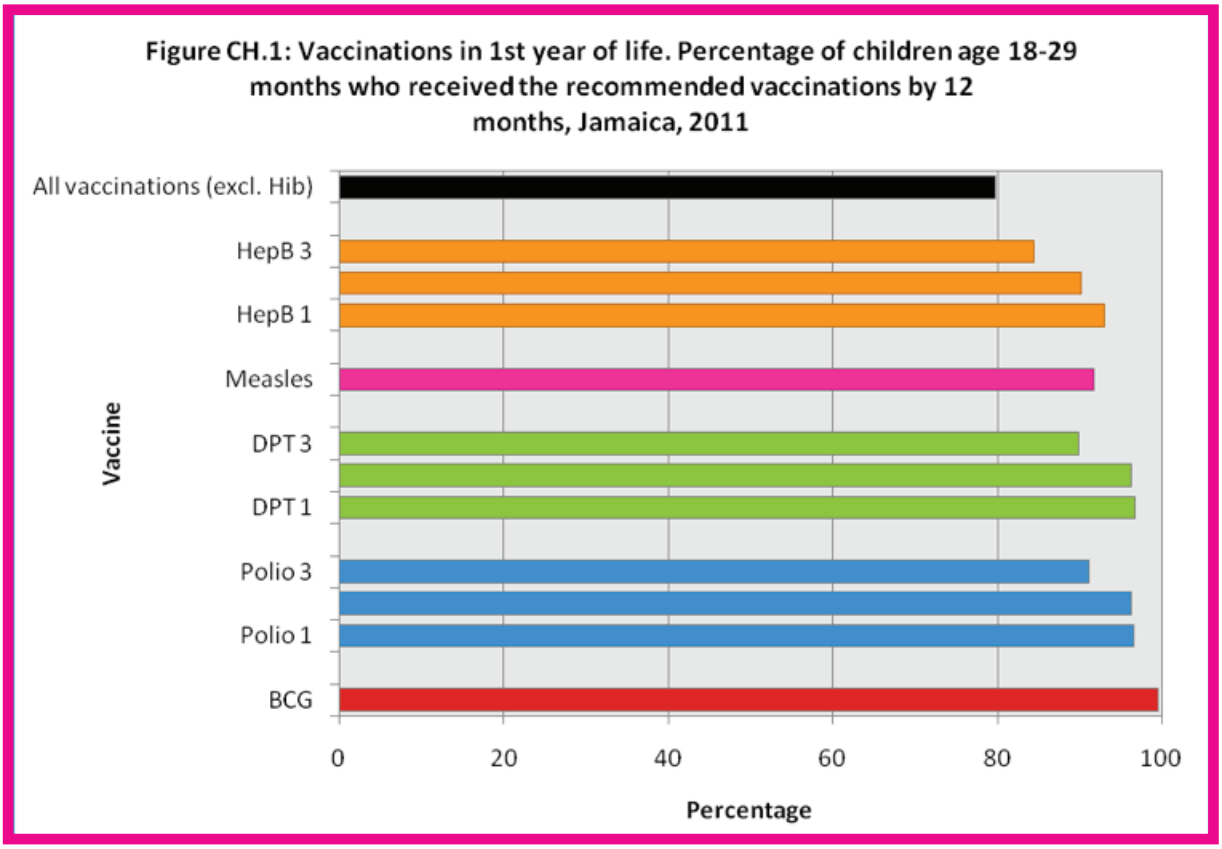
* data on mother's report not collected
[1] MICS indicator 3.1
[2] MICS indicator 3.2
[3] MICS indicator 3.3
[4] MICS indicator 3.4; MDG indicator 4.3
[5] MICS indicator 3.5

According to UNICEF and WHO guidelines, a child should receive a BCG vaccination to protect against tuberculosis, three doses of DPT/DT to protect against diphtheria, pertussis, and tetanus, three doses of polio vaccine, and a measles vaccination by the age of 12 months. In Jamaica, the Ministry of Health

(MOH) recommends that a child be given the BCG vaccine at birth, three doses of DPT/DT by the age of six (6) months, three doses of the polio vaccine by age six (6) months and the measles vaccination at twelve (12) months. Mothers were asked to provide vaccination cards for children under the age of five. Interviewers copied vaccination information from the cards onto the MICS questionnaire.

Overall, 77.8 per cent of children had health cards that were seen by interviewers (Table CH.2). If the child did not have a card, the mother was asked to recall whether or not the child had received each of the vaccinations and, for DPT and Polio, how many times. The HaemophilusInfluenzae B (HiB) vaccine was added for Jamaica but information was collected based on seeing health cards only; no mother's report was collected due to a design flaw in the questionnaire. The percentage of children age 18 to 23 months who received each of the vaccinations is shown in Table CH.1. The denominator for the table is comprised of children age 18-23 months so that only children who are old enough to be fully vaccinated are counted. In columns 1 – 3 the numerator includes all children who were vaccinated at any time before the survey according to the vaccination card or the mother's report. In the fourth column, only those who were vaccinated by 18 months are included. For children without vaccination cards, the proportion of vaccinations given before the first birthday is assumed to be the same as for children with vaccination cards.

Figure CH.1: Vaccinations in 1st year of life. Percentage of children age 18-29 months who received the recommended vaccinations by 12 months, Jamaica, 2011



Generally, the coverage rates for the stated vaccines were high, with over 90 per cent of children 18-29 months having been vaccinated at some point, as indicated by either their vaccination cards or their mother' recall. There was almost universal coverage (99.5%) among children 18-29 months who had received a BCG vaccination by the age of 18 months. The first dose of DPT was given to 96.8 per cent of children 18-29 months. The percentage declined for subsequent doses of DPT to 96.4 per cent for the

second dose, and 89.9 per cent for the third dose (Figure CH.1). Similarly, the percentage of children who were vaccinated against polio was highest for the first dose and declined for subsequent doses. Fewer than 97 per cent (96.6%) of children received their first dose of Polio by 18 months. This declined to 96.3 per cent for the second dose and 91.1 per cent by the third dose.

The coverage for measles vaccine by 18 months was 91.7 per cent, while for the first dose of the Hepatitis B (HepB) vaccine it was 93.0 per cent. Subsequent doses of this vaccine (HepB 2 and HepB 3) were administered to 90.3 per cent and 84.5 per cent of children 18-29 months by the age of 18 months. The Haemophilus Influenzae B (HiB) vaccine was administered to a marginally lower proportion of children, with the first dose of HiB being given to 74.2 per cent, the second dose to 73.9 per cent and the final dose to 71.4 per cent. This may have occurred as no data were collected from mother's reports.

The percentage of children who had all the recommended vaccinations by their first birthday was 67.6 per cent, and no child was found who had not received any vaccine.

Table CH.2 shows vaccination coverage rates among children 18-29 months by background characteristics. The figures indicate children receiving the vaccinations at any time up to the date of the survey, and are based on information from both the vaccination cards and mothers'/caretakers' reports. There were 164 male and 156 female children between the age group 18 – 29 months; 78.0 per cent of female and 77.6 per cent male children had a vaccination card. While Urban Areas had a greater proportion of children with vaccination cards that were seen (79.8%), the proportion of children in the urban areas who received all the stated vaccines was lower (83.8%) than the proportion recorded for rural areas (88.9%). Within urban areas, 88.9per cent of children aged 18-29 months from other towns received all the stated vaccines. This was however offset by the relatively low proportion of children from the KMA (80.2%) who received all the stated vaccines. Further examination of the percentage of children in the KMA who received the stated vaccines revealed that the third doses of the DPT, Polio, HepB and HiB had a lower coverage rate than the other stated vaccines.

An analysis of the results by wealth quintile shows that the richest quintile had the lowest percentage of vaccination cards seen at 66.6 per cent. By wealth, the middle quintile had the lowest proportion of children receiving all vaccinations.

TABLE CH.2: VACCINATIONS BY BACKGROUND CHARACTERISTICS

PERCENTAGE OF CHILDREN AGE 18-29 MONTHS CURRENTLY VACCINATED AGAINST CHILDHOOD DISEASES, JAMAICA, 2011

	Percentage of children who received:													Percentage with vaccination card seen	Number of children age 18-29 months
	BCG	Polio 1	Polio 2	Polio 3	DPT 1	DPT 2	DPT 3	Measles	HepB 1	HepB 2	HepB 3	None	All		
Sex															
Male	99.7	94.8	94.8	90.3	96.4	95.8	90.6	94.1	91.7	91.1	87.1	0.3	86.2	78.0	164
Female	99.4	99.4	99.4	93.8	99.1	98.8	92.4	94.1	96.1	91.1	89.8	0.6	85.9	77.6	156
Area															
Urban															
KMA	100.0	94.3	94.3	88.1	94.6	94.6	89.1	89.3	90.0	87.1	87.1	0.0	80.2	75.5	104
Other towns	100.0	100.0	100.0	92.4	100.0	99.4	93.6	95.5	96.6	94.3	91.6	0.0	88.9	85.9	73
Urban total	***100.0***	***96.6***	***96.6***	***89.9***	***96.8***	***96.5***	***90.9***	***91.8***	***92.8***	***90.1***	***89.0***	***0.0***	***83.8***	***79.8***	***177***
Rural	98.9	97.6	97.6	94.7	98.9	98.2	92.2	97.0	95.2	92.3	87.7	1.1	88.9	75.4	143
Mother's Education															
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	10
Secondary	99.3	96.2	96.2	91.4	96.7	96.5	91.3	93.3	93.8	92.1	88.8	0.7	86.2	81.0	224
Tertiary	100.0	98.8	98.8	92.6	100.0	98.8	91.0	95.5	93.2	87.5	86.6	0.0	84.0	70.5	86
Wealth Index Quintiles															
Poorest	98.3	98.3	98.3	95.4	98.2	98.2	95.2	96.5	96.8	92.5	87.7	1.7	90.1	83.1	58
Second	100.0	100.0	100.0	97.5	99.4	98.7	96.2	98.7	97.9	97.9	95.5	0.0	95.0	88.9	70
Middle	99.2	93.4	93.4	82.6	93.2	93.2	82.0	83.4	85.1	82.7	77.0	0.8	76.2	74.6	72
Fourth	100.0	98.5	98.5	94.8	98.4	98.4	91.4	100.0	94.8	90.7	90.7	0.0	86.7	74.6	62
Richest	100.0	95.2	95.2	90.8	100.0	98.3	93.9	93.5	95.6	91.9	91.9	0.0	82.7	66.6	58
Total	**99.5**	**97.0**	**97.0**	**92.0**	**97.7**	**97.3**	**91.5**	**94.1**	**93.9**	**91.1**	**88.4**	**0.5**	**86.1**	**77.8**	**320**

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

NEONATAL TETANUS PROTECTION

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

One method of prevention of maternal and neonatal tetanus is to ensure that all pregnant women receive at least two doses of tetanus toxoid vaccine. However, if a woman did not receive two doses of the vaccine during their pregnancy, she (and her newborn) is also considered to be protected if the following conditions are met:

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

TABLE CH.3: NEONATAL TETANUS PROTECTION

PERCENTAGE OF WOMEN AGE 15-49 YEARS WITH A LIVE BIRTH IN THE LAST 2 YEARS PROTECTED AGAINST NEONATAL TETANUS, JAMAICA, 2011

	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		
Area							
Urban							
KMA	23.4	5.8	0.0	0.0	0.0	29.2	187
Other towns	30.4	13.4	1.1	0.6	0.0	45.4	151
Urban total	***26.5***	***9.2***	***0.5***	***0.3***	***0.0***	***36.4***	***338***
Rural	25.7	14.2	0.3	0.0	0.3	40.5	276
Education							
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	9
Secondary	28.7	12.6	0.2	0.2	0.0	41.7	474
Tertiary	16.8	7.7	0.9	0.0	0.6	25.9	131
Wealth Index Quintiles							
Poorest	28.9	18.8	0.5	0.0	0.0	48.1	145
Second	25.0	11.1	0.3	0.6	0.0	37.0	146
Middle	29.9	7.7	0.9	0.0	0.0	38.5	131
Fourth	23.8	9.0	0.0	0.0	0.8	33.6	98
Richest	21.1	8.4	0.0	0.0	0.0	29.5	94
Total	**26.2**	**11.4**	**0.4**	**0.1**	**0.1**	**38.2**	**614**

[1] MICS indicator 3.7

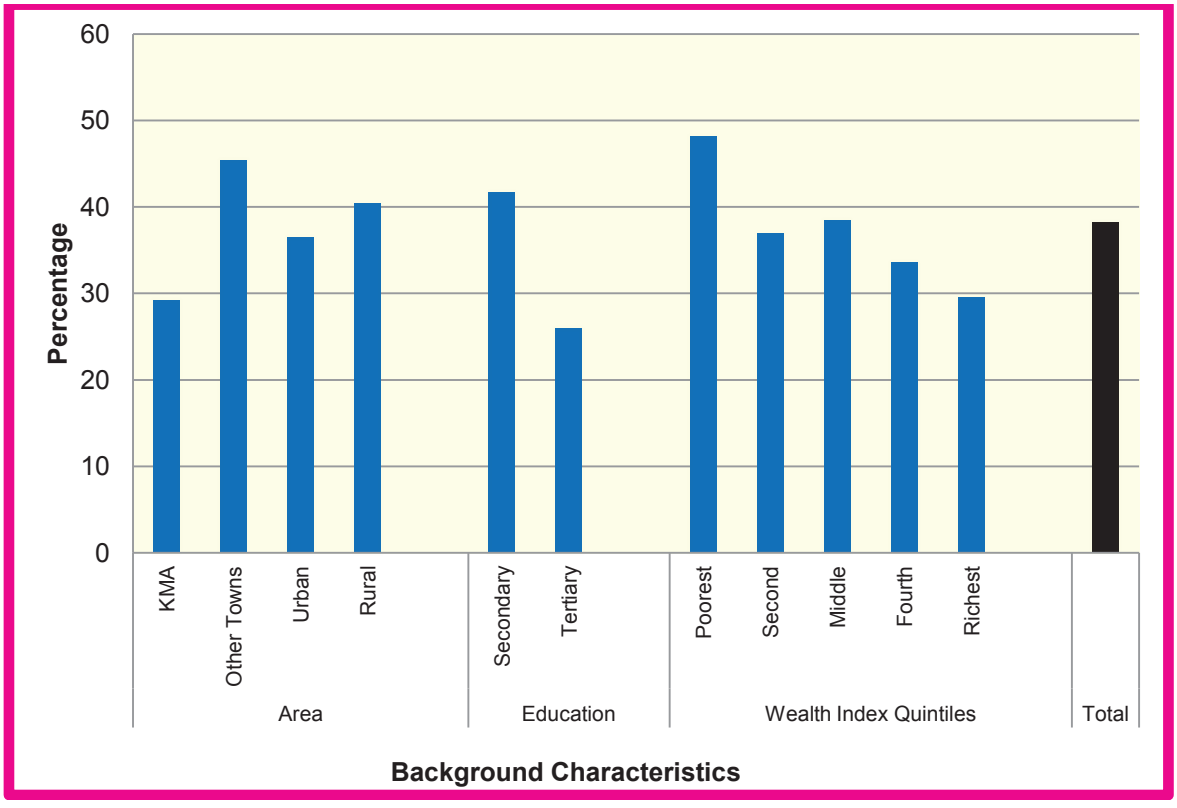
(*) Figures that are based on less than 25 unweighted cases

To assess the status of tetanus vaccination coverage, women who gave birth during the two years before the survey were asked if they had received tetanus toxoid injections during the pregnancy for their most recent birth, and if so, how many. Women who did not receive two or more tetanus toxoid vaccinations during this pregnancy were then asked about tetanus toxoid vaccinations they may have received prior to this pregnancy. Interviewers also asked women to present their vaccination card, on which dates of tetanus toxoid are recorded and referred to information from the cards when available.

Table CH.3 shows the protection status from tetanus of women who have had a live birth within the last 2 years. Figure CH.2 shows the protection of women against neonatal tetanus by major background characteristics. Approximately 38 per cent of women who had a live birth within the last two years were protected against tetanus. The majority of these women (26.2%) received at least two doses of the tetanus toxoid vaccine during their last pregnancy. An additional 11.4 per cent received two doses of this vaccine, the last within the last three years and the remaining 0.6 per cent received the tetanus vaccine at some other point in their lives.

The KMA at 29.2 per cent was the area which recorded the lowest percentage of women who had given birth in the last two years that were adequately protected from tetanus. In other towns, protection against tetanus was highest at 45.4 per cent. Together, 36.4 per cent of recent mothers from urban areas were adequately protected against Tetanus. In the rural areas, 40.5 per cent of recent mothers who had given birth in the two years prior to the survey were adequately protected from tetanus. The data also revealed that the richest quintile recorded the lowest percentage of recent mothers who were protected from tetanus (29.5%) and the poorest quintile the highest at (48.1%).

Figure CH.2: Percentage of women with a live birth in the last 12 months who are protected against neonatal tetanus, Jamaica, 2011



ORAL REHYDRATION TREATMENT

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

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

The indicators are:

- Prevalence of diarrhoea
- Oral rehydration therapy (ORT)
- Home management of diarrhoea
- ORT with continued feeding

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

Overall, 5.7 per cent of children under five had diarrhoea in the two weeks preceding the survey (Table CH.4).The prevalence of diarrhoea varied across geographical areas. In both rural and urban areas, the prevalence of diarrhoea was 5.7 per cent. Within urban areas, the KMA recorded a prevalence rate of 4.1 per cent, while in other towns the prevalence of diarrhoea was comparatively higher at 8.6 per cent. During the weaning period (12-23 months), children become more prone to diarrhoea. The peak of diarrhoea prevalence occurred among children within the age group 12-23 at 8.7%, followed by those in the 24-35 months age group (6.1%).

Table CH.4 also shows the percentage of children who were treated by Oral Rehydration Therapy (ORT) during the episode of diarrhoea. Among children with diarrhoea in the two weeks before the survey, ORS was used in 64.1 per cent of the cases. There were no major differences by background characteristics.

More than a half, 56.6 per cent of children under-five years old with diarrhoea drank more than usual while 14.9 per cent drank about the same and 27.9 per cent were given less (10.3%) or much less (17.6%) to drink (Table CH.5). Regarding eating practices during diarrhoea, 59.4 per cent ate somewhat less (24.7%) or much less (34.7%), 27.2 per cent ate about the same and 2.4 per cent were given more to eat. The remaining 11.0 per cent either stopped feeding/eating, or had never been given food.

TABLE CH.4: ORAL REHYDRATION SOLUTIONS AND RECOMMENDED HOMEMADE FLUIDS
PERCENTAGE OF CHILDREN AGE 0-59 MONTHS WITH DIARRHOEA IN THE LAST TWO WEEKS, AND TREATMENT WITH ORAL REHYDRATION SOLUTIONS AND RECOMMENDED HOMEMADE FLUIDS, JAMAICA, 2011

	Had diarrhoea in last two weeks	Number of children age 0-59 months	Children with diarrhoea who received: ORS (Fluid from ORS packet or pre-packaged ORS fluid)	Number of children aged 0-59 months with diarrhoea
Sex				
Male	6.2	854	64.5	53
Female	5.1	785	(63.6)	40
Area				
Urban				
KMA	4.1	606	(66.9)	25
Other towns	8.6	321	(61.3)	28
Urban total	***5.7***	***927***	***64.0***	***53***
Rural	5.7	712	(64.3)	40
Age				
0-11	2.4	329	(*)	8
12-23	8.7	321	(71.3)	28
24-35	6.1	327	(*)	20
36-47	5.8	289	(*)	17
48-59	5.4	373	(*)	20
Mother's Education				
None/Primary	(10.8)	47	(*)	5
Secondary	5.8	1,235	63.7	71
Tertiary	4.7	356	(*)	17
Missing/DK	(*)	0	-	0
Total	**5.7**	**1,639**	**64.1**	**93**

(*) Figures that are based on less than 25 unweighted cases
( ) Figures that are based on 25-49 unweighted cases

TABLE CH.5: FEEDING PRACTICES DURING DIARRHOEA

PER CENT 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, JAMAICA, 2011

	Had diarrhoea in last two weeks	Number of children age 0-59 months	Drinking practices during diarrhoea:						Eating practices during diarrhoea:							Number of children aged 0-59 months with diarrhoea
			Given much less to drink	Given somewhat less to drink	Given about the same to drink	Given more to drink	Missing/ DK	Total	Given much less to eat	Given somewhat less to eat	Given about the same to eat	Given more to eat	Stopped food	Had never been given food	Total	
Sex																
Male	6.2	854	19.4	11.4	13.0	55.1	1.2	100.0	34.7	23.0	27.5	1.9	5.6	7.4	100.0	53
Female	5.1	785	(15.1)	(8.8)	(17.4)	(58.6)	(0.0)	100.0	(34.6)	(27.0)	(26.7)	(3.0)	(8.0)	(0.6)	100.0	40
Area																
Urban																
KMA	4.1	606	(27.8)	(16.9)	(15.0)	(37.8)	(2.5)	100.0	(34.5)	(34.5)	(15.5)	(6.6)	(5.8)	(3.2)	100.0	25
Other towns	8.6	321	(21.4)	(14.9)	(19.3)	(44.4)	(0.0)	100.0	(40.1)	(13.1)	(33.5)	(2.0)	(10.4)	(0.9)	100.0	28
Urban total	***5.7***	***927***	***24.4***	***15.9***	***17.3***	***41.3***	***1.2***	***100.0***	***37.4***	***23.2***	***25.0***	***4.2***	***8.2***	***2.0***	***100.0***	***53***
Rural	5.7	712	(8.6)	(3.0)	(11.7)	(76.7)	(0.0)	100.0	(31.0)	(26.6)	(30.0)	(0.0)	(4.5)	(7.8)	100.0	40
Age																
0-11	2.4	329	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	(*)	(*)	8
12-23	8.7	321	(23.5)	(2.6)	(0.0)	(73.9)	(0.0)	100.0	(42.1)	(18.2)	(29.5)	(2.0)	(8.1)	(0.0)	100.0	28
24-35	6.1	327	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	(*)	(*)	20
36-47	5.8	289	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	(*)	(*)	17
48-59	5.4	373	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	(*)	(*)	20
Mother's Education																
None/Primary	10.8	47	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	(*)	(*)	5
Secondary	5.8	1,235	19.9	13.1	15.5	50.5	0.9	100.0	32.3	27.2	27.8	.6	6.6	5.5	100.0	71
Tertiary	4.7	356	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	(*)	(*)	17
Wealth Index Quintiles																
Poorest	5.9	358	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	(*)	(*)	21
Second	7.5	396	(26.2)	(11.2)	(14.6)	(45.9)	(2.1)	100.0	(43.0)	(11.0)	(33.8)	(1.5)	(4.6)	(6.1)	100.0	30
Middle	3.6	352	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	(*)	(*)	13
Fourth	6.7	274	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	(*)	(*)	18
Richest	4.3	260	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	(*)	(*)	(*)	(*)	(*)	11
Total	**5.7**	**1,639**	**17.6**	**10.3**	**14.9**	**56.6**	**0.7**	**100.0**	**34.7**	**24.7**	**27.2**	**2.4**	**6.6**	**4.5**	**100.0**	**93**

(*) Figures that are based on less than 25 unweighted cases
( ) Figures that are based on 25-49 unweighted cases

TABLE CH.6: ORAL REHYDRATION THERAPY WITH CONTINUED FEEDING AND OTHER TREATMENTS

PERCENTAGE OF CHILDREN AGE 0-59 MONTHS WITH DIARRHOEA IN THE LAST TWO WEEKS WHO RECEIVED ORAL REHYDRATION THERAPY WITH CONTINUED FEEDING, AND PERCENTAGE OF CHILDREN WITH DIARRHOEA WHO RECEIVED OTHER TREATMENTS, JAMAICA, 2011

			Total
Children with diarrhoea who received:	ORS or increased fluids		84.3
	ORT with continued feeding [1]		43.3
Other treatment:	Pill or syrup:	Amoxil	5.7
		Ampicilin	0.0
		Bactrim	1.9
		Evithrom	0.0
		Other Antibiotic	0.0
		Antimotility	0.0
		Zinc	0.0
		Other	3.8
		Unknown	0.0
	Injection	Antibiotic	4.0
		Non-antibiotic	0.0
		Unknown	0.0
	Intravenous		4.9
	Home remedy/ Herbal medicine		15.9
	Other		21.0
Not given any treatment or drug			0.0
Number of children aged 0-59 months with diarrhoea			**93**

[1] MICS indicator 3.8

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

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

Table CH.6 provides the proportion of children age 0-59 months with diarrhoea in the last two weeks who received oral rehydration therapy with continued feeding, and the percentage of children with diarrhoea who received other treatments. Overall, 84.3 per cent of children with diarrhoea in the two weeks preceding the survey received ORS or increased fluids. Combining the information in Table CH.5 with those in Table CH.4 on oral rehydration therapy, it is observed that 43.3 per cent of children received ORT and, at the same time, feeding was continued, as is recommended.

There are minor differences in the home management of diarrhoea by background characteristics. In rural areas, 53.2 per cent of children received ORT and continued feeding. In urban areas however, this was 35.7 per cent (data not shown).

CARE SEEKING AND ANTIBIOTIC TREATMENT OF PNEUMONIA

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

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

TABLE CH.7: CARE SEEKING FOR SUSPECTED PNEUMONIA AND ANTIBIOTIC USE DURING SUSPECTED PNEUMONIA

PERCENTAGE OF CHILDREN AGE 0-59 MONTHS WITH SUSPECTED PNEUMONIA IN THE LAST TWO WEEKS WHO WERE TAKEN TO A HEALTH PROVIDER AND PERCENTAGE OF CHILDREN WHO WERE GIVEN ANTIBIOTICS, JAMAICA, 2011

	Had suspected pneumonia in the last two weeks	Number of children age 0-59 months	Children with suspected pneumonia who were taken to:														Any appropriate provider [1]	Percentage of children with suspected pneumonia who received antibiotics in the last two weeks [2]	Number of children age 0-59 months with suspected pneumonia in the last two weeks
			Public Sector						Private Sector					Other					
			Government hospital	Government health center	Government health post	Community health worker	Mobile / Outreach clinic	Other public	Private hospital / clinic	Private physician	Private pharmacy	Mobile clinic	Other private medical	Relative / Friend	Shop	Traditional practitioner	Other		
Sex																			
Male	5.7	854	(48.0)	(17.7)	(0.0)	(3.4)	(0.0)	(0.0)	(0.0)	(22.0)	(1.3)	(0.0)	(0.9)	(0.9)	(0.0)	(0.0)	(0.0)	(85.3)	(57.3)	49
Female	4.6	785	(49.3)	(7.6)	(0.0)	(0.0)	(0.0)	(0.0)	(5.3)	(19.6)	(0.0)	(0.0)	(0.0)	(2.1)	(0.0)	(1.2)	(0.0)	(78.3)	(60.1)	36
Area																			
Urban																			
KMA	5.6	606	(49.3)	(18.1)	(0.0)	(5.0)	(0.0)	(0.0)	(2.2)	(12.2)	(0.0)	(0.0)	(0.0)	(2.2)	(0.0)	(0.0)	(0.0)	(84.6)	(52.3)	34
Other towns	6.3	321	(35.3)	(18.2)	(0.0)	(0.0)	(0.0)	(0.0)	(2.4)	(28.4)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(0.0)	(79.3)	(53.0)	20
Urban total	***5.8***	***927***	***44.1***	***18.1***	***0.0***	***3.1***	***0.0***	***0.0***	***2.3***	***18.3***	***0.0***	***0.0***	***0.0***	***1.4***	***0.0***	***0.0***	***0.0***	***82.6***	***52.6***	***54***
Rural	4.4	712	(56.2)	(5.3)	(0.0)	(0.0)	(0.0)	(0.0)	2.2	25.6	2.0	0.0	1.4	1.4	0.0	1.4	0.0	81.9	68.6	31
Age																			
0-11	5.8	329	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	19
12-23	4.2	321	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	14
24-35	4.2	327	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	14
36-47	8.9	289	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	26
48-59	3.6	373	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	13
Mother's education																			
None/Primary	(1.8)	47	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	1
Secondary	5.9	1235	50.2	15.8	0	2.3	0	0	1.6	15.4	0.9	0	0.6	1.7	0	0.6	0	80.7	52.2	72
Tertiary	3.4	356	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	12
Missing/DK	(*)	0	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	0
Wealth index quintiles																			
Poorest	5.6	358	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	20
Second	7.0	396	(38.5)	(29.9)	(0.0)	(6.1)	(0.0)	(0.0)	(1.7)	(9.0)	(0.0)	(0.0)	(1.6)	(1.6)	(0.0)	(0.0)	(0.0)	(83.3)	(51.8)	28
Middle	5.2	352	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	18
Fourth	3.2	274	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	9
Richest	4.1	260	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	11
Total	5.2	1639	48.5	13.4	0.0	2.0	0.0	0.0	2.3	21.0	0.8	0.0	0.5	1.4	0.0	0.5	0.0	82.3	58.5	85

[1] MICS indicator 3.9, [2] MICS indicator 3.10

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

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

The indicators are:

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

Table CH.7 presents the prevalence of suspected pneumonia and, if care was sought outside the home, the site of care. Some 5.2 per cent of children age 0-59 months were reported to have had symptoms of pneumonia during the two weeks preceding the survey. Of these children, 82.3 per cent were taken to an appropriate provider.

Table CH.7 also shows the use of antibiotics for the treatment of suspected pneumonia in under-5s by sex, age, area of residence, age, and socioeconomic factors. In Jamaica, 58.5 per cent of under-5 year old children with suspected pneumonia were treated with antibiotics during the two weeks prior to the survey. Across geographical areas, the percentage of under-5 year olds with suspected pneumonia who were treated with antibiotics was 68.6 per cent for rural areas and 52.6 per cent for urban areas.

Solid Fuel Use

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

Liquefied Petroleum Gas (LPG) was the primary fuel used for cooking, with 82.2 per cent of households mainly using this fuel. This was followed by wood which was used by 7.8 per cent of households, charcoal, used by 5.0 per cent of households and electricity used by 3.4 per cent of households. Other types of fuel were used by 1.6 per cent of households.

Overall, 13.7 per cent of all households in Jamaica are using solid fuels for cooking. Use of solid fuels is higher in rural areas (23.0%) than in urban areas at 6.0%. Within urban areas, other towns have a higher percentage of households that use solid fuels for cooking (10.3%) than the KMA (3.4%). In urban areas, 88.3 per cent and 5.1 per cent of households used LPG and electricity respectively. In rural areas, however, the two primary fuels used for cooking were LPG (74.9%) and Wood (15.6%).

The data revealed a difference in the choice of fuel for cooking when disaggregated by the educational attainment of the household head. Whereas 83.1 per cent of households whose head had attained education to the secondary level used LPG, this was 89.1 per cent for those educated at the tertiary level. Additionally, 7.1 per cent of households whose heads received secondary education used wood, 1.1 per cent of households with heads with tertiary level education used wood as their main fuel for cooking. Overall, 13.6 per cent of households whose heads had secondary level education used solid fuels for cooking relative to 1.9 per cent among households whose heads had a tertiary level education and 22.5 per cent whose heads received an education up to the primary level.

Disaggregated by wealth quintiles, the data revealed an inverse relationship between the use of solid fuels and wealth. Within the poorest quintile, the use of solid fuels was highest at 55.3 per cent. This proportion declined to 10.7 per cent for the second quintile and 2.1 per cent in the middle quintile. No household in the richest quintile used solid fuels for cooking. Within the fourth and richest quintiles, the only fuel used was LPG (92.5% - Richest, 98.5% - Fourth) and Electricity (7.5% - Richest, 1.0% - Fourth).

Table CH.9: Solid fuel use

Percent distribution of household members according to type of cooking fuel used by the household, and percentage of household members living in households using solid fuels for cooking, Jamaica, 2011

	Percentage of household members in households using:															
	Electricity	Liquefied Petroleum Gas ((LPG)	Natural gas	Biogas	Kerosene	Charcoal	Wood	Straw / Shrubs / Grass	Animal dung	Agricultural crop residue	No food cooked in household	Other	Missing	Total	Solid fuels for cooking [1]	Number of household members
Urban																
KMA	7.5	88.6	0.0	0.1	0.0	3.2	0.3	0.0	0.0	0.0	0.4	0.0	0.0	100.0	3.4	6517
Other towns	1.2	87.8	0.2	0.0	0.0	7.2	3.1	0.0	0.0	0.0	0.5	0.0	0.0	100.0	10.3	3862
Urban Total	***5.1***	***88.3***	***0.1***	***0.0***	***0.0***	***4.7***	***1.3***	***0.0***	***0.0***	***0.0***	***0.5***	***0.0***	***0.0***	***100.0***	***6.0***	***10379***
Rural	1.3	74.9	0.5	0.0	0.0	7.4	15.6	0.0	0.0	0.0	0.2	0.0	0.1	100.0	23.0	8568
Education of household head																
None/Primary	2.4	74.3	0.3	0.0	0.0	8.3	14.2	0.0	0.0	0.0	0.4	0.0	0.0	100.0	22.5	3952
Secondary	2.5	83.1	0.3	0.0	0.0	6.5	7.1	0.0	0.0	0.0	0.4	0.0	0.1	100.0	13.6	11766
Tertiary	8.9	89.1	0.0	0.0	0.0	0.7	1.1	0.0	0.0	0.0	0.1	0.0	0.0	100.0	1.9	2884
Missing/DK	0.6	84.0	0.0	0.0	0.0	3.4	10.5	0.0	0.0	0.0	0.0	0.0	1.5	100.0	13.9	345
Wealth index quintiles																
Poorest	1.9	40.3	0.6	0.0	0.0	22.8	32.6	0.0	0.0	0.0	1.5	0.0	0.3	100.0	55.3	3789
Second	3.5	85.1	0.4	0.1	0.0	5.5	5.2	0.0	0.0	0.0	0.2	0.0	0.0	100.0	10.7	3788
Middle	3.1	94.6	0.1	0.0	0.0	1.1	1.1	0.0	0.0	0.0	0.1	0.0	0.0	100.0	2.1	3790
Fourth	1.0	98.5	0.2	0.0	0.0	0.2	0.1	0.0	0.0	0.0	0.1	0.0	0.0	100.0	0.3	3801
Richest	7.5	92.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100.0	0.0	3779
Total	**3.4**	**82.2**	**0.3**	**0.0**	**0.0**	**5.9**	**7.8**	**0.0**	**0.0**	**0.0**	**0.4**	**0.0**	**0.1**	**100.0**	**13.7**	**18947**

[1] MICS indicator 3.11

Solid fuel use alone is a poor proxy for indoor air pollution, since the concentration of the pollutants is different when the same fuel is burnt in different stoves or fires. Use of closed stoves with chimneys minimizes indoor pollution, while open stove or fire with no chimney or hood means that there is no protection from the harmful effects of solid fuels. Solid fuel use by place of cooking is depicted in Table CH.10.

Among households that used solid fuels, the primary place of cooking was outdoors at 43.9 per cent. This was followed by cooking in a separate building (33.0%) and in a separate room used as a kitchen (18.3%). Interestingly, cooking outdoors was more popular in urban households that used solid fuel for cooking (48.2%) than in rural households (42.6%). In rural households, however, cooking in a separate building was the next most popular option (38.0%) compared to urban areas where cooking in a separate room used as a kitchen was the next most popular option (24.6%).

TABLE CH.10: SOLID FUEL USE BY PLACE OF COOKING

PER CENT DISTRIBUTION OF HOUSEHOLD MEMBERS IN HOUSEHOLDS USING SOLID FUELS BY PLACE OF COOKING, JAMAICA, 2011

	Place of cooking:							Number of household members in households using solid fuels for cooking
	In a separate room used as kitchen	Elsewhere in the house	In a separate building	Outdoors	Other	Missing	Total	
Area								
Urban								
KMA	27.0	9.9	8.2	44.0	0.5	10.3	100.0	224
Other Towns	23.2	1.9	22.6	50.5	0.1	1.7	100.0	396
Urban Total	***24.6***	***4.8***	***17.4***	***48.2***	***0.2***	***4.8***	***100.0***	620
Rural	16.4	1.4	38.0	42.6	0.0	1.7	100.0	1,972
Education of Household Head								
None/Primary	18.3	1.4	38.1	40.1	0.1	2.0	100.0	890
Secondary	18.8	2.8	28.4	47.2	0.0	2.8	100.0	1,600
Tertiary	10.8	1.2	47.5	40.4	0.0	0.0	100.0	55
Missing/DK	(11.0)	(0.0)	(77.9)	(10.2)	(0.0)	(0.9)	100.0	48
Wealth Index Quintiles								
Poorest	18.3	2.2	31.6	44.9	0.1	2.9	100.0	2,097
Second	15.1	2.2	41.0	41.3	0.0	0.3	100.0	404
Middle	38.4	4.4	34.6	22.6	0.0	0.0	100.0	81
Fourth	(*)	(*)	(*)	(*)	(*)	(*)	100.0	10
Richest	-	-	-	-	-	-	-	0
Total	**18.3**	**2.2**	**33.0**	**43.9**	**0.1**	**2.4**	**100.0**	**2,592**

( ) Figures that are based on 25-49 unweighted cases
(*) Figures that are based on less than 25 unweighted cases

VI.

Water and Sanitation

VI. Water And Sanitation

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

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

Water

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

Sanitation

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

For more details on water and sanitation and to access some reference documents, please visit the UNICEF child info website http://www.childinfo.org/wes.html.

Use of Improved Water Sources

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

Overall, 94.6 per cent of the population used an improved source of drinking water – 99.7 per cent in KMA, 98.0 per cent in other towns, and 89.2 per cent in rural areas.

There are strong variations in the source of drinking water between urban areas and KMA on one hand, and rural areas on the other hand (Table WS.1).In other towns and KMA, 88.1 per cent and 91.2 per cent respectively, of their populations used piped drinking water. In contrast, only about 63.4 per cent of those residing in rural areas used piped water. In rural areas, the second most important source of drinking water is rainwater collection, while for other towns and KMA it is bottled water. Ninety-three per cent of households with a head who has at most a primary level of education have an improved source of water compared to the higher figure (97.6 %) recorded for those that have a head who has a tertiary level education. In terms of wealth, the figures for households with an improved source of water range from 89.3 per cent for the poorest quintile to 98.1 per cent for the richest quintile, with a steady increase in the use of improved sources with increases in household wealth.

TABLE WS.1A: USE OF IMPROVED WATER SOURCES

PER CENT DISTRIBUTION OF HOUSEHOLD POPULATION ACCORDING TO MAIN SOURCE OF DRINKING WATER AND PERCENTAGE OF HOUSEHOLD POPULATION USING IMPROVED DRINKING WATER SOURCES, JAMAICA, 2011

	Main source of drinking water								Percentage using improved sources of drinking water [1]	Number of household members
	Improved sources									
	Piped into dwelling	Piped into compound, yard or plot	Piped to neighbour	Public tap / standpipe	Protected well	Protected spring	Rainwater collection	Bottled water		
Area										
Urban										
KMA	70.9	17.7	1.4	1.2	0.1	0.0	0.0	8.4	99.7	6,517
Other towns	58.7	21.8	3.1	4.5	0.5	0.0	4.5	4.9	98.0	3,862
Urban total	***66.3***	***19.3***	***2.0***	***2.4***	***0.2***	***0.0***	***1.7***	***7.1***	***99.1***	***10,379***
Rural	32.8	15.7	3.9	11.0	0.4	2.5	20.9	1.9	89.2	8,568
Education of household head										
None/Primary	44.7	17.1	3.2	7.8	0.4	1.9	15.4	2.5	93.0	3,952
Secondary	48.4	20.9	3.3	6.7	0.3	1.1	10.3	3.4	94.5	11,766
Tertiary	71.2	5.4	1.1	2.0	0.3	0.4	4.5	12.6	97.6	2,884
Missing/DK	54.3	13.1	0.0	11.6	0.0	0.0	5.0	10.9	94.8	345
Wealth index quintiles										
Poorest	8.9	30.1	9.1	18.2	0.5	3.1	19.1	0.3	89.3	3,789
Second	27.1	36.9	4.0	8.1	0.3	1.6	13.1	1.3	92.3	3,788
Middle	60.3	14.5	1.1	3.3	0.5	0.8	12.9	2.0	95.4	3,790
Fourth	78.1	5.7	0.1	1.6	0.3	0.2	6.1	6.0	98.1	3,801
Richest	81.6	1.1	0.1	0.3	0.0	0.0	0.8	14.3	98.1	3,779
Total	**51.2**	**17.6**	**2.9**	**6.3**	**0.3**	**1.1**	**10.4**	**4.8**	**94.6**	**18,947**

[1] MICS indicator 4.1; MDG indicator 7.8

* 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.

TABLE WS.1B: USE OF IMPROVED WATER SOURCES

PER CENT DISTRIBUTION OF HOUSEHOLD POPULATION ACCORDING TO MAIN SOURCE OF DRINKING WATER AND PERCENTAGE OF HOUSEHOLD POPULATION USING IMPROVED DRINKING WATER SOURCES, JAMAICA, 2011

	Main source of drinking water								Number of household members
	Unimproved sources								
	Unprotected well	Unprotected spring	Tanker-truck	Cart with small tank / drum	Surface water +	Bottled water	Other	Missing	
Area									
Urban									
KMA	0.0	0.0	0.0	0.0	0.0	0.1	0.1	0.0	6,517
Other towns	0.0	0.2	0.9	0.1	0.0	0.5	0.2	0.0	3,862
Urban total	***0.0***	***0.1***	***0.4***	***0.0***	***0.0***	***0.3***	***0.1***	***0.0***	***10,379***
Rural	0.1	2.6	2.7	1.7	1.4	0.6	1.7	0.0	8,568
Education of Household Head									
None/Primary	0.0	2.4	1.1	0.5	0.9	0.6	1.6	0.0	3,952
Secondary	0.0	1.2	1.5	1.1	0.7	0.4	0.7	0.0	11,766
Tertiary	0.1	0.0	1.6	0.0	0.1	0.5	0.2	0.0	2,884
Missing/DK	0.0	0.5	3.1	0.0	1.4	0.0	0.3	0.0	345
Wealth Index Quintiles									
Poorest	0.2	3.5	1.3	1.4	2.4	0.3	1.6	0.1	3,789
Second	0.1	1.8	1.6	2.1	0.5	0.0	1.5	0.0	3,788
Middle	0.0	0.7	2.7	0.2	0.2	0.3	0.6	0.0	3,790
Fourth	0.0	0.0	1.2	0.1	0.0	0.2	0.4	0.0	3,801
Richest	0.0	0.0	0.3	0.0	0.0	1.5	0.1	0.0	3,779
Total	**0.0**	**1.2**	**1.4**	**0.8**	**0.6**	**0.4**	**0.8**	**0.0**	**18,947**

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

One half of the population used some method to treat their drinking water. The two methods most frequently employed were boiling and adding bleach or chlorine. A half of those household members in household using an unimproved drinking water source used an appropriate water treatment method.

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

Table WS.3 shows that for 86.5 per cent of households, the drinking water source was on the premises. There is little difference in the figures between households in rural areas and those in other towns and KMA, although 74.3 per cent of rural households have the source of drinking water on the premises, the figure for other towns was 93.3 per cent and 98.5 per cent for households in KMA. Education and wealth seem also to be associated with households that have the source of drinking water on the premises. Households headed by persons with a primary level of education have a figure of 82.9 per cent, slightly lower than the national average of 86.5 per cent, whereas those headed by persons with a tertiary level of education have a figure of 94.9 per cent. In terms of wealth, 65.9 per cent of households in the poorest quintile have the source of drinking water on the premises. This figure increases with each successive quintile to reach 97.8 per cent for the richest quintile.

For 5.7 per cent of all households, it takes less than 30 minutes to get to the water source and bring water, while 2.0 per cent of households spend 30 minutes or more for this purpose. In rural areas 10.2 per cent of households spend less than 30 minutes to get water and return to the home and 3.8 % spend more than 30 minutes on this chore.

Table WS.4 shows that for 59.6 per cent of households, an adult male is usually the person collecting the water, when the source of drinking water is not on the premises. Adult females collect water in 32.6 per cent of the cases, with the rest of the households - female or male children under age 15 - collecting in 3.7 per cent of the 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, JAMAICA, 2011

	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	Other	Don't know			
Area												
Urban												
KMA	54.0	35.7	12.9	0.1	5.1	0.0	0.6	0.1	0.1	6,517	(*)	17
Other towns	51.6	33.7	14.1	0.2	5.7	0.0	1.2	0.6	0.0	3,862	50.5	76
Urban total	***53.1***	***34.9***	***13.4***	***0.2***	***5.3***	***0.0***	***0.9***	***0.3***	***0.1***	***10,379***	***43.5***	***93***
Rural	47.3	31.9	25.7	0.3	1.4	0.0	0.6	0.7	0.1	8,568	50.3	923
Education of Household Head												
None/Primary	48.3	33.4	21.1	0.2	1.7	0.1	1.2	0.5	0.2	3,952	58.4	277
Secondary	51.6	33.1	20.4	0.2	2.3	0.0	0.6	0.4	0.0	11,766	47.2	652
Tertiary	47.8	36.0	11.0	0.2	11.0	0.0	0.7	0.9	0.0	2,884	42.0	69
Missing/DK	61.1	29.9	12.3	0.0	4.8	0.0	0.2	0.5	0.0	345	(35.5)	18
Wealth Index Quintiles												
Poorest	52.0	28.4	24.5	0.4	0.1	0.0	1.2	0.6	0.1	3,789	50.2	407
Second	47.9	36.0	25.6	0.2	0.2	0.0	0.6	0.5	0.0	3,788	47.0	292
Middle	46.9	35.5	24.3	0.3	1.2	0.0	1.1	0.3	0.1	3,790	61.9	174
Fourth	52.4	35.6	15.0	0.1	3.5	0.0	0.3	0.5	0.2	3,801	63.2	71
Richest	53.1	32.2	5.3	0.1	12.8	0.1	0.6	0.6	0.0	3,779	15.0	72
Total	**50.5**	**33.6**	**19.0**	**0.2**	**3.6**	**0.0**	**0.7**	**0.5**	**0.1**	**18,947**	**49.7**	**1,015**

[1] MICS indicator 4.2

( ) Figures that are based on 25-49 unweighted cases(*) Figures that are based on less than 25 unweighted cases

TABLE WS.3: TIME TO SOURCE OF DRINKING WATER

PER CENT 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, JAMAICA, 2011

	Time to source of drinking water								Total	Number of household members
	Users of improved drinking water sources				Users of unimproved drinking water sources					
	Water on premises	Less than 30 minutes	30 minutes or more	Missing/DK	Water on premises	Less than 30 minutes	30 minutes or more	Missing/DK		
Area										
Urban										
KMA	98.5	0.8	0.4	0.0	0.0	0.0	0.0	0.2	100.0	6,517
Other towns	93.3	4.0	0.7	0.0	0.6	0.4	0.6	0.4	100.0	3,862
Urban total	***96.6***	***2.0***	***0.5***	***0.0***	***0.2***	***0.2***	***0.2***	***0.2***	***100.0***	***10,379***
Rural	74.3	10.2	3.8	1.0	3.1	3.6	3.3	0.7	100.0	8,568
Education of Household Head										
None/Primary	82.9	7.6	2.3	0.1	1.9	2.3	2.3	0.5	100.0	3,952
Secondary	85.8	6.0	2.1	0.6	1.6	1.8	1.7	0.4	100.0	11,766
Tertiary	94.9	1.9	0.5	0.4	1.0	0.6	0.4	0.4	100.0	2,884
Missing/DK	81.1	5.9	7.8	0.0	1.4	2.2	1.4	0.3	100.0	345
Wealth Index Quintiles										
Poorest	65.9	18.0	5.1	0.3	1.9	4.8	3.7	0.2	100.0	3,789
Second	81.8	6.9	2.3	1.3	1.9	2.9	2.4	0.5	100.0	3,788
Middle	90.8	2.5	2.0	0.2	2.4	0.6	1.2	0.4	100.0	3,790
Fourth	96.1	1.1	0.7	0.3	0.9	0.1	0.4	0.5	100.0	3,801
Richest	97.8	0.1	0.0	0.2	0.6	0.4	0.4	0.6	100.0	3,779
Total	**86.5**	**5.7**	**2.0**	**0.5**	**1.5**	**1.7**	**1.6**	**0.5**	**100.0**	**18,947**

TABLE WS.4: PERSON COLLECTING WATER

PERCENTAGE OF HOUSEHOLDS WITHOUT DRINKING WATER ON PREMISES, AND PER CENT DISTRIBUTION OF HOUSEHOLDS WITHOUT DRINKING WATER ON PREMISES ACCORDING TO THE PERSON USUALLY COLLECTING DRINKING WATER USED IN THE HOUSEHOLD, JAMAICA, 2011

	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 (age 15+ years)	Adult man (age 15+ years)	Female child (under 15)	Male child (under 15)	Missing	Total	
Area									
Urban									
KMA	1.6	2,084	(50.3)	(28.2)	(0.0)	(0.0)	(21.5)	100	33
Other towns	6.0	1,232	29.1	60.2	1.8	6.0	2.9	100	74
Urban total	***3.2***	***3,316***	***35.6***	***50.4***	***1.2***	***4.2***	***8.6***	***100***	***106***
Rural	21.8	2,644	32.0	61.3	1.6	1.7	3.3	100	577
Education of Household Head									
None/Primary	14.9	1,281	34.1	60.9	0.5	0.6	3.8	100	191
Secondary	12.1	3,589	31.5	59.1	1.8	3.0	4.6	100	434
Tertiary	4.5	1,005	(29.7)	(63.3)	(4.3)	(0.0)	(2.8)	100	45
Missing/DK	16.0	85	(*)	(*)	(*)	(*)	(*)	100.0	14
Wealth Index Quintiles									
Poorest	29.3	1,323	33.4	61.1	1.4	3.0	1.1	100	388
Second	14.3	1,136	36.0	58.8	2.6	1.6	1.1	100	162
Middle	7.4	1,102	27.2	60.8	1.1	0.0	10.9	100	82
Fourth	2.6	1,165	(15.7)	(66.1)	(0.0)	(0.0)	(18.1)	100	31
Richest	1.6	1,233	(*)	(*)	(*)	(*)	(*)	100.0	20
Total	**11.5**	**5,960**	**32.6**	**59.6**	**1.6**	**2.1**	**4.2**	**100**	**683**

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

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

USE OF IMPROVED SANITATION FACILITIES

Inadequate disposal of human excreta and personal hygiene is associated with a range of diseases including diarrhoeal diseases and polio. An improved sanitation facility is defined as one that hygienically separates human excreta from human contact. Improved sanitation can reduce diarrhoeal disease by more than a third, and can significantly lessen the adverse health impacts of other disorders responsible for death and disease among millions of children in developing countries. Improved sanitation facilities for excreta disposal include flush or pour flush to a piped sewer system, septic tank, or latrine; ventilated improved pit latrine, pit latrine with slab, and composting toilet.

There were sizeable variations in the type of sanitation system used by the different areas. In terms of a sanitation facility employing a flush mechanism to a sewer system, a septic tank or a pit, 97.9 per cent of households in KMA used such a system, 90.8 per cent in urban areas, 79.0 per cent in other towns and only 62.3 per cent in rural areas. About a third (33.9%) of households in rural areas used pit latrines with slab compared to a high 18.7 per cent in other towns, 7.7 per cent in urban areas and 1.1 per cent in KMA. There is a noticeable correlation between wealth and the type of sanitation facility used, while those in the richest quintile of the population used a flush system to a sewer, a septic tank or to a pit, the poorest quintile had 64.2 per cent of households using pit latrines with slab. In terms of education there is little variation with improved sanitation facilities.

Access to safe drinking-water and to basic sanitation is measured by the proportion of population using an improved sanitation facility. MDGs and WHO / UNICEF Joint Monitoring Programme (JMP) for Water Supply and Sanitation classify households as using an unimproved sanitation facility if they are using otherwise acceptable sanitation facilities but sharing a facility between two or more households or using a public toilet facility.

As shown in Table WS.6, 86.5 per cent of the household population used an improved sanitation facility that is not shared. Use of a shared facility is more common among households in KMA (15.2%) followed by other towns (13.8%), urban area (13.5%) and rural area (10.7%).Also, sharing of facilities was most prevalent among the poorest quintile of the population with 29.5 per cent.

TABLE WS.5: TYPES OF SANITATION FACILITIES

PER CENT DISTRIBUTION OF HOUSEHOLD POPULATION ACCORDING TO TYPE OF TOILET FACILITY USED BY THE HOUSEHOLD, JAMAICA, 2011

	Type of toilet facility used by household													
	Improved sanitation facility						Unimproved sanitation facility						Total	Number of household members
	Flush to piped sewer system	Flush to septic tank	Flush to pit (latrine)	Flush to unknown place / Not sure / DK where	Ventilated Improved Pit latrine (VIP)	Pit latrine with slab	Flush to some where else	Pit latrine without slab / Open pit	Bucket	Other	Missing	No facility, Bush, Field		
Area														
Urban														
KMA	46.2	31.8	19.9	0.2	0.1	1.1	0.1	0.0	0.0	0.0	0.4	0.1	100	6,517
Other towns	14.5	31.9	32.6	0.3	0.9	18.7	0.1	0.5	0.0	0.3	0.0	0.2	100	3,862
Urban total	34.4	31.8	24.6	0.3	0.4	7.7	0.1	0.2	0.0	0.1	0.3	0.2	100	10,379
Rural	7.3	21.7	33.3	0.1	2.3	33.9	0.3	0.4	0.0	0.1	0.2	0.4	100	8,568
Education of Household Head														
None/Primary	15.4	23.7	29.4	0.0	2.1	27.6	0.1	0.8	0.0	0.2	0.2	0.4	100	3,952
Secondary	20.6	27.3	29.2	0.1	1.3	20.6	0.2	0.1	0.0	0.1	0.2	0.3	100	11,766
Tertiary	36.2	32.8	25.9	0.5	0.2	3.8	0.2	0.0	0.0	0.0	0.4	0.1	100	2,884
Missing/DK	34.8	21.4	19.8	0.0	0.0	20.3	0.0	2.1	0.0	0.0	1.5	0.1	100	345
Wealth Index Quintiles														
Poorest	3.9	11.0	14.2	0.0	3.8	64.2	0.1	0.9	0.0	0.4	0.2	1.2	100	3,789
Second	10.6	26.5	29.9	0.0	2.2	29.5	0.4	0.6	0.0	0.1	0.0	0.2	100	3,788
Middle	18.2	34.4	42.9	0.2	0.1	3.6	0.2	0.0	0.0	0.0	0.4	0.0	100	3,790
Fourth	30.1	31.6	36.9	0.4	0.3	0.4	0.1	0.0	0.0	0.0	0.3	0.0	100	3,801
Richest	48.0	32.9	18.7	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	100	3,779
Total	**22.1**	**27.3**	**28.5**	**0.2**	**1.3**	**19.5**	**0.2**	**0.3**	**0.0**	**0.1**	**0.2**	**0.3**	**100**	**18,947**

TABLE WS.6: USE AND SHARING OF SANITATION FACILITIES

PER CENT 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, JAMAICA, 2011

	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: 5 households or less	Shared by: More than 5 households	Missing/DK	Not shared	Shared by: 5 households or less	Shared by: More than 5 households			
Area											
Urban											
KMA	83.9	0.1	12.3	2.9	0.1	0.5	0.0	0.0	0.1	100	6,517
Other towns	88.1	0.1	9.8	0.9	0.1	0.4	0.6	0.0	0.2	100	3,862
Urban total	***85.5***	***0.1***	***11.3***	***2.2***	***0.1***	***0.4***	***0.2***	***0.0***	***0.2***	***100***	***10,379***
Rural	87.8	0.1	10.2	0.5	0.1	0.8	0.2	0.0	0.4	100	8,568
Education of Household Head											
None/Primary	88.0	0.1	9.3	0.8	0.0	0.9	0.4	0.0	0.4	100	3,952
Secondary	84.0	0.1	12.9	2.0	0.1	0.4	0.2	0.0	0.3	100	11,766
Tertiary	94.9	0.0	4.4	0.1	0.0	0.6	0.0	0.0	0.1	100	2,884
Missing/DK	85.0	0.0	10.2	1.2	0.0	3.6	0.0	0.0	0.1	100	345
Wealth Index Quintiles											
Poorest	67.2	0.2	26.1	3.4	0.3	0.9	0.7	0.0	1.2	100	3,789
Second	76.9	0.2	18.8	2.7	0.0	0.9	0.2	0.1	0.2	100	3,788
Middle	92.6	0.1	6.5	0.2	0.1	0.6	0.0	0.0	0.0	100	3,790
Fourth	96.6	0.0	2.3	0.8	0.0	0.4	0.0	0.0	0.0	100	3,801
Richest	99.2	0.1	0.4	0.0	0.0	0.3	0.0	0.0	0.0	100	3,779
Total	**86.5**	**0.1**	**10.8**	**1.4**	**0.1**	**0.6**	**0.2**	**0.0**	**0.3**	**100**	**18,947**

[1] MICS indicator 4.3; MDG indicator 7.9

Safe disposal of a child's faeces is disposing of the stool, by the child using a toilet or by releasing the stool into a toilet or latrine. Disposal of faeces of children 0-2 years of age is presented in Table WS.7.Twenty-eight per cent of all households with children of this age group disposed of the child's stool safely. This low occurrence is likely due to the high use of disposable diapers by caretakers which are usually disposed of, in the garbage (66.5%). Rural areas have 34.8 per cent of its households carrying out safe disposal of stool, followed by other towns 23.6 per cent and KMA 23.1 per cent. Safe disposal seems to decrease along the wealth index as 28.1 per cent of the richest quintile of the population disposes of stool in this way, while 40.4 per cent of the poorest quintile disposes of stool safely. Interestingly, there seems to be an inverse relationship between the mother's level of education and safe disposal of the child's stool. Safe disposal of stool was highest (32.6%) where the mother has at most a primary level education, 28.5 per cent in the case of mothers with at least a secondary level of education and 27.0 per cent where the mother has a tertiary level education.

In its 2008 report[6], the JMP developed a new way of presenting the access figures, by disaggregating and refining the data on drinking-water and sanitation and reflecting them in "ladder" format. This ladder allows a disaggregated analysis of trends in a three rung ladder for drinking-water and a four-rung ladder for sanitation. For sanitation, this gives an understanding of the proportion of population with no sanitation facilities at all, of those reliant on technologies defined by JMP as "unimproved," of those sharing sanitation facilities of otherwise acceptable technology, and those using "improved" sanitation facilities. Table WS.8 presents the percentages of household population by drinking water and sanitation ladders. The table also shows the percentage of household members using improved sources of drinking water and sanitary means of excreta disposal.

Eighty-two per cent of the Jamaican population is using an improved drinking water source and improved sanitation. In other towns 86.3 per cent of the population are using such facilities, 84.7 per cent in urban areas, 83.7 per cent in KMA and 77.9 per cent in rural areas. As expected, wealth has a strong influence on whether a household has improved facilities or not. The poorest quintile had the lowest percentage of household with improved facilities (57.7%), while those in the richest quintile have the highest (97.3%).

[6] WHO/UNICEF JMP (2008), MDG assessment report - http://www.wssinfo.org/download?id_document=1279

TABLE WS.7: DISPOSAL OF CHILD'S FAECES

PER CENT 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, JAMAICA, 2011

	Place of disposal of child's faeces								Total	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 (solid waste)	Buried	Other	DK	Missing			
Type of Sanitation Facility in Dwelling											
Improved	13.2	15.1	0.7	66.5	1.2	2.0	0.3	1.1	100	28.3	975
Unimproved	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	4
Open defecation	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	1
Area											
Urban											
KMA	18.2	4.9	1.9	72.8	0.2	0.5	0.1	1.3	100	23.1	347
Other towns	9.5	14.1	0.0	73.1	0.5	1.7	0.7	0.4	100	23.6	211
Urban total	***14.9***	***8.4***	***1.2***	***72.9***	***0.3***	***1.0***	***0.3***	***0.9***	***100***	***23.3***	***559***
Rural	10.8	23.9	0.1	58.0	2.3	3.4	0.2	1.2	100	34.8	421
Mother's Education											
None/Primary	(16.7)	(15.9)	(2.2)	(60.2)	(0.0)	(5.0)	(0.0)	(0.0)	100.0	(32.6)	20
Secondary	11.8	16.8	0.9	65.7	1.6	1.9	0.2	1.2	100	28.5	732
Tertiary	17.4	9.6	0.0	69.7	0.0	2.0	0.6	0.7	100	27.0	228
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	0
Wealth Index Quintiles											
Poorest	8.8	31.6	0.2	51.1	1.1	4.7	0.0	2.5	100	40.4	203
Second	10.2	19.7	1.9	64.0	3.0	0.6	0.3	0.4	100	29.9	231
Middle	12.9	7.6	1.0	76.6	1.0	0.8	0.2	0.0	100	20.5	215
Fourth	13.6	7.6	0.0	73.1	0.3	3.5	0.9	1.0	100	21.2	164
Richest	22.6	5.5	0.0	69.4	0.0	0.8	0.0	1.7	100	28.1	167
Total	**13.2**	**15.1**	**0.7**	**66.5**	**1.2**	**2.0**	**0.3**	**1.0**	**100**	**28.2**	**980**

[1] MICS indicator 4.4

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

HAND WASHING

Hand washing with water and soap is the most cost effective health intervention to reduce both the incidence of diarrhoea and pneumonia in children under five. It is most effective when done using water and soap after visiting a toilet or cleaning a child, before eating or handling food and, before feeding a child. Monitoring correct hand washing behaviour at these critical times is challenging. A reliable alternative to observations or self-reported behaviour is assessing the likelihood that correct hand washing behaviour takes place by observing if a household has a specific place where people most often wash their hands and observing if water and soap (or other local cleansing materials) are present at a specific place for hand washing.

In Jamaica, in 65.5 per cent of the households a specific place for hand washing was observed, while 19.5 per cent of the households did not give a permission to see the place used for hand washing (Table WS9). Of those households where a place for hand washing was observed, about 80 per cent had both water and soap present at the designated place. In 15 per cent of the households only water was available at the designated place, while in 2.3 per cent of the households the place only had soap but no water. The remaining 2.7 per cent of households had neither water nor soap available at the designated place for hand washing. In 89 per cent of households, there was soap available in some part of the dwelling (Table WS 10).

TABLE WS.8: DRINKING WATER AND SANITATION LADDERS

PERCENTAGE OF HOUSEHOLD POPULATION BY DRINKING WATER AND SANITATION LADDERS, JAMAICA, 2011

	Percentage of household population using:											Number of household members
	Improved					Unimproved sanitation						
	Improved drinking water [1]		Unimproved drinking water	Total	Improved sanitation [2]				Total	Improved drinking water sources and improved sanitation		
	Piped into dwelling, plot or yard	Other improved				Shared improved facilities	Unimproved facilities	Open defecation				
Area												
Urban												
KMA	97.0	2.7	0.3	100	83.9	15.4	0.5	0.1	100	83.7		6,517
Other towns	85.1	12.9	2.0	100	88.1	10.8	1.0	0.2	100	86.3		3,862
Urban total	92.6	6.5	0.9	100	85.5	13.7	0.7	0.2	100	84.7		10,379
Rural	49.8	39.5	10.8	100	87.8	10.9	1.0	0.4	100	77.9		8,568
Education of Household Head												
None/Primary	63.8	29.2	7.0	100	88.0	10.3	1.4	0.4	100	81.6		3,952
Secondary	72.4	22.0	5.5	100	84.0	15.1	0.6	0.3	100	78.9		11,766
Tertiary	88.8	8.8	2.4	100	94.9	4.5	0.6	0.1	100	92.8		2,884
Missing/DK	78.2	16.5	5.2	100	85.0	11.3	3.6	0.1	100	80.0		345
Wealth Index Quintiles												
Poorest	39.2	50.1	10.7	100	67.2	30.0	1.6	1.2	100	57.7		3,789
Second	64.5	27.8	7.7	100	76.9	21.7	1.2	0.2	100	70.0		3,788
Middle	76.5	18.9	4.6	100	92.6	6.9	0.6	0.0	100	88.2		3,790
Fourth	89.1	9.1	1.9	100	96.6	3.0	0.4	0.0	100	94.8		3,801
Richest	96.8	1.3	1.9	100	99.2	0.5	0.3	0.0	100	97.3		3,779
Total	**73.2**	**21.4**	**5.4**	**100.0**	**86.5**	**12.4**	**0.8**	**0.3**	**100.0**	**81.6**		**18947**

[1] MICS indicator 4.1

[2] MICS indicator 4.3

TABLE WS.9: WATER AND SOAP AT PLACE FOR HAND WASHING

PERCENTAGE OF HOUSEHOLDS WHERE PLACE FOR HAND WASHING WAS OBSERVED AND PER CENT DISTRIBUTION OF HOUSEHOLDS BY AVAILABILITY OF WATER AND SOAP AT PLACE FOR HAND WASHING, JAMAICA, 2011

	Percentage of households where place for hand washing was observed	Percentage of households where place for hand washing was not observed				Total	Number of households	Per cent distribution of households where place for hand washing was observed, where:				Total	Number of households where place for hand washing was observed
		Not in dwelling/ plot/ yard	No permission to see	Other reasons	Missing			Water and soap are available [1]	Water is available, soap is not available	Water is not available, soap is available	Water and soap are not available		
Area													
Urban													
KMA	66.1	6.4	20.1	7.4	0.0	100	2,084	80.0	19.4	0.2	0.4	100	1,378
Other towns	58.5	4.3	28.8	8.1	0.3	100	1,232	87.9	8.5	2.2	1.5	100	720
Urban total	***63.3***	***5.6***	***23.3***	***7.7***	***0.1***	***100***	***3,316***	***82.7***	***15.6***	***0.9***	***0.8***	***100***	***2,098***
Rural	68.2	3.6	14.7	13.4	0.0	100	2,644	77.0	14.3	3.9	4.9	100	1,803
Education of Household Head													
None/Primary	64.5	5.3	17.8	12.3	0.1	100	1,281	74.4	19.0	2.8	3.8	100	826
Secondary	66.4	4.9	18.7	9.9	0.1	100	3,589	78.9	15.9	2.4	2.8	100	2,385
Tertiary	64.2	3.6	23.1	8.9	0.2	100	1,005	92.2	6.4	0.9	0.5	100	646
Missing/DK	52.3	0.5	36.3	10.9	0.0	100	85	(74.3)	(15.7)	(1.8)	(8.2)	100	44
Wealth Index Quintiles													
Poorest	64.7	7.6	13.2	14.5	0.1	100	1,323	61.7	26.6	4.1	7.6	100	856
Second	65.9	6.6	15.9	11.4	0.1	100	1,136	72.4	21.7	2.4	3.6	100	749
Middle	66.8	4.2	19.1	9.8	0.1	100	1,102	85.0	11.3	2.4	1.4	100	736
Fourth	64.2	2.9	24.5	8.4	0.1	100	1,165	90.7	7.5	1.6	0.2	100	747
Richest	65.9	2.1	25.2	6.7	0.1	100	1,233	92.3	6.9	0.8	0.1	100	813
Total	**65.5**	**4.7**	**19.5**	**10.2**	**0.1**	**100**	**5,960**	**80.1**	**15.0**	**2.3**	**2.7**	**100**	**3,901**

[1] MICS indicator 4.5

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

TABLE WS.10: AVAILABILITY OF SOAP

PER CENT DISTRIBUTION OF HOUSEHOLDS BY AVAILABILITY OF SOAP IN THE DWELLING, JAMAICA, 2011

	Place for hand washing observed				Place for hand washing not observed				Total	Percentage of households with soap anywhere in the dwelling [1]	Number of households
	Soap observed	Soap shown	No soap in household	Not able/Does not want to show soap	Soap observed	Soap shown	No soap in household	Not able/Does not want to show soap			
Area											
Urban											
KMA	53.0	11.5	0.4	1.2	0.0	29.0	0.5	4.4	100	93.5	2,084
Other towns	52.6	4.3	0.5	1.0	0.0	21.1	1.5	18.9	100	78.0	1,232
Urban total	***52.9***	***8.8***	***0.4***	***1.1***	***0.0***	***26.1***	***0.9***	***9.8***	***100***	***87.7***	***3,316***
Rural	55.2	11.7	0.7	0.6	0.0	22.7	0.8	8.3	100	89.5	2,644
Education of Household Head											
None/Primary	49.8	12.2	0.9	1.6	0.0	24.6	1.2	9.7	100	86.5	1,281
Secondary	54.0	11.1	0.6	0.7	0.0	24.5	0.9	8.2	100	89.6	3,589
Tertiary	59.8	3.9	0.0	0.5	0.0	24.5	0.2	11.0	100	88.3	1,005
Missing/DK	39.8	10.4	0.0	2.1	0.0	27.7	1.5	18.5	100	77.9	85
Wealth Index Quintiles											
Poorest	42.5	19.3	1.3	1.6	0.0	23.8	2.5	8.9	100	85.6	1,323
Second	49.3	14.4	0.9	1.3	0.0	24.5	0.8	8.8	100	88.3	1,136
Middle	58.3	7.5	0.3	0.6	0.0	24.1	0.2	8.9	100	90.0	1,102
Fourth	59.2	4.2	0.2	0.6	0.0	27.0	0.2	8.6	100	90.4	1,165
Richest	61.3	4.2	0.1	0.3	0.0	23.4	0.3	10.4	100	88.9	1,233
Total	**53.9**	**10.1**	**0.6**	**0.9**	**0.0**	**24.6**	**0.8**	**9.1**	**100**	**88.5**	**5,960**

[1] MICS indicator 4.6

VII.

Reproductive Health

VII. Reproductive Health

Reproductive Health addresses the reproductive processes, functions and system. Implicit within the framework of WHO's definition, is the right of access to appropriate health care services that will enable women to go safely through pregnancy and childbirth and provide the best chance of having a healthy infant.

FERTILITY

In MICS4, adolescent birth rates and total fertility rates are calculated by using information on the date of last birth of each woman and are based on the one-year period (1-12 months) preceding the survey. Rates are underestimated by a very small margin due to absence of information on multiple births (twins, triplets etc.) and on women having multiple deliveries during the one year period preceding the survey.

Tables RH.1A and RH.1B show adolescent birth rates and total fertility rate. The adolescent birth rate (age-specific fertility rate for women age 15-19) is defined as the number of births to women age 15-19 years during the one year period preceding the survey, divided by the average number of women age 15-19 (number of women-years lived between ages 15 through 19, inclusive) during the same period, expressed per 1000 women. The total fertility rate (TFR) is calculated by summing the age-specific fertility rates calculated for each of the 5-year age groups of women, from age 15 through to age 49. The TFR denotes the average number of children to which a woman will have given birth by the end of her reproductive years if current fertility rates prevailed. The data show a higher GFR and TFR among rural women. The highest age specific fertility rate of 129 births per 1000 women occurs among rural women age 25-29.

TABLE RH.1A: FERTILITY RATES

ADOLESCENT BIRTH RATE, AGE-SPECIFIC AND TOTAL FERTILITY RATES, THE GENERAL FERTILITY RATE, AND THE CRUDE BIRTH RATE FOR THE ONE YEAR PRECEDING THE SURVEY, BY AREA, JAMAICA 2011

	Urban	Rural	Total
Age			
15-19[1]	72	67	70
20-24	112	98	106
25-29	110	129	118
30-34	61	91	72
35-39	53	68	59
40-44	7	27	16
45-49	2	5	3
Total Fertility Rate (TFR)	**2.1**	**2.4**	**2.2**
General Fertility Rate (GFR)	**70**	**80**	**74**
Crude Birth Rate (CBR)	**17**	**19**	**18**

[1] MICS indicator 5.1; MDG indicator 5.4

Note[7]:
TFR: Total fertility rate expressed per woman age 15-49
GFR: General fertility rate expressed per 1,000 women age 15-49
CBR: Crude birth rate expressed per 1,000 population

However, the adolescent birth rate is lower among women age 15-19 in rural areas. Adolescents with no or primary education exhibit a high birth rate of 177 per 1000 women of that age, more than twice the rate among adolescents with tertiary education (87 per 1000 women). The number of births per 1000 women is highest among adolescents in the poorest and second poorest quintiles.

TABLE RH.1B
ADOLESCENT BIRTH RATES AND TOTAL FERTILITY RATES, JAMAICA, 2011

	Adolescent birth rate [1] (Age-specific fertility rate for women age 15-19)	Total Fertility Rate
Area		
Urban		
KMA	73	1.8
Other towns	70	2.6
Urban total	***72***	***2.1***
Rural	67	2.4
Mother's Education		
None/Primary	177	1.7
Secondary	66	2.4
Tertiary	87	1.9
Wealth Index Quintiles		
Poorest	100	3.2
Second	107	2.6
Middle	77	2.5
Fourth	48	1.6
Richest	7	1.4
Total	**70**	**2.2**

[1] MICS indicator 5.1; [1] MICS indicator 5.4

[7] *Age-specific fertility rate is defined as the number of live births to women of a specific age group during the one year period preceding the survey divided by the average number of women in that age group during the same period, expressed per 1000 women.*

The age-specific fertility rate for women age 15-19 is also referred as the adolescent birth rate.

The total fertility rate (TFR) is calculated by summing the age-specific fertility rates calculated for each of the 5-year age groups of women, from age 15 through to age 49. The TFR denotes the average number of children to which a woman will have given birth by the end of her reproductive years if current fertility rates prevailed.

The general fertility rate (GFR) is number of live births to women age 15-49 years during the one year period preceding the survey divided by the average number of women in the same age group during the same period, expressed per 1000 women.

The crude birth rate (CBR) is the number of births during the one year period preceding the survey, divided by the total population during the same period, expressed per 1,000 population.

Age specific and total fertility rates are calculated by using information on the date of last birth of each woman (CM12) and are based on the one-year period (1-12 months) preceding the survey.

EARLY CHILDBEARING

Childbearing early in life carries significant risks for young people all around the world. Table RH.2 presents some early childbearing indicators for women age 15-19 and 20-24. In Jamaica, as shown in Table RH.3, 8.9 per cent of women ages 15-19 years who have already had a birth, or are pregnant with their first child, less than 1 per cent have had a live birth before age 15. Of the women who had a live birth in the age group 15-19, 8 per cent were located in rural areas, 9.3 per cent in KMA, and 9.9 per cent in other towns.

TABLE RH.2: EARLY CHILDBEARING

PERCENTAGE OF WOMEN AGE 15-19 WHO HAVE HAD A LIVE BIRTH; PERCENTAGE OF WOMEN AGE 15-19 WHO HAVE BEGUN CHILDBEARING BEFORE AGE 15, AND THE PERCENTAGE OF WOMEN AGE 20-24 WHO HAVE HAD A LIVE BIRTH BEFORE AGE 18, JAMAICA, 2011

	Number of women age 15-19		Number of women age 15-19	Percentage of women age 20-24 who have had a live birth before age 18 [1]	Number of women age 20-24
	Have had a live birth	Have had a live birth before age 15			
Area					
Urban					
KMA	9.3	0.3	299	13.6	261
Other towns	9.9	0.0	185	14.0	160
Urban total	***9.6***	***0.2***	***485***	***13.7***	***421***
Rural	8.0	0.3	409	16.4	311
Mother's Education					
None/Primary	(*)	(*)	4	(*)	3
Secondary	8.8	0.3	788	20.2	464
Tertiary	8.9	0.0	102	5.2	264
Wealth Index Quintiles					
Poorest	11.4	0.0	166	23.7	123
Second	11.6	0.9	203	20.0	177
Middle	10.8	0.0	201	16.9	159
Fourth	5.4	0.2	172	10.0	146
Richest	3.7	0.0	152	2.2	127
Total	**8.9**	**0.3**	**894**	**14.9**	**732**

[1] MICS indicator 5.2
(*) Figures that are based on less than 25 unweighted cases

In terms of the household wealth, the percentage in the first and second wealth quintiles (11.4% and 11.6%) were at the higher end of the scale, with a low of 3.7 per cent in the poorest quintile group. This shows that early child bearing is negatively associated with wealth.

Some 14.9 per cent of women age 20 – 24 had a live birth before age 18. There was little variation by area though rural areas had a slightly higher percentage than urban areas (16.4 per cent compared with 13.7 per cent).However there was a clear negative association between wealth and the percentage of women age 20-24 who had a live birth before the age of 18. The women the poorest quintile was more likely to have begun child bearing before age 18, women in the richest quintile.

Living in rural areas was also associated with early child bearing; in rural areas, 16.4 per cent of 20-24 year old women had a live birth before age 18. This percentage declined to 14.0 per cent in other towns and 13.6 per cent in the KMA. Educational attainment also impacted early childbearing; while 20.2 per cent of 20-24 year old women with secondary education had a live birth before age 18, only 5.2 per cent of women with tertiary education had a live birth before age 18. Across wealth quintiles, there was an inverse relationship between wealth and early childbearing. Approximately 24 per cent of 20-24 year old women in the poorest quintile had a live birth before age 18. This percentage gradually declined to 20 per cent in the second quintile, 16.9 per cent in the middle quintile, 10 per cent in the fourth quintile and finally 2.2 per cent in the richest quintile.

TABLE RH.3: TRENDS IN EARLY CHILDBEARING

PERCENTAGE OF WOMEN WHO HAVE HAD A LIVE BIRTH BY AGE 15 AND 18, BY AGE GROUPS, JAMAICA, 2011

	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
Age												
15-19	0.2	485	na	na	0.3	409	na	na	0.3	894	na	na
20-24	1.7	421	13.7	421	1.1	311	16.4	311	1.4	732	14.9	732
25-29	3.3	419	17.4	419	2.6	308	22.3	308	3.0	728	19.5	728
30-34	2.4	413	19.9	413	1.5	246	29.9	246	2.0	659	23.7	659
35-39	1.3	462	19.3	462	3.1	270	26.3	270	2.0	732	21.9	732
40-44	2.2	409	23.9	409	2.1	290	28.1	290	2.1	698	25.6	698
45-49	2.0	320	23.0	320	4.6	269	33.1	269	3.2	589	27.6	589
Total	**1.8**	**2928**	**19.4**	**2444**	**2.1**	**2104**	**25.7**	**1695**	**1.9**	**5032**	**22.0**	**4138**

ANTENATAL CARE

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

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

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

The type of personnel providing antenatal care to women aged 15-49 years who gave birth in the two years preceding is presented in Table RH.4. Coverage of antenatal care (by a doctor, nurse, or midwife) is high in Jamaica with 97.7 per cent of women receiving antenatal care at least once during the pregnancy. The lowest level of antenatal care was found in the KMA (94.4%), while the highest level was in both other towns and rural areas with 99.3 and 98.8 per cent respectively of women receiving antenatal care at least once by skilled personnel.

In terms of the wealth index, the percentage of women who received antenatal care from a doctor showed an upward trend, while the percentage who received such care from a nurse/midwife moved in the opposite direction. Some 30 per cent of women in the poorest wealth index quintile reported antenatal care provided by a doctor and 66.4 per cent reported antenatal care provided by nurse/midwife. In the middle quintile group, 59.6 per cent of women reported that antenatal care was provided by a doctor and 37.6 per cent by a nurse/midwife. At the top of the wealth index scale, 84.3 per cent of women (the richest wealth quintile) reported antenatal care provided by a doctor and 14.8 per cent reported antenatal care provided by nurse/midwife.

TABLE RH.4: ANTENATAL CARE PROVIDER

PER CENT DISTRIBUTION OF WOMEN AGED 15-49 WHO GAVE BIRTH IN THE TWO YEARS PRECEDING THE SURVEY BY TYPE OF PERSONNEL PROVIDING ANTENATAL CARE, JAMAICA, 2011

	Person providing antenatal care						Total	At least once by skilled personnel [1]	Number of women who gave birth in the preceding two years
	Doctor	Nurse/ Midwife	Auxiliary midwife	Community health worker	Other/ missing	No antenatal care received			
Area									
Urban									
KMA	66.2	27.8	0.4	1.7	0.8	3.1	100.0	94.4	187
Other towns	60.4	38.4	0.0	0.0	0.0	1.2	100.0	98.8	151
Urban total	***63.7***	***32.5***	***0.2***	***0.9***	***0.4***	***2.3***	***100.0***	***96.4***	***338***
Rural	43.9	55.4	0.0	0.0	0.0	0.7	100.0	99.3	276
Mother's Age at Birth									
Less than 20	52.6	43.7	0.0	3.1	0.6	0.0	100.0	96.3	101
20-34	56.5	42.2	0.0	0.0	0.2	1.1	100.0	98.7	409
35-49	50.0	44.5	0.6	0.0	0.0	4.8	100.0	95.2	104
Education									
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	9
Secondary	47.7	50.3	0.1	0.0	0.1	1.8	100.0	98.1	474
Tertiary	80.0	16.1	0.0	2.4	0.6	0.8	100.0	96.1	131
Wealth Index Quintiles									
Poorest	30.0	66.4	0.5	0.0	0.0	3.1	100.0	96.9	145
Second	42.6	55.9	0.0	0.0	0.4	1.1	100.0	98.5	146
Middle	59.6	37.6	0.0	0.0	0.0	2.8	100.0	97.2	131
Fourth	74.6	22.2	0.0	3.2	0.0	0.0	100.0	96.8	98
Richest	84.3	14.8	0.0	0.0	0.9	0.0	100.0	99.1	94
Total	**54.8**	**42.8**	**0.1**	**0.5**	**0.2**	**1.6**	**100.0**	**97.7**	**614**

[1] MICS indicator 5.5a; MDG indicator 5.5

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

UNICEF and WHO recommend a minimum of at least four antenatal care visits during pregnancy. Table RH.5 shows the number of antenatal care visits during the last pregnancy within the two years preceding the survey, regardless of provider by selected characteristics.

Almost nine in ten mothers (90.6) received antenatal care more than once and 85.6 per cent of mothers received antenatal care at least four times. Less than 2 per cent of the women who had a live birth in the preceding two years did not visit any antenatal care provider.

Mothers from the poorest households are least likely to receive four or more visits to obtain antenatal care. For example, 77.3 per cent of the women living in poorest households reported four or more antenatal care visits compared with 89.3 per cent among those living in richest households. Over 85.0 per cent of the women in the other quintile groups made four or more antenatal care visits.

TABLE RH.5: NUMBER OF ANTENATAL CARE VISITS

PERCENTAGE OF WOMEN WHO HAD A LIVE BIRTH DURING THE TWO YEARS PRECEDING THE SURVEY BY NUMBER OF ANTENATAL CARE VISITS BY ANY PROVIDER, JAMAICA, 2011

	Per cent of women who had:				Total	Number of women who gave birth in the preceding two years
	No antenatal care visits	One visit	Three visits	Four or more visits		
Area						
Urban						
KMA	3.1	0.9	1.8	85.3	100	187
Other towns	1.2	0.3	1.4	85.1	100	151
Urban total	***2.3***	***0.6***	***1.6***	***85.2***	***100***	***338***
Rural	0.7	1.6	3.0	86.0	100	276
Education						
None / Primary	(*)	(*)	(*)	(*)	100.0	9
Secondary	1.8	1.3	2.4	84.8	100	474
Tertiary	0.8	0.0	1.9	89.4	100	131
Wealth Index Quintiles						
Poorest	3.1	1.9	4.8	77.3	100	145
Second	1.1	0.0	2.4	90.8	100	146
Middle	2.8	0.0	1.3	85.3	100	131
Fourth	0.0	3.7	1.0	86.8	100	98
Richest	0.0	0.0	0.5	89.3	100	94
Total	**1.6**	**1.0**	**2.2**	**85.6**	**100**	**614**

[1] MICS indicator 5.5b; MDG indicator 5.5

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

The types of services pregnant women received are shown in table RH.6. Among those women who have given birth to a child during the two years preceding the survey, 97.4 per cent reported that a blood test was taken during antenatal care visits, 98.4 per cent reported that their blood pressure was checked, and, in 98 per cent of cases, urine specimen was taken. Pregnant women from rural areas and other towns reported 98.3 per cent and 97.9 per cent respectively for all three types of services received, while 95.7 per cent of pregnant women in the KMA reported that they were recipient of the three services. Of the women who have obtained secondary and Tertiary levels of education, 96.8 per cent and 99.2 per cent reported having blood test taken, blood pressure measured, and urine specimen taken.

There was some variation in the quintile groups for the content of antenatal care for women in the poorest quintile compared to women in the richest quintile. Some 96.5 per cent of women in the poorest quintile reported having blood test taken, blood pressure measured, and urine specimen taken when compared with 100 per cent of women in the richest quintile. The variations in the other three quintile groups are: 98.4, 97.2 and 95 per cent for the second, middle and fourth groups respectively.

TABLE RH.6: CONTENT OF ANTENATAL CARE

PERCENTAGE OF WOMEN AGE 15-49 YEARS WHO HAD THEIR BLOOD PRESSURE MEASURED, URINE SAMPLE TAKEN, AND BLOOD SAMPLE TAKEN AS PART OF ANTENATAL CARE, JAMAICA, 2011

	Per cent of pregnant women who had:			Blood pressure measured, urine specimen and blood test taken [1]	Number of women who gave birth in two years preceding survey
	Blood pressure measured	Urine specimen taken	Blood test taken		
Area					
Urban					
KMA	96.9	96.5	95.7	95.7	187
Other towns	98.8	98.8	97.9	97.9	151
Urban total	***97.7***	***97.5***	***96.7***	***96.7***	338
Rural	99.3	98.6	98.3	98.3	276
Education					
None / Primary	(*)	(*)	(*)	(*)	9
Secondary	98.2	97.6	96.8	96.8	474
Tertiary	99.2	99.2	99.2	99.2	131
Wealth Index Quintiles					
Poorest	96.9	96.5	96.5	96.5	145
Second	98.9	98.9	98.4	98.4	146
Middle	97.2	97.2	97.2	97.2	131
Fourth	100.0	98.0	95.0	95.0	98
Richest	100.0	100.0	100.0	100.0	94
Total	**98.4**	**98.0**	**97.4**	**97.4**	**614**

[1] MICS indicator 5.6

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

ASSISTANCE AT DELIVERY

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

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

About 99.1 per cent of births occurring in the two years preceding the MICS survey were delivered by any skilled personnel (Table RH.7).This is highest in other towns at 100 per cent and lowest in the rural areas at 98.2 per cent. In the KMA, it was 99.7 per cent. More than one in three of the births (54.3%) in the two years preceding the MICS survey were delivered with assistance by a nurse/midwife; and Doctors assisted with the delivery of 44.3 per cent of births. However, the percentage of women who were assisted by a doctor or a nurse/midwife showed some wide variation, as well as an inverse relationship, when measured according to rural areas, other towns and KMA. Those who were assisted at delivery by a doctor and resided in rural areas had the lowest percentage (29.7%), followed by other towns (43.4%) and KMA (66.5%). Women from rural areas who were assisted by a nurse/midwife had the highest percentage (68.4%), with lower percentages in other towns (56.6%) and KMA (31.5%).

In terms of women who have obtained secondary level of education, 98.8 per cent were assisted at delivery by skilled personnel. Those assisted by a doctor (39.9%) were at a lower percentage than those assisted by a nurse/midwife (58.3%), in line with the overall percentages for these skilled providers. For women who have obtained tertiary level of education, 100 per cent were assisted at delivery by skilled personnel. Those assisted by a doctor (62.5%) were at a higher percentage than those assisted by a nurse/midwife (37.5%).

There is a positive relationship between household wealth and use of a doctor for delivery, but a negative relationship with the use of a nurse/midwife. As household wealth increases, the percentages for doctor increase, while there was a decrease for nurse/midwife, with the exception of the poorest and second quintiles (see Table RH.7).Some 96.5 per cent of women in the poorest quintile and 99.6 per cent of women in the second wealth index reported assistance at delivery by any skilled personnel. In the other three groups, there is complete coverage regarding assistance at delivery by any skilled personnel.

Among women aged 15–49 years who had a live birth in the two years preceding the survey, 21.2 per cent were delivered by C-section. As a woman gets closer to the end of her reproductive years (35–49 yrs.), it is more likely that she would report having delivered by C-section (29.6%). Some 20.8 per cent of women in the 20-34 age groups reported a delivery by C-section, while 14.3 per cent of those less than 20 years had a C-section.

In the rural areas, 16.5 per cent of women reported that they had a C-section, followed by 22.2 per cent in the KMA and 28.6 per cent in other towns. Some 16.8 per cent of women with secondary education reported delivery by C-section; 38.3 per cent of women with tertiary education reported delivery by C-section. Birth by C-section is positively associated with household wealth; Women in the poorest quintile are less likely to report delivery by C-section (12.7%) compared with 20.9 per cent and 32.7 per cent of women in the middle and richest quintile.

TABLE RH.7: ASSISTANCE DURING DELIVERY

PER CENT DISTRIBUTION OF WOMEN AGE 15-49 WHO HAD A LIVE BIRTH IN THE TWO YEARS PRECEDING THE SURVEY BY PERSON ASSISTING, AT DELIVERY AND PERCENTAGE OF BIRTHS DELIVERED BY C-SECTION, JAMAICA, 2011

	Person assisting at delivery						Total	Any skilled personnel [1]	Per cent delivered by C-section [2]	Number of women who gave birth in preceding two years
	Doctor	Nurse / Midwife	Auxiliary Nurse	Traditional Midwife	Relative/ Friend	No Attendant				
Area										
Urban										
KMA	66.5	31.5	1.7	0.0	0.0	0.3	100.0	99.7	22.2	187
Other towns	43.4	56.6	0.0	0.0	0.0	0.0	100.0	100.0	28.6	151
Urban total	***56.2***	***42.7***	***0.9***	***0.0***	***0.0***	***0.2***	***100.0***	***99.8***	***25.1***	***338***
Rural	29.7	68.4	0.0	0.4	1.0	0.4	100.0	98.2	16.5	276
Mother's Age at Birth										
Less than 20	33.7	63.0	0.0	0.0	2.7	0.6	100.0	96.7	14.3	101
20-34	44.2	54.8	0.8	0.0	0.0	0.3	100.0	99.7	20.8	409
35-49	55.1	43.7	0.0	1.1	0.0	0.0	100.0	98.9	29.6	104
Place of Delivery										
Public sector health facility	40.5	58.8	0.6	0.0	0.0	0.1	100.0	99.9	19.9	554
Private sector health facility	(91.3)	(8.7)	(0.0)	(0.0)	(0.0)	(0.0)	100.0	(100.0)	(39.0)	51
Home	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	7
Other	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	2
Education										
None / Primary	(*)	(*)	(*)	(*)	(*)	(*)	100.0	(*)	(*)	9
Secondary	39.9	58.3	0.7	0.2	0.6	0.4	100.0	98.8	16.8	474
Tertiary	62.5	37.5	0.0	0.0	0.0	0.0	100.0	100.0	38.3	131
Wealth Index Quintiles										
Poorest	33.3	63.2	0.0	0.8	1.9	0.8	100.0	96.5	12.7	145
Second	35.7	63.9	0.0	0.0	0.0	0.4	100.0	99.6	29.9	146
Middle	42.0	55.6	2.4	0.0	0.0	0.0	100.0	100.0	20.9	131
Fourth	51.8	48.2	0.0	0.0	0.0	0.0	100.0	100.0	25.3	98
Richest	70.2	29.8	0.0	0.0	0.0	0.0	100.0	100.0	32.7	94
Total	**44.3**	**54.3**	**0.5**	**0.2**	**0.5**	**0.3**	**100.0**	**99.1**	**21.2**	**614**

[1] MICS indicator 5.7; MDG indicator 5.2

[2] MICS indicator 5.9

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

Place of Delivery

Increasing the proportion of births that are delivered in health facilities is an important factor in reducing the health risks to both the mother and the baby. Proper medical attention and hygienic conditions during delivery can reduce the risks of complications and infection that can cause morbidity and mortality to either the mother or the baby. Table RH.8 presents the per cent distribution of women age 15-49 years who had a live birth in the two years preceding the survey by place of delivery and the percentage of births delivered in a health facility, according to background characteristics.

Some 98.6 per cent of births in Jamaica were delivered in either a public or private health facility: 90.2 per cent of deliveries occurred in public sector facilities and 8.4 per cent occurred in private sector facilities. A very small percentage (1.1%) of live births occurred at home. By age, women 35-49 are most likely to deliver in a health facility (98.9%).

Delivery in a health facility does not differ much by place of residence. There was a very minimal difference between the per cent of women with secondary (98.4%) and tertiary (98.9) education who delivered in a health facility. The proportion of births occurring in a health facility for the poorest wealth quintile was 94.3 per cent; 100 per cent in the second and middle wealth quintiles, 99.3 per cent among those in the fourth wealth quintile and 100 per cent in the highest wealth quintile.

TABLE RH.8: PLACE OF DELIVERY

PER CENT DISTRIBUTION OF WOMEN AGE 15-49 WITH A BIRTH IN TWO YEARS PRECEDING THE SURVEY BY PLACE OF DELIVERY, JAMAICA, 2011

	Place of delivery				Total	Delivered in health facility [1]	Number of women who gave birth in preceding two years
	Public sector health facility	Private sector health facility	Home	Other			
Area							
Urban							
KMA	78.4	21.2	0.0	0.3	100.0	99.7	187
Other towns	97.5	2.1	0.4	0.0	100.0	99.6	151
Urban total	***86.9***	***12.7***	***0.2***	***0.2***	***100.0***	***99.6***	***338***
Rural	94.2	3.1	2.3	0.4	100.0	97.3	276
Mother's age at birth							
Less than 20	92.8	4.5	1.6	1.2	100.0	97.3	101
20-34	89.7	9.1	1.0	0.2	100.0	98.8	409
35-49	89.6	9.3	1.1	0.0	100.0	98.9	104
Per cent of women who had:							
None	(*)	(*)	(*)	(*)	100.0	(*)	10
1-3 visits	(91.2)	(0.0)	(5.0)	(3.8)	100.0	(91.2)	31
4+ visits	89.4	9.7	0.8	0.1	100.0	99.0	525
Missing/DK	(98.9)	(1.1)	(0.0)	(0.0)	100.0	(100.0)	48
Education							
None/Primary	(*)	(*)	(*)	(*)	100.0	(*)	9
Secondary	94.5	3.9	1.2	0.4	100.0	98.4	474
Tertiary	73.8	25.1	1.1	0.0	100.0	98.9	131
Wealth index quintiles							
Poorest	93.4	0.9	4.9	0.8	100.0	94.3	145
Second	97.7	2.3	0.0	0.0	100.0	100.0	146
Middle	91.8	8.2	0.0	0.0	100.0	100.0	131
Fourth	92.3	7.1	0.0	0.7	100.0	99.3	98
Richest	69.1	30.9	0.0	0.0	100.0	100.0	94
Total	**90.2**	**8.4**	**1.1**	**0.3**	**100.0**	**98.6**	**614**

[1] MICS indicator 5.8
(*) Figures that are based on less than 25 unweighted cases
( ) Figures that are based on 25-49 unweighted cases

VII.

Child Development

VIII. Child Development

Early Childhood Education and Learning

Early childhood education is an important tool in the preparation of children for entry into primary education. An organized learning or child education programme (e.g. pre-school), helps to prepare children for this transition.

In Table CD.1, 91.5 per cent of children aged 36-59 months were attending pre-school. Among children aged 36-59 months, attendance to pre-school was more prevalent in rural areas (93.8%), and lowest in the other towns (87.9%). No gender differential existed, with males at 91.8 per cent and females at 91.1 per cent, but differentials by socioeconomic status were notable. The percentage of children aged 36-59 months attending pre-school increased by household wealth. All of the children living in the richest quintile attended pre-school, while the figure dropped to 87.5 per cent in the poorest quintile. The proportions of children attending pre-school increased by age, from 85 per cent for ages 36-47 months to 96.4 per cent for ages 48-59 months.

TABLE CD.1: EARLY CHILDHOOD EDUCATION
PERCENTAGE OF CHILDREN AGE 36-59 MONTHS WHO ARE ATTENDING SOME FORM OF ORGANIZED EARLY CHILDHOOD EDUCATION PROGRAMME, JAMAICA, 2011

	Percentage of children age 36-59 months currently attending early childhood education [1]	Number of children aged 36-59 months
Sex		
Male	91.8	359
Female	91.1	303
Area		
Urban		
KMA	90.4	261
Other towns	87.9	111
Urban total	***89.6***	***372***
Rural	93.8	290
Age of Child		
36-47 months	85.0	289
48-59 months	96.4	373
Mother's Education		
None/Primary	(80.8)	27
Secondary	90.8	505
Tertiary	96.1	130
Wealth Index Quintiles		
Poorest	87.5	154
Second	88.0	165
Middle	91.9	137
Fourth	94.4	112
Richest	100.0	93
Total	**91.5**	**662**

[1] MICS indicator 6.7
( ) Figures that are based on 25-49 unweighted cases

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

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

TABLE CD.2: SUPPORT FOR LEARNING

PERCENTAGE OF CHILDREN AGE 36-59 MONTHS WITH WHOM AN ADULT HOUSEHOLD MEMBER ENGAGED IN ACTIVITIES THAT PROMOTE LEARNING AND SCHOOL READINESS DURING THE LAST THREE DAYS, JAMAICA, 2011

	Percentage of children aged 36-59 months		Mean number of activities		Percentage of children not living with their natural father	Number of children aged 36-59 months
	With whom adult household members engaged in four or more activities [1]	With whom the father engaged in one or more activities [2]	Any adult household member engaged with the child	The father engaged with the child		
Sex						
Male	85.7	28.3	5.2	1.0	55.8	359
Female	89.7	26.5	5.3	1.0	60.2	303
Area						
Urban						
KMA	87.0	33.3	5.3	1.2	56.6	261
Other towns	88.7	30.7	5.1	1.0	52.1	111
Urban total	***87.5***	***32.5***	***5.3***	***1.2***	***55.3***	***372***
Rural	87.7	21.0	5.3	0.7	61.0	290
Age						
36-47 months	89.3	29.5	5.3	1.1	58.5	289
48-59 months	86.3	26.0	5.2	0.9	57.2	373
Mother's Education						
None/Primary	(71.2)	(7.3)	(4.8)	(0.2)	(81.3)	27
Secondary	87.1	27.6	5.2	1.0	55.7	505
Tertiary	92.7	31.1	5.5	1.2	60.8	130
Father's Education						
None/Primary	(*)	(*)	(*)	(*)	(*)	11
Secondary +	86.5	64.8	5.2	2.4	0.0	261
Father not in household	88.7	0.9	5.3	0.0	100.0	383
Missing/DK	(*)	(*)	(*)	(*)	(*)	8
Wealth Index Quintiles						
Poorest	75.7	15.5	4.7	0.5	62.5	154
Second	91.6	26.9	5.5	0.9	56.7	165
Middle	93.9	25.2	5.5	1.0	63.9	137
Fourth	91.4	32.0	5.4	1.2	55.2	112
Richest	86.1	46.3	5.4	1.7	45.9	93
Total	**87.6**	**27.5**	**5.3**	**1.0**	**57.8**	**662**

[1] MICS indicator 6.1
[2] MICS Indicator 6.2
(*) Figures that are based on less than 25 unweighted cases
( ) Figures that are based on 25-49 unweighted cases

In Table CD.2, for over three quarter (87.6%) of under-five children, an adult household member engaged in four or more activities that promote learning and school readiness during the three days preceding the survey. Father's involvement with the child in one or more activities is 27.5 per cent. The average number of activities that adults engaged with children was 5.3, but the mean number of activities in which the father engages with the child was 1.0. A little over one half (57.8%) of these under five children were living in a household without their natural fathers.

There were no gender differentials in terms of adult household members' activities with children (5.3 activities for female and 5.2 for male); nor among fathers engaged in activities with male children (1.0 activity) when compared with the said fathers engaging in the same types of activities with their female children (1.0 activity).

According to wealth quintiles, children in the poorest households had the lowest levels of engagement (75.7 per cent) for four or more activities. Father's involvement showed a strong positive association with engaging with the child increasing from 15.5 per cent in the poorest quintile to 46.3 per cent in the richest quintile.

Exposure to books in early years not only provides the child with greater understanding of the nature of print, but may also give the child opportunities to see others reading, such as older siblings doing school work. Presence of books is important for later school performance and IQ scores. The mother/caretaker of all children 'under 5' were asked about number of children's books or picture books they have for the child, household objects or outside objects, and homemade toys or toys that came from a shop that are available at home.

Table CD.3 shows that only 54.7 per cent of children age 0-59 months were living in households where at least 3 children's books were present; but this figure fell to 30.4 per cent for 10 or more children's books. Children in other towns appear to have more access to children's books than those living in rural households. The proportion of under-5 children who have 3 or more children's books was 55.8 per cent in other towns, compared with 49.1 per cent in rural areas. In the KMA, 60.6 per cent of children had access to 3 or more books. The presence of children's books is positively correlated with the child's age. In the homes of 27.2 per cent of children aged 0-23 months, there were 3 or more children's books, while the figure was 72.7 per cent for children aged 24-59 months for a similar number of books. There was no gender differential among children who had access to 3 or more books, but there were differences according to household wealth. The percentage of children with 3 or more and 10 or more children's books increase with household wealth. In the poorest quintile, 34.2 per cent of households had 3 or more children's books, while the percentages for the next four groups were 48.4 per cent, 62.3 per cent, 63.4 per cent, and 72.7 per cent, respectively.

When children for whom there were 10 or more children's books or picture books are taken into account, the percentage of households (30.4%) was much lower than those that had 3 or more children's books. The percentage of children under-5 who had 10 or more children's books was 22.4 per cent in rural areas, compared with 28.8 per cent in other towns and 40.7 per cent in KMA. Households with 10 or more books were in a higher percentage range the older the child. Some 13.0 per cent of children aged 0-23 months had access to 10 or more children's books, while 41.9 per cent of children aged 24-59 months had access to 10 or more books. Household wealth differentials among children who had access to 10 or more books were observed. In the poorest quintile, 12.3 per cent of households had 10 or more children's books, while the percentages for the next four groups were 26.6 per cent, 29.6 per cent, 38.3 per cent, and 53.9 per cent.

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, JAMAICA, 2011

	Household has for the child:		Child plays with:			Two or more types of playthings [2]	Number of children underage 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		
Sex							
Male	54.5	30.1	27.9	89.0	61.9	64.4	854
Female	54.8	30.7	24.7	85.4	57.3	56.8	785
Area							
Urban							
KMA	60.6	40.7	33.6	90.3	61.8	64.3	606
Other towns	55.8	28.8	20.6	85.3	53.2	55.0	321
Urban total	***58.9***	***36.5***	***29.1***	***88.6***	***58.8***	***61.1***	***927***
Rural	49.1	22.4	22.9	85.5	60.8	60.3	712
Age							
0-23 months	27.2	13.0	16.3	78.2	40.4	42.1	650
24-59 months	72.7	41.9	33.0	93.2	72.4	73.0	989
Mother's Education							
None/Primary	54.9	23.3	28.3	79.5	57.7	62.7	47
Secondary	49.5	24.5	26.4	86.9	61.0	61.9	1,235
Tertiary	72.3	51.8	25.9	89.6	55.3	56.5	356
Wealth Index Quintiles							
Poorest	34.2	12.3	19.2	82.4	66.8	63.7	358
Second	48.4	26.6	32.4	87.1	65.9	65.2	396
Middle	62.3	29.6	27.4	86.8	56.0	59.3	352
Fourth	63.4	38.3	27.5	88.2	54.3	57.0	274
Richest	72.7	53.9	24.6	93.7	51.1	55.8	260
Total	**54.7**	**30.4**	**26.4**	**87.3**	**59.7**	**60.7**	**1,639**

[1] MICS indicator 6.3
[2] MICS indicator 6.4
( ) Figures that are based on 25-49 unweighted cases
(*) Figures that are based on less than 25 unweighted cases

Table CD.3 also shows that 60.7 per cent of children aged 0-59 months had 2 or more playthings to play with in their homes. The playthings in MICS included homemade toys (such as dolls and cars, or other toys made at home), toys that came from a store, and household objects (such as pots and bowls) or objects and materials found outside the home (such as sticks, rocks, animal shells, or leaves). While 87.3 per cent of children played with toys that come from a store, the percentage of children who played with homemade toys was 26.4 per cent. The proportion of children who played with household objects or objects found outside was 59.7 per cent. Male children were more likely than female children to have 2 or more playthings (64.4% compared with 56.8%). Not much of an urban-rural differential was observed for children with two or more playthings but in the other towns it was 55.0 per cent, 60.3 per cent in rural areas and 64.3 per cent in KMA. Small differences were observed in terms of the levels of the mother's education; women with tertiary education were least likely to have play things for their children (56.5%) compared with women with no/primary or secondary education (62.7% and 61.9% respectively) –(See Table CD3). Differentials by socioeconomic status of the households are not consistent: 63.7 per cent of the poorest quintile had two or more playthings, 65.2 per cent in the second quintile and 55.8 in the richest quintile.

Leaving children alone or in the presence of other young children is known to increase the risk of accidents. In MICS4, two questions were asked to find out whether children aged 0-59 months were left alone during the week preceding the interview, and whether children were left in the care of other children under 10 years of age.

In Table CD.4, the data show that less than one per cent of children aged 0-59 months were left in the care of other children, while 1.5 per cent was left alone during the week preceding the interview. Combining the two care indicators, it is calculated that 1.8 per cent of children were left with inadequate care during the week preceding the survey, either by being left alone or in the care of another child.

TABLE CD.4: INADEQUATE CARE

PERCENTAGE OF CHILDREN UNDER AGE 5 LEFT ALONE OR LEFT IN THE CARE OF OTHER CHILDREN UNDER THE AGE OF 10 YEARS FOR MORE THAN ONE HOUR AT LEAST ONCE DURING THE PAST WEEK, JAMAICA, 2011

	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]	
Sex				
Male	1.4	0.9	1.7	854
Female	1.7	0.7	1.9	785
Area				
Urban				
KMA	2.6	1.3	3.1	606
Other towns	0.7	0.7	1.3	321
Urban total	***1.9***	***1.1***	***2.4***	***927***
Rural	1.0	0.3	1.0	712
Age				
0-23 months	2.1	0.8	2.2	650
24-59 months	1.1	0.7	1.5	989
Mother's Education				
None/Primary	(1.7)	(0.0)	(1.7)	47
Secondary	1.7	0.9	2.0	1,235
Tertiary	0.7	0.5	1.0	356
Wealth Index Quintiles				
Poorest	1.1	1.2	2.0	358
Second	3.5	1.8	3.7	396
Middle	1.2	0.2	1.2	352
Fourth	0.8	0.0	0.8	274
Richest	0.3	0.2	0.5	260
Total	**1.5**	**0.8**	**1.8**	**1,639**

[1] MICS indicator 6.5

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

No differences were observed by the sex of the child, while small differences were observed between other towns and rural areas. On the other hand, inadequate care was more prevalent among children whose mothers had a secondary education (2%). Children aged 24-59 months were left with inadequate care less (1.5%) than those who were aged 0-23 months (2.2%). There were small differences in term of the socioeconomic status of the household. As expected, the data show that the richest socioeconomic status adults were least likely to leave their young children unattended or in the supervision of their siblings younger than 10 years old.

Early Childhood Development

Early childhood development is defined as an orderly, predictable process along a continuous path, in which a child learns to handle more complicated levels of moving, thinking, speaking, feeling and relating to others. Physical growth, literacy and numeracy skills, socio-emotional development and readiness to learn are vital domains of a child's overall development, which is a basis for overall human development.

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, JAMAICA, 2011

	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		
Sex						
Male	63.1	97.9	75.4	97.0	85.9	359
Female	68.4	99.1	82.0	97.5	93.0	303
Area						
Urban						
KMA	73.4	99.0	79.6	97.7	92.0	261
Other towns	69.8	98.3	75.1	97.5	86.4	111
Urban total	***72.3***	***98.8***	***78.3***	***97.6***	***90.3***	***372***
Rural	56.9	98.0	78.7	96.7	87.6	290
Age						
36-47 months	52.3	98.4	75.1	96.5	86.0	289
48-59 months	75.8	98.4	81.1	97.8	91.5	373
Preschool Attendance						
Attending preschool	68.4	99.0	79.2	98.0	90.2	605
Not attending preschool	35.1	92.8	71.0	88.8	77.8	57
Mother's Education						
None/Primary	(40.4)	(100.0)	(83.1)	(95.0)	(92.1)	27
Secondary	63.6	98.1	76.8	97.0	87.1	505
Tertiary	78.6	99.3	83.9	98.5	96.4	130
Wealth Index Quintiles						
Poorest	48.9	97.5	67.6	95.5	79.1	154
Second	67.3	98.0	79.8	97.3	90.1	165
Middle	72.1	100.0	80.7	99.6	93.9	137
Fourth	74.1	97.1	79.2	96.0	88.9	112
Richest	70.0	100.0	90.0	98.0	97.1	93
Total	**65.5**	**98.4**	**78.5**	**97.2**	**89.1**	**662**

[1] MICS indicator 6.6

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

A 10-item module that has been developed for the MICS programme was used to calculate the Early Child Development Index (ECDI). The indicator is based on some benchmarks that children would be expected to have if they are developing as the majority of children in that age group. The primary purpose of the ECDI is to inform public policy regarding the developmental status of children in Jamaica.

Each of the 10 items is used in one of the four domains, to determine if children are developmentally on track in that domain. The domains in question are:

- ***Literacy-numeracy***: Children are identified as being developmentally on track based on whether they can identify/name at least ten letters of the alphabet, whether they can read at least four simple, popular words, and whether they know the name and recognize the symbols of all numbers from 1 to 10. If at least two of these are true, then the child is considered developmentally on track.

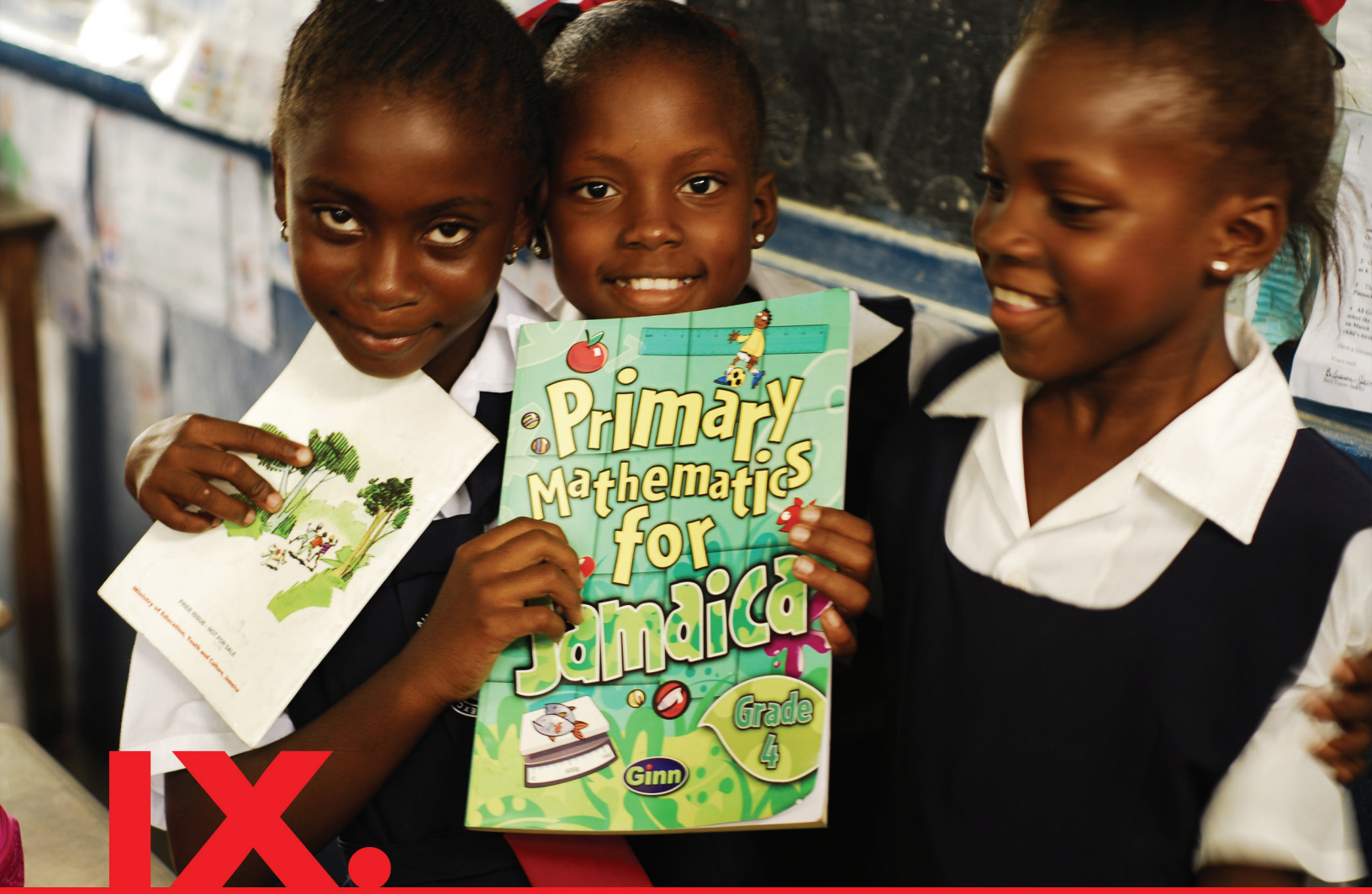
- ***Physical***: If the child can pick up a small object with two fingers, like a stick or a rock from the ground and/or the mother/caretaker does not indicate that the child is sometimes too sick to play, then the child is regarded as being developmentally on track in the physical domain.

- In the ***social-emotional*** domain, children are considered to be developmentally on track if two of the following is true: If the child gets along well with other children, if the child does not kick, bite, or hit other children and if the child does not get distracted easily

- ***Learning***: If the child follows simple directions on how to do something correctly and/or when given something to do, is able to do it independently, then the child is considered to be developmentally on track in the learning domain.

ECDI is then calculated as the percentage of children who are developmentally on track in at least three of these four domains.

The results are presented in Table CD.5. In Jamaica, 89.1 per cent of children aged 36-59 months are developmentally on track, as measured by the ECDI; but the index is lower among boys (85.9%) than girls (93.0%). The ECDI was much higher in older age group (91.5% among 48-59 months old, compared with 86.0% among 36-47 months old), since children develop more skills with increasing age. Higher ECDI was seen in children attending pre-school (90.2% compared with 77.8% for those who are not attending preschool). Children living in poorest households have lower ECDI (79.1%) compared with children living in richest households (97.1% of children developmentally on track). The analysis of the four domains of child development showed that 98.4 per cent are on track in the physical domain, 97.2 per cent of children are on track in the learning domain, 78.5 per cent in the socio-emotional domain, and 65.5 per cent in the literacy-numeracy domain.



IX.

Literacy and Education

IX. Literacy And Education

Literacy Among Young Women

One of the World Fit for Children goals is to assure adult literacy. Adult literacy is also a MDG indicator, relating to both men and women. In MICS, since only women's questionnaires were administered, the results are based only on females aged 15-24 years. Literacy was assessed on the ability of women to read a short simple statement or on school attendance i.e. young women who completed grade nine or higher in secondary school were assumed to be literate. Women who could not read the sentence were classified as illiterate. The per cent literate is presented in Table ED.1. Table ED.1 indicated that 94.4 per cent of the young women 15-24 years in Jamaica are literate and that there is little difference in literacy between rural (94.0%), urban (94.8%) young women.

TABLE ED.1: LITERACY AMONG YOUNG WOMEN
PERCENTAGE OF WOMEN AGE 15-24 YEARS WHO ARE LITERATE, JAMAICA, 2011

	Percentage literate [1]	Percentage not known	Number of women age 15-24 years
Area			
Urban			
KMA	96.2	2.6	561
Other towns	92.4	3.2	345
Urban total	***94.8***	***2.9***	***906***
Rural	94.0	4.2	720
Education			
None/Primary	(*)	(*)	7
Secondary	93.2	4.4	1252
Tertiary	100.0	0	367
Age			
15-19	92.6	5.2	894
20-24	96.6	1.3	732
Wealth Index Quintiles			
Poorest	87.7	5.8	289
Second	96.6	2.3	380
Middle	93.4	4.4	359
Fourth	96.2	3.0	318
Richest	98.0	1.8	279
Total	**94.4**	**3.4**	**1626**

[1] MICS indicator 7.1; MDG indicator 2.3

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

School Readiness

Attendance to Pre-School Education in an organized learning or child education programme is important for the readiness of children for school. Table ED.2 shows the proportion of children in the first grade of primary school who attended pre-school the previous year. Overall, 93.6 per cent of children who are currently attending the first grade of primary school attended pre-school the previous year. The proportion among males (94.6%) is higher than females (92.4%). The proportion of children in rural areas (96.2%)

was highest; for children in KMA the proportion was 92.9 per cent, while children from other towns were lowest at 88.8 per cent. The percentage attendance of children by mother's education showed 93.7 per cent attendance for children of mothers with a secondary education and 93.6 per cent for mothers with a tertiary education. It is noteworthy that in Jamaica's case, 95.7 per cent of the children in first grade were born to mothers who had attained secondary education or higher. The middle quintile had the lowest proportion (86.4%) of children attending the first grade of primary school who attended pre-school the previous year. In fact, the poorest (97.0%) and fourth (96.6%) quintiles had higher proportions than the richest (91.2%) quintile.

TABLE ED.2: SCHOOL READINESS
PERCENTAGE OF CHILDREN ATTENDING FIRST GRADE OF PRIMARY SCHOOL WHO ATTENDED PRE-SCHOOL THE PREVIOUS YEAR, JAMAICA, 2011

	Percentage of children attending first grade who attended preschool in previous year [1]	Number of children attending first grade of primary school
Sex		
Male	94.6	188
Female	92.4	160
Area		
Urban		
KMA	92.9	121
Other towns	88.8	71
Urban total	***91.4***	***191***
Rural	96.2	157
Mother's Education		
None/Primary	(*)	14
Secondary	93.7	267
Tertiary	93.6	66
Wealth Index Quintiles		
Poorest	97.0	82
Second	96.4	82
Middle	86.4	72
Fourth	96.6	52
Richest	91.2	60
Total	**93.6**	**348**

[1] MICS indicator 7.2

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

PRIMARY AND SECONDARY SCHOOL PARTICIPATION

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

The indicators for primary and secondary school attendance include:

- Net intake rate in primary education
- Primary school net attendance ratio (adjusted)
- Secondary school net attendance ratio (adjusted)
- Female to male education ratio (or gender parity index – GPI) in primary and secondary school

The indicators of school progression include:

- Children reaching last grade of primary
- Primary completion rate
- Transition rate to secondary school

Children who are of primary school entry age i.e. age 6 years for Jamaica, 88.9 per cent are attending the first grade of primary school (Table ED.3). A higher proportion of females (91.7%) than males (86.5%) attend at this level; there are also differentials by region as the intake rate for rural areas was highest at 90.4 per cent; however, KMA (88.2%) was not significantly different from other towns which had a rate of 86.4 per cent. Net intake rate by Mother's Education showed a rate of 89.5 per cent for mothers with a secondary education and 86.4 per cent for mothers with a tertiary education.

TABLE ED.3: PRIMARY SCHOOL ENTRY
PERCENTAGE OF CHILDREN OF PRIMARY SCHOOL ENTRY AGE ENTERING GRADE 1 (NET INTAKE RATE), JAMAICA, 2011

	Percentage of children of primary school entry age entering grade 1 [1]	Number of children of primary school entry age
Sex		
Male	86.5	202
Female	91.7	166
Area		
Urban		
KMA	88.2	124
Other towns	86.4	75
Urban total	***87.5***	***198***
Rural	90.4	169
Mother's Education		
None/Primary	(*)	11
Secondary	89.5	278
Tertiary	86.4	68
Wealth Index Quintiles		
Poorest	87.5	86
Second	90.1	86
Middle	86.4	63
Fourth	89.8	66
Richest	90.4	67
Total	**88.9**	**367**

[1] MICS indicator 7.3

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

Table ED.4 provides the percentage of children of primary school age i.e. 6 to 11 years, who are attending primary or secondary school. The majority of children of primary school age (98.0%) are attending school. Attendance of girls (98.7%) is slightly higher than that of boys (97.2%). There was little

difference in attendance by area of residence, with the exception of the rural areas where there was a 2.2 percentage point gap between females and males. As the age of the child at the beginning of the school year increased, so did the attendance ratio, moving from 90.1 per cent for age six to 99.7 for age eleven years.

TABLE ED.4: PRIMARY SCHOOL ATTENDANCE

PERCENTAGE OF CHILDREN OF PRIMARY SCHOOL AGE ATTENDING PRIMARY OR SECONDARY SCHOOL (NET ATTENDANCE RATIO), JAMAICA, 2011

	Male		Female		Total	
	Net attendance ratio (adjusted)	Number of children	Net attendance ratio (adjusted)	Number of children	Net attendance ratio (adjusted) [1]	Number of children
Area						
Urban						
KMA	97.1	316	98.5	378	97.9	693
Other towns	98.2	239	98.3	218	98.3	457
Urban total	***97.6***	***554***	***98.5***	***596***	***98.0***	***1,150***
Rural	96.8	543	99.0	542	97.9	1,085
Age At Beginning Of School Year						
6	88.2	202	92.5	166	90.1	367
7	97.4	152	99.5	184	98.6	336
8	99.4	183	100.0	184	99.7	367
9	99.6	183	99.7	211	99.6	395
10	100.0	200	99.8	212	99.9	412
11	99.4	178	100.0	180	99.7	358
Mother's Education						
None/Primary	95.0	64	98.5	71	96.8	134
Secondary	97.5	851	98.5	854	98.0	1,706
Tertiary	96.5	180	99.5	212	98.1	392
Missing/DK	(*)	2	(*)	1	(*)	3
Wealth Index Quintiles						
Poorest	96.0	254	98.9	273	97.5	527
Second	97.9	249	98.6	275	98.3	523
Middle	96.4	228	97.9	198	97.1	426
Fourth	97.8	202	99.2	209	98.5	411
Richest	98.5	165	99.0	184	98.8	349
Total	**97.2**	**1097**	**98.7**	**1138**	**98.0**	**2,235**

[1] MICS indicator 7.4; MDG indicator 2.1

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

The secondary school net attendance ratio is presented in Table ED.5. In Jamaica, 91.5 per cent of children of secondary school age were attending school, and, as was the case for primary school attendance, females (92.3%) had a higher attendance ratio than their male counterparts (90.8%). Unlike the attendance ratio at the primary level, there are differentials by area of residence at the secondary level as KMA had the highest attendance ratio (94.3%) while rural had the lowest (89.5 per cent). Attendance by age at beginning of school year is also different from that of the primary level. In secondary schools, the attendance ratio is lowest at age 12 years (77.8%) and highest at age 14 years (98.6%). Additionally for various reasons, some students complete their secondary education at the Grade 9 level (Junior High/All Age School), hence the drop in attendance ratio (94.1%) at age 15 years (Grade 10) level. The proportion proceeding to Grade 10 is higher for females (97.3%) than males

(90.6%). As was the case with primary attendance, socioeconomic status positively impacts secondary attendance, with 96.5 per cent attendance for the richest quintile and 87.6 per cent for the poorest

TABLE ED.5: SECONDARY SCHOOL ATTENDANCE

PERCENTAGE OF CHILDREN OF SECONDARY SCHOOL AGE ATTENDING SECONDARY SCHOOL OR HIGHER (ADJUSTED NET ATTENDANCE RATIO), AND PERCENTAGE OF CHILDREN ATTENDING PRIMARY SCHOOL, JAMAICA, 2011

	Male			Female			Total		
	Net attendance ratio (adjusted)	Per cent attending primary school	Number of children	Net attendance ratio (adjusted)	Per cent attending primary school	Number of children	Net attendance ratio (adjusted) [1]	Per cent attending primary school	Number of children
Area									
Urban									
KMA	93.1	2.8	301	95.5	2.2	305	94.3	2.5	606
Other towns	89.4	7.1	204	94.6	3.7	204	92.0	5.4	409
Urban total	91.6	4.6	505	95.2	2.8	510	93.4	3.7	1015
Rural	89.9	4.1	466	89.1	6.5	453	89.5	5.3	919
Age At Beginning Of School Year									
12	79.5	20.3	195	75.9	22.8	176	77.8	21.5	371
13	98.4	1.6	185	98.6	1.2	219	98.5	1.4	404
14	98.1	0.0	208	99.1	0.3	185	98.6	0.1	392
15	90.6	0.0	190	97.3	0.3	209	94.1	0.1	398
16	87.3	0.0	195	87.8	0.0	174	87.5	0.0	369
Mother's Education									
None/Primary	92.8	1.7	61	85.2	11.9	93	88.2	7.9	155
Secondary	90.3	4.6	648	92.4	4.6	606	91.3	4.6	1254
Tertiary	90.6	8.3	128	97.0	3.0	140	93.9	5.5	269
Mother not in household	93.0	0.0	129	92.3	0.0	121	92.6	0.0	250
Missing/DK	(*)	(*)	6	(*)	(*)	3	(*)	(*)	8
Wealth Index Quintiles									
Poorest	87.0	2.4	222	88.3	7.5	212	87.6	4.9	434
Second	92.9	3.3	208	90.8	3.8	222	91.8	3.5	430
Middle	87.3	7.3	184	93.9	3.9	221	90.9	5.5	406
Fourth	92.6	5.0	200	92.3	4.9	160	92.5	5.0	360
Richest	95.2	4.3	158	97.9	2.1	148	96.5	3.2	305
Total	90.8	4.4	972	92.3	4.6	963	91.5	4.5	1935

[1] MICS indicator 7.5
(*) Figures that are based on less than 25 unweighted cases

The percentage of children entering first grade who eventually reach the last grade of primary school is presented in Table ED.6. The progression to the next grade for Jamaica is 100.0 per cent overall with the exception of Grade 3 to Grade 4 which was 99.3 per cent. For this category, females in urban areas (98.6%) and from the poorest quintile (97.3%) were responsible for Jamaica not attaining 100.0 per cent progression.

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), JAMAICA, 2011

	Per cent attending grade 1 last year who are in grade 2 this year	Per cent attending grade 2 last year who are attending grade 3 this year	Per cent attending grade 3 last year who are attending grade 4 this year	Per cent attending grade 4 last year who are attending grade 5 this year	Per cent attending grade 5 last year who are attending grade 6 this year	Per cent who reach grade 6 of those who enter grade 1 [1]
Sex						
Male	100.0	100.0	100.0	100.0	100.0	100.0
Female	100.0	100.0	98.6	100.0	100.0	98.6
Area						
Urban						
KMA	100.0	100.0	100.0	100.0	100.0	100.0
Other towns	100.0	100.0	96.6	100.0	100.0	96.6
Urban total	***100.0***	***100.0***	***98.6***	***100.0***	***100.0***	***98.6***
Rural	100.0	100.0	100.0	100.0	100.0	100.0
Mother's Education						
None/Primary	100.0	100.0	100.0	100.0	100.0	100.0
Secondary	100.0	100.0	100.0	100.0	100.0	100.0
Tertiary	100.0	100.0	100.0	100.0	100.0	100.0
Wealth Index Quintiles						
Poorest	100.0	100.0	97.3	100.0	100.0	97.3
Second	100.0	100.0	100.0	100.0	100.0	100.0
Middle	100.0	100.0	100.0	100.0	100.0	100.0
Fourth	100.0	100.0	100.0	100.0	100.0	100.0
Richest	100.0	100.0	100.0	100.0	100.0	100.0
Total	**100.0**	**100.0**	**99.3**	**100.0**	**100.0**	**99.3**

[1] MICS indicator 7.6; MDG indicator 2.2

The primary school completion rate and transition rate to secondary education are presented in Table ED.7. The overall transition rate to secondary school for Jamaica is 95.0 per cent. The transition rate is higher among males (98.2) than females (91.6%); and there are also differentials by area of residence with KMA having a rate of 100 per cent, other towns 95.5 per cent and rural 90.9 per cent. Transition to secondary school rate was highest in the richest quintile (100.0%) and lowest in the poorest quintile (86.6%).

TABLE ED.7: PRIMARY SCHOOL COMPLETION AND TRANSITION TO SECONDARY SCHOOL

PRIMARY SCHOOL COMPLETION RATES AND TRANSITION RATE TO SECONDARY SCHOOL, JAMAICA, 2011

	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
Sex				
Male	103.4	179	98.2	186
Female	121.1	180	91.6	176
Area				
Urban				
KMA	112.1	114	100.0	120
Other towns	104.9	73	95.5	93
Urban total	***109.3***	***187***	***98.0***	***212***
Rural	115.7	171	90.7	149
Mother's Education				
None/Primary	(*)	22	(97.3)	48
Secondary	107.3	267	93.9	241
Tertiary	121.6	69	96.9	69
Mother not in household	-	0	-	0
Missing/DK	-	0	(*)	4
Wealth Index Quintiles				
Poorest	104.1	88	86.6	79
Second	91.6	93	96.2	88
Middle	108.4	73	96.4	69
Fourth	141.9	62	97.2	57
Richest	(137.6)	43	100.0	68
Total	**112.3**	**358**	**95.0**	**362**

[1] MICS indicator 7.7
[2] MICS indicator 7.8
(*) Figures that are based on less than 25 unweighted cases
( ) Figures that are based on 25-49 unweighted cases

The ratio of girls to boys attending primary and secondary education is provided in Table ED.8. These ratios are better known as the Gender Parity Index (GPI). The ratios included here are obtained from net attendance ratios rather than gross attendance ratios. The latter ratios provide an erroneous description of the GPI mainly because in most of the cases the majority of over-aged children attending primary education tend to be boys. A parity of 1.0 indicates no difference between the attendance of boys and girls. At the primary level, the adjusted net attendance ratio (NAR) for girls is marginally higher (at 98.7) than for boys (97.2). However, the NAR for both girls and boys at the secondary level are at a lower level, 92.3 and 90.8, respectively. Both the primary and secondary school GPI show that girls are more likely to attend school than boys.

TABLE ED.8: EDUCATION GENDER PARITY

RATIO OF ADJUSTED NET ATTENDANCE RATIOS OF GIRLS TO BOYS, IN PRIMARY AND SECONDARY SCHOOL, JAMAICA, 2011

	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]
Area						
Urban						
KMA	98.5	97.1	1.01	95.5	93.1	1.03
Other towns	98.3	98.2	1.00	94.6	89.4	1.06
Urban total	***98.5***	***97.6***	***1.01***	***95.2***	***91.6***	***1.04***
Rural	99.0	96.8	1.02	89.1	89.9	0.99
Mother's Education						
None/Primary	98.5	95.0	1.04	85.2	92.8	0.92
Secondary	98.5	97.5	1.01	92.4	90.3	1.02
Tertiary	99.5	96.5	1.03	97.0	90.6	1.07
Not in the household	-	-	-	92.3	93.0	0.99
Missing	(*)	(*)	(*)	(*)	(*)	(*)
Wealth Index Quintiles						
Poorest	98.9	96.0	1.03	88.3	87.0	1.02
Second	98.6	97.9	1.01	90.8	92.9	0.98
Middle	97.9	96.4	1.01	93.9	87.3	1.08
Fourth	99.2	97.8	1.01	92.3	92.6	1.00
Richest	99.0	98.5	1.01	97.9	95.2	1.03
Total	**98.7**	**97.2**	**1.02**	**92.3**	**90.8**	**1.02**

[1] MICS indicator 7.9; MDG indicator 3.1
[2] MICS indicator 7.10; MDG indicator 3.1

X.

Child Protection

X. Child Protection

CHILD LABOUR

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

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

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

Table CP.1 presents the results of child labour by the type of work. Percentages do not add up to the total child labour as children may be involved in more than one type of work. More children in the younger age group 5-11 years (15.2%) were involved in child labour than the age group 12-14 years (0.3%). The percentage of boys involved in child labour was higher for boys in the 5-11 age group compared with boys age 12-14. For the 5-11 age group, 16.7 per cent of boys were involved in child labour compared to 13.8 per cent girls, while for the 12-14 age group, there was little difference by sex. For the 5-11 years, 0.9 per cent were involved in paid labour, while 2.7 per cent were involved in unpaid labour outside the home. Within the 12-14 years 1.4 per cent were involved in paid work outside the household while 3.6 per cent were involved in unpaid work. Of the children who were working for family business, the rural area had the highest per cent for the 5-11 age group and 12-14 age group, 15.9 and 23.4 per cent, respectively.

TABLE CP.1A: CHILD LABOUR

PERCENTAGE OF CHILDREN BY INVOLVEMENT IN ECONOMIC ACTIVITY AND HOUSEHOLD CHORES DURING THE PAST WEEK, ACCORDING TO AGE GROUPS, AND PERCENTAGE OF CHILDREN AGE 5-14 INVOLVED IN CHILD LABOUR, JAMAICA, 2011

	Percentage of children age 5-11 involved in							Number of children age 5-11
	Economic activity							
	Working outside household		Working for family business	Economic activity for at least one hour	Household chores less than 28 hours	Household chores for 28 hours or more	Child labour	
	Paid work	Unpaid work						
Sex								
Male	0.7	2.7	14.6	16.5	48.4	0.2	16.7	1,233
Female	1.1	2.7	11.8	13.7	53.8	0.1	13.8	1,288
Area								
Urban								
KMA	1.0	2.9	11.9	14.2	54.5	0.2	14.5	780
Other towns	1.2	3.8	8.5	11.7	50.6	0.0	11.7	505
Urban total	***1.0***	***3.2***	***10.6***	***13.2***	***53.0***	***0.1***	***13.4***	***1,285***
Rural	0.8	2.2	15.9	17.0	49.3	0.2	17.2	1,236
School Participation								
Yes	0.9	2.7	13.3	15.2	51.4	0.2	15.3	2,506
No	(*)	(*)	(*)	(*)	(*)	(*)	(*)	15
Mother's Education								
None/Primary	0.9	1.5	19.0	19.3	54.0	0.0	19.3	150
Secondary	1.1	2.7	14.1	16.1	50.4	0.2	16.3	1,915
Tertiary	0.2	3.1	7.6	9.5	53.6	0.0	9.5	453
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	3
Wealth Index Quintiles								
Poorest	1.4	3.6	29.6	30.8	51.5	0.0	30.8	595
Second	2.0	3.5	14.7	17.2	50.8	0.0	17.2	574
Middle	0.6	1.9	8.6	10.3	53.3	0.0	10.3	487
Fourth	0.0	2.8	5.2	8.0	53.9	0.0	8.0	465
Richest	0.2	1.1	1.5	2.7	45.4	1.0	3.7	401
Total	**0.9**	**2.7**	**13.2**	**15.1**	**51.2**	**0.2**	**15.2**	**2,521**

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

TABLE CP.1B: CHILD LABOUR

PERCENTAGE OF CHILDREN BY INVOLVEMENT IN ECONOMIC ACTIVITY AND HOUSEHOLD CHORES DURING THE PAST WEEK, ACCORDING TO AGE GROUPS, AND PERCENTAGE OF CHILDREN AGE 5-14 INVOLVED IN CHILD LABOUR, JAMAICA, 2011

	Percentage of children age 12-14 involved in								Number of children age 12-14	Total child labour [1]	Number of children age 5-14 years
	Economic activity										
	Working outside household		Working for family business	Economic activity less than 14 hours	Economic activity for 14 hours or more	Household chores less than 28 hours	Household chores for 28 hours or more	Child labour			
	Paid work	Unpaid work									
Sex											
Male	1.7	3.3	16.4	19.5	0.1	76.0	0.2	0.2	565	11.6	1,797
Female	1.1	4.0	19.9	23.1	0.2	81.0	0.2	0.3	570	9.7	1,859
Area											
Urban											
KMA	0.7	3.3	14.2	17.3	0.0	80.6	0.5	0.5	372	9.9	1,152
Other towns	1.9	3.7	13.5	16.2	0.2	75.3	0.0	0.2	249	7.9	754
Urban total	***1.1***	***3.5***	***13.9***	***16.9***	***0.1***	***78.5***	***0.3***	***0.4***	***621***	***9.1***	***1,906***
Rural	1.7	3.8	23.4	26.6	0.2	78.6	0.0	0.2	514	12.2	1,750
School Participation											
Yes	1.4	3.7	18.3	21.4	0.1	78.8	0.2	0.3	1,129	10.7	3,635
No	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	6	(0.0)	21
Mother's Education											
None/Primary	3.6	4.3	20.3	25.7	0.3	78.9	0.0	0.3	118	10.9	267
Secondary	1.4	3.4	19.7	22.6	0.1	80.0	0.2	0.3	823	11.5	2,738
Tertiary	0.0	4.5	10.0	12.3	0.0	72.6	0.0	0.0	188	6.7	641
Missing/DK	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	7	(*)	10
Wealth Index Quintiles											
Poorest	3.1	5.4	37.6	40.6	0.3	80.7	0.7	1.1	251	22.0	846
Second	0.7	5.7	24.8	29.2	0.0	78.8	0.0	0.0	255	11.9	829
Middle	2.2	2.8	16.2	20.0	0.0	84.4	0.0	0.0	241	6.9	727
Fourth	0.4	1.0	4.5	5.8	0.0	73.7	0.0	0.0	204	5.6	669
Richest	0.2	2.5	0.5	2.8	0.2	72.9	0.0	0.2	184	2.6	585
Total	**1.4**	**3.6**	**18.2**	**21.3**	**0.1**	**78.5**	**0.2**	**0.3**	**1,135**	**10.6**	**3,656**

[1] MICS indicator 8.2

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

Table CP.2 presents the percentage of children age 5-14 years involved in child labour who are attending school and percentage of children age 5-14 years attending school who are involved in child labour. The percentage of children 5-14 years of age attending school is 99.4 per cent. Some 10.7 per cent of the children age 5 -14 years who are attending school are involved in child labour. All of the children involved in child labour activities are attending school. Children who are attending school who are involved in child labour are most likely to come from poorer households (22.2%) compared with the richest households (2.6%).

TABLE CP.2: CHILD LABOUR AND SCHOOL ATTENDANCE

PERCENTAGE OF CHILDREN AGE 5-14 YEARS INVOLVED IN CHILD LABOUR WHO ARE ATTENDING SCHOOL, AND PERCENTAGE OF CHILDREN AGE 5-14 YEARS ATTENDING SCHOOL WHO ARE INVOLVED IN CHILD LABOUR, JAMAICA, 2011

	Percentage of children involved in child labour	Percentage of children attending school	Number of children age 5-14 years	Percentage of child labourers who are attending school [1]	Number of children age 5-14 years involved in child labour	Percentage of children attending school who are involved in child labour [2]	Number of children age 5-14 years attending school
Sex							
Male	11.6	99.2	1,797	100.0	208	11.6	1,784
Female	9.7	99.6	1,859	100.0	179	9.7	1,851
Area							
Urban							
KMA	9.9	99.4	1,152	100.0	115	10.0	1,145
Other towns	7.9	99.9	754	100.0	59	7.9	753
Urban total	***9.1***	***99.6***	***1,906***	***100.0***	***174***	***9.2***	***1,898***
Rural	12.2	99.2	1,750	100.0	213	12.3	1,736
Age							
5-11 years	15.2	99.4	2,521	100.0	384	15.3	2,506
12-14 years	0.3	99.5	1,135	(*)	3	0.3	1,129
Mother's Education							
None/Primary	10.9	98.9	267	100.0	29	11.1	265
Secondary	11.5	99.4	2,738	100.0	315	11.6	2,721
Tertiary	6.7	99.7	641	100.0	43	6.7	639
Missing/DK	(*)	(*)	10	-	0	(*)	10
Wealth Index Quintiles							
Poorest	22.0	99.0	846	100.0	186	22.2	837
Second	11.9	99.7	829	100.0	99	12.0	826
Middle	6.9	99.3	727	100.0	50	6.9	722
Fourth	5.6	99.4	669	100.0	37	5.6	665
Richest	2.6	99.9	585	(*)	15	2.6	585
Total	**10.6**	**99.4**	**3,656**	**100.0**	**387**	**10.7**	**3,635**

[1] MICS indicator 8.3
[2] MICS indicator 8.4
(*) Figures that are based on less than 25 unweighted cases

Child Discipline

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

In Jamaica, 71.9 per cent of children age 2-14 years were subjected to at least one form of psychological punishment by their mothers/caretakers or other household members. While 27 per cent of respondents believed that children need to be physically punished, the per cent of children who were subjected to any physical punishment more than doubled this rate (68.4%) and only 5.7 per cent were subjected to severe physical punishment.

Children within the poorest quintile were more likely to experience any physical punishment (79.0%) and severe physical punishment (9.9%) than those in the wealthiest quintile.

Male children were more likely to be subjected to both any physical punishment and severe physical punishment (71.4 and 6.7%) than female children (65.2 and 4.7%). Children from rural areas were most likely to be subjected to any physical punishment (70.4%) while those in the KMA were most likely to be subjected to severe physical punishment (7.6%), compared with other areas. Children 2-4 years were subjected to more physical punishment (77.9%) while the older children, those 10-14 years were subjected to more severe physical punishment (6.8%).

Early Marriage

Marriage before the age of 18 is a reality for many young girls. According to UNICEF's worldwide estimates, over 64 million women age 20-24 were married/in union before the age of 18. Factors that influence child marriage rates include: the state of the country's civil registration system, which provides proof of age for children; the existence of an adequate legislative framework with an accompanying enforcement mechanism to address cases of child marriage; and the existence of customary or religious laws that condone the practice.

In many parts of the world parents encourage the marriage of their daughters while they are still children in hopes that the marriage will benefit them both financially and socially, while also relieving financial burdens on the family. In actual fact, child marriage is a violation of human rights, compromising the development of girls and often resulting in early pregnancy and social isolation, with little education and poor vocational training reinforcing the gendered nature of poverty. The right to 'free and full' consent to a marriage is recognized in the Universal Declaration of Human Rights - with the recognition that consent cannot be 'free and full' when one of the parties involved is not sufficiently mature to make an informed decision about a life partner.

TABLE CP.3: CHILD DISCIPLINE

PERCENTAGE OF CHILDREN AGE 2-14 YEARS ACCORDING TO METHOD OF DISCIPLINING THE CHILD, JAMAICA, 2011

	Percentage of children age 2-14 years who experienced:					Number of children age 2-14 years	Respondent believes that the child needs to be physically punished	Respondents to the child discipline module
	Only non-violent discipline	Psychological aggression	Physical punishment		Any violent discipline method [1]			
			Any	Severe				
Sex								
Male	8.6	74.1	71.4	6.7	86.9	2,354	28.6	1291
Female	11.3	69.5	65.2	4.7	82.0	2,256	25.4	1310
Area								
Urban								
KMA	9.0	70.7	69.0	7.6	83.6	1,477	21.8	871
Other towns	13.8	70.0	62.8	3.2	81.1	941	26.4	532
Urban total	***10.8***	***70.4***	***66.6***	***5.9***	***82.6***	***2,418***	23.5	1404
Rural	8.9	73.4	70.4	5.5	86.5	2,192	31.0	1197
Age								
2-4 years	7.8	65.5	77.9	1.6	84.6	879	22.4	520
5-9 years	10.2	71.3	73.9	6.5	85.7	1,728	27.7	945
10-14 years	10.6	75.1	59.6	6.8	83.4	2,003	28.5	1135
Education of Household Head								
None/Primary	12.6	69.6	66.5	6.0	81.5	751	na	na
Secondary	9.4	71.7	71.4	6.3	85.6	3,162	na	na
Tertiary	10.7	75.1	55.7	2.0	81.3	616	na	na
Missing/DK	0.8	76.1	65.5	7.4	93.8	81	na	na
Respondent's Education								
None	na	na	na	na	na	na	(*)	8
Primary	na	na	na	na	na	na	32.0	230
Secondary +	na	na	na	na	na	na	26.4	2361
Missing/DK	na	na	na	na	na	na	(*)	1
Wealth Index Quintiles								
Poorest	4.4	76.4	79.0	9.9	90.1	1,063	32.8	515
Second	8.4	75.2	72.2	6.0	86.6	1,061	29.7	562
Middle	10.3	71.2	68.7	3.7	83.4	932	28.0	536
Fourth	11.7	69.3	64.1	5.2	83.3	827	25.7	515
Richest	17.8	64.2	51.9	2.3	75.9	727	17.7	472
Total	**9.9**	**71.9**	**68.4**	**5.7**	**84.5**	**4,610**	**27.0**	**2601**

[1] MICS indicator 8.5

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

The Convention on the Elimination of all Forms of Discrimination against Women mentions the right to protection from child marriage in article 16, which states: "The betrothal and the marriage of a child shall have no legal effect, and all necessary action, including legislation, shall be taken to specify a minimum age for marriage..." While marriage is not considered directly in the Convention on the Rights of the Child, child marriage is linked to other rights - such as the right to express their views freely, the right to protection from all forms of abuse, and the right to be protected from harmful traditional practices - and is frequently addressed by the Committee on the Rights of the Child. Other international agreements related to child marriage are the Convention on Consent to Marriage, Minimum Age for Marriage and Registration of Marriages and the African Charter on the Rights and Welfare of the Child and the Protocol to the African Charter on Human and People's Rights on the Rights of Women in Africa. Child marriage was also identified by the Pan-African Forum against the Sexual Exploitation of Children as a type of commercial sexual exploitation of children.

Young married girls are a unique, though often invisible, group. Required to perform heavy amounts of domestic work, under pressure to demonstrate fertility, and responsible for raising children while still children themselves, married girls and child mothers face constrained decision-making and reduced life choices. Boys are also affected by child marriage but the issue impacts girls in far larger numbers and with more intensity. Cohabitation - when a couple lives together as if married - raises the same human rights concerns as marriage. Where a girl lives with a man and takes on the role of caregiver for him, the assumption is often that she has become an adult woman, even if she has not yet reached the age of 18. Additional concerns due to the informality of the relationship - for example, inheritance, citizenship and social recognition - might make girls in informal unions vulnerable in different ways than those who are in formally recognized marriages.

Research suggests that many factors interact to place a child at risk of marriage. Poverty, protection of girls, family honour and the provision of stability during unstable social periods are considered as significant factors in determining a girl's risk of becoming married while still a child. Women who married at younger ages were more likely to believe that it is sometimes acceptable for a husband to beat his wife and were more likely to experience domestic violence themselves. The age gap between partners is thought to contribute to these abusive power dynamics and to increase the risk of untimely widowhood.

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

TABLE CP.4: EARLY MARRIAGE

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, JAMAICA, 2011

	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 of women 15-19 years currently married/in union [3]	Number of women age 15-19 years
Area							
Urban							
KMA	1.1	1,899	1.2	7.2	1,599	2.1	299
Other towns	1.6	1,030	2.0	9.7	844	5.1	185
Urban total	***1.2***	***2,928***	***1.5***	***8.0***	***2,444***	***3.3***	***485***
Rural	0.9	2,104	1.1	8.8	1,695	3.4	409
Age							
15-19	0.2	894	na	na	na	3.4	894
20-24	1.4	732	1.4	7.9	732	na	na
25-29	1.0	728	1.0	9.2	728	na	na
30-34	2.1	659	2.1	10.5	659	na	na
35-39	0.9	732	0.9	9.1	732	na	na
40-44	1.4	698	1.4	6.4	698	na	na
45-49	1.0	589	1.0	7.0	589	na	na
Education							
None/Primary	5.0	90	5.2	10.6	87	(*)	4
Secondary	1.3	3,652	1.6	10.7	2,864	3.6	788
Tertiary	0.3	1,290	0.3	2.5	1,188	0.4	102
Wealth Index Quintiles							
Poorest	2.3	832	2.8	15.1	667	3.2	166
Second	0.9	1,038	1.0	12.5	834	5.7	203
Middle	1.5	1,029	1.9	8.5	829	4.6	201
Fourth	0.8	1,064	1.0	4.2	892	1.5	172
Richest	0.3	1,069	0.4	3.6	917	1.0	152
Total	**1.1**	**5,032**	**1.3**	**8.4**	**4,138**	**3.4**	**894**

[1] MICS indicator 8.6
[2] MICS indicator 8.7
[3] MICS indicator 8.8
(*) Figures that are based on less than 25 unweighted cases
( ) Figures that are based on 25-49 unweighted cases

Two of the indicators are to estimate the percentage of women married before 15 years of age and percentage married before 18 years of age. The percentage of women married at various ages is provided in Table CP.4.The women who stated that they were married or in a union before age 15 years was 1.1 per cent, while 8.4 per cent stated that they were married or in a union before age 18. The percentage of women 15-19 years who are currently married/ in union is 3.4 per cent. More females, 15-19 years in other towns are currently married/in union compared to their rural counterparts (5.1% versus 3.4%), while in the KMA it was 2.1 per cent. The percentage of women who got married or were in a union before age 15 and those who are currently married/in union does not vary much across wealth index quintiles falling between 0.3 and 2.3%. Marriage before the age of 18 declines with household wealth where 15.1 per cent of women from the poorest households were married by this age compared with 3.6 per cent of women in the wealthiest households.

Tables CP.5a and CP.5b present the proportion of women who were first married or entered into a marital union before age 15 and 18 by residence and age groups. Examining the percentages married before age 15 and 18 by different age groups allow us to see the trends in early marriage over time. Overall, 1.1 per cent of women were first married or entered into a marital union before age 15 and 8.4 per cent were first married or entered into a marital union before age 18.

The percentage of women who were first married or entered into a marital union before age 15 from other towns, rural areas and KMA do not vary much by age cohort. However, the percentage was a little higher for women who were first married or entered into a marital union before age 18. The percentage varies across areas with other towns accounting for the highest per cent 9.7, followed by rural areas 8.8 per cent and KMA 7.2 per cent.

Overall, age patterns revealed that marriage by age 18 peaked for the age group 30-34 and then declined for younger ages demonstrating that the overall pattern of marriage is a reduction in early marriage.

TABLE CP.5A: TRENDS IN EARLY MARRIAGE

PERCENTAGE OF WOMEN WHO WERE FIRST MARRIED OR ENTERED INTO A MARITAL UNION BEFORE AGE 15 , BY RESIDENCE AND AGE GROUPS, JAMAICA, 2011

Age	Women married before age 15									
	KMA		Other Towns		*Urban*		Rural		All	
	Per cent	Number	Per cent	Number	*Per cent*	*Number*	Per cent	Number	Per cent	Number
15-19	0.0	299	0.0	185	***0.0***	***485***	0.3	409	0.2	894
20-24	1.5	261	1.8	160	***1.6***	***421***	1.0	311	1.4	732
25-29	1.0	265	1.2	154	***1.1***	***419***	1.0	308	1.0	728
30-34	2.0	277	4.4	136	***2.8***	***413***	1.0	246	2.1	659
35-39	1.0	323	0.6	139	***0.8***	***462***	1.1	270	0.9	732
40-44	1.5	262	2.0	146	***1.7***	***409***	1.1	290	1.4	698
45-49	0.3	211	2.0	108	***0.9***	***320***	1.1	269	1.0	589
Total	**1.1**	**1,899**	**1.6**	**1,030**	***1.2***	***2928***	**0.9**	**2,104**	**1.1**	**5,032**

TABLE CP.5B: TRENDS IN EARLY MARRIAGE

PERCENTAGE OF WOMEN WHO WERE FIRST MARRIED OR ENTERED INTO A MARITAL UNION BEFORE AGE 18, BY RESIDENCE AND AGE GROUPS, JAMAICA, 2011

Age	Women married before age 18									
	KMA		Other Towns		*Urban*		Rural		All	
	Per cent	Number	Per cent	Number	Per cent	*Number*	Per cent	Number	Per cent	Number
15-19	na	na	na	na	***na***	***na***	na	na	na	na
20-24	9.7	261	6.9	160	***8.6***	***421***	6.8	311	7.9	732
25-29	8.4	265	10.8	154	***9.3***	***419***	9.0	308	9.2	728
30-34	10.0	277	13.2	136	***11.1***	***413***	9.6	246	10.5	659
35-39	6.2	323	9.3	139	***7.1***	***462***	12.4	270	9.1	732
40-44	3.7	262	7.6	146	***5.1***	***409***	8.3	290	6.4	698
45-49	4.6	211	11.2	108	***6.8***	***320***	7.3	269	7.0	589
Total	**7.2**	**1,599**	**9.7**	**844**	***8.0***	***2,444***	**8.8**	**1,695**	**8.4**	**4,138**

Another component is the spousal age difference with an indicator being the percentage of married/in union women with a difference of 10 or more years younger than their current spouse. Table CP.7 presents the results of the age difference between husbands and wives. The results show that there are some important spousal age differences in Jamaica. Among the women currently married/in union age 20-24 years, 4.7 per cent of their partners were younger, 34.5 per cent were 0-4 years older, 31.6 per cent 5-9 years older and 28.9 per cent 10 years and older.

TABLE CP.6: SPOUSAL AGE DIFFERENCE

PER CENT DISTRIBUTION OF WOMEN CURRENTLY MARRIED/IN UNION AGE 15-19 AND 20-24 YEARS ACCORDING TO THE AGE DIFFERENCE WITH THEIR HUSBAND OR PARTNER, JAMAICA, 2011

	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	
Area														
Urban														
KMA	(*)	(*)	(*)	(*)	(*)	100.0	6	(4.1)	(38.2)	(22.6)	(35.0)	(0.0)	100.0	41
Other towns	(*)	(*)	(*)	(*)	(*)	100.0	9	(2.9)	(28.0)	(27.3)	(40.0)	(1.6)	100.0	38
Urban total	***(*)***	***(*)***	***(*)***	***(*)***	***(*)***	100.0	***16***	***3.6***	***33.3***	***24.8***	***37.5***	***0.7***	***100***	***79***
Rural	(*)	(*)	(*)	(*)	(*)	100.0	14	5.8	35.6	38.1	20.5	0.0	100	81
Age														
15-19 years	(7.6)	(46.4)	(27.1)	(18.9)	(0.0)	100.0	30	na	na	na	na	na	na	na
20-24 years	na	na	na	na	na	na	0	4.7	34.5	31.6	28.9	0.4	100	159
Education														
None/Primary	(*)	(*)	(*)	(*)	(*)	100.0	1	(*)	(*)	(*)	(*)	(*)	100.0	1
Secondary	(6.7)	(48.5)	(28.3)	(16.5)	(0.0)	100.0	29	5.9	33.7	29.1	30.8	0.5	100	126
Tertiary	(*)	(*)	(*)	(*)	(*)	100.0	0	(0.0)	(36.2)	(41.0)	(23.0)	(0.0)	100	32
Wealth Index Quintiles														
Poorest	(*)	(*)	(*)	(*)	(*)	100.0	5	(6.8)	(29.3)	(37.3)	(27.0)	(0.0)	100.0	36
Second	(*)	(*)	(*)	(*)	(*)	100.0	12	(3.3)	(44.1)	(19.6)	(32.0)	(1.4)	100.0	43
Middle	(*)	(*)	(*)	(*)	(*)	100.0	9	(2.9)	(28.4)	(43.1)	(26.0)	(0.0)	100.0	40
Fourth	(*)	(*)	(*)	(*)	(*)	100.0	3	(9.0)	(19.5)	(37.3)	(34.3)	(0.0)	100.0	24
Richest	(*)	(*)	(*)	(*)	(*)	100.0	2	(*)	(*)	(*)	(*)	(*)	100.0	17
Total	**7.6**	**46.4**	**27.1**	**18.9**	**0.0**	**100.0**	**30**	**4.7**	**34.5**	**31.6**	**28.9**	**0.4**	**100**	**159**

[1] MICS indicator 8.10a
[2] MICS indicator 8.10b
(*) Figures that are based on less than 25 unweighted cases
( ) Figures that are based on 25-49 unweighted cases

Domestic Violence

A number of questions were asked of women age 15-49 years to assess their attitudes towards whether husbands are justified to hit or beat their wives/partners for a variety of scenarios. These questions were asked to have an indication of cultural beliefs that tend to be associated with the prevalence of violence against women by their husbands/partners. The main assumption here is that women that agree with the statements indicating that husbands/partners are justified to beat their wives/partners under the situations described in reality tend to be abused by their own husbands/partners. The responses to these questions can be found in Table CP.7.

Overall, 6.0 per cent of women in Jamaica feel that their husband/partner has a right to hit or beat them for at least one of a variety of reasons (including being unfaithful). Considering only the standard MICS questions, 4.9 per cent of women feel that their husband/partner has a right to hit or beat them. Women who approve their partner's violence, in most cases agree and justify violence in instances when they neglect the children (4.0%). Less than 1 per cent of women believe that their partner has a right to hit or beat them if they refuse to have sex with him, go out without telling him, refuse to have sex with him or burn the food. About 3 per cent of women believe that violence is justified if she is unfaithful. Women who have never been married when compared to those currently and formerly married are more likely to believe that a husband is to beat a wife for any of the standard reasons asked in MICS (5.2%). In examining the attitude of women from the three areas towards domestic violence, women from the rural areas were somewhat more likely to believe that their husbands were justified in beating them for any of the standard reasons asked in MICS (6.0%) compared with urban women (4.1%). Of the different age groupings, younger women (15-29) were more likely to agree that their partners can beat them for any of the given reasons than older age groups.

TABLE CP.7: ATTITUDES TOWARD DOMESTIC VIOLENCE

PERCENTAGE OF WOMEN AGE 15-49 YEARS WHO BELIEVE A HUSBAND IS JUSTIFIED IN BEATING HIS WIFE/PARTNER IN VARIOUS CIRCUMSTANCES, JAMAICA, 2011

	Percentage of women age 15-49 years who believe a husband is justified in beating his wife/partner:								Number of women age 15-49 years
	If 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 5 reasons [1]	If she is unfaithful	For any of these reasons (including being unfaithful)	
Area									
Urban									
KMA	0.3	4.0	0.6	0.1	0.3	4.6	1.9	5.5	1,899
Other towns	0.4	2.3	0.5	0.5	0.6	3.0	1.5	3.5	1,030
Urban total	***0.3***	***3.4***	***0.6***	***0.3***	***0.4***	***4.1***	***1.8***	***4.8***	***2,928***
Rural	0.6	4.9	1.3	0.9	0.7	6.0	4.3	7.6	2,104
Age									
15-19	0.8	6.1	1.3	0.7	1.1	7.6	5.1	9.4	894
20-24	0.2	5.2	1.9	0.8	0.4	6.6	3.3	7.3	732
25-29	0.2	4.6	0.5	0.2	0.1	5.1	3.7	7.9	728
30-34	0.3	4.0	0.4	0.3	0.4	4.7	1.8	5.0	659
35-39	0.8	1.8	1.0	0.5	0.4	2.1	0.9	2.2	732
40-44	0.2	2.3	0.5	0.5	0.5	3.2	2.3	4.2	698
45-49	0.5	3.4	0.3	0.7	0.4	4.0	2.1	4.6	589
Marital/Union Status									
Currently married/in union	0.4	4.2	0.9	0.4	0.4	5.1	2.4	5.8	1,745
Formerly married/in union	0.6	2.7	0.7	0.7	0.5	3.4	2.4	4.6	868
Never married/in union	0.4	4.3	0.9	0.6	0.5	5.2	3.3	6.6	2,420
Education									
None/Primary	1.5	4.0	2.2	2.2	0.7	4.8	3.0	4.8	90
Secondary	0.5	4.8	1.1	0.6	0.6	5.9	3.6	7.3	3,652
Tertiary	0.2	1.7	0.2	0.1	0.2	1.9	0.7	2.2	1,290
Wealth Index Quintiles									
Poorest	0.3	5.5	1.9	0.8	0.5	6.9	3.5	8.4	832
Second	0.6	7.0	0.9	0.5	0.5	8.3	4.8	9.9	1,038
Middle	0.9	4.4	1.0	0.9	0.9	5.2	3.1	6.4	1,029
Fourth	0.3	1.8	0.7	0.5	0.4	2.3	2.1	3.3	1,064
Richest	0.1	1.7	0.2	0.0	0.1	2.1	0.9	2.4	1,069
Total	**0.4**	**4.0**	**0.9**	**0.5**	**0.5**	**4.9**	**2.8**	**6.0**	**5,032**

[1] MICS indicator 8.14

XI. Life Satisfaction

XI. Life Satisfaction

Life Satisfaction among Young Women

In MICS4, women in the age range 15 -24 years were asked a number of questions to gauge their level of satisfaction in a number of different areas. The response to the life satisfaction questions was based on how satisfied or happy they were with their family, friends, school, job, income, or with themselves. They were also asked if their life has improved or worsened in the past year, and whether their life in one year's time is expected to be better or worse than it was at the time of the survey.

Satisfaction with Family Life

Overall, 92.1 per cent of young women aged 15-24 years were very satisfied or somewhat satisfied with family life (see Table SW.1). Women in the age group 15-19 years had a higher percentage (94.2%) than those in the 20-24 years age group (89.5%). By area, the proportion of very satisfied or satisfied young women was 94.4% in rural areas, followed by other towns (93.0%) and KMA (88.7%).

Women who were never married/in union tended to be much more satisfied with their family life than those who were currently married (93.1% compared with 87.4%). By household wealth, the percentages of young women who were very satisfied or somewhat satisfied with family life did not show much variation.

Satisfaction with Friendship and satisfaction with School

The proportion of young women (15-24 years) who were very satisfied or somewhat satisfied with friendship or school in Jamaica was 92.9 per cent and 91.5 per cent, respectively. In terms of areas, marital status and quintile groups, these percentages show a similar pattern to those who were very satisfied or somewhat satisfied with family life (see Table SW.1).

Satisfaction with Living Environment and satisfaction with Current Job

Approximately 83.3 per cent of women aged 15-24 years were very satisfied or somewhat satisfied with their living environment, while 81.3 per cent were very satisfied or somewhat satisfied with their current job. In the 15-19 age group, more women were very satisfied or satisfied with their living environment (85.3%) than those who were very satisfied or somewhat satisfied with their current job (78.9%). Additionally, some 80.4 per cent of the young women in 15-24 years age group did not have a job, 94.3 per cent of women 15-19 and 63.3 per cent of the women 20-24). A similar percentage of young women in rural areas (82.8%) and KMA (80.1%) did not have a job, while 75.7 per cent were in other towns were jobless. By household wealth, the highest percentage of women with no job (88.0%) was in the poorest quintile.

TABLE SW.1: DOMAINS OF LIFE SATISFACTION

PERCENTAGE OF WOMEN AGE 15-24 YEARS WHO ARE VERY OR SOMEWHAT SATISFIED IN SELECTED DOMAINS, JAMAICA, 2011

	Percentage of women age 15-24 who are very or somewhat satisfied with selected domains:								Percentage of women age 15-24 who:			Number of women age 15-24 years
	Family life	Friendships	School	Current job	Herself	Living environment	Current income	Life overall	Are not currently attending school	Do not have a job	Do not have any income	
Age												
15-19 years	94.2	94.0	93.1	78.9	96.5	85.3	65.8	92.4	28.0	94.3	88.1	894
20-24 years	89.5	91.5	85.5	81.8	93.0	80.8	62.9	88.3	76.2	63.3	56.6	732
Area												
Urban												
KMA	88.7	91.8	90.2	72.7	93.7	74.8	55.0	86.8	43.3	80.1	76.0	561
Other towns	93.0	92.7	91.8	88.9	95.5	86.5	75.4	89.3	49.0	75.7	62.3	345
Urban total	***90.3***	***92.1***	***90.8***	***79.7***	***94.4***	***79.3***	***65.0***	***87.7***	***45.5***	***78.4***	***70.8***	***906***
Rural	94.4	94.0	92.4	83.9	95.7	88.3	61.3	94.2	55.0	82.8	77.9	720
Marital Status												
Ever married/in union	87.4	87.9	81.5	89.3	91.9	79.7	65.8	84.3	92.3	69.3	56.3	268
Never married/in union	93.1	93.9	91.7	78.5	95.6	84.0	62.8	91.8	41.3	82.5	77.4	1,358
Education												
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	(*)	7
Secondary	92.0	92.1	91.8	82.1	95.0	82.8	64.9	90.5	51.1	84.0	77.1	1,252
Tertiary	92.5	96.2	91.2	80.1	95.2	85.3	61.1	91.6	44.7	67.5	62.6	367
Wealth Index Quintiles												
Poorest	87.2	91.0	89.1	72.5	93.1	75.4	61.1	88.9	55.1	88.0	82.3	289
Second	92.4	91.8	89.0	79.5	93.7	81.3	58.2	88.8	58.4	81.4	71.4	380
Middle	95.3	93.7	91.9	92.2	95.7	86.7	72.4	91.8	54.4	78.6	71.6	359
Fourth	92.6	94.3	94.3	72.7	94.9	84.9	60.5	92.0	44.1	76.6	70.6	318
Richest	92.4	93.9	92.1	85.2	97.7	87.7	65.6	91.5	32.5	77.7	75.6	279
Total	**92.1**	**92.9**	**91.5**	**81.3**	**95.0**	**83.3**	**63.7**	**90.6**	**49.7**	**80.4**	**73.9**	**1,626**

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

Life Overall

Some ninety one per cent of women aged 15-24 who responded to the life satisfaction question say they were satisfied with life overall. However, those in the sub-group 15-19 years had a higher percentage (92.4 %) than those in the 20-24 age group (88.3%). A higher percentage of women in rural areas (94.2%) indicated that they were generally satisfied with life, compared with 87.7 per cent in urban areas. According to marital status, a larger percentage of women (91.8%) who were never married were satisfied with life overall, compared with 84.3 per cent in the ever married/in union category. Differences by household wealth and education were small.

Satisfied with Income

The proportion of women aged 15-24 years who were very satisfied or somewhat satisfied with their income was 63.7 per cent, nationally. Those in the age group 15-19 years expressed a higher level of satisfaction with their current income (65.8%) than those in the 20-24 years age group (62.9%). Also, in the 15-24 age groups, ever married/in union women had a higher level of satisfaction with their current income (65.8%) than those never married/in union (62.8%). In other towns, 75.4 per cent of these young women were very satisfied or somewhat satisfied with their income, but only 55 per cent of young women in KMA were very satisfied or somewhat satisfied. Approximately 74 per cent of these young women did not have any income. A higher percentage of these women were in rural areas (77.9%) and KMA (76.0%), while 62.3 per cent was in other towns. In the poorest quintile group, some 82.3 per cent had no income, while in the richest quintile 75.6 per cent had no income.

Life Satisfaction and Happiness

Overall, only 51.7 per cent of women aged 15-24 years were very satisfied or somewhat satisfied with income and life satisfaction (see Table SW.2) though 73 per cent of women had life satisfaction. Overall, 87.6 per cent of women were somewhat happy or very happy. A higher percentage were located in rural areas (89.8%), compared with KMA (83.9%). By household wealth, while there was no overall pattern; the second quintile had the lowest percentage (83.3%), while the fourth quintile had the highest (92.1%).

TABLE SW.2: LIFE SATISFACTION AND HAPPINESS

PERCENTAGE OF WOMEN AGE 15-24 YEARS WHO ARE VERY OR SOMEWHAT SATISFIED WITH THEIR FAMILY LIFE, FRIENDSHIPS, SCHOOL, CURRENT JOB, HEALTH, LIVING ENVIRONMENT, TREATMENT BY OTHERS, AND THE WAY THEY LOOK, THE AVERAGE LIFE SATISFACTION SCORE, PERCENTAGE OF WOMEN WITH LIFE SATISFACTION WHO ARE ALSO VERY OR SOMEWHAT SATISFIED WITH THEIR INCOME, AND PERCENTAGE OF WOMEN AGE 15-24 YEARS WHO ARE VERY OR SOMEWHAT HAPPY, JAMAICA, 2011

	Percentage of women with life satisfaction [1]	Average life satisfaction score	Missing/ Cannot be calculated	Women with life satisfaction who are very or somewhat satisfied with their income	No income / Cannot be calculated	Percentage who are very or somewhat happy [2]	Number of women age 15-24 years
Age							
15-19 years	77.3	1.4	2.2	53.3	2.2	90.5	894
20-24 years	67.5	1.6	5.8	51.2	5.8	84.0	732
Area							
Urban							
KMA	64.0	1.6	2.6	43.9	2.6	83.9	561
Other towns	75.1	1.5	3.6	63.2	3.6	89.0	345
Urban total	68.2	1.6	3.0	53.4	3.0	85.9	906
Rural	79.1	1.4	4.8	48.8	4.8	89.8	720
Marital Status							
Ever married/in union	66.8	1.7	6.4	49.4	6.4	82.2	189
Never married/in union	74.1	1.5	3.3	52.6	3.3	89.0	1,358
Education							
None/Primary	(*)	(*)	(*)	(*)	(*)	(*)	7
Secondary	73.5	1.5	4.1	51.8	4.1	87.4	1,252
Tertiary	71.4	1.5	3.0	51.7	3.0	89.2	367
Wealth Index Quintiles							
Poorest	65.1	1.6	5.0	40.4	5.0	83.7	289
Second	70.7	1.5	5.7	45.0	5.7	83.3	380
Middle	76.7	1.5	2.6	62.5	2.6	88.9	359
Fourth	76.7	1.5	3.5	51.7	3.5	92.1	318
Richest	74.9	1.4	1.9	54.0	1.9	90.6	279
Total	**73.0**	**1.5**	**3.8**	**51.7**	**3.8**	**87.6**	**1,626**

[1] MICS Indicator SW.1
[2] MICS indicator SW.2
(*) Figures that are based on less than 25 unweighted cases

PERCEPTION OF A BETTER LIFE

Some 65 per cent of women in the age group 15-24 years were of the opinion that their life improved over the last one year. Percentages according to areas indicated that other towns had the highest proportion of young women whose life had improved (72.6%), while the lowest was in the KMA (62.8%). There were also some differences in the proportion who believed that their life had improved by household wealth quintiles; perception of improvements in the last year increased with household wealth In the richest quintile, 72.9 per cent claimed that their life was better, while 56.5 per cent in the poorest quintile expressed the same opinion.

The proportion of young women (15-24 years) who believed that their life will get better after one year was 94.7 per cent (see Table SW.3). There were no major differences in areas, quintile groups or marital status. Only 63.7 per cent of these women expressed the view that their life improved during the last year and will get better in one year's time.

TABLE SW.3: PERCEPTION OF A BETTER LIFE

PERCENTAGE OF WOMEN AGE 15-24 YEARS WHO THINK THAT THEIR LIVES IMPROVED DURING THE LAST ONE YEAR AND WHO EXPECT THAT THEIR LIVES WILL GET BETTER AFTER ONE YEAR, JAMAICA, 2011

	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]	
Age				
15-19 years	67.3	95.1	66.0	894
20-24 years	62.4	94.2	60.8	732
Area				
Urban				
KMA	62.8	92.4	61.0	561
Other towns	72.6	97.3	72.0	345
Urban total	***66.6***	***94.3***	***65.2***	***906***
Rural	63.2	95.3	61.8	720
Marital Status				
Ever married/in union	60.2	96.5	60.2	268
Never married/in union	66.1	94.4	64.4	1,358
Education				
None/Primary	(*)	(*)	(*)	7
Secondary	64.3	94.6	62.8	1,252
Tertiary	67.8	95.2	66.9	367
Wealth Index Quintiles				
Poorest	56.5	93.3	54.3	289
Second	61.5	94.6	60.2	380
Middle	66.5	96.3	65.0	359
Fourth	68.7	95.7	67.9	318
Richest	72.9	93.2	71.7	279
Total	**65.1**	**94.7**	**63.7**	**1,626**

[1] MICS indicator SW.3

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

XII.

Appendices

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 for the Jamaica Multiple Indicator Cluster Survey (MICS) was to produce statistically reliable estimates of most indicators, at the national level, and for three regions of Jamaica: (a) the Kingston Metropolitan Area (KMA), comprising the whole of Kingston, St. Andrew urban, Spanish Town, and Portmore; (b) other towns; and (c) rural areas. A multi-stage, stratified cluster sampling approach was used for the selection of the survey sample.

SAMPLE SIZE AND SAMPLE ALLOCATION

The target sample size for the Jamaica MICS was determined as 7,200 households. For the calculation of the sample size, two key indicators were chosen: neonatal tetanus protection and father's support for learning. The following formula was used to estimate the required sample size for these indicators:

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

where

- *n* is the required sample size, expressed as number of households
- *4* is a factor to achieve the 95 per cent level of confidence
- *r* is the predicted or anticipated value of the indicator, expressed in the form of a proportion
- *1.2* is the factor necessary to raise the sample size by 20 per cent for the expected non-response (based on the experience from previous surveys)
- *f* is the shortened symbol for *deff* (design effect)
- *0.12r* is the margin of error to be tolerated at the 95 percent level of confidence, defined as 12 per cent of *r* (relative margin of error of *r*)
- *p* is the proportion of the total population upon which the indicator, *r*, is based
- $\bar{n}$ is the average household size (number of persons per household).

Using this formula the required sample size by domain (region) for each indicator was calculated based on the assumptions presented in Table SD.2.The resulting total sample size (for all three regions) from this exercise was 7,797 households for neonatal protection and 7,485 for father's support for learning.

TABLE SD.2: ESTIMATED SAMPLE SIZES BASED ON TWO INDICATORS

	Neonatal tetanus protection			Father's support for learning		
	KMA	Other towns	Rural areas	KMA	Other towns	Rural areas
Value, r(MICS 3)	0.577	0.665	0.701	0.447	0.373	0.394
Design effect, deff(assumed)	1.5	1.5	1.5	1.5	1.5	1.5
Nonresponse adjustment factor	1.2	1.2	1.2	1.2	1.2	1.2
Relevant group as a proportion of total population, p(MICS 3)	0.033	0.033	0.033	0.091	0.091	0.091
Average household size(JSLC 2008)	3.1	3.3	3.4	3.1	3.3	3.4
Acceptable relative margin of error	0.12	0.12	0.12	0.12	0.12	0.12
Required sample size using MICS formula	3,583	2,313	1,901	2,195	2,802	2,488
Required sample size - if 3 domains	**7,797**			**7,485**		

The results of the 2005 Jamaica MICS3 presented in the Final Report for that survey were also examined. That survey had the same three geographic domains (KMA, other towns and rural), and the total sample size was 6,276 households. Appendix C of the 2005 Jamaica MICS3 Final Report presents tables with the standard errors, 95% confidence intervals and design effects for key indicators. In reviewing the measures of precision at the national level (Table SE.2), it was found that the relative margins of error for most indicators were lower than 0.12, and the design effects were generally lower than 1.5.The tables for the three regions also indicated that the 95% confidence intervals for the MICS3 estimates of most indicators were generally acceptable.

Based on results of the sample size calculations, a review of the results from MICS3, logistical considerations and resource constraints, it was decided that a sample of 7,200 households would be effective for the Jamaica MICS4.Based on this sample size the level of precision of the survey results should be slightly higher than that for MICS3.

The average number of households selected per cluster for the Jamaica MICS4 was determined as 20 households, based on a number of considerations, including the design effect, the budget available, and the time that would be needed per team to complete the interviews in one cluster. Dividing the total number of sample households by the number of sample households per cluster, it was calculated that a total of 360 sample clusters should be selected for the Jamaica MICS4.

The 2001 Jamaica Census sampling frame showed the following distribution of households by region: 34 per cent for KMA, 19 per cent for other towns and 47 per cent for rural. If the sample were allocated to the three regions proportionally to the number of households, the sample size for the other towns region would be too small to provide reliable estimates for some indicators. As a compromise between equal and proportional allocation, the sample clusters were allocated to the regions as follows:120 clusters (EDs) for KMA, 100 for other towns and 140 for rural. The corresponding number of sample households for each region (2,400, 2,000 and 2,800, respectively) should provide a sufficient level of precision for the key indicators at the regional level.

The sampling frame was stratified by the urban and rural parts of each parish, which were further divided into sampling regions, as described below. It is necessary to have a minimum of two clusters selected in each sampling stratum. Within each region the sample clusters were allocated to the sampling strata in proportion to the number of households in the frame; the number of sample clusters in each stratum was then rounded to a multiple of 2.Table SD.3 shows the final allocation of the sample clusters and households by parish and area (KMA, other urban and rural).

TABLE SD.3: ALLOCATION OF SAMPLE CLUSTERS (PRIMARY SAMPLING UNITS) BY PARISH AND AREA

Parish	Number of Sample Clusters				Number of Sample Households			
	Total	KMA	Urban	Rural	Total	KMA	Urban	Rural
Kingston	14	14	0	0	280	280	0	0
St Andrew	72	66	0	6	1,440	1,320	0	120
St Thomas	12	0	4	8	240	0	80	160
Portland	10	0	2	8	200	0	40	160
St Mary	14	0	6	8	280	0	120	160
St Ann	20	0	6	14	400	0	120	280
Trelawny	10	0	4	6	200	0	80	120
St James	30	0	22	8	600	0	440	160
Hanover	10	0	2	8	200	0	40	160
Westmoreland	20	0	6	14	400	0	120	280
St Elizabeth	18	0	4	14	360	0	80	280
Manchester	28	0	14	14	560	0	280	280
Clarendon	34	0	18	16	680	0	360	320
St Catherine	68	40	12	16	1,360	800	240	320
Total	360	120	100	140	7,200	2,400	2,000	2,800

SAMPLING FRAME AND SELECTION OF CLUSTERS

A stratified two-stage sample design was used for the Jamaica MICS4, although the primary sampling units (PSUs) for the survey were selected in two steps. The Statistical Institute of Jamaica (STATIN) developed a master sample for their household survey program based on the 2001 Jamaica Census data and cartographic materials. The PSUs were defined as enumeration districts (EDs), although a very small ED (with less than 25 households) was combined with a neighbouring ED to form a PSU. The master sampling frame had a total of 254 sampling strata, and 3 sample PSUs were selected per stratum, for a total of 762 sample PSUs. These master sample PSUs were then further grouped into 180 new sampling regions (within parish and urban/rural strata), and two sample PSUs were selected in each new sampling region for the MICS4, for a total sample of 360 PSUs or clusters. At each step the PSUs were selected systematically with probability proportional to size, based on the number of households in the 2001 Census.

LISTING ACTIVITIES

Since the sampling frame (based on the 2001 Jamaica Census) was not up-to-date, a new listing of households was conducted in all the sample EDs prior to the selection of households. For this purpose, listing teams were formed, who visited each ED, and listed the occupied dwelling units.

SELECTION OF HOUSEHOLDS

Lists of households were prepared by the listing teams in the field for each ED. The households were then sequentially numbered from 1 to n (the total number of households in the ED), and the selection of 20 households in each ED was carried out using random systematic sampling procedures.

CALCULATION OF SAMPLE WEIGHTS

The Jamaica Multiple Indicator Cluster Survey sample is not self-weighting. Given that the sampling probabilities vary by region and cluster, it was necessary to calculate sample weights at the cluster level. These weights were used in the subsequent analyses of the survey data in order to ensure that the weighted estimates reflect the distribution of the sampling frame.

The major component of the weight is the reciprocal of the sampling fraction employed in selecting the number of sample households in that particular sampling stratum (h) and PSU (i):

$$W_{hi} = \frac{1}{f_{hi}}$$

The term f_{hi}, the sampling fraction for the sample households in the *i-th* sample PSU in the *h-th* stratum, is the product of probabilities of selection at every stage in each sampling stratum:

$$f_{hi} = p_{1hi} \times p_{2hi}$$

Where p_{1hi} is the probability of selection for the *i-th* sample PSU in the *h-th* sampling stratum, and p_{2hi} is the probability of selecting the households from the listing for the *i-th* sample PSU in the *h-th* stratum. Since the sample PSUs for the Jamaica MICS4 were selected as a sub-sample of the master sample stratified by new sampling regions, the calculation of p_{1hi} is actually more complex, but it takes into account the actual probabilities at each step.

Since the estimated number of households in each PSU (ED) in the sampling frame used for the first stage selection with PPS and the updated number of households in the ED from the listing are generally different, sampling fractions were calculated for the households in each sample ED (cluster).The sampling fractions for households in each sample cluster therefore included the first stage probability of selecting the ED in that particular sampling stratum and the second stage probability of selection of a household in the sample ED.

A second component in the calculation of sample weights takes into account the level of non-response for the household and individual interviews. The adjustment for household non-response is equal to the inverse value of:

> *RR_h = Number of interviewed households in stratum h/ Number of occupied households listed in stratum h*

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 Jamaica Multiple Indicator Cluster Survey are shown in Table HH.1 in this report.

Similarly, the adjustment for non-response at the individual level (women and under-5 children) for each stratum is equal to the inverse value of:

> *RR_h = Completed women's (or under-5's) questionnaires in stratum h / Eligible women (or under-5s) in stratum h*

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

The design weights for the households were calculated by multiplying the above factors for each sample cluster. These weights were then standardized (or normalized), one purpose of which is to make the weighted sum of the interviewed sample units equal the total sample size at the national level. Normalization is achieved by dividing the full sample weights (adjusted for non-response) by the average of these weights across all households at the national level. This is performed by multiplying the sample weights by a constant factor equal to the unweighted number of households at the national level divided by the weighted total number of households (using the full sample weights adjusted for non-response). A similar normalization procedure was followed in obtaining standardized weights for the women's and under-5's questionnaires. Adjusted (normalized) household weights varied between 0.1377 and 7.3820 for the 360 sample clusters. The average normalized weights by region were: 1.0618 for KMA, 0.7436 for other urban and 1.1298 for rural. These relative weights reflect the overall allocation of sample PSUs by region, as the other urban region was over sampled.

Sample weights were appended to all data sets, and analyses were performed by weighting each household, woman or under-5 with these sample weights.

Appendix B. List of Personnel Involved in the Survey

The Statistical Institute of Jamaica was the implementing agency for this survey. A number of persons were involved in the survey at various levels.

Project Manager: Douglas Forbes

Project Coordinator STATIN: Samuel Indalmanie

CONTRIBUTORS TO THE REPORT

Andrew Jones
Cary Renford
Donovan Davis
Ieesha Graham-McIntosh
Leesha Delatie-Budair
Julian Walters
Phyllis Wilks
Samuel Indalmanie

FIELD SUPERVISORS

Andrea Dores
Cydia McPherson
Denise King
Diana Lennon-Lewis
Doreen Hall-Millwood
Dorsia Allen
Edris McDermott
Elaine Bloomfield
Grace Shaw
Gracelin Muirhead
Janice Bent-Carr
Juliet McLeod
Myrtle Lewis-Wright
Paulette Henry
Paulette Reid
Pauline Purvill
Sarah Card
Tashna Findlaytor

INTERVIEWERS

Andrea Fullerton
Andrea Stewart
Camille McKenzie
Carlene Rose
Carol McKenzie
Carolene Sutton
Christine Gayle
Christine Morgan
Christine Reid
Christine Williams-Coke
Claudette Bernard
Claudine Cole-Malcolm
Collette Manning
Diana Henry
Divena Findlay
Donyagay Lofters
Dorett Allen
Dorothy Fraser
Fidrene Wong
Francella Anderson
Gaye Buchanan
Gillian Higgins
Gloria Parke
Hanna-Kay Rennicks
Indra Campbell
Janet Barnett
Joanna Foster
Judyann Baker
June Bridgemahan
Kalia Prince
Karen McLeod
Karlene Cooper
Kedeisha Gibson
Kedeisha Lindo-Miller
Kellie-Ann Williams
Kesha Dick
Leonie Bernard
Lorna Bingham
Marcia Wheatley
Margaret Griffiths
Mavalin Parkinson
Maxine Hill
Morphia Blair-West
Nadine Thompson
Nekesha Beckford
Nerissa Adams
Nerzetta Hyatt
Neslene McLean
Nordan Gilbert
Orleen Harris
Pauline Cover-Myers
Rosemarie Harris-Lee
Sasha-Gaye McLean
Sashana Nephew
Shannamar Chambers
Shannique Ferguson
Sharon Bailey
Sharon Dyke
Shenay Salmon
Sheryl Anderson
Suzanne Martin
Tamara McPherson
Tanesha Lewis
Tanika Thompson
Tanya Bryan
Tanya Earle

Terry-Ann Carnegie	ThaleneHolness	Veronica Dryden-Cameron
Terry-Ann Ross	Tiffany Whyte	Yvette Gordon

TRAINERS

Isbeth Bernard	Phyllis Wilks	Andrew Jones
Stuart Brown	Samuel Indalmanie	Julian Walters
Leesha Delatie-Budair	Donovan Davis	

DATA PROCESSING SUPERVISORS

Sydna Amos	Avery Hylton

DATA ENTRY OPERATORS /EDITORS:

Jacqueline Howell	Chantelle White	Denise Barnet
Shakea Duffus	Donna Salmon	Desmond Clarke
Tishana Gayle	Kemisha Jacks	

STEERING COMMITTEE MEMBERS

Isbeth Bernard	UNICEF
Nasolo Thompson	ILO
Donneth Edmondson	Planning Institute of Jamaica
Easton Williams	Planning Institute of Jamaica
Randell Bailey	Child Development Agency
Dr. Karen Lewis-Bell	Ministry of Health
Machel Stewart	UNDP
Marva Ximinnies	Ministry of Labour &Social Security
Glen Smith	UNFPA
Dothyn Minott	UNESCO
Annette McKenzie	Statistical Institute of Jamaica
Douglas Forbes	Statistical Institute of Jamaica
Merville Anderson	Statistical Institute of Jamaica
Leesha Delatie-Budair	Statistical Institute of Jamaica
Samuel Indalmanie	Statistical Institute of Jamaica
Avery Gaynor-Hylton	Statistical Institute of Jamaica
William Fong	Early Childhood Commission

Appendix C. Estimates of Sampling Errors

TABLE SE.1: SAMPLING ERRORS: TOTAL SAMPLE

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Jamaica, 2011

	MICS Indicator	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deft*)	Weighted count	Unweighted count	Confidence limits	
									r - 2se	*r + 2se*
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.9445	0.00779	0.008	6.894	2.626	18946	5960	0.928	0.957
Use of improved sanitation facilities	4.3	0.8650	0.00942	0.011	4.531	2.129	18946	5960	0.985	0.992
Secondary school net attendance ratio (adjusted)	7.5	0.8615	0.00894	0.010	1.609	1.269	2324	2403	0.841	0.875
Child labour	8.2	0.1059	0.00755	0.071	2.267	1.506	3655	3769	0.090	0.117
Violent discipline	8.5	0.8449	0.00994	0.012	2.007	1.417	4609	2661	0.822	0.862
WOMEN										
Early childbearing	5.2	0.1486	0.01291	0.087	0.991	0.995	732	753	0.116	0.170
Antenatal care coverage - at least once by skilled personnel	5.5a	0.9768	0.00518	0.005	0.746	0.864	613	630	0.967	0.988
Antenatal care coverage – at least four times by any provider	5.5b	0.8558	0.01574	0.018	1.263	1.124	613	630	0.824	0.884
Skilled attendant at delivery	5.7	0.9908	0.00437	0.004	1.310	1.145	613	630	0.982	1.000
Institutional deliveries	5.8	0.9856	0.00478	0.005	1.010	1.005	613	630	0.976	0.996
Caesarean section	5.9	0.2123	0.01762	0.083	1.168	1.081	613	630	0.170	0.234
Literacy rate among young women	7.1	0.9444	0.00672	0.007	1.431	1.196	1626	1668	0.931	0.958
Marriage before age 18	8.7	0.0836	0.00605	0.072	1.967	1.402	4138	4117	0.076	0.101
UNDER-5s										
Exclusive breastfeeding under 6 months	2.6	0.2378	0.02277	0.096	0.475	0.689	168	167	0.182	0.286
Age-appropriate breastfeeding	2.14	0.3121	0.01855	0.059	1.030	1.015	649	643	0.276	0.344
Tuberculosis immunization coverage	-	0.9952	0.00322	0.003	0.675	0.821	320	314	1.000	1.000
Received polio immunization	-	0.9202	0.01695	0.018	1.221	1.105	319	313	0.914	0.949
Received DPT immunization	-	0.9150	0.01702	0.019	1.148	1.071	313	309	0.898	0.936
Received measles immunization	-	0.9411	0.01547	0.016	1.330	1.153	315	309	0.853	0.902
Received Hepatitis B immunization	-	0.8842	0.01794	0.020	0.952	0.976	309	304	0.878	0.916
Diarrhoea in the previous 2 weeks	-	0.0568	0.00733	0.129	1.645	1.283	1639	1639	0.042	0.071
Illness with a cough in the previous 2 weeks	-	0.0521	0.00692	0.133	1.589	1.261	1639	1639	0.040	0.063
Oral rehydration therapy with continued feeding	3.8	0.4326	0.02630	0.061	0.265	0.515	85	95	0.339	0.436
Antibiotic treatment of suspected pneumonia	3.10	0.5848	0.01890	0.032	0.132	0.364	85	95	0.515	0.634
Support for learning	6.1	0.8757	0.01195	0.014	0.879	0.937	661	671	0.861	0.909
Attendance to early childhood education	6.7	0.9145	0.01121	0.012	1.078	1.038	661	671	0.898	0.939

TABLE SE.2: SAMPLING ERRORS: KMA

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Jamaica, 2011

	MICS Indicator	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deft*)	Weighted count	Unweighted count	Confidence limits	
									r - 2se	*r + 2se*
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.9974	0.00084	0.001	0.533	0.730	6517	1963	0.995	0.999
Use of improved sanitation facilities	4.3	0.8391	0.01995	0.024	5.787	2.406	6517	1963	0.989	0.997
Secondary school net attendance ratio (adjusted)	7.5	0.8772	0.01680	0.019	2.006	1.416	751	766	0.847	0.911
Child labour	8.2	0.0995	0.01735	0.174	3.833	1.958	1152	1141	0.062	0.124
Violent discipline	8.5	0.8365	0.01796	0.021	2.015	1.420	1476	856	0.796	0.868
WOMEN										
Early childbearing	5.2	0.1355	0.02415	0.178	1.284	1.133	261	259	0.089	0.200
Antenatal care coverage - at least once by skilled personnel	5.5a	0.9443	0.01557	0.016	0.876	0.936	187	191	0.917	0.975
Antenatal care coverage – at least four times by any provider	5.5b	0.8533	0.02446	0.029	0.908	0.953	187	191	0.798	0.895
Skilled attendant at delivery	5.7	0.9969	0.00308	0.003	0.586	0.766	187	191	0.990	1.000
Institutional deliveries	5.8	0.9965	0.00346	0.003	0.657	0.810	187	191	0.987	1.000
Caesarean section	5.9	0.2220	0.02971	0.134	0.971	0.985	187	191	0.158	0.265
Literacy rate among young women	7.1	0.9621	0.01134	0.012	1.977	1.406	561	561	0.939	0.985
Marriage before age 18	8.7	0.0718	0.01047	0.146	2.435	1.561	1599	1480	0.062	0.106
UNDER-5s										
Exclusive breastfeeding under 6 months	2.6	0.2715	0.01847	0.068	0.074	0.272	50	44	0.000	-0.305
Age-appropriate breastfeeding	2.14	0.3262	0.02649	0.081	0.613	0.783	226	193	0.252	0.350
Tuberculosis immunization coverage	-	1.0000	0.00000	0.000	na	na	104	92	1.000	1.000
Received polio immunization	-	0.8807	0.03880	0.044	1.303	1.142	104	92	0.825	0.923
Received DPT immunization	-	0.8909	0.03780	0.042	1.323	1.150	103	91	0.817	0.910
Received measles immunization	-	0.8926	0.03629	0.041	1.236	1.112	103	91	0.779	0.859
Received Hepatitis B immunization	-	0.8712	0.04121	0.047	1.316	1.147	99	88	0.830	0.910
Diarrhoea in the previous 2 weeks	-	0.0413	0.00973	0.236	1.234	1.111	605	517	0.021	0.061
Illness with a cough in the previous 2 weeks	-	0.557	0.01394	0.250	1.906	1.381	605	517	0.030	0.074
Oral rehydration therapy with continued feeding	3.8	*	*	*	*	*	34	26	*	*
Antibiotic treatment of suspected pneumonia	3.10	*	*	*	*	*	34	26	*	*
Support for learning	6.1	0.8699	0.01645	0.019	0.533	0.730	260	224	0.861	0.934
Attendance to early childhood education	6.7	0.9037	0.02180	0.024	1.217	1.103	260	224	0.871	0.957

TABLE SE.3: SAMPLING ERRORS: URBAN AREAS

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Jamaica, 2011

	MICS Indicator	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deft*)	Weighted count	Unweighted count	Confidence limits	
									r - 2se	*r + 2se*
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.991	0.002	0.002	1.573	1.254	10379	3620	0.987	0.995
Use of improved sanitation facilities	4.3	0.855	0.014	0.016	5.672	2.382	10379	3620	0.988	0.995
Secondary school net attendance ratio (adjusted)	7.5	0.877	0.012	0.013	1.764	1.328	1239	1418	0.854	0.900
Child labour	8.2	0.091	0.012	0.129	3.637	1.907	1905	2175	0.064	0.107
Violent discipline	8.5	0.827	0.013	0.016	1.917	1.385	2418	1586	0.797	0.848
WOMEN										
Early childbearing	5.2	0.137	0.017	0.123	1.138	1.067	421	476	0.104	0.180
Antenatal care coverage - at least once by skilled personnel	5.5a	0.964	0.009	0.009	0.845	0.919	337	382	0.948	0.983
Antenatal care coverage – at least four times by any provider	5.5b	0.852	0.022	0.025	1.428	1.195	337	382	0.814	0.888
Skilled attendant at delivery	5.7	0.998	0.002	0.002	0.652	0.807	337	382	0.994	1.000
Institutional deliveries	5.8	0.996	0.002	0.002	0.613	0.783	337	382	0.989	1.000
Caesarean section	5.9	0.251	0.024	0.096	1.177	1.085	337	382	0.189	0.273
Literacy rate among young women	7.1	0.948	0.008	0.009	1.535	1.239	906	1025	0.930	0.964
Marriage before age 18	8.7	0.080	0.008	0.101	2.329	1.526	2443	2605	0.073	0.106
UNDER-5s										
Exclusive breastfeeding under 6 months	2.6	0.243	0.029	0.121	0.485	0.696	99	104	0.170	0.262
Age-appropriate breastfeeding	2.14	0.291	0.023	0.079	1.008	1.004	373	390	0.225	0.304
Tuberculosis immunization coverage	-	1.000	0.000	0.000	na	na	177	186	1.000	1.000
Received polio immunization	-	0.899	0.025	0.028	1.256	1.121	177	186	0.869	0.932
Received DPT immunization	-	0.909	0.025	0.027	1.350	1.162	174	184	0.854	0.920
Received measles immunization	-	0.918	0.024	0.026	1.376	1.173	176	185	0.820	0.878
Received Hepatitis B immunization	-	0.890	0.026	0.030	1.277	1.130	170	181	0.839	0.901
Diarrhoea in the previous 2 weeks	-	0.057	0.008	0.147	1.268	1.126	927	975	0.040	0.077
Illness with a cough in the previous 2 weeks	-	0.058	0.010	0.171	1.760	1.326	927	975	0.040	0.075
Oral rehydration therapy with continued feeding	3.8	0.357	0.042	0.118	0.481	0.694	54	63	0.279	0.393
Antibiotic treatment of suspected pneumonia	3.10	0.526	0.016	0.030	0.060	0.244	54	63	0.532	0.578
Support for learning	6.1	0.875	0.014	0.016	0.741	0.861	371	397	0.860	0.921
Attendance to early childhood education	6.7	0.896	0.017	0.019	1.235	1.111	371	397	0.867	0.934

TABLE SE.4: SAMPLING ERRORS: OTHER TOWNS

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Jamaica, 2011

	MICS Indicator	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deft*)	Weighted count	Unweighted count	Confidence limits	
									r - 2se	*r + 2se*
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.9792	0.00534	0.005	2.317	1.522	3861	1657	0.970	0.990
Use of improved sanitation facilities	4.3	0.8809	0.01680	0.019	4.453	2.110	3861	1657	0.981	0.997
Secondary school net attendance ratio (adjusted)	7.5	0.8761	0.01410	0.016	1.193	1.092	488	652	0.843	0.905
Child labour	8.2	0.0788	0.01343	0.171	2.569	1.603	753	1034	0.049	0.098
Violent discipline	8.5	0.8108	0.01836	0.023	1.602	1.266	941	730	0.774	0.839
WOMEN										
Early childbearing	5.2	0.1402	0.02024	0.144	0.734	0.857	160	217	0.094	0.180
Antenatal care coverage - at least once by skilled personnel	5.5a	0.9880	0.00255	0.003	0.105	0.324	150	191	0.980	1.000
Antenatal care coverage – at least four times by any provider	5.5b	0.8512	0.03804	0.045	2.170	1.473	150	191	0.801	0.916
Skilled attendant at delivery	5.7	1.0000	0.00000	0.000	na	na	150	191	1.000	1.000
Institutional deliveries	5.8	0.9957	0.00357	0.004	0.559	0.747	150	191	0.985	1.000
Caesarean section	5.9	0.2863	0.04062	0.142	1.534	1.239	150	191	0.187	0.327
Literacy rate among young women	7.1	0.9242	0.01293	0.014	1.104	1.051	345	464	0.898	0.950
Marriage before age 18	8.7	0.0969	0.01185	0.122	1.805	1.344	844	1125	0.076	0.124
UNDER-5s										
Exclusive breastfeeding under 6 months	2.6	0.2143	0.05671	0.265	1.127	1.062	49	60	0.105	0.257
Age-appropriate breastfeeding	2.14	0.2369	0.03974	0.168	1.712	1.309	147	197	0.153	0.279
Tuberculosis immunization coverage	-	1.0000	0.00000	0.000	na	na	72	94	1.000	1.000
Received polio immunization	-	0.9242	0.01906	0.021	0.482	0.695	72	94	0.903	0.971
Received DPT immunization	-	0.9360	0.02086	0.022	0.668	0.817	70	93	0.872	0.964
Received measles immunization	-	0.9553	0.01839	0.019	0.736	0.858	72	94	0.849	0.930
Received Hepatitis B immunization	-	0.9162	0.02123	0.023	0.540	0.735	70	93	0.820	0.919
Diarrhoea in the previous 2 weeks	-	0.0864	0.01448	0.168	1.215	1.102	321	458	0.056	0.118
Illness with a cough in the previous 2 weeks	-	0.0628	0.01162	0.185	1.048	1.024	321	458	0.040	0.094
Oral rehydration therapy with continued feeding	3.8	0.3283	0.07278	0.222	0.865	0.930	20	37	0.260	0.372
Antibiotic treatment of suspected pneumonia	3.10	0.5301	0.02866	0.054	0.099	0.315	20	37	0.592	0.614
Support for learning	6.1	0.8868	0.02840	0.032	1.382	1.176	110	173	0.822	0.928
Attendance to early childhood education	6.7	0.8787	0.02529	0.029	1.033	1.016	110	173	0.824	0.922

TABLE SE.5: SAMPLING ERRORS: RURAL AREAS

Standard errors, coefficients of variation, design effects (*deff*), square root of design effects (*deft*) and confidence intervals for selected indicators, Jamaica, 2011

	MICS Indicator	Value (*r*)	Standard error (*se*)	Coefficient of variation (*se/r*)	Design effect (*deff*)	Square root of design effect (*deft*)	Weighted count	Unweighted count	Confidence limits	
									r - 2se	*r + 2se*
HOUSEHOLD MEMBERS										
Use of improved drinking water sources	4.1	0.8886	0.1645	0.019	6.394	2.529	8567	2340	0.858	0.919
Use of improved sanitation facilities	4.3	0.8775	0.01185	0.013	3.053	1.747	8567	2340	0.978	0.991
Secondary school net attendance ratio (adjusted)	7.5	0.8440	0.01371	0.016	1.406	1.186	1084	985	0.813	0.861
Child labour	8.2	0.1218	0.00889	0.073	1.178	1.085	1749	1594	0.105	0.139
Violent discipline	8.5	0.8651	0.01477	0.017	2.007	1.417	2192	1075	0.832	0.893
WOMEN										
Early childbearing	5.2	0.1640	0.01874	0.114	0.707	0.841	310	277	0.109	0.182
Antenatal care coverage - at least once by skilled personnel	5.5a	0.9928	0.00410	0.004	0.579	0.761	275	248	0.980	1.000
Antenatal care coverage – at least four times by any provider	5.5b	0.8600	0.02261	0.026	1.048	1.024	275	248	0.808	0.905
Skilled attendant at delivery	5.7	0.9816	0.00945	0.010	1.219	1.104	275	248	0.965	1.000
Institutional deliveries	5.8	0.9726	0.01010	0.010	0.946	0.973	275	248	0.957	0.997
Caesarean section	5.9	0.1653	0.02337	0.141	0.978	0.989	275	248	0.119	0.220
Literacy rate among young women	7.1	0.9402	0.01063	0.011	1.290	1.136	720	643	0.919	0.961
Marriage before age 18	8.7	0.0882	0.00851	0.096	1.359	1.166	1694	1512	0.069	0.106
UNDER-5s										
Exclusive breastfeeding under 6 months	2.6	0.2299	0.03591	0.156	0.452	0.672	68	63	0.158	0.351
Age-appropriate breastfeeding	2.14	0.3407	0.02771	0.081	0.861	0.928	276	253	0.307	0.415
Tuberculosis immunization coverage	-	0.9892	0.00743	0.008	0.653	0.808	143	128	1.000	1.000
Received polio immunization	-	0.9473	0.01701	0.018	0.730	0.854	142	127	0.953	0.979
Received DPT immunization	-	0.9224	0.02214	0.024	0.849	0.921	139	125	0.936	0.963
Received measles immunization	-	0.9697	0.01646	0.017	1.135	1.065	139	124	0.869	0.950
Received Hepatitis B immunization	-	0.8772	0.02382	0.027	0.643	0.802	138	123	0.908	0.944
Diarrhoea in the previous 2 weeks	-	0.0565	0.01265	0.224	1.990	1.411	711	664	0.031	0.077
Illness with a cough in the previous 2 weeks	-	0.0441	0.00897	0.203	1.265	1.125	711	664	0.028	0.061
Oral rehydration therapy with continued feeding	3.8	0.5318	0.02636	0.050	0.087	0.294	31	32	0.366	0.531
Antibiotic treatment of suspected pneumonia	3.10	0.6862	0.03802	0.055	0.201	0.449	31	32	0.460	0.744
Support for learning	6.1	0.8767	0.01936	0.022	0.947	0.973	290	274	0.843	0.916
Attendance to early childhood education	6.7	0.9379	0.01360	0.015	0.868	0.932	290	274	0.913	0.964

Appendix D. Data Quality Tables

TABLE DQ.1: AGE DISTRIBUTION OF HOUSEHOLD POPULATION

SINGLE-YEAR AGE DISTRIBUTION OF HOUSEHOLD POPULATION BY SEX, JAMAICA, 2011

Age	Male		Female		Age	Male		Female	
	Number	Per cent	Number	Per cent		Number	Per cent	Number	Per cent
0	162	1.8	152	1.6	41	99	1.1	129	1.3
1	157	1.7	150	1.5	42	122	1.3	112	1.2
2	163	1.8	153	1.6	43	108	1.2	144	1.5
3	134	1.5	143	1.5	44	123	1.3	149	1.5
4	210	2.3	152	1.6	45	123	1.3	127	1.3
5	149	1.6	143	1.5	46	107	1.2	129	1.3
6	195	2.1	175	1.8	47	91	1.0	136	1.4
7	157	1.7	178	1.8	48	141	1.5	95	1.0
8	168	1.8	175	1.8	49	117	1.3	103	1.1
9	178	1.9	206	2.1	50	106	1.2	109	1.1
10	220	2.4	210	2.2	51	93	1.0	104	1.1
11	164	1.8	201	2.1	52	95	1.0	110	1.1
12	203	2.2	173	1.8	53	78	0.8	91	0.9
13	172	1.9	199	2.0	54	80	0.9	83	0.9
14	189	2.1	199	2.0	55	78	0.8	82	0.8
15	208	2.3	203	2.1	56	73	0.8	76	0.8
16	212	2.3	195	2.0	57	67	0.7	51	0.5
17	186	2.0	182	1.9	58	87	0.9	57	0.6
18	198	2.1	156	1.6	59	73	0.8	64	0.7
19	141	1.5	174	1.8	60	77	0.8	66	0.7
20	166	1.8	144	1.5	61	43	0.5	57	0.6
21	151	1.6	145	1.5	62	45	0.5	49	0.5
22	135	1.5	141	1.4	63	58	0.6	41	0.4
23	121	1.3	160	1.6	64	70	0.8	57	0.6
24	136	1.5	148	1.5	65	52	0.6	55	0.6
25	121	1.3	166	1.7	66	43	0.5	52	0.5
26	148	1.6	139	1.4	67	37	0.4	49	0.5
27	136	1.5	135	1.4	68	41	0.4	49	0.5
28	126	1.4	151	1.5	69	31	0.3	32	0.3
29	111	1.2	146	1.5	70	49	0.5	55	0.6
30	130	1.4	144	1.5	71	38	0.4	46	0.5
31	92	1.0	131	1.3	72	30	0.3	46	0.5
32	130	1.4	133	1.4	73	39	0.4	39	0.4
33	89	1.0	154	1.6	74	34	0.4	27	0.3
34	102	1.1	109	1.1	75	37	0.4	45	0.5
35	146	1.6	159	1.6	76	34	0.4	33	0.3
36	102	1.1	114	1.2	77	30	0.3	42	0.4
37	100	1.1	155	1.6	78	41	0.4	31	0.3
38	156	1.7	172	1.8	79	30	0.3	38	0.4
39	132	1.4	147	1.5	80+	177	1.9	251	2.6
40	138	1.5	172	1.8	DK/missing	92	1.0	25	0.3
					Total	9,226	100.0	9,721	100.0

TABLE DQ.2: AGE DISTRIBUTION OF ELIGIBLE AND INTERVIEWED WOMEN

HOUSEHOLD POPULATION OF WOMEN AGE 10-54, INTERVIEWED WOMEN AGE 15-49, AND PERCENTAGE OF ELIGIBLE WOMEN WHO WERE INTERVIEWED, BY FIVE-YEAR AGE GROUPS, JAMAICA, 2011

Age	Household population of women age 10-54	Interviewed women age 15-49		Percentage of eligible women interviewed (Completion rate)
	Number	Number	Per cent	
10-14	981	na	na	na
15-19	910	885	17.7	97.2
20-24	738	724	14.5	98.1
25-29	736	723	14.5	98.2
30-34	671	656	13.2	97.8
35-39	746	729	14.6	97.8
40-44	707	696	13.9	98.5
45-49	591	579	11.6	98.0
50-54	497	na	na	na
Total (15-49)	**5099**	**4991**	**100.0**	**97.9**
Ratio of 50-54 to 45-49	**0.84**			

na: not applicable

TABLE DQ.3: AGE DISTRIBUTION OF ELIGIBLE AND INTERVIEWED UNDER - 5S HOUSEHOLD POPULATION OF CHILDREN AGE 0 4, CHILDREN WHOSE MOTHERS/CARETAKERS WERE INTERVIEWED, AND PERCENTAGE OF UNDER 5 CHILDREN WHOSE MOTHERS/CARETAKERS WERE INTERVIEWED (WEIGHTED), BY FIVE-YEAR AGE GROUP, JAMAICA, 2011

Age	Household population of children 0-7 years	Interviewed under-5 children		Percentage of eligible under-5s interviewed (Completion rate)
	Number	Number	Per cent	
0	315	312	19.9	99.2
1	308	307	19.6	99.9
2	316	315	20.1	99.7
3	277	276	17.6	99.6
4	361	356	22.7	98.4
5	292	na	na	na
6	370	na	na	na
7	335	na	na	na
Total (0 - 4)	**1,576**	**1,566**	**100.0**	**99.3**
Ratio of 5 to 4	**0.81**			

na: not applicable
Note: Weights for both household population of children and interviewed children are household weights. Age is based on the household schedule.

TABLE DQ.4: OBSERVATION OF PLACES FOR HAND WASHING
PERCENTAGE OF PLACES FOR HAND WASHING OBSERVED BY THE INTERVIEWER IN ALL INTERVIEWED HOUSEHOLDS, JAMAICA, 2011

	Observation of places for hand washing: Observed	Place for hand washing not in dwelling	No permission to see	Other	Total	Number of households interviewed
Area						
KMA	63.7	5.9	20.5	9.9	100.0	1,963
Other towns	61.7	5.1	25.1	7.8	100.0	1,657
Urban total	***62.8***	***5.5***	***22.6***	***8.9***	***100.0***	***3,620***
Rural	66.4	5.1	16.2	12.3	100.0	2,340
Wealth index quintiles						
Poorest	64.3	8.6	13.5	13.6	100.0	1,352
Second	65.9	7.1	15.5	11.4	100.0	1,135
Middle	65.6	4.1	20.6	9.5	100.0	1,135
Fourth	62.2	3.4	25.5	8.8	100.0	1,195
Richest	63.2	3.1	26.3	7.3	100.0	1,143
Total	**64.2**	**5.4**	**20.1**	**10.2**	**100.0**	**5,960**

TABLE DQ.5: OBSERVATION OF WOMEN'S HEALTH CARDS

PER CENT 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, JAMAICA, 2011

	Woman does not have health card	Woman has health card		Missing/ DK	Total	Per cent 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)				
Area							
Urban							
KMA	16.8	27.2	55.0	1.0	100	33.1	191
Other towns	8.9	38.2	51.3	1.6	100	42.7	191
Urban total	***12.8***	***32.7***	***53.1***	***1.3***	***100***	***38.1***	***382***
Rural	13.3	42.3	43.1	1.2	100	49.5	248
Wealth index quintiles							
Poorest	11.5	43.6	42.9	1.9	100	50.4	156
Second	12.1	39.3	47.9	0.7	100	45.1	140
Middle	15.0	38.3	45.1	1.5	100	45.9	133
Fourth	9.4	32.1	58.5	0.0	100	35.4	106
Richest	17.9	23.2	56.8	2.1	100	28.9	95
Total	**13.0**	**36.5**	**49.2**	**1.3**	**100**	**42.6**	**630**

TABLE DQ.6: OBSERVATION OF VACCINATION CARDS

PER CENT DISTRIBUTION OF CHILDREN UNDER 5 BY PRESENCE OF A VACCINATION CARD, AND THE PERCENTAGE OF VACCINATION CARDS SEEN BY THE INTERVIEWERS, JAMAICA, 2011

	Child does not have vaccination card		Child has vaccination card		Missing/DK	Total	Per cent of vaccination cards seen by the interviewer (1)/(1+2)*100	Number of children under age 5
	Had vaccination card previously	Never had vaccination card	Seen by the interviewer (1)	Not seen by the interviewer (2)				
Area								
Urban								
KMA	0.4	0.6	73.9	25.1	0.0	100	74.6	517
Other towns	0.9	0.4	78.6	20.1	0.0	100	79.6	458
Urban total	***0.6***	***0.5***	***76.1***	***22.8***	***0.0***	***100***	***77.0***	***975***
Rural	0.8	0.5	78.5	20.3	0.0	100	79.4	664
Child's age								
0	0.3	1.2	81.8	16.6	0.0	100	83.1	325
1	0.6	0.0	83.6	15.8	0.0	100	84.1	317
2	0.6	0.3	76.6	22.5	0.0	100	77.3	329
3	0.3	1.0	72.5	26.2	0.0	100	73.5	302
4	1.4	0.0	71.3	27.3	0.0	100	72.3	366
Total	**0.7**	**0.5**	**77.1**	**21.8**	**0.0**	**100**	**78.0**	**1,639**

TABLE DQ.7: PRESENCE OF MOTHER IN THE HOUSEHOLD AND THE PERSON INTERVIEWED FOR THE UNDER-5 QUESTIONNAIRE DISTRIBUTION OF CHILDREN UNDER FIVE BY WHETHER THE MOTHER LIVES IN THE SAME HOUSEHOLD, AND THE PERSON INTERVIEWED FOR THE UNDER-5 QUESTIONNAIRE, JAMAICA, 2011

Age	Mother in the household	Mother not in the household			Total	Number of children under 5
	Mother interviewed	Father interviewed	Other adult female interviewed	Other adult male interviewed		
0	98.3	0.2	1.6	0.0	100	315
1	94.7	1.0	4.3	0.0	100	308
2	89.3	1.9	8.1	0.6	100	316
3	86.4	1.0	12.3	0.3	100	277
4	85.0	1.6	13.0	0.3	100	361
Total	**90.7**	**1.2**	**7.9**	**0.2**	**100**	**1,576**

TABLE DQ.8: SELECTION OF CHILDREN AGE 2-14 YEARS FOR THE CHILD DISCIPLINE MODULE
PER CENT OF HOUSEHOLDS WITH AT LEAST TWO CHILDREN AGE 2-14 YEARS WHERE CORRECT SELECTION OF ONE CHILD FOR THE CHILD DISCIPLINE MODULE WAS PERFORMED, JAMAICA, 2011

	Per cent of households where correct selection was performed	Number of households with 2 or more children age 2-14 years
Area		
Urban		
KMA	96.6	387
Other towns	97.3	368
Urban total	***97.0***	***755***
Rural	95.7	559
Number of households by number of children 2-14		
2	96.6	798
3	95.9	340
4	98.2	109
5+	94.0	67
Total	**96.4**	**1,314**

TABLE DQ.9: SCHOOL ATTENDANCE BY SINGLE AGE

DISTRIBUTION OF HOUSEHOLD POPULATION AGE 5-24 BY EDUCATIONAL LEVEL AND EDUCATIONAL LEVEL AND GRADE ATTENDED IN THE CURRENT (OR MOST RECENT) SCHOOL YEAR, JAMAICA, 2011

Age at beginning of school year	Not attending school	Preschool	Primary						Secondary								Higher	DK	Total	Number of household members
			1	2	3	4	5	6	7	8	9	10	11	12	13	DK				
5	0.7	72.1	25.2	0.9	0.9	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	308
6	1.1	8.3	64.8	24.4	0.4	0.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	100	367
7	0.9	0.5	8.5	66.2	22.7	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	336
8	0.0	0.3	0.0	9.7	65.7	22.5	1.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	367
9	0.2	0.2	0.0	1.8	11.6	63.7	21.9	0.5	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	395
10	0.0	0.1	0.0	0.0	1.7	11.9	69.8	16.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	412
11	0.3	0.0	0.0	0.0	0.1	0.6	9.3	74.0	15.2	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	358
12	0.8	0.0	0.3	0.1	0.0	0.0	0.3	20.7	60.0	17.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	100	371
13	0.1	0.0	0.0	0.0	0.1	0.0	0.0	1.3	16.4	64.7	16.2	1.1	0.0	0.0	0.0	0.0	0.0	0.0	100	404
14	0.7	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.4	18.7	65.9	13.2	0.3	0.0	0.0	0.1	0.0	0.6	100	392
15	5.5	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	1.0	25.8	51.6	14.5	0.0	0.0	0.0	1.2	0.2	100	398
16	12.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	6.3	25.2	50.4	2.9	0.7	0.0	2.1	0.2	100	369
17	40.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	2.9	27.0	10.4	3.0	0.9	14.4	0.2	100	390
18	67.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.9	7.1	3.4	5.7	0.0	15.3	0.0	100	329
19	72.6	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	2.9	0.3	3.3	0.0	20.7	0.0	100	297
20	79.9	0.0	0.3	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.8	0.0	0.5	0.0	18.4	0.0	100	327
21	81.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.2	0.0	100	274
22	81.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	17.5	0.7	100	293
23	89.3	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0	0.2	0.0	0.0	0.0	9.7	0.0	100	274
24	90.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1	0.0	0.0	0.2	8.2	0.0	100	279

Appendix E. MICS Indicators - Numerators and Denominators

MICS4	INDICATOR	Module[1]	Numerator	Denominator	MDG[2]
2. NUTRITION					
2.4	Children ever breastfed	MN	Number of women with a live birth in the 2 years preceding the survey who breastfed the child at any time	Total number of women with a live birth in the 2 years preceding the survey	
2.5	Early initiation of breastfeeding	MN	Number of women with a live birth in the 2 years preceding the survey who put the new-born infant to the breast within 1 hour of birth	Total number of women with a live birth in the 2 years preceding the survey	
2.6	Exclusive breastfeeding under 6 months	BF	Number of infants under 6 months of age who are exclusively breastfed[7]	Total number of infants under 6 months of age	
2.7	Continued breastfeeding at 1 year	BF	Number of children age 12-15 months who are currently breastfeeding	Total number of children age 12-15 months	
2.8	Continued breastfeeding at 2 years	BF	Number of children age 20-23 months who are currently breastfeeding	Total number of children age 20-23 months	
2.9	Predominant breastfeeding under 6 months	BF	Number of infants under 6 months of age who received breast milk as the predominant source of nourishment[8] during the previous day	Total number of infants under 6 months of age	
2.10	Duration of breastfeeding	BF	The age in months when 50 per cent of children age 0-35 months did not receive breast milk during the previous day		
2.11	Bottle feeding	BF	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	
2.12	Introduction of solid, semi-solid or soft foods	BF	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	
2.13	Minimum meal frequency	BF	Number of children age 6-23 months receiving solid, semi-solid and soft foods (plus milk feeds for non-breastfed children) the minimum times[9] or more, according to breastfeeding status, during the previous day	Total number of children age 6-23 months	
2.14	Age-appropriate breastfeeding	BF	Number of children age 0-23 months appropriately fed[10] during the previous day	Total number of children age 0-23 months	
2.15	Milk feeding frequency for non-breastfed children	BF	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	
2.18	Low-birth weight infants	MN	Number of last live births in the 2 years preceding the survey weighing below 2,500 grams at birth	Total number of last live births in the 2 years preceding the survey	
2.19	Infants weighed at birth	MN	Number of last live births in the 2 years preceding the survey who were weighed at birth	Total number of last live births in the 2 years preceding the survey	

MICS4	INDICATOR	Module[1]	Numerator	Denominator	MDG[2]
3. CHILD HEALTH					
3.1	Tuberculosis immunization coverage	IM	Number of children age 12-23 months[11] who received BCG vaccine before 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 OPV3 vaccine before their first birthday	Total number of children age 12-23 months	
3.3	Immunization coverage for diphtheria, pertussis and tetanus (DPT)	IM	Number of children age 12-23 months who received DPT3 vaccine before 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 before 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 before their first birthday	Total number of children age 12-23 months	
3.7	Neonatal tetanus protection	MN	Number of women age 15-49 years with a live birth in the 2 years preceding the survey who were given at least two doses of tetanus toxoid vaccine within the appropriate interval[12] prior to giving birth	Total number of women age 15-49 years with a live birth in the 2 years preceding the survey	
3.8	Oral rehydration therapy with continued feeding	CA	Number of children under age 5 with diarrhoea in the previous 2 weeks who received ORT (ORS packet or 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 previous 2 weeks	
3.9	Care-seeking for suspected pneumonia	CA	Number of children under age 5 with suspected pneumonia in the previous 2 weeks who were taken to an appropriate health provider	Total number of children under age 5 with suspected pneumonia in the previous 2 weeks	
3.10	Antibiotic treatment ofsuspected pneumonia	CA	Number of children under age 5 with suspected pneumonia in the previous 2 weeks who received antibiotics	Total number of children under age 5 with suspected pneumonia in the previous 2 weeks	
3.11	Solid fuels	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	
4. 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 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	

MICS4	INDICATOR	Module[1]	Numerator	Denominator	MDG[2]
4.5	Place for hand washing	HW	Number of households with a specific place for hand washing where water and soap are present	Total number of households	
4.6	Availability of soap	HW	Number of households with soap anywhere in the dwelling	Total number of households	
5. REPRODUCTIVE HEALTH					
5.1	Adolescent birth rate	CM - BH	Age-specific fertility rate for women age 15-19 years for the one year period preceding the survey		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	
5.5a	Antenatal care coverage	MN	Number of women age 15-49 years who were attended during pregnancy in the 2 years preceding the survey	Total number of women age 15-49 years with a live birth in the 2 years preceding the survey	MDG 5.5
5.5b			(a) at least once by skilled personnel		
			(b) at least four times by any provider		
5.6	Content of antenatal care	MN	Number of women age 15-49 years with a live birth in the 2 years preceding the survey who had their blood pressure measured and gave urine and blood samples during the last pregnancy	Total number of women age 15-49 years with a live birth in the 2 years preceding the survey	
5.7	Skilled attendant at delivery	MN	Number of women age 15-49 years with a live birth in the 2 years preceding the survey who were attended during childbirth by skilled health personnel	Total number of women age 15-49 years with a live birth in the 2 years preceding the survey	MDG 5.2
5.8	Institutional deliveries	MN	Number of women age 15-49 years with a live birth in the 2 years preceding the survey who delivered in a health facility	Total number of women age 15-49 years with a live birth in the 2 years preceding the survey	
5.9	Caesarean section	MN	Number of last live births in the 2 years preceding the survey who were delivered by caesarean section	Total number of last live births in the 2 years preceding the survey	
6. CHILD DEVELOPMENT					
6.1	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 past 3 days	Total number of children age 36-59 months	
6.2	Father's support for learning	EC	Number of children age 36-59 months whose father has engaged in one or more activities to promote learning and school readiness in the past 3 days	Total number of children age 36-59 months	
6.3	Learning materials: 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	
6.4	Learning materials: playthings	EC	Number of children under age 5 with two or more playthings	Total number of children under age 5	
6.5	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 past week	Total number of children under age 5	

MICS4	INDICATOR	Module[1]	Numerator	Denominator	MDG[2]
6.6	Early child development index	EC	Number of children age 36-59 months who are developmentally on track in literacy-numeracy, physical, social-emotional, and learning domains	Total number of children age 36-59 months	
6.7	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	
7. 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
8. CHILD PROTECTION					
8.2	Child labour	CL	Number of children age 5-14 years who are involved in child labour	Total number of children age 5-14 years	
8.3	School attendance among child labourers	ED - CL	Number of children age 5-14 years who are involved in child labour and are currently attending school	Total number of children age 5-14 years involved in child labour	
8.4	Child labour among students	ED - CL	Number of children age 5-14 years who are involved in child labour and are currently attending school	Total number of children age 5-14 years attending school	
8.5	Violent discipline	CD	Number of children age 2-14 years who experienced	Total number of children age 2-14	

MICS4	INDICATOR	Module[1]	Numerator	Denominator	MDG[2]
			psychological aggression or physical punishment during the past month	years	
8.6	Marriage before age 15 [M]	MA	Number of women age 15-49 years who were first married or in union by the exact age of 15	Total number of women age 15-49 years	
8.7	Marriage before age 18 [M]	MA	Number of women age 20-49 years who were first married or in union by the exact age of 18	Total number of women age 20-49 years	
8.8	Young women age 15-19 years currently married or in union [M]	MA	Number of women age 15-19 years who are currently married or in union	Total number of women age 15-19 years	
8.10a	Spousal age difference	MA	Number of women currently married or in union whose spouse is 10 or more years older,	Total number of women currently married or in union	
8.10b			(a) for women age 15-19 years,	(a) age 15-19 years,	
			(b) for women age 20-24 years	(b) age 20-24 years	
8.14	Attitudes towards domestic violence[M]	DV	Number of women who state that a husband/partner 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	
11. SUBJECTIVE WELL-BEING					
SW.1	Life satisfaction [M]	LS	Number of women age 15-24 years who are very or somewhat satisfied with their family life, friendships, school, current job, health, where they live, how they are treated by others, and how they look	Total number of women age 15-24 years	
SW.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	
SW.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	

[1] Some indicators are constructed by using questions in several modules. In such cases, only the module(s) which contains most of the necessary information is indicated.
[2] MDG indicators as of February 2010

MICS unicef

QUESTIONNAIRE FOR CHILDREN UNDER FIVE [JAMAICA]

UNDER-FIVE CHILD INFORMATION PANEL	UF
This questionnaire is to be administered to all mothers or caretakers (see Household Listing Form, column HL9) who care for a child that lives with them and is under the age of 5 years (see Household Listing Form, column HL6). A separate questionnaire should be used for each eligible child.	
UF1. Parish..... ___ ___ Constituency..... ___ ___ Enumeration District ..... ___ ___ ___	UF2. Dwelling Number: .....___ ___ ___ Household number.....___ ___
UF3. Child's Name: _____	UF4. Child's line number: ..... ___ ___
UF5. Mother's / Caretaker's name: Name_____	UF6. Mother's / Caretaker's lin e number: ___ ___
UF7. Interviewer name and number: Name_____ ___ ___	UF8. Day / Month / Year of interview: ___ ___ / ___ ___ / ___ ___ ___ ___

Repeat greeting if not already read to this respondent:

I AM FROM **THE STATISTICAL INSTITUTE OF JAMAICA**. WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION. I WOULD LIKE TO TALK TO YOU ABOUT (*name*)'S HEALTH AND WELL-BEING. THE INTERVIEW WILL TAKE ABOUT 15 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

If greeting at the beginning of the household questionnaire has already been read to this woman, then read the following:

NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT (***chil***d's name ***from UF3***)'S HEALTH AND OTHER TOPICS. THIS INTERVIEW WILL TAKE ABOUT 15 MINUTES. AGAIN, ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

MAY I START NOW?

☒ *Yes, permission is given ☒ Go to UF12 to record the time and then begin the interview.*

☒ *No, permission is not given ☒ Complete UF9. Discuss this result with your supervisor*

UF9. Result of interview for children under 5 *Codes refer to mother/caretaker.*	Completed .....01 Not at home .....02 Refused .....03 Partly completed.....04 Incapacitated .....05 Other (*specify*) _____ 96

UF10. Field Editor (Name and Number): Name: …….. __ __ __ __	UF11. Data entry clerk (Name and number): Name ……..__ __ __ __

UF12. *Record the time.*	Hour and minutes .....__ __ : __ __	

AGE		AG
AG1. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE HEALTH OF (*name*). IN WHAT MONTH AND YEAR WAS (*name*) BORN? *Probe:* WHAT IS HIS / HER BIRTHDAY? *If the mother/caretaker knows the exact birth date, also enter the day; otherwise, circle 98 for day* *Month and year must be recorded.*	Date of birth Day .....__ __ DK day.....98 Month.....__ __ Year .....__ __ __ __	
AG2. HOW OLD IS (*name*)? *Probe*: HOW OLD WAS (*name*) AT HIS / HER LAST BIRTHDAY? *Record age in completed years.* Record '0' if less than 1 year. *Compare and correct AG1 and/or AG2 if inconsistent.*	Age (in completed years) .....__	

EARLY CHILDHOOD DEVELOPMENT		EC
EC1. HOW MANY CHILDREN'S BOOKS OR PICTURE BOOKS DO YOU HAVE FOR (*name*)?	None ..... 00 Number of children's books ..... 0 __ Ten or more books 10	
EC2. I AM INTERESTED IN LEARNING ABOUT THE THINGS THAT (*name*) PLAYS WITH WHEN HE/SHE IS AT HOME. DOES HE/SHE PLAY WITH: [A] HOMEMADE TOYS (SUCH AS DOLLS, CARS, OR OTHER TOYS MADE AT HOME)? [B] TOYS FROM A SHOP OR MANUFACTURED TOYS? [C] HOUSEHOLD OBJECTS (SUCH AS BOWLS OR POTS) OR OBJECTS FOUND OUTSIDE (SUCH AS STICKS, ROCKS, ANIMAL SHELLS OR LEAVES)? If the respondent says "YES" to the categories above, then probe to *learn specifically what the child plays with to ascertain the response*	Y N DK Homemade toys ..... 1 2 8 Toys from a shop ..... 1 2 8 Household objects or outside objects 1 2 8	
EC3. SOMETIMES ADULTS TAKING CARE OF CHILDREN HAVE TO LEAVE THE HOUSE TO GO SHOPPING, WASH CLOTHES, OR FOR OTHER REASONS AND HAVE TO LEAVE YOUNG CHILDREN. ON HOW MANY DAYS IN THE PAST WEEK WAS (*name*): [A] LEFT ALONE FOR MORE THAN AN HOUR? [B] LEFT IN THE CARE OF ANOTHER CHILD, THAT IS, SOMEONE LESS THAN 10 YEARS OLD, FOR MORE THAN AN HOUR? If 'none' enter' 0'. If 'don't know' enter'8'	Number of days left alone for more than an hour ..... __ Number of days left with other child for more than an hour ..... __	
EC4. *Check AG2: Age of child* ☒ *Child age 3 or 4 Continue with EC5* ☒ *Child age 0, 1 or 2 Go to Next Module*		
EC5. DOES (*name*) ATTEND ANY ORGANIZED LEARNING OR EARLY CHILDHOOD EDUCATION PROGRAMME, SUCH AS A PRIVATE OR GOVERNMENT FACILITY, INCLUDING KINDERGARTEN OR COMMUNITY CHILD CARE?	Yes ..... 1 No ..... 2 DK 8	 2 EC7 8 EC7
EC6. WITHIN THE LAST SEVEN DAYS, ABOUT HOW MANY HOURS DID (*name*) ATTEND?	Number of hours ..... __ __	
EC7. IN THE PAST 3 DAYS, DID YOU OR ANY HOUSEHOLD MEMBER OVER 15 YEARS OF AGEENGAGE IN ANY OF THE FOLLOWING ACTIVITIES WITH (*name*): *If yes, ask:* WHO ENGAGED IN THIS ACTIVITY WITH (*name*)? *Circle all that apply.* [A] READ BOOKS TO OR LOOKED AT PICTURE BOOKS WITH (*name*)?	Mother Father Other No one Read books A B X Y	

[B] TOLD STORIES TO (*name*)?	Told stories	A	B	X	Y	
[C] SANG SONGS TO (*name*) OR WITH (*name*), INCLUDING LULLABIES?	Sang songs	A	B	X	Y	
[D] TOOK (*name*) OUTSIDE THE HOME, COMPOUND, YARD OR ENCLOSURE?	Took outside	A	B	X	Y	
[E] PLAYED WITH (*name*)?	Played with	A	B	X	Y	
[F] NAMED, COUNTED, OR DREW THINGS TO OR WITH (*name*)?	Named/counted	A	B	X	Y	
EC8. I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE HEALTH AND DEVELOPMENT OF YOUR CHILD. CHILDREN DO NOT ALL DEVELOP AND LEARN AT THE SAME RATE. FOR EXAMPLE, SOME WALK EARLIER THAN OTHERS. THESE QUESTIONS ARE RELATED TO SEVERAL ASPECTS OF YOUR CHILD'S DEVELOPMENT. CAN (*name*) IDENTIFY OR NAME AT LEAST TEN LETTERS OF THE ALPHABET?	Yes ..... 1 No ..... 2 DK 8					
EC9. CAN (*name*) READ AT LEAST FOUR SIMPLE, POPULAR WORDS?	Yes ..... 1 No ..... 2 DK 8					
EC10. DOES (*name*) KNOW THE NAME AND RECOGNIZE THE SYMBOL OF ALL NUMBERS FROM 1 TO 10?	Yes ..... 1 No ..... 2 DK 8					
EC11. CAN (*name*) PICK UP A SMALL OBJECT WITH TWO FINGERS, LIKE A STICK OR A ROCK FROM THE GROUND?	Yes ..... 1 No ..... 2 DK 8					
EC12. IS (*name*) SOMETIMES TOO SICK TO PLAY?	Yes ..... 1 No ..... 2 DK 8					
EC13. DOES (*name*) FOLLOW SIMPLE DIRECTIONS ON HOW TO DO SOMETHING CORRECTLY?	Yes ..... 1 No ..... 2 DK 8					
EC14. WHEN GIVEN SOMETHING TO DO, IS (*name*) ABLE TO DO IT INDEPENDENTLY?	Yes ..... 1 No ..... 2 DK 8					
EC15. DOES (*name*) GET ALONG WELL WITH OTHER CHILDREN?	Yes ..... 1 No ..... 2 DK 8					
EC16. DOES (*name*) KICK, BITE, OR HIT OTHER CHILDREN OR ADULTS?	Yes ..... 1 No ..... 2 DK 8					
EC17. DOES (*name*) GET DISTRACTED EASILY?	Yes ..... 1 No ..... 2 DK 8					

BREASTFEEDING		BF
BF1. HAS (*name*) EVER BEEN BREASTFED?	Yes ..... 1 No ..... 2 DK 8	 2 BF3 8 BF3
BF2. IS HE/SHE STILL BEING BREASTFED?	Yes ..... 1 No ..... 2 DK 8	
BF3. I WOULD LIKE TO ASK YOU ABOUT LIQUIDS THAT (*name*) MAY HAVE HAD YESTERDAY DURING THE DAY OR THE NIGHT. I AM INTERESTED IN WHETHER (*name*) HAD THE ITEM EVEN IF IT WAS COMBINED WITH OTHER FOODS. DID (*name*) DRINK PLAIN WATER YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF4. DID (*name*) DRINK INFANT FORMULA YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	 2 BF6 8 BF6
BF5. HOW MANY TIMES DID (*name*) DRINK INFANT FORMULA?	Number of times ..... __ __	
BF6. DID (*name*) DRINK MILK, SUCH AS TINNED, POWDERED OR FRESH ANIMAL MILK YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	 2 BF8 8 BF8
BF7. HOW MANY TIMES DID (*name*) DRINK TINNED, POWDERED OR FRESH ANIMAL MILK?	Number of times ..... __ __	
BF8. DID (*name*) DRINK JUICE OR JUICE DRINKS YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF9. DID (*name*) DRINK (***CLEAR BROTH/SOUP***) YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF10. DID (*name*) DRINK OR EAT VITAMIN OR MINERAL SUPPLEMENTS OR ANY MEDICINES YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF11. DID (*name*) DRINK ORS (ORAL REHYDRATION SOLUTION) YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF12. DID (*name*) DRINK ANY OTHER LIQUIDS YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	
BF13. DID (*name*) DRINK OR EAT YOGURT YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No ..... 2 DK 8	 2 BF15 8 BF15

BF14. HOW MANY TIMES DID (*name*) DRINK OR EAT YOGURT YESTERDAY, DURING THE DAY OR NIGHT?	Number of times..... __ __	
BF15. DID (*name*) EAT THIN PORRIDGE YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No..... 2 DK 8	
BF16. DID (*name*) EAT SOLID OR SEMI-SOLID (SOFT, MUSHY) FOOD YESTERDAY, DURING THE DAY OR NIGHT?	Yes ..... 1 No..... 2 DK 8	2⇨BF18 8⇨BF18
BF17. HOW MANY TIMES DID (*name*) EAT SOLID OR SEMI-SOLID (SOFT, MUSHY) FOOD YESTERDAY, DURING THE DAY OR NIGHT?	Number of times..... __ __	
BF18. YESTERDAY, DURING THE DAY OR NIGHT, DID (*name*) DRINK ANYTHING FROM A BOTTLE WITH A NIPPLE?	Yes ..... 1 No..... 2 DK 8	

CARE OF ILLNESS		CA
CA1. IN THE LAST TWO WEEKS, HAS (*name*) HAD DIARRHOEA?	Yes ..... 1 No ..... 2 DK 8	 2 CA7 8 CA7
CA2. I WOULD LIKE TO KNOW HOW MUCH (*name*) WAS GIVEN TO DRINK DURING THE DIARRHOEA (INCLUDING BREASTMILK). DURING THE TIME (*name*) HAD DIARRHOEA, WAS HE/SHE GIVEN LESS THAN USUAL TO DRINK, ABOUT THE SAME AMOUNT, OR MORE THAN USUAL? *If less, probe*: WAS HE/SHE GIVEN MUCH LESS THAN USUAL TO DRINK, OR SOMEWHAT LESS?	Much less ..... 1 Somewhat less ..... 2 About the same ..... 3 More ..... 4 Nothing to drink ..... 5 DK 8	
CA3. DURING THE TIME (*name*) HAD DIARRHOEA, WAS HE/SHE GIVEN LESS THAN USUAL TO EAT, ABOUT THE SAME AMOUNT, MORE THAN USUAL, OR NOTHING TO EAT? If "less", probe *:* WAS HE/SHE GIVEN MUCH LESS THAN USUAL TO EAT OR SOMEWHAT LESS?	Much less ..... 1 Somewhat less ..... 2 About the same ..... 3 More ..... 4 Stopped food ..... 5 Never gave food ..... 6 DK 8	
CA4. DURING THE EPISODE OF DIARRHOEA, WAS (*name*) GIVEN TO DRINK ANY OF THE FOLLOWING: *Read each item aloud and record response before proceeding to the next item.* [A] A FLUID MADE FROM A SPECIAL **ORS**PACKET? [B] A PRE-PACKAGED ORS FLUID FOR DIARRHOEA?	Y N DK Fluid from ORS packet ..... 1 2 8 Pre-packaged ORS fluid ..... 1 2 8 S*pecify* _____	
CA5. WAS ANYTHING (ELSE) GIVEN TO TREAT THE DIARRHOEA?	Yes ..... 1 No ..... 2 DK 8	 2 CA7 8 CA7

CA6. WHAT (ELSE) WAS GIVEN TO TREAT THE DIARRHOEA? *Probe*: ANYTHING ELSE? *Record all treatments given. Write brand name(s) of all medicines mentioned.* _____ *(Name)*	Pill or Syrup Antibiotic Amoxil ..... A1 Ampicillin ..... A2 Bactrim ..... A3 Evithromucin ..... A4 Other Antibiotic ..... A5 Antimotility ..... B Zinc ..... C Other (Not antibiotic, antimotility or zinc) ... G (*Specify*) ..... Unknown pill or syrup ..... H Injection Antibiotic ..... L Non-antibiotic ..... M Unknown injection ..... N Intravenous ..... O Home remedy / Herbal medicine ..... Q Other (*specify*) _____ X	
CA7. AT ANY TIME IN THE LAST TWO WEEKS, HAS (*name*) HAD AN ILLNESS WITH A COUGH?	Yes ..... 1 No ..... 2 DK 8	 2⇨CA14 8⇨CA14
CA8. WHEN (*name*) HAD AN ILLNESS WITH A COUGH, DID HE/SHE BREATHE FASTER THAN USUAL WITH SHORT, RAPID BREATHS OR HAVE DIFFICULTY BREATHING?	Yes ..... 1 No ..... 2 DK 8	 2⇨CA14 8⇨CA14
CA9. WAS THE FAST OR DIFFICULT BREATHING DUE TO A PROBLEM IN THE CHEST OR A BLOCKED OR RUNNY NOSE?	Problem in chest only ..... 1 Blocked or runny nose only ..... 2 Both ..... 3 Other (*specify*) _____ 6 DK 8	 2⇨CA14 6⇨CA14
CA10. DID YOU SEEK ANY ADVICE OR TREATMENT FOR THE ILLNESS FROM ANY SOURCE?	Yes ..... 1 No ..... 2 DK 8	 2⇨CA12 8⇨CA12
CA11. FROM WHERE DID YOU SEEK ADVICE OR TREATMENT? *Probe:* ANYWHERE ELSE? *Circle all providers mentioned, but do NOT prompt with any suggestions.* *Probe to identify each type of source.* *If unable to determine if public or private sector, write the name of the place.*	Public sector Govt. hospital ..... A Govt. health centre ..... B Govt. health post ..... C Village health worker ..... D Mobile / Outreach clinic ..... E Other public (*specify*) _____ H Private medical sector Private hospital / clinic ..... I Private physician ..... J Private pharmacy ..... K Mobile clinic ..... L Other private medical (*specify*) _____ O Other source Relative / Friend ..... P	

_____ *(Name of place)*	Shop ..... Q Traditional practitioner ..... R Other (*specify*) _____ X	
CA12. WAS (*name*) GIVEN ANY MEDICINE TO TREAT THIS ILLNESS?	Yes ..... 1 No ..... 2 DK 8	 2⇨CA14 8⇨CA14
CA13. WHAT MEDICINE WAS (*name*) GIVEN? *Probe:* ANY OTHER MEDICINE? *Circle all medicines given. Write brand name(s) of all medicines mentioned.* _____ *(Names of medicines)*	Antibiotic Pill / Syrup Amoxil ..... A1 Ampicillin ..... A2 Bactrim ..... A3 Evithromucin ..... A4 Other Antibiotic ..... A5 Injection ..... B Anti-malarials ..... M Paracetamol / Panadol / Acetaminophen ... P Aspirin ..... Q Ibuprofen ..... R Other (*specify*) _____ X DK ..... Z	
CA14. *Check AG2: Child aged under 3?* ☐ *Yes ⇨ Continue with CA15* ☐ *No ⇨ Go to Next Module*		
CA15. THE LAST TIME *(name)* PASSED STOOLS, WHAT WAS DONE TO DISPOSE OF THE STOOLS?	Child used toilet / latrine ..... 01 Put / Rinsed into toilet or latrine ..... 02 Put / Rinsed into drain or ditch ..... 03 Thrown into garbage (solid waste) ..... 04 Buried ..... 05 Left in the open ..... 06 Other (*specify*) _____ 96 DK 98	

IMMUNIZATION — IM

If an immunization card is available, copy the dates in IM3 for each type of immunization recorded on the card. IM6-IM16 are for registering vaccinations that are not recorded on the card. IM6-IM16 will only be asked when a card is not available.

IM1. DO YOU HAVE A CARD OR CHILD HEALTH PASSPORT WHERE (*name*)'S VACCINATIONS ARE WRITTEN DOWN? (*If yes*) MAY I SEE IT PLEASE?	Yes, seen ..... 1 Yes, not seen ..... 2 No card 3	1⇨IM3 2⇨IM6
IM2. DID YOU EVER HAVE A VACCINATION CARD FOR (*name*)?	Yes ..... 1 No 2	1⇨IM6 2⇨IM6

IM3.
(a) Copy dates for each vaccination from the card.
(b) Write '44' in day column if card shows that vaccination was given but no date recorded.

		Date of Immunization: Day		Month		Year				
BCG	BCG									
POLIO 1	OPV1									
POLIO 2	OPV2									
POLIO 3	OPV3									
DPT1	DPT1									
DPT2	DPT2									
DPT3	DPT3									
HEPB1	H1									
HEPB2	H2									
HEPB3	H3									
HIB1	HIB1									
HIB2	HIB2									
HIB3	HIB3									
MEASLES (OR MMR)	MEASLES									

IM4. *Check IM3. Are all vaccines (BCG to Measles) recorded?*

☐ *Yes⇨ Go to IM19*

☐ *No ⇨Continue with IM5*

IM5. IN ADDITION TO WHAT IS RECORDED ON THIS CARD, DID (*name*) RECEIVE ANY OTHER VACCINATIONS – INCLUDING VACCINATIONS RECEIVED IN CAMPAIGNS OR IMMUNIZATION DAYS? *Record 'Yes' only if respondent mentions vaccines shown in the table above.*	Yes .....1 *(Probe for vaccinations and write '66' in the corresponding day column for each vaccine mentioned. Then skip to IM19)* No .....2 DK.....8	 2⇨IM19 8⇨IM19
IM6. HAS (*name*) EVER RECEIVED ANY VACCINATIONS TO PREVENT HIM/HER FROM GETTING DISEASES, INCLUDING VACCINATIONS RECEIVED IN A CAMPAIGN OR IMMUNIZATION DAY?	Yes .....1 No .....2 DK.....8	 2⇨IM19 8⇨IM19
IM7. HAS (*name*) EVER RECEIVED A BCG VACCINATION AGAINST TUBERCULOSIS – THAT IS, AN INJECTION IN THE ARM OR SHOULDER THAT USUALLY CAUSES A SCAR?	Yes .....1 No .....2 DK.....8	
IM8. HAS (*name*) EVER RECEIVED ANY "VACCINATION DROPS IN THE MOUTH" TO PROTECT HIM/HER FROM GETTING DISEASES – THAT IS, POLIO?	Yes .....1 No .....2 DK.....8	 2⇨IM11 8⇨IM11
IM10. HOW MANY TIMES WAS THE POLIO VACCINE RECEIVED?	Number of times .....__	
IM11. HAS (*name*) EVER RECEIVED A DPT VACCINATION – THAT IS, AN INJECTION IN THE THIGH OR BUTTOCKS – TO PREVENT HIM/HER FROM GETTING TETANUS, WHOOPING COUGH, OR DIPHTHERIA? *Probe by indicating that DPT vaccination is sometimes given at the same time as Polio*	Yes .....1 No .....2 DK.....8	 2⇨IM13 8⇨IM13
IM12. HOW MANY TIMES WAS A DPT VACCINE RECEIVED?	Number of times .....__	
IM13. HAS (*name*) EVER BEEN GIVEN A HEPATITIS B VACCINATION – THAT IS, AN INJECTION IN THE THIGH OR BUTTOCKS – TO PREVENT HIM/HER FROM GETTING HEPATITIS B? *Probe by indicating that the Hepatitis B vaccine is sometimes given at the same time as Polio and DPT vaccines*	Yes .....1 No .....2 DK.....8	 2⇨IM16 8⇨IM16
IM14. WAS THE FIRST HEPATITIS B VACCINE RECEIVED WITHIN 24 HOURS AFTER BIRTH, OR LATER?	Within 24 hours .....1 Later 2	
IM15. HOW MANY TIMES WAS A HEPATITIS B VACCINE RECEIVED?	Number of times .....__	
IM16. HAS (*name*) EVER RECEIVED A MEASLES INJECTION OR AN MMR INJECTION – THAT IS, A SHOT IN THE ARM AT THE AGE OF 9 MONTHS OR OLDER - TO PREVENT HIM/HER FROM GETTING MEASLES?	Yes .....1 No .....2 DK.....8	

IM19. Please tell me if (*name*) has participated in any of the following campaigns, national immunization days or child health days: _____ (*Name of campaign)*	Y N DK *Campaign* 1 2 8	
IM20. WHERE DID (**NAME**) RECEIVE MOST OF HIS/HER VACCINATION?	Public clinic ..... 1 Private facility..... 2	

UF13. *Record the time.*	Hour and minutes .....__ __ : __ __	

UF14. *Is the respondent the mother or caretaker of another child age 0-4 living in this household?*

☐ *Yes ⇨ Go to the next QUESTIONNAIRE FOR CHILDREN UNDER FIVE to be administered to the same respondent*

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

Check to see if there are other woman's or under-5 questionnaires to be administered in this household.

If Yes, move to another woman's or under-5 questionnaire.
If No, gather together all questionnaires for this household and check that all identification numbers are inserted on each page. Tally on the household Information Panel the number of Interviews completed.

Interviewer's Observations

Field Editor's Observations

Supervisor's Observations

MICS unicef

HOUSEHOLD QUESTIONNAIRE [JAMAICA]

HOUSEHOLD INFORMATION PANEL	HH
HH1. Parish ..... ___ ___ Constituency..... ___ ___ Enumeration District..... ___ ___ ___	HH2: Dwelling Number ..... ___ ___ ___ Household number..... ___ ___
HH3. Interviewer Name and Number: _____ __ __ __ __	HH4. Supervisor Name and number: _____ __ __ __ __
HH5. Day / Month / Year of interview:	___ ___ / ___ ___ / ___ ___ ___ ___
HH6. Area: Urban ..... 1 Rural..... 2 KMA..... 3	HH7. Region:

I AM FROM **THE STATISTICAL INSTITUTE OF JAMAICA**. WE ARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION. I WOULD LIKE TO TALK TO YOU ABOUT THESE SUBJECTS. THE INTERVIEW WILL TAKE ABOUT ***30*** MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

MAY I START NOW? ☐*Yes, permission is given* ⇨*Go to HH18 to record the time and then begin the interview.* ☐*No, permission is not given* ⇨*Complete HH9. Discuss this result with your supervisor.*

After all questionnaires for the household have been completed, fill in the following information:	
HH8. Name of head of household: _____	
HH9. Result of household interview: Complete..... .01 No household member or no competent respondent at home at time of visit..... ..02 Entire household absent for extended period of time..... ..03 Refused..... ..04	Dwelling vacant / Address not a dwelling..... 05 Dwelling destroyed..... 06 Dwelling not found..... 07 Other (*specify*) 96
HH10. Respondent to household questionnaire: Name: _____ Line Number: ____ ____	HH11. Total number of household members: ___ ___
HH12. Number of women age 15-49 years: ___ ___	HH13. Number of woman's questionnaires completed: ___ ___
HH14. Number of children under age 5: ___ ___	HH15. Number of under-5 questionnaires completed: ___ ___

HH16. Field Editor (Name and number) Name _____ __ __ __ __	HH17. Data entry clerk (Name and number): Name _____ __ __ __ __

HH18.
Record the time.

Hour.......... __ __

Minutes...... __ __

HOUSEHOLD LISTING FORM — HL

FIRST, PLEASE TELL ME THE NAME OF EACH PERSON WHO USUALLY LIVES HERE, STARTING WITH THE HEAD OF THE HOUSEHOLD.
List the head of the household in line 01. List all household members (HL2), their relationship to the household head (HL3), and their sex (HL4). Then ask: ARE THERE ANY OTHERS WHO LIVE HERE, EVEN IF THEY ARE NOT AT HOME NOW? *If yes, complete listing for questions HL2-HL4. Then, ask questions starting with HL5 for each person at a time. Use an additional questionnaire if all rows in the household listing form have been used.*

							*For women age **15-49***	*For children age **5-14***	*For children under age **5***	*For all household members*	*For children age **0-17** years*			
HL1. *Line number*	HL2. *Name*	HL3. WHAT IS THE RELATION-SHIP OF (*name*) TO THE HEAD OF HOUSE-HOLD?	HL4. IS (*name*) MALE OR FEMALE? 1 Male 2 Female	HL5. WHAT IS (*name*)'S DATE OF BIRTH? 98 DK	9998 DK	HL6. HOW OLD IS (*name*)? *Record in completed years. If age is 95 or above, record '95'*	HL7. *Circle line number if woman is age **15-49***	HL8. WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD? *Record line number of mother/ caretaker*	HL9. WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD? *Record line number of mother/ caretaker*	HL10. DID (*name*) STAY HERE LAST NIGHT? 1 Yes 2 No	HL11. IS (*name*)'S NATURAL MOTHER ALIVE? 1 Yes 2 No⇘ HL13 8 DK⇘ HL13	HL12. DOES (*name*)'S NATURAL MOTHER LIVE IN THIS HOUSEHOLD? *Record line number of mother or 00 for "No"*	HL13. IS (*name*)'S NATURAL FATHER ALIVE? 1 Yes 2 No⇘ Next Line 8 DK⇘ Next Line	HL14. DOES (*name*)'S NATURAL FATHER LIVE IN THIS HOUSEHOLD? *Record line number of father or 00 for "No"*
Line	Name	Relation*	M F	Month	Year	Age	15-49	Mother	Mother	Y N	Y N DK	Mother	Y N DK	Father
01		0 1	1 2	__ __	__ __ __ __	__ __	01	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
02		__ __	1 2	__ __	__ __ __ __	__ __	02	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
03		__ __	1 2	__ __	__ __ __ __	__ __	03	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
04		__ __	1 2	__ __	__ __ __ __	__ __	04	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
05		__ __	1 2	__ __	__ __ __ __	__ __	05	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
06		__ __	1 2	__ __	__ __ __ __	__ __	06	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
07		__ __	1 2	__ __	__ __ __ __	__ __	07	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
08		__ __	1 2	__ __	__ __ __ __	__ __	08	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
09		__ __	1 2	__ __	__ __ __ __	__ __	09	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
10		__ __	1 2	__ __	__ __ __ __	__ __	10	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
11		__ __	1 2	__ __	__ __ __ __	__ __	11	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __
12		__ __	1 2	__ __	__ __ __ __	__ __	12	__ __	__ __	1 2	1 2 8	__ __	1 2 8	__ __

Tick here if additional questionnaire used ☐

Probe for additional household members. Probe especially for any infants or small children not listed, and others who may not be members of the family (such as servants, friends) but who usually live in the household. Insert names of additional members in the household list and complete form accordingly.

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

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

01 Head	03 Son / Daughter	05 Grandchild	07 Parent-In-Law	09 Brother-In-Law / Sister-In-Law	11 Niece / Nephew	13 Adopted / Foster / Stepchild	98 Don't know
02 Wife / Husband	04 Son-In-Law / Daughter-In-Law	06 Parent	08 Brother / Sister	10 Uncle / Aunt	12 Other relative	14 Not related	

EDUCATION ED

For household members age **5 and above**							For household members age **5-24** *years*								
ED1. *Line number*	ED2. *Name and age* *Copy from Household Listing Form, HL2 and HL6*		ED3. HAS (*name*) EVER ATTENDED SCHOOL OR PRE-SCHOOL? 1 Yes 2 No ⇨ Next Line		ED4. WHAT IS THE HIGHEST LEVEL OF SCHOOL (*name*) ATTENDED? WHAT IS THE HIGHEST GRADE (*name*) COMPLETED AT THIS LEVEL? Level: 0 Preschool 1 Primary 2 Secondary 3 Higher 8 DK *If level=0, skip to ED5*	Grade: 98 DK *If less than 1 grade, enter 00.*	ED5. DURING THE (**2010-2011**) SCHOOL YEAR, DID (*name*) ATTEND SCHOOL OR PRESCHOOL AT ANY TIME? 1 Yes 2 No ⇨ ED7		ED6. DURING THIS/THAT SCHOOL YEAR, WHICH LEVEL AND GRADE IS/WAS (*name*) ATTENDING? Level: 0 Preschool 1 Primary 2 Secondary 3 Higher 8 DK *If level=0, skip to ED7*	Grade: 98 DK	ED7. DURING THE PREVIOUS SCHOOL YEAR, THAT IS (**2009-2010**), DID (*name*) ATTEND SCHOOL OR PRESCHOOL AT ANY TIME? 1 Yes 2 No ⇨ Next Line 8 DK ⇨ Next Line			ED8. DURING THAT PREVIOUS SCHOOL YEAR, WHICH LEVEL AND GRADE DID (*name*) ATTEND? Level: 0 Preschool 1 Primary 2 Secondary 3 Higher 8 DK *If level=0, go to next person*	Grade: 98 DK
Line	Name	Age	Yes	No	Level	Grade	Yes	No	Level	Grade	Y	N	DK	Level	Grade
01		___ ___	1	2	0 1 2 3 8	___ ___	1	2	0 1 2 3 8	___ ___	1	2	8	0 1 2 3 8	___ ___
02		___ ___	1	2	0 1 2 3 8	___ ___	1	2	0 1 2 3 8	___ ___	1	2	8	0 1 2 3 8	___ ___
03		___ ___	1	2	0 1 2 3 8	___ ___	1	2	0 1 2 3 8	___ ___	1	2	8	0 1 2 3 8	___ ___
04		___ ___	1	2	0 1 2 3 8	___ ___	1	2	0 1 2 3 8	___ ___	1	2	8	0 1 2 3 8	___ ___
05		___ ___	1	2	0 1 2 3 8	___ ___	1	2	0 1 2 3 8	___ ___	1	2	8	0 1 2 3 8	___ ___
06		___ ___	1	2	0 1 2 3 8	___ ___	1	2	0 1 2 3 8	___ ___	1	2	8	0 1 2 3 8	___ ___
07		___ ___	1	2	0 1 2 3 8	___ ___	1	2	0 1 2 3 8	___ ___	1	2	8	0 1 2 3 8	___ ___
08		___ ___	1	2	0 1 2 3 8	___ ___	1	2	0 1 2 3 8	___ ___	1	2	8	0 1 2 3 8	___ ___
09		___ ___	1	2	0 1 2 3 8	___ ___	1	2	0 1 2 3 8	___ ___	1	2	8	0 1 2 3 8	___ ___
10		___ ___	1	2	0 1 2 3 8	___ ___	1	2	0 1 2 3 8	___ ___	1	2	8	0 1 2 3 8	___ ___
11		___ ___	1	2	0 1 2 3 8	___ ___	1	2	0 1 2 3 8	___ ___	1	2	8	0 1 2 3 8	___ ___
12		___ ___	1	2	0 1 2 3 8	___ ___	1	2	0 1 2 3 8	___ ___	1	2	8	0 1 2 3 8	___ ___
13		___ ___	1	2	0 1 2 3 8	___ ___	1	2	0 1 2 3 8	___ ___	1	2	8	0 1 2 3 8	___ ___
14		___ ___	1	2	0 1 2 3 8	___ ___	1	2	0 1 2 3 8	___ ___	1	2	8	0 1 2 3 8	___ ___
15		___ ___	1	2	0 1 2 3 8	___ ___	1	2	0 1 2 3 8	___ ___	1	2	8	0 1 2 3 8	___ ___

WATER AND SANITATION		WS
WS1. WHAT IS THE MAIN SOURCE OF DRINKING WATER FOR MEMBERS OF YOUR HOUSEHOLD?	Piped water Piped into dwelling……..11 Piped into compound, yard or plot.....12 Piped to neighbour.....13 Public tap / standpipe……..14 Tube Well, Borehole .....21 Dug well Protected well .....31 Unprotected well .....32 Water from spring Protected spring.....41 Unprotected spring.....42 Rainwater collection (incl. tanks) .....51 Tanker-truck.....61 Cart with small tank / drum .....71 Surface water (river, stream, dam, lake, pond, canal, irrigation channel .....81 Bottled water.....91 Other (*specify*) _____ 96	11 WS6 12 WS6 13 WS6 14 WS3 21 WS3 31 WS3 32 WS3 41 WS3 42 WS3 51 WS3 61 WS3 71 WS3 81 WS3 96 WS3
WS2. WHAT IS THE MAIN SOURCE OF WATER USED BY YOUR HOUSEHOLD FOR OTHER PURPOSES SUCH AS COOKING AND HANDWASHING?	Piped water Piped into dwelling .....11 Piped into compound, yard or plot.....12 Piped to neighbour.....13 Public tap / standpipe .....14 Tube Well, Borehole .....21 Dug well Protected well .....31 Unprotected well .....32 Water from spring Protected spring.....41 Unprotected spring.....42 Rainwater collection.....51 Tanker-truck.....61 Cart with small tank / drum .....71 Surface water (river, stream, dam, lake, pond, canal, irrigation channel .....81 Other (*specify*)_____ 96	11 WS6 12 WS6 13 WS6
WS3. WHERE IS THAT WATER SOURCE LOCATED?	In own dwelling .....1 In own yard / plot .....2 Elsewhere 3	1 WS6 2 WS6
WS4. HOW LONG DOES IT TAKE TO GO THERE, GET WATER, AND COME BACK?	Number of minutes ..... __ __ __ DK.....998	
WS5. WHO USUALLY GOES TO THIS SOURCE TO COLLECT THE WATER FOR YOUR HOUSEHOLD? *Probe:* IS THIS PERSON UNDER AGE 15? WHAT SEX?	Adult woman (age 15+ years)..... 1 Adult man (age 15+ years) ..... 2 Female child (under 15)..... 3 Male child (under 15) ..... 4 DK..... 8	

WS6. DO YOU DO ANYTHING TO THE WATER TO MAKE IT SAFER TO DRINK?	Yes ... 1 No ... 2 DK ... 8	2⇨WS8 8⇨WS8
WS.7 WHAT DO YOU USUALLY DO TO MAKE THE WATER SAFER TO DRINK? *Probe:* ANYTHING ELSE? *Record all items mentioned.*	Boil ... A Add bleach / chlorine ... B Strain it through a cloth ... C Use water filter (ceramic, sand, composite, etc.) ... D Solar disinfection ... E Let it stand and settle ... F Other (*specify*)______________________ X DK ... Z	
WS8. WHAT KIND OF TOILET FACILITY DO MEMBERS OF YOUR HOUSEHOLD USUALLY USE? *If "flush" or "pour flush", probe:* WHERE DOES IT FLUSH TO? *If necessary, ask permission to observe the facility.*	Flush / Pour flush Flush to piped sewer system ... 11 Flush to septic tank ... 12 Flush to pit (latrine) ... 13 Flush to somewhere else ... 14 Flush to unknown place / Not sure / DK where ... 15 Pit latrine Ventilated Improved Pit latrine (VIP) ... 21 Pit latrine with slab ... 22 Pit latrine without slab / Open pit ... 23 Composting toilet ... 31 Bucket ... 41 Hanging toilet, Hanging latrine ... 51 No facility, Bush, Field ... 95 Other (*specify*) ... 96	95⇨Next Module
WS9. DO YOU SHARE THIS FACILITY WITH OTHERS WHO ARE NOT MEMBERS OF YOUR HOUSEHOLD?	Yes ... 1 No ... 2	2⇨Next Module
WS10. DO YOU SHARE THIS FACILITY ONLY WITH MEMBERS OF OTHER HOUSEHOLDS THAT YOU KNOW, OR IS THE FACILITY OPEN TO THE USE OF THE GENERAL PUBLIC?	Other households only (not public) ... 1 Public facility ... 2	2⇨Next Module
WS11. HOW MANY HOUSEHOLDS IN TOTAL USE THIS TOILET FACILITY, INCLUDING YOUR OWN HOUSEHOLD?	Number of households (if less than 10) 0 __ Ten or more households ... 10 DK ... 98	

HOUSEHOLD CHARACTERISTICS		HC
HC1A. WHAT IS THE RELIGION OF THE HEAD OF THIS HOUSEHOLD?	Christianity ..... 1 (Denomination) _____ Hinduism ..... 2 Rastafarianism ..... 3 Other religion (*specify*) _____ 6 No religion 7	
HC1C. TO WHAT RACE/ETHNIC GROUP DOES THE HEAD OF THIS HOUSEHOLD BELONG?	Negro ..... 1 Chinese ..... 2 Indian ..... 3 Caucasian ..... 4 Mixed ..... 5 Other ethnic group (*specify*) _____ 6	
HC2. HOW MANY ROOMS IN THIS HOUSEHOLD ARE USED FOR SLEEPING?	Number of rooms ..... __ __	
HC3. *Main material of the dwelling floor.* *Record observation.*	Natural floor Earth / Sand ..... 11 Dung ..... 12 Rudimentary floor Wood planks ..... 21 Palm / Bamboo ..... 22 Finished floor Parquet or polished wood ..... 31 Vinyl or asphalt strips ..... 32 Ceramic tiles ..... 33 Cement ..... 34 Carpet ..... 35 Other (*specify*) _____ 96	
HC4. *Main material of the roof.* *Record observation.*	Natural roofing No Roof ..... 11 Thatch / Palm leaf ..... 12 Sod ..... 13 Rudimentary Roofing Rustic mat ..... 21 Palm / Bamboo ..... 22 Wood planks ..... 23 Cardboard ..... 24 Finished roofing Metal ..... 31 Wood ..... 32 Calamine / Cement fibre ..... 33 Ceramic tiles ..... 34 Cement ..... 35 Roofing shingles ..... 36 Other (*specify*) _____ 96	

HC5. *Main material of the exterior walls.* *Record observation.*	Natural walls No walls ..... 11 Cane / Palm / Trunks ..... 12 Dirt ..... 13 Rudimentary walls Bamboo with mud ..... 21 Stone with mud ..... 22 Uncovered adobe ..... 23 Plywood ..... 24 Cardboard ..... 25 Reused wood ..... 26 Finished walls Cement ..... 31 Stone with lime / cement ..... 32 Bricks ..... 33 Cement blocks ..... 34 Covered adobe ..... 35 Wood planks / shingles ..... 36 Other (*specify*) _____ 96	
HC6. WHAT TYPE OF FUEL DOES YOUR HOUSEHOLD MAINLY USE FOR COOKING?	Electricity ..... 01 Liquefied Petroleum Gas (LPG) ..... 02 Natural gas ..... 03 Biogas ..... 04 Kerosene ..... 05 Coal / Lignite ..... 06 Charcoal ..... 07 Wood ..... 08 Straw / Shrubs / Grass ..... 09 Animal dung ..... 10 Agricultural crop residue ..... 11 No food cooked in household ..... 95 Other (*specify*) _____ 96	01⇨HC8 02⇨HC8 03⇨HC8 04⇨HC8 05⇨HC8 95⇨HC8
HC7. IS THE COOKING USUALLY DONE IN THE HOUSE, IN A SEPARATE BUILDING, OR OUTDOORS? *If 'In the house', probe*: IS IT DONE IN A SEPARATE ROOM USED AS A KITCHEN?	In the house In a separate room used as kitchen ..... 1 Elsewhere in the house ..... 2 In a separate building ..... 3 Outdoors ..... 4 Other (*specify*) _____ 6	

HC8. DOES YOUR HOUSEHOLD HAVE:

	Yes	No
[A] ELECTRICITY?	Electricity 1	2
[B] A RADIO?	Radio 1	2
[C] A TELEVISION?	Television 1	2
[D] A NON-MOBILE TELEPHONE?	Non-mobile telephone 1	2
[E] A REFRIGERATOR?	Refrigerator 1	2
[F] A CHAIR?	Chair 1	2
[G] A TABLE?	Table 1	2

[H] A SOFA?	Sofa 1 2	
[I] A KITCHEN CUPBOARD/CABINET?	Kitchen Cupboard/Cabinet 1 2	
[J] A BED?	Bed 1 2	
[K] A GAS / ELECTRIC STOVE?	Gas/Electric Stove 1 2	
[L] A MICROWAVE OVEN?	Microwave Oven 1 2	
[M] AN AIR CONDITIONER / COOLER?	Air Conditioner/ Cooler 1 2	
[N] A FAN?	Fan..... 1 2	
[O] A WASHING MACHINE?	Washing Machine 1 2	
[P] A CLOTHES DRYER?	Dryer..... 1 2	
[Q] A DISHWASHER?	Dishwasher..... 1 2	
[R] A WATER HEATER?	Water Heater 1 2	
HC9. DOES ANY MEMBER OF YOUR HOUSEHOLD OWN:	Yes No	
[A] A WATCH?	Watch 1 2	
[B] A MOBILE TELEPHONE?	Mobile telephone 1 2	
[C] A BICYCLE?	Bicycle 1 2	
[D] A MOTORCYCLE OR SCOOTER?	Motorcycle / Scooter 1 2	
[E] AN ANIMAL-DRAWN CART?	Animal drawn-cart 1 2	
[F] A CAR OR TRUCK?	Car / Truck..... 1 2	
[G] A BOAT WITH A MOTOR?	Boat with motor 1 2	
HC10. DO YOU OR SOMEONE LIVING IN THIS HOUSEHOLD OWN THIS DWELLING? *If "No", then ask:* DO YOU RENT THIS DWELLING FROM SOMEONE NOT LIVING IN THIS HOUSEHOLD? *If "Rented from someone else", circle "2". For other responses, circle "6".*	Own .....1 Rent .....2 Other (Not owned or rented) 6	
HC11. DOES ANY MEMBER OF THIS HOUSEHOLD OWN ANY LAND THAT CAN BE USED FOR AGRICULTURE?	Yes .....1 No 2	2⇨HC13
HC12. HOW MANY HECTARES/ACRES OF AGRICULTURAL LAND DO MEMBERS OF THIS HOUSEHOLD OWN? *If less than 1, record "00". If 95 or more, record '95'. If unknown, record '98'.*	Hectares ..... __ __ • __ __ Acres __ __ __ Sq. Chains ___	

HC13. DOES THIS HOUSEHOLD OWN ANY LIVESTOCK, HERDS, OTHER FARM ANIMALS, OR POULTRY?	Yes .....1 No 2	 2⇨HC15
HC14. HOW MANY OF THE FOLLOWING ANIMALS DOES THIS HOUSEHOLD HAVE? [A] CATTLE, MILK COWS, OR BULLS? [B] HORSES, DONKEYS, OR MULES? [C] GOATS? [D] SHEEP? [E] CHICKENS? [F] PIGS? *If none, record '00'.* *If 95 or more, record '95'.* *If unknown, record '98'.*	 Cattle, milk cows, or bulls.....___ ___ Horses, donkeys, or mules.....___ ___ Goats.....___ ___ Sheep .....___ ___ Chickens.....___ ___ Pigs.....___ ___	
HC15. DOES ANY MEMBER OF THIS HOUSEHOLD HAVE A BANK ACCOUNT?	Yes .....1 No 2	

CHILD LABOUR — CL

To be administered for children in the household age **5-14***years.For household members below age5 or aboveage 14, leave rows blank.*

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

CL1. *Line number*	CL2. *Name and Age*		CL3. DURING THE PAST WEEK, DID (*name*) DO ANY KIND OF WORK FOR SOMEONE WHO IS NOT A MEMBER OF THIS HOUSEHOLD? *If yes*: FOR PAY IN CASH OR KIND? 1 Yes, for pay (cash or kind) 2 Yes, unpaid 3 No ⇨CL5			CL4. SINCE LAST (*day of the week*), ABOUT HOW MANY HOURS DID HE/SHE DO THIS WORK FOR SOMEONE WHO IS NOT A MEMBER OF THIS HOUSEHOLD? *If more than one job, include all hours at all jobs.*	CL5. DURING THE PAST WEEK, DID (*name*) FETCH WATER OR COLLECT FIREWOOD FOR HOUSEHOLD USE? 1 Yes 2 No ⇨ CL7		CL6. SINCE LAST (*day of the week*), ABOUT HOW MANY HOURS DID HE/SHE FETCH WATER OR COLLECT FIREWOOD FOR HOUSEHOLD USE?	CL7. DURING THE PAST WEEK, DID (*name*) DO ANY PAID OR UNPAID WORK ON A FAMILY FARM OR IN A FAMILY BUSINESS OR SELLING GOODS IN THE STREET? *Include work for a business run by the child, alone or with one or more partners.* 1 Yes 2 No ⇨ CL9		CL8. SINCE LAST (*day of the week*), ABOUT HOW MANY HOURS DID HE/SHE DO THIS WORK FOR HIS/HER FAMILY OR HIMSELF/ HERSELF?	CL9. DURING THE PAST WEEK, DID (*name*) HELP WITH HOUSEHOLD CHORES SUCH AS SHOPPING, CLEANING, WASHING CLOTHES, COOKING; OR CARING FOR CHILDREN, OLD OR SICK PEOPLE? 1 Yes 2 No ⇨ Next Line		CL10. SINCE LAST (*day of the week*), ABOUT HOW MANY HOURS DID HE/SHE SPEND DOING THESE CHORES?
			Yes		No												
Line	Name	Age	Paid	Unpaid		Number of hours	Yes	No	Number of hours	Yes	No	Number of hours	Yes	No	Number of hours	Yes	No	Number of hours
01		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
02		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
03		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
04		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
05		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
06		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
07		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
08		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
09		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
10		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
11		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
12		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
13		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
14		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___
15		__ __	1	2	3	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___	1	2	___ ___

CHILD DISCIPLINE — CD

Table 1: Children Aged 2-14 Years Eligible for Child Discipline Questions

- *List each of the children aged 2-14 years below in the order they appear in the Household Listing Form. Do not include other household members outside of the age range 2-14 years.*
- *Record the line number, name, sex, and age for each child.*
- *Then record the total number of children aged 2-14 in the box provided (CD6).*

CD1. *Rank number*	CD2. *Line number from HL1*	CD3. *Name from HL2*	CD4. *Sex from HL4*		CD5. *Age from HL6*	
Rank	Line	Name	M	F	Age	
1	__ __		1	2	___ ___	
2	__ __		1	2	___ ___	
3	__ __		1	2	___ ___	
4	__ __		1	2	___ ___	
5	__ __		1	2	___ ___	
6	__ __		1	2	___ ___	
7	__ __		1	2	___ ___	
8	__ __		1	2	___ ___	
CD6.	Total children age 2-14 years					___ ___

- *If there is only one child age 2-14 years in the household, then skip table 2 and go to CD8; write down '1' and continue with CD9*

Table 2: Selection of Random Child for Child Discipline Questions

- *Use Table 2 to select one child between the ages of 2 and 14 years, if there is more than one child in that age range in the household.*
- *Check the last digit of the household number (HH2) from the cover page. This is the number of the row you should go to in the table below.*
- *Check the total number of eligible children (2-14) in CD6 above. This is the number of the column you should go to.*
- *Find the box where the row and the column meet and circle the number that appears in the box. This is the rank number of the child (CD1) about whom the questions will be asked.*

CD7.	**Total Number of Eligible Children in the Household (CD6)**							
Last digit of Questionnaire Number	1	2	3	4	5	6	7	8+
0	1	2	2	4	3	6	5	4
1	1	1	3	1	4	1	6	5
2	1	2	1	2	5	2	7	6
3	1	1	2	3	1	3	1	7
4	1	2	3	4	2	4	2	8
5	1	1	1	1	3	5	3	1
6	1	2	2	2	4	6	4	2
7	1	1	3	3	5	1	5	3
8	1	2	1	4	1	2	6	4
9	1	1	2	1	2	3	7	5

CD8. *Record the rank number of the selected child* ..... ___

CD9. *Write the name and line number of the child selected for the module from CD3 and CD2, based on the rank number in CD8.*	Name _____ Line number ..... __ __	
CD10. ADULTS USE CERTAIN WAYS TO TEACH CHILDREN THE RIGHT BEHAVIOUR OR TO ADDRESS A BEHAVIOUR PROBLEM. I WILL READ VARIOUS METHODS THAT ARE USED AND I WANT YOU TO TELL ME IF YOU OR ANYONE ELSE IN YOUR HOUSEHOLD HAS USED THIS METHOD WITH *(name)* IN THE PAST MONTH. CD11. TOOK AWAY PRIVILEGES FORBADE SOMETHING *(name)* LIKED OR DID NOT ALLOW HIM/HER TO LEAVE HOUSE.	Yes ..... 1 No 2	
CD12. EXPLAINED WHY (*name*)'S BEHAVIOR WAS WRONG.	Yes ..... 1 No 2	
CD13. SHOOK HIM/HER.	Yes ..... 1 No 2	
CD14. SHOUTED, YELLED AT OR SCREAMED AT HIM/HER.	Yes ..... 1 No 2	
CD15. GAVE HIM/HER SOMETHING ELSE TO DO.	Yes ..... 1 No 2	
CD16. SPANKED, HIT OR SLAPPED HIM/HER ON THE BOTTOM WITH BARE HAND.	Yes ..... 1 No 2	
CD17. HIT HIM/HER ON THE BOTTOM OR ELSEWHERE ON THE BODY WITH SOMETHING LIKE A BELT, HAIRBRUSH, STICK OR OTHER HARD OBJECT.	Yes ..... 1 No 2	
CD18. CALLED HIM/HER DUMB, LAZY, OR ANOTHER NAME LIKE THAT.	Yes ..... 1 No 2	
CD19. HIT OR SLAPPED HIM/HER ON THE FACE, HEAD OR EARS.	Yes ..... 1 No 2	
CD20. HIT OR SLAPPED HIM/HER ON THE HAND, ARM, OR LEG.	Yes ..... 1 No 2	
CD21. BEAT HIM/HER UP, THAT IS HIT HIM/HER OVER AND OVER AS HARD AS ONE COULD.	Yes ..... 1 No 2	
CD21A. ISOLATED HIM/HER.	Yes ..... 1 No 2	
CD22. DO YOU BELIEVE THAT IN ORDER TO BRING UP, RAISE, OR EDUCATE A CHILD PROPERLY, THE CHILD NEEDS TO BE	Yes ..... 1 No 2	

PHYSICALLY PUNISHED?	Don't know / No opinion..... 8	

HANDWASHING		HW
HW1. CAN YOU PLEASE SHOW ME WHERE MEMBERS OF YOUR HOUSEHOLD MOST OFTEN WASH THEIR HANDS?	Observed ..... 1 Not observed Not in dwelling / plot / yard ..... 2 No permission to see ..... 3 Other reason 6	 2 ⇨HW4 3 ⇨HW4 6 ⇨HW4
HW2. *Observe presence of water at the specific place for hand washing.* *Verify by checking the tap/pump, or basin, bucket, water container or similar objects for presence of water.*	Water is available ..... 1 Water is not available 2	
HW3. *Record if soap or detergent is present at the specific place for hand washing.* *Circle all that apply.* *Skip to HH19 if any soap or detergent code (A, B, C or D) is circled. If "None" (Y) is circled, continue with HW4.*	Bar soap ..... A Detergent (Powder / Liquid / Paste) ..... B Liquid soap ..... C Sanitizer ..... E None ..... Y	A⇨HH19 B⇨HH19 C⇨HH19 E⇨HH19
HW4. DO YOU HAVE ANY SOAP SANITIZER OR DETERGENT IN YOUR HOUSEHOLD FOR WASHING HANDS?	Yes ..... 1 No 2	 2⇨HH19
HW5. CAN YOU PLEASE SHOW IT TO ME? *Record observation. Circle all that apply.*	Bar soap ..... A Detergent (Powder / Liquid / Paste) ..... B Liquid soap ..... C Sanitizer ..... D Not able / Does not want to show ..... Y	

HH19. *Record the time.*	Hour and minutes .....__ __ : __ __	

HH20. *Does any eligible woman age 15-49 reside in the household?*

Check Household Listing Form, column HL7 for any eligible woman.
You should have a questionnaire with the Information Panel filled in for each eligible woman.

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

☐ *No ⇨ Continue.*

HH21. *Does any child under the age of 5 reside in the household?*

Check Household Listing Form, column HL9 for any eligible child under age 5.
You should have a questionnaire with the Information Panel filled in for each eligible child.

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

☐ *No ⇨ End the interview by thanking the respondent for his/her cooperation. Gather together all questionnaires for this household and complete HH8 to HH15 on the cover page.*

Interviewer's Observations

Field Editor's Observations

Supervisor's Observations

QUESTIONNAIRE FOR INDIVIDUAL WOMEN[JAMAICA]

WOMAN'S INFORMATION PANEL	WM
This questionnaire is to be administered to all women age 15 through 49 (see Household Listing Form, column HL7). A separate questionnaire should be used for each eligible woman.	
WM1. Parish ..... ___ ___ Constituency ..... ___ ___ Enumeration Division ..... ___ ___ ___	WM2. Dwelling Number ..... ___ ___ ___ Household number ..... ___ ___
WM3. Woman's name: Name_____	WM4. Woman's line number: ____ ___ ___
WM5. Interviewer name and number: Name_____	WM6. Day/Month/Year of interview: ___ ___ / ___ ___ / ___ ___ ___ ___

Repeat greeting if not already read to this woman:

I AM FROM **THE STATISTICAL INSTITUTE OF JAMAICA**.WEARE WORKING ON A PROJECT CONCERNED WITH FAMILY HEALTH AND EDUCATION. I WOULD LIKE TO TALK TO YOU ABOUT THESE SUBJECTS. THE INTERVIEW WILL TAKE ABOUT 15 MINUTES. ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

If greeting at the beginning of the household questionnaire has already been read to this woman, then read the following:

NOW I WOULD LIKE TO TALK TO YOU MORE ABOUT YOUR HEALTH AND OTHER TOPICS. THIS INTERVIEW WILL TAKE ABOUT 15 MINUTES. AGAIN, ALL THE INFORMATION WE OBTAIN WILL REMAIN STRICTLY CONFIDENTIAL AND YOUR ANSWERS WILL NEVER BE SHARED WITH ANYONE OTHER THAN OUR PROJECT TEAM.

MAY I START NOW?

☐ *Yes, permission is given ⇨Go to WM10 to record the time and then begin the interview.*

☐ *No, permission is not given ⇨Complete WM7.Discuss this result with your supervisor.*

WM7. Result of woman's interview	Completed .....01 Not at home .....02 Refused .....03 Partly completed .....04 Incapacitated.....05 Other (*specify*)_____ 96
WM8. Field Editor (Name and number): Name _____ __ __ __	WM9. Data entry clerk (Name and number): Name _____ __ __ __ __

WM10. *Record the time.*	Hour and minutes ..... __ __ : __ __	

WOMAN'S BACKGROUND		WB
WB1. IN WHAT MONTH AND YEAR WERE YOU BORN?	Date of birth Month..... __ __ DK month..... 98 Year ..... __ __ __ __ DK year..... 9998	
WB2. HOW OLD ARE YOU? *Probe:* HOW OLD WERE YOU AT YOUR LAST BIRTHDAY? *Compare and correct WB1 and/or WB2 if inconsistent*	Age (in completed years) ..... __ __	
WB3. HAVE YOU EVER ATTENDED SCHOOL OR PRESCHOOL?	Yes ..... 1 No 2	2⇨WB7
WB4. WHAT IS THE HIGHEST LEVEL OF SCHOOL YOU ATTENDED?	Preschool ..... 0 Primary ..... 1 Secondary ..... 2 Higher 3	0⇨WB7
WB5. WHAT IS THE HIGHEST GRADE YOU COMPLETED AT THAT LEVEL? *If less than 1 grade, enter "00"*	Grade ..... __ __	
WB6. *Check WB4:* ☐ *Secondary above grade nine or higher. ⇨ Go to Next Module* ☐ *Primary or Secondary below grade ten ⇨ Continue with WB7*		
WB7. NOW I WOULD LIKE YOU TO READ THIS SENTENCE TO ME. *Show sentence on the card to the respondent.* *If respondent cannot read whole sentence, probe:* CAN YOU READ PART OF THE SENTENCE TO ME?	Cannot read at all ..... 1 Able to read only parts of sentence..... 2 Able to read whole sentence ..... 3 No sentence in required language _____ 4 *(specify language)* Blind/mute, visually/speech impaired 5	

CHILD MORTALITY		CM
All questions refer only to LIVE births.		
CM1. NOW I WOULD LIKE TO ASK ABOUT ALL THE BIRTHS YOU HAVE HAD DURING YOUR LIFE. HAVE YOU EVER GIVEN BIRTH?	Yes ..... 1 No 2	2⇨DOMESTIC VIOLENCE
CM2. WHAT WAS THE DATE OF YOUR FIRST BIRTH? I MEAN THE VERY FIRST TIME YOU GAVE BIRTH, EVEN IF THE CHILD IS NO LONGER LIVING, OR WHOSE FATHER IS NOT YOUR CURRENT PARTNER.	Date of first birth Day ..... __ __ DK day ..... 98 Month ..... __ __ DK month ..... 98 Year ..... __ __ __ __ DK year 9998	
CM12. OF THESE BIRTHS YOU HAVE HAD, WHEN DID YOU DELIVER THE LAST ONE (EVEN IF HE OR SHE HAS DIED)? *Month and year must be recorded.*	Date of last birth Day ..... __ __ DK day ..... 98 Month ..... __ __ Year ..... __ __ __ __	

CM13. *Check CM12: Last birth occurred within the last 2 years, that is, since (day and month of interview) in **2009***

☐ *No live birth in last 2 years. ⇨ Go To ATTITUDES TOWARD DOMESTIC VIOLENCE Module.*

☐ *One or more live births in last 2 years. ⇨ Ask for the name of the child*

*Name of child*_____

If child has died, take special care when referring to this child by name in the following modules.

Continue with the next module.

DESIRE FOR LAST BIRTH		DB
This module is to be administered to all women with a live birth in the 2 years preceding date of interview. Check child mortality module CM13 and record name of last-born child here _____. Use this child's name in the following questions, where indicated.		
DB1. WHEN YOU GOT PREGNANT WITH (*name*), DID YOU WANT TO GET PREGNANT AT THAT TIME?	Yes ..... 1 No 2	1⇨Next Module
DB2. DID YOU WANT TO HAVE A BABY LATER ON, OR DID YOU NOT WANT ANY (MORE) CHILDREN?	Later ..... 1 No more 2	2⇨Next Module
DB3. HOW MUCH LONGER DID YOU WANT TO WAIT?	Months ..... 1 __ __ Years ..... 2 __ __ DK 998	

MATERNAL AND NEWBORN HEALTH		MN
This module is to be administered to all women with a live birth in the 2 years preceding date of interview. Check child mortality module CM13 and record name of last-born child here _____. Use this child's name in the following questions, where indicated.		
MN1. DID YOU SEE ANYONE FOR ANTENATAL CARE DURING YOUR PREGNANCY WITH (*name*)?	Yes ..... 1 No 2	 2⇨MN5
MN2. WHOM DID YOU SEE? *Probe:* ANYONE ELSE? *Probe for the type of person seen and circle all answers given.*	Health professional: Doctor ..... A Nurse / Midwife ..... B Auxiliary midwife ..... C Other person Traditional birth attendant ..... F Community health worker ..... G Other (*specify*) _____ X	
MN3. HOW MANY TIMES DID YOU RECEIVE ANTENATAL CARE DURING THIS PREGNANCY?	Number of times ..... __ __ DK 98	
MN4. AS PART OF YOUR ANTENATAL CARE DURING THIS PREGNANCY, WERE ANY OF THE FOLLOWING DONE AT LEAST ONCE: [A] WAS YOUR BLOOD PRESSURE MEASURED? [B] DID YOU GIVE A URINE SAMPLE? [C] DID YOU GIVE A BLOOD SAMPLE?	Yes No Blood pressure ..... 1 2 Urine sample ..... 1 2 Blood sample 1 2	
MN5. DO YOU HAVE A CARD OR OTHER DOCUMENT WITH YOUR OWN IMMUNIZATIONS LISTED? MAY I SEE IT PLEASE? *If a card is presented, use it to assist with answers to the following questions.*	Yes (card seen) ..... 1 Yes (card not seen) ..... 2 No ..... 3 DK 8	
MN6. WHEN YOU WERE PREGNANT WITH (*name*), DID YOU RECEIVE ANY INJECTION IN THE ARM OR SHOULDER TO PREVENT THE BABY FROM GETTING TETANUS, THAT IS CONVULSIONS AFTER BIRTH?	Yes ..... 1 No ..... 2 DK 8	 2⇨MN9 8⇨MN9
MN7. HOW MANY TIMES DID YOU RECEIVE THIS TETANUS INJECTION DURING YOUR PREGNANCY WITH (*name*)? *If 7 or more times, record '7'.*	Number of times ..... __ DK 8	 8⇨MN9
MN8. *How many tetanus injections during last pregnancy were reported in MN7?* ☐ *At least two tetanus injections during last pregnancy. ⇨ Go to MN17* ☐ *Fewer than two tetanus injections during last pregnancy. ⇨ Continue with MN9*		

MN9. DID YOU RECEIVE ANY TETANUS INJECTION AT ANY TIME BEFORE YOUR PREGNANCY WITH (*name*), EITHER TO PROTECT YOURSELF OR ANOTHER BABY?	Yes ..... 1 No ..... 2 DK 8	 2⇨MN17 8⇨MN17
MN10. HOW MANY TIMES DID YOU RECEIVE A TETANUS INJECTION BEFORE YOUR PREGNANCY WITH (*name*)? *If 7 or more times, record '7'.*	Number of times ..... __ DK 8	 8⇨MN17
MN11. HOW MANY YEARS AGO DID YOU RECEIVE THE LAST TETANUS INJECTION BEFORE YOUR PREGNANCY WITH (*name*)?	Years ago ..... __ __	
MN17. WHO ASSISTED WITH THE DELIVERY OF (*name*)? *Probe:* ANYONE ELSE? *Probe for the type of person assisting and circle all answers given.* *If respondent says no one assisted, probe to determine whether any adults were present at the delivery.*	Health professional: Doctor ..... A Nurse/ Midwife ..... B Auxiliary midwife ..... C Other person Traditional birth attendant ..... F Community health worker ..... G Relative/Friend ..... H Other (*specify*) _____ X No one ..... Y	

MN21. WAS (*name*) WEIGHED AT BIRTH?	Yes ..... 1 No ..... 2 DK _____ 8	 2⇨MN23 8⇨MN23
MN22. HOW MUCH DID (*name*) WEIGH? *Record weight from health card, if available.*	From card ..... 1 __ __ • __ __ __ (kg) ..... 1 __ __ (lbs) __ __ (ozs.) ..... 2 From recall ..... 2 __ __ • __ __ __ (kg) ..... 1 __ __ (lbs) __ __ (ozs.) ..... 2 DK 99998	
MN23. HAS YOUR MENSTRUAL PERIOD RETURNED SINCE THE BIRTH OF (*name*)?	Yes ..... 1 No 2	
MN24. DID YOU EVER BREASTFEED (*name*)?	Yes ..... 1 No 2	 2⇨Next Module
MN25. HOW LONG AFTER BIRTH DID YOU FIRST PUT (*name*) TO THE BREAST? *If less than 1 hour, record '00' hours.* *If less than 24 hours, record hours.* *Otherwise, record days.*	Immediately ..... 000 Hours ..... 1 __ __ Days ..... 2 __ __ Don't know/remember 998	

ATTITUDES TOWARD DOMESTIC VIOLENCE — DV

DV1. Sometimes a husband/partner is annoyed or angered by things that his wife/partner does. In your opinion, is a husband/partner justified in hitting or beating his wife /partner in the following situations:

[A] If she goes out without telling him?

[B] If she neglects the children?

[C] If she argues with him?

[D] If she refuses to have sex with him?

[E] If she burns the food?

[F] If she is unfaithful?

	Yes	No	DK
Goes out without telling	1	2	8
Neglects children	1	2	8
Argues with him	1	2	8
Refuses sex	1	2	8
Burns food	1	2	8
Is unfaithful	1	2	8

DV2. Please tell me if you think a husband/partner is ever justified in doing any of the following to his wife/partner

[A] Embarrassing her in front of others?

[B] Threatening her or someone close to her with harm?

[C] Restricting her contact with friends or family?

	Yes	No	DK
Embarrassing her	1	2	8
Threatening	1	2	8
Restricting	1	2	8

MARRIAGE/UNION		MA
MA1. ARE YOU CURRENTLY MARRIED OR LIVING TOGETHER WITH A MAN AS IF MARRIED?	Yes, currently married ..... 1 Yes, living with a man ..... 2 No, not in union 3	 3⇨MA5
MA2. HOW OLD IS YOUR HUSBAND/PARTNER? *Probe*: HOW OLD WAS YOUR HUSBAND/PARTNER ON HIS LAST BIRTHDAY?	Age in years ..... __ __ DK 98	⇨MA7 ⇨MA7
MA5. HAVE YOU EVER BEEN MARRIED OR LIVED TOGETHER WITH A MAN AS IF MARRIED?	Yes, formerly married ..... 1 Yes, formerly lived with a man ..... 2 No 3	 3 ⇨Next Module
MA6. WHAT IS YOUR MARITAL STATUS NOW: ARE YOU WIDOWED, DIVORCED OR SEPARATED?	Widowed ..... 1 Divorced ..... 2 Separated 3	
MA7. HAVE YOU BEEN MARRIED OR LIVED WITH A MAN ONLY ONCE OR MORE THAN ONCE?	Only once ..... 1 More than once 2	
MA8. IN WHAT MONTH AND YEAR DID YOU FIRST MARRY OR START LIVING WITH A MAN AS IF MARRIED?	Date of first marriage Month ..... __ __ DK month ..... 98 Year ..... __ __ __ __ DK year 9998	 ⇨Next Module
MA9. HOW OLD WERE YOU WHEN YOU STARTED LIVING WITH YOUR FIRST HUSBAND/PARTNER?	Age in years..... __ __	

LIFE SATISFACTION		LS
LS1. *Check WB2: Age of respondent is between 15 and 24?* ☐ *Age 25-49⇨Go to WM11* ☐*Age 15-24 ⇨ Continue with LS2*		
LS2. NOW I WOULD LIKE TO ASK YOU SOME VERY SIMPLE QUESTIONS ABOUT YOUR LEVEL OF SATISFACTION IN DIFFERENT AREAS. IN EACH CASE, I WOULD LIKE TO KNOW WHERE YOU WOULD PLACE YOURSELF: WHETHER YOU ARE VERY OR SOMEWHAT SATISFIED, NEITHER SATISFIED NOR UNSATISFIED, OR SOMEWHAT OR VERY UNSATISFIED. YOU CAN ALSO LOOK AT THESE PICTURES TO HELP YOU WITH YOUR RESPONSE. *Give response card to respondent and prompt her to look at the card while and after you ask each question from LS2 to LS10.* HOW SATISFIED ARE YOU WITH YOUR FAMILY LIFE?	Does not have family ..... 0 Very satisfied ..... 1 Somewhat satisfied ..... 2 Neither satisfied nor unsatisfied ..... 3 Somewhat unsatisfied ..... 4 Very unsatisfied 5	

LS3. How satisfied are you with your friendships?	Does not have friends ..... 0 Very satisfied ..... 1 Somewhat satisfied ..... 2 Neither satisfied nor unsatisfied ..... 3 Somewhat unsatisfied ..... 4 Very unsatisfied 5	
LS4. How satisfied are you with your school?	Does not go to school ..... 0 Very satisfied ..... 1 Somewhat satisfied ..... 2 Neither satisfied nor unsatisfied ..... 3 Somewhat unsatisfied ..... 4 Very unsatisfied 5	
LS5. How satisfied are you with your current job?	Does not have a job ..... 0 Very satisfied ..... 1 Somewhat satisfied ..... 2 Neither satisfied nor unsatisfied ..... 3 Somewhat unsatisfied ..... 4 Very unsatisfied 5	
LS6. How satisfied are you with yourself?	Very satisfied ..... 1 Somewhat satisfied ..... 2 Neither satisfied nor unsatisfied ..... 3 Somewhat unsatisfied ..... 4 Very unsatisfied 5	
LS7. How satisfied are you with where you live? If necessary, explain that the question refers to the living environment, including the neighbourhood and the dwelling.	Very satisfied ..... 1 Somewhat satisfied ..... 2 Neither satisfied nor unsatisfied ..... 3 Somewhat unsatisfied ..... 4 Very unsatisfied 5	
LS8. How satisfied are you with your life, overall?	Very satisfied ..... 1 Somewhat satisfied ..... 2 Neither satisfied nor unsatisfied ..... 3 Somewhat unsatisfied ..... 4 Very unsatisfied 5	
LS9. How satisfied are you with your current income?	Does not have any income ..... 0 Very satisfied ..... 1 Somewhat satisfied ..... 2 Neither satisfied nor unsatisfied ..... 3 Somewhat unsatisfied ..... 4 Very unsatisfied 5	
LS10. Taking all things together, would you say you are very or somewhat happy, neither happy nor unhappy, or somewhat or very unhappy?	Very happy ..... 1 Somewhat happy ..... 2 Neither happy nor unhappy ..... 3 Somewhat unhappy ..... 4 Very unhappy 5	
LS11. Compared to this time last year, would you say that your life has improved or worsened, overall?	Improved ..... 1 More or less the same ..... 2 Worsened 3	

LS12. AND IN ONE YEAR FROM NOW, DO YOU EXPECT THAT YOUR LIFE WILL BE BETTER OR WORSE, OVERALL?	Better ..... 1 More or less the same ..... 2 Worse 3	

WM11. *Record the time*.	Hour and minutes ..... __ __ : __ __	

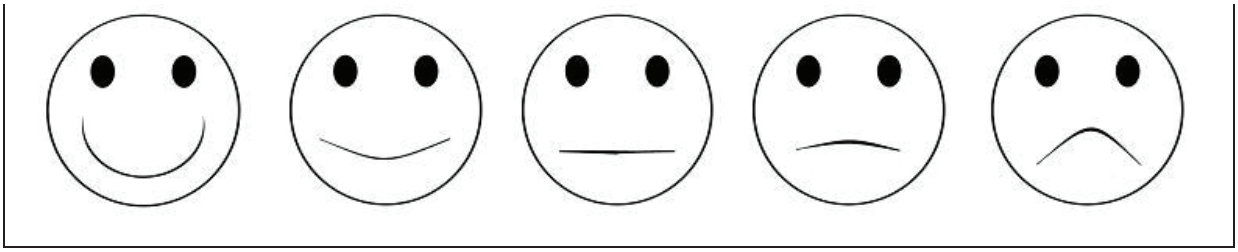
WM12. *Check Household Listing Form, column HL9.*
Is the respondent the mother or caretaker of any child age 0-4 living in this household?

☒ *Yes* ☒ *Go to QUESTIONNAIRE FOR CHILDREN UNDER FIVE for that child and start the interview with thisrespondent.*

☒ *No* ☒ *End the interview with this respondent by thanking her for her cooperation.*
Check for the presence of any other eligible woman or children under-5 in the household.

RESPONSE CARD

Very Satisfied	Somewhat satisfied	Neither satisfied, nor unsatisfied	Somewhat unsatisfied	Very unsatisfied



Interviewer's Observations

Field Editor's Observations

Supervisor's Observations

JAMAICA
MULTIPLE INDICATOR CLUSTER SURVEY
2011