

GUYANA
Multiple Indicator Cluster Survey

Funded by The United Nations Children's Fund (UNICEF)

Conducted by The Bureau of Statistics (Guyana)

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Foreword and Acknowledgements

The Guyana MICS 2000, a household survey designed to collect current data on key child health and welfare indicators was the result of efforts on the part of UNICEF in collaboration with other agencies to develop a household survey tool, for the collection of data which could be used by countries to generate child welfare indicators for the purpose of assessing progress made towards achieving the world's summit for children (WSC) end decade (2000) goals. The Guyana MICS should however be seen as more than just an instrument for meeting the reporting needs of Guyana on the achievement of WSC goals. Clearly, MICS has also plugged some of the data gaps in the national child health and welfare reporting system. Thus, in addition to facilitating the end decade assessment the relevant information on child health and welfare indicators may be also used by policy makers and programme managers in national health and welfare agencies for purposes of planning, program evaluation and policy formulation.

This report on the results of the Guyana 2000 MICS, represents the combined efforts of many institutions and persons without which the successful completion of the entire project would have been impossible to achieve. In this regard, I wish to acknowledge the enormous contribution of UNICEF which funded the entire Guyana MICS 2000 project and provided the technical support which was an essential element in the success of the Guyana MICS, 2000. A special debt of gratitude is owed to the former Assistant Representative, UNICEF (Guyana), Mr. Juan Carlos Espinola whose enthusiastic and unwavering support sustained the Guyana MICS project through its difficult periods. Thanks is also due to Macro International Inc., for providing training and technical support in the areas of data entry and processing, in collaboration with UNICEF.

The work of the Technical Committee deserves special praise since its members showed a keen interest in the conduct of MICS from the very outset and was unstinting in the advice and support they gave to the Bureau of Statistics in the implementation to the Guyana MICS.

The Bureau also gratefully acknowledges the valuable contribution made by the field supervisors and interviewers who performed admirably in the field and whose efforts contributed immeasurably towards the success of the Guyana MICS. Editors, data entry personnel and administrative staff of the Bureau are also commended for their sustained efforts and commitment to the MICS. Finally, the Bureau would also like to express gratitude and thanks to members of the public who were respondents in MICS for their patience, understanding and willing participation.

Everton W. Pollard
Bureau of Statistics (Guyana)
26th June 2001

Executive Summary

The 2000 Guyana Multiple Indicator Cluster Survey (MICS) is a nationally representative survey of households. Although the household was the basic unit of enumeration, information was collected on the welfare of women and children resident in households. The main objectives of the survey were to provide up-to-date information for assessing the situation of children and women in Guyana at the end of the decade and to furnish data needed for monitoring progress toward goals established at the World Summit for Children and as a basis for future action.

Infant and Under Five Mortality

- Through the use of the Brass indirect estimation technique (Trussel version) estimates of infant and child mortality were derived. The infant mortality rate was estimated at 54 per 1000 and the under five mortality rate was 72 per 1000 around the period 1997.

Education

- Overall 35 percent of children in Guyana aged 36-59 months attended some form of organized early childhood education programme and there was hardly any difference in the attendance of boys and girls. There were however, marked differences in the proportions attended in the coastal urban (48 percent) and coastal rural (29 percent) areas. The proportion attended from the rural coast was even lower than that of the interior areas (35 percent).
- Ninety-eight percent (98 percent) of children of primary school age attended primary school at the national level. As in the case of early childhood education, there were hardly any differences in the rates of attendance for boys and girls. Attendance in the Interior (96 percent) was somewhat lower than attendance on the Coast, where the coastal urban and coastal areas had an attendance of about 98 percent each.
- Approximately 97 percent of children who enter the first grade of primary school eventually reached grade five.

Water and Sanitation

- Eighty-three percent (83 percent) of the population in Guyana had access to improved sources of drinking water. The Interior (44 percent) had the lowest proportion while the proportions in the coastal urban (83 percent) and coastal rural (89 percent) were considerably higher. The greater access to improved sources of drinking water, which the population from the rural coast had relative to the urban coast, may be explained by the definition of 'improved drinking water sources' which excludes bottled water but includes rainwater.
- Ninety-eight percent (98 percent) of the total population lived in households with some sanitary means of excreta disposal. The proportion was however, lower in the Interior (84 percent) compared with the Coast where the rural and urban coastal areas had approximately 99 percent each. The most commonly used type of facility was the 'pit latrine' (60 percent) followed by 'flush to sewage/septic tank' (36 percent).

Child Malnutrition

- Fourteen (14) percent of children under age five-years were underweight or too thin for their age. Eleven percent (11 percent) was stunted or too short for their age while 11 percent was also wasted or too thin for their height. Children from the rural coast were more likely to be underweight and wasted compared with children from the urban coast and interior. Children at older ages (12-59 months) were more likely to be undernourished than younger children (<11 months). Moreover, children whose mothers had no formal education were much more likely to be malnourished compared with children of mothers who had secondary or higher and non-standard curriculum type education.

Breastfeeding

- Approximately 15 percent of children aged under-four months were exclusively breastfed, a level considerably lower than recommended. At age 6-9 months, 42 percent of children are receiving breast milk and solid or semi-solid foods. By age 12-15 months and 20-23 months, 50 percent and 31 percent respectively, were continuing to breastfeed. The Interior had the highest rates of breastfeeding among all categories, i.e. exclusive (0-3 months) complementary (6-9 months) and continued (12-23 months), relative to the Coast. Within the coastal areas, however, the urban coast had higher rates of exclusive and complementary breastfeeding compared with the rural coast. At older ages, the rural coast had higher rates of continued breastfeeding.

Low Birth weight

- Approximately 11 percent of infants are estimated to weigh less than 2500 grams at birth. This percentage is somewhat higher than the average for the Latin America and Caribbean region and there were no substantial differences between interior and coastal areas.

Immunization Coverage

- Ninety-seven (97) percent of children aged 12-23 months received a BCG vaccination by the age of 12 months. While 95 percent were given the first dose of DPT, the proportions declined somewhat for the second dose (90 percent) and the third dose (86 percent).
- Similarly, 94 percent of children aged 12-23 months received Polio1 by age 12 months but the proportion of subsequent doses received, declined. These were Polio2 (91 percent) and Polio3 (85 percent).
- Protection against measles, is provided by the vaccine MMR (Measles, Mumps and Rubella). The proportion of children 12-23 months old who received MMR by age 12 months was only 45 percent. This is because MMR is given between the age of 12-23 months. Over the longer period, i.e. children who received MMR at any age up to and including age 23 months, the coverage increased to 92 percent.
- Similarly, 39 percent of children received all of the recommended vaccinations during the first 12 months of life, including MMR, which provides the necessary protection against measles. When MMR was excluded the overall rate of vaccination by age 12 months increased to 81 percent.
- There were hardly any differences in the vaccination coverage for male and female children.

- Vaccination coverage was highest among children whose mothers had secondary or higher education. The differences by education of mother were greatest for second and third doses of DPT and Polio. This suggests that the completion rates were lower among children with less educated mothers.

Diarrhea

- Approximately 69 percent of children with diarrhea received one or more of the recommended home treatments (i.e., were treated with ORS or RHF).
- Only 7 percent of children with diarrhea received increased fluids and continued eating as recommended.

Acute Respiratory Infection

- Five (5) percent of under-five children had an acute respiratory infection in the two weeks prior to the survey. Overall, approximately 78 percent of these children were taken to an appropriate health provider.

IMCI Initiative

- Among under-five children who were reported to have had diarrhea or some other illness in the two weeks preceding the MICS, 8 percent received increased fluids and continued eating as recommended under the IMCI programme which is now in its embryonic stage.
- Forty-eight (48) percent of mothers knew at least two of the signs, which indicate that a child should be taken immediately to a health facility.

Malaria

- In Guyana, the Interior was designated as the area with the highest level of malaria risk. Sixty-one (61) percent of under-five children slept under a bed-net the night prior to the survey interview. However, only about 11 percent of the bed-nets used are impregnated with insecticide.
- International recommendations suggest the treatment of fever among children in high-risk areas as if it were malaria by immediately giving the child a full course of anti-malarial tablets. Approximately 24 percent of children with a fever in the two weeks prior to the MICS interview were given Paracetamol to treat the fever. Only 3 percent were given an appropriate anti-malarial drug.

HIV/AIDS

- Forty-three (43) percent of women aged 15-49 knew all three of the main ways to prevent HIV transmission i.e. having only one uninfected sex partner, using a condom every time, and abstaining from sex.
- Forty-five (45) percent of women correctly identified three misconceptions about HIV transmission i.e. that HIV can be transmitted through supernatural means, that it can be transmitted through mosquito bites, and that a healthy looking person cannot be infected.

- Sixty-nine percent of women of reproductive age in Guyana knew a place to get tested for AIDS and about 16 percent have been tested.
- The percentage of women who have sufficient knowledge of HIV transmission (24 percent) and the percentage who know where to get tested for HIV increases dramatically with the level of education.

Contraception

- Current use of contraception was reported by 37 percent of married or in union women. The most common method used was the pill, which was used by 11 percent of the women. The second highest proportion (9 percent) used condoms, followed by the inter-uterine device (IUD) (6 percent).

Prenatal Care

- Sixty-one percent (61 percent) of women who had a birth within the 12-months period prior to the survey were protected against neonatal tetanus. The vast majority of these women received at least two doses of tetanus toxoid within the last three years. These proportions were similar across all strata.
- A high proportion of women in Guyana with a birth in the last year (81 percent) received some type of antenatal care from skilled personnel (doctor, nurse/midwife, single-trained midwife, medex). The proportion of women however, who had their antenatal care delivered by skilled personnel was not uniform among the strata. Women from the Coast, particularly the urban coast (90 percent) had substantially higher proportions attended to by skilled personnel compared with women from the Interior (49 percent). Women on the Coast also had a far greater likelihood of having their antenatal care delivered by a doctor, compared with women from the Interior.

Assistance at Delivery

- Skilled personnel (doctor, nurse/midwife, single-trained midwife, medex) delivered about 86 percent of births occurring in the year prior to the MICS survey. Again the proportions were lowest in the Interior (43 percent) and highest in the urban coast and rural coast, 100 percent and 90 percent respectively.

Birth Registration

- The births of approximately 97 percent of children under-five years were reported as having been registered. Children born to mothers with no formal education had somewhat lower proportions registered compared with children with mothers with higher levels of education. Children from the Interior also had somewhat lower proportions registered (86 percent) relative to children the urban coast (99 percent) and the rural coast (98 percent).

Orphanhood and Living Arrangements of Children

- Overall, 65 percent of children aged 0-14 were living with both parents, while 9 percent were living with neither biological parent. Children who had one or both parents dead amounted to 5 percent while those with one parent dead were 4 percent. In the urban coast the proportion not living with a biological parent (11 percent) was higher compared with the Interior (5 percent) and the rural coast (8 percent).

Child Labor

- In the Guyana MICS children were classified as ‘currently working’ if they were found to be engaged in any of the following activities ‘paid or unpaid work for a non-household member, performed 4 or more hours of housekeeping chores, did other family work’. Approximately 27 percent of children aged 0-14 years were found to be currently working. The highest proportion (16 percent) did family work on farms and businesses. Unpaid work for a non-household member and paid work accounted for 13 percent and 2 percent respectively, while those children who did 4 or more hours per day doing household chores was only 1 percent.
- Children from the Interior were almost 4 times more likely than those from the Coast to have worked on family farm or business, while children from the Coast were more likely to have been engaged in unpaid work for persons who were not members of the household.

Summary Indicators

World Summit for Children Indicators		
Under-five mortality rate	Probability of dying before reaching age five	72 per 1000
Infant mortality rate	Probability of dying before reaching age one	54 per 1000
Underweight prevalence	Proportion of under-fives who are too thin for their age	13.6 percent
Stunting prevalence	Proportion of under-fives who are too short for their age	10.8 percent
Wasting prevalence	Proportion of under fives who are too thin for their height	10.6 percent
Use of safe drinking water	Proportion of population who use a safe drinking water source	83.3 percent
Use of sanitary means of excreta disposal	Proportion of population who use a sanitary means of excreta disposal	97.8 percent
Children reaching grade five	Proportion of children entering first grade of primary school who eventually reach grade five	97.0 percent
Net primary school attendance rate	Proportion of children of primary school age attending primary school	97.7 percent
Antenatal care	Proportion of women aged 15-49 attended at least once during pregnancy by skilled personnel	80.9 percent
Contraceptive prevalence	Proportion of married or in union women aged 15-49 who are using a contraceptive method	37.5 percent
Childbirth care	Proportion of births attended by skilled health personnel	85.6 percent
Birth weight below 2.5 kg.	Proportion of live births that weigh below 2500 grams	11.2 percent
Exclusive breastfeeding rate	Proportion of infants aged less than 4 months who are exclusively breastfed	15.3 percent
Timely complementary feeding rate	Proportion of infants aged 6-9 months who are receiving breast milk and complementary food	42.3 percent
Continued breastfeeding rate	Proportion of children aged 12-15 months and 20-23 months who are breastfeeding	49.6 percent (12-15) 30.5 percent (20-23)
DPT immunization coverage	Proportion of children immunized against diphtheria, pertussis and tetanus by age one	86.0 percent
Measles immunization coverage ¹	Proportion of children immunized against measles by age 12 months Proportion of children immunized against measles by age 23 months	45.1 percent 91.7 percent
Polio immunization coverage	Proportion of children immunized against polio by age one	85.0 percent
Tuberculosis immunization coverage	Proportion of children immunized against tuberculosis by age one	97.3 percent
Children protected against neonatal tetanus	Proportion of one year old children protected against neonatal tetanus through immunization of their mother	61.7percent
ORT use	Proportion of under-five children who had diarrhea in the last 2 weeks who were treated with oral re-hydration salts and an appropriate household solution	69.3 percent
Home management of diarrhea	Proportion of under-five children who had diarrhea in the last 2 weeks and received increased fluids and continued feeding during the episode	7.1 percent
Care seeking for acute respiratory infections	Proportion of under-five children who had ARI in the last 2 weeks and were taken to an appropriate health provider	77.6 percent

¹ Protection against measles is provided by the MMR vaccine, which is given to children between the age of 12-23 months old. As a result, the coverage for this vaccine is low when children who received it by age 12 months old are considered. However, when children who received the vaccine at any age, up to and including age 23 months are taken into account, coverage increases substantially.

Preschool development	Proportion of children aged 36-59 months who are attending some form of organized early childhood education program	35.1 percent
Indicators for Monitoring Children's Rights		
Birth registration	Proportion of under-five children whose births are reported registered	96.5 percent
Children's living arrangements	Proportion of children aged 0-14 years in households not living with a biological parent	8.5 percent
Orphans in household	Proportion of children aged 0-14 years who are orphans living in households	0.6 percent (both parents) 4.4 percent (one parent)
Child labor	Proportion of children aged 5-14 years who are currently working	27.0 percent
Indicators for Monitoring IMCI and Malaria		
Home management of illness	Proportion of under-five children reported ill during the last 2 weeks who received increased fluids and continued feeding	7.7 percent
Care seeking knowledge	Proportion of caretakers of under-five children who know at least 2 signs for seeking care immediately	47.5 percent
Bed-nets	Proportion of under-five children who sleep under an insecticide impregnated bed-net	11.3 percent (high risk areas)
Malaria treatment	Proportion of under five children who were ill with fever in the last 2 weeks who received anti-malarial drugs	2.6 percent (high risk areas)
Indicators for Monitoring HIV/AIDS		
Knowledge of preventing HIV/AIDS	Proportion of women who correctly state the 3 main ways of avoiding HIV infection	42.8 percent
Knowledge of misconceptions of HIV/AIDS	Proportion of women who correctly identify 3 misconceptions about HIV/AIDS	45.1 percent
Knowledge of mother to child transmission	Proportion of women who correctly identify means of transmission of HIV from mother to child	42.3 percent
Attitude to people with HIV/AIDS	Proportion of women expressing a discriminatory attitude towards people with HIV/AIDS	39.2 percent
Women who know where to get tested for HIV	Proportion of women who know where to get a HIV test	69.0 percent
Women who have been tested for HIV	Proportion of women who have been tested for HIV	15.7 percent

I. Introduction

Background of the Survey

At the World Summit for Children held in New York in 1990, the government of Guyana along with the governments of other countries around the world pledged themselves to a Declaration and Plan of Action for Children. The Plan of Action committed national governments to monitor the progress towards the achievement of specific goals and objectives, related to the well being of children by the year 2000. The Plan of Action for children also called for *inter alia*, the establishment of mechanisms for monitoring progress toward the stated goals and objectives. Towards this end, and in response to data gaps and the paucity of data in many countries, UNICEF developed a core set of indicators of specific aspects of the situation of children in coordination with other international organizations. In addition, the Multiple Indicator Cluster Survey (MICS) was developed as a household survey tool. It was in this context, therefore, that the 2000 Guyana MICS survey was therefore implemented to provide country specific end-decade information on many of these indicators.

The Guyana Multiple Indicator Cluster Survey (MICS) was conducted by the Bureau of Statistics with The Guyana MICS 2000 was conducted by the Bureau of Statistics (Guyana) with technical assistance being given by UNICEF and Macro International Inc. Technical support was also provided by a technical committee, which was constituted to assist the Bureau with the implementation of MICS. Members of the technical committee were drawn mostly from persons within organizations in health and related fields and education. The assistance of the technical committee in the implementation of MICS was mainly in the areas of adapting the questionnaire to country specific needs and in the assessment of overall data quality and key outputs of the survey. The organizations which provided the main support through members of the technical committee, include the following:

- Food Policy Division, Ministry of Health (annexe)
- Maternal and Child Health Unit, Ministry of Health
- PAHO/WHO (Guyana)
- Planning Unit, Ministry of Education
- Guyana Responsible Parenthood Association (GRPA)
- Ministry of Amerindian Affairs (Office of the President)

UNICEF (Guyana) was the sole organization through which funding was provided for the entire MICS, Guyana 2000 project.

This report presents the principal findings of the Guyana MICS 2000, which collected information on the World Summit for Children (WSC) indicators.

Population and Economy

Guyana is situated on the north-eastern shoulder of South America and is bordered on the north by the Atlantic Ocean, on the east by Suriname, on the south by Brazil and on the west by Venezuela. With an area of 214,969 sq km and a population of just under 724000 persons (Guyana Population & Housing Census 1991), the country has a population density of 3.4 persons per sq km. The vast majority of the population (97 percent) however, live on the narrow coastal plain, approximately 485 km long and on average approximately 13 km in depth. It is in this area also, that much of the country's agricultural produce is cultivated because of the presence of rich alluvial soils.

Agriculture and mining are Guyana's most important economic activities with sugar, bauxite, rice and gold accounting for between 75.0% and 80.0% of export earnings. Other exports include timber and shrimp. The manufacturing sector is relatively small and limited to bauxite processing, the production of beverages, construction materials, clothing and some food processing. From a period of growth in the 1970s the economy went into a period of decline and stagnation in the 1980s, resulting in Guyana being categorized as one of the poorest nations in the western hemisphere. However, in the late 1980s economic reforms were instituted with the objective of liberalizing the economy and attracting foreign aid and investment. The result was that during most of the 1990s the economy recorded positive growth rates. In 1998 after five continuous years of positive growth rates the economy registered a negative growth rate of -1.3%. In 1999, the economy again experienced positive growth (3.0%) but negative growth (-0.8%) returned for the year 2000. GDP is projected to grow by 2.8% in 2001.

Between 1980 and 1991 the population achieved a negative average annual growth rate (-0.4%). The population growth rates for the two previous decades were 1970-80 (0.78%) and 1960-70 (2.3%) and the prognosis for the decade 1991-2001 is that the population will record minimum to zero growth. The total fertility rate in 1991 was 2.4 children, which represented a decline from 3.2 in 1980. The continued decline in fertility, which was first observed between the late 1960s and early 1970 and high rates of emigration were the principal contributors to the decline in population growth rates. The median age of the population increased from 18.6 years in 1980 to 21.7 years in 1991. This suggests a changing age structure of the population from a younger to a more mature population.

Survey Objectives

The 2000 Guyana Multiple Indicator Cluster Survey has as its primary objectives:

- To provide up-to-date information for assessing the situation of children and women in Guyana at the end of the decade and for looking forward to the next decade;
- To furnish data needed for monitoring progress toward goals established at the World Summit for Children and a basis for future action;
- To contribute to the improvement of data and monitoring systems in Guyana and to strengthen technical expertise in the design, implementation, and analysis of such systems.

II. Survey Methodology

Sample Design

The sample for the Guyana Multiple Indicator Cluster Survey (MICS) was designed to provide estimates of health indicators at the national level, interior and coastal regions; and for urban and rural areas. In considering the urban/rural distinction, it should be borne in mind that all the urban areas of the country are located within the coastal region and the entire interior region is considered to be rural. The sample was selected in two stages. At the first stage, 200 census enumeration districts were selected with probability proportional to size. After a household listing was carried out within the selected enumeration district, using a systematic sample, 24 households were selected from each ED, making for a total selection of 4800 households. On account of the sample being stratified by Coast and Interior regions, with a further implicit stratification by urban and rural areas, it was not self-weighting. For reporting national level results, sample weights are used. Full technical details of the sample are included in Appendix A.

Questionnaires

The questionnaires for the Guyana MICS were based on the MICS Model Questionnaire, which was suitably adapted and modified to reflect national situations. A household questionnaire was administered in each household, which collected various types of information on household members including sex, age, marital status, and orphanhood status. The household questionnaire also included education, child labor and water and sanitation modules. In addition to a household questionnaire, questionnaires were administered in each household for women age 15-49 and children under age five. For children, the questionnaire was administered to the mother or caretaker of the child. The questionnaire for women contains the following modules:

- Child mortality
- Tetanus toxoid
- Maternal and newborn health
- Contraceptive use
- HIV/AIDS

The questionnaire for children under age five years includes modules on:

- Birth registration and early learning
- Breastfeeding
- Care of Illness
- Malaria
- Immunization
- Anthropometry.

The questionnaires were pre-tested during July 2000. Based on the results of the pretest, additional modifications were made to the wording of the questionnaires. For the final questionnaires, see Appendix D.

Fieldwork and Processing

The field staff was trained for five days between Monday 14th August and Friday 18th August 2000. Ten teams, each comprised of between 4 to 7 enumerators and including a supervisor conducted interviews. Vehicle support was provided to each team, since the UNICEF scales and measuring boards had to be transported from household to household during interviews. The fieldwork on the Coast commenced in August 2000 and ended in October 2000. The fieldwork in the Interior, which started towards the end of the fieldwork on the Coast, was finally completed in November 2000. The Bureau of Statistics provided the overall supervision of the fieldwork.

Data from the questionnaires were entered on microcomputers using the IMPS (integrated micro-computer system) software while tabulations were generated using SPSS (statistical package for social sciences). In order to ensure quality control, after the first data entry, the completed questionnaires were then entered again for verification, after which a programme ran internal consistency checks on the data. Procedures and standard programs developed under MICS and adapted to modifications of the questionnaire were used throughout. Data processing began in August 2000 and was completed by January 2001.

III. Sample Characteristics and Data Quality

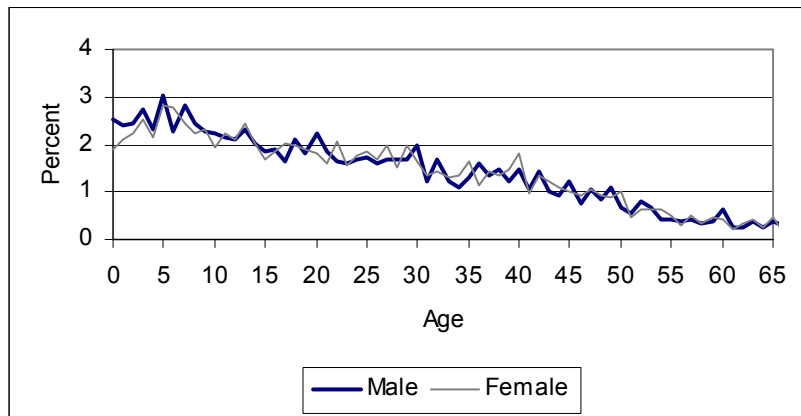
Response Rates

As a consequence of difficulties encountered which restricted access to two selected Eds from the Interior, they were excluded from the sample of 200 Eds. As a result, the 4800 households originally selected in the sample were reduced to 4747 households. Of these, 4695 were located during the period of interviews (Table 1) and 4538 were successfully interviewed, giving a household response rate of 97 percent. The response rate was higher in rural areas (98 percent) compared with urban areas (93 percent). In the interviewed households, 4972 eligible women aged 15-49 were identified. Interviews were successfully completed for 4801 of these, yielding a response rate of 97 percent for eligible women. In addition, 2697 children under age five were identified from the household listing questionnaire. Of these, 2672 child questionnaires were completed which yielded a response rate of 99 percent.

Age Distribution and Missing Data

Table 2 and Figure 1 show the single year age distribution of household members by sex. Usually there are small differences among adjacent age groups of population when distributed by single years of age.

Figure 1: Single year age distribution of the household population by sex, Guyana, 2000



The peaks and troughs suggest that there was age heaping at particular ages, in the reporting of age among the sample population. The incidence of digit preference, usually for ages ending in 0 and 5 is often found in age data. Fig. 1 and Table 2, clearly shows that there was age heaping mostly at ages ending at 0 and 5 for both sexes.

As a basic check on the quality of the survey data, the percentage cases of missing information on selected questions is shown in Table 3. There were no cases of missing information on the level and grade of education of household members, the number of hours worked in relation to working children (5-14 years), and women 15-49 years with a complete birth date. There were also no cases of missing information among eligible women who had ever been tested for HIV/AIDS, children who had a complete birth date and those who had diarrhea in the last two weeks. An almost negligible proportion of women (<1 percent) who had a birth during the last year prior to the survey did not report the date of their last tetanus toxoid injection.

The data on weight and height are considered the most likely to be missing among the selected information. This was borne out in the Table which shows that information on weight and height was missing among 4 percent of children under 5-years. This was due mostly to the child not being present in the household despite subsequent visits and the measurement taken not being used in the analysis because the recorded height or weight for age was outside of the range of acceptable values. This percentage of missing data is still considered to be relatively low in comparison with other surveys where anthropometric measurements are taken. These low levels of missing data suggest that there were no significant problems with the questions or the fieldwork.

Characteristics of the Household Population

Information on the characteristics of the household population and the survey respondents is provided to assist in the interpretation of the survey findings and to serve as a basic check on the sample implementation.

Table 4 presents the percent distribution of households in the sample by background characteristics. About 31 percent (53451) households are urban and 69 percent (116097 households) are rural. The Interior area of the country being sparsely populated has the relatively smaller proportion of households (7 percent) compared with the Coast which has 93 percent of the total households. The urban areas are all located on the Coast and consequently, 100 percent of urban households are located therein. On the other hand, of the total number of rural households, 10 percent was located in the Interior and 90 percent on the Coast. The highest proportion of households (37 percent) had between 4-5 persons, followed closely by the 2-3 member household (31 percent). One-person households accounted for 9 percent of the total sampled households. Forty (40) percent of the households had at least one child under age five while 83 percent had at least one woman aged between 15-49 years. Sixty-nine (69) percent of the households had at least one child who was less than 15 years old.

Table 5 shows the characteristics of female respondents aged 15-49 years. Women in the age groups 15-19, 20-24 and 25-29 all exhibited similar proportions that ranged between 17 percent and 18 percent. Thereafter, the proportions declined steadily over the older age groups until age 45-49 where the percentage was lowest at 9 percent. This pattern of distribution of the female population by age groups is suggestive of the onset of a sustained earlier period of fertility decline. Table 5 also indicates that approximately 71 percent of women in the sample aged 15-49 were currently married while 20 percent were never married. Sixty-nine (69) percent was also shown as having ever given birth. The majority of women (79 percent) had secondary and higher education. Less than 1 percent had no formal education.

Table 6 shows the characteristics of children under age five. Fifty-three (53) percent of the children are male and 47 percent are female. Approximately 91 percent of mothers with children under age five had secondary and higher education. This represents an increase of 10 percent over the women 15-49 years old in the population at large who had comparable levels of education (secondary and higher). This suggests that women 15-49 years old, with children under 5-years were better educated on average compared with women 15-49 years in the population at large. Note however, that for children whose mothers did not live in the household, the education of the child's caretaker was used. The Table also shows that there are slightly less children aged under 6-months (8 percent) than those aged 6-11 months (10 percent). This pattern suggests a continued decline in fertility.

IV. Results

A. Infant and Under-Five Mortality

The *infant mortality rate* is the probability of dying before the first birthday. The *under five mortality rate* is the probability of dying before the fifth birthday. In the Guyana MICS, infant and under five mortality rates were estimated using the Trussell version of the Brass indirect estimation technique.

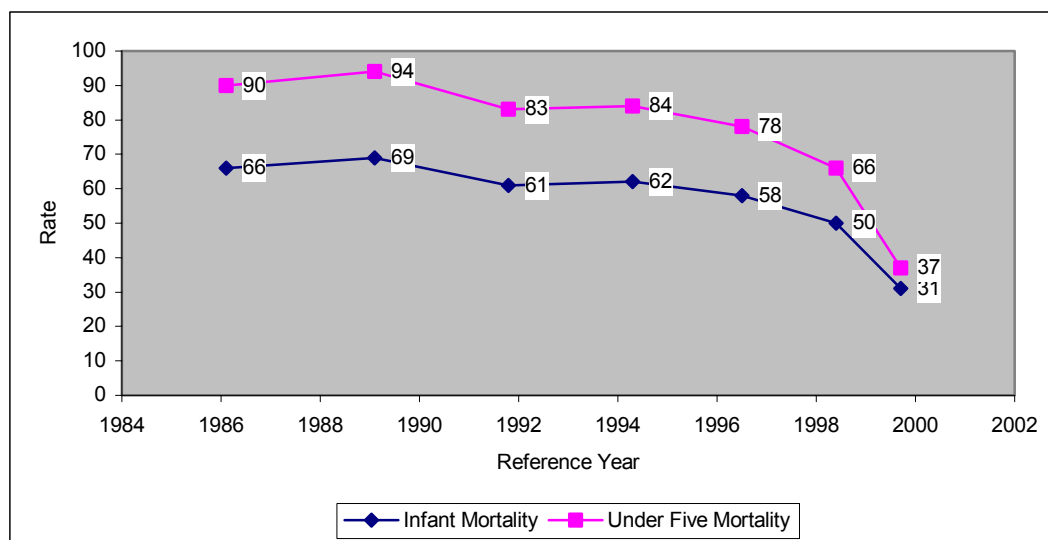
The data used in the estimation are: average parity (mean number of children ever born) for five year age groups of women from age 15-19 to 45-49, and the proportion of these children who are dead, also for five year age groups of women. The method derives estimates of probabilities of dying between birth and different ages in childhood from the proportions of children who died to women in the various age groups. The technique takes account of both the mortality risks to which children are exposed and their length of exposure to the risk of dying.

The data used for mortality estimation are shown in Table 7. Average parity follows the expected pattern of rising gradually from 0.16 among 15-19 year old women to 4.2 children among women aged 45-49 years. This suggests that the quality of the data was fairly good. The United Nations QFIVE program was used to execute the various stages in the estimation of child mortality for Guyana. The program applied the Trussell version of the Brass method, which incorporates the use of the Coale-Demeny regional model life-tables in the simulation of child mortality patterns. From the Coale-Demeny model life-tables, the “West” model was selected for use in the estimation of child mortality, since it is believed to represent a regime of mortality, which is similar to the pattern of child mortality in Guyana.

In Figure 2, estimates of infant mortality and under-5 mortality are plotted for different reference periods. Trends seem to indicate a general slow decline in infant and under-5 mortality. To obtain plausible estimates of infant and under-5 mortality the estimates for reference years 1996.5 and 1998.5, which represent the reported information of women aged 20-24 and 25-29 were averaged to give an estimated IMR of 54 per 1000 and under-5 mortality of 72 per thousand (Table 8). The reference period was taken as 1997.5, being the average also of the corresponding two periods. Usually estimates of IMR and under-5 mortality as represented by information for the youngest age group of 15-19 years old mothers (reference year 1999.8) and to a lesser extent the next higher age group of mothers, 20-24 years old (reference year 1998.5) are ignored because of their known unreliability. However, since the estimates up to the year 1998.5 show a general slow but downwards trend, it was also included in the estimate. The alternative would have been to use the estimates for the age group 25-29 (reference year 1996.5). This would have however, pushed the reference date back somewhat and ignore the obvious continued slightly decreasing trend. The method assumes that the child mortality experience of children born to mothers who had died or migrated were not dissimilar to the mothers who were interviewed.

The measurement of infant and under-5 mortality, using vital registration data in Guyana has produced quite different results. For 1997, the same reference year as the estimates from Guyana MICS, Infant Mortality was calculated at 25.5 per 1000 live births and under-5 mortality at 31.8 per 1000. This underscores the perception that the reported levels of infant mortality derived from civil registration data was too low because of the under-registration of infant deaths and inadequacies of the administrative and institutional arrangements of the current vital registration system.

Figure 2: Estimates of infant and under five mortality based on indirect estimation, Country, Year



B. Education

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 World Summit for Children. Education is a vital prerequisite for combating poverty, empowering women, protecting children from hazardous and exploitative labor and sexual exploitation and promoting human rights and democracy.

Early childhood education

Overall, 35 percent of children aged 36-59 months attended some form of organized early childhood education programme, such as kindergarten or community childcare with organized learning activities (Table 9). Approximately similar proportions of girls and boys attended these programmes. Within the coastal areas, there were large variations in the proportions attending from urban and rural areas. In coastal urban areas almost half of the children (48 percent) attended while in the coastal rural, only 29 percent attended. Given that there is supposedly greater physical access in coastal rural areas relative to interior locations, it is somewhat surprising that higher proportions attended in the interior (35 percent) compared with the coastal rural areas.

The enrolment rate for 1997 using data on nursery school enrolment from the Ministry of Education (MOE) and population projections, at 86.7% (Guyana Statistical Bulletin Vol.10, No.4, December 2000) was almost 2½ times higher than the attendance rate indicated by the Guyana MICS. Data from the two sources however are not strictly comparable. In MICS the age group 36-59 months (3-5 years) was used while in the case of the MOE's data the age group 4-5 years was used.

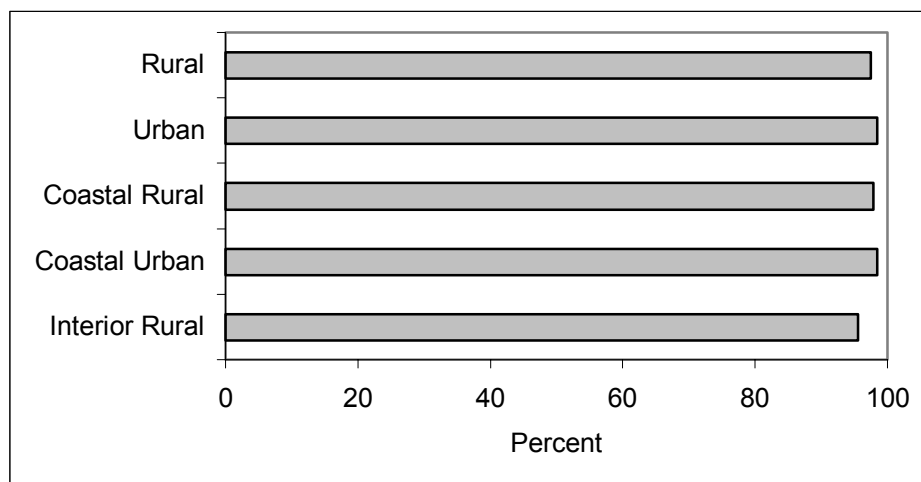
Also, the MOE's data is comprised of children enrolled in the formal school system, as opposed to the MICS, which includes children from any organized early childhood education programme, some of which operate outside of the formal education system. Moreover, MOE's nursery enrolment could be somewhat overstated, given that the denominator that goes into the calculation comes from population projections, which could be slightly flawed because of unsubstantiated assumptions.

Table 9 also shows that 54 percent of the older children, 48-59 months old attended early childhood education programmes. Although this age coincides with the official age for nursery school attendance, the difference compared with the official nursery enrolment rate is still too great and may be accounted for by the explanation already given. The education level of mother appears to be strongly related to the likelihood that a child will attend an organized early childhood education programme. The Table shows that children with mothers who had secondary and higher education had more than double the proportions attended compared with children of mothers with no formal education. These proportions were 35 percent and 16 percent, respectively. Children with mothers who had a non-standard curriculum type education had even higher proportions attended (43 percent).

Basic Education

Table 10 indicates that generally there was a high level of attendance at the level of primary schools in Guyana. Overall, 98 percent of children of primary school age are shown as having attended school with there being hardly any differences in attendance rates for boys and girls. In the Interior, the attendance rate of 96 percent was slightly lower than that on the Coast where attendance was 98 percent each in urban and rural areas (see Fig.3). The Table also shows that there were no major differences in attendance by age at the national level.

Figure 3: Percentage of Children of Primary School Age Attending Primary school, Guyana, 2000



High attendance rates, between 97 percent and 99 percent were maintained throughout the age range, 6-11 years. Primary enrolment data from the Ministry of education, which shows overall net primary enrolment rates at 94.7 and 96.6 for 1997 and 1998 respectively, is comparable to the high overall attendance level indicated by the Guyana MICS.

In Table 11, the proportion of children who eventually reach grade 5, from those who enter grade 1, is shown for the various geographic sub-divisions. Overall, 97 percent of children who enter the first grade of primary school eventually reached grade five. The Table also shows that the relative high proportions reaching grade 5 were maintained for the interior and coastal regions, as well as urban and rural areas. There was also no disparity between boys and girls in the proportions reaching grade 5.

C. Water and Sanitation

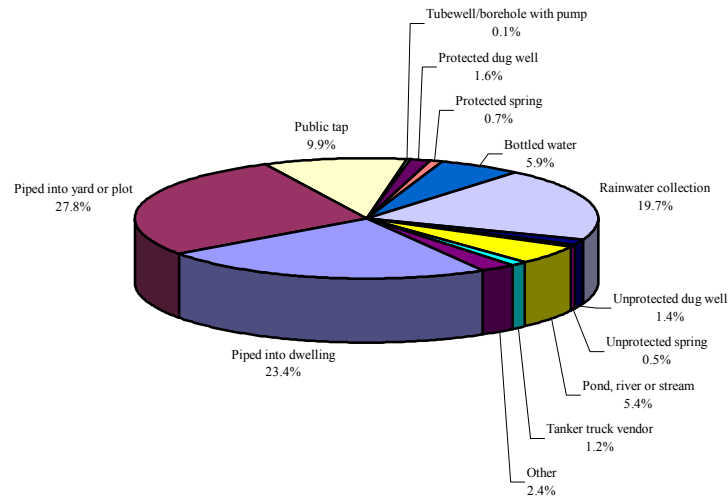
Use of Drinking Water

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, particularly in rural areas, who bear the primary responsibility for carrying water, often for long distances. The information presented in Table 13, refers to access to improved sources of drinking water, rather than the quality of drinking water. The Table shows that just over half of the population (51 percent) used drinking water that was either piped into their dwelling or piped into their yard or plot. Of this amount, only 23 percent had water piped into their dwellings. Rainwater collection (20 percent) was also a significant source of drinking water.

Overall, 83 percent of the population had access to improved sources of drinking water. The Interior (44 percent) had the lowest proportion while the Coast had comparatively higher proportions (urban coast 83 percent and rural coast 89 percent). The higher proportion with access to improved drinking water sources in the urban coast relative to the rural coast may be explained by the definition of 'improved sources'. In the definition, bottled water is excluded but rainwater is included. The Table shows that higher relative proportions in the urban coast, used bottled water as opposed to rainwater. In the rural coast, the reverse was true, higher proportions used rainwater relative to bottled water. Improved drinking water sources include the following: *piped into dwelling, piped into yard or plot, public tap, tube-well/borehole with pump, protected dug-well, protected spring and rain water collection*. Figure 4 below shows the distribution of population by sources of drinking water.

The sources of drinking water for the population vary strongly by the urban/rural and interior/coastal areas of the country (Table 13). The overall proportion with drinking water that was either 'piped to dwelling' or 'piped to yard/plot' was 51 percent. There were substantial differences however, between the urban coast (66 percent) and rural coast (50 percent). The Interior had the lowest proportion (10 percent). River or stream (an unsafe source) was a major source of drinking water for the Interior at 34 percent) along with rainwater collection (25 percent). In rural coastal areas, rainwater collection (25 percent) was also a major source.

Figure 4: Percent Distribution of Population by Sources of Drinking Water, Guyana 2000



Use of sanitation

Inadequate disposal of human excreta and personal hygiene is associated with a range of diseases including diarrheal diseases and typhoid fever. *Sanitary means of excreta disposal* include: flush toilets connected to sewage systems or septic tanks, improved pit latrines, and traditional pit latrines. Table 14 shows that 98 percent of the population had some sanitary means of excreta disposal. The proportions varied however, from 84 percent in the interior to 99 percent each in the urban coast and rural coast. The ‘traditional pit latrine’ considered a sanitary means of excreta disposal at 60 percent usage was the means most widely used by the population, followed by the ‘flush to sewage system/septic tank’ (36 percent). The most commonly used facility in the interior and rural coast was the pit latrine (approximately 75 percent and 74 percent, respectively) while in the urban coast ‘flushed to sewage system or septic tank’ (71 percent) was more common.

D. Child Malnutrition

Nutritional status

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

In a well-nourished population, there is a standard distribution of height and weight for children under age five. Undernourishment in a population can be gauged by comparing children to this standard distribution. The standard or reference population used here is the NCHS standard, which is recommended for use by UNICEF and the World Health Organization. Each of the three nutritional status indicators are expressed in standard deviation units (z-scores) from the median of this reference population.

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

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

Finally, children whose weight for height is more than two standard deviations below the median of the reference population are classified as *moderately or severely wasted* while those who fall more than three standard deviations below the median are *severely wasted*. Wasting is usually the result of a recent nutritional deficiency. The indicator may exhibit significant seasonal shifts associated with changes in the availability of food or disease prevalence.

In Table 14, children whose weight or height in relation to age, were found to be outside of the range of what was considered plausible (approximately 8 percent), were excluded. In the Table, the proportions that are below minus-2 standard deviations from the mean represent those children that were moderately or severely under-nourished according to the particular index while the proportions below minus-3 standard deviations from the mean represent those that are severely under-nourished. The Table indicates that 14 percent of children under the age of five years in Guyana were underweight for their age, while 3 percent were severely underweight. Eleven (11) percent was stunted or too short for their age and as in the case of the previous measure, 3 percent were also severely stunted. The Table also shows that 11 percent were too thin for their height or wasted and approximately 3 percent were severely wasted. The data also indicates that boys were more likely to be undernourished than girls, based on all three measures of assessment.

The data set out in the table below represents comparable information taken from the 1997 Guyana Micro-nutrient Survey. Comparisons with the data from the Guyana MICS 2000 (Table 14) indicate that there are striking similarities in the levels and pattern of under-nourishment of children. The measures of weight for age, height for age and weight for height all indicate comparable levels of under-nourishment among children. Taken together then, the Tables indicate that there were no discernable improvements in the nutritional status of children between 1997 and 2000.

The overall levels of under-nutrition in the population of children under 5-years in Guyana, as indicated by both the Guyana MICS (2000) and the Micro-nutrient Survey (1997) is considered to be somewhat high compared with the levels found in other commonwealth Caribbean countries. The concomitant negative effects such as susceptibility to infectious diseases, higher child mortality and delayed mental development are therefore presumed to be among the factors at play which affect the health and well being of children in the society.

Proportion of children (0-5) years who were severely or moderately undernourished Guyana (1997)

	Weight for Age		Height for Age		Weight for Height	
	% Below -2 SD	% Below -3 SD	% Below -2 SD	% Below -3 SD	% Below -2 SD	% Below -3 SD
Male	12.2	2.6	12.8	4.5	10.9	.0
Female	11.4	2.3	6.8	2.3	12.1	1.5
Total	11.8	2.4	10.1	3.5	11.5	.7

Source: Guyana Micro-nutrient Survey 1997

Table 14 also shows that children from the rural coast were more likely to be underweight and wasted, compared with children from the urban coast and the Interior. In contrast, children from the Interior were more likely to be stunted compared with children from other areas. The relationship between the nutrition status of children and education of mothers, suggests that children born to mothers with no formal education were more likely to be moderately or severely undernourished according to all three indices when compared with children born to mothers whose highest level of education was secondary and higher or non standard curriculum. The age pattern shows that children at the younger age groups (< 6months and 6-11 months) were the least likely to be malnourished and this holds true for all three indices of undernourishment. This pattern may be due to the age at which many children cease to be breastfed and are exposed to micro-nutrient malnutrition, contaminated water and other adverse environmental factors affecting their health.

Breastfeeding

Breastfeeding is economical and safe. It also protects children during the first months of life, from infection as well as provides an ideal source of nutrients. However, many mothers stop breastfeeding too soon, and there are often pressures to switch to infant formula, which can contribute to growth faltering and micronutrient malnutrition and is unsafe if clean water is not readily available. The World Summit for Children goal states that children should be exclusively breastfed for four to six months, that breastfeeding should be complemented with appropriate foods from the age of around six months, and that children continue to be breastfed for two or more years.

In Table 15, breastfeeding status is based on women’s reports of children’s consumption in the 24 hours prior to the interview. *Exclusive breastfeeding* refers to children who receive only breast milk and vitamins, mineral supplements, or medicine. *Complementary feeding* refers to children who receive breast milk and solid or semi-solid food.

The last two columns of the table include children who continued to breastfeed at one and at two years of age. Percentages according to urban/rural and interior/coastal divisions of the country are also shown.

Approximately 15 percent of children aged less than four months were exclusively breastfed, a level considerably lower than recommended. At age 6-9 months, approximately 42 percent of children received timely complementary feeding. By age 12-15 months and 20-23 months 50 percent and 31 percent of children respectively, were still being breastfed. In a breast-feeding survey (1999)¹ it was found that for the corresponding age groups, 22 percent of children in Guyana were exclusively breast-fed while 63 percent had timely complementary feeding. Sixty (60) percent and 39 percent of children 12-15 and 20-23 months respectively continued to breastfeed.

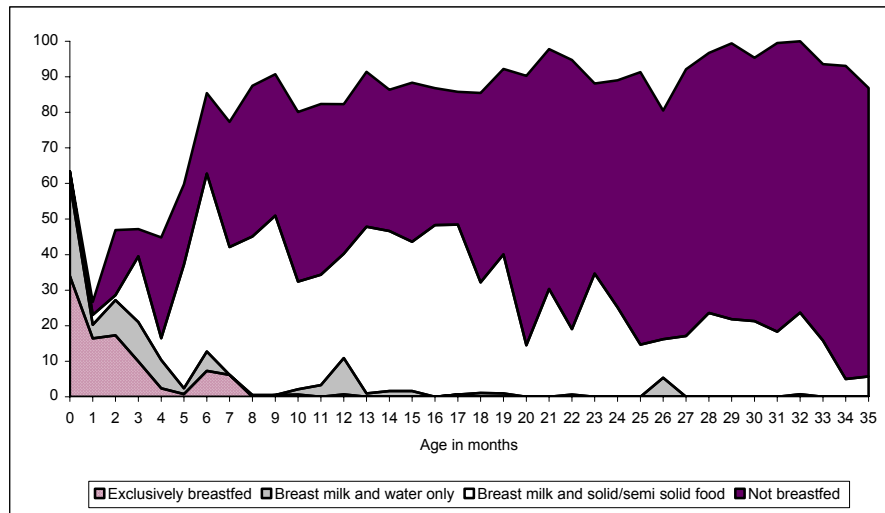
The higher rates found in the breastfeeding survey and which are still considered to be low by recommended standards, may be explained by the fact that respondents were selected from mothers who were still attending Health Clinics at the time of the interview. The expectation therefore is that breastfeeding rates among that group would be higher compared with the more nationally representative group of mothers in MICS. Notwithstanding the differences, which are not considered to be large, the patterns of breastfeeding among women from both data sources are quite similar. Timely complementary rates were higher than exclusive rates with continued rate for the 12-15 months old leveling off or increasing slightly. This suggest in both studies that children who still breastfed by age 6-months were very likely to have continued breastfeeding right on to the first year of life. Thereafter continued breastfeeding declined.

Table 15 also shows that the Interior had the highest rates of breastfeeding compared with urban coast and rural coast and for all the categories of breastfeeding; exclusive, complementary and continued. In comparing urban coast and rural coast it can be seen that the urban coast had higher rates of exclusive and timely complementary breastfeeding. However, the rural coast had higher rates of continued breastfeeding.

Figure 5 (stacked area graph) shows the detailed pattern of breastfeeding status by the child's age in months. Even at the earliest ages, children were not being exclusively breastfed. At age < 1 month, only 34 percent of the children were being exclusively breastfed. This proportion declined to almost 10 percent by age 3-months old. Approximately 26 percent of children aged < 1 month, as shown by the graph were fed breast-milk and water only while 37 percent (not shown in graph) were fed breast-milk and other liquids. Fig.3 also indicates that from as early as age 4 months old over 20 percent of children were not breastfeeding. These proportions increased steadily with age reaching about 40 percent by age 12 months. The data clearly indicates that generally complementary and continued breastfeeding rates were perhaps at acceptable levels. The exclusive rate for children (0-3) months old was however, too low.

¹ Young Child Feeding In Guyana
Survey conducted by Bureau of Statistics (Guyana)
Report prepared by Caribbean Food & Nutrition Institute (CFNI), March 2000

Figure 5: Percent distribution of living children by breastfeeding status, Guyana, 2000



Low birth weight

Infants who weigh less than 2500 grams (2.5 kg.) at birth are categorized as low birth weight babies. Since some infants are not weighed at birth and those who are weighed may be a biased sample of all births, reported birth weight cannot be used to estimate the prevalence of low birth-weight among all children. Therefore, the percentage of births weighing below 2500 grams was estimated from two items in the questionnaire. The items used were 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. Seventy-nine (79) percent of births in the Guyana MICS were weighed at birth.

First, both the total number of weighed births and the number of weighed births below 2500g were cross-tabulated separately by the mother's assessment of the child's **size** at birth. These two items of information were then used to obtain the proportion of births in each category of **size** who weighed less than 2500 grams. These proportions were then multiplied by the total number of children falling in the size category to obtain the estimated number of children in each size category who were of low birth weight. The numbers for each size category were summed to obtain the total number of low birth weight children. This number was then divided by the total live births to obtain the percentage with low birth weight.

In Guyana it was found that approximately 11 percent of infants were estimated to weigh less than 2500 grams at birth (Table 16). This percentage is somewhat higher than the average for the Latin America and Caribbean region (9.0%) (UNICEF, 2000).

The Maternal & Child Health Unit, Ministry of Health Guyana, reported that in 1998, 14.8% of infants weighed < 2500 grams at birth. This figure, however, only represented those infants born in public health institutions and accounts for between 90.0% and 95.0% of total births.

According to Table 16, there were no substantial differences between the Interior and Coast. The urban coast had 10 percent, while the rural coast also had 12 percent, as in the case of the Interior. Contrary to expectations, the table also shows that children born to mothers with no formal education had relatively lower proportions (6 percent) with live birth weights below 2500 grams compared with children of mothers with primary and secondary or higher education (approximately 11 percent each).

E. Child Health

Immunization coverage

According to UNICEF and WHO guidelines, a child should receive a BCG vaccination to protect against tuberculosis, three doses of DPT to protect against diphtheria, pertussis, and tetanus, three doses of polio vaccine, and a measles vaccination by the age of 12 months. In MICS, 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. Mothers were also probed to report any vaccinations the child received that did not appear on the card. Overall, 89 percent of children had health cards. If the child did not have a card, the mother was asked whether the child had received each vaccine and in doing so, a short description of each vaccine was read. For DPT and Polio, it was also enquired of the mother, the number of doses the child received.

Table 17 shows the percentage of children aged 12 to 23 months who received each of the vaccinations. The denominator for the table is comprised of children aged 12-23 months so that only children who are old enough to be fully vaccinated are counted. In the top panel, the numerator includes all children who were vaccinated at any time before the survey according to the vaccination card or the mother's report. In the bottom panel, only those who were vaccinated before their first birthday are included. For children without vaccination cards, the proportion of vaccinations given before the first birthday is assumed to be the same as for children with vaccination cards.

Approximately 97 percent of children aged 12-23 months received a BCG vaccination by the age of 12 months and the first dose of DPT was given to 95 percent. The percentage declined for subsequent doses of DPT to 90 percent for the second dose and 86 percent for the third dose (Figure 4). Similarly, 94 percent of children received Polio 1 by age 12 months and this declined to 91 percent and 85 percent for the second and third doses respectively. It should be noted that in the Guyana health system, the vaccine for measles is not administered as a single measles specific vaccine. Protection against measles is provided through the use of the three-in-one vaccine Measles, Mumps and Rubella (MMR), which is usually given to children between the age of 12 and 23 months.

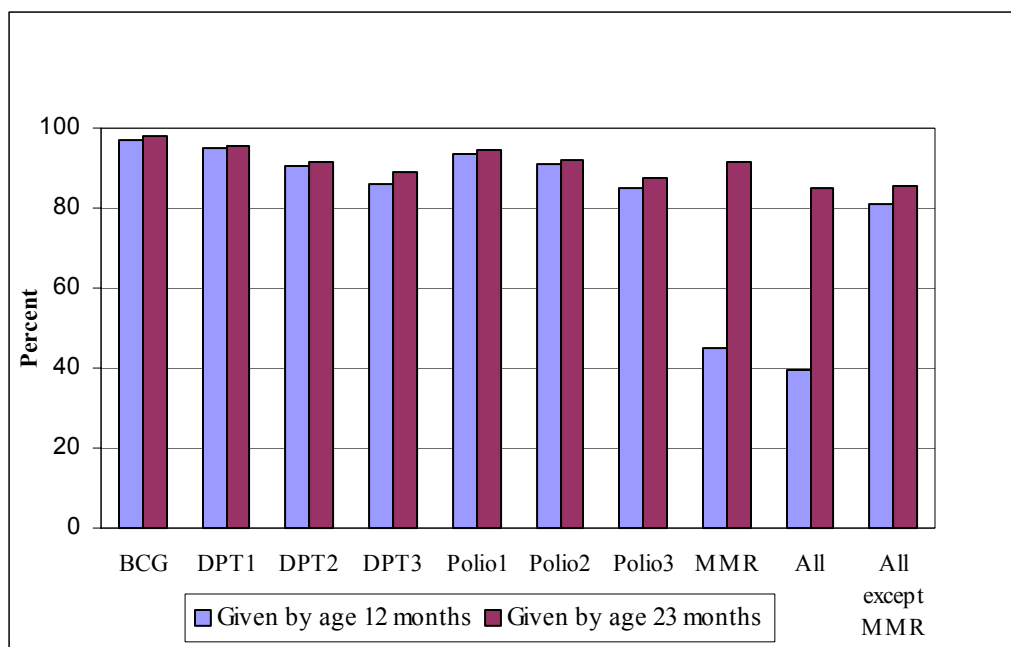
The low coverage rate for measles (45 percent) as shown for children vaccinated by age 12 months is therefore not unexpected given that MMR is not usually given before age 12 months.

The 45 percent shown as having received this vaccine by age 12 months therefore, represents those children who received the vaccine at just under 12 months old or having reached age 12 months were less than 13 months old (age is defined as age last birthday).

In contrast, the upper panel of the table, which shows the proportions vaccinated for each specific vaccine at any age, up to and including age 23 months, indicates that MMR coverage for this group was much higher at 92 percent. The Table also shows that only 39 percent had all the recommended vaccinations by age 12 months. This overall coverage rate by age 12-months is somewhat misleading since it includes MMR, which as previously stated is given between the age of 12-23 months. With the exclusion of MMR the overall coverage rate by age 12 months adjusts to 81 percent. Figure 6, shows a graphical representation of the proportions aged 12-23 months who were immunized by age 12 months, as well as those who were immunized at anytime before the survey (i.e. anytime up to and including age 23 months).

In Table 18, the percentage of children age 12-23 months currently vaccinated against childhood diseases is shown according to urban/rural and interior/coastal divisions of the country but only in relation to children who were vaccinated by the time of the survey, even if they did not occur prior to the age of 12 months. Generally, the rates of vaccination for children aged 12-23 months were fairly high. As in the case of vaccinations by age 12 months old, there appears to be a trend of slightly lower rates for second and third doses of those vaccines requiring three doses (i.e. DPT and Polio). There were, also no meaningful differentials in the vaccination rates of male and female children. The Interior had consistently lower rates of vaccination, particularly in cases of second and third doses vaccines, compared with the urban coast and rural coast which also had higher rates of coverage for children who received all the recommended vaccinations (between 87 percent and 88 percent). The Interior had only 72 percent. In addition, the Interior areas also had the lowest proportion of children with vaccination cards (84 percent).

Figure 6: Percentage of children aged 12-23 months who received immunizations by age 12 months and by age 23 months, Guyana, 2000



A cursory examination of vaccination rates by mother’s education, indicate that vaccination coverage is highest among children whose mothers had secondary or higher education. The differences in rates by mother’s education appear to increase for the second and third doses of DPT and Polio. This suggests that drop out rates are higher among children with less educated mothers.

Diarrhea

Dehydration caused by diarrhea can be a major cause of mortality among children. Home management of diarrhea – either through oral rehydration salts (ORS) or a recommended home fluid (RHF) - can prevent many of these deaths. Preventing dehydration by increasing fluid intake and continuing to feed the child are also important strategies for managing diarrhea.

In the MICS questionnaire, mothers (or caretakers) were asked to report whether their child had diarrhea 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, one in ten children under five years of age had diarrhea in the two weeks preceding the survey (Table 19). Diarrhea prevalence was higher in the Interior (18 percent) compared with the Coast, where the prevalence rates for the rural coast was 10 percent and than of the urban coast, 8 percent. The overall high rates for rural (11 percent), compared with urban (8 percent) is reflective of the relatively high prevalence rate in the Interior which forms part of the rural areas. From the Table, it can be seen that the age at which the prevalence of diarrhea peaks among children under-5 years, is between the age groups 6-23 months. This is probably related to the period during which most children are weaned.

Table 19 also shows the percentage of children receiving various types of recommended liquids during the episode of diarrhea. Since mothers were able to name more than one type of liquid, the percentages do not necessarily add to 100. Approximately one-third of the children under-5 received breast milk during the episode of diarrhea while 68 percent received porridge or gruel and 47 percent were fed other milk or infant formula. In addition, 58 percent of the children were specifically treated for the diarrhea with recommended home fluids (RHF) while 34 percent received ORS. The proportion treated for diarrhea with RHF or ORS was 69 percent.

Children of mothers with secondary education appear to be more likely than other children to receive ORS, other milk or infant formula and water with feeding during the episode of diarrhea. Approximately 94 percent of the children, with diarrhea received one or more of the recommended treatment (i.e., received any of the following: ORS, RHF, breast-milk, other milk or infant formula, porridge/gruel or water along with feeding).

Table 20 shows the proportion of children, under 5-years old with diarrhea during the two weeks prior to the survey by whether increased fluids were taken and if they continued to feed during the episode. Only 14 percent of the children are shown to have taken *more* fluids than usual while 83 percent drank about the *same or less*.

Just over half (56 percent) ate *somewhat less, the same, or more* than usual while approximately 44 percent ate *much less, or none*. Overall, only 7 percent of children with diarrhea received increased fluids and continued eating as recommended.

Table 20 also suggests that there were no differences between boys and girls in the patterns of fluid intake and feeding practices during the episode of diarrhea. Children from the Interior, however, were more likely than those from the urban coast and rural coast to consume *more* liquids than usual when stricken with diarrhea. Interior children also had a relatively higher proportion of children (11 percent) who received increased fluids and continued eating compared with those from the urban areas (9 percent) but more particularly from the rural coast (5 percent). The education of mothers appears to have some influence on the extent to which children consume food and liquids while affected by diarrhea. From the Table it can be seen that children born to mothers with secondary and higher education had higher a proportion who ate about the same or more (56 percent) compared with children born to mothers with no formal education (37 percent). Also all the children who drank more during their illness with diarrhea (14 percent) were born to mothers with secondary education and higher.

Acute respiratory infection

Acute lower respiratory infections, particularly pneumonia, are one of the leading causes of child deaths. In the MICS questionnaire, children with acute respiratory infection are defined as those who had an illness with a cough accompanied by rapid or difficult breathing and whose symptoms were due to a problem in the chest, or both a problem in the chest and a blocked nose, or whose mother did not know the source of the problem. Approximately 5 percent of under-five children had an acute respiratory infection in the two weeks prior to the survey according to these criteria (Table 21). Of these, 61 percent were taken to either a hospital or health center for treatment, while 8 percent and 9 percent respectively, were taken to a community health worker or private physician. Overall, approximately 78 percent of children with ARI were taken to an appropriate health provider (i.e., doctor, community health worker, MCH clinic, hospital, health center, dispensary).

IMCI initiative

The Integrated Management of Childhood Illnesses (IMCI) is a programme developed by UNICEF and WHO that uses a combined strategy for the control and treatment of five major killers of children – acute lower respiratory tract infections, diarrheal dehydration, measles, malaria, and malnutrition. The programme focuses on the improvement of case management skills by health workers, improvement of the health system, and improvement of family and community practices in the prevention and early management of childhood illnesses. Appropriate home management of illness is, therefore, one component of IMCI. The approach teaches mothers that appropriate home management of diarrhea or any other illness requires giving more fluids and continuing to feed sick children as they are normally fed. In June 2001, the first IMCI training scheme to be held in Guyana was launched under the sponsorship of UNICEF, PAHO/WHO and the Ministry of Health. Participants, mainly health personnel from administrative regions across the country were trained in aspects of IMCI with the objective of having the acquired knowledge disseminated among other health providers and mothers/caregivers countrywide.

Table 22 presents information on the drinking and eating behavior of sick children. Almost one-third of the children were reported to have had diarrhea or some other illness in the two weeks preceding the survey. Of these, only 12 percent drank more liquids than usual during the illness and 61 percent continued eating (i.e., ate somewhat less, the same, or more). Overall, only 8 percent of children who were reported as ill received increased fluids and continued eating as recommended under the IMCI programme. While there are no meaningful differences in the eating and drinking patterns of sick children, by sex, the table does indicate that there were some differences by geographical areas within the country.

Among these differences, the proportion of children reported as ill in the interior (48 percent) was higher compared with children from the urban coast (31 percent) and rural coast (32 percent). In addition, a comparatively higher proportion of children from the urban coast drank more liquids during illness (22 percent), compared with those from the rural coast (only 9 percent). Children from the Interior were intermediate at (16 percent). The patterns of eating behavior of sick children were similar across all of the population strata and domains. Sixteen (16) percent of the children from the urban areas are shown in Table 22 as having received increased amounts of liquids and continued feeding during their illness.

While this may be lower than what is recommended, it is considerably higher compared with the corresponding proportions from the Interior (9 percent) and the rural coast (4 percent). The Table also indicates that children of mothers with no formal education were much less likely to receive increased amounts of liquid and continued feeding relative to children whose mothers had secondary and a non-standard curriculum education.

Promoting knowledge among caretakers about when it is appropriate to seek care for sick children is another important component of the IMCI programme. In the Guyana MICS, mothers or caretakers of children were asked to name all of the symptoms that would cause them to take a child to a health facility right away. The most common response, as given by 65 percent of mothers, was that they would take their child to a health facility right away if he/she developed a fever (Table 23). The second highest proportion of mothers (33 percent) reported that the child becoming sicker would cause them to take the child to a health facility while 28 percent mentioned difficulty breathing. Significantly high proportions of mothers, about 20 percent each, cited *fast breathing* and *blood in stool* as reasons for taking a child to a health facility right away. Overall, 48 percent of mothers recognized at least two of the signs that would warrant the taking of the child to a health facility immediately.

Table 23 also shows that there were no appreciable differences among mothers in urban/rural and interior/coastal areas who recognize at least two of the signs for seeking care immediately. Similarly, except for mothers whose level of education corresponded to non-standard curriculum, and who were more likely to know the signs for seeking care immediately, there were hardly any differences among mothers in the other categories of education attainment levels.

Malaria

Malaria contributes to anemia and can be a leading cause of death among children under age five years of age. Preventive measures, especially the use of mosquito nets treated with insecticide, can dramatically reduce malaria rates of infection and malaria related mortality rates among children. In areas where malaria is common, international recommendations suggest treating any fever in children as if it were malaria and immediately giving the child a full course of recommended antimalarial tablets. In Guyana however, this strategy in dealing with suspected cases of malaria in high-risk areas is not widely promoted as an effective preventative measure. Rather, Community Health Workers are trained to do blood smears before treatment is given.

It is also recommended that children with severe malaria symptoms, such as fever or convulsions, should be taken to a health facility. In addition, children recovering from malaria should be given extra liquids and food and should continue breastfeeding. In the Guyana MICS, the Malaria Module of the children's questionnaire was only administered in high-risk malaria areas, which included all the interior regions.

The MICS questionnaire incorporated questions on the use of bednets among children. Table 24 shows that 61 percent of children under the age of five years slept under a bednet the night prior to the survey interview. There is no consistent pattern by age, although children under 6-months had somewhat higher proportions (66 percent) when compared with the older age groups. Only 11 percent of the bed-nets were treated with insecticide.

The data also seems to indicate that children in the youngest age groups (< 6 months and 6-11 months) were less likely to have slept under treated bed-nets than the older children. Intervening factors such as the economic situation of the household may help to further elucidate these findings.

Questions on the prevalence and treatment of fever were asked for all children under age five. Only 4 percent of children under the age of 5 years were ill with fever in the two weeks prior to the MICS (Table 25). There is little variation in the prevalence of fever among children by age groups. The proportions who were ill with fever, ranged only from approximately 3 percent for the 36-47 months old to approximately 5 percent for the 12-23 months old. From the Table, fever is less common among children whose mothers had secondary or higher education compared with children whose mother's education level was none.

In the malaria module, mothers were also asked to report all of the medicines given to children during their illness. These include any medicine given at home as well as medicines given or prescribed at a health facility. Approximately 24 percent of children were given paracetamol while 16 percent did not know what medicine was given. Only 2 percent and < 1 percent were given *chloroquine* and *fansidar*, respectively. Overall, only 3 percent of children under-5 years and who had a fever in the two weeks prior to the survey were given any appropriate anti-malarial drug.

F. HIV/AIDS

AIDS knowledge

One of the most important strategies for reducing the rate of HIV/AIDS infection is the promotion of accurate knowledge of how AIDS is transmitted and how to prevent transmission. Table 26 shows that among women aged 15-49 years in Guyana, 97 percent had ever heard of AIDS. This percentage ranged from a high in urban areas (almost 100 percent) to percentages which are somewhat lower in the rural coast (97 percent) and the Interior (85 percent). There are hardly any differences among women by age, in the proportions which had ever heard of AIDS. Moreover, women with no formal education were the least likely to have heard of AIDS compared with women in the other education categories.

Women in the MICS were read several statements about means of HIV/AIDS transmission and asked to state whether they believed the statements were true. Seventy-four percent (74 percent) believed that having only one uninfected sex partner could prevent HIV transmission. Sixty-seven (67) percent believed that using a condom every time one has sex could prevent HIV transmission, while 58 percent was in agreement that abstaining from sex prevents HIV transmission. Overall, 43 percent knew all three ways and 83 percent were aware of at least one of the means of preventing transmission. Seventeen (17) percent did not know any of the three ways of preventing HIV transmission.

Accurate knowledge of the means of HIV/AIDS transmission was substantially less among women in the Interior than among other women. Also, education appears to be a very important factor in AIDS knowledge.

The proportion of women whose level of education was none, and who knew all three means of preventing transmission was almost half of the corresponding proportion for women with secondary or higher education. Women with no formal education also had the largest proportions (56 percent) who didn't know any of the three ways of HIV transmission. Primary and secondary educated women accounted for 30 percent and 14 percent, respectively. Differences across age groups were negligible.

Seventy-four (74) percent of women correctly stated that AIDS could not be transmitted by supernatural means, whereas 52 percent stated that AIDS couldn't be spread by mosquito bites. In addition, 85 percent of women believed that a healthy looking person could be infected (Table 27). Overall, 45 percent of women correctly identified all three misconceptions. Women in the Interior were the least likely to have correctly identified all three misconceptions about AIDS transmission while women from the Coast, particularly the urban coast, were the most likely to have correctly identified all three misconceptions. Again, education is shown to be an important factor in women's knowledge of AIDS. For women with no formal education, the proportion knowing all three misconceptions was a low of 16 percent. This compares unfavourably with primary educated women (31 percent) and the secondary educated (49 percent).

In Table 28, 84 percent of women in Guyana is shown as having knowledge that AIDS can be transmitted from mother to child. When asked specifically about the mechanisms through which mother to child transmission can take place, 79 percent reported that transmission during pregnancy was possible and 57 percent knew about the possibility of transmission at delivery. In addition, 58 percent agreed that AIDS could be transmitted through breast milk. Overall, slightly more than 40 percent of women had knowledge of all three modes of transmission. Except for the Interior, which had a comparatively low proportion of women who knew all three ways of transmission (30 percent), there was not much variation by strata. The urban coast and rural coast had 44 percent and 43 percent respectively. Women with no formal education also exhibited fewer proportions with knowledge of all three ways compared with those in the higher education categories.

The MICS survey also attempted to measure discriminatory attitudes towards people living with HIV/AIDS. Towards this end, respondents were asked whether they agreed with two questions. The first asked whether a teacher who has the AIDS virus but is not sick should be allowed to continue teaching in school. The second question asked whether the respondent would buy food from a shopkeeper or food seller who the respondent knew to be infected with AIDS. The results are presented in Table 29. Just over one third of the respondents (37 percent) believed that a teacher with HIV/AIDS should not be allowed to work. This proportion was highest in the coastal urban areas (51 percent) and lowest in the Interior (26 percent).

The Table also shows that overall 11 percent of women would not buy food from a person infected with AIDS. This measure however, shows a different pattern by urban/rural and interior/coastal areas than the first question. Women in the Interior were now among the most discriminatory (14 percent), second only to coastal urban women (15 percent), while women in the coastal rural areas (8 percent) were the least discriminatory. Overall, 61 percent of women agreed with neither discriminatory statement. These proportions were lowest in coastal urban areas (47 percent) and approximately the same (68 percent to 69 percent) in the coastal rural and interior areas.

The Table clearly shows that there is nexus between levels education and discriminatory attitudes towards AIDS. In the case of both discriminatory statements, women with secondary or higher education were the least likely to be in agreement than those with no formal education. Only 57 percent agreed with neither discriminatory statement among the secondary or higher educated, compared with 90 percent and 75 percent among the none and primary education categories, respectively.

Table 30 summarizes information from two previous tables on AIDS knowledge (Tables 28 and 29). The second column shows the percentage of women who knew all three means of preventing HIV transmission (having one faithful uninfected partner, using a condom every time, and abstaining from sex). Forty-three percent (43 percent) of women knew all three ways. The third column of the table shows the percentage of women who correctly identified all three misconceptions about HIV transmission (that HIV can be transmitted through supernatural means, that it can be transmitted through mosquito bites, and that a healthy looking person cannot be infected). Forty-five percent (45 percent) of women correctly identified these misconceptions. Finally, the fourth column of the table shows the percentage of women who have ‘sufficient knowledge’ of HIV/AIDS transmission. These are women who knew all three ways of preventing HIV transmission and correctly identified all three misconceptions. Only 24 percent of women aged 15-49 fell into this category.

Figure 7: Percentage of women aged 15-49 who have sufficient knowledge of HIV/AIDS transmission by level of education, Country, Year

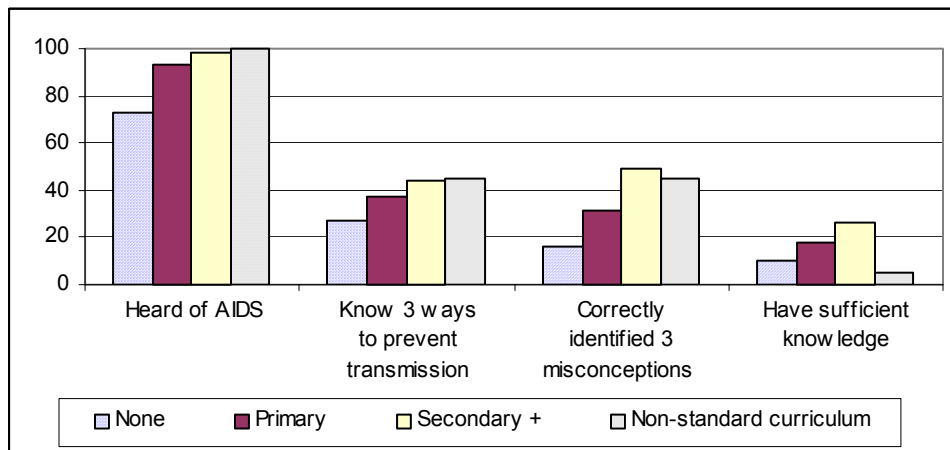


Table 30 also shows that knowledge of HIV/AIDS transmission varies by level of education (see Figure 7). Women with secondary or higher and non-standard education curriculum education were one and a half times more likely to know all three ways of preventing transmission compared with women with no education. They were also three times more likely to correctly identify all three misconceptions about AIDS. In terms of sufficiency of knowledge of HIV/AIDS transmission, women with secondary or higher education were more than two and a half times more likely to have sufficient knowledge, compared with women with no formal education.

AIDS testing

Voluntary testing for AIDS, accompanied by counseling, allows those infected to seek health care and to prevent the infection of others. Testing is particularly important for pregnant women who can then take steps to prevent infecting their babies. The indicators shown in Table 31 are designed to monitor whether women are aware of places to get tested for HIV/AIDS, the extent to which they have been tested, and the extent to which those tested have been told the result of the test. In some places, a relatively large proportion of people who are tested do not return to get their results due to fear of having the disease, fear that their privacy will be violated, or other reasons.

From Table 31, 69 percent of women of reproductive age in Guyana knew of a place where they could be tested for AIDS. Women living in coastal urban areas (81 percent) were most likely to know a place, followed by those in the coastal rural (66 percent). Women living in the Interior (40 percent) were the least likely to know of a place for the testing of HIV/AIDS. The table also indicates that there are hardly any differentials among women by age in the proportions, which knew of a place to get tested. There was however, a strong relationship between women's level of education and knowledge of a place for testing. Women with a non standard curriculum and secondary or higher education were much more likely to have known of a place for testing compared with women whose level of education were none or primary. The proportions with non-standard curriculum and secondary education who knew of a place to get tested were 83 percent and 72 percent, respectively. The corresponding proportion for women with no formal education was only 39 percent, while primary educated women amounted to 58 percent.

Approximately 16 percent of women 15-49 years had been tested for AIDS. Again, this percentage is highest in the coastal urban areas (20 percent) and lowest in the Interior (8 percent). Coastal rural was intermediate with 14 percent. Women with no formal education and primary education, as in the case of knowing a place to get tested were again the least likely to have been tested compared with the secondary or higher and the non-standard curriculum educated group. Women in the youngest age group, 15-19 years (8 percent) and those in the oldest age group 45-49 years (12 percent) were the least likely to have been tested.

The overwhelming majority of women who have been tested were told the result (88 percent). However, although high proportions were maintained, there was some variation across interior/coastal residence, age groups, and education levels. Having been tested, women from the Interior were less likely to have been told the result, compared with women on the Coast, particularly the urban coast. Women in the youngest age groups are also shown in the Table to have been less likely to be informed of the result than those in the older age groups.

Also women whose level of education was none were less likely to have been told the result when compared with those who had primary, secondary/higher and non-standard curriculum education.

G. Reproductive Health

Contraception

The practice of family planning can have a positive impact on the health of both women and children by preventing pregnancies that are too early or late, extending the period between births and limiting the number of children. Family planning also helps to limit the number of abortions a woman may otherwise have because of unplanned and unwanted pregnancies. Current use of contraception in MICS refers to women aged 15-49 years who were either married or in a union and who were using (or whose partner was using) a contraceptive method. Although currently pregnant women were not asked about their contraceptive use, they were included in the denominator of the contraceptive prevalence rates. The MICS questionnaire allowed respondents to name more than one method. Whenever this occurred, the method used in the analysis was the first method appearing in the list of categories for the variable. Suppliers of contraceptives in Guyana reported that there were intermittent periods of shortages leading up to the Guyana MICS. The extent to which this may have influenced the reported usage in MICS is unknown.

Table 32 shows that 37 percent of women who were either married or in a union used a contraceptive method (including traditional methods). The remainder (63 percent) did not use any contraception. The most common method used was the pill (11 percent) followed by the condom (9 percent) and IUDs (6 percent). The traditional methods, LAM (lactational amenorrhoea), periodic abstinence, withdrawal and others, amounted to only less than 1 percent each. Overall, the proportion using any modern method was 36 percent, while those who used any traditional method was only amounted to 1 percent.

Contraceptive use was the least prevalent among women from the Interior (29 percent) compared with women from the urban coast (37 percent) and rural coast (38 percent). Similar proportions of women used the pill in all the geographic divisions (approximately 11 percent) but injections enjoyed wider use among women in the Interior, in comparison with the Coast. Condoms however, enjoyed greater use among women from the Coast, particularly in the urban coastal areas, relative to women in the Interior. The Table also indicates that women in the youngest age group (<20 years) were the least likely to have used any contraceptive method when compared with older women (20-24 and 25-49 years).

From the Table, women's education level is shown to be associated with contraceptive prevalence. Women with non-standard curriculum and no formal education were also the least likely to have used any method of contraception. The Table also shows that women with non-standard curriculum and secondary education were more likely to use the pill while women whose education level was none were more likely to use the IUD (inter-uterine device) and injections. Relatively high proportions of women with secondary education also used condoms (10 percent).

Prenatal care

Quality prenatal care can contribute to the prevention of maternal mortality by detecting and managing potential complications and risk factors, including pre-eclampsia, anemia, and sexually transmitted diseases. Antenatal care also provides opportunities for women to learn the danger signs of pregnancy and delivery, to be immunized against tetanus, to learn about infant care, and be treated for existing conditions, such as malaria and anemia.

Tetanus toxoid injections are given to women during pregnancy to protect infants from neonatal tetanus, a major cause of infant death that is due primarily to in-sanitary conditions during childbirth. Two doses of tetanus toxoid during pregnancy offer full protection. However, if a woman was vaccinated during a previous pregnancy, she may only need a booster to give full protection. Five doses are believed to provide lifetime protection.

Table 33 shows that 62 percent of women with recent births in Guyana were protected against neonatal tetanus. The majority of these women received two or more doses of tetanus toxoid within the last three years. Just about 1 percent received at least 3 doses within the last 10 years. The Table also shows that the rates of protection from neonatal tetanus among women were no different between urban/rural or interior/coastal areas. The rates for women by level of educational attainment were also quite similar.

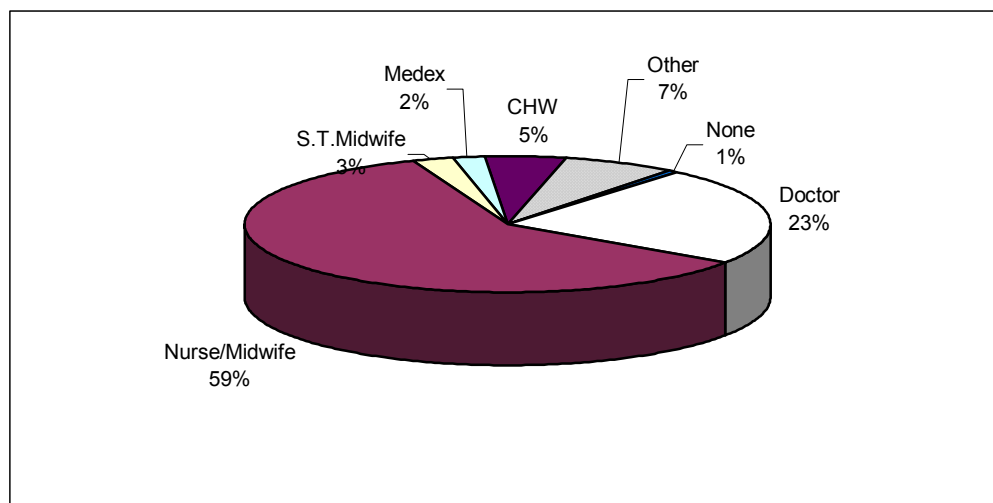
Female respondents who had a birth in the year prior to the Guyana MICS were asked whether they had received antenatal care for the birth and, if so, what type of person provided the care. If the woman saw more than one type of provider, all were recorded in the questionnaire. Table 34 presents the percent distribution of women with a birth in the year prior to the MICS by the type of personnel who delivered antenatal care. If more than one provider was mentioned by the respondent, she is categorized as having seen the most skilled person mentioned.

A high proportion of all women in Guyana (81 percent) received antenatal care from some skilled personnel (i.e. doctor, nurse/midwife, single trained midwife or medex). The largest proportion of women with a birth in the year prior to the survey received antenatal care from a doctor (42 percent). The second largest group (39 percent) received care from a nurse/midwife. There is a significant amount of disparity in the rates of care by skilled personnel, with the Interior exhibiting the lowest rate at approximately 48 percent compared with the coastal urban which was highest at 90 percent and coastal rural (85 percent). The Table also indicates that the education attainment level of the woman was also a significant factor in determining the likelihood of the provider of antenatal care being any skilled personnel. Women with secondary and higher education had larger proportions (83 percent) attended by skilled personnel. For women with primary and no formal education, the proportions were 77 percent and 55 percent, respectively.

Women in coastal urban areas (50 percent) were most likely to have seen a doctor for antenatal care, while women from the Interior were the least likely (15 percent). In the Interior, women were most likely to have seen a nurse/midwife for antenatal care. Women for whom the professional skill of the person delivering antenatal care was ill-defined and ascribed to the category of *other/missing* also accounts for a relatively large proportion of women in the Interior (30 percent).

Women with secondary or higher education were more likely to have their antenatal care delivered by a doctor (46 percent) compared with women whose level of education was primary (30 percent) and none (7 percent). In Figure 8, the percent distribution of women with a birth in the last year prior to MICS is represented by a pie chart.

Figure 8: Percent distribution of women with a birth in the last year by type of personnel delivering antenatal care, Guyana, 2000



Assistance at delivery

The provision of delivery assistance by trained attendants can greatly improve outcomes for mothers and children by the use of technically appropriate procedures, and accurate and speedy diagnosis and treatment of complications. *Skilled assistance at delivery* is defined as assistance provided by a doctor, nurse/midwife, single trained midwife or Medex.

Approximately 86 percent of births occurring in the year prior to the MICS, were delivered by skilled personnel (Table 35). This percentage is highest in the coastal urban areas, where all the births (100 percent), were attended by skilled personnel. The Interior had the lowest proportion of births attended by skilled personnel (43 percent) while the coastal rural was intermediate with 90 percent. The Table also shows that the more educated women were more likely to have delivered with the assistance of a skilled person compared with those of lesser education. Overall, 23 percent of the deliveries made during the year prior to MICS, were assisted by a doctor. However, the proportion accounted for by doctors in the Interior was only 7 percent.

H. Child Rights

Birth registration

The International Convention on the Rights of the Child states that every child has the right to a name and a nationality and the right to protection from being deprived of his or her identity. Birth registration is a fundamental means of securing these rights for children. Table 36 shows that the births of approximately 97 percent of children under five years of age in Guyana, had been registered. The proportions of children registered, show some variation by age of children and mother's education. At age < 6 months the proportion registered (89 percent) is somewhat lower than that of the higher age groups. This suggests that some birth registrations take place after children attain the age of 6-months. Also, children born to mothers whose highest level of education was 'none' had a lower proportion registered (81 percent) compared with children whose mothers had higher levels of education attainment. There were no differences in the proportions registered by sex of the children.

Children in the Interior of the Guyana had lower proportions registered (86 percent) compared with the urban coast (99 percent) and rural coast (98 percent). Among the births not registered in the Interior, the main reasons were unknown because of *DK/Missing* (7 percent) and *Other* (3 percent). Travel distance and costs combined accounted for another 3 percent.

Orphanhood and Living Arrangements of Children

Children who are orphaned or living away from their parents may be at increased risk of impoverishment, discrimination, denial of rights to inheritance and various forms of abuse, neglect, and exploitation of their labor or sexuality. Monitoring the level of orphanhood and the living arrangements of children assists in identifying those who may be at risk and in tracking changes over time.

In Guyana, 65 percent of children aged 0-14 years were found to be living with both parents (Table 37) while 8 percent lived with neither biological parent. Children living with mothers only, amounted to 23 percent but of this 23 percent, the overwhelming majority (21 percent) had fathers who were alive. On the other hand, only 7 percent lived with fathers only and for 5 percent of this 7 percent, their mothers were dead. Approximately 7 percent were living with neither parent although both parents were alive.

The situation of children in the urban coast was markedly different from those in the interior and rural coast. Less than half of children (47 percent) who resided in the urban coast lived with both biological parents. In the Interior and the rural coast, the comparable proportions (77 percent and 71 percent respectively) were much higher. In the urban coast 32 percent of children aged 0-14 years lived with their mothers only, although their fathers were alive. The comparative proportions for the interior and rural coast were only 14 percent and 17 percent respectively. Again we see in the proportions not living with a biological parent that the urban coast (11 percent) had higher relative proportions followed by the rural coast (8 percent) and the Interior, only 5 percent.

The Table also shows that the older children (5-14 years) were the ones that were the most likely not to be living with a biological parent. These indicators expose the greater vulnerability of children in the coastal urban areas relative to the Interior and coastal rural areas and may partly be the result of the consequences of rural-urban migration.

Child Labor

It is important to monitor the extent to which children work and the type of work in which they participate for several reasons. Children who are working are less likely to attend school and more likely to drop out. This pattern can result in children being disadvantaged and entrapped in a cycle of poverty. Working conditions for children are often unregulated with few safeguards against potential abuse. In addition, many types of work are intrinsically hazardous and carry grave risks to children's health, such as exposure to pesticides in agricultural work and the carrying heavy loads.

In Guyana, 27 percent of children aged 0-14 years were classified as currently working (Table 38). Children classified as currently working in the Guyana MICS are defined as those who had done any 'paid or unpaid work for a non-household member or who did 4 or more hours of housekeeping chores per day or who did other family work'. Overall boys had slightly higher proportions 'currently working' (29 percent) relative to girls (25 percent). The Interior had almost twice the proportion of 'currently working children' (45 percent) compared with the urban coast (22 percent) and the rural coast (26 percent).

Table 38 also shows that while only 2 percent of children were engaged in paid work over six times as many (13 percent) participated in unpaid work for someone who was not a household member. In addition, 16 percent did other family work (farm or business). Domestic work as used in the MICS is defined as 'cooking, shopping, cleaning, washing clothes, fetching water, and caring for children'. Only 1 percent of children performed these tasks for more than four hours a day.

Children from the Interior had a lower proportion engaged in unpaid work (9 percent) compared with the Coast where approximately 13 percent of children in both the urban and rural coast were engaged in unpaid work. Interior children however, had higher proportions (39 percent) engaged in work on a family farm or business relative to the urban coast and the rural coast, which amounted to 11 percent and 14 percent respectively. Older children (10-14 years) were more likely to be 'currently working' than younger children (5-9 years), and this was also true for all categories making up the group 'currently working'.

Appendix A: Sample Design

Design of the Sample

One of the principal objectives in the measurement of indicators for the purposes of the Guyana 2000 MICS was to provide reliable estimates at the national level, as well as for urban and rural areas separately and for the two major geographic areas of the country defined as coastal and interior. A sample of 4800 households was considered large enough to accomplish these various measurement objectives. The Population and Housing Census of 1991 was used as the sampling frame. Although the sampling frame is 9-years old, parts of the frame were constantly being updated as a prerequisite for household type surveys during the post census period

The basic design of the sample followed a 2-stage stratified systematic selection process. At the first stage of selection, enumeration districts (Eds) were used as the primary sampling units (PSUs). These were selected using the principle of probability proportionate to size (pps). The Eds selected in this manner were then subjected to a listing of households in a field operation before they were used as the sampling frame for the second stage selection of households. From this updated listing of households in the selected Eds a fixed number of households in each ED was then selected for interview.

It is a well known axiom in sample design strategy, that the greater the number of clusters and the smaller the cluster size, the more reliable the sample. Spreading the sample over a larger number of clusters, however, has implications for increased travel costs. A balance had to be found therefore, between reasonable travel costs and improved sample reliability. The recommendation of the UNICEF/TACRO sampling consultant was adhered to and a cluster size of 24 with the corresponding number of PSUs being 200 was used for purposes of the Guyana 2000 MICS.

The need to provide separate estimates for the interior, coast, urban and rural areas, dictated the use of disproportional allocation as a sample strategy since some domains, particularly the Interior would have yielded too few households to provide reliable data. As a result, the interior as an area was over-sampled. The first row of Table A1: shows the distribution of clusters by strata and domains if proportionate sampling was to be used. The second row of the Table shows the selection of clusters (disproportionate sampling) that was actually used.

Table A1: Distribution of Sample Enumeration Districts (Eds)

Allocation	Interior	Coast	Urban	Rural	Total	Households
Proportionate	20	180	67	133	200	4800
Disproportionate	60	140	50	150	200	4800

Sample Selection

As part of the selection process the Eds were arranged by administrative regions into the two main strata (interior and coast). Thereafter, within regions the Eds were further arranged into urban and rural areas. EDs or PSUs were then selected in a systematic manner using a random start, with the probability of selection being proportionate to size (pps).

This was accomplished using the appropriate sampling interval which was derived by dividing the population total of all the Eds in the strata by the number of Eds to be selected in the strata. In this manner, systematic selection provided for the implicit stratification of urban and rural areas. Although 60 Interior Eds were drawn in the sample, only 58 were sampled because of difficulties related to accessibility during the fieldwork phase. While the urban and rural areas are not considered to be separate strata, they are important domains and estimates were also generated for them. In the actual selection process, 49 of the Eds selected were urban and 151 were rural.

At the second stage of selection, from a listing of households within Eds, households were selected systematically using a random start and the appropriate sample interval. The sample interval being determined by the actual number of households listed in the ED divided by the required cluster size (24 households).

Sample Weights

Since the sample was not self-weighting, weights were calculated and applied to the sample estimates so as to ensure a fair degree of representation among the various population strata and domains. The weights applied were the inverses of the probability of the cluster being selected at the first stage sampling times the probability of households being selected at the second stage. Weights derived for households and persons were variable by cluster (ED) since regardless of the varying size of Eds in terms of households, the fixed number of households (24) were selected for each ED.

Appendix B: Guyana MICS Tables

Table 1: Number of households and women, and response rates, Guyana, 2000

	Urban	Rural	Total
Sampled households	1124	3623	4747
Occupied households	1095	3600	4695
Interviewed households	1020	3518	4538
Household response rate	93.2	97.7	96.7
Eligible women	1219	3753	4972
Interviewed women	1170	3631	4801
Women response rate	96.0	96.7	96.6
Children under 5	440	2257	2697
Interviewed children under 5	434	2238	2672
Child response rate	98.6	99.2	99.1

Table 2: Single year age distribution of household population by sex, Guyana, 2000

Age	Male		Female		Age	Male		Female	
	Number	Percent	Number	Percent		Number	Percent	Number	Percent
0	8829	2.5	6676	1.9	37	4682	1.3	5132	1.4
1	8384	2.4	7514	2.1	38	5200	1.5	4713	1.3
2	8546	2.4	7831	2.2	39	4211	1.2	5242	1.5
3	9501	2.7	8977	2.5	40	5120	1.5	6396	1.8
4	8080	2.3	7610	2.1	41	3617	1.0	3440	1.0
5	10534	3.0	9989	2.8	42	4954	1.4	4772	1.3
6	7952	2.3	9811	2.8	43	3512	1.0	4325	1.2
7	9938	2.8	8631	2.4	44	3258	.9	3851	1.1
8	8540	2.4	7923	2.2	45	4285	1.2	3570	1.0
9	7949	2.3	8195	2.3	46	2703	.8	3262	.9
10	7786	2.2	6831	1.9	47	3652	1.0	3681	1.0
11	7446	2.1	7881	2.2	48	2879	.8	3327	.9
12	7420	2.1	7461	2.1	49	3805	1.1	3100	.9
13	8065	2.3	8581	2.4	50	2349	.7	3652	1.0
14	7126	2.0	7221	2.0	51	1906	.5	1698	.5
15	6512	1.9	5990	1.7	52	2843	.8	2286	.6
16	6595	1.9	6588	1.9	53	2420	.7	2311	.7
17	5726	1.6	7151	2.0	54	1454	.4	2190	.6
18	7401	2.1	7067	2.0	55	1484	.4	1815	.5
19	6366	1.8	6730	1.9	56	1317	.4	1101	.3
20	7751	2.2	6478	1.8	57	1420	.4	1811	.5
21	6515	1.9	5655	1.6	58	1167	.3	1257	.4
22	5726	1.6	7353	2.1	59	1285	.4	1571	.4
23	5538	1.6	5507	1.6	60	2267	.6	1494	.4
24	5856	1.7	6290	1.8	61	820	.2	750	.2
25	6074	1.7	6540	1.8	62	938	.3	1181	.3
26	5604	1.6	6035	1.7	63	1268	.4	1445	.4
27	5910	1.7	6986	2.0	64	841	.2	886	.3
28	5827	1.7	5357	1.5	65	1343	.4	1613	.5
29	5828	1.7	6982	2.0	66	973	.3	623	.2
30	6992	2.0	5849	1.7	67	857	.2	746	.2
31	4230	1.2	4767	1.3	68	570	.2	1118	.3
32	5872	1.7	5080	1.4	69	615	.2	1083	.3
33	4308	1.2	4664	1.3	70+	6807	1.9	8271	2.3
34	3851	1.1	4806	1.4	Missing/DK	8249	2.4	7502	2.1
35	4575	1.3	5882	1.7					
36	5530	1.6	4055	1.1	Total	349751	100.0	354157	100.0

Table 3: Percentage of cases with missing information, Guyana, 2000

	Reference population	Percent missing	Number
Level of education	Household members	.0	620198
Year of education	Household members	.0	620089
Number of hours worked	Working children age 5-14	.0	24121
Complete birth date	Women 15-49	.0	186484
Date of last tetanus toxoid injection	Women with a live birth in the last year	.5	3564
Ever been tested for HIV	Women 15-49	.0	180590
Complete birth date	Children under 5	.0	81904
Diarrhoea in last 2 weeks	Children under 5	.0	81904
Weight	Children under 5	4.0	81904
Height	Children under 5	4.3	81904

Table 4: Percent distribution of households by background characteristics, Guyana

	Area		Total
	Urban	Rural	
Interior	.0	10.5	7.1
Coast	100.0	89.5	92.9
Number of HH members			
1	11.9	8.3	9.4
2-3	31.5	30.1	30.5
4-5	35.5	37.9	37.2
6-7	14.9	17.4	16.6
8-9	4.2	4.4	4.4
10+	1.9	1.9	1.9
Total	100.0	100.0	100.0
At least one child age < 15	65.1	70.6	68.8
At least one child age < 5	37.2	41.4	40.1
At least one woman age 15-49	82.4	82.7	82.6
Number	52451	116097	168548
Unweighted	1020	3519	4539

Table 5: Percent distribution of women 15-49 by background characteristics, Guyana, 2000

	Percent	Number	Un-weighted
Interior	7.3	13548	1396
Coast	92.7	172936	3405
Urban	33.6	62616	1170
Rural	66.4	123868	3631
Age			
15-19	17.8	33192	882
20-24	16.9	31515	834
25-29	17.2	32132	793
30-34	13.3	24853	668
35-39	13.4	24949	646
40-44	12.3	23004	573
45-49	9.0	16839	405
Marital status			
Currently married	70.6	131665	3453
Formerly married	9.9	18542	464
Never married	19.5	36277	884
Ever given birth			
Yes	68.7	128075	3414
No	31.3	58409	1387
Education level			
None	1.2	2149	81
Primary	19.0	35439	1018
Secondary +	79.1	147424	3668
Non-standard curr.	0.5	934	18
Missing/DK	0.3	538	16
Total	100.0	186484	4801

Table 6: Percent distribution of children under 5 by background characteristics, Guyana, 2000

	Percent	Number	Total
Male	53.2	43601	1391
Female	46.8	38303	1281
Interior	13.5	11026	1211
Coast	86.5	70878	1461
Urban	27.3	22384	434
Rural	72.7	59520	2238
Age			
< 6 months	7.9	6458	209
6-11 months	9.6	7871	254
12-23 months	20.1	16442	558
24-35 months	20.0	16344	542
36-47 months	22.5	18456	571
48-59 months	19.9	16334	538
Mother's education			
None	2.3	1909	97
Primary	0.1	45	1
Secondary +	91.3	74752	2456
Non-std. curr.	5.9	4855	104
Missing/DK	0.4	343	14
Total	100	81904	2672

Table 7: Mean number of children ever born (CEB) and proportion dead by mother's age, Guyana, 2000

	Mean number of CEB	Proportion dead	Number of women
15-19	.156	.029	33192
20-24	.956	.055	31515
25-29	2.024	.072	32132
30-34	2.830	.083	24853
35-39	3.184	.088	24949
40-44	3.549	.108	23004
45-49	4.201	.113	16839
Total	2.414	.078	26641

Table 8: infant and under-five mortality rates

	Infant mortality rate	Under-five mortality rate
Total	54 per 1000	72 per 1000

Reference date is 1997.5

Table 9: Percentage of children aged 36-59 months who are attending some form of organized early childhood education programme, Guyana, 2000

	Attending programme	Number of children
Male	36.3	18024
Female	33.9	16766
Interior	34.7	4387
Coast (urban)	48.0	9887
Coast (rural)	29.1	20516
Urban	48.0	9887
Rural	30.1	24903
36-47 months	18.1	18456
48-59 months	54.4	16334
Mother's education		
None	15.6	771
Primary		
Secondary +	34.8	31444
Non-standard curr.	42.7	2381
Missing/DK	80.3	194
Total	35.1	34790

Table 10: Percentage of children of primary school age attending primary school, Guyana, 2000

	Male		Female		Total	
	Attending	Number	Attending	Number	Attending	Number
Interior (rural)	94.7	5758	96.3	5519	95.5	11277
Coast (urban)	98.0	13542	98.9	13787	98.4	27329
Coast (rural)	97.6	30311	98.1	29966	97.9	60277
Urban	98.0	13542	98.9	13787	98.4	27329
Rural	97.2	36069	97.8	35485	97.5	71554
Age						
6	96.1	7952	98.2	9811	97.2	17763
7	96.1	9938	97.7	8631	96.8	18569
8	98.9	8540	95.8	7923	97.4	16463
9	98.1	7949	98.3	8195	98.2	16144
10	97.6	7786	99.2	6831	98.4	14617
11	97.9	7446	99.5	7881	98.7	15327
Total	97.4	49611	98.1	49272	97.7	98882

Table 11: Percentage of children entering first grade of primary school who eventually reach grade 5, Guyana, 2000

	Percent in grade 1 eventually reaching grade 2	Percent in grade 2 eventually reaching grade 3	Percent in grade 3 eventually reaching grade 4	Percent in grade 4 eventually reaching grade 5	Percent who reach grade 5 of those who enter grade 1
Male	100.0	99.6	99.4	97.9	96.9
Female	99.6	98.7	100.0	98.7	97.0
Interior	100.0	100.0	100.0	100.0	100.0
Coast	99.8	99.0	99.6	98.1	96.6
Urban	100.0	97.9	100.0	98.3	96.2
Rural	99.7	99.7	99.5	98.3	97.3
Total	99.8	99.2	99.7	98.3	97.0

Table 12: Percentage of the population using improved drinking water sources, Guyana, 2000

	Main source of water													Total	Total with improved drinking water sources	No. of persons
	Piped into dwelling	Piped into yard or plot	Public tap	Tube-well/Bore-hole with pump	Protected dug well	Protected spring	rain water collection	Bottled water	Unprotected dug well	Unprotected spring	River or stream	Tanker truck vendor	Other			
Interior (rural)	4.2	5.3	1.2	1.0	7.0	0.7	25.0	0.5	15.1	4.7	34.3	0.1	0.9	100.0	44.4	61562
Coast (urban)	43.6	22.8	6.5	0.0	1.9	1.7	6.9	13.4	0.1	0.3	0.4	1.3	1.2	100.0	83.3	210711
Coast (rural)	16.4	33.5	12.9	0.1	0.7	0.2	25.1	3.0	0.1	0.0	3.8	1.2	3.1	100.0	88.7	431635
Urban	43.6	22.8	6.5	0.0	1.9	1.7	6.9	13.4	0.1	0.3	0.4	1.3	1.2	100.0	83.3	210711
Rural	14.8	30.0	11.4	0.2	1.5	0.2	25.1	2.7	2.0	0.6	7.6	1.1	2.9	100.0	83.2	493197
Total	23.4	27.8	9.9	0.1	1.6	0.7	19.7	5.9	1.4	0.5	5.4	1.2	2.4	100.0	83.3	703908

Table 13: Percentage of the population using sanitary means of excreta disposal, Guyana, 2000

	Type of toilet facility									Total	Total with sanitary means of excreta disposal	No. of persons
	Flush to sewage system/ septic tank	Pour flush latrine	Improved pit latrine	Traditional pit latrine	Open pit	Other	No facilities/ bush/field	Missing				
Interior (rural)	8.1	0.2	0.5	75.3	6.6	2.9	6.3	0.0	100.0	84.1	61562	
Coast (urban)	71.4	0.4	0.6	26.8	0.4	0.0	0.5	0.0	100.0	99.1	210711	
Coast (rural)	22.6	0.3	1.8	74.2	0.5	0.0	0.4	0.0	100.0	99.0	431635	
Urban	71.4	0.4	0.6	26.8	0.4	0.0	0.5	0.0	100.0	99.1	210711	
Rural	20.8	0.3	1.7	74.4	1.3	0.4	1.2	0.0	100.0	97.2	493197	
Total	35.9	0.3	1.3	60.1	1.0	0.3	1.0	0.0	100.0	97.8	703908	

Table 14: Percentage of under-five children who are severely or moderately undernourished, Guyana, 2000

	Weight for age		Height for age		Weight for height		Number of children
	Percent below	Percent below	Percent below	Percent below	Percent below	Percent below	
	- 2 SD	-3 SD	- 2 SD	-3 SD	-2 SD	-3 SD	
Male	14.4	3.5	11.6	3.2	11.4	2.9	39866
Female	12.8	2.4	9.9	3.2	9.7	2.1	35483
Interior (rural)	10.4	1.2	19.5	4.5	4.0	0.6	10198
Coast (urban)	10.3	1.7	6.2	1.1	8.6	2.8	20007
Coast (rural)	15.9	3.9	10.9	3.9	13.0	2.8	45144
Urban	10.3	1.7	6.2	1.1	8.6	2.8	20007
Rural	14.9	3.4	12.5	4.0	13.3	2.4	55342
< 6 months	3.1	.1	7.2	0.1	6.8	2.1	5239
6-11 months	5.5	1.5	5.8	1.6	6.8	1.6	7083
12-23 months	16.0	4.2	13.5	3.5	15.2	3.3	15075
24-35 months	15.9	5.3	9.5	3.8	10.4	2.8	15322
36-47 months	14.2	2.1	13.5	4.7	11.4	2.6	17170
48-59 months	15.7	2.0	9.9	2.5	10.8	2.0	15460
Mother's education							
None	33.9	3.5	32.0	3.7	19.6	2.9	1598
Primary	.0	0.0	0.0	0.0	0.0	0.0	45
Secondary +	13.8	3.1	10.6	3.2	10.9	2.5	68906
Non-std.. curr..	4.0	0.0	5.4	3.7	2.7	1.1	4544
Missing/DK	27.8	23.7	19.1	4.1	28.7	23.7	255
Total	13.6	3.0	10.8	3.2	10.6	2.5	75349

Table 15: Percent of living children by breastfeeding status, Guyana, 2000

	Percent of children 0-3 months exclusively breastfed	Number of children	Percent of children 6-9 months receiving breastmilk and solid/semi-solid food		Number of children	Percent of children 12-15 months breastfed	Number of children	Percent of children 20-23 months breastfed		Number of children
			Percent of children 6-9 months receiving breastmilk and solid/semi-solid food	Number of children				Percent of children 20-23 months breastfed	Number of children	
Male	15.1	2554	42.6	2929	43.1	3161	33.5	3025		
Female	15.7	1582	41.9	2279	56.2	3135	26.9	2511		
Interior (rural)	24.4	482	51.2	705	87.9	862	52.7	765		
Coast (urban)	17.0	1225	47.2	1451	37.7	1748	23.4	1564		
Coast (rural)	12.6	2429	37.9	3052	46.2	3685	28.7	3208		
Urban	17.0	1225	47.2	1451	37.7	1748	23.4	1564		
Rural	14.6	2911	40.4	3757	54.2	4547	33.3	3972		
Total	15.3	4136	42.3	5208	49.6	6296	30.5	5536		

Table 16: Percentage of live births in the last 12 months that weighed below 2500 grams at birth, Guyana, 2000

	Percent of live births		Number of live births
	Below 2500 grams	Weighed at birth	
Interior (rural)	11.8	62.5	2256
Coast (urban)	10.3	89.2	4176
Coast (rural)	11.5	78.3	9347
Urban	10.3	89.2	4176
Rural	11.6	75.2	11603
Mother's education			
None	6.0	56.1	468
Primary	11.5	63.4	2920
Secondary +	11.4	83.6	12357
Missing/DK	21.2	42.6	34
Total	11.2	78.9	15779

Table 17: Percentage of children age 12-23 months immunized against childhood diseases at any time before the survey and before the first birthday, Guyana, 2000

	Percentage of children who received:											No. of children
	BCG	DPT1	DPT2	DPT3	Polio 1	Polio2	Polio3	MMR	All	All except MMR	None	
Vaccinated at any time before the survey												
According to:												
Vaccination card	88.1	86.6	85.8	85.1	88.1	87.4	85.3	87.6	83.2	83.4	-	14591
Mother's report	9.8	8.9	5.8	3.7	6.4	4.6	2.3	4.1	1.8	2.1	1.7	1851
Either	97.9	95.5	91.6	88.8	94.5	92.0	87.6	91.7	85.0	85.5	1.7	16442
Vaccinated by 12 months of age	97.2	94.8	90.4	86.0	93.7	90.9	85.0	45.1	39.4	80.9	-	16442

Table 18: Percentage of children age 12-23 months currently vaccinated against childhood diseases, Guyana, 2000

	BCG	DPT 1	DPT 2	DPT 3	Polio 1	Polio 2	Polio 3	MMR	All	None	% with health card	Number of children
Male	98.5	95.7	90.8	87.5	94.5	91.3	85.7	91.6	83.4	1.4	87.0	8890
Female	97.3	95.4	92.6	90.2	94.7	92.7	89.9	91.7	86.8	2.1	90.8	7551
Interior (rural)	95.9	91.4	86.6	76.8	91.6	88.5	76.5	90.7	72.0	3.7	83.6	2883
Coast (urban)	95.7	92.9	89.6	89.6	93.5	92.4	90.1	91.1	88.3	4.3	90.4	4552
Coast (rural)	99.5	97.8	93.9	91.3	95.8	92.6	89.2	92.2	86.6	.0	89.3	9507
Urban	95.7	92.9	89.6	89.6	93.5	92.4	90.1	91.1	88.3	4.3	90.4	4552
Rural	98.8	96.5	92.4	88.4	95.0	91.8	86.6	91.9	83.7	.7	88.1	11890
Mother's education												
None	89.9	92.5	74.5	78.6	89.9	87.3	78.6	82.6	69.8	7.5	85.2	325
Secondary +	98.7	96.0	92.5	89.5	95.1	92.6	86.6	92.8	86.0	1.0	89.4	15504
Non-standard curr.	83.9	83.9	77.6	75.5	83.9	77.6	65.3	67.4	65.3	16.1	73.8	606
Missing/DK												7
Total	97.9	95.5	91.6	88.7	94.6	92.0	87.6	91.7	85.0	1.7	88.7	16442

Table 19: Percentage of under-five children with diarrhea in the last two weeks and treatment with ORT , Guyana, 2000

	Had diarrhea in last two weeks	Number of children under 5	Children with diarrhea who received:									Number of children with diarrhea
			Breast milk	Porridge	Home Fluids (RHF)	ORS packet	Other milk or infant formula	Water with feeding	Any recom- mended treatment	ORS or Home Fluids	No treatment	
Male	9.9	43601	30.8	60.6	55.2	30.5	49.5	62.4	92.1	63.5	7.9	4301
Female	10.7	38303	31.1	75.4	61.0	37.9	44.9	69.1	96.9	75.4	3.1	4098
Interior (rural)	18.0	11026	44.3	61.5	63.1	24.5	40.4	70.0	93.8	67.3	6.2	1983
Coast (urban)	7.7	22384	29.2	65.8	42.2	32.5	51.0	78.9	91.0	63.0	9.0	1731
Coast (rural)	9.7	48494	26.0	71.2	61.8	38.8	48.8	59.0	96.0	72.5	4.0	4685
Urban	7.7	22384	29.2	65.8	42.2	32.5	51.0	78.9	91.0	63.0	9.0	1731
Rural	11.2	59520	31.4	68.3	62.2	34.6	46.3	62.2	95.4	71.0	4.6	6668
< 6 months	5.6	6458	79.8	51.5	3.6	19.0	40.3	27.2	96.2	20.8	3.8	359
6-11 months	15.1	7871	59.5	83.4	53.6	28.9	59.3	73.8	100.0	73.1	.0	1190
12-23 months	15.4	16442	41.6	66.8	65.3	41.7	49.6	69.5	93.6	76.7	6.4	2540
24-35 months	9.5	16344	22.8	66.8	61.7	22.5	47.2	74.3	94.3	64.8	5.7	1547
36-47 months	10.1	18456	10.3	62.6	60.3	41.7	37.4	65.8	93.3	75.4	6.7	1865
48-59 months	5.5	16334	.6	68.7	54.1	30.1	48.1	44.6	91.5	58.0	8.5	897
Mother's education												
None	10.1	1909	21.6	52.8	70.3	15.4	6.8	61.5	91.3	74.3	8.7	192
Primary	.0	45	.	.	.	.	.	.	.	.	.	0
Secondary	10.8	74752	31.1	67.8	58.0	35.1	48.6	66.1	94.4	69.6	5.6	8073
Non-standard curriculum	2.4	4855	32.0	94.1	51.8	5.9	19.8	39.6	100.0	51.8	.0	116
Missing/DK	5.0	343	50.0	50.0	.0	.0	50.0	100.0	100.0	.0	.0	17
Total	10.3	81904	31.0	67.8	58.0	34.1	47.3	65.7	94.4	69.3	5.6	8399

Table 20: Percentage of under-five children with diarrhea in the last two weeks who took increased fluids and continued to feed during the episode, Guyana 2000

	Had diarrhea in last two weeks	Number of children under 5	Children with diarrhea who drank:			Total	Children with diarrhea who ate:			Total	Received increased fluids and continued eating	Number of children with diarrhea
			More	Same/ Less	Missing/ DK		Somewhat less/same/ more	Much less/none	Missing/ DK			
Male	9.9	43601	14.2	82.1	3.7	100.0	57.7	41.0	1.3	100.0	6.9	4301
Female	10.7	38303	13.6	85.0	1.5	100.0	53.3	46.2	.5	100.0	7.3	4098
Interior (rural)	18.0	11026	20.7	75.3	4.0	100.0	56.8	41.0	2.2	100.0	10.6	1983
Coast (urban)	7.7	22384	12.1	84.6	3.3	100.0	57.2	42.8	.0	100.0	9.2	1731
Coast (rural)	9.7	48494	11.6	86.6	1.8	100.0	54.5	43.7	0.6	100.0	4.8	4685
Urban	7.7	22384	12.1	84.6	3.3	100.0	57.2	42.8	.0	100.0	9.2	1731
Rural	11.2	59520	14.3	83.2	2.4	100.0	55.2	43.7	1.1	100.0	6.6	6668
< 6 months	5.6	6458	16.5	79.7	3.8	100.0	36.4	59.9	3.8	100.0	12.7	359
6-11 months	15.1	7871	13.9	86.1	.0	100.0	67.6	32.4	.0	100.0	5.2	1190
12-23 months	15.4	16442	12.9	83.7	3.3	100.0	53.6	46.0	.4	100.0	4.6	2540
24-35 months	9.5	16344	14.8	84.6	.5	100.0	68.3	31.0	.7	100.0	10.5	1547
36-47 months	10.1	18456	13.2	82.8	4.0	100.0	48.5	51.5	.0	100.0	10.7	1865
48-59 months	5.5	16334	15.1	80.5	4.4	100.0	45.8	49.9	4.4	100.0	1.2	897
Mother's education												
None	10.1	1909	.0	95.6	4.4	100.0	36.8	63.2	.0	100.0	.0	192
Primary	.0	45	.0	.0	.0	.0	.0	.0	.0	.0	.	0
Secondary	10.8	74752	14.4	83.0	2.6	100.0	56.0	43.1	.9	100.0	7.4	8073
Non-standard curriculum	2.4	4855	.0	100.0	.0	100.0	57.1	42.9	.0	100.0	.0	116
Missing/DK	5.0	343	.0	100.0	.0	100.0	50.0	50.0	.0	100.0	.0	17
Total	10.3	81904	13.9	83.5	2.6	100.0	55.6	43.5	.9	100.0	7.1	8399

Table 21: Percentage of under-five children with acute respiratory infection in the last two weeks and treatment by health providers, Guyana 2000

	Had acute respiratory infection	Number of children under 5	Children with ARI who were taken to							Any appropriate provider	Number of children with ARI
			Hospital	Health centre	Dispensary	Community health worker	MCH clinic	Private physician	Other		
Male	5.2	43601	30.5	20.7	2.3	8.2	3.7	11.0	6.5	72.4	2247
Female	4.1	38303	36.6	39.1	2.8	8.6	.0	5.7	6.1	85.0	1582
Urban	3.9	22384	68.7	11.9	.0	.0	7.0	5.5	19.6	86.2	880
Rural	5.0	59520	22.3	33.2	3.3	10.9	.7	9.8	2.4	75.0	2949
Total	4.7	81904	33.0	28.3	2.5	8.4	2.1	8.8	6.4	77.6	3829

Table 22: Percentage of children 0-59 months of age reported ill during the last two weeks who received increased fluids and continued feeding, Guyana, 2000

	Reported illness in last two weeks	Number of children under 5	Children with illness who drank:				Children with illness who ate:				Received increased fluids and continued eating	Number of sick children
			More	Same/Less	Missing/DK	Total	Somewhat less/same/more	Much less/none	Missing/DK	Total		
Male	34.3	43601	10.8	88.2	1.1	100.0	58.9	40.8	.4	100.0	6.6	14942
Female	33.1	38303	13.8	85.7	.5	100.0	62.4	37.4	.2	100.0	9.0	12688
Interior (rural)	48.2	11026	16.3	82.2	1.5	100.0	61.1	38.1	.8	100.0	8.9	5315
Coastal (urban)	31.3	22384	22.4	76.8	.8	100.0	60.9	39.1	.0	100.0	15.9	7008
Coastal (rural)	31.6	48494	6.1	93.4	.5	100.0	60.1	39.7	.2	100.0	3.6	15307
Urban	31.3	22384	22.4	76.8	.8	100.0	60.9	39.1	.0	100.0	15.9	7008
Rural	34.6	59520	8.7	90.5	.8	100.0	60.4	39.3	.4	100.0	4.9	20622
< 6 months	33.8	6458	17.5	81.9	.6	100.0	46.3	53.1	.6	100.0	13.9	2184
6-11 months	42.0	7871	7.4	92.6	.0	100.0	63.6	36.4	.0	100.0	3.9	3307
12-23 months	40.3	16442	8.7	90.0	1.3	100.0	56.7	43.1	.2	100.0	4.8	6626
24-35 months	32.0	16344	13.9	85.9	.2	100.0	72.1	27.6	.2	100.0	10.0	5232
36-47 months	31.1	18456	11.8	86.9	1.3	100.0	64.0	36.0	.0	100.0	7.7	5731
48-59 months	27.9	16334	16.6	82.6	.9	100.0	52.6	46.5	.9	100.0	9.2	4549
Mother's Education												
None	37.5	1909	3.3	95.5	1.2	100.0	50.9	49.1	.0	100.0	2.2	716
Primary	.0	45	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0
Secondary	33.9	74752	12.8	86.4	.8	100.0	60.1	39.6	.3	100.0	8.0	25371
Non-standard curr.	27.0	4855	7.4	92.6	.0	100.0	75.4	24.6	.0	100.0	7.4	1313
Missing/DK	66.7	343	.0	100.0	.0	100.0	44.6	55.4	.0	100.0	.0	229
Total	33.7	81904	12.2	87.0	.8	100.0	60.5	39.2	.3	100.0	7.7	27630

Table 23: Percentage of caretakers of children 0-59 months who know at least 2 signs for seeking care immediately, Guyana, 2000

	Knows child should be taken to health facility if child:							Knows at least two signs	Number of caretakers
	Not able to drink /breastfeed	Becomes sicker	Develops a fever	Has fast breathing	Has difficult breathing	Has blood in stool	Is drinking poorly		
Interior	7.4	32.6	75.4	13.4	23.0	11.5	8.0	45.7	11026
Coast (urban)	10.1	33.3	59.1	32.6	32.5	23.7	16.1	48.1	22384
Coast (rural)	9.9	33.1	65.7	15.4	26.8	20.7	11.2	47.6	48494
Urban	10.1	33.3	59.1	32.6	32.5	23.7	16.1	48.1	22384
Rural	9.4	33.0	67.5	15.0	26.1	19.0	10.6	47.2	59520
Mother's education									
None	6.6	52.3	70.4	4.0	19.7	8.8	2.4	47.6	1909
Primary	.0	.0	.0	.0	.0	.0	.0	.0	45
Secondary +	9.6	32.9	65.0	20.0	27.9	20.3	12.2	47.6	74752
Non-standard curr.	12.2	29.7	65.3	25.6	29.8	25.3	14.2	44.9	4855
Missing/DK	.0	20.3	94.1	.0	37.9	14.7	14.7	67.4	343
Total	9.6	33.1	65.2	19.8	27.8	20.3	12.1	47.5	81904

Table 24: Percentage of children 0-59 months of age who slept under an insecticide-impregnated bednet during the previous night, Guyana, 2000

	Slept under a bed-net			Number of children	Bed-net treated			Children who slept under a bednet
	Yes	No	DK/missing		Yes	No	DK/missing	
Male	61.9	37.9	.1	6700	13.1	86.7	.2	4159
Female	59.0	40.8	.2	6795	9.5	90.2	.4	4002
< 6 months	65.5	34.5	.0	1090	7.3	91.6	1.1	714
6-11 months	57.4	42.6	.0	1302	2.1	97.9	.0	747
12-23 months	63.6	36.4	.0	2884	12.3	86.9	.8	1832
24-35 months	62.0	37.5	.5	2680	12.1	87.9	.0	1662
36-47 months	56.7	43.3	.0	2857	10.9	89.1	.0	1620
48-59 months	59.1	40.6	.3	2682	15.9	84.1	.0	1586
Total	60.5	39.4	.2	13495	11.3	88.4	.3	8161

Table 25: Percentage of children 0-59 months of age who were ill with fever in the last two weeks who received anti-malarial drugs, Guyana, 2000

	Had a fever in last two weeks	Number of children under 5	Children with a fever who were treated with:				Don't know	Any appropriate anti-malarial drug*	Number of children
			Para-etamol	Chloro-quine	Fansidar				
Male	3.5	43601	26.8	.0	1.0	15.6	1.0	1543	
Female	3.7	38303	20.0	4.3	.0	17.2	4.3	1435	
Interior (rural)	27.0	11026	23.5	2.1	.5	16.4	2.6	2978	
Coast (urban)	.0	22384	.	.	.	.	.	0
Coast (rural)	.0	48494	.	.	.	.	.	0
Urban	.0	22384	.	.	.	.	.	0
Rural	5.0	59520	23.5	2.1	.5	16.4	2.6	2978	
<6 months	3.6	6458	16.8	.0	.0	17.9	.0	233	
6-11 months	4.1	7871	35.3	2.4	.0	9.9	2.4	326	
12-23 months	4.5	16442	26.2	2.8	1.1	16.8	3.9	747	
24-35 months	3.5	16344	22.3	1.9	1.3	14.4	3.2	573	
36-47 months	2.8	18456	16.5	2.8	.0	20.8	2.8	521	
48-59 months	3.5	16334	23.5	1.4	.0	16.8	1.4	579	
Mothers education									
None	12.3	1909	9.4	.0	.0	18.0	.0	235	
Primary	.0	45	.	.	.	.	.	0
Secondary	3.6	74752	24.3	2.3	.6	16.4	2.9	2670	
Non-standard curriculum	.9	4855	66.0	.0	.0	.0	.0	44	
Missing/DK	8.4	343	.0	.0	.0	25.4	.0	29	
Total	3.6	81904	23.5	2.1	.5	16.4	2.6	2978	

Table 26: Percentage of women aged 15-49 who know the main ways of preventing HIV transmission, Guyana, 2000

	Percent who know transmission can be prevented by:							Number of women	
	Heard of AIDS	Have only one faithful uninfected sex partner		Using a condom every time	Abstaining from sex	Knows all three ways	Knows at least one way		Doesn't know any way
Interior (rural)	85.0	48.3	45.5	42.2	29.0	57.5	42.5	13548	
Coast (urban)	99.5	77.5	69.2	64.8	42.9	90.6	9.4	62616	
Coast (rural)	96.7	74.5	68.2	56.5	44.5	81.6	18.4	110320	
Urban	99.5	77.5	69.2	64.8	42.9	90.6	9.4	62616	
Rural	95.4	71.6	65.7	54.9	42.8	79.0	21.0	123868	
15-19	96.2	74.5	69.7	58.3	43.5	84.8	15.2	33192	
20-24	95.9	71.7	68.5	57.1	42.2	82.2	17.8	31515	
25-29	96.3	73.1	66.3	57.1	42.5	82.0	18.0	32132	
30-34	98.5	74.1	66.1	60.3	42.8	83.2	16.8	24853	
35-39	97.7	74.1	67.7	58.3	43.1	83.9	16.1	24949	
40-44	97.1	75.0	65.4	56.3	42.7	82.8	17.2	23004	
45-49	96.4	72.9	61.9	61.9	42.9	80.2	19.8	16839	
Education									
None	72.7	41.4	33.8	37.3	26.8	44.3	55.7	2149	
Primary	92.9	62.5	56.3	51.6	37.5	70.3	29.7	35439	
Secondary +	98.1	76.8	69.9	60.0	44.3	86.4	13.6	147424	
Non-standard curriculum	100.0	65.9	74.4	74.4	44.5	93.2	6.8	934	
Missing/DK	96.2	68.4	60.2	66.9	51.2	76.0	24.0	538	
Total	96.8	73.6	66.9	58.2	42.8	82.9	17.1	186484	

Table 27: Percentage of women aged 15-49 who correctly identify misconceptions about HIV/AIDS, Guyana, 2000

	Percent who know that:							Number of women	
	Heard of AIDS	AIDS cannot be transmitted by:			A healthy looking person can be infected	Knows all three misconceptions	Knows at least one misconception		Doesn't correctly identify any misconception
		Supernatural means	Mosquito bites						
Interior (rural)	85.0	51.4	40.3	62.4	33.5	68.5	31.5	13548	
Coast (urban)	99.5	82.9	60.0	93.3	53.6	97.9	2.1	62616	
Coast (rural)	96.7	71.8	49.0	83.3	41.7	90.0	10.0	110320	
Urban	99.5	82.9	60.0	93.3	53.6	97.9	2.1	62616	
Rural	95.4	69.6	48.0	81.0	40.8	87.7	12.3	123868	
15-19	96.2	78.6	56.7	85.7	49.8	92.5	7.5	33192	
20-24	95.9	74.9	57.1	82.7	49.7	89.5	10.5	31515	
25-29	96.3	70.6	50.8	85.1	43.2	90.6	9.4	32132	
30-34	98.5	74.9	49.1	86.6	43.3	92.4	7.6	24853	
35-39	97.7	74.9	50.5	86.4	44.7	91.8	8.2	24949	
40-44	97.1	73.6	49.8	85.2	42.9	91.4	8.6	23004	
45-49	96.4	67.9	45.7	84.4	37.1	89.1	10.9	16839	
Education									
None	72.7	44.0	15.8	50.6	15.8	53.8	46.2	2149	
Primary	92.9	58.8	41.7	73.2	31.4	82.4	17.6	35439	
Secondary +	98.1	78.1	55.1	88.5	48.8	93.8	6.2	147424	
Non-standard curriculum	100.0	85.9	44.6	93.2	44.6	93.2	6.8	934	
Missing/DK	96.2	67.8	69.4	82.5	61.2	82.5	17.5	538	
Total	96.8	74.0	52.1	85.1	45.1	91.1	8.9	186484	

Table 28: Percentage of women aged 15-49 who correctly identify means of HIV transmission from mother to child, Guyana, 2000

	Know AIDS can be transmitted from mother to child	Percent who know AIDS can be transmitted:				Did not know any specific way	Number of women
		During pregnancy	At delivery	Through breastmilk	Knows all three		
Interior Rural	64.5	59.7	44.9	39.9	30.2	36.7	13548
Coast (urban)	88.3	83.0	61.7	58.1	43.5	12.9	62616
Coast (rural)	83.8	78.7	56.3	59.7	43.1	17.7	110320
Urban	88.3	83.0	61.7	58.1	43.5	12.9	62616
Rural	81.7	76.7	55.1	57.6	41.7	19.7	123868
15-19	83.8	76.8	55.3	55.8	40.5	17.9	33192
20-24	84.4	78.4	58.9	56.7	41.8	16.9	31515
25-29	80.6	77.1	52.7	52.7	36.6	20.4	32132
30-34	86.5	82.0	59.7	59.5	43.1	14.5	24853
35-39	84.9	81.2	59.2	59.4	46.7	16.6	24949
40-44	85.9	79.7	57.9	63.0	45.6	16.1	23004
45-49	81.9	76.9	59.6	60.9	45.6	19.4	16839
Education							
None	55.9	53.3	39.3	50.2	37.8	45.9	2149
Primary	77.1	72.6	54.4	55.6	41.8	24.6	35439
Secondary +	85.9	80.6	58.1	58.3	42.4	15.3	147424
Non-standard curriculum	100.0	91.6	64.5	69.5	56.7	8.4	934
Missing/DK	80.9	74.3	71.1	52.3	52.3	25.7	538
Total	83.9	78.8	57.3	57.7	42.3	17.5	186484

Table 29: Percentage of women aged 15-49 who express a discriminatory attitude towards people with HIV/AIDS, Guyana, 2000

	Percent of women who:				Number of women
	Believe that a teacher with HIV should not be allowed to work	Would not buy food from a person with HIV/AIDS	Agree with at least one discriminatory statement	Agree with neither discriminatory statement	
Interior (rural)	25.6	14.4	31.3	68.7	13548
Coast (urban)	50.5	15.2	53.0	47.0	62616
Coast (rural)	30.8	7.8	32.2	67.8	110320
Urban	50.5	15.2	53.0	47.0	62616
Rural	30.2	8.6	32.1	67.9	123868
15-19	38.3	12.4	41.1	58.9	33192
20-24	38.1	9.5	40.2	59.8	31515
25-29	37.0	12.0	39.6	60.4	32132
30-34	37.7	12.7	39.6	60.4	24853
35-39	33.9	9.8	35.8	64.2	24949
40-44	36.9	9.5	39.0	61.0	23004
45-49	36.2	8.1	37.1	62.9	16839
Education					
None	9.3	.8	9.7	90.3	2149
Primary	23.0	6.2	24.7	75.3	35439
Secondary +	40.8	12.0	43.0	57.0	147424
Non-standard curriculum	34.4	13.0	47.5	52.5	934
Missing/DK	32.4	5.9	35.1	64.9	538
Total	37.0	10.8	39.2	60.8	186484

Table 30: Percentage of women aged 15-49 who have sufficient knowledge of HIV/AIDS transmission, Guyana, 2000

	Heard of AIDS	Know 3 ways to prevent HIV transmission	Correctly identify 3 misconceptions about HIV transmission	Have sufficient knowledge	Number of women
Interior (rural)	85.0	29.0	33.5	17.3	13548
Coast (urban)	99.5	42.9	53.6	25.7	62616
Coast (rural)	96.7	44.5	41.7	24.2	110320
Urban	99.5	42.9	53.6	25.7	62616
Rural	95.4	42.8	40.8	23.4	123868
15-19	96.2	43.5	49.8	26.7	33192
20-24	95.9	42.2	49.7	26.4	31515
25-29	96.3	42.5	43.2	21.9	32132
30-34	98.5	42.8	43.3	21.6	24853
35-39	97.7	43.1	44.7	24.5	24949
40-44	97.1	42.7	42.9	24.7	23004
45-49	96.4	42.9	37.1	22.1	16839
Education					
None	72.7	26.8	15.8	10.2	2149
Primary	92.9	37.5	31.4	17.9	35439
Secondary +	98.1	44.3	48.8	26.0	147424
Non-standard curr.	100.0	44.5	44.6	4.8	934
Missing/DK	96.2	51.2	61.2	44.6	538
Total	96.8	42.8	45.1	24.2	186484

Table 31: Percentage of women aged 15-49 who know where to get an AIDS test and who have been tested, Guyana, 2000

	Know a place to get tested	Have been tested	If tested, have been told result	Number of women
Interior (rural)	40.3	8.1	83.0	13548
Coast (urban)	81.2	19.6	90.8	62616
Coast (rural)	65.6	14.4	85.2	110320
Urban	81.2	19.6	90.8	62616
Rural	62.8	13.7	85.0	123868
15-19	66.9	7.6	78.7	33192
20-24	69.4	18.8	89.5	31515
25-29	68.2	17.4	89.4	32132
30-34	73.9	18.8	86.4	24853
35-39	69.8	17.1	85.9	24949
40-44	70.5	18.9	89.2	23004
45-49	63.4	11.5	89.2	16839
Education				
None	38.5	10.9	96.4	2149
Primary	57.7	11.3	87.1	35439
Secondary +	72.1	16.8	87.3	147424
Non-standard curriculum	82.6	20.8	100.0	934
Missing/DK	46.7	9.4	100.0	538
Total	69.0	15.7	87.5	186484

Table 32: Percentage of married or in union women aged 15-49 who are using (or whose partner is using) a contraceptive method, Guyana, 2000

	Percent of married or in-union women who are using:															Number of currently married women			
	No method	Female sterilization	Male sterilization	Pill	IUD	Injections	Implants	Condom	Female condom	Diaphragm/foam/jelly	LAM	Periodic abstinence	Withdrawal	Other	Total		Any modern method	Any traditional method	Any method
Interior (rural)	71.4	2.9	.0	10.6	3.4	6.6	.3	3.8	.0	.2	.2	.5	.0	.2	100.0	27.7	.9	28.6	10372
Coast (urban)	62.7	4.4	.1	11.0	2.2	3.2	1.0	13.3	.0	.5	.5	.8	.0	.2	100.0	35.7	1.6	37.3	42874
Coast (rural)	61.6	4.7	.0	11.3	8.9	3.6	1.1	7.0	.1	.4	.2	.3	.6	.2	100.0	37.2	1.2	38.4	78419
Urban	62.7	4.4	.1	11.0	2.2	3.2	1.0	13.3	.0	.5	.5	.8	.0	.2	100.0	35.7	1.6	37.3	42874
Rural	62.7	4.5	.0	11.2	8.2	3.9	1.0	6.6	.1	.4	.2	.3	.5	.2	100.0	36.1	1.2	37.3	88791
< 20 years	73.7	.0	.0	7.9	1.1	2.4	.0	14.5	.0	.0	.0	.0	.0	.5	100.0	25.9	.5	26.3	9713
20-24 years	60.5	1.1	.0	13.7	5.2	3.9	.4	13.8	.0	.2	.1	.8	.2	.0	100.0	38.4	1.1	39.5	21396
25-49 years	62.1	5.7	.1	10.9	7.0	3.8	1.2	7.2	.1	.5	.4	.4	.4	.2	100.0	36.4	1.4	37.9	100556
None	69.9	4.5	.0	5.0	10.6	8.9	.0	.0	.0	1.1	.0	.0	.0	.0	100.0	30.1	.0	30.1	1894
Primary	64.1	6.5	.0	9.3	8.1	2.7	1.9	4.9	.0	.3	.7	.5	.7	.2	100.0	33.8	2.1	35.9	28667
Secondary +	62.0	3.9	.1	11.8	5.7	3.9	.8	10.1	.1	.5	.2	.5	.3	.2	100.0	36.9	1.1	38.0	100225
Non-std. curr.	78.0	9.6	.0	12.5	.0	.0	.0	.0	.0	.0	.0	.0	.0	.0	100.0	22.0	.0	22.0	467
Missing/DK	95.7	.0	.0	1.8	.0	2.6	.0	.0	.0	.0	.0	.0	.0	.0	100.0	4.3	.0	4.3	412
Total	62.7	4.5	.1	11.2	6.3	3.7	1.0	8.8	.1	.4	.3	.5	.4	.2	100.0	36.0	1.3	37.3	131665

Table 33: Percentage of mothers with a birth in the last 12 months protected against neonatal tetanus, Guyana, 2000

	Percent of mothers with a birth in the last 12 months who:			Number of mothers
	Received at least 2 doses, last within 3 years	Received at least 3 doses, last within 10 years	Protected against tetanus	
Interior (rural)	61.0	.4	61.4	2256
Coast (urban)	60.6	3.1	63.8	4176
Coast (rural)	60.9	.0	60.9	9347
Urban	60.6	3.1	63.8	4176
Rural	60.9	.1	61.0	11604
Education				
None	68.8	.0	68.8	468
Primary	62.2	.3	62.5	2920
Secondary +	60.1	1.1	61.2	12357
Missing/DK	100.0	.0	100.0	34
Total	60.8	.9	61.7	15779

Table 34: Percent distribution of women aged 15-49 with a birth in the last year by type of personnel delivering antenatal care, Guyana, 2000

	Person delivering antenatal care						Total	Any skilled personnel	Number of women
	Doctor	Nurse/mid-wife	Single trained midwife	Medex	Other/missing	No antenatal care received			
Interior (rural)	14.7	31.9	1.9	13.6	30.2	7.6	100.0	48.5	2256
Coast (urban)	49.6	39.0	1.1	3.6	5.4	1.4	100.0	89.7	4176
Coast (rural)	44.5	38.8	1.5	7.3	4.8	3.1	100.0	84.7	9347
Urban	49.6	39.0	1.1	3.6	5.4	1.4	100.0	89.7	4176
Rural	38.7	37.4	1.6	8.6	9.8	4.0	100.0	77.7	11604
Education									
None	6.9	38.8	9.1	.0	34.4	10.9	100.0	54.8	468
Primary	30.0	46.8	.0	7.7	11.9	3.6	100.0	76.8	2920
Secondary +	45.6	35.7	1.5	7.5	6.9	2.8	100.0	82.8	12357
Missing/DK	42.6	31.1	.0	.0	.0	26.3	100.0	73.7	34
Total	41.6	37.8	1.4	7.3	8.6	3.3	100.0	80.9	15779

Table 35: Percent distribution of women aged 15-49 with a birth in the last year by type of personnel assisting at delivery, Guyana, 2000

	Person assisting at delivery							Total	Any skilled personnel	Number of women
	Doctor	Nurse/ midwife	Single Trained midwife	Medex	Community Health Worker	Other/ missing	No assistance received			
Interior (rural)	6.5	34.1	2.4	6.9	17.0	30.8	2.3	100.0	42.9	2256
Coast (urban)	30.2	68.2	1.6	.0	.0	.0	.0	100.0	100.0	4176
Coast (rural)	24.4	61.8	3.3	1.7	4.3	4.1	.4	100.0	89.5	9347
Urban	30.2	68.2	1.6	.0	.0	.0	.0	100.0	100.0	4176
Rural	20.9	56.4	3.1	2.7	6.8	9.3	.8	100.0	80.4	11604
Education										
None	.0	58.1	.0	4.8	4.7	30.9	1.5	100.0	58.1	468
Primary	13.5	58.7	3.4	1.5	7.6	14.8	.6	100.0	75.5	2920
Secondary +	26.5	59.9	2.6	2.0	4.4	4.0	.5	100.0	89.1	12357
Missing/DK	42.6	31.1	.0	.0	.0	26.3	.0	100.0	73.7	34
Total	23.4	59.5	2.7	2.0	5.0	6.8	.6	100.0	85.6	15779

Table 36: Percent distribution of children aged 0-59 months by whether birth is registered and reasons for non-registration, Guyana, 2000

	Birth is not registered because:							Total	No. of children
	Birth is registered	Costs too much	Must travel too far	Didn't know it should be registered	Doesn't know where to register	Other	Reason DK or Missing		
Male	96.9	0.3	0.3	0.1	0.1	0.5	1.7	100.0	43601
Female	96.0	0.3	0.4	.0	0.2	0.8	2.2	100.0	38303
Interior (rural)	85.5	1.9	1.3	0.5	1.0	2.7	7.1	100.0	11026
Coast (urban)	98.6	.0	.0	.0	.0	0.2	1.2	100.0	22384
Coast (rural)	98.1	0.1	0.3	.0	.0	0.4	1.2	100.0	48494
Urban	98.6	.0	.0	.0	.0	0.2	1.2	100.0	22384
Rural	95.7	0.4	0.5	0.1	0.2	0.8	2.3	100.0	59520
Age < 6 months	89.4	0.5	0.7	.0	0.2	1.2	7.9	100.0	6458
6-11 months	96.1	0.7	.0	.0	0.2	0.6	2.4	100.0	7871
12-23 months	96.4	0.3	0.3	.0	0.1	1.0	1.8	100.0	16442
24-35 months	97.5	0.3	0.2	.0	0.1	0.8	1.2	100.0	16344
36-47 months	97.4	0.2	0.4	0.1	0.1	0.3	1.3	100.0	18456
48-59 months	97.6	0.2	0.5	0.2	0.1	0.3	1.1	100.0	16334
Mother's education									
None	80.7	0.9	1.7	.0	2.2	6.4	8.2	100.0	1909
Primary	100.0	.0	.0	.0	.0	.0	.0	100.0	45
Secondary +	96.7	0.3	0.3	0.1	0.1	0.5	1.9	100.0	74752
Non-standard curr.	99.6	.0	0.2	.0	.0	0.3	.0	100.0	4855
Missing/DK	95.0	.0	.0	.0	.0	.0	5.0	100.0	343
Total	96.5	0.3	0.4	0.1	0.1	0.6	2.0	100.0	81904

Table 37: Percentage of children 0-14 years of age in households not living with a biological parent, Guyana, 2000

	Living with both parents	Living with neither parent				Living with mother only		Living with father only			Impossible to determine	Total	Not living with a biological parent	One or both parents dead	One parent dead	Both parents dead	Number of children
		Father only live	Mother only alive	Both are alive	Both are dead	Father alive	Father dead	Mother alive	Mother dead								
Male	65.3	.8	.5	5.8	.6	21.0	2.9	1.9	5.2	.7	100.0	7.7	5.2	4.6	.6	126094	
Female	64.4	.4	.7	7.4	.7	20.4	2.4	2.1	5.0	.7	100.0	9.3	5.0	4.3	.7	121132	
Interior (rural)	76.5	.5	.3	4.4	.3	14.4	1.6	1.0	3.1	.6	100.0	5.4	3.1	2.8	.3	28459	
Coast (urban)	47.0	.6	.7	8.6	1.0	32.4	4.0	4.0	6.8	1.2	100.0	11.0	6.8	5.8	1.0	68642	
Coast (rural)	70.8	.6	.6	6.1	.5	16.6	2.3	1.3	4.6	.6	100.0	7.9	4.6	4.1	.5	150125	
Urban	47.0	.6	.7	8.6	1.0	32.4	4.0	4.0	6.8	1.2	100.0	11.0	6.8	5.8	1.0	68642	
Rural	71.7	.6	.6	5.8	.5	16.2	2.2	1.2	4.4	.6	100.0	7.5	4.4	3.9	.5	178584	
0-4 years	70.8	.4	.2	4.5	.2	20.8	.9	1.4	1.9	.5	100.0	5.4	1.9	1.7	.2	81947	
5-9 years	63.4	.8	.4	7.7	.9	20.1	3.3	2.2	5.6	.9	100.0	9.7	5.6	4.8	.9	89462	
10-14 years	60.2	.6	1.3	7.6	.9	21.3	3.9	2.4	7.8	.8	100.0	10.3	7.8	7.0	.9	75817	
Total	64.9	.6	.6	6.6	.6	20.7	2.7	2.0	5.1	.7	100.0	8.5	5.1	4.4	.6	247226	

Table 38: Percentage of children 5-14 years of age who are currently working, Guyana, 2000

	Paid work	Unpaid work	Domestic work		Family Work (farm or business)	Currently working	No. of children
			< 4 hours/day	4 or more hours/day			
Male	2.5	13.3	70.8	.6	17.83	29.2	82755
Female	1.6	11.9	72.8	1.2	14.08	24.8	82524
Interior (rural)	2.7	8.5	84.8	1.1	39.42	44.8	17433
Coast (urban)	1.5	12.8	72.5	.9	10.94	22.0	46257
Coast (rural)	2.2	13.2	69.2	.9	14.22	26.2	101589
Urban	1.5	12.8	72.5	.9	10.94	22.0	46257
Rural	2.2	12.5	71.5	.9	17.91	28.9	119022
5-9 years	1.2	11.1	62.4	.3	11.84	21.4	89462
10-14 years	2.9	14.4	82.9	1.7	20.81	33.6	75817
Total	2.0	12.6	71.8	.9	15.96	27.0	165279

Appendix C: List of Personnel Involved in the Guyana MICS

Technical Committee

Dharam Seelochand	Deputy Chief Statistician, Bureau of Statistics
Everton Pollard	Head; Demographic Department, Bureau of Statistics
Paula Trotter	Nutritionist, WHO/PAHO (Guyana)
Janice Woolford	MCH Director, Ministry of Health
Janice Archibald	Director Food Policy, Ministry of Health (annexe)
Gillian Butts-Garnette	Programme Manager, Guyana Responsible Parenthood Association (GRPA)
Evelyn Hamilton	Chief Planning Officer, Ministry of Education
Oudit Ram	Permanent Secretary (ag), Ministry of Amerindian Affairs (Office of the President)

Technical Assistance and Operational Support

Chakravarty Naraine	Consultant (UNICEF)
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Field Supervisors

Hamlet Smith
Mohamed Basir
Cleophas Loyola
Florence Younge
Cecil Pearson
Ivor Hytmiah
Cravwaldo Callender
Ompargas Persaud
Marva Ault
Oswald Ward

Data Entry Supervision and Processing

Soyini Barrington

Editors

Yolanda Williams
Eureka Anderson
Clara Bowen
Mark Cheong

Enumerators

Patrick Howard
Lalita Sohail
Ian Manifold
Germaine Grimes
Janet Walrond
Jomo Newland
Michelle Chester
Susette Peters
Dolores Lynch
Potoni Critchlow
Ernestine Logan
Lana Ross
Leila Simon
Anya Mahaica
Vanessa Rooplall
Megan Younge
Nandranie Ram
Maharanie Simon
Anita Dias
Dale Ann Luke
Cheryl Vickerie
Walter Charles
Janice Clarke
Readona Archer
Dwight John
Seon Barlow
Julia Da Silva
Bevon Fraites
Wendy Collins
Pamela Wilson
Lilowtie Bissessar
Daniel Hernandez
Norah Budha
Barbara Barrow
Johnson H. Bristol
Bibi Ullah
Sherwyn Hytmiah
Robin Arthur

Eric Moore
Melissa Munroe
Bidget Chichester
Ellen Layne
Cornella Leitch
Shundell Wilson
Andre Cush

Appendix D: Questionnaires

**END-DECADE
MULTIPLE INDICATOR CLUSTER SURVEY
GUYANA QUESTIONNAIRE**

**GOVERNMENT OF GUYANA
&
UNITED NATIONS CHILDREN'S FUND
JULY 2000**

END-DECADE MULTIPLE INDICATOR CLUSTER SURVEY MODEL QUESTIONNAIRE

FLOW OF MODULES

Note: ‘Age’ refers to ‘age at last birthday’ and a dash (-) denotes ‘up to and including age X’.

Household questionnaire

Household information panel

Household listing form (all residents) and orphanhood questions (birth to 14)

Education module: educational attainment (age 5 or over), school attendance (age 5-17)

Child labour module (age 5-14*)

Water and sanitation module (all households)

Questionnaire for individual women (women of reproductive age, 15-49)

Women’s information panel (all eligible women, 15-49)

Child mortality module (all eligible women)

Tetanus toxoid module (all mothers with last birth within last year)

Maternal and newborn health module (all mothers with last birth within last year)

Contraceptive use module (currently married women, 15-49)

HIV/AIDS module (all women, 15-49)

Questionnaire for children under five

Birth registration and early learning module

Breastfeeding module

Care of illness module

Malaria module (for high-risk areas)

Immunization module

Anthropometry module

DESIGN FEATURES

Changes in font are used to indicate the various components of the questionnaire. Questions that the interviewer will be asking appear in small capital letters in Arial font (QUESTIONS VERBALIZED BY INTERVIEWERS), to distinguish them from responses and general instructions. With the exception of skip instructions, general instructions to the interviewer are provided in italics, Times New Roman font (*instructions to interviewers*). Skip instructions are provided in a ‘skip column’ in Arial (⇒Q.6) and at the end of modules in bold capitals, Times New Roman (**GO TO NEXT MODULE**). For purposes of saving space, DK is used to abbreviate “doesn’t know” and HH is sometimes used to abbreviate “household”. The questionnaires that follow are not intended to be completely self-explanatory; detailed instructions for the interviewer are provided in the Interviewers Manual.

HOUSEHOLD QUESTIONNAIRE

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

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

HOUSEHOLD INFORMATION PANEL **	
1. Enumeration District number: _____ Name of Ward/Village/Community: _____	2. Household number: _____
3. Day/Month/Year of interview: _____ / _____ / _____	4. Interviewer; name/number: _____
5. Name of head of household: _____	
6. Area: Urban 1 Rural 2	7. Region: _____
9 (a). What type of fuel does this household use most for cooking? Electricity..... 1 Gas..... 2 Kerosene..... 3 Coals..... 4 Wood..... 5 Other (<i>specify</i>)..... 6	9 (b). Number of bedrooms in dwelling: _____
10. Result of HH interview: Completed..... 1 Refused..... 2 Not at home 3 HH not found/destroyed 4 Other (<i>specify</i>) _____ 5	
11. No. of women eligible for interview: _____	12. No. of women interviews completed: _____
13. No. of children under age 5: _____	14. No. of child interviews completed: _____
15. Data entry clerk; name/number: _____	16. Total number of persons in household: _____
Interviewer/supervisor notes: <i>Use this space to record notes about the interview with this household, such as call-back times, incomplete individual interview forms, number of attempts to re-visit, etc.</i>	

Region No. _____

Enumeration District no. _____

Household no. _____

HOUSEHOLD LISTING FORM													
FIRST, PLEASE TELL ME THE NAME OF EACH PERSON WHO USUALLY LIVES HERE STARTING WITH THE HEAD OF THE HH. (Use survey definition of HH member). List the first name in line 01. List adult HH members first, then list children. Then ask: ARE THERE ANY OTHERS WHO LIVE HERE, EVEN IF THEY ARE NOT AT HOME NOW? (THESE MAY INCLUDE CHILDREN IN SCHOOL OR AT WORK). If yes, complete listing. Then, ask and record answers to questions as described in Instructions for Interviewers. Add a continuation sheet if there is not enough room on this page. Tick here if continuation sheet used <input type="checkbox"/>													
				Eligible for:			For persons age 15 or over ask Qs. 8 and 9		For children under age 15 years ask Qs. 10-13				
1. Line No.	2. Name Surname followed by Christian name	3. IS (name) MALE OR FEMALE ?		4. HOW OLD WAS (name) ON HIS/HER LAST BIRTHDAY? Record in completed years 99=DK*	5. Circle Line no. if woman is age 15-49	6. For each child age 5-14: WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD? Record Line no. of mother/ caretaker	7. For each child under 5: WHO IS THE MOTHER OR PRIMARY CARETAKER OF THIS CHILD? Record Line no. Of mother/ caretaker	8. QUESTION NOT ASKED	9. WHAT IS THE MARITAL STATUS OF (name)?** 1 CURRENTLY MARRIED/ IN UNION 2 WIDOWED 3 DIVORCED 4 SEPARATED 5 NEVER MARRIED	10. IS (name's) NATURAL MOTHER ALIVE? 1 YES 2 NO 9 DK	11. If alive: DOES (name's) NATURAL MOTHER LIVE IN THIS HOUSEHOLD? 1 YES 2 NO	12. IS (name's) NATURAL FATHER ALIVE? 1 YES 2 NO 9 DK	13. If alive: DOES (name's) NATURAL FATHER LIVE IN THIS HOUSEHOLD? 1 YES 2 NO
LINE	NAME	M	F	AGE	15-49	MOTHER	MOTHER		M W D S N	Y N DK	Y N	Y N DK	Y N
01		1	2	___	01	___	___		1 2 3 4 5	1 2 9	1 2	1 2 9	1 2
02		1	2	___	02	___	___		1 2 3 4 5	1 2 9	1 2	1 2 9	1 2
03		1	2	___	03	___	___		1 2 3 4 5	1 2 9	1 2	1 2 9	1 2
04		1	2	___	04	___	___		1 2 3 4 5	1 2 9	1 2	1 2 9	1 2
05		1	2	___	05	___	___		1 2 3 4 5	1 2 9	1 2	1 2 9	1 2
06		1	2	___	06	___	___		1 2 3 4 5	1 2 9	1 2	1 2 9	1 2
07		1	2	___	07	___	___		1 2 3 4 5	1 2 9	1 2	1 2 9	1 2
ARE THERE ANY OTHER CHILDREN LIVING HERE – EVEN IF THEY ARE NOT MEMBERS OF YOUR FAMILY OR DO NOT HAVE PARENTS LIVING IN THIS HOUSEHOLD? INCLUDING CHILDREN AT WORK OR AT SCHOOL? If yes, insert child's name and complete form.													
* See instructions: to be used only for elderly household members (code meaning "do not know/over age 50").													

Region No. _____

Enumeration District no. _____

Household no. _____

EDUCATION MODULE														
* If the number of years completed or attended at this level is equal to or greater than 8 years, enter 08														
For persons age 4 or over ask Qs. 15 and 16				For children age 4 through 17 years, continue on, asking Qs. 17-22										
14. Line No.	15. HAS (name) EVER ATTENDED SCHOOL?	16. WHAT IS THE HIGHEST LEVEL OF SCHOOL (name) ATTENDED? WHAT IS THE HIGHEST YEAR/GRADE (name) COMPLETED AT THIS LEVEL? <u>LEVEL:</u> 1 NURSERY 2 PRIMARY 3 SECONDARY 4 HIGHER (POST-SECONDARY /UNIVERSITY) * 5 NON-STANDARD CURRICULUM 9 DK <u>GRADE/YEAR:</u> 99 DK If less than 1 grade, enter 00.		17. QUESTION NOT ASKED	18. DURING THE LAST SCHOOL YEAR ENDED JULY 2000 DID (name) ATTEND SCHOOL AT ANY TIME? 1 YES 2 NO ⇒ Q.21		19. SINCE LAST (day of the week), HOW MANY DAYS DID (name) ATTEND SCHOOL? <i>Don't ask this question. Code 88 for not applicable</i>	20. DURING THE LAST SCHOOL YEAR ENDED JULY 2000, WHICH LEVEL AND GRADE/YEAR DID (name) ATTEND? <u>LEVEL:</u> 1 NURSERY 2 PRIMARY 3 SECONDARY 4 HIGHER (POST-SECONDARY /UNIVERSITY) * 5 NON-STANDARD CURRICULUM 9 DK <u>GRADE/YEAR:</u> 99 DK		21. DURING THE SCHOOL YEAR PREVIOUS TO THE LAST, I.E. ENDED JULY 1999, DID (name) ATTEND SCHOOL AT ANY TIME? 1 YES 2 NO ⇒ NEXT LINE 9 DK ⇒ NEXT LINE			22. DURING THE SCHOOL YEAR PREVIOUS TO THE LAST, I.E. ENDED JULY 1999, WHAT LEVEL AND GRADE/YEAR DID (name) ATTEND? <u>LEVEL:</u> 1 NURSERY 2 PRIMARY 3 SECONDARY 4 HIGHER (POST-SECONDARY /UNIVERSITY) * 5 NON-STANDARD CURRICULUM 9 DK <u>GRADE/YEAR:</u> 99 DK	
LINE	Y NO	LEVEL	GRADE/YEAR		YES	NO	DAYS	LEVEL	GRADE/YEAR	Y N DK	LEVEL	GRADE/YEAR		
01	1 2⇒NEXT LINE	1 2 3 4 5 9	___ __		1	2	___	1 2 3 4 5 9	___ __	1 2 9	1 2 3 4 5 9	___ __		
02	1 2⇒NEXT LINE	1 2 3 4 5 9	___ __		1	2	___	1 2 3 4 5 9	___ __	1 2 9	1 2 3 4 5 9	___ __		
03	1 2⇒NEXT LINE	1 2 3 4 5 9	___ __		1	2	___	1 2 3 4 5 9	___ __	1 2 9	1 2 3 4 5 9	___ __		
04	1 2⇒NEXT LINE	1 2 3 4 5 9	___ __		1	2	___	1 2 3 4 5 9	___ __	1 2 9	1 2 3 4 5 9	___ __		
05	1 2⇒NEXT LINE	1 2 3 4 5 9	___ __		1	2	___	1 2 3 4 5 9	___ __	1 2 9	1 2 3 4 5 9	___ __		
06	1 2⇒NEXT LINE	1 2 3 4 5 9	___ __		1	2	___	1 2 3 4 5 9	___ __	1 2 9	1 2 3 4 5 9	___ __		
07	1 2⇒NEXT LINE	1 2 3 4 5 9	___ __		1	2	___	1 2 3 4 5 9	___ __	1 2 9	1 2 3 4 5 9	___ __		
Now for each woman age 15-49 years, write her name and line number at the top of each page in the Women's Questionnaire. For each child under age 5, write his/her name and line number AND the line number of his/her mother or caretaker at the top of each page in the Children's Questionnaire. You should now have a separate questionnaire for each eligible woman and child in the household.														

Region No. _____

Enumeration District no. _____

Household no. _____

CHILD LABOUR MODULE																		
To be administered to caretaker of each child resident in the household age 5 through 14 years. Copy line number of each eligible child from household listing. NOW I WOULD LIKE TO ASK ABOUT ANY WORK CHILDREN IN THIS HOUSEHOLD MAY DO.																		
1. Line No.	2. Child's name (Surname followed by Christian name). Copy from Column 2 Household Listing	3. 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? 1 YES, FOR PAY (CASH OR KIND) 2 YES, UNPAID 3 NO ⇒ TO Q.5			4. If yes: SINCE LAST (day of the week), ABOUT HOW MANY HOURS DID HE/SHE DO THIS WORK FOR SOMEONE WHO IS NOT A MEMBER OF THIS HOUSEHOLD? If more than one job, include all hours at all jobs. Record response then ⇒ Q.6			5. AT ANY TIME DURING THE PAST YEAR, DID (name) DO ANY KIND OF WORK FOR SOMEONE WHO IS NOT A MEMBER OF THIS HOUSEHOLD? If yes: FOR PAY? 1 YES, FOR PAY (CASH OR KIND) 2 YES, UNPAID 3 NO			6. DURING THE PAST WEEK, DID (name) HELP WITH HOUSEKEEPING CHORES SUCH AS COOKING, SHOPPING, CLEANING, WASHING CLOTHES, FETCHING WATER, OR CARING FOR CHILDREN? 1 YES 2 NO ⇒ TO Q.8		7. If yes: SINCE LAST (day of the week), ABOUT HOW MANY HOURS DID HE/SHE SPEND DOING THESE CHORES?		8. DURING THE PAST WEEK, DID (name) DO ANY WORK FOR HIMSELF, OR ANY OTHER FAMILY WORK (ON THE FARM, BUSINESS, OR VENDING)? 1 YES 2 NO ⇒ NEXT LINE		9. If yes: SINCE LAST (day of the week), ABOUT HOW MANY HOURS DID HE/SHE DO THIS WORK?	
LINE NO.	NAME	YES PAID UNPAID NO	NO	NO. HOURS	YES PAID UNPAID NO	NO	YES NO	NO	NO. HOURS	YES NO	NO	NO. HOURS						
___		1 2 3		___	1 2 3		1 2		___	1 2		___						
___		1 2 3		___	1 2 3		1 2		___	1 2		___						
___		1 2 3		___	1 2 3		1 2		___	1 2		___						
___		1 2 3		___	1 2 3		1 2		___	1 2		___						
___		1 2 3		___	1 2 3		1 2		___	1 2		___						
___		1 2 3		___	1 2 3		1 2		___	1 2		___						
___		1 2 3		___	1 2 3		1 2		___	1 2		___						

When all children in the age range have been covered, GO TO WATER AND SANITATION MODULE ⇒

Region No. ___ Enumeration District no. ___ Household no. ___

WATER AND SANITATION MODULE		
<p><i>This module is to be administered once for each household visited. Record only one response for each question. If more than one response is given, record the most usual source or facility.</i></p>		
<p>1. WHAT IS THE MAIN SOURCE OF DRINKING WATER FOR MEMBERS OF YOUR HOUSEHOLD?</p>	<p>Piped into dwelling .....01 Piped into yard or plot .....02 Public tap .....03 Tubewell/borehole with pump .....04 Protected dug well .....05 Protected spring .....06 Bottled water .....07 Rainwater collection .....08 Unprotected dug well .....09 Unprotected spring .....10 Pond, river or stream .....11 Tanker-truck, vendor .....12 Other (<i>specify</i>) _____ 13 No answer or DK .....99</p>	
<p>2. HOW LONG DOES IT TAKE TO GO THERE, GET WATER, AND COME BACK?</p>	<p>No. of minutes.....__ __ __ Water on premises .....888 DK.....999</p>	
<p>3. WHAT KIND OF TOILET FACILITY DOES YOUR HOUSEHOLD USE?</p>	<p>Flush to sewage system or septic tank .....01 Pour flush latrine (water seal type).....02 Improved pit latrine (e.g., VIP) .....03 Traditional pit latrine.....04 Open pit .....05 Other (<i>specify</i>) .....06 No facilities or bush or field .....88</p>	88⇒Q.5
<p>4. IS THIS FACILITY LOCATED WITHIN YOUR DWELLING, OR YARD OR COMPOUND?*</p>	<p>Yes, in dwelling/yard/compound 1 No, outside dwelling/yard/compound 2 DK..... 9</p>	
<p>5. WHAT HAPPENS WITH THE STOOLS OF YOUNG CHILDREN (0-3 YEARS) WHEN THEY DO NOT USE THE LATRINE OR TOILET FACILITY?</p>	<p>Children always use toilet or latrine .....01 Thrown into toilet or latrine .....02 Thrown outside the yard .....03 Buried in the yard.....04 Not disposed of or left on the ground .....05 Other (<i>specify</i>):_____ 07 No young children in household .....88</p>	

GO TO NEXT MODULE ⇒

Reg. No. ___ Enumeration District no. ___ Household no. ___ Woman line no. ___

QUESTIONNAIRE FOR INDIVIDUAL WOMEN

WOMEN'S INFORMATION PANEL	
<i>This module is to be administered to all women age 15 through 49 (see column 5 of HH listing). Fill in one form for each eligible woman.</i>	
1. <i>Woman's line number (from HH listing).</i>	Line number.....__ __
2. <i>Woman's name.</i>	Name _____
3. HOW OLD WERE YOU AT YOUR LAST BIRTHDAY?	Age (in completed years) __ __

GO TO NEXT MODULE ⇨

Reg. No. _____ E.D. no. _____ Hh no. _____ Woman line no. _____

CHILD MORTALITY MODULE		
<p><i>This module is to be administered to all women age 15-49. All questions refer only to LIVE births. Follow instructions as provided in training. See Instructions for Interviewers.</i></p>		
<p>1. NOW I WOULD LIKE TO ASK ABOUT ALL THE BIRTHS YOU HAVE HAD DURING YOUR LIFE. HAVE YOU EVER GIVEN BIRTH?</p> <p><i>If "NO" probe by asking: I MEAN, TO A CHILD WHO EVER BREATHED OR CRIED OR SHOWED OTHER SIGNS OF LIFE – EVEN IF HE OR SHE LIVED ONLY A FEW MINUTES OR HOURS?</i></p>	<p>Yes 1 No 2</p>	<p>2⇒ CONTRA- CEPTIVE USE MODULE</p>
<p>2A. 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 IS THE CHILD OF A MAN OTHER THAN YOUR CURRENT PARTNER.</p> <p><i>Or:</i> 2B. HOW MANY YEARS AGO DID YOU HAVE YOUR FIRST BIRTH?</p>	<p>Date of first birth Day/Month/Year..... _ / _ / _ _ _ _</p> <p>DK date of first birth 99999999</p> <p><i>Or:</i> Completed years since first birth _ _</p>	<p>DK⇒2B</p>
<p>3. DO YOU HAVE ANY SONS OR DAUGHTERS TO WHOM YOU HAVE GIVEN BIRTH WHO ARE NOW LIVING WITH YOU?</p>	<p>Yes 1 No 2</p>	<p>2⇒Q.5</p>
<p>4. HOW MANY SONS LIVE WITH YOU?</p> <p>HOW MANY DAUGHTERS LIVE WITH YOU?</p>	<p>Sons at home..... _ _</p> <p>Daughters at home _ _</p>	
<p>5. DO YOU HAVE ANY SONS OR DAUGHTERS TO WHOM YOU HAVE GIVEN BIRTH WHO ARE ALIVE BUT DO NOT LIVE WITH YOU?</p>	<p>Yes 1 No 2</p>	<p>2⇒Q.7</p>
<p>6. HOW MANY SONS ARE ALIVE BUT DO NOT LIVE WITH YOU?</p> <p>HOW MANY DAUGHTERS ARE ALIVE BUT DO NOT LIVE WITH YOU?</p>	<p>Sons elsewhere _ _</p> <p>Daughters elsewhere _ _</p>	
<p>7. HAVE YOU EVER GIVEN BIRTH TO A BOY OR GIRL WHO WAS BORN ALIVE BUT LATER DIED?</p>	<p>Yes 1 No 2</p>	<p>2⇒Q.9</p>
<p>8. HOW MANY BOYS HAVE DIED?</p> <p>HOW MANY GIRLS HAVE DIED?</p>	<p>Boys dead..... _ _</p> <p>Girls dead _ _</p>	
<p>9. Sum answers to Q. 4, 6, and 8.</p>	<p>Sum _ _</p>	
<p>10. JUST TO MAKE SURE THAT I HAVE THIS RIGHT, YOU HAVE HAD IN TOTAL (<i>total number</i>) BIRTHS DURING YOUR LIFE. IS THIS CORRECT?</p> <p><input type="checkbox"/> Yes ⇒ Go to Q.11 <input type="checkbox"/> No ⇒ Check responses and make corrections before proceeding to Q.11</p>		

Reg. No. ___ E.D. no. ___ Hh no. ___ Woman line no. ___

11. OF THESE (<i>total number</i>) BIRTHS YOU HAVE HAD, WHEN DID YOU DELIVER THE LAST ONE (EVEN IF HE OR SHE HAS DIED)?	Date of last birth Day/Month/Year..... ___/___/___	
<p><i>Did the woman's last birth occur within the last year, that is, since .....(insert date)?</i></p> <p><input type="checkbox"/> <i>Yes, live birth in last year. ⇒ GO TO TETANUS TOXOID (TT)MODULE</i></p> <p><input type="checkbox"/> <i>No live birth in last year. ⇒ GO TO CONTRACEPTIVE USE MODULE</i></p>		

Reg. No. ___ Enumeration Dist. no. ___ Household no. ___ Woman line no. ___

TETANUS TOXOID (TT) MODULE		
<i>This module is to be administered to all women with a live birth in the year preceding date of interview.</i>		
1. DO YOU HAVE A CARD OR OTHER DOCUMENT WITH YOUR OWN IMMUNIZATIONS LISTED? <i>If a card is presented, use it to assist with answers to the following questions.</i>	Yes (card seen) 1 Yes (card not seen)..... 2 No 3 DK..... 9	
2. WHEN YOU WERE PREGNANT WITH YOUR LAST CHILD, DID YOU RECEIVE ANY INJECTION TO PREVENT HIM OR HER FROM GETTING TETANUS AFTER BIRTH (AN ANTI-TETANUS SHOT, AN INJECTION AT THE TOP OF THE ARM OR SHOULDER)?	Yes 1 No 2 DK..... 9	2⇒Q.4 9⇒Q.4
3. <i>If yes:</i> HOW MANY DOSES OF TETANUS TOXOID (ANTI-TETANUS INJECTIONS) DID YOU RECEIVE DURING YOUR LAST PREGNANCY?	No. of doses.....__ __ DK.....99	
<i>How many TT doses were reported during last pregnancy in Q.3?</i>		
<input type="checkbox"/> <i>At least two TT injections during last pregnancy. ⇒ GO TO MATERNAL AND NEWBORN HEALTH MODULE</i>		
<input type="checkbox"/> <i>Fewer than two TT injections during last pregnancy. ⇒ CONTINUE WITH Q.4</i>		
<i>If the response to Q3 is fewer than 2 or DK go on to Q4 as well.</i>		
4. DID YOU RECEIVE ANY TETANUS TOXOID INJECTION (<i>additional probes</i>) AT ANY TIME BEFORE YOUR LAST PREGNANCY, INCLUDING DURING A PREVIOUS PREGNANCY OR BETWEEN PREGNANCIES?	Yes 1 No 2 DK..... 9	2⇒Q.7 9⇒Q.7
5. <i>If yes:</i> HOW MANY DOSES DID YOU RECEIVE?	No. of doses.....__ __ DK..... 99	
6A. WHEN WAS THE LAST DOSE RECEIVED?	Date of last dose Month/Year __ / __ __ __ DK date.....999999 <i>Or:</i> Years ago__ __ DK 99	DK⇒6B
6B. HOW MANY YEARS AGO DID YOU RECEIVE THE LAST DOSE?	DK 99	
7. <i>Add responses to Q.3 and Q.5 to obtain total number of doses in lifetime.</i> <i>If the response to Q.3 and Q.5 is DK then Q7 is also DK..</i>	Total no. of doses__ __ DK..... 99	

GO TO MATERNAL AND NEWBORN HEALTH MODULE ⇒

Reg. no. ____

E. D. no. ____

Hh no. ____

Woman line no. ____

MATERNAL AND NEWBORN HEALTH MODULE		
<i>This module is to be administered to all women with a live birth in the year preceding date of interview.</i>		
Use Q.7 and Q.8 only in countries where a local term for night blindness exists.		
1. Not applicable to Guyana and therefore not asked.		
2. DID YOU SEE ANYONE FOR ANTENATAL CARE FOR THIS PREGNANCY? <i>If yes: WHOM DID YOU SEE? ANYONE ELSE?</i> <i>Probe for the type of person seen and circle all answers given.</i>	Health professional: Doctor .....01 Nurse/midwife .....02 Single Trained Midwife .....03 Medex .....04 Community Health Worker .....05 Traditional Birth Attendant .....06 Other (<i>specify</i>) _____ 07 No one .....88	
3. WHO ASSISTED WITH THE DELIVERY OF YOUR LAST CHILD (<i>or name</i>)? ANYONE ELSE? <i>Probe for the type of person assisting and circle all answers given.</i>	Health professional: Doctor .....01 Nurse/midwife .....02 Single Trained Midwife .....03 Medex .....04 Community Health Worker .....05 Traditional Birth Attendant .....06 Relative/friend .....07 Designation Unknown .....08 Other (<i>specify</i>) _____ 09 No one .....88	
4. WHEN YOUR LAST CHILD (<i>name</i>) WAS BORN, WAS HE/SHE VERY LARGE, LARGER THAN AVERAGE, AVERAGE, SMALLER THAN AVERAGE, OR VERY SMALL?	Very large 1 Larger than average 2 Average 3 Smaller than average 4 Very small 5 DK 9	
5. WAS (<i>name</i>) WEIGHED AT BIRTH?	Yes 1 No 2 DK 9	2⇒NEXT MODULE 9⇒NEXT MODULE
6. HOW MUCH DID (<i>name</i>) WEIGH? <i>Record weight from health card, if available. Only complete record from card or recall. Not both.</i>	From card 1 (grams) __ , ____ From recall 2 (grams) __ , ____ DK 99999	

GO TO NEXT MODULE ⇒

Reg. no. ____

E.D. no. ____

Hh. no. ____

Woman line no. ____

CONTRACEPTIVE USE MODULE

Ask Q.1 for all women age 15-49 and then follow the skip instruction carefully.

Questions on pregnancy and contraception are to be asked only of women who are currently married or in a common law relationship.

<p>1. ARE YOU CURRENTLY MARRIED, IN A COMMON LAW UNION OR IN A RELATIONSHIP WITH A MALE FRIEND?</p>	<p>Yes 1</p> <p>No, widowed, divorced, separated 2</p> <p>No, never married 3</p>	<p>2⇒NEXT MODULE</p> <p>3⇒NEXT MODULE</p>
<p>2. NOW I AM GOING TO CHANGE TOPICS. I WOULD LIKE TO TALK WITH YOU ABOUT ANOTHER SUBJECT – FAMILY PLANNING – AND YOUR REPRODUCTIVE HEALTH. I KNOW THIS IS A DIFFICULT SUBJECT TO TALK ABOUT, BUT IT IS IMPORTANT THAT WE OBTAIN THIS INFORMATION. OF COURSE, ALL THE INFORMATION YOU SUPPLY WILL REMAIN STRICTLY CONFIDENTIAL. YOU WILL NEVER BE IDENTIFIED WITH THE ANSWERS TO THESE QUESTIONS.</p> <p>ARE YOU PREGNANT NOW?</p>	<p>Yes, currently pregnant 1</p> <p>No 2</p> <p>Unsure or DK 3</p>	<p>1⇒NEXT MODULE</p>
<p>3. SOME COUPLES USE VARIOUS WAYS OR METHODS TO DELAY OR AVOID A PREGNANCY. ARE YOU CURRENTLY DOING SOMETHING OR USING ANY METHOD TO DELAY OR AVOID GETTING PREGNANT?</p>	<p>Yes 1</p> <p>No 2</p>	<p>2⇒NEXT MODULE</p>
<p>4. WHICH METHOD ARE YOU USING?</p> <p><i>Do not prompt.</i> <i>If more than one method is mentioned, circle each one.</i></p>	<p>Female sterilization .....01</p> <p>Male sterilization .....02</p> <p>Pill .....03</p> <p>IUD .....04</p> <p>Injections .....05</p> <p>Implants .....06</p> <p>Condom .....07</p> <p>Female condom .....08</p> <p>Diaphragm .....09</p> <p>Foam/jelly .....10</p> <p>Lactational amenorrhoea method (LAM) .....11</p> <p>Periodic abstinence .....12</p> <p>Withdrawal .....13</p> <p>Other (<i>specify</i>) _____ 14</p>	

GO TO NEXT MODULE ⇒

Reg. no. ____

E.D. no. ____

Hh. no. ____

Woman line no. ____

HIV/AIDS MODULE*This module is to be administered to all women age 15-49.**See Instructions for Interviewers for further discussion of these questions.*

<p>1. NOW I WOULD LIKE TO TALK WITH YOU ABOUT WHAT YOU KNOW ABOUT SERIOUS ILLNESS, IN PARTICULAR, ABOUT HIV AND AIDS.</p> <p>HAVE YOU EVER HEARD OF THE VIRUS HIV OR AN ILLNESS CALLED AIDS?</p>	<p>Yes 1</p> <p>No 2</p>	<p>2⇒Q.18</p>
<p>2. IS THERE ANYTHING A PERSON CAN DO TO AVOID GETTING HIV, THE VIRUS THAT CAUSES AIDS?</p>	<p>Yes 1</p> <p>No 2</p> <p>DK..... 9</p>	<p>2⇒Q.8</p> <p>9⇒Q.8</p>
<p>3. NOW I WILL READ SOME QUESTIONS ABOUT HOW PEOPLE CAN PROTECT THEMSELVES FROM THE AIDS VIRUS. THESE QUESTIONS INCLUDE ISSUES RELATED TO SEXUALITY WHICH SOME PEOPLE MIGHT FIND DIFFICULT TO ANSWER. HOWEVER, YOUR ANSWERS ARE VERY IMPORTANT TO HELP UNDERSTAND THE NEEDS OF PEOPLE IN GUYANA. AGAIN, THIS INFORMATION IS ALL COMPLETELY PRIVATE AND ANONYMOUS. PLEASE ANSWER YES OR NO TO EACH QUESTION.</p> <p>CAN PEOPLE PROTECT THEMSELVES FROM GETTING INFECTED WITH THE AIDS VIRUS BY HAVING ONE UNINFECTED SEX PARTNER WHO ALSO HAS NO OTHER PARTNERS?</p>	<p>Yes 1</p> <p>No 2</p> <p>DK..... 9</p>	
<p>4. DO YOU THINK A PERSON CAN GET INFECTED WITH THE AIDS VIRUS THROUGH SUPERNATURAL MEANS? E.G. OBEAH OR WITCHCRAFT.</p>	<p>Yes 1</p> <p>No 2</p> <p>DK..... 9</p>	
<p>5. CAN PEOPLE PROTECT THEMSELVES FROM THE AIDS VIRUS BY USING A CONDOM CORRECTLY EVERY TIME THEY HAVE SEX?</p>	<p>Yes 1</p> <p>No 2</p> <p>DK..... 9</p>	
<p>6. CAN A PERSON GET THE AIDS VIRUS FROM MOSQUITO BITES?</p>	<p>Yes 1</p> <p>No 2</p> <p>DK..... 9</p>	
<p>7. CAN PEOPLE PROTECT THEMSELVES FROM GETTING INFECTED WITH THE AIDS VIRUS BY NOT HAVING SEX AT ALL?</p>	<p>Yes 1</p> <p>No 2</p> <p>DK..... 9</p>	
<p>8. IS IT POSSIBLE FOR A HEALTHY-LOOKING PERSON TO HAVE THE AIDS VIRUS?</p>	<p>Yes 1</p> <p>No 2</p> <p>DK..... 9</p>	

Reg. no. ____ E.D. no. ____ Hh. no. ____ Woman line no. ____

9. CAN THE AIDS VIRUS BE TRANSMITTED FROM A MOTHER TO A CHILD?	Yes 1 No 2 DK..... 9	2⇒Q.13 9⇒Q.13
10. CAN THE AIDS VIRUS BE TRANSMITTED FROM A MOTHER TO A CHILD DURING PREGNANCY?	Yes 1 No 2 DK..... 9	
11. CAN THE AIDS VIRUS BE TRANSMITTED FROM A MOTHER TO A CHILD AT DELIVERY?	Yes 1 No 2 DK..... 9	
12. CAN THE AIDS VIRUS BE TRANSMITTED FROM A MOTHER TO A CHILD THROUGH BREAST MILK?	Yes 1 No 2 DK..... 9	
13. IF A TEACHER HAS THE AIDS VIRUS BUT IS NOT SICK, SHOULD HE OR SHE BE ALLOWED TO CONTINUE TEACHING IN SCHOOL?	Yes 1 No 2 DK..... 9	
14. IF YOU KNEW THAT A SHOPKEEPER OR FOOD SELLER HAD AIDS OR THE VIRUS THAT CAUSES IT, WOULD YOU BUY FOOD FROM HIM OR HER?	Yes 1 No 2 DK..... 9	
15. I AM NOT GOING TO ASK YOU ABOUT YOUR HIV STATUS, BUT WE ARE INTERESTED TO KNOW HOW MUCH DEMAND THERE IS IN YOUR COMMUNITY FOR HIV TESTING AND COUNSELLING. So, I WOULD LIKE TO ASK YOU: I DO NOT WANT TO KNOW THE RESULTS, BUT HAVE YOU EVER BEEN TESTED TO SEE IF YOU HAVE HIV, THE VIRUS THAT CAUSES AIDS?	Yes 1 No 2	2⇒Q.17
16. I DO NOT WANT YOU TO TELL ME THE RESULTS OF THE TEST, BUT HAVE YOU BEEN TOLD THE RESULTS?	Yes 1 No 2	
17. AT THIS TIME, DO YOU KNOW OF A PLACE WHERE YOU CAN GO TO GET SUCH A TEST TO SEE IF YOU HAVE THE AIDS VIRUS?	Yes 1 No 2	
18. Is the woman a caretaker of any children under five years of age? <input type="checkbox"/> Yes. ⇒ GO TO QUESTIONNAIRE FOR CHILDREN UNDER FIVE and administer one questionnaire for each child under five for whom she is the caretaker. <input type="checkbox"/> No. ⇒ CONTINUE WITH Q.19		
19. Does another eligible woman reside in the household? <input type="checkbox"/> Yes. ⇒ End the current interview by thanking the woman for her cooperation and GO TO QUESTIONNAIRE FOR INDIVIDUAL WOMEN to administer the questionnaire to the next eligible woman. <input type="checkbox"/> No. ⇒ End the interview with this woman by thanking her for her cooperation. Gather together all questionnaires for this household and tally the number of interviews completed on the cover page.		

Reg. no. ___ E.D. no. ___ Hh no. ___ Caretaker no. ___ Child line no. ___

QUESTIONNAIRE FOR CHILDREN UNDER FIVE

*This questionnaire is to be administered to all women who care for a child that lives with them
And is under the age of 5 years (see Q.4 of the HH listing).
A separate form should be used for each eligible child.
Questions should be administered to the mother or caretaker of the eligible child (see Q.7 of the HH listing).
Fill in the line number of each child, the line number of the child's mother or caretaker,
And the household and cluster numbers in the space at the top of each page.*

BIRTH REGISTRATION AND EARLY LEARNING MODULE		
1. Child's name.	Name _____	
2. Child's age (copy from Q.4 of HH listing).	Age (in completed years) _ _	
3. NOW I WOULD LIKE TO ASK YOU SOME QUESTIONS ABOUT THE HEALTH OF EACH CHILD UNDER THE AGE OF 5 IN YOUR CARE, WHO LIVES WITH YOU NOW. NOW I WANT TO ASK YOU ABOUT (name). IN WHAT MONTH AND YEAR WAS (name) BORN? <i>Probe:</i> WHAT IS HIS/HER BIRTHDAY? <i>If the mother knows the exact birth date, also enter the day; otherwise, enter 99 for day.</i>	Date of birth Day/Month/Year _ _ / _ _ / _ _ _ _	
4. DOES (name) HAVE A BIRTH CERTIFICATE? MAY I SEE IT? <i>If certificate is presented, verify reported birth date. If no birth certificate is presented, try to verify date using another document (health card, etc.). Correct stated age, if necessary.</i>	Yes, seen 1 Yes, not seen 2 No 3 DK 9	1⇒Q.8
5. <i>If no birth certificate is shown, ask:</i> HAS (name's) BIRTH BEEN REGISTERED?	Yes 1 No 2 DK 9	1⇒Q.8 9⇒Q.7
6. WHY IS (name's) BIRTH NOT REGISTERED? <i>IF MORE THAN ONE REASON IS GIVEN, CIRCLE ALL THAT APPLY</i>	Costs too much** 1 Must travel too far 2 Did not know it should be registered 3 Late, and did not want to pay fine 4 Does not know where to register 5 Don't know how to register 6 Other (specify) _____ 7 DK 9	6⇒Q8
7. DO YOU KNOW HOW TO REGISTER YOUR CHILD'S BIRTH?	Yes 1 No 2 No answer 8	

Reg. no. ___ E.D. no. ___ Hh no. ___ Caretaker no. ___ Child line no. ___

<p>8. Check age. If child is less than 3 years old go to Next Module. If 3 years old or more, ask: DURING THE LAST SCHOOL YEAR ENDED JULY 2000, DID (name) ATTEND ANY ORGANIZED LEARNING OR EARLY CHILDHOOD EDUCATION PROGRAMME, SUCH AS A PRIVATE OR GOVERNMENT FACILITY, INCLUDING KINDERGARTEN?</p>	<p>Yes 1 No 2 DK..... 9</p>	
<p>9.A. NOT ASKED 9.B. NOT ASKED</p>		

GO TO NEXT MODULE ⇒

Reg. no. ___ E.D. no. ___ Hh no. ___ Caretaker no. ___ Child line no. ___

BREASTFEEDING MODULE		
1. HAS (<i>name</i>) EVER BEEN BREASTFED?	Yes 1 No 2 DK..... 9	2⇒Q.4 9⇒Q.4
2. IS HE/SHE STILL BEING BREASTFED?	Yes 1 No 2 DK..... 9	2⇒Q.4 9⇒Q.4
3. SINCE THIS TIME YESTERDAY, DID HE/SHE RECEIVE ANY OF THE FOLLOWING: <i>Read each item aloud and record response before proceeding to the next item.</i>		
		Y N DK
3A. VITAMIN, MINERAL SUPPLEMENTS OR MEDICINE?	A. Vitamin supplements 1 2 9	
3B. PLAIN WATER?	B. Plain water..... 1 2 9	
3C. SUGAR WATER, FLAVOURED WATER OR FRUIT JUICE OR TEA?	C. Sugar water or juice 1 2 9	
3D. ORAL REHYDRATION SOLUTION (ORS)?	D. ORS 1 2 9	
3E. TINNED, POWDERED OR FRESH MILK OR INFANT FORMULA?	E. Milk..... 1 2 9	
3F. ANY OTHER LIQUIDS?	F. Other liquids (<i>specify</i>) _____ 1 2 9	
3G. SOLID OR SEMI-SOLID (CRUSH) FOOD?	G. Crush 1 2 9	
4. SINCE THIS TIME YESTERDAY, HAS (<i>name</i>) BEEN GIVEN ANYTHING TO DRINK FROM A BOTTLE WITH A NIPPLE OR TEAT?	Yes 1 No 2 DK..... 9	

GO TO NEXT MODULE ⇒

CARE OF ILLNESS MODULE		
<p>1. HAS (<i>name</i>) HAD DIARRHOEA IN THE LAST TWO WEEKS? THAT IS, DURING THE LAST 14 DAYS?</p> <p><i>Diarrhoea is determined as perceived by mother or caretaker, or as three or more loose or watery stools per day, or blood in stool.</i></p>	<p>Yes 1</p> <p>No 2</p> <p>DK..... 9</p>	<p>1⇒Q.3</p>
<p>2. IN THE LAST TWO WEEKS, HAS (<i>name</i>) HAD ANY OTHER ILLNESS, SUCH AS COUGH, FEVER OR ANY OTHER HEALTH PROBLEM?</p>	<p>Yes 1</p> <p>No 2</p> <p>DK..... 9</p>	<p>1⇒Q.4</p> <p>2⇒Q.11</p> <p>9⇒Q.11</p>
<p>3. DURING THIS LAST EPISODE OF DIARRHOEA, DID (<i>name</i>) DRINK ANY OF THE FOLLOWING:</p> <p><i>Read each item aloud and record response before proceeding to the next item.</i></p> <p>3A. BREAST MILK?</p> <p>3B. CEREAL-BASED PORRIDGE MADE FROM CORN FLOUR, CASSAVA, PLANTAINS ETC.?</p> <p>3C Home fluids (e.g., sugar/salt water, coconut water)?</p> <p>3D. ORS PACKET SOLUTION?</p> <p>3E. OTHER MILK OR INFANT FORMULA?</p> <p>3F. WATER WITH FEEDING DURING SOME PART OF THE DAY?</p> <p>3G. WATER ALONE?</p> <p>3H. Other home remedies (e.g. guava bush, black sage, buck cotton, aerated drinks etc..)</p> <p>3I. NOTHING</p>	<p style="text-align: right;">Y N DK</p> <p>A. Breast milk.....1 2 9</p> <p>B. Porridge.....1 2 9</p> <p>C. Home Fluids .....1 2 9</p> <p>D. ORS packet.....1 2 9</p> <p>E. Other milk.....1 2 9</p> <p>F. Water with feeding.....1 2 9</p> <p>G. Water alone.....1 2 9</p> <p>H. Other Home fluids .....1 2 9</p> <p>I. Nothing .....1 2 9</p>	<p>1⇒Q.5</p>
<p>4. DURING (<i>name's</i>) ILLNESS, DID HE/SHE DRINK MUCH LESS, ABOUT THE SAME, OR MORE THAN USUAL?</p>	<p>Much less or none 1</p> <p>About the same (or somewhat less)..... 2</p> <p>More 3</p> <p>DK..... 9</p>	
<p>5. DURING (<i>name's</i>) ILLNESS, DID HE/SHE EAT LESS, ABOUT THE SAME, OR MORE FOOD THAN USUAL?</p> <p><i>If "less", probe:</i> MUCH LESS OR A LITTLE LESS?</p>	<p>None 1</p> <p>Much less..... 2</p> <p>Somewhat less 3</p> <p>About the same..... 4</p> <p>More 5</p> <p>DK..... 9</p>	
<p>6. HAS (<i>name</i>) HAD AN ILLNESS WITH A COUGH AT ANY TIME IN THE LAST TWO WEEKS, THAT IS, DURING THE LAST 14 DAYS?</p>	<p>Yes 1</p> <p>No 2</p> <p>DK..... 9</p>	<p>2⇒Q.11</p> <p>9⇒Q.11</p>

Reg. no. ___ E.D. no. ___ Hh no. ___ Caretaker no. ___ Child line no. ___

<p>7. WHEN (<i>name</i>) HAD AN ILLNESS WITH A COUGH, DID HE/SHE BREATHE FASTER THAN USUAL WITH SHORT, QUICK BREATHS OR HAVE DIFFICULTY BREATHING?</p>	<p>Yes 1 No 2 DK..... 9</p>	<p>2⇒Q.11 9⇒Q.11</p>
<p>8. WERE THE SYMPTOMS DUE TO A PROBLEM IN THE CHEST OR A BLOCKED NOSE?</p>	<p>Blocked nose 1 Problem in chest 2 Both 3 Other (<i>specify</i>) 4 DK..... 9</p>	<p>1⇒Q.11 4⇒Q.11</p>
<p>9. DID YOU SEEK ADVICE OR TREATMENT FOR THE ILLNESS OUTSIDE THE HOME?</p>	<p>Yes 1 No 2 DK..... 9</p>	<p>2⇒Q.11 9⇒Q.11</p>
<p>10. FROM WHERE DID YOU SEEK CARE? ANYWHERE ELSE? <i>Circle all providers mentioned, but do NOT prompt with any suggestions.</i></p>	<p>Hospital.....01 Health centre .....02 Dispensary .....03 Community health worker .....04 MCH clinic.....05 Mobile/outreach clinic .....06 Private physician.....07 Traditional healer .....08 Pharmacy or drug seller.....09 Relative or friend.....10 Other (<i>specify</i>) 11</p>	
<p><i>Ask this question (Q.11) only once for each caretaker.</i></p> <p>11. SOMETIMES CHILDREN HAVE SEVERE ILLNESSES AND SHOULD BE TAKEN IMMEDIATELY TO A HEALTH FACILITY. WHAT TYPES OF SYMPTOMS WOULD CAUSE YOU TO TAKE YOUR CHILD TO A HEALTH FACILITY RIGHT AWAY? <i>Keep asking for more signs or symptoms until the caretaker cannot recall any additional symptoms. Circle all symptoms mentioned, but do NOT prompt with any suggestions.</i></p>	<p>Child not able to drink or breastfeed .....01 Child becomes sicker .....02 Child develops a fever .....03 Child has fast breathing .....04 Child has difficult breathing .....05 Child has blood in stool.....06 Child is drinking with difficulty .....07 Other (<i>specify</i>) 08 Other (<i>specify</i>) 09 Other (<i>specify</i>) 10</p>	

GO TO NEXT MODULE ⇒

Reg. No. ___ E.D. no. ___ Hh no. ___ Caretaker no. ___ Child line no. ___

MALARIA MODULE		
<i>This module is for use in countries or regions at high risk of malaria. See manual for definition.</i>		
1. IN THE LAST TWO WEEKS, THAT IS, SINCE (<i>day of the week</i>) OF THE WEEK BEFORE LAST, HAS (<i>name</i>) BEEN ILL WITH A FEVER?	Yes 1 No 2 DK..... 9	2⇒Q.8 9⇒Q.8
2. WAS (<i>name</i>) SEEN AT A HEALTH FACILITY DURING THIS ILLNESS?	Yes 1 No 2 DK..... 9	2⇒Q.6 9⇒Q.6
3. DID (<i>name</i>) TAKE A MEDICINE FOR FEVER OR MALARIA THAT WAS PROVIDED OR PRESCRIBED AT THE HEALTH FACILITY?	Yes 1 No 2 DK..... 9	2⇒Q.5 9⇒Q.5
4. WHAT MEDICINE DID (<i>name</i>) TAKE THAT WAS PROVIDED OR PRESCRIBED AT THE HEALTH FACILITY? <i>Circle all medicines mentioned.</i>	Paracetamol..... 1 Chloroquine 2 Fansidar..... 3 Quinine .....4 Primaquine .....5 Other (<i>specify</i>) _____ 6 DK..... 9	
5. WAS (<i>name</i>) GIVEN MEDICINE FOR THE FEVER OR MALARIA BEFORE BEING TAKEN TO THE HEALTH FACILITY?	Yes 1 No 2 DK..... 9	1⇒Q.7 2⇒Q.8 9⇒Q.8
6. WAS (<i>name</i>) GIVEN MEDICINE FOR FEVER OR MALARIA DURING THIS ILLNESS?	Yes 1 No 2 DK..... 9	2⇒Q.8 9⇒Q.8
7. WHAT MEDICINE WAS (<i>name</i>) GIVEN? <i>Circle all medicines given before visiting a health facility or if no visit was made to a health facility.</i>	Paracetamol..... 1 Chloroquine 2 Fansidar..... 3 Quinine .....4 Primaquine .....5 Other (<i>specify</i>) _____ 6 DK..... 9	
8. DID (<i>name</i>) SLEEP UNDER A BEDNET LAST NIGHT?	Yes 1 No 2 DK..... 9	2⇒NEXT MODULE 9⇒NEXT MODULE

Reg. No. ___ E.D. no. ___ Hh no. ___ Caretaker no. ___ Child line no. ___

<p>9. WAS THIS BEDNET EVER TREATED WITH A PRODUCT TO KILL MOSQUITOS?</p>	<p>Yes 1 No 2 DK..... 9</p>	<p>2⇒NEXT MODULE 9⇒NEXT MODULE</p>
<p>10. WHEN WAS THE BEDNET LAST TREATED?</p>	<p>Months ago DK.....99</p>	

GO TO NEXT MODULE ⇒

Reg. No. ___ E.D. no. ___ Hh no. ___ Caretaker no. ___ Child line no. ___

IMMUNIZATION MODULE										
<p><i>If an immunization card is available, copy the dates in Qs.2-5 for each type of immunization recorded on the card. Qs.7-14 are for recording vaccinations that are not recorded on the card. Qs.7-14 will only be asked when a card is not available.</i></p>										
1. IS THERE A VACCINATION RECORD FOR (name)?		Yes, seen..... 1						2⇒Q.7		
		Yes, not seen..... 2						3⇒Q.7		
		No..... 3								
<p>(a) Copy dates of all vaccinations from the card: (b) Write 44 in day column if card shows that vaccination was given but no date recorded.</p>		Date of Immunization								
		DAY		MONTH		YEAR				
2. BCG	BCG									
3B. OPV1	OPV1									
3C. OPV2	OPV2									
3D. OPV3	OPV3									
4A. DPT1	DPT1									
4B. DPT2	DPT2									
4C. DPT3	DPT3									
5. M M R	M M R									
6. IN ADDITION TO THE VACCINATIONS SHOWN ON THIS CARD, DID (NAME) RECEIVE ANY OTHER VACCINATIONS?		Yes 1						1⇒NEXT MODULE		
		Probe for vaccinations and write 66 in the corresponding day column on Q.2 to Q.5						2⇒NEXT MODULE		
		No 2						9⇒NEXT MODULE		
		DK..... 9								
7. HAS (NAME) EVER RECEIVED ANY VACCINATIONS TO PREVENT HIM/HER GETTING DISEASES?		Yes 1						2⇒NEXT MODULE		
		No 2						9⇒NEXT MODULE		
		DK..... 9								
8. HAS (name) EVER BEEN GIVEN A BCG VACCINATION AGAINST TUBERCULOSIS – THAT IS, AN INJECTION IN THE LEFT SHOULDER THAT CAUSED A SCAR?		Yes 1								
		No 2								
		DK..... 9								

Reg. No. ___ E.D. no. ___ Hh no. ___ Caretaker no. ___ Child line no. ___

<p>9. HAS (<i>name</i>) EVER BEEN GIVEN ANY “VACCINATION DROPS IN THE MOUTH” TO PROTECT HIM/HER FROM GETTING POLIO?</p>	<p>Yes 1 No 2 DK..... 9</p>	<p>2⇒Q.12 9⇒Q.12</p>
<p>10. HOW OLD WAS HE/SHE WHEN THE FIRST DOSE WAS GIVEN – JUST AFTER BIRTH OR LATER?</p>	<p>Just after birth 1 Later 2</p>	
<p>11. HOW MANY TIMES HAS HE/SHE BEEN GIVEN THESE DROPS?</p>	<p>No. of times.....__ __ DK.....99</p>	
<p>12. HAS (<i>name</i>) EVER BEEN GIVEN “VACCINATION INJECTIONS” – THAT IS, AN INJECTION IN THE UPPER ARM – TO PREVENT HIM/HER FROM GETTING TETANUS, WHOOPING COUGH, DIPHTHERIA? (SOMETIMES GIVEN AT THE SAME TIME AS POLIO)</p>	<p>Yes 1 No 2 DK..... 9</p>	<p>2⇒Q.14 9⇒Q.14</p>
<p>13. HOW MANY TIMES?</p>	<p>No. of times.....__ __ DK.....99</p>	
<p>14. HAS (<i>name</i>) EVER BEEN GIVEN “VACCINATION INJECTIONS” – THAT IS, A SHOT IN THE ARM BETWEEN THE AGE OF 12 TO 23 MONTHS OR OLDER – TO PREVENT HIM/HER FROM GETTING MEASLES, MUMPS AND RUBELLA (MMR)?</p>	<p>Yes 1 No 2 DK..... 9</p>	

GO TO NEXT MODULE ⇒

Reg. No. ___ E.D. no. ___ Hh no. ___ Caretaker no. ___ Child line no. ___

ANTHROPOMETRY MODULE		
<p><i>After questionnaires for all children are complete, the measurer weighs and measures each child. Record weight and length/height below, taking care to record the measurements on the correct questionnaire for each child. Check the child's name and line number on the HH listing before recording measurements.</i></p>		
1. Child's weight.	Kilograms (kg)..... _____ . _____	
2. Child's length or height.		
<p>Check age of child:</p> <p><input type="checkbox"/> Child under 2 years old. ⇒ Measure length (lying down).</p> <p><input type="checkbox"/> Child age 2 or more years. ⇒ Measure height (standing up).</p>	<p>Length (cm)</p> <p>Lying down..... 1 _____ . _____</p> <p>Height (cm)</p> <p>Standing up..... 2 _____ . _____</p>	
3. Measurer's identification code.	Measurer code..... _____	
4. Result.	<p>Measured..... 1</p> <p>Not present..... 2</p> <p>Refused..... 3</p> <p>Other (specify) _____ 4</p>	
5. Is there another child in the household who is eligible for measurement?		
<p><input type="checkbox"/> Yes. ⇒ Record measurements for next child.</p> <p><input type="checkbox"/> No. ⇒ End the interview with this household by thanking all participants for their cooperation. Gather together all questionnaires for this household and check that identification numbers are at the top of each page. Tally on the Household Information Panel the number of interviews completed.</p>		