Integrated Health Project of the DRC (DRC-IHP) Baseline Survey Report

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August 4, 2011

DRC, IHP, baseline survey, LQAS, household survey

This report was made possible through support provided by the US Agency for International Development, under the terms of Cooperative Agreement Number AID-OAA-A-10-00054. The opinions expressed herein are those of the author(s) and do not necessarily reflect the views of the US Agency for International Development.

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Integrated Health Project

in the Democratic Republic of Congo

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BASELINE SURVEY

May 2011

FINAL REPORT

AUGUST 2011

ACKNOWLEDGMENTS

As scheduled in the project workplan, the Democratic Republic of Congo (DRC)-Integrated Health Project (IHP) completed its Baseline Survey in the first half of 2011. The implementation of the survey was made possible by IHP team members working in the DRC and in Cambridge (U.S.). Personnel from local Ministry of Health structures as well as members of the baseline survey field team also made the completion of this survey possible. The survey coordinator expresses his gratitude to each individual and organization who in one way or another and at one point or another have played an important role in carrying out this study.

His thanks go first to the IHP management team in Kinshasa and to staff at Management Sciences for Health (MSH) home office in Cambridge who were willing to entrust the responsibility to conduct the survey and who made available the necessary financial and logistic resources to effectively implement the survey.

Special thanks go to Mr. Juan-Carlos Alegre (CLM M&E Director), Jennifer Raymond (Program Coordinator), Ashley Stephens (Program Officer), Dr. Ousmane Faye (DRC IHP Chief of Party), and Alidor Kuamba (DRC IHP M&E Specialist) who have accompanied and supported the survey coordinator throughout the process, from design to data collection, from analysis to report writing. Their prompt interventions have contributed to significantly improve the efficiency of the implementation of the baseline survey.

A big thank you is sent to the Coordination Office Field Directors and their Monitoring and Evaluation Officers, in particular, for their involvement in the roll-out of field work; to the local authorities (heads of districts and villages); and to the individuals who participated with kindness, welcomed field workers into their homes, and agreed to answer questions.

Finally, the coordinator sends his sincere congratulations to the field staff (supervisors, interviewers) and staff who worked with the data (the programmer and data collectors). Their selflessness and sense of responsibility have been the basis for the success of the IHP baseline survey.

Simon Makaya, Baseline Study Coordinator

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ACRONYMS AND ABBREVIATIONS

AIDS	Acquired Immunodeficiency Syndrome
BCG	Bacillus Calmette-Guerin
CLM	Center for Leadership and Management
CPA	Complementary Package of Activities
DHS	Demographic and Health Survey
DRC	Democratic Republic of Congo
DTP	Diptheria Tetanus Pertussis Vaccine
EPI	Expanded Program for Immunization
FP	Family Planning
GPS	Global Positioning System
HC	Health Center
HIV	Human Immunodefiency Virus
HZ	Health Zone
IHP	Integrated Health Program
IRC	International Rescue Committee
ITN	Insecticide-Treated Net
JNV	*Journées Nationales de Vaccination* (National Vaccination Days)
KAP	Knowledge, Attitudes and Practices
LMS	Leadership, Management and Sustainability
LQAS	Lot Quality Assurance Sampling
MICS	Multiple Indicator Cluster Survey
MNCH	Maternal, Newborn and Child Health
MOH	Ministry of Health
MPA	Minimum Package of Activities
MSH	Management Siences for Health
OSC	Overseas Strategic Consulting, Ltd.
PEV	*Programme Elargi de Vaccination* (Expanded Program for Immunization)
PME	Planning, Monotoring and Evaluation
PMP	Performance Monitoring Plan
PNDS	National Health Development Program
PROSANI	Integrated Health Program
RH	Reproductive Health
SA	Supervision Area
SD	Standard Deviation
SNIS	*Système National d'Information Sanitaire* (National System for Health Information)
USAID	United States Agency for International Development
TB	Tuberculosis
TT	Tetanus Toxoid Vaccine
WASH	Water, Sanitation and Hygiene
WATSAN	Water and Sanitation
WHO	World Health Organization

SUMMARY OF INDICATORS

	INDICATOR	%	CONFIDENCE INTERVAL
1.	**CONTACT WITH HEALTH SERVICES**		
1.1	Proportion of mothers with children 0-23 months who have been in contact with a health professional at least once in the month before the survey	57.7	± 7.1
1.2	Proportion of mothers with children 0-23 months who learned two or more health practices through contact with a health professional in the month before the survey	45.0	± 8.5
1.3	Proportion of mothers with children 0-23 months who received information on health or nutrition a: through formal networks b: through informal networks	 88.9 38.9	 ± 4.5 -
1.4	Proportion of mothers with children 0-23 months who, in the month before the survey, received health messages a. from health personnel b. from mass media	58.2 21.6 63.0	 ± 7.1
2.	**INFANT NUTRITION**		
2.1	Proportion of children 0-23 months who were breastfed during the first hour after birth	51.9	± 6.9
2.2	Proportion of children under 6 months living with their mother who are exclusively breastfed	54.3	± 7.1
2.3	Proportion of children 6-23 months who received solid foods, semi-solid foods or porridge for the required minimum number of meals a day during the day preceding the survey	23.1	± 5.9
2.4	Proportion of children 6-23 months who received a dose of vitamin A in the past 6 months	76.0	± 5.9
2.5a 2.5b	Proportion of children 0-23 months who: (a) fall below -2 standard deviation compared to the median **weight-for-age** WHO reference population (moderate and severe) (b) fall below -3 standard deviation compared to the median **weight-for-age** WHO reference population (severe)	13.9 4.8	± 5.4 -
2.6a 2.6b	Proportion of children 0-23 months who: (a) fall below -2 standard deviation compared to the median **height-for-age** WHO reference population (moderate and severe) (b) fall below -3 standard deviation compared to the median **height-for-age** WHO reference population (severe)	31.3 17.8	± 6.8 ± 5.9
2.7a 2.7b	Proportion of children 0-23 months who: (a) fall below -2 standard deviation compared to the median **weight-for-height** WHO reference population (moderate and severe) (b) fall below -3 standard deviation compared to the median **weight-for-height** WHO reference population (severe)	8.7 5.3	- -
3	**VACCINATION COVERAGE OF CHILDREN 12-23 MONTHS**		
3.1	Proportion of children 12-23 months who received the BCG vaccine before their 1st birthday	92.8	± 3.5
3.2	Proportion of children 12-23 months who received all 3 doses of the VPO vaccine (VPO3) before their 1st birthday	30.3	± 6.3
3.3	Proportion of children 12-23 months who received all 3 doses of the DTP vaccine (DTP3) before their 1st birthday	32.2	± 6.7
3.4	Proportion of children 12-23 months vaccinated against the measles before their 1st birthday	68.6	± 6.8
3.5	Proportion of children 12-23 month who received all 3 doses of the Hepatitis B vaccine before their 1st birthday	28.8	± 6.2
3.6	Proportion of children 12-23 months vaccinated against yellow fever before their 1st birthday	27.1	± 6.1
4.	**CHILD HEALTH AND AWARENESS OF SYMPTOMS**		

4.1	Proportion of children 0-23 months with suspected pneumonia (cough with rapid and difficult breathing) in the 2 weeks before the survey who were taken to appropriate health services	56.3	± 7.3
4.2	Proportion of children 0-23 months with suspected pneumonia (cough with rapid and difficult breathing) in the 2 weeks before the survey who were treated with antibiotics	62.3	± 6.5
4.3	Proportion of children 0-23 months who had diarrhea in the 2 weeks before the survey who received ORT (ORS packet or recommended household fluids or more) and who continued to be fed during the diarrhea episode	29.3	± 6.5
4.4	Proportion of children 0-23 months who had a fever in the 2 weeks before the survey and who received appropriate antimalarial treatment in line with the national policy within 24 hours of the onset of symptoms	46.6	± 7.2
4.5	Proportion of children 0-23 months who had at least one permanent insecticide-treated net (ITN) or net treated within the year before the survey	46.6	± 7.2
4.6	Proportion of children 0-23 months who slept under an ITN the night before the survey	32.7	± 6.5
4.7	Proportion of pregnant women who slept under an ITN the night before the survey	26.1	± 5.8
4.8	Proportion of mothers of children 0-23 months who were at least aware of the signs/symptoms that indicate the need to take the child for immediate medical attention	44.2	± 7.1
4.9	Proportion of mothers of children 0-23 months who were aware of the 2 danger signs of pneumonia among children	8.2	-
5.	**FAMILY PLANNING**		
5.1	Proportion of women 15-49 years old who were aware of at least one modern method of family planning	83.2	± 4.2
5.2	Proportion of women 15-49 years old who actually use a modern method of family planning	8.2	-
5.3	Proportion of women 15-49 years old who had a discussion with their partners about the spacing between births	13.0	-
6.	**MATERNAL HEALTH**		
6.1	Proportion of mother of children 0-23 months who had at least 4 prenatal visits during pregnancy with the youngest child	42.8	± 7.3
6.2	Proportion of mother of children 0-23 months who received at least 2 tetanus vaccines during pregnancy with the youngest child	46.6	± 7.2
6.3	Proportion of mother of children 0-23 months who received a dose of vitamin A in the 2 months after the birth of their youngest child	17.8	± 5.3
6.4	Proportion of mother of children 0-23 months who had qualified personnel at the birth of their youngest child	78.4	± 5.2
6.5	Proportion of mother of children 0-23 months who gave birth in a medical setting	79.3	± 5.0
6.6	Proportion of mother of children 0-23 months who were examined by qualified medical personnel in the three days following giving birth	17.8	-
6.7	Proportion of mother of children 0-23 months who had heard of fistula	37.5	± 6.5
7.	**HIV/AIDS AND SEXUAL RISK FACTORS**		
7.1	Proportion of women 15-49 years old who could correctly identify 2 means of prevention against HIV infection, know that someone who appears to be in good health can have HIV, and rejected the 2 most common misconceptions on HIV transmission	16.8	± 5.6
7.2	Proportion of women 15-49 years old who correctly identified the 3 modes of mother-child transmission of HIV	43.3	± 7.1
7.3	Proportion of women 15-49 years old who were tested for HIV in the last 12 months and know the results	32.7	± 6.5
7.4	Proportion of women 15-49 years old who engaged in high-risk sexual activity with occasional partners in the 12 months preceding the survey and who used a condom in their recent sexual activity	16.7	-
8.	**WATER AND SANITATION**		
8.1	Proportion of mothers of children 0-23 months living in households using improved sources of drinking water	41.8	± 6.0

8.2	Proportion of mothers of children 0-23 months living in households using appropriate treatment methods for drinking water	1.7	-
8.3	Proportion of mother of children 0-23 months living in households using improved non-communal toilets	6.3	-
8.4	Proportion of mothers of children 0-23 months living in households with water and soap in a particular hand washing location	18.2	-
8.5	Proportion of mother of children 0-23 months living in households with soap found somewhere in the house	46.2	± 6.0

EXECUTIVE SUMMARY

This report documents a comprehensive baseline study on knowledge, practices and coverage of key health areas as part of the USAID-funded Integrated Health Project (IHP in English, PROSANI in French) implemented in the Democratic Republic of Congo (DRC). IHP is a five-year project that supports the National Health Development Program (PNDS) in DRC. The project's two components – Component 1, "Services" and Component 2, "Other Health Systems" – are designed to create better conditions for, and increase the availability and use of, high-impact health services, products, and practices in 80 target health zones in four provinces of DRC (Kasaï Occidental, Kasaï Oriental, Katanga and Sud Kivu).

The project's objective is to improve the enabling environment for, and increase the availability and use of, high-impact services, products, and practices for family planning; maternal, newborn, and child health; nutrition, malaria, and tuberculosis; neglected tropical diseases; HIV/AIDS; and water, sanitation and hygiene in the target health zones.

Figure 1: IHP Target Areas in DR Congo

Component 1 supports the first strategic focus of the DRC's national health plan: health zone strengthening. Activities under Component 1 strengthen health zones' capacity to deliver services by addressing both the supply and demand sides of services. Under Component 1, there are three Intermediate Results (IRs):

- IR 1: Access to and availability of Minimum Package of Activities/Complementary Package of Activities plus (MPA/CPA-plus) services in target health zones increased
- IR 2: Quality of MPA/CPA-plus services in target health zones increased
- IR 3: Knowledge, attitudes, and practices (KAP) to support health-seeking behaviors increased in target health zones

Component 2 corresponds to the plan's second strategic pillar, support for health zone strengthening in six priority areas: human resource development; pharmaceutical management; health finance; construction/rehabilitation of infrastructure; equipment and new technologies; and improved health system management. Activities under Component 2 create an enabling environment for strong health zones, with particular emphasis on leadership and governance and the provision of resources. The DRC-IHP's fourth Intermediate Result is found under component 2:

- IR 4: Health sector leadership and governance in target provinces improved

IHP implementing partners are Management Sciences for Health, the International Rescue Committee and Overseas Strategic Consulting, Ltd. (hereafter referred to, respectively, as MSH, the IRC, and OSC, Ltd.).

Baseline Study Objective

The primary objective of the baseline study is to establish a point of reference through which change will be measured across key IHP performance indicators in subsequent years. MSH and its partners conducted this study as one of three major assessments that are part of IHP's evaluation strategy to assess project effectiveness. The study used a cross-sectional population-based survey to assess the health conditions of young children, their mothers, and women of reproductive age living in IHP target areas.

The baseline findings will contribute to a better understanding of determinants of health for MSH, its partners and other key stakeholders in DRC, including the Ministry of Health (MOH) and other USAID implementing partners that are also implementing interventions and strategies for improving the health of the Congolese people.

Study Methodology

The survey used the Lot Quality Assurance Sampling (LQAS) methodology, a cost-effective yet robust approach to obtain data from a representative sample of communities and households located in the 80 target health zones of the project. IHP administered the survey across nine "lots" or Supervision Areas, primarily management units that IHP uses for project management and implementation of activities. As such, the Supervision Areas reflect almost the same IHP implementation structure of the eight coordination offices located in the project target areas: Luiza, Mwene Ditu, Kamina, Tshumbe, Kole, Kolwezi, Bukavu, and Uvira. However, given the high-population density in South Kivu and the greater number of health zones (23) covered in Bukavu as compared to other IHP coordination offices, Bukavu was surveyed through two Supervision Areas while each of the other seven IHP coordination offices was surveyed through one Supervision Area.

The LQAS sampling framework included a random selection of approximately 25 places of interviews in each Supervision Area, for a total of 208 sites surveyed for the entire area covered by the project. From May 3 to June 3, 2011, 36 trained interviewers, organized into 18 teams led by four field supervisors with significant experience in conducting population-based surveys in DRC, collected data. The entire survey team was managed by a locally-hired Congolese statistician with extensive experience in designing and conducting population-based surveys in DRC.

The survey targeted three major groups: children aged 0-23 months, their mothers, and women of reproductive age. The main rationale for focusing the survey on children aged 0-23 months is twofold: (1) focusing on health characteristics and practices for this population group and their mothers represents the greatest opportunity to improve their health; and (2) adding a wider population group (i.e., 0-59 months) would have significantly increased the resources required to complete survey data collection.

In order to collect survey data for the three major target groups and in all IHP health areas of interest in a cost-effective way, the LQAS baseline survey used a parallel sampling strategy. This strategy used a total of nine survey questionnaires to assess knowledge, practices, and coverage of key health areas in maternal, newborn and child health (MNCH), family planning/reproductive health (FP/RH), HIV/AIDS, nutrition, malaria, and water and sanitation (WATSAN). Tuberculosis (TB) data were not captured by the survey since service statistics on IHP TB indicators obtained from health facilities data sources are more appropriate than those collected from population-based sources.

The use of the LQAS methodology for conducting the survey served two purposes: (1) to obtain an overall picture of health status for the entire project area; and (2) to assess how each Supervision Area is performing in various health areas (MNCH, FP/RH, HIV/AIDS, nutrition, malaria, and WATSAN) according to key performance indicators. While the first purpose will help the project to establish a reference point against which change will be measured for the entire project area, the second purpose will greatly help IHP managers to prioritize health areas that are underperforming or that will need to increase performance in order to achieve end-of-project targets. This will help guide optimal use of project resources for achieving anticipated results and targets as articulated in the project results framework and the performance monitoring plan.

Characteristics of Surveyed Households

The majority of mothers of children 0-23 months interviewed live in rural areas (80%), are married or living with a man (84%), and nearly half of them (46%) do not read or write. The survey also revealed a very young population living in the IHP target area: 30% are under five years of age, more than half (57%) are under 15 years of age, and more than three in five (61%) household members are under 18 years of age. Overall, the average household size is 6.5 people. Sex distribution among children aged 0-23 months was equal.

Contact with Health Services

Overall, 58% of surveyed mothers of children 0-23 months had at least one contact with a health care provider during the month preceding the survey, while 39% have had no contact with health services during the same

period. Among those mothers who had contact with health professionals, 45% of mothers learned at least two health practices related to MNCH, FP/RH, nutrition, malaria, or HIV/AIDS.

The survey also revealed the various sources of information mothers use to obtain health and nutrition information for their families. The majority of mothers (89%) use formal networks, including nurses, doctors, midwives and community health workers. At the same time, 39% of all surveyed mothers use informal networks, including spouses, other relatives, friends and neighbors.

As for the channels of health information actively used in the project target area, survey findings showed that mothers use predominantly two channels for receiving health messages: 58% from health workers and 22% from mass media.

Overall, the analysis revealed that the Supervision Areas are underperforming on indicators related to contact with health services: Luiza and Uvira registered low contacts with health care professionals; Luiza, Mwene Ditu and Bukavu-2 learned fewer health practices during contacts with health professionals than in other areas; and Kamina registered the lowest use of information channels for receiving health messages.

Child Nutrition

The survey revealed important information from mothers about essential practices that are critical for childhood health status and development: breastfeeding practices among newborns, food intake, and vitamin A supplementation for infants and young children. The survey also included anthropometric measurements – height and weight – to assess the current nutritional status of young children in the project target area.

More than half (52%) of children 0-23 months were breastfed within one hour after birth, and almost the same proportion (54%) of children 0-5 months were exclusively breastfed. However, ongoing intake of foods was significantly lower than breastfeeding practices: less than a quarter of children (23%) aged 6-23 months were adequately fed with solid, semi-solid or soft foods during the 24 hours preceding the survey. More than three-quarters (76%) of children aged 6-23 months received one dose of vitamin A during the six months preceding the survey.

Malnutrition levels are relatively high among children 0-23 months: 14% of children are underweight (weight-for-age) with 5% severely underweight; 31% suffer from growth retardation (height-for-age) with 18% as severe, and 9% of children have wasting (weight-for-height), of which 5% are severe.

Most of the child nutrition indicators obtained through the survey presented disparities by geographic location of households (urban vs. rural), and according to mothers' literacy levels. Child nutrition is better in urban areas and increases with the degree of literacy of the mother. By Supervision Area, Tshumbe, Kamina and Bukavu registered low performance in breastfeeding practices; Luiza, Kamina and Uvira were low performers in exclusive breastfeeding among children under six months of age; and Kamina and Kole had low performance in vitamin A supplementation. LQAS analyses show almost all areas are underperforming on indicators measuring the nutritional status of young children, particularly for underweight and growth retardation indicators.

Child Health

Among children 12-23 months, 28% received all vaccinations recommended by the Expanded Program of Immunization (EPI), and 6% have not received any vaccinations. Immunization coverage of young children is higher in urban areas and increases with the degree of literacy of the mother. However, these figures should be carefully interpreted as there was a high proportion of survey mothers (67.8%) who reported information about their child vaccination status based on recollection and not through the child vaccination card.

For 56% of children with suspected pneumonia during the two weeks preceding the survey, care was sought from an appropriate health service. Among children with suspected pneumonia, 62% received antibiotics.

Among children aged 0-23 months who had diarrhea during the two weeks preceding the survey, less than one-third (29%) received oral rehydration therapy (oral rehydration salts or recommended home fluids, or increased liquids) with continued feeding.

In the prevention of malaria, the survey revealed that 47% of mothers of children 0-23 months live in households with at least one insecticide-treated net (ITN). In households with at least one net, 47% of children and 33% of pregnant women slept under an ITN the night before the survey.

The survey also found that 26% of children 0-23 months who had fever during the two weeks preceding the survey took an anti-malarial treatment for fever within 24 hours following the onset of fever. Less than half of mothers of children 0-23 months (44%) know at least one symptom of childhood diseases that would trigger them to take the child immediately to a health facility, and very few mothers (8%) are aware of two danger signs of pneumonia.

While the LQAS analysis by Supervision Area showed a mixed set of low performing indicators for various immunization coverage and child health disease rates, Mwene Ditu and Kamina registered the lowest performance for care and treatment of childhood pneumonia, malaria prevention, and use of ITNs in the household.

Family Planning and Maternal Health

Among women aged 15-49 years, 83% know at least one modern family planning method, but only 8% of women currently use a modern contraceptive method. Thirteen percent of women have had a discussion on birth spacing with a spouse/partner. Knowledge of modern methods of family planning is weak in Kole, Tshumbe, Kamina and Uvira.

Less than half (43%) of mothers of children 0-23 months received at least four antenatal care visits by a skilled provider during the pregnancy of the youngest child. Coverage for antenatal care is higher among women who have had contact with a health professional and among those who can read and write.

Less than half (47%) of mothers of children 0-23 months received at least two doses of tetanus toxoid (TT) during the pregnancy of the youngest child to protect against neonatal tetanus. The proportion of women with TT protection is higher in rural areas, among women over 25 years of age and among those who can neither read nor write.

As for vitamin A supplementation, less than one in five (18%) mothers of children aged 0-23 months received a dose of vitamin A within two months following the birth of the youngest child. Luiza was one of the Supervision Areas with lower performance in vitamin A supplementation among mothers during the post natal period for their youngest child.

With regard to skilled birth attendance, 78% of mothers of children 0-23 months were attended by trained personnel during the delivery of their youngest child. This percentage is highest among mothers living in urban areas, among those under 25 years of age, and among mothers who can read and write. Nearly eight out of ten (79%) mothers of children 0-23 months gave birth in health facilities. In rural areas, 26% of mothers gave birth outside health facilities. Kole and Kamina were the two Supervision Areas that registered lower performance with regard to assisted deliveries by trained personnel.

The survey also revealed that postnatal care practices are low in IHP target areas: less than one-fifth (18%) of mothers of children 0-23 months were examined by qualified medical personnel within the three days following birth.

Less than four out of ten (38%) mothers of children 0-23 months have heard about fistula. These mothers are more likely in rural areas, have been in contact with a health care professional, and are over 25 years of age. Four Supervision Areas (Mwene Ditu, Kamina, Kolwezi and Uvira) had weaker knowledge about fistula.

HIV/AIDS and Sexual Behaviors

While almost all women aged 15-49 years (96%) have heard about HIV/AIDS, only 53% know two main ways to prevent the HIV virus. Less than one out of five (17%) women of the same age have a thorough knowledge of HIV, meaning they can correctly identify two ways to prevent HIV, know that a healthy person can have the virus, and can reject two misconceptions about HIV transmission. In addition, slightly more than two out of five women (43%) know three ways HIV/AIDS can be transmitted from mother to child.

As for HIV counseling and testing, the survey revealed that only one-third (33%) of women aged 15-49 years have had an HIV test during the last 12 months and received their results.

The results of the LQAS analysis show areas of supervision with poor performance as follows: Kole and Kamina for knowledge of HIV/AIDS transmission; Kamina and Uvira for the transmission of HIV from mother to child; and Mwene Ditu, Kole, Tshumbe and Kamina for testing and knowledge of HIV status.

Water and Sanitation

With regard to water and sanitation practices, 42% of surveyed mothers reported drinking water from an improved source. This proportion is higher in urban areas and among mothers who can read and write. Among mothers living in households using unimproved water sources, very few of them (1.7%) treat the water with appropriate methods.

The survey also revealed that 12% of mothers use improved toilets, but only 6% of them use improved non-shared toilets. Almost three-quarters (74%) of surveyed households use unimproved toilets, and 14% of families live in households that practice defecation in open air. Very few households (6%) have a place for hand washing. However, nearly half of families (46%) reported living in households with soap somewhere in the house.

When analyzing local areas, Luiza, Kole and Tshumbe predominantly showed poor performance in the use of improved sources of drinking water and the presence of soap somewhere in the household.

The completion of the IHP baseline survey provides an assessment of the knowledge, practices, and coverage of key health areas in the 80 target health zones of the project. Findings from this cross-sectional survey should assist IHP to deliver high-impact interventions and activities in ways that maximize project effectiveness and efficiency.

Of particular importance are the adoption of behavior change and communication strategies with a small number of key messages that can be delivered through preferred information sources for health and nutrition through formal networks at both health facility and community levels that include doctors, nurses, community health workers, and health educators.

As there are a number of health issues facing young children, mothers and women of reproductive age – particularly young women – integrated strategies for the effective delivery of essential health services at both health facility and community levels should be a priority.

The use of the LQAS methodology provides information not only for the entire project area but also at the local level by identifying high- and low-performing Supervision Areas. This will greatly help IHP managers to prioritize project resources to set up realistic end-of-project targets and improve performance of Supervision Areas towards the achievement of those targets.

Finally, the findings of this baseline study should help other USAID implementing partners working in DRC to improve the health of women and children. IHP should maximize synergies with those partners by sharing approaches, tools, and strategies for reaching young children, their mothers, and young women of reproductive age with life-saving interventions.

INTRODUCTION

Project Background and Rationale

Management Sciences for Health (MSH), in partnership with the Internal Rescue Committee (IRC) and Overseas Strategic Consulting, Ltd. (OSC, Ltd.), implements the Integrated Health Project (IHP) in Eastern Democratic Republic of Congo (DRC). This five-year USAID-funded project aims to improve the enabling environment for, and increase the availability and use of, high-impact health services, products, and practices in the areas of family planning (FP); maternal, newborn and child health (MNCH); nutrition, malaria, and tuberculosis (TB); neglected tropical disease (NTD), HIV/AIDS, and water, sanitation, and hygiene (WASH) in the 80 targeted health zones in four provinces of the DRC: Katanga, South Kivu, Eastern Kasaï, and Western Kasaï.

This baseline study is important considering that the two previous projects covering these health zones (AXxes and LMS) did not include a final assessment or survey to formally evaluate project results. Although the performance monitoring plan (PMP) for IHP contains a certain number of performance indicators, many of them will be calculated using information obtained from service statistics from the *Système National d'Information Sanitaire* (SNIS, the National System of Health Information) for the targeted health zones and from project records. As was indicated in the technical proposal for IHP, MSH intends to conduct three evaluations throughout the life of the project as follows: (1) initially, a baseline survey to establish a reliable point of reference by which the project can measure change in subsequent years; (2) halfway through the project, to measure progress towards anticipated results, and (3) near the end of the project, to measure the effectiveness and impact of the project on the 11.4 million Congolese living in the 80 targeted health zones.

The results of the baseline survey will help IHP, its partners (including the central and provincial levels of the Ministry of Health), and other USAID partners to strengthen the health systems of the DRC and its numerous subsystems (including the delivery of health services, health personnel, SNIS, supply chain, and leadership and governance). The results of the baseline survey will help reveal current knowledge, beliefs, social norms, and behaviors among women and/or female caretakers that will inform appropriate strategies for increasing the demand for priority health services.

Objectives of the Baseline Survey

The overall objective of the IHP baseline survey is to establish a point of reference from which the results of future interventions in health facilities and communities can be reliably measured.

Specifically, the survey aims to:

- Collect data to calculate performance indicators at the beginning of project implementation in the areas of child health (nutritional status, vaccination coverage, case management of childhood diseases); reproductive and maternal health (contraception, prenatal care, birth, postnatal care); HIV/AIDS; and water, sanitation, and hygiene.
- Identify high-performing and low-performing Supervision Area by performance indicator.
- Identify the Supervision Area of highest performance that could act as an example of best practices.
- Define priorities among the Supervision Areas that have greatest differences in coverage.
- Define priorities about health conditions and diseases for young children and their mothers in each Supervision Area.

CHAPTER 1: SURVEY METHODOLOGY

This chapter describes the methodology of the baseline study and is presented in six sections as follows:

- 1.1: Indicators and target groups
- 1.2: Data collection tools
- 1.3: Composition of the sample group
- 1.4: Recruitment, training, and pilot survey
- 1.5: Data collection
- 1.6: Presentation of data collected

1.1. Indicators and Target Groups

IHP selected a certain number of performance indicators to be calculated from the baseline survey. The list of indicators, including their respective numerators and denominators, is found in Annex A.

A review of the denominators of different indicators allowed IHP to identify the different target groups of the survey: children aged 0-23 months, their mothers, and women of reproductive age. As the indicators of interest from this survey include nine sub-population groups, the survey investigated general and health subjects when collecting data from the three target groups. Table 1.1 below shows the nine sub-population groups with their related subjects.

Table 1.1: Survey sub-population groups and related subjects

Sub-population Group	Related Subjects
Mothers with children 0-23 months	Household composition
	WASH
	Knowledge and use of contraceptive methods
	Knowledge and practice of HIV/AIDS prevention methods
	Maternal health care (prenatal care, assisted delivery, postnatal care)
	Vitamin A supplementation
	General knowledge of fistula
	Knowledge of disease symptoms
Pregnant women ages 15-49	Use of ITNs
Children 0-23 months	Early initiation of breastfeeding
	Use of ITNs by infants 0-23 months
	Community health workers
	Nutritional status (anthropometry)
Children 0-5 months	Exclusive breastfeeding
Children 6-23 months	Feeding practices of young children
	Vitamin A supplementation
Children 12-23 months	Immunization coverage
Children 0-23 months with fever within the last two weeks preceding the survey	Malaria case managemnet
Children 0-23 months with diarrhea within the last two weeks preceding the survey	Diarrhea case management
Children 0-23 months with cough and difficult breathing within the last two weeks preceding the survey	Suspected pneumonia case management

1.2 Data Collection Tools

1.2.1 Survey questionnaires

Survey questionnaires were used as the main tool for data collection on the ground. A separate questionnaire was developed for each target group. In total, nine questionnaires were developed, each with one or more modules for the different topics related to the target group. These questionnaires were:

1. Questionnaire for mothers of children 0-23 months
2. Questionnaire for children 0-5 months
3. Questionnaire for children 6-23 months
4. Questionnaire for children 12-23 months
5. Questionnaire for children 0-23 months
6. Questionnaire for children 0-23 months with fever in the two weeks preceding the survey
7. Questionnaire for children 0-23 months with diarrhea in the two weeks preceding the survey
8. Questionnaire for children 0-23 months with suspected pneumonia in the two weeks preceding the survey
9. Questionnaire for pregnant women

These questionnaires, developed in French, are found in *Appendix B.*

1.2.2 Other data collection tools

Survey teams in the field used other data collection tools such as Global Positioning System (GPS) tools to record geographic coordinates of survey locations. The teams also used checklists to ensure completion of interviews, quality control forms, and data monitoring sheets.

IHP also provided field staff with a field manual, a table of random numbers used for sampling, a table showing the weight and size limits of children according to their age and sex, and a knowledge assessment test.

In addition to the data collection materials, the teams also used an instruction manual and other field documents as well as other tools such as measuring tapes and weighing scales to take anthropometric measurements of children 0-23 months old.

1.3 Composition of the Sample Group

The sampling plan implemented as part of the IHP baseline survey was defined through the following elements: type and scope of the survey, sampling method, size of sample units and sampling frames, sample selection process, and sample allocation.

1.3.1 Type and scope of the survey

The IHP baseline survey is a cross-sectional household survey. The survey covered the 80 IHP-targeted health zones (HZ) in four provinces of DRC: Western Kasaï, Eastern Kasaï, Katanga and South Kivu. The survey was administered across nine “lots” or Supervision Areas, mostly management units that IHP uses for project management and implementation of activities. As such, the Supervision Areas reflect almost the same IHP implementation structure of the eight coordination offices located in the project target areas:

1. Western Kasaï:	Luiza
2. Eastern Kasaï:	Mwene Ditu, Kole and Tshumbe
3. Katanga:	Kolwezi and Kamina
4. South Kivu:	Bukavu 1, Bukavu 2 and Uvira

Given the high-population density in South Kivu and the greater number of health zones (23) covered in Bukavu as compared to other IHP coordination offices, Bukavu was surveyed through two Supervision Areas while each of the other seven IHP coordination offices was surveyed through one Supervision Area.

1.3.2 Sampling Method and Sample Size

IHP selected Lot Quality Assurance Sampling (LQAS) as the sampling method to select interview locations, households, and subjects. The project determined that this method was most suitable to the objectives of the study as it is a robust and cost-effective method for assessing knowledge, attitudes, and practices as well as coverage of key primary health care indicators.

IHP determined the sample size as 25 interviews per Supervision Area, which resulted in producing 208 interviews for the entire project area. Although small, this sample size is large enough to produce statistically significant results (that is, a precision level of 92% with 95% confidence intervals) for all project indicators.

1.3.3 Units and Sampling Frames

Sampling units include interview locations such as neighborhoods or villages, and the households in those locations. In the first stage, the sampling frames consist of lists of districts and villages and their population sizes for each Supervision Area. In the second phase, the survey teams developed the list of households in the selected districts and villages using the sampling frame as the point of reference.

IHP presented the methodology to a panel of experts at the National Institute of Statistics (INS, in its French acronym). After review and commentaries from INS, these experts deemed the methodology relevant for the baseline survey given its objectives. IHP was thus granted a favorable response from INS to conduct the baseline survey within the boundaries of the 80 IHP target health zones.

1.3.4 Process for sample selection

Selection of interview sites

The team selected sites for interviews randomly following the procedure for systematic sampling with probability proportional to the size of units (population size) or drawing with unequal probabilities. The drawing of the communities was done Supervision Areas by Supervision Area.

Selecting interview sites in each Supervision Area followed these steps:

1. List the districts and villages with their population size.
2. Calculate the cumulative population.
3. Calculate the sampling interval (total cumulative population divided by 25).
4. Choose a random number between 1 and the sampling interval using a table of random numbers. This number corresponds to the first interview selected.
5. From the random number, add successively the sampling interval to identify other places to achieve the required 25 interviews for the Supervision Area.

Protocol for the selection of households and persons to be interviewed

The protocol for the selection of households and persons interviewed included two steps:

1. Selecting the first household to survey
2. Selecting the households where interviews will take place and people to survey .

Selecting the first household to survey

The survey team selected the first household randomly. Three scenarios were possible:

Case 1: If a complete list of households in the community was available, we assigned a number to each household and drew the first number from the table of random numbers. The household matching the number drawn was considered the first household contact.

Case 2: If the community had no more than 30 households, we, with the assistance of a community leader, established a list of households or a map locating each household. Then we assigned a number to each household, drew the first number using a table of random numbers, and used the household matching the first number drawn as the first contact.

Case 3: If the community included a large number of households difficult to count in a short time, we began by assessing the number of households in the community. Then, we subdivided the site into 2 to 5 segments, each comprising approximately the same number of households. We then randomly selected a segment using the procedure of simple random sampling. If the selected segment still had too many households to count, we divided the segment again into 2 to 5 smaller segments, and selected one randomly. We continued the division until we reached a segment where the number of households could be counted easily.

At this stage, we proceeded as before: with the help of a key person in the community, we made a list of households or a map locating each household in the segment drawn. We assigned a number to each household, drew a first number using a table of random numbers, and considered the household matching the number drawn as the first contact.

Selecting households in interview sites and people to survey

Once the household contact was identified, the following protocol was applied:

1. We began by asking if a child aged 0-23 months was living in the household with his/her mother. If yes, this household was selected as the first household in interview site. In this case, we counted all the persons targeted by the survey living in this household and proceeded to interview and fill out the respective questionnaires, starting with the mother of a child aged 0-23 months.

2. If in the household there were no children aged 0-23 months living with his/her mother, we went to the nearest household contact and again asked if a child aged 0-23 months was living there with his/her mother. Depending on the answer, we conducted the interview or continued, step by step, until we found a household within the interview site with eligible participants.

3. After completing the questionnaire for mothers of children aged 0-23 months, the interviewer then followed with another questionnaire relating to the target group of children (0-5 months, 6-23 months, 12-23 months) living in the household. For example, if a child was 13 months old, the interviewer first completed the questionnaire for mothers of children aged 0-23 months, then the questionnaire for children 6-23 months, and then the questionnaire for children aged 12-23 months. After that, the interviewer asked whether the child had fever, diarrhea, cough with rapid and/or difficult breathing during the two weeks preceding the survey. If the child was sick with one or more of these symptoms, the interviewer filled in the appropriate questionnaire(s) depending on the childhood sickness. Finally, to finish in this household, the interviewer completed the anthropometry measurements (height and weight) for children aged 0-23 months.

4. After completing all relevant questionnaires for the first household, the interviewer went to the next house and asked if there was a child aged 0-23 months. If so, it was then determined whether or not the child met the criteria for any of the questionnaires that remained to be completed (age or disease specific). The appropriate questionnaire that matched the profile of age or illness of the child was then used. After that, the survey team went to the nearest house, where other questionnaires had yet to be completed. This process continued until all the questionnaires were completed. In other words, only one questionnaire was completed for each study target in each interview site.

5. If the investigator exhausted all households in the village without completing all 9 questionnaires, presumably because of small population, he would go to the nearest village and continue with the survey beginning with the nearest house in the sampled village.

6. If two eligible children were present in the original household, the youngest child had priority and the mother was interviewed about the child using all appropriate questionnaires. Then, the interviewer could ask the same mother about the second child using questionnaires for the target groups that had not been applied for the first child. The application in a household of each of these questionnaires that collected different information introduced no bias into the sample because the household was randomly selected as required by LQAS and because a mother was interviewed only once on issues relating to each indicator, even if certain questions were asked about a child in a certain age bracket and other questions were asked about a child of a different age. This would not be the case if two questionnaires on the same indicators (i.e., control of diarrhea) were applied in the same household for children of different ages.

By following this protocol and a parallel sampling approach, the survey aimed to obtain 25 responses for each of the nine questionnaries in all Supervision Area. With nine Supervision Areas, there were a total of 225 anticipated responses to each question in each survey questionnaire.

1.3.5 Sample Allocation

The table below shows, by Supervision Area, the number of sites selected for interviews and the number of interviews actually carried out.

Table 1.2: Breakdown, by Supervision Area, the number of sites selected for interviews and the number of interviews completed

Order N°	Supervision Area	No. of selected interview sites	No. of interviews completed
1	Luiza	25	25
2	Mwene Ditu	25	25
3	Kole	25	25
4	Tshumbe	25	24
5	Kamina	25	25
6	Kolwezi	25	25
7	Bukavu 1	25	19
8	Bukavu 2	25	19
9	Uvira	25	21
Total		**225**	**208**

Table 1.2 shows that the survey team conducted a total of 208 interviews and completed 1,872 questionnaires due to the use of parallel sampling given the various sub-population groups in the 9 Supervision Areas used in the survey. Interviewers from Uvira and Bukavu had been ordered to conduct 19 interviews instead of 25 given logistical challenges in the implementation of the survey in these Supervision Areas. Due to similar challenges, the survey conducted 24 interviews in Tshumbe and 21 in Uvira.

1.4 Recruitment, Training and Pilot Survey

1.4.1 Recruitment of survey staff

To achieve the 208 survey interviews, IHP hired a team of local supervisors and interviewers with experience in conducting population-based surveys in DRC. The survey staff included: one survey coordinator, four field supervisors, and 36 interviewers organized into 18 teams of two persons each.

The four field supervisors (three men and one woman) were recruited in Kinshasa by the survey coordinator based on the following criteria: qualifications, experience, familiarity with the DRC interior, and capability shown during the training session and during the pilot survey.

The field supervisors, assisted by the monitoring and evaluation officers from the MSH coordination offices, conducted the recruitment of interviewers from a main pool of applicants. The team selected interviewers on the basis of skills, experience in conducting demographic surveys, familiarity with the interview locations, and

knowledge of the local language/dialect of the survey sites. Participation in recent national surveys (DHS-DRC 2007, DRC MICS-2010) was a major asset. All selected interviewers went through a theoretical and practical survey training. After the training session, which included a test, supervisors selected the best candidates to participate as interviewers for the IHP baseline survey.

1.4.2 Staff Training

The team used a cascade approach to train staff to conduct the survey. The Survey Coordinator first received training in Kinshasa and continous coaching throughout the design and implementation of the survey from the MSH Director of M&E. The Survey Coordinator in turn trained all four field supervisors, who then trained survey interviewers in their respective pools.

The training of field supervisors lasted three days, from April 8 to 10, 2011, at the IHP office in Kinshasa. The training emphasized the LQAS methodology, the sampling framework, and survey protocols for the appropriate selection of communities and households to survey . Following training, supervisors completed all field work during a pilot survey that was considered part of the process of training and recruitment. Final selection took place after candidates for field supervisors were observed playing the role of an interviewer.

The training helped survey interviewers to understand the LQAS methodology, particularly the protocol for household selection and household members to interview. Particular emphasis was placed on the calculation of children's ages in months, since this information determined which set of survey questionnaires to administer in the selected households. Taking correct anthropometric measurements was also emphasized during training because incorrect measurements might make the child in the survey ineligible for nutritional status analysis.

The training sessions lasted three days and involved 41 people selected for the training sessions after the screening. All training sessions were held over the period from April 28 to May 6, 2011. The training was slightly delayed for the supervision of Kolwezi, Bukavu, and Uvira because of National Immunization Days which coincided with the beginning of this activity.

1.4.3 Pilot Survey

To test the methodology of the survey, IHP conducted a pilot survey from April 11 to 14, 2011, in a neighborhood of the city of Kintanu and in a village close to the Kisantu Catholic mission in the province of Bas-Congo. The team conducted the main field activities – contacts with local authorities, segmentation, selection of the household contact, selection of households and people to interview, administration of questionnaires, anthropometric measurements taken, and geographic coordinates registered –in these two sites. The team used the results of this pilot survey to finalize the questionnaires of the baseline survey.

1.5 Data Collection

1.5.1 Deployment and field communications

Prior to deployment to the field, the survey team developed a logistics plan that involved MSH staff at coordination offices. The plan focused on the organization of trips to survey pools, accommodation of supervisors, travel to interview sites, and per diem of interviewers.

The supervisors flew to their respective pools. All data collection tools and field equipment were sent to survey sites via air freight. The survey interviewers were deployed in teams following a plan developed by the supervisors on the basis of information obtained in the field. Interviewers arrived at survey sites either by motorcycle or on foot depending on the condition of the roads. Some roads were in such disrepair that motorcycles could not pass.

The remoteness of some areas in relation to the town pool and the inaccessibility of some areas because of poor road conditions were the main difficulties encountered in the deployment of interviewers. Despite these difficulties, all places of interviews were reached.

Telephone was the preferred means of communication to ensure constant contact between interviewers and supervisors. It was only in Kole that phone communication was difficult.

1.5.2 Data collection in households

The strategy adopted during data collection was to decentralize the center of supervision of survey interviews to be as close as possible to the survey sites. Thus, four pools, corresponding to the four provinces where IHP operates, were formed and managed by the supervisors. The supervisors stayed in towns that acted as centers of recruitment and training of field staff, deployment to interview sites, and supervision of all field operations. Each pool's "focal point" was the M&E officer from the respective IHP coordination offices.

The team planned for a period of approximately 17 days to perform data collection in households, including the duration and the actual work in interview locations and travel from one place to another. This period was sufficient in most areas of supervision, even over long distances. However, due to some logistical challenges in Kolwezi, Bukavu and Uvira, the total fieldwork was carried out from May 3 to June 3, 2011.

Surveyed mothers of children age 0-23 months answered questions from interviewers regarding their own and their children's health situation. For ethical reasons, at the beginning of each interview, interviewers ensured that the mother read and/or understood the consent form contained on each survey. Only consenting mothers were interviewed.

1.5.3 Supervision of fieldwork

Field supervisors monitored the work of the interviewers. The purpose of regular field visits was to ensure that interviewers were following the instructions and protocols provided and agreed upon during the training sessions for sampling, interviewing, and data collection. Document control techniques and questionnaires were conducted to identify and eliminate systematic errors and minimize survey bias. In addition, supervisors conducted a systematic review of completed questionnaires once received at the town pool, prior to shipment to the respective IHP coordination office.

The survey coordinator and the IHP M&E Specialist also monitored field supervisors and data collection activities. This helped ensure progress toward completing fieldwork, provide solutions to some methodological concerns, and, above all, ensure the quality of data collected.

1.6 Presentation of Data Collected

1.6.1 Data entry

In total, IHP received 1,872 questionnaires that were then entered with CSPro version 4. Data entry was conducted by 10 data-entry technicians in two organized teams and supervised by the technical analyst. These data-entry technicians, recruited for their experience in data entry of demographic surveys, were trained for two days to understand the logic of the questionnaire and the data-entry masks. Data entry, which occurred as questionnaires were received from the field, was completed over six days between May 24 and June 8, 2011 in Kinshasa.

Data entry and release of the data file occured during the same period. The file by CSPro was converted into an SPSS file. SPSS version 18 was used to produce frequency tables, data analysis and calculation of performance indicators.

1.6.2 Analysis and drafting

The survey coordinator oversaw the data analysis and drafting of the final report, in collaboration with the M&E Director at the MSH home office and a field-based M&E Specialist. Performance indicators were disaggregated according to demographic characteristics such as sex, age, place of residence, and mother's level of education.

Additional analyses were completed by Supervision Area for each indicator. Feedback from the IHP home office team and portfolio director helped to enrich and finalize the study report.

The following section presents detailed survey results. The analysis of results is presented by indicator including two major pieces of information: (1) the average coverage rate for the entire IHP project area; and (2) performance by Supervision Area. While the former presents a picture of the entire target area, the latter identifies high- and low-performing Supervision Areas. High-performing areas are colored in green, and reflect those Supervision Areas that are above the average coverage rate for the entire project target area. Low-performing areas are colored in red, and reflect those Supervision Areas that are below the average coverate rate for the entire project target area. The identification of high- and low-performing areas is possible through the LQAS analysis, including the use of three parameters: (1) the average coverage rate found for the entire project target area; (2) the sample size by Supervision Area; and (3) a decision rule obtained from a pre-established LQAS table as shown in Annex B.

CHAPTER 2: CHARACTERISTICS OF HOUSEHOLDS AND SURVEYS

2.1 Characteristics of Households

Survey questionnaires were filled in 1,039 households, but we were only able to identify characteristics in 208 "first" households in the different communities. In these households, 1,364 people were identified. Table HH.1 provides information on the structure of the population by five-year age groups and broad age groups.

Table HH.1: Structure of household population by age and sex

	Male		Female		Total	
	Number	Percentage	Number	Percentage	Number	Percentage
Age						
0-4	218	16.0	184	13.5	402	29.5
5-9	104	7.6	117	8.6	221	16.2
10-14	67	4.9	80	5.9	147	10.8
15-19	37	2.7	71	5.2	108	7.9
20-24	42	3.1	70	5.1	112	8.2
25-29	50	3.7	59	4.3	109	8.0
30-34	43	3.2	43	3.2	86	6.3
35-39	45	3.3	29	2.1	74	5.4
40-44	35	2.6	11	0.8	46	3.4
45-49	18	1.3	4	0.3	22	1.6
50-54	8	0.6	6	0.4	14	1.0
55-59	2	0.1	3	0.2	5	0.4
60-64	3	0.2	2	0.1	5	0.4
65-69	1	0.1	0	0	1	0.1
70-74	1	0.1	5	0.4	6	0.4
75+	4	0.3	1	0.1	5	0.4
Dependence Age Group						
0-14	389	28.5	381	28.0	770	56.5
15-64	283	20.8	298	21.9	581	42.6
65+	6	0.4	6	0.4	12	0.9
Population of Children and Adults						
Children 0-17 months	406	29.8	426	31.3	832	61.0
Adults 18 and above	272	20.0	259	19.0	531	39.0
Total	**678**	**49.7**	**686**	**50.3**	**1364**	**100.0**

This table shows that there were slightly more women than men (50.3% women, 49.7% men) in these households. Also, the population is very young: 30% are below 5 years old and more than half (57%) are under 15 years of age. Three in five (61%) are under 18 years old. The average household size is 6.5 people.

2.2 Characteristics of mothers surveyed with children 0-23 months old

The characteristics of 208 out of the 1,039 mothers of children 0-23 months interviewed are presented in table HH.2.

Table HH.2: Characteristics of mothers of children 0-23 months old interviewed		
Characteristic	Percentage	Number of Mothers
Area of Residence		
Urban	20.2	42
Rural	79.8	166
Age		
<25	37.5	78
>25	62.5	130
Matrimonial Status		
Single	2.9	6
Married	84.1	174
Civil Union	8.7	18
Divorced/Separated	1.9	4
Widow/Widower	2.4	5
Degree of Literacy (Mother)		
Cannot read or write	45.9	130
Can read only	13.7	31
Can read and write	40.5	83
Total	100	208

The table above shows that, of the mothers interviewed, 80% live in rural areas. Among them, 62% are older than 25 years old, 84% are married, and 46% cannot read or write.

2.3 Characteristics of Children 0-23 Months Old

Table HH.3 shows that among the surveyed children 0-23 months old, 80% live in rural areas. The same percentage of boys (50%) and girls (50%) were surveyed.

Table HH.3: Characteristics of children 0-23 months surveyed		
Characteristic	Percentage	Number of children 0-23 months old
Area of residence		
Urban	20.2	42
Rural	79.8	166
Sex		
Male	50	104
Female	50	104
Age (in months)		
0-5	29.8	62
6-11	26	54
12-17	24.5	51
18-23	19.7	41
Total	**100**	**208**

The table also indicates that more infants 0-5 months were surveyed than in the other age groups 6-23 months. Thirty-percent of children surveyed were 0-5 months old, 26% were 6-11 months old, 25% were 12-17 months old and 20% were 19-23 months old.

2.4 Contacts with Health Services

2.4.1 Contact with health professionals

Table HH.4 below shows the percentage of mothers with children 0-23 months that have had at least one contact with a health service professional during the month preceding the survey. In all, 58% of mothers had at least one contact with health workers. Among these mothers, 60% are from an urban area and 57% are from a rural area. About 30% of mothers interviewed did not have contact with a health service professional.

Table CS.1a: Contact with Health Professionals
Percentage of mothers with children 0-23 months old who have had at least one contact with a health service professional during the month preceding the survey

Characteristics	Health Personnel Contacted								Total	At least one contact with a health service professional	Number of mothers with children 0-23 months
	Doctor	Nurse/ Midwife	Community Health Workers (RECO)	Growth Monitoring Officer (CPS)	Qualified Birth Attendant	Traditional Healer	Other	No contact			
Area of Residence											
Urban	16.7	23.8	16.7	0	2.4	4.8	2.4	33.3	100	59.5	42
Rural	7.2	35.5	11.4	1.8	1.2	1.2	1.2	40.4	100	57.2	166
Age of Mother											
< 25 years	3.8	26.9	16.7	2.6	1.3	3.8	2.6	42.3	100	51.3	78
>25 years	12.3	36.9	10	0.8	1.5	0.8	0.8	36.9	100	61.5	130
Degree of Literacy											
Cannot read or write	11.7	30.9	14.9	1.1	0	1.1	0	40.4	100	58.5	94
Can read only	10.7	32.1	14.3	0	3.6	0	3.6	35.7	100	60.7	31
Can read and write	6	36.1	9.6	2.4	2.4	3.6	2.4	37.3	100	56.6	83
Total	**9.1**	**33.2**	**12.5**	**1.4**	**1.4**	**1.9**	**1.4**	**38.9**	**100**	**57.7**	**208**

Among mothers who had contact with health professionals, 9% were in contact with a doctor, 33% with a nurse, and 13% with community health workers. In addition, mothers more than 25 years old were more likely to have had contact with health professionals (62%) than women under 25 (51%). The degree of literacy was not a significant factor in whether mothers contact health service professionals or not; 59% of women who cannot read or write contacted a health service professional, and 57% of literate women did not.

The situation by Supervision Area is presented as follows:

Table CS 1b: Percentage of mothers with children 0-23 months old who have had at least one contact with a health service professional during the month preceding the survey (by area of supervision)

Supervision Area	Yes	No	Sample Size	Decision Rule	Mini coverage (p)	Estimate population size (N)	Weighted Factor (Wt)	Weighted mini coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 - Luiza	11	14	25	13	0.440	1 351 998	0.116	0.051	0.560	0.246	0.000132389
Supervision Area 2 - Mwene Ditu	15	10	25	13	0.600	2 250 550	0.193	0.116	0.400	0.240	0.000357313
Supervision Area 3 - Kole	19	6	25	13	0.760	1 770 312	0.152	0.115	0.240	0.182	0.000168029
Supervision Area 4 - Tshumbe	14	10	24	13	0.583	634 342	0.054	0.032	0.417	0.243	2.99462E-05
Supervision Area 5 - Kamina	16	9	25	13	0.640	716 185	0.061	0.039	0.360	0.230	3.47371E-05
Supervision Area 6 - Kolwezi	16	9	25	13	0.640	766 697	0.066	0.042	0.360	0.230	3.98098E-05
Supervision Area 7 - Bukavu 1	12	7	19	10	0.632	1 683 143	0.144	0.091	0.368	0.233	0.000254953
Supervision Area 8 - Bukavu 2	13	6	19	10	0.684	1 683 143	0.144	0.099	0.316	0.216	0.000236742
Supervision Area 9 - Uvira	8	13	21	11	0.381	809 040	0.069	0.026	0.619	0.236	5.40151E-05
Total	**124**	**84**	**208**			**11 665 409**		**0.611**			**0.001307935**

Average Coverage in 2011 =	59.6%	Maximum Coverage in 2011 =	**68.2%**
Weighted Average Coverage in 2011 =	**61.1%**	Minimum Coverage in 2011 =	**54.1%**
95% confidence interval = +/-	7.1%		

The analysis showed that the Supervision Areas of Luiza and Uvira are performing poorly on this indicator.

2.4.2 Practices learned from health service professionals

Table CS.2a presents the health practices learned from health service professionals during the month preceding the survey. Analysis by Supervision Area revealed that because of the low coverage in the supervisory areas of Luiza, Bukavu and Uvira, a decision rule cannot be established for these areas. In addition, the Supervisory Area of Mwene Ditu also has low coverage and therefore lies below the decision rule.

Table CS.2a: Health practices learned from contact with health service professionals

Percentage of mothers of children 0-23 months who had contact with a health service professional during the month preceding the survey

Description	HEALTH PRACTICES LEARNED									No practice learned	Percentage of mothers who learned at least two (2) health practices	No. of mothers with children 0-23 months old
	Exclusive Breastfeeding	Nutrition Practices	Vaccinations	Prevention and treatment of diarrhea	Prevention and treatment of acute respiratory infections	Prevention and treatment of malaria	Knowledge and usage of family planning methods	Prevention and treatment of HIV/AIDS	Other			
Area of Residence												
Urban	14.3	16.7	47.6	11.9	9.5	11.9	16.7	16.7	9.5	33.3	31.0	42
Rural	18.1	14.5	36.1	7.2	2.4	7.8	12.0	12.0	10.2	40.4	25.3	166
Mother's Age												
<25 years	16.7	15.4	37.2	6.4	6.4	7.7	9	9	10.3	42.3	25.6	78
>25 years	17.7	14.6	39.2	9.2	2.3	9.2	15.4	15.4	10	36.9	26.9	130
Degree of Literacy												
Cannot read nor write	14.9	13.8	36.2	8.5	3.2	10.6	9.6	9.6	6.4	40.4	25.5	94
Can read only	17.9	10.7	53.6	10.7	0	3.6	10.7	10.7	3.6	35.7	17.9	31
Can read and write	19.3	18.1	36.1	7.2	6.0	8.4	18.1	18.1	16.9	37.3	30.1	83
Total	**17.3**	**14.9**	**38.5**	**8.2**	**3.8**	**8.7**	**13**	**13**	**10.1**	**38.9**	**26.4**	**208**

Overall, 26% of mothers have learned at least two health practices from health professionals during the month preceding the survey. More of these women live in urban areas (31%) than in rural areas (25%). More mothers who contacted health professionals (30%) can read and write compared to those who can neither read nor write (26%). Age was not a strong factor as to whether a mother visited a health professional or not. Regarding health practices, 39% of mothers learned immunization practices, 17% know and practice exclusive breastfeeding, and 15% learned about nutrition practices. Thirty-nine percent of mothers interviewed cited they did not learn any health practices from the health professionals with whom they were in contact.

Analysis by Supervision Area revealed that Luiza, Mwene Ditu, Bukavu-1, and Uvira are underperformaing with regard to this indicator.

Table CS.2b: Percentage of mothers and children 0-23 months old who learned at least two health practices from health service professionals by Supervision Area											
Supervision Area	**Yes**	**No**	**Sample Size**	**Decision Rule**	**Mini coverage (p)**	**Estimated population size (N)**	**Weighted Factor (Wt)**	**Weighted mini coverage**	**q=1-p**	**p*q**	**Wt^2 * (pq)/n**
Supervision Area 1 – Luiza	2	8	10	SO	0.200	1 351 998	0.116	0.023	0.800	0.160	0.000214918
Supervision Area 2 - Mwene Ditu	2	13	15	4	0.133	2 250 550	0.193	0.026	0.867	0.116	0.000286733
Supervision Area 3 – Kole	12	7	19	5	0.632	1 770 312	0.152	0.096	0.368	0.233	0.000282045
Supervision Area 4 – Tshumbe	4	10	14	4	0.286	634 342	0.054	0.016	0.714	0.204	4.31045E-05
Supervision Area 5 – Kamina	8	8	16	4	0.500	716 185	0.061	0.031	0.500	0.250	5.88939E-05
Supervision Area 6 – Kolwezi	11	5	16	4	0.688	766 697	0.066	0.045	0.313	0.215	5.8003E-05
Supervision Area 7 - Bukavu 1	2	7	9	SO	0.222	1 683 143	0.144	0.032	0.778	0.173	0.0003998
Supervision Area 8 - Bukavu 2	8	5	13	3	0.615	1 683 143	0.144	0.089	0.385	0.237	0.000379028
Supervision Area 9 – Uvira	5	3	8	SO	0.625	809 040	0.069	0.043	0.375	0.234	0.000140916
Total	**54**	**66**	**120**			**11 665 409**		**0.400**			**0.001863441**
Average Coverage in 2011 =				45.0%	Maximum coverage in 2011 =			**48.5%**			
Weighted Average Coverage in 2011 =				**40.0%**	Minimum coverage in 2011 =			**31.6%**			
95% confidence interval = +/-				8.5%							

2.4.3 Sources of health information

Mothers of children 0-23 months old usually receive information on health or nutrition from different sources. Table CS.3, below, presents the different sources of information.

Data in this table show that 89% of mothers receive information on health and nutrition through formal networks: 88% receive them from nurses or midwives, 28% from community health workers and 21% from physicians. Thirty-nine percent of mothers receive information through informal networks such as spouses or partners (65%), friends or neighbors (42%), and adoptive mothers (33%).

Table CS.3a: Sources of information on health and nutrition

Percentage of mothers of children 0-23 months who receive health and nutrition information through formal or informal networks

	Formal Network						**Informal Network**								% of mothers who receive information through formal networks	% of mothers who receive information through informal networks	No. of mothers of children 0-23 months
	Doctor	Nurse/Midwife	Assistant Midwife	Community Health Worker	Growth Monitoring Officer	Qualified Birth Attendant	Spouse/ Partner	Adoptive Mother	Sister	Grandparent	Aunt	Friend/Neighbor	Village Elders	Others			
Area of Residence																	
Urban	42.5	87.5	12.5	17.5	10.0	15.0	78.9	10.5	15.8	5.3	5.3	36.8	0	10.5	95.2	45.2	42
Rural	15.2	88.3	13.1	31	10.3	15.9	61.3	40.3	9.7	19.4	4.8	43.5	1.6	4.8	87.3	37.3	166
Mother's Age																	
<25 years	18.5	87.7	9.2	26.2	13.8	13.8	63.6	39.4	12.1	15.2	3	42.4	0	3	83.3	42.3	78
>25 years	22.5	88.3	15	29.2	8.3	16.7	66.7	29.2	10.4	16.7	6.3	41.7	2.1	8.3	92.3	36.9	130
Degree of Literacy																	
Cannot read or write	16.0	88.9	9.9	32.1	8.6	13.6	60.5	39.5	10.5	18.4	5.3	50	2.6	5.3	86.2	40.4	94
Can read only	12.5	79.2	16.7	41.7	16.7	20.8	54.5	27.3	18.2	9.1	0	36.4	0	0	85.7	39.3	31
Can read and write	27.8	89.9	13.9	19	10.1	15.2	76.7	26.7	10	13.3	6.7	33.3	0	10	95.2	36.1	83
Total	**21.1**	**88.1**	**13**	**28.1**	**10.3**	**15.7**	**65.4**	**33.3**	**11.1**	**16**	**4.9**	**42**	**1.2**	**6.2**	**88.9**	**38.9**	**208**

The Kamina Supervision Area had the weakest performance on this indicator.

Table CS.3b below further breaks down the percentage of mothers who receive health information through formal networks by Supervision Area.

CS.3b: Percentage of mothers of children 0-23 months who receive information on health and nutrition through formal networks, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimated population size	Weighted factor (Wt)	Mini coverage weighted	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 – Luiza	20	5	25	20	0.800	1 351 998	0.116	0.093	0.200	0.160	8.5967E-05
Supervision Area 2 - Mwene Ditu	20	5	25	20	0.800	2 250 550	0.193	0.154	0.200	0.160	0.000238209
Supervision Area 3 – Kole	25	0	25	20	1.000	1 770 312	0.152	0.152	0.000	0.000	0
Supervision Area 4 – Tshumbe	22	2	24	19	0.917	634 342	0.054	0.050	0.083	0.076	9.41165E-06
Supervision Area 5 – Kamina	20	5	25	20	0.800	716 185	0.061	0.049	0.200	0.160	2.4123E-05
Supervision Area 6 – Kolwezi	22	3	25	20	0.880	766 697	0.066	0.058	0.120	0.106	1.82462E-05
Supervision Area 7 - Bukavu 1	17	2	19	15	0.895	1 683 143	0.144	0.129	0.105	0.094	0.000103195
Supervision Area 8 - Bukavu 2	18	1	19	15	0.947	1 683 143	0.144	0.137	0.053	0.050	5.46328E-05
Supervision Area 9 – Uvira	21	0	21	17	1.000	809 040	0.069	0.069	0.000	0.000	0
Total	**185**	**23**	**208**			**11 665 409**		**0.891**			**0.000533785**

Average coverage in 2011 =	88.9%	Maximum coverage in 2011 =	**93.6%**
Weighted average coverage in 2011 =	**89.1%**	Minimum coverage in 2011 =	**84.5%**
95% Confidence interval = +/-	4.5%		

All Supervision Areas show wide coverage on this indicator, indicating good performance in obtaining health information from formal sources.

3.4.3 Channels of receiving health messages

Several channels are used to receive information on health. Those used by mothers of children 0-23 months during the month preceding the survey are listed in table CS.4 below. Health staff includes a physician, nurse and community health worker, while the mass media include radio, newspaper/magazine and television.

Table CS.4a: Channels of receiving health messages
Percentage of mothers of children 0-23 months who received messages through health personnel or mass media

	Channels of receiving health messages							Through a health personnel	Through mass media	Through health personnel or mass media	No. of mothers of children 0-23 months
	Community health worker	Physician or nurse	Family member/s	Radio	Newspaper/ magazine	Television	Others				
Area of Residence											
Urban	50	46.9	40.6	46.9	3.1	18.8	6.3	66.7	35.7	73.8	42
Rural	68.3	46.2	20.2	28.8	2.9	0	0	56	18.1	60.2	166
Mother's Age											
<25 years	69.6	43.5	28.3	32.6	6.5	2.2	2.2	51.3	19.2	56.4	78
>25 years	61.1	47.8	23.3	33.3	1.1	5.6	1.1	62.3	23.1	66.9	130
Degree of Literacy											
Cannot read or write	65.6	47.5	23	24.6	0	0	0	59.6	16	63.8	94
Can read only	63.2	42.1	15.8	31.6	5.3	0	5.3	60.7	21.4	67.9	31
Can read and write	63.6	45.5	30.9	43.6	5.5	10.9	1.8	56.6	28.9	61.4	83
Total	64	46.3	25	33.1	2.9	4.4	1.5	58.2	21.6	63	208

Data indicate that 58% of mothers received their information through health personnel, primarily from community health workers (64%) and from physicians or nurses (46%). Consequently, 22% received health messages from mass media, primarily from the radio (33%). About 25% of mothers interviewed receive health information from family members.

By Supervision Area, the percentage of mothers who received health information from health personnel or mass media is presented below. The Kamina Supervision Area performs poorly on this indicator.

CS.4b: Percentage of mothers of children 0-23 months who received health messages from health personnel or mass media

Supervision Area	Yes	No	Sample Size	Decision Rule	Mini coverage (p)	Estimated population size (N)	Weighted Factor (Wt)	Weighted mini coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 - Luiza	18	7	25	13	0.720	1 351 998	0.116	0.083	0.280	0.202	0.000108319
Supervision Area 2 - Mwene Ditu	14	11	25	13	0.560	2 250 550	0.193	0.108	0.440	0.246	0.000366841
Supervision Area 3 - Kole	19	6	25	13	0.760	1 770 312	0.152	0.115	0.240	0.182	0.000168029
Supervision Area 4 - Tshumbe	14	10	24	13	0.583	634 342	0.054	0.032	0.417	0.243	2.99462E-05
Supervision Area 5 - Kamina	10	15	25	13	0.400	716 185	0.061	0.025	0.600	0.240	3.61844E-05
Supervision Area 6 - Kolwezi	18	7	25	13	0.720	766 697	0.066	0.047	0.280	0.202	3.48336E-05
Supervision Area 7 - Bukavu 1	11	8	19	10	0.579	1 683 143	0.144	0.084	0.421	0.244	0.000267094
Supervision Area 8 - Bukavu 2	12	7	19	10	0.632	1 683 143	0.144	0.091	0.368	0.233	0.000254953
Supervision Area 9 - Uvira	15	6	21	11	0.714	809 040	0.069	0.050	0.286	0.204	4.67439E-05
Total	**131**	**77**	**208**			**11 665 409**		**0.635**			**0.001312944**

Average coverage in 2011 =	63,0%	Maximum coverage in 2011 =	**70,6%**
Weighted average coverage in 2011 =	**63,5%**	Minimum coverage in 2011 =	**56,4%**
95% Confidence interval = +/-	7,1%		

CHAPTER 3: NUTRITION OF CHILDREN

3.1 Breastfeeding and Nutrition of Young Children

3.1.1 Early Initiation of breastfeeding

Table NE.1a presents information on children who were breastfed immediately or during the first hour following birth.

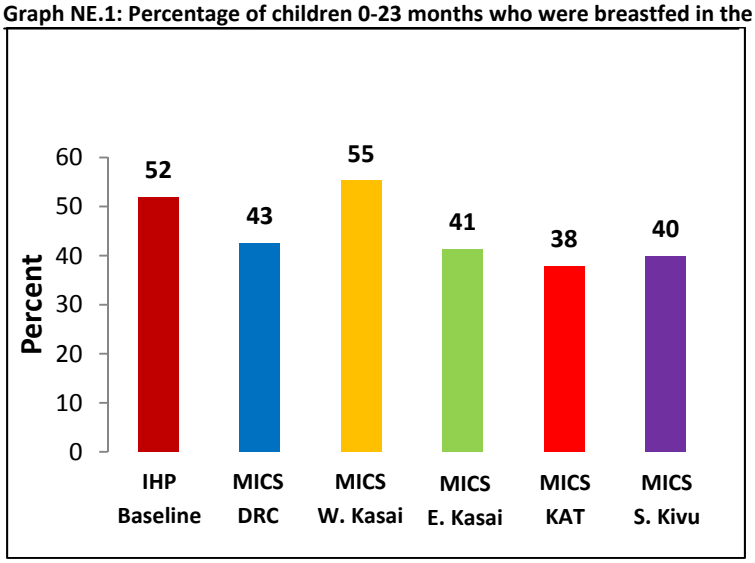
Table NE.1a: Percentage of children 0-23 months who were breastfed during the first hour following birth

	During the first hour following birth	Number of children 0-23 months
Area of Residence		
Urban	64.3	42
Rural	48.8	166
Sex of Child		
Male	54.8	104
Female	49.0	104
Age (in months) of child		
0-5	43.5	62
6-11	55.6	54
12-17	58.8	51
18-23	51.2	41
Degree of Literacy of Mother		
Cannot read or write	55.3	94
Can read only	57.1	31
Can read and write	47.0	83
Total	**51.9**	**208**

According to data gathered, 52% of children were breastfed within one hour following birth. A proportionately higher percentage of these children (64%) live in urban areas as compared to 49% who live in rural areas. The survey also found that more boys were breastfed within the first hour than girls (55% against 49%). Also, more children whose mothers cannot read and write (55%) were breastfed within the first hour than those whose mothers are literate (47%). As related to age, it appears that the youngest children (0-5 months) were least likely to have been breastfed within one hour after birth (44% of children aged 0 -5 months against 56% of children 6-11 months and 59% of children 12-17 months).

As compared to the 2010 Multiple Indicator Cluster Survey (MICS) covering statistics for all of DRC and for Eastern Kasaï, Katanga, and South Kivu specifically, this survey found a higher proportion of children breastfed during the first hour following birth. However, the MICS statistics on Western Kasaï (55%) were higher.

Graph NE.1: Percentage of children 0-23 months who were breastfed in the first hour following birth



The analysis of this indicator by Supervision Area shows that Tshumbe, Kamina, and Bukavu-2 performed poorly on the practice of early initiation of breastfeeding.

Table NE.1b: Percentage of children 0-23 months who were breastfed during the first hour following birth, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini Coverage (p)	Estimated population size	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	Wt^2 * (pq)/n
Supervision Area 1 - Luiza	21	4	25	12	0.840	1 351 998	0.116	0.097	0.160	0.134	7.22123E-05
Supervision Area 2 - Mwene Ditu	13	12	25	12	0.520	2 250 550	0.193	0.100	0.480	0.250	0.000371605
Supervision Area 3 - Kole	18	8	25	12	0.720	1 770 312	0.152	0.109	0.280	0.202	0.000185716
Supervision Area 4 - Tshumbe	6	18	24	11	0.250	634 342	0.054	0.014	0.750	0.188	2.31013E-05
Supervision Area 5 - Kamina	6	19	25	12	0.240	716 185	0.061	0.015	0.760	0.182	2.75002E-05
Supervision Area 6 - Kolwezi	13	12	25	12	0.520	766 697	0.066	0.034	0.480	0.250	4.31273E-05
Supervision Area 7 - Bukavu 1	14	5	19	9	0.737	1 683 143	0.144	0.106	0.263	0.194	0.000212461
Supervision Area 8 - Bukavu 2	6	13	19	9	0.316	1 683 143	0.144	0.046	0.684	0.216	0.000236742
Supervision Area 9 - Uvira	11	10	21	10	0.524	809 040	0.069	0.036	0.476	0.249	5.71314E-05
Total	**108**	**101**	**208**			**11 665 409**		**0.558**			**0.001229597**
Average coverage in 2011 =				51.9%	Maximum coverage in 2011 =				**62.6%**		
Weighted average coverage in 2011 =				**55.8%**	Minimum coverage in 2011 =				**48.9%**		
95% confidence interval = +/-				6.9%							

3.1.2 Exclusive breastfeeding

National health protocol recommends that newborn infants be exclusively breastfed for the first 6 months of life. Table NE.2 presents the situation as observed by the survey.

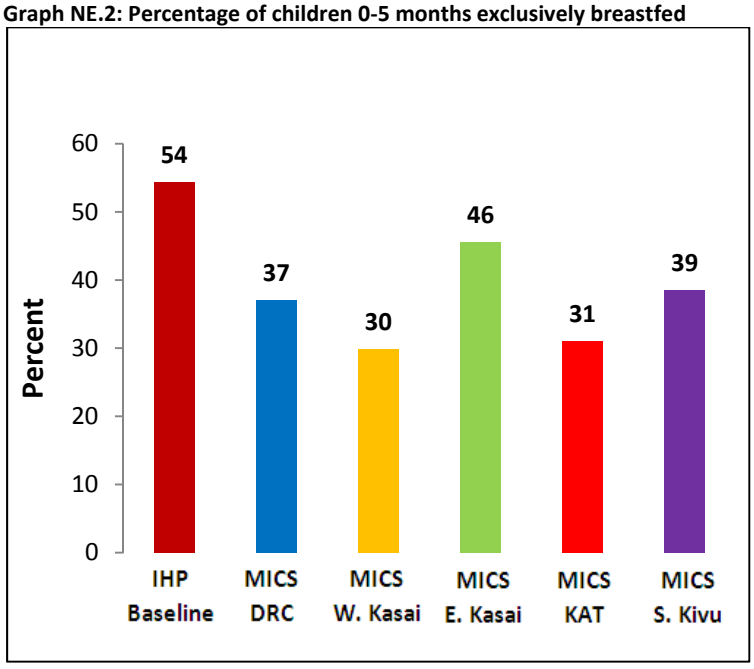
Table NE.2a: Percentage of infants 0-5 months old who are exclusively breastfed

Characteristic	Percentage of infants exclusively breastfed	Number of infants 0-5 months old
Area of Residence		
Urban	47.6	42
Rural	56.0	166
Sex of Child		
Male	52.9	104
Female	55.8	104
Degree of Literacy of Mother		
Cannot read or write	51.1	94
Can read only	64.3	31
Can read and write	56.6	83
Total	**54.3**	**208**

Data from this table shows that more than half of children aged 0-5 months (54 %) are exclusively breastfed. More of these children (56%) live in rural areas than urban (48%). More children who are breastfed have mothers who are literate (57%) than those whose mothers do not read or write (51%). By gender, it appears that the proportion of children exclusively breastfed is slightly higher among girls (56%) than among boys (53%).

As shown on graph NE.2 below, the prevalence of exclusive breastfeeding estimated by this baseline survey is 8 percentage points higher than what was estimated by MICS.

Graph NE.2: Percentage of children 0-5 months exclusively breastfed



Moreover, it appears that in the Supervision Areas of Luiza, Kamina, and Uvira, performance on this indicator is weak. (Table NE.2b).

Table NE.2b: Percentage of infants 0-5 months, living with their mothers, who are exclusively breastfed, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimated population size (N)	Weighed factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$

Supervision Area 1 – Luiza	7	18	25	12	0.280	1 351 998	0.116	0.032	0.720	0.202	0.000108319
Supervision Area 2 - Mwene Ditu	13	12	25	12	0.520	2 250 550	0.193	0.100	0.480	0.250	0.000371605
Supervision Area 3 – Kole	15	10	25	12	0.600	1 770 312	0.152	0.091	0.400	0.240	0.000221091
Supervision Area 4 - Tshumbe	19	5	24	11	0.792	634 342	0.054	0.043	0.208	0.165	2.03206E-05
Supervision Area 5 – Kamina	11	14	25	12	0.440	716 185	0.061	0.027	0.560	0.246	3.71493E-05
Supervision Area 6 - Kolwezi	12	13	25	12	0.480	766 697	0.066	0.032	0.520	0.250	4.31273E-05
Supervision Area 7 - Bukavu 1	14	5	19	9	0.737	1 683 143	0.144	0.106	0.263	0.194	0.000212461
Supervision Area 8 - Bukavu 2	13	6	19	9	0.684	1 683 143	0.144	0.099	0.316	0.216	0.000236742
Supervision Area 9 – Uvira	9	12	21	10	0.429	809 040	0.069	0.030	0.571	0.245	5.60926E-05
Total	**113**	**95**	**208**			**11 665 409**		**0.560**			**0.001306908**

Average coverage in 2011 =	54.3%	Maximum coverage in 2011 =	**63.1%**
Weighted average coverage in 2011 =	**56.0%**	Minimum coverage in 2011 =	**48.9%**
95% confidence interval = +/-	7.1%		

3.1.3 Adequate Food for Young Children

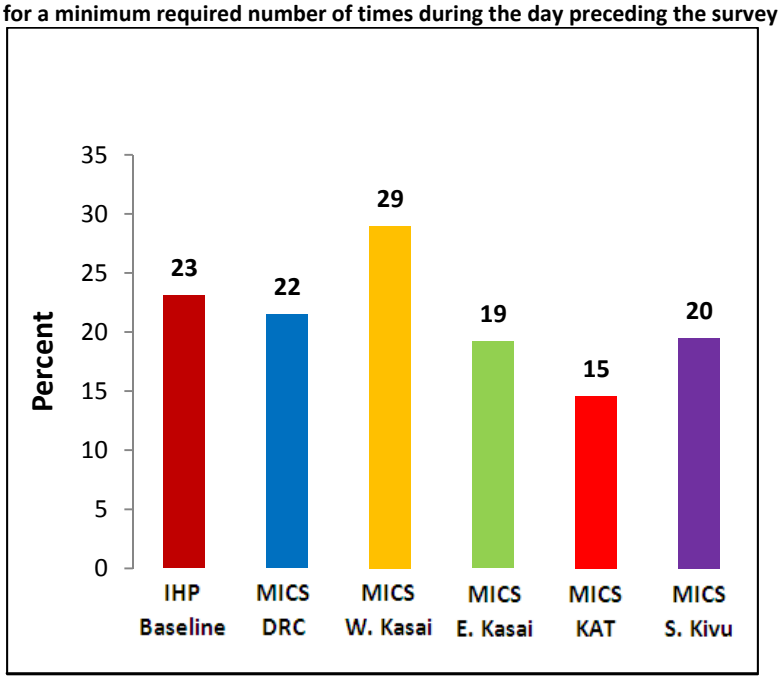
Children 6-23 months old should receive, in addition to breastmilk, complementary solid or semi-solid food or porridge for a required minimum number of times a day, according to their age, to be considered adequately nourished. Table NE.3a below shows the percentage of children 6-23 months who are adequately nourished.

Table NE.3a: Percentage of children 6-23 months old who received solid, semi-solid food or porridge for the minimum required number of meals a day during the day preceding the survey

Description	Percentage of children who received the minimum required number of meals	Number of children 6-23 months old
Area of residence		
Urban	21.4	42
Rural	23.5	166
Age of child (in months)		
6-8	33.3	60
9-11	13.7	51
12-17	24.5	53
18-23	18.2	44
Degree of literacy of mothers		
Cannot read or write	22.3	94
Can read only	35.7	31
Can read and write	20.5	83
Total	**23.1**	**208**

This table shows that only 23% of children 6-23 months old are properly fed since they were given solid or semi-solid food or porridge for a minimum required number of meals a day depending on their age. There is a slightly higher percentage of children in rural (21%) than urban (24%) areas but it does not vary significantly whether the child's mother is literate (21%) or not (22%). Compared to MICS findings, the percentage of children adequately fed in the DRC overall (22%) reflects the percentage found in the IHP baseline survey (23%) as shown in the graph below.

Graph NE.3: Percentage of children 6-23 months who received solid, semi-solid or porridge for a minimum required number of times during the day preceding the survey



The situation on proper nutrition of children by Supervision Area is shown in Table NE.3b below. Although all Supervision Areas are above their decision rule on this indicator, none of them are performing well.

Table NE.3b: Percentage of children 6-23 months who received solid, semi-solid food or porridge for the minimum required number of meals a day during the day preceding the survey, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini Coverage (p)	Estimated population size	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 - Luiza	6	19	25	2	0.240	1 351 998	0.116	0.028	0.760	0.182	9.80025E-05
Supervision Area 2 - Mwene Ditu	4	21	25	2	0.160	2 250 550	0.193	0.031	0.840	0.134	0.000200095
Supervision Area 3 - Kole	9	16	25	2	0.360	1 770 312	0.152	0.055	0.640	0.230	0.000212247
Supervision Area 4 - Tshumbe	4	20	24	2	0.167	634 342	0.054	0.009	0.833	0.139	1.71121E-05
Supervision Area 5 - Kamina	5	20	25	2	0.200	716 185	0.061	0.012	0.800	0.160	2.4123E-05
Supervision Area 6 - Kolwezi	8	17	25	2	0.320	766 697	0.066	0.021	0.680	0.218	3.75981E-05
Supervision Area 7 - Bukavu 1	2	17	19	2	0.105	1 683 143	0.144	0.015	0.895	0.094	0.000103195
Supervision Area 8 - Bukavu 2	4	15	19	2	0.211	1 683 143	0.144	0.030	0.789	0.166	0.000182109
Supervision Area 9 - Uvira	6	15	21	2	0.286	809 040	0.069	0.020	0.714	0.204	4.67439E-05
Total	**48**	**160**	**208**			**11 665 409**		**0.221**			**0.000921227**

Average coverage in 2011 =	23.1%	Maximum coverage in 2011 =	**28.1%**
Weighted average coverage in 2011 =	**22.1%**	Minimum coverage in 2011 =	**16.2%**
95% confidence interval = +/-	5.9%		

3.2 Vitamin A Supplementation for Children

Vitamin A is essential for eye health and proper functioning of the immune system. The Ministry of Health of the DRC recommends that children 6-59 months receive a vitamin A capsule every six months. Table NE.4a below describes the situation observed during the baseline survey.

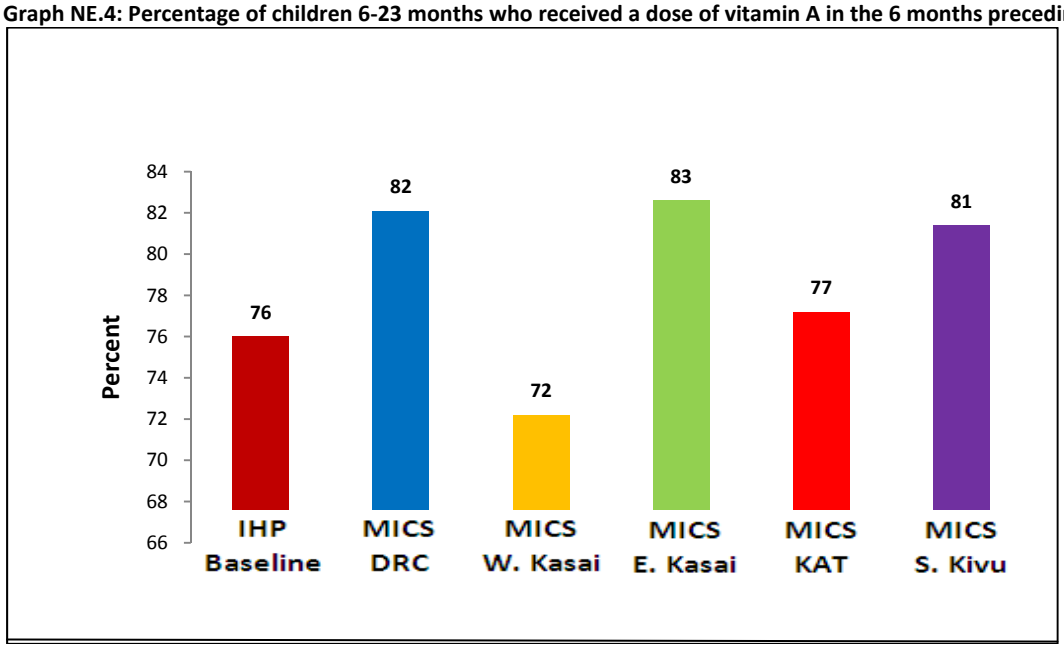
Table NE.4a: Percentage of children 6-23 months who received one dose of vitamin A during the 6 months preceding the survey

Description	Percentage of children 6-23 months who received one dose of vitamin A during the 6 months preceding the survey	Number of children 6-23 months old
Area of residence		
Urban	78.6	42
Rural	75.3	166
Degree of literacy of mother		
Cannot read or write	72.3	94
Can read only	64.3	31
Can read and write	84.3	83
Age of child (in months)		
6-11	71.2	111
12-17	83.0	53
18-23	79.5	44
Total	**76.0**	**208**

More than three out of five children (76%) received one dose of vitamin A during the six months preceding the survey. The proportion of children who were supplemented with vitamin A is greater among children living in urban areas (79%) than among children living in rural areas (75%), and among children whose mothers are literate (84%) compared to those whose mothers cannot read or write (72%).

The IHP estimate of 76% is below the national average of 82% (MICS) of children receiving a dose of vitamin A in the six months preceding the survey. As shown in Graph NE.4, the IHP baseline estimate closely matches that of Katanga (77%).

Graph NE.4: Percentage of children 6-23 months who received a dose of vitamin A in the 6 months preceding the survey



Detailed data by Supervision Area are presented below.

Table NE.4b: Percentage of children 6-23 months who received one dose of vitamin A during the 6 months preceding the survey, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini Coverage (p)	Estimated population size	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 - Luiza	20	5	25	17	0.800	1 351 998	0.116	0.093	0.200	0.160	8.59671E-05
Supervision Area 2 - Mwene Ditu	17	8	25	17	0.680	2 250 550	0.193	0.131	0.320	0.218	0.000323964
Supervision Area 3 - Kole	16	9	25	17	0.640	1 770 312	0.152	0.097	0.360	0.230	0.000212247
Supervision Area 4 - Tshumbe	20	4	24	16	0.833	634 342	0.054	0.045	0.167	0.139	1.71121E-05
Supervision Area 5 - Kamina	12	13	25	17	0.480	716 185	0.061	0.029	0.520	0.250	3.76318E-05
Supervision Area 6 - Kolwezi	21	4	25	17	0.840	766 697	0.066	0.055	0.160	0.134	2.32224E-05
Supervision Area 7 - Bukavu 1	17	2	19	13	0.895	1 683 143	0.144	0.129	0.105	0.094	0.000103195
Supervision Area 8 - Bukavu 2	18	1	19	13	0.947	1 683 143	0.144	0.137	0.053	0.050	5.46328E-05
Supervision Area 9 - Uvira	17	4	21	17	0.810	809 040	0.069	0.056	0.190	0.154	3.53176E-05
Total	**158**	**50**	**208**			**11 665 409**		**0.773**			**0.00089329**

Average coverage in 2011 =	76.0%	Maximum coverage in 2011 =	**83.2%**
Weighted average coverage in 2011 =	**77.3%**	Minimum coverage in 2011 =	**71.4%**
95% confidence interval = +/-	5.9%		

Data on this table show that Kole and Kamina Supervision Areas are not performing well on distribution of vitamin A supplements for children 6 to 23 months old.

3.3 Nutritional status of children 0-23 months

The nutritional status of children 0-23 months is assessed through three anthropometric indices: weight-for-age, height-for-age and weight-for-height. The weight-for-age informs the general malnutrition or underweight status. Height-for-age measures stunting or chronic malnutrition. The weight-for-height measures wasting or acute malnutrition. When the index is greater than two standard deviations (SD) below the median of the reference population, it is called moderate or severe malnutrition. When the index is more than three standard deviations below the median, then it is a case of severe malnutrition. The reference population used in this report is based on the new growth standards of the World Health Organization. [1]

[1] http://www.who.int/childgrowth/standars/second_set/technical_report_2.pdf

Table NE.5 presents the indicator of nutritional status of children 0-23 months according to the three anthropometric indexes: weight-for-age, height-for-age, and weight-for-height.

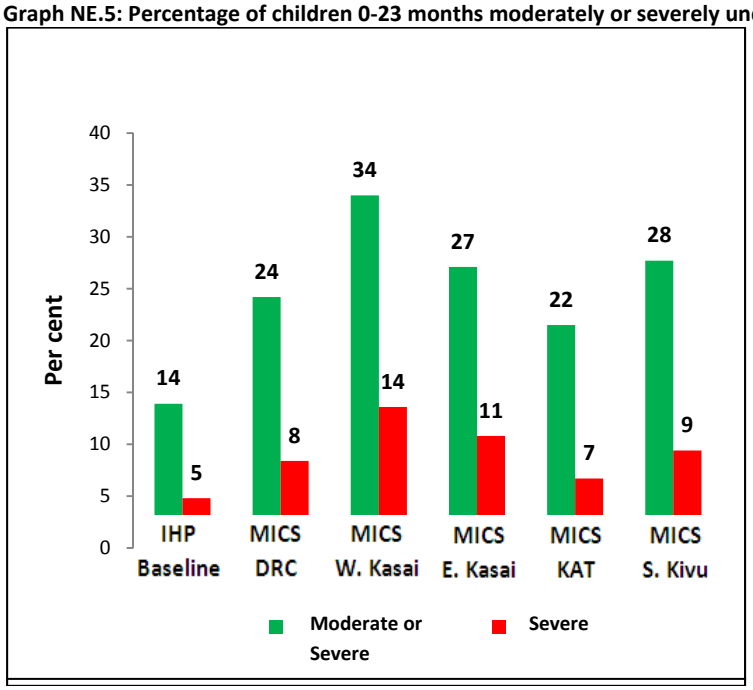
Table NE.5a: Percentage of children 0-23 months according to the three anthropometry indexes: weight-for-age, height-for-age, and weight-for-height

	Weight-for-age			Height-for-age			Weight-for-height		
	Percentage below -2 SD	Percentage below -3 SD	Number of children 0-23 months	Percentage below -2 SD	Percentage below -3 SD	Number of children 0-23 months	Percentage below -2 SD	Percentage below -3 SD	Number of children 0-23 months
Place of residence									
Urban	14.3	4.8	42	31.0	16.7	42	7.1	2.4	42
Rural	13.9	4.8	166	31.3	18.1	166	9.0	6.0	166
Sex of Child									
Male	14.4	5.8	104	34.6	18.3	104	8.7	5.8	104
Female	13.5	3.8	104	27.9	17.3	104	8.7	4.8	104
Total	**13.9**	**4.8**	**208**	**31.3**	**17.8**	**208**	**8.7**	**5.3**	**208**

3.3.1 Underweight (general malnutrition)

In the project target health zones, 14% of children suffer from moderate or severe weight insufficiency, with 5% of these children severely underweight. There are no significant differences in weight between children from urban and rural areas, or between sexes.

Graph NE.5: Percentage of children 0-23 months moderately or severely underweight



As shown in the graph above, the IHP baseline estimates are lower than MICS findings on both the national and provincial levels.

Results of coverage analysis of weight insufficiency by Supervision Area are presented in table NE.5b below. All Supervision Areas perform poorly in terms of the weight-for-age index (moderate or severe).

Table NE.5b: Percentage of children 0-23 months who fall below 2 standard deviation compared to the median of weight-for-age of the reference population (moderate or severe)

Supervision Area	Yes	No	Sample size	Decision rule	Mini Coverage (p)	Estimated population size	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 - Luiza	6	19	25	2	0.240	1 351 998	0.116	0.028	0.760	0.182	9.80025E-05
Supervision Area 2 - Mwene Ditu	2	23	25	2	0.080	2 250 550	0.193	0.015	0.920	0.074	0.000109576
Supervision Area 3 - Kole	4	21	25	2	0.160	1 770 312	0.152	0.024	0.840	0.134	0.000123811
Supervision Area 4 - Tshumbe	2	22	24	1	0.083	634 342	0.054	0.005	0.917	0.076	9.41165E-06
Supervision Area 5 - Kamina	3	22	25	2	0.120	716 185	0.061	0.007	0.880	0.106	1.59211E-05
Supervision Area 6 - Kolwezi	2	23	25	2	0.080	766 697	0.066	0.005	0.920	0.074	1.2717E-05
Supervision Area 7 - Bukavu 1	4	15	19	1	0.211	1 683 143	0.144	0.030	0.789	0.166	0.000182109
Supervision Area 8 - Bukavu 2	4	15	19	1	0.211	1 683 143	0.144	0.030	0.789	0.166	0.000182109
Supervision Area 9 - Uvira	2	19	21	1	0.095	809 040	0.069	0.007	0.905	0.086	1.97363E-05
Total	**29**	**179**	**208**			**11 665 409**		**0.152**			**0.000753394**

Average coverage in 2011 =	13.9%	Maximum coverage in 2011 =	**20.6%**
Weighted adjusted coverage in 2011 =	**15.2%**	Minimum coverage in 2011 =	**9.8%**
95% confidence interval = +/-	5.4%		

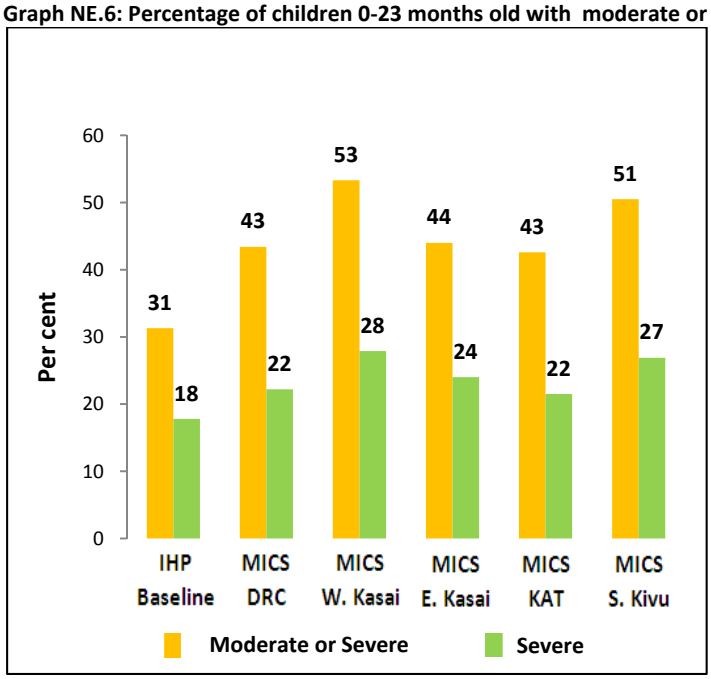
As weight-for-age is low across all Supervision Areas, improving the weight-for-age index among children 0-23 months will need to be a priority across the project area.

3.3.2 Stunting (Chronic Malnutrition)

The proportion of children 0-23 months who are stunted (growth retardation) -- moderate or severe-- is 31% (see table NE.5a). There are no significant differences whether children live in urban or rural areas but boys are more likely to suffer from retarded growth than girls (35% against 28% respectively).

Just as with weight insufficiency, the survey estimate is below the average by MICS on national and provincial levels.

Graph NE.6: Percentage of children 0-23 months old with moderate or severe stunting



Analysis results by Supervision Area are presented on table NE.5c. It appears that coverage in all Supervision Areas fall below the average and therefore are poor performers in the weight-for-age index whether in its moderate or severe form.

Table NE.5c: Percentage of children 0-23 months who fall below -2 standard deviation compared to the median height-for-age of the reference population (WHO) (moderate or severe)

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimated population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 – Luiza	8	17	25	5	0.320	1 351 998	0.116	0.037	0.680	0.218	0.000116915
Supervision Area 2 - Mwene Ditu	6	19	25	5	0.240	2 250 550	0.193	0.046	0.760	0.182	0.000271558
Supervision Area 3 - Kole	11	14	25	5	0.440	1 770 312	0.152	0.067	0.560	0.246	0.000226987
Supervision Area 4 - Tshumbe	4	21	24	4	0.167	634 342	0.054	0.009	0.833	0.139	1.71121E-05
Supervision Area 5 - Kamina	12	13	25	5	0.480	716 185	0.061	0.029	0.520	0.250	3.76318E-05
Supervision Area 6 - Kolwezi	7	18	25	5	0.280	766 697	0.066	0.018	0.720	0.202	3.48336E-05
Supervision Area 7 - Bukavu 1	4	15	19	4	0.211	1 683 143	0.144	0.030	0.789	0.166	0.000182109
Supervision Area 8 - Bukavu 2	7	12	19	4	0.368	1 683 143	0.144	0.053	0.632	0.233	0.000254953
Supervision Area 9 - Uvira	6	15	21	4	0.286	809 040	0.069	0.020	0.714	0.204	4.67439E-05
Total	**65**	**144**	**208**			**11 665 409**		**0.310**			**0.001188843**

Average coverage in 2011 =	31.3%	Maximum coverage in 2011 =	**37.8%**
Weighted average coverage in 2011 =	**31.0%**	Minimum coverage in 2011 =	**24.3%**
95% confidence interval = +/-	6.8%		

Table NE.5a indicates that 18% of children 0-23 months surveyed suffer from severe growth retardation. On table NE.5d below, the analysis by Supervision Area with LQAS methodology shows that all areas show poor performance on this indicator.

Table NE.5d: Percentage of children 0-23 months who fall below -3 standard deviations (-3 SD) from the median height-for-age WHO reference population (severe), by Supervision Area

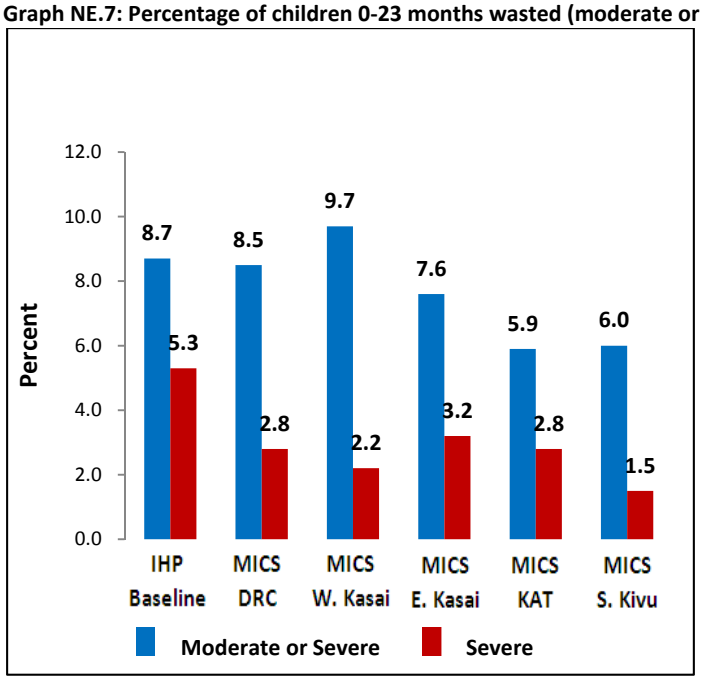
Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimated population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 – Luiza	3	22	25	2	0.120	1 351 998	0.116	0.014	0.880	0.106	5.67383E-05
Supervision Area 2 - Mwene Ditu	5	20	25	2	0.200	2 250 550	0.193	0.039	0.800	0.160	0.000238209
Supervision Area 3 - Kole	7	17	24	1	0.292	1 770 312	0.152	0.044	0.708	0.207	0.00019825
Supervision Area 4 - Tshumbe	4	21	25	2	0.160	634 342	0.054	0.009	0.840	0.134	1.58967E-05
Supervision Area 5 - Kamina	6	19	25	2	0.240	716 185	0.061	0.015	0.760	0.182	2.75002E-05
Supervision Area 6 - Kolwezi	3	22	25	2	0.120	766 697	0.066	0.008	0.880	0.106	1.82462E-05
Supervision Area 7 - Bukavu 1	4	15	19	1	0.211	1 683 143	0.144	0.030	0.789	0.166	0.000182109
Supervision Area 8 - Bukavu 2	3	16	19	1	0.158	1 683 143	0.144	0.023	0.842	0.133	0.000145687
Supervision Area 9 - Uvira	2	19	21	1	0.095	809 040	0.069	0.007	0.905	0.086	1.97363E-05
Total	**37**	**171**	**208**			**11 665 409**		**0.188**			**0.000902373**

Average coverage in 2011 =	17.8%	Maximum coverage in 2011 =	**24.7%**
Weighted average coverage in 2011 =	**18.8%**	Minimum coverage in 2011 =	**12.9%**
95% confidence interval = +/-	5.9%		

3.3.3 Wasting (Acute Malnutrition without Edema)

Among children who are wasted, 9% are moderate or severe cases, and 5% are severe cases (Table NE.5a).
On the moderate or severe level of this indicator, IHP baseline findings are similar to those of MICS in regard to the national average estimated at 8.5%. There are also no significant differences from the MICS estimates in Western Kasaï and Eastern Kasaï as shown on the graph below.

Graph NE.7: Percentage of children 0-23 months wasted (moderate or severe and severe)



In its severe form, the estimated prevalence of wasting in the baseline survey is above the MICS estimate for the whole country and for the four provinces studied. The weight-for-height index (wasting) estimated by the baseline survey was low among children 0-23 months across all Supervision Areas, and should be a health improvement priority.

CHAPTER 4: CHILD HEALTH

4.1 Vaccination Coverage of Children 12-23 Months

According to the Expanded Programme on Immunization (EPI), a child should have before their first birthday:

- BCG vaccination at birth
- three doses of DTP-HepB on the 6, 10, and 14 weeks to protect against diphtheria, pertussis, neonatal tetanus and hepatitis B virus
- a dose of oral polio vaccine (OPV) contact at birth
- three doses of vaccine against polio at 6, 10 and 14 weeks, respectively
- vaccination against yellow fever at 9 months
- vaccination against measles at 9 months

Thus, a child who regularly followed the immunization schedule should be fully vaccinated before the age of 12 months. Table VE.1 provides information on immunization coverage of children 12-23 months before the first birthday and at any time prior to the survey.

Table VE.1a: Percentage of children 12-23 months vaccinated against childhood diseases before their first birthday or at any time prior to the survey

Vaccination	Vaccinated at any time prior to the survey according to child's vaccination card	Vaccinated at any time prior to the survey according to recollection of child's mother	Vaccinated at any time prior to the survey	Vaccinated before 12 months old
BCG	30.3	62.5	92.8	92.8
Polio 0	24.5	11.5	36.1	36.1
Polio 1	29.8	33.7	63.5	60.8
Polio 2	27.4	3.8	31.3	29.8
Polio 3	25.0	5.3	30.3	27.0
DTP 1	29.3	12.5	41.8	40.0
DTP 2	26.9	7.2	34.1	33.3
DTP 3	25.0	7.2	32.2	29.6
Measles	24.5	44.1	68.6	56.9
HepB 1	28.4	8.7	37.0	35.4
HepB 2	26.4	3.4	29.8	28.4
HepB 3	24.5	4.3	28.8	24.7
Yellow Fever	22.7	4.3	27.1	25.3
All vaccinations	28.4	0.0	28.4	18.2
No vaccinations	0.0	6.3	6.3	6.3
No. of children 12-23 months	**208**	**208**	**208**	**208**

Table VE.1a shows that 18% of children 12-23 months all received required vaccinations before the age of one. About 28% of children 12-23 months have received all required vaccinations regardless of their age. However, 6% of children 12-23 months surveyed have never been vaccinated. Among the children who received vaccinations, most (93%) received the BCG vaccine. The first dose of polio was administered to 64% of vaccinated children. However, the number of children who received subsequent doses dropped to 31% for the second dose and 30% for the third dose. The attrition rate is 53% between the first and third doses. Similarly, 42% of children received the first dose of DTP but only 32% received the third dose. For DTP, there is a 24% attrition rate. More than half the children surveyed (69%) were immunized against measles but only 27% received the yellow fever vaccine.

It is important to note that more than two-thirds (67.8%) of mothers were not able to provide the child's vaccination card at all. Table VE.1b shows the large proportion of mothers who said they have their child's vaccination card but did not provide it at the time of the survey (45.2%), or had a card in the past (7.2%) but not anymore, or never had a card (15.4%). Therefore, the various low immunization coverage findings must be carefully interpreted given that the

majority of mothers were able to respond about their child's vaccination status based mostly on their recollection, while only less than one-third of mothers (32.2%) were able to do so according to the vaccination card shown at the time of the survey.

Table VE.1b: Possession of child vaccination card by mothers of children 12-23 months

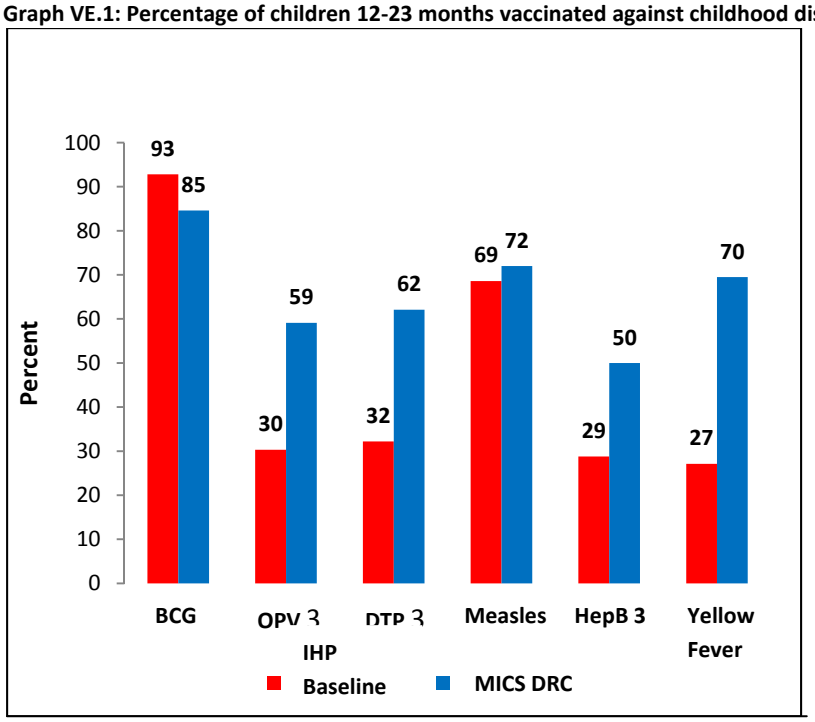
		Have a child vaccination card		Do not have a child vaccination card		No. of children aged 12-23 months
		Vaccination card seen	Vaccination card not seen	Had a child vaccination card in the past	Never had a child vaccination card	
Supervision Area	Luiza	64.0	28.0	0.0	8.0	25
	Mwene Ditu	16.0	64.0	12.0	8.0	25
	Kole	16.0	40.0	0.0	44.0	25
	Tshumbe	54.2	16.7	0.0	29.2	24
	Kamina	8.0	52.0	8.0	32.0	25
	Kolwezi	44.0	56.0	0.0	0.0	25
	Bukavu 1	52.6	10.5	36.8	0.0	19
	Bukavu 2	31.6	47.4	15.8	5.3	19
	Uvira	4.8	90.5	0.0	4.8	21
Area of Residence	Urban	31.0	57.1	7.1	4.8	42
	Rural	32.5	42.2	7.2	18.1	166
Sex of Child	Male	30.8	42.3	9.6	17.3	104
	Female	33.7	48.1	4.8	13.5	104
Degree of literacy	Cannot read or write	30.9	46.8	6.4	16.0	94
	Can read only	35.7	50.0	3.6	10.7	28
	Can read and write	33.7	42.2	9.6	14.5	83
Age (in months) of child	12-17	32.8	45.4	6.7	15.1	119
	18-23	31.5	44.9	7.9	15.7	89
Total		**32.2**	**45.2**	**7.2**	**15.4**	**208**

The differences in vaccination coverage between socio-demographic characteristics are analyzed in relation to vaccines received by children. Table VE.2 below shows immunization coverage of children 12-23 months at any time prior to the survey, by various characteristics. Generally speaking and with few exceptions, coverage is higher among rural children than among those in urban areas, and among children of literate mothers compared to children of illiterate mothers. Sex and age of children do not play a role in immunization coverage.The proportion of children who are not vaccinated is higher in rural areas and among children with mothers who cannot read or write.

Table VE.2a: Percentage of children 12-23 months who are currently vaccinated against childhood diseases

	Percentage of children who received:															Number of children 12-23 months
	BCG	Polio 0	Polio 1	Polio 2	Polio 3	DTP 1	DTP 2	DTP 3	Measles	HepB 1	HepB 2	HepB 3	Yellow Fever	No Vaccination	All	
Place of residence																
Urban	100.0	28.6	78.6	28.6	28.6	40.5	28.6	26.2	73.2	35.7	28.6	26.2	23.8	.0	26.2	42
Rural	91.0	38.0	59.6	31.9	30.7	42.2	35.5	33.7	67.5	37.3	30.1	29.5	27.9	7.8	28.9	166
Sex of child																
Male	93.3	36.5	61.5	28 .8	27.9	39.4	33.7	31.7	66.7	33.7	26.9	26.9	26.0	4.8	27.9	104
Female	92.3	35.6	65.4	33 .7	32.7	44.2	34.6	32.7	70.6	40.4	32.7	30.8	28.2	7.7	28.8	104
Mother's degree of literacy																
Cannot read or write	90.4	31.9	61.7	28 .7	27.7	39.4	31.9	29.8	62.6	35.1	27.7	26.6	24.5	7.4	24.5	94
Can read only	92.9	46.4	57.1	35 .7	35.7	39.3	39.3	35.7	74.1	35.7	35.7	32.1	32.1	7.1	32.1	31
Can read and write	96.4	37.3	68.7	33 .7	32.5	45.8	36.1	34.9	74.7	41.0	31.3	31.3	29.3	3.6	32.5	83
Age of child (in months)																
12-17	93.3	35.3	60.5	31.1	30.3	43.7	36.1	32.8	70.4	40.3	31.1	29.4	27.1	5.0	27.7	119
18-23	92.1	37.1	67.4	31.5	30.3	39.3	31.5	31.5	66.3	32.6	28.1	28.1	27.0	7.9	29.2	89
Total	**92.8**	**36.1**	**63.5**	**31.3**	**30.3**	**41.8**	**34.1**	**32.2**	**68.6**	**37.0**	**29.8**	**28.8**	**27.1**	**6.3**	**28.4**	**208**

Graph VE.1: Percentage of children 12-23 months vaccinated against childhood diseases, MICS survey



As presented on graph VE.1 above, the IHP baseline survey estimates of vaccination coverage are not consistent with MICS findings. Aside from the percentage of children vaccinated against the BCG vaccine, the IHP baseline survey found lower percentages of children vaccinated against childhood diseases. There are particularly significant differences for yellow fever and the third doses for polio, DTP and Hepatitis B.

Tables VE.2b to VE.2g below present the results of the analysis of immunization coverage by Supervision Area.

Table VE.2b: Percentage of children 12-23 months who received the BCG vaccine, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimate population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 – Luiza	25	0	25	21	1.000	1 351 998	0.116	0.116	0.000	0.000	0
Supervision Area 2 - Mwene Ditu	23	2	25	21	0.920	2 250 550	0.193	0.177	0.080	0.074	0.000109576
Supervision Area 3 - Kole	22	3	25	21	0.880	1 770 312	0.152	0.134	0.120	0.106	9.728E-05
Supervision Area 4 - Tshumbe	23	1	24	21	0.958	634 342	0.054	0.052	0.042	0.040	4.91973E-06
Supervision Area 5 - Kamina	20	5	25	21	0.800	716 185	0.061	0.049	0.200	0.160	2.4123E-05
Supervision Area 6 - Kolwezi	24	1	25	21	0.960	766 697	0.066	0.063	0.040	0.038	6.63497E-06
Supervision Area 7 - Bukavu 1	19	0	19	16	1.000	1 683 143	0.144	0.144	0.000	0.000	0
Supervision Area 8 - Bukavu 2	18	1	19	16	0.947	1 683 143	0.144	0.137	0.053	0.050	5.46328E-05
Supervision Area 9 - Uvira	19	2	21	18	0.905	809 040	0.069	0.063	0.095	0.086	1.97363E-05
Total	**193**	**15**	**208**			**11 665 409**		**0.935**			**0.000316903**

Average coverage in 2011 = **92.8%** Maximum coverage in 2011 = **97.0%**

Weighted average coverage in 2011 = **93.5%** Minimum coverage in 2011 = **90.0%**

95% confidence interval = **+/-5.9%**

116BTable VE.2c: Percentage of children 12-23 months who received 3 doses of polio vaccine (OPV 3), by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimate population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 - Luiza	16	9	25	5	0 .640	1 351 998	0.116	0.074	0.360	0.230	0.000123793
Supervision Area 2 - Mwene Ditu	4	21	25	5	0 .160	2 250 550	0.193	0.031	0.840	0.134	0.000200095
Supervision Area 3 - Kole	4	21	25	5	0 .160	1 770 312	0.152	0.024	0.840	0.134	0.000123811
Supervision Area 4 - Tshumbe	11	13	24	4	0 .458	634 342	0.054	0.025	0.542	0.248	3.05879E-05
Supervision Area 5 - Kamina	0	25	25	5	0 .000	716 185	0.061	0.000	1.000	0.000	0
Supervision Area 6 - Kolwezi	11	14	25	5	0 .440	766 697	0.066	0.029	0.560	0.246	4.25744E-05
Supervision Area 7 - Bukavu 1	10	9	19	4	0 .526	1 683 143	0.144	0.076	0.474	0.249	0.000273164
Supervision Area 8 - Bukavu 2	6	13	19	4	0 .316	1 683 143	0.144	0.046	0.684	0.216	0.000236742
Supervision Area 9 - Uvira	1	20	21	4	0 .048	809 040	0.069	0.003	0.952	0.045	.03875E-05
Total	**63**	**145**	**208**			**11 665 409**		**0.308**			**0.001041155**

Average coverage in 2011 = **30.3%** Maximum coverage in 2011 = **37.1%**

Weighted average coverage in 2011 = **30.8%** Minimum coverage in 2011 = **24.5%**

95% confidence interval = +/- **6.3%**

Table VE.2d: Percentage of children 12-23 months who recived 3 doses of DTP (DTP3) vaccine, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimate population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 - Luiza	16	9	25	5	0 .640	1 351 998	0.116	0.074	0.360	0.230	0.000123793
Supervision Area 2 - Mwene Ditu	6	19	25	5	0 .240	2 250 550	0.193	0.046	0.760	0.182	0.000271558
Supervision Area 3 - Kole	5	20	25	5	0 .200	1 770 312	0.152	0.030	0.800	0.160	0.000147394
Supervision Area 4 - Tshumbe	11	13	24	4	0 .458	634 342	0.054	0.025	0.542	0.248	3.05879E-05
Supervision Area 5 - Kamina	0	25	25	5	0 .000	716 185	0.061	0.000	1.000	0.000	0
Supervision Area 6 - Kolwezi	10	15	25	5	0 .400	766 697	0.066	0.026	0.600	0.240	4.14685E-05
Supervision Area 7 - Bukavu 1	10	9	19	4	0 .526	1 683 143	0.144	0.076	0.474	0.249	0.000273164
Supervision Area 8 - Bukavu 2	8	11	19	4	0 .421	1 683 143	0.144	0.061	0.579	0.244	0.000267094
Supervision Area 9 – Uvira	1	20	21	4	0 .048	809 040	0.069	0.003	0.952	0.045	1.03875E-05
Total	**67**	**141**	**208**			**11 665 409**		**0.342**			**0.001165446**

Average coverage in 2011 =	32.2%	Maximum coverage in 2011 =	**40.9%**
Weighted average coverage in 2011 =	**34.2%**	Minimum coverage in 2011 =	**27.5%**
95% confidence interval = +/-	6.7%		

Table VE.2e: Percentage of children 12-23 months who received the measles vaccine, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimate population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 – Luiza	21	4	25	14	0.840	1 351 998	0 .116	0.097	0 .160	0 .134	7.22123E-05
Supervision Area 2 - Mwene Ditu	14	11	25	14	0.560	2 250 550	0 .193	0.108	0 .440	0 .246	0.000366841
Supervision Area 3 – Kole	13	12	25	14	0.520	1 770 312	0 .152	0.079	0 .480	0 .250	0.000229935
Supervision Area 4 – Tshumbe	17	7	24	14	0.708	634 342	0 .054	0.039	0 .292	0 .207	2.54542E-05
Supervision Area 5 – Kamina	9	14	23	13	0.391	716 185	0 .061	0.024	0 .609	0 .238	3.90335E-05
Supervision Area 6 – Kolwezi	22	2	24	14	0.917	766 697	0 .066	0.060	0 .083	0 .076	1.37489E-05
Supervision Area 7 - Bukavu 1	14	5	19	11	0.737	1 683 143	0 .144	0.106	0 .263	0 .194	0.000212461
Supervision Area 8 - Bukavu 2	14	5	19	11	0.737	1 683 143	0 .144	0.106	0 .263	0 .194	0.000212461
Supervision Area 9 – Uvira	16	4	20	12	0.800	809 040	0 .069	0.055	0 .200	0 .160	3.84796E-05
Total	**140**	**64**	**204**			**11 665 409**		**0.675**			**0.001210626**

Average coverage in 2011 =	68.6%	Maximum coverage in 2011 =	**74.3%**
Weighted average coverage in 2011 =	**67.5%**	Minimum coverage in 2011 =	**60.7%**
95% confidence interval = +/-	6.8%		

Table VE.2f: Percentage of children 12-23 months who received all 3 doses of Hepatitis B vaccine, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimate population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 - Luiza	16	9	25	4	0.640	1 351 998	0.116	0.074	0.360	0.230	0.000123793
Supervision Area 2 - Mwene Ditu	4	21	25	4	0.160	2 250 550	0.193	0.031	0.840	0.134	0.000200095
Supervision Area 3 - Kole	3	22	25	4	0.120	1 770 312	0.152	0.018	0.880	0.106	9.728E-05
Supervision Area 4 - Tshumbe	11	13	24	3	0.458	634 342	0.054	0.025	0.542	0.248	3.05879E-05
Supervision Area 5 - Kamina	0	25	25	4	0.000	716 185	0.061	0.000	1.000	0.000	0
Supervision Area 6 - Kolwezi	10	15	25	4	0.400	766 697	0.066	0.026	0.600	0.240	4.14685E-05
Supervision Area 7 - Bukavu 1	9	10	19	3	0.474	1 683 143	0.144	0.068	0.526	0.249	0.000273164
Supervision Area 8 - Bukavu 2	6	13	19	3	0.316	1 683 143	0.144	0.046	0.684	0.216	0.000236742
Supervision Area 9 - Uvira	1	20	21	3	0.048	809 040	0.069	0.003	0.952	0.045	1.03875E-05
Total	**60**	**148**	**208**			**11 665 409**		**0.292**			**0.001013518**

Average coverage in 2011 =	28.8%	Maximum coverage in 2011 =	**35.4%**
Weighted average coverage in 2011 =	**29.2%**	Minimum coverage in 2011 =	**22.9%**
95% confidence interval = +/-	6.2%		

Table VE.2g: Percentage of children 12-23 months vaccinated against yellow fever, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimate population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 - Luiza	16	9	25	4	0.640	1 351 998	0.116	0.074	0.360	0.230	0.000123793
Supervision Area 2 - Mwene Ditu	4	21	25	4	0.160	2 250 550	0.193	0.031	0.840	0.134	0.000200095
Supervision Area 3 - Kole	2	23	25	4	0.080	1 770 312	0.152	0.012	0.920	0.074	6.78012E-05
Supervision Area 4 - Tshumbe	11	12	23	3	0.478	634 342	0.054	0.026	0.522	0.250	3.20802E-05
Supervision Area 5 - Kamina	0	25	25	4	0.000	716 185	0.061	0.000	1.000	0.000	0
Supervision Area 6 - Kolwezi	9	16	25	4	0.360	766 697	0.066	0.024	0.640	0.230	3.98098E-05
Supervision Area 7 - Bukavu 1	7	12	19	3	0.368	1 683 143	0.144	0.053	0.632	0.233	0.000254953
Supervision Area 8 - Bukavu 2	6	13	19	3	0.316	1 683 143	0.144	0.046	0.684	0.216	0.000236742
Supervision Area 9 - Uvira	1	20	21	3	0.048	809 040	0.069	0.003	0.952	0.045	1.03875E-05
Total	**56**	**151**	**207**			**11 665 409**		**0.269**			**0.000965662**

Average coverage in 2011 =	27.1%	Maximum coverage in 2011 =	**33.0%**
Weighted average coverage in 2011 =	**26.9%**	Minimum coverage in 2011 =	**20.8%**
95% confidence interval = +/-	6.1%		

The Areas of Supervision with lowest vaccine coverage performance include: Kamina for tuberculosis; Mwene Ditu, Kole, Kamina and Uvira for the third dose of vaccine against polio; Kamina and Uvira for the third dose of vaccine against DPT; Kole and Kamina for the vaccine against measles; Kole, Kamina, and Uvira for the third dose of vaccine against hepatitis B; and Kole, Kamina and Uvira for the vaccine against yellow fever.

4.2 Case management of suspected pneumonia

Table CD.1a presents the percentage of children aged0-23 months with suspected pneumonia in the two weeks preceding the baseline survey who were placed under appropriate care, and the percentage of those who were treated with antibiotics.

Table CD.1a: Percentage of children 0-23 months with suspected pneumonia in the 2 weeks preceding the survey who were placed under appropriate care and were treated with antibiotics

	Percentage of children who were placed under appropriate care	Percentage of children age 0-23 who were treated with antibiotics	No. of children 0-23 months with suspected pneumonia
Area of Residence			
Urban	54.8	59.5	42
Rural	56.7	63.1	157
Literacy of Mother			
Cannot read or write	56.2	65.2	89
Can only read	50.0	57.1	28
Can read and write	58.8	61.3	80
Age of child (months)			
0-5	51.6	60.9	64
6-11	61.9	63.5	63
12-17	73.2	68.3	41
18-23	32.3	54.8	31
Total	56.3	**62.3**	**199**

According to the above table, 56% of mothers of children with suspected pneumonia in the two weeks preceding the baseline survey sought appropriate treatment in a health facility. Children cared for appropriately were slightly higher in urban than rural areas (57% versus 55%) and among children of literate mothers than among illiterate mothers (59% versus 56%). Depending on the age of the child, the proportion is highest among children aged 12-17 moths (73%).

Table CD.1b shows how each Supervision Area performs in relation to case management of suspected pneumonia.

Table CD.1b: Percentage of children 0-23 months with suspected pneumonia in the two weeks before the baseline survey who were placed under appropriate care

Supervision Area	Yes	No	Sample size	Decision rule	Mini Coverage (p)	Estimated population size	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
AS 1 – Luiza	15	10	25	12	0.600	1 351 998	0.116	0.070	0.400	0.240	0.000128951
AS 2 - Mwene Ditu	12	13	25	12	0.480	2 250 550	0.193	0.093	0.520	0.250	0.000371605
AS 3 – Kole	11	13	24	11	0.458	1 770 312	0.152	0.070	0.542	0.248	0.000238233
AS 4 – Tshumbe	12	12	24	11	0.500	634 342	0.054	0.027	0.500	0.250	3.08018E-05
AS 5 – Kamina	8	10	18	9	0.444	716 185	0.061	0.027	0.556	0.247	5.17039E-05
AS 6 – Kolwezi	18	7	25	12	0.720	766 697	0.066	0.047	0.280	0.202	3.48336E-05
AS 7 - Bukavu 1	13	6	19	9	0.684	1 683 143	0.144	0.099	0.316	0.216	0.000236742
AS 8 - Bukavu 2	13	6	19	9	0.684	1 683 143	0.144	0.099	0.316	0.216	0.000236742
AS 9 – Uvira	10	10	20	9	0.500	809 040	0.069	0.035	0.500	0.250	6.01243E-05
Total	**112**	**87**	**199**			**11 665 409**		**0.566**			**0.001389737**

Average coverage in 2011 =	56.3%	Maximum coverage in2011 =	**63.9%**
Weighted average coverage in 2011 =	**56.6%**	Minimum coverage in 2011 =	**49.3%**
95% Confidence Interval = +/-	7.3%		

It is clear from this table that the Kamina coordination office shows poor performance on seeking appropriate health care for suspected pneumonia of young children.

Table CD.1a also shows that among children with suspected pneumonia in the two weeks before the survey, 62% were treated with antibiotics. More of these children are from rural than urban areas (63% versus 60%) and are more likely to have mothers who cannot read or write (65% versus 61% of children whose mothers can read and write). Data presented in Table CD.1c demonstrate poor performance in the Mwene Ditu and Kamina Supervision Areas in relation to this indicator.

Table CD.1c: Percentage of children 0-23 months with suspected pneumonia in the two weeks before the baseline survey who were treated with antibiotics

Supervision Area	Yes	No	Sample size	Decision rule	Mini Coverage (p)	Estimated population size	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
AS 1 – Luiza	20	5	25	13	0.800	1 351 998	0.116	0.093	0.200	0.160	8.6E-05
AS 2 - Mwene Ditu	5	20	25	13	0.200	2 250 550	0.193	0.039	0.800	0.160	0.000238
AS 3 – Kole	16	8	24	13	0.667	1 770 312	0.152	0.101	0.333	0.222	0.000213
AS 4 – Tshumbe	12	12	24	13	0.500	634 342	0.054	0.027	0.500	0.250	3.08E-05
AS 5 – Kamina	9	9	18	10	0.500	716 185	0.061	0.031	0.500	0.250	5.24E-05
AS 6 – Kolwezi	19	6	25	13	0.760	766 697	0.066	0.050	0.240	0.182	3.15E-05
AS 7 - Bukavu 1	16	3	19	10	0.842	1 683 143	0.144	0.122	0.158	0.133	0.000146
AS 8 - Bukavu 2	13	6	19	10	0.684	1 683 143	0.144	0.099	0.316	0.216	0.000237
AS 9 – Uvira	14	6	20	11	0.700	809 040	0.069	0.049	0.300	0.210	5.05E-05
Total	**124**	**75**	**199**			**11 665 409**		**0.609**			**0.001085**

Average coverage in 2011 =	62.3%	Maximum coverage in 2011 =	**67.4%**
Average weighted coverage in 2011 =	**60.9%**	Minimum coverage in 2011 =	**54.5%**
95% Confidence Interval = +/-	6.5%		

The percentage of children with suspected peumonia who were treated with antibiotics found by the IHP baseline survey (62%) closely matches the estimates of the MICS, as shown below on graph CD.1, for Eastern Kasaï (63%) and Katanga (65%). However, for overall country estimates, IHP percentage is above that of MICS (62% versus 42%).

Graph CD.1: Percentage of children 0-23 months with suspected pneumonia who were treated with antibiotics

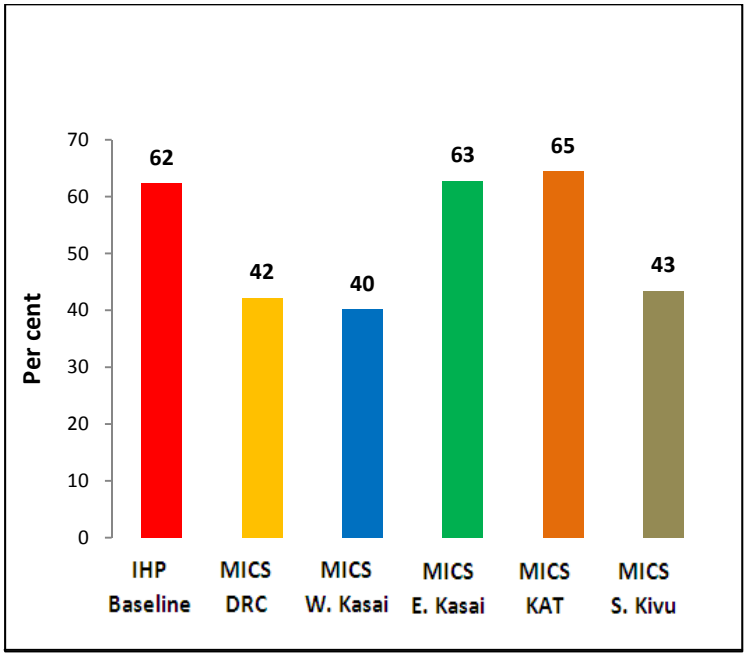


Table CD.1d below shows the poor performances on using antibiotics to treat suspected pneumonia in the Supervision Areas of Mwene Ditu and Kamina.

Table CD.1d: Percentage of children 0-23 months with suspected pneumonia during the two weeks preceding the survey treated with antibiotics, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimate population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 - Luiza	20	5	25	13	0.800	1 351 998	0.116	0.093	0.200	0.160	8.6E-05
Supervision Area 2 - Mwene Ditu	5	20	25	13	0.200	2 250 550	0.193	0.039	0.800	0.160	0.000238
Supervision Area 3 - Kole	16	8	24	13	0.667	1 770 312	0.152	0.101	0.333	0.222	0.000213
Supervision Area 4 - Tshumbe	12	12	24	13	0.500	634 342	0.054	0.027	0.500	0.250	3.08E-05
Supervision Area 5 - Kamina	9	9	18	10	0.500	716 185	0.061	0.031	0.500	0.250	5.24E-05
Supervision Area 6 - Kolwezi	19	6	25	13	0.760	766 697	0.066	0.050	0.240	0.182	3.15E-05
Supervision Area 7 - Bukavu 1	16	3	19	10	0.842	1 683 143	0.144	0.122	0.158	0.133	0.000146
Supervision Area 8 - Bukavu 2	13	6	19	10	0.684	1 683 143	0.144	0.099	0.316	0.216	0.000237
Supervision Area 9 - Uvira	14	6	20	11	0.700	809 040	0.069	0.049	0.300	0.210	5.05E-05
Total	**124**	**75**	**199**			**11 665 409**		**0.609**			**0.001085**

Average coverage in 2011 =	62.3%	Maximum coverage in 2011 =	**67.4%**
Weighted average coverage in 2011 =	**60.9%**	Minimum coverage in 2011 =	**54.5%**
95% confidence interval = +/-	6.5%		

4.3 Case Management of Diarrhea

The proper management of childhood diarrhea includes giving sick children oral rehydration therapy (ORT) with continued feeding. The baseline survey data show that only 29% of children aged 0-23 months who had diarrhea in the two weeks before the survey were adequately treated (Table CD.2a).

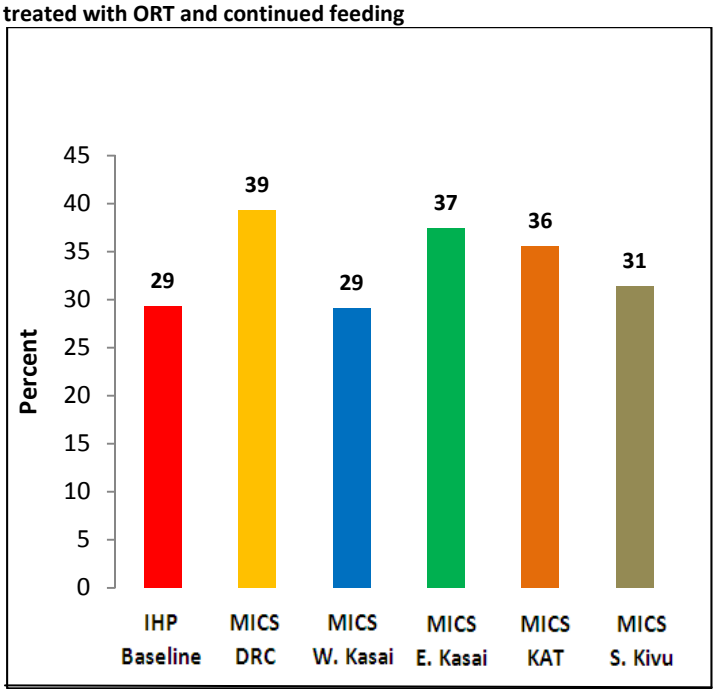
Table CD.2a: Percentage of children 0-23 months with diarrhea in the two weeks preceeding the baseline survey that received Oral Rehydration Therapy (ORT) with continued feeding

	Children who received ORT with continued feeding	Number of children age 0-23 months who had diarrhea
Area of Residence		
Urban	33.3	42
Rural	28.3	166
Literacy of Mother		
Cannot read or write	34.0	94
Can read only	28.6	31
Can read and write	24.1	83
Age of child (months)		
0-5	9.1	33
6-11	33.7	83
12-17	30.6	62
18-23	36.7	30
Total	**29.3**	**208**

The correct management of diarrhea among children aged 0-23 months was slightly better in urban (33%) than rural (28%) areas. In addition, children ages 18-23 months were more likely to be treated properly for their episode of diarrhea (37%).

As shown on graph CD.2, the percentage of children with diarrhea who were properly treated (29%) matches MICS findings for Western Kasaï (29%), but shows lower overall country and provincial estimates.

Graph CD.2: Percentage of children 0-23 months with diarrhea who were treated with ORT and continued feeding



Finally, table CD.2b below shows that management of diarrhea with ORT and continued feeding was low among all Supervision Areas, with only small differences among them. .

Table CD.2b: Percentage of children 0-23 months who had diarrhea in the 2 weeks before the baseline survey that received ORT and continued feeding

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimated population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 - Luiza	8	17	25	4	0.320	1 351 998	0.116	0.037	0.680	0.218	0.000116915
Supervision Area 2 - Mwene Ditu	5	20	25	4	0.200	2 250 550	0.193	0.039	0.800	0.160	0.000238209
Supervision Area 3 - Kole	13	12	25	4	0.520	1 770 312	0.152	0.079	0.480	0.250	0.000229935
Supervision Area 4 - Tshumbe	5	19	24	3	0.208	634 342	0.054	0.011	0.792	0.165	2.03206E-05
Supervision Area 5 - Kamina	7	18	25	4	0.280	716 185	0.061	0.017	0.720	0.202	3.03949E-05
Supervision Area 6 - Kolwezi	7	18	25	4	0.280	766 697	0.066	0.018	0.720	0.202	3.48336E-05
Supervision Area 7 - Bukavu 1	4	15	19	3	0.211	1 683 143	0.144	0.030	0.789	0.166	0.000182109
Supervision Area 8 - Bukavu 2	4	15	19	3	0.211	1 683 143	0.144	0.030	0.789	0.166	0.000182109
Supervision Area 9 - Uvira	8	13	21	3	0.381	809 040	0.069	0.026	0.619	0.236	5.40151E-05
Total	**61**	**147**	**208**			**11 665 409**		**0.289**			**0.001088841**

Average coverage in 2011 =	29.3%	Higher Coverage in 2011 =	**35.3%**
Weighted average coverage in 2011 =	**28.9%**	Lower Coverage in 2011 =	**22.4%**
95% Confidence Interval = +/-	6.5%		

4.4 Malaria

4.4.1 Malaria prevention

Availability of insecticide-treated nets in households

Table CD.31 shows the availability of insecticide-treated nets in households.

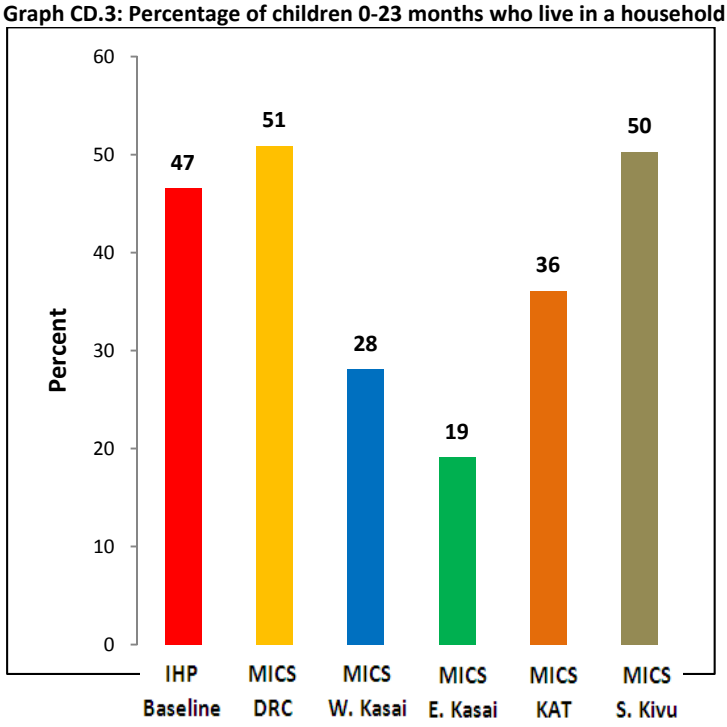
Table CD.3a: Percentage of children having at least one insecticide-treated net (ITN) in their household

	Percentage of children having at least 1 net in their household	Percentage of children having at least one insecticide-treated net (ITN) in their household	Number of children age 0-23 months
Area of Residence			
Urban	69.0	45.2	42
Rural	60.2	47.0	166
Literacy of Mother			
Cannot read or write	57.4	43.6	94
Can only read	57.1	35.7	28
Can read and write	69.9	54.2	83
Total	62.0	46.6	208

This table shows that 62% of surveyed households with young children have at least one net, but only 47% of the households have at least one insecticide-treated net (ITN). More of these young children live in rural areas (47%) than urban areas (45%), and more of these young children have mothers who are literate (54%) than mothers who do not read and write (44%).

The IHP baseline survey finding (47%) closely matches the MICS national estimate that 51% of Congolese children 0-23 months live in households that have at least one ITN. The IHP estimate also matches MICS findings for South Kivu province (50%). IHP percentages are higher, however, than MICS estimates for Katanga (36%), Western Kasaï (28%) and Eastern Kasaï (19%).

Graph CD.3: Percentage of children 0-23 months who live in a household with at least one ITN



The situation by Supervision Area is described in table CD.3b below.

Table CD.3b: Proportion of children 0-23 months who have at least one insecticide-treated net (ITN) in their household

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimate population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 - Luiza	12	13	25	9	0.480	1 351 998	0.116	0.056	0.520	0.250	0.000134109
Supervision Area 2 - Mwene Ditu	7	18	25	9	0.280	2 250 550	0.193	0.054	0.720	0.202	0.000300143
Supervision Area 3 - Kole	12	13	25	9	0.480	1 770 312	0.152	0.073	0.520	0.250	0.000229935
Supervision Area 4 - Tshumbe	13	11	24	9	0.542	634 342	0.054	0.029	0.458	0.248	3.05879E-05
Supervision Area 5 - Kamina	12	13	25	9	0.480	716 185	0.061	0.029	0.520	0.250	3.76318E-05
Supervision Area 6 - Kolwezi	10	15	25	9	0.400	766 697	0.066	0.026	0.600	0.240	4.14685E-05
Supervision Area 7 - Bukavu 1	11	8	19	7	0.579	1 683 143	0.144	0.084	0.421	0.244	0.000267094
Supervision Area 8 - Bukavu 2	12	7	19	7	0.632	1 683 143	0.144	0.091	0.368	0.233	0.000254953
Supervision Area 9 - Uvira	8	13	21	8	0.381	809 040	0.069	0.026	0.619	0.236	5.40151E-05
Total	**97**	**111**	**208**			**11 665 409**		**0.469**			**0.001349936**

Average coverage in 2011 =	46.6%	Higher Coverage in 2011 =	**54.1%**
Average adjusted coverage in 2011 =	**46.9%**	Lower Coverage in 2011 =	**39.7%**
95% Confidence Interval = +/-	7.2%		

It appears that the Supervision Area of Mwene Ditu showed weak performance in the availability of insecticide-treated nets (ITNs) in households.

Use of insecticide-treated nets by children age 0-23 months

Use of insecticide-treated nets (ITNs) is described in table CD.4a.

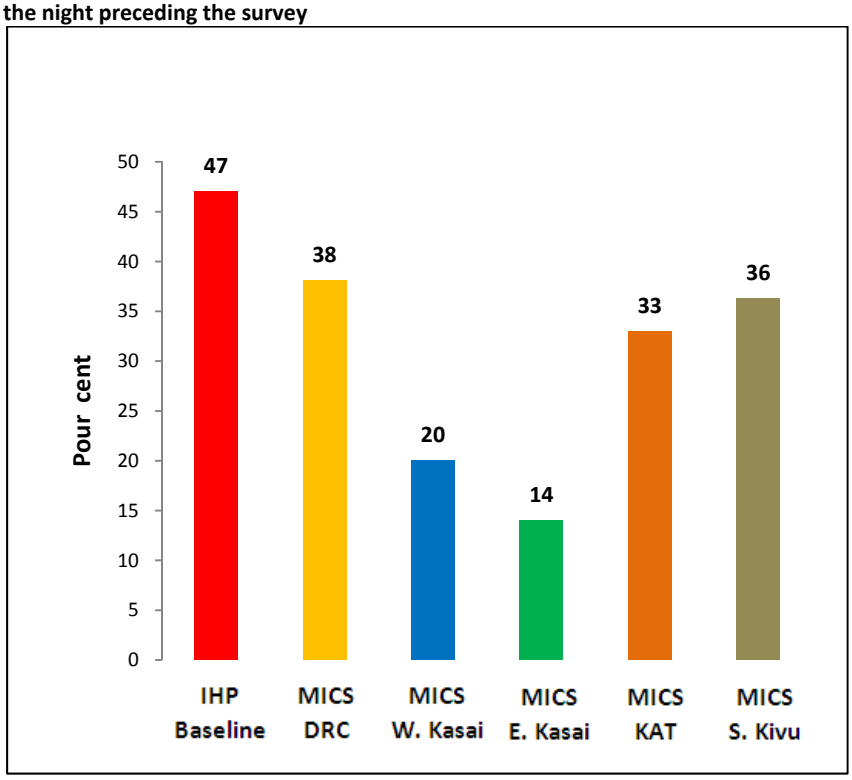
Table CD.4a: Percentage of children 0-23 months who slept under an insecticide-treated net (ITN) the night before the baseline survey

	Percentage having slept under an insecticide-treated net (ITN)	Number of children age 0-23 months
Area of Residence		
Urban	45.2	42
Rural	47.0	166
Literacy of Mother		
Cannot read or write	43.6	94
Can only read	35.7	28
Can read and right	54.2	83
Age of child		
0-5	45.2	62
6-11	48.1	54
12-17	45.1	51
18-23	48.8	41
Total	**46.6**	**208**

Overall, 47% of children age 0-23 months slept under insecticide-treated nets (ITNs) the night before the baseline survey. This proportion is highest among children in urban areas and among children whose mothers are literate.

This coverage percentage is higher than that estimated by the MICS survey, which found 38% national coverage.

Graph CD.4: Percentage of children 0-23 months who slept under insecticide-treated net the night preceding the survey



By Supervision Area, the analysis shows that Mwene Ditu demonstrated weak performance for this indicator.

Table CD.4b: Percentage of children 0-23 months who slept under an insecticide-treated net (ITN) the night before the baseline survey, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimate population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 - Luiza	12	13	25	9	0 .480	1 351 998	0.116	0.056	0.520	0.250	0.000134109
Supervision Area 2 - Mwene Ditu	7	18	25	9	0 .280	2 250 550	0.193	0.054	0.720	0.202	0.000300143
Supervision Area 3 - Kole	12	13	25	9	0 .480	1 770 312	0.152	0.073	0.520	0.250	0.000229935
Supervision Area 4 - Tshumbe	13	11	24	9	0 .542	634 342	0.054	0.029	0.458	0.248	3.05879E-05
Supervision Area 5 - Kamina	12	13	25	9	0 .480	716 185	0.061	0.029	0.520	0.250	3.76318E-05
Supervision Area 6 - Kolwezi	10	15	25	9	0 .400	766 697	0.066	0.026	0.600	0.240	4.14685E-05
Supervision Area 7 - Bukavu 1	11	8	19	7	0 .579	1 683 143	0.144	0.084	0.421	0.244	0.000267094
Supervision Area 8 - Bukavu 2	12	7	19	7	0 .632	1 683 143	0.144	0.091	0.368	0.233	0.000254953
Supervision Area 9 - Uvira	8	13	21	8	0 .381	809 040	0.069	0.026	0.619	0.236	5.40151E-05
Total	**97**	**111**	**208**			**11 665 409**		**0.469**			**0.001349936**

Average coverage in 2011 =	46.6%	Max. Coverage in 2011 =	**54.1%**
Average weighted coverage in 2011 =	**46.9%**	Min. Coverage in 2011 =	**39.7%**
95% Confidence Interval = +/-	7.2%		

Use of insecticide-treated nets by pregnant women

Table CD.5a shows the percentage of pregnant women who slept under an insecticide-treated net (ITN) the night before the baseline survey.

Table CD.5a: Percentage of pregnant women who slept under an insecticide-treated net (ITN) the night before the baseline survey

	Percentage of women who slept under an insecticide-treated net	Number of pregnant women surveyed
Area of Residence		
Urban	33 .3	42
Rural	32 .5	166
Literacy of Mother		
Cannot read or write	25 .5	94
Can only read	28 .6	28
Can read and write	42 .2	83
Age of mother		
15-19	19 .4	31
20-24	37 .7	53
25-29	37 .7	61
30-34	35 .1	37
35-39	23 .8	21
40-44	20 .0	5
Total	**32 .7**	**208**

Overall, only one-third (33%) of pregnant women slept under an insecticide-treated net the night before the baseline survey. This proportion does not differ by place of residence. However, the percentage is higher among literate women (42%) than among those who cannot read or write (26%). Women from age groups 20-24 and 25-29 are proportionally more likely to have slept under an insecticide-treated net (ITN) the night before the survey.

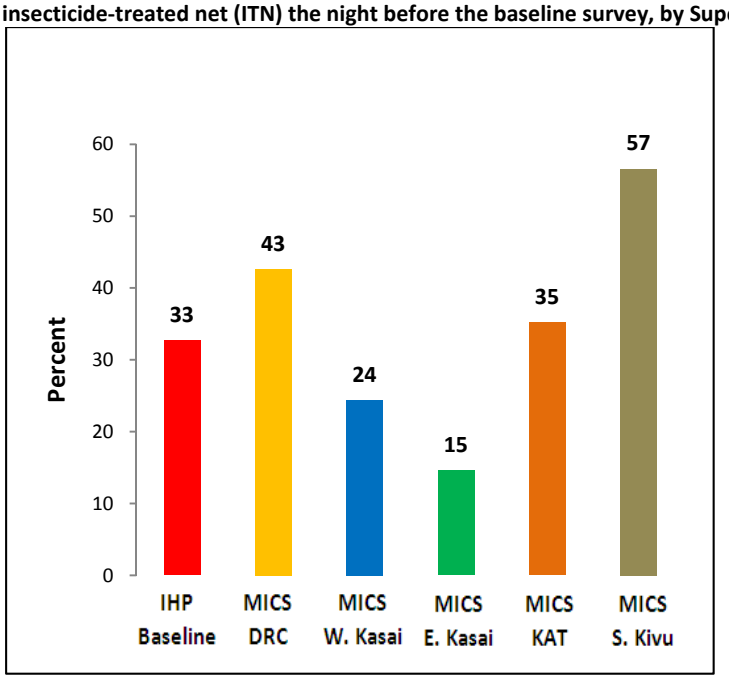
Table CD.5b describes the proportion of pregnant women who slept under an ITN by Supervision Area.

Table CD.5b: Percentage of pregnant women who slept under an insecticide-treated net (ITN) the night before the baseline survey, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimate population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
AS 1 - Luiza	10	15	25	5	0.400	1 351 998	0.116	0.046	0.600	0.240	0.000128951
AS 2 - Mwene Ditu	4	21	25	5	0.160	2 250 550	0.193	0.031	0.840	0.134	0.000200095
AS 3 - Kole	4	21	25	5	0.160	1 770 312	0.152	0.024	0.840	0.134	0.000123811
AS 4 - Tshumbe	6	18	24	4	0.250	634 342	0.054	0.014	0.750	0.188	2.31013E-05
AS 5 - Kamina	10	15	25	5	0.400	716 185	0.061	0.025	0.600	0.240	3.61844E-05
AS 6 - Kolwezi	8	17	25	5	0.320	766 697	0.066	0.021	0.680	0.218	3.75981E-05
AS 7 - Bukavu 1	12	7	19	4	0.632	1 683 143	0.144	0.091	0.368	0.233	0.000254953
AS 8 - Bukavu 2	11	8	19	4	0.579	1 683 143	0.144	0.084	0.421	0.244	0.000267094
AS 9 - Uvira	3	18	21	4	0.143	809 040	0.069	0.010	0.857	0.122	2.80463E-05
Total	**68**	**140**	**208**			**11 665 409**		**0 .345**			**0 .001099834**
Average coverage in 2011 =				32.7%	Higher Coverage in 2011 =			**41.0%**			
Average adjusted coverage in 2011 =				**34.5%**	Lower Coverage in 2011 =			**28.0%**			
95% Confidence Interval = +/-				6.5%							

The percentage of pregnant women who slept under an ITN the night preceding the survey (33%) is lower than national percentage (43%) according to MICS survey, though the IHP estimate closely matches that of MICS findings in the province of Katanga (25%).

Graph CD.5: Percentage of pregnant women who slept under an insecticide-treated net (ITN) the night before the baseline survey, by Supervision Area



4.4.2 Malaria Treatment

The DRC Ministry of Health recommends that in case of fever, the child receives an antimalarial within 24 hours of the onset of fever. Table CD.7a shows the percentage of children age 0-23 months who received an antimalarial on the same day or the day after the onset of fever.

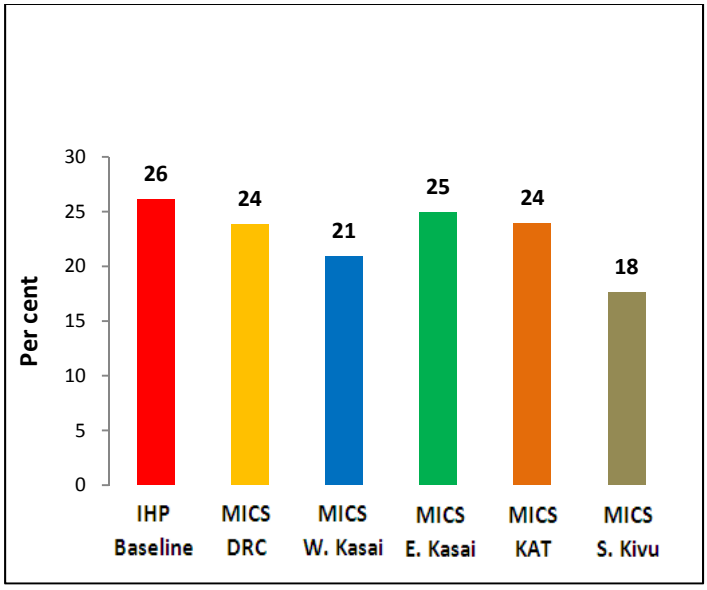
Table CD.6a: Percentage of children 0-23 months with fever in the 2 weeks before the baseline survey who received an antimalarial the same day or the day after the onset of fever

	Percentage of children who received an antimalarial the same day or the day after the onset of fever	Number of children age 0-23 months with fever
Area of Residence		
Urban	37.5	42
Rural	23.6	165
Literacy of Mother		
Cannot read or write	26.9	93
Can only read	21.4	28
Can read and write	26.5	83
Age of child (months)		
0-5	13.2	53
6-11	27.3	66
12-17	29.3	58
18-23	40.0	30
Total	26.1	**207**

Twenty-six percent of children with fever took an antimalarial on the same day or the day after the onset of fever. This proportion did not vary according to the literacy of the mother. However, the percentage of children who took an antimalarial is higher in urban (38%) than rural (24%) areas. The proportion increases with the age of the child, from 13% in children age 0-5 months to 40% among children age 18-23 months.

Graph CD.6 below presents survey finding of IHP and MICS concerning appropriate treatment of malaria. MICS estimated that 24% of Congolese children with fever were properly cared for according to national policy. The 26% estimate of the baseline survey is slightly above the national and provincial estimates of the MICS survey.

Graph CD.6: Percentage of children 0-23 months who had fever and were treated with antimalarial medication within 24 hours of the onset of fever



Analysis by Supervision Area shows that although all Supervision Areas are above their respective decision rules for this indicator, in general all are not performing well.

Table CD.6b: Percentage of children 0-23 months who had a fever two weeks preceding the survey who received an appropriate antimalarial treatment within 24 hours after the onset of fever, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimate population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 - Luiza	6	19	25	2	0.240	1 351 998	0.116	0.028	0.760	0.182	9.80025E-05
Supervision Area 2 - Mwene Ditu	2	23	25	2	0.080	2 250 550	0.193	0.015	0.920	0.074	0.000109576
Supervision Area 3 - Kole	6	19	25	2	0.240	1 770 312	0.152	0.036	0.760	0.182	0.000168029
Supervision Area 4 - Tshumbe	6	18	24	2	0.250	634 342	0.054	0.014	0.750	0.188	2.31013E-05
Supervision Area 5 - Kamina	2	22	24	2	0.083	716 185	0.061	0.005	0.917	0.076	1.19969E-05
Supervision Area 6 - Kolwezi	13	12	25	2	0.520	766 697	0.066	0.034	0.480	0.250	4.31273E-05
Supervision Area 7 - Bukavu 1	5	14	19	2	0.263	1 683 143	0.144	0.038	0.737	0.194	0.000212461
Supervision Area 8 - Bukavu 2	3	16	19	2	0.158	1 683 143	0.144	0.023	0.842	0.133	0.000145687
Supervision Area 9 - Uvira	11	10	21	2	0.524	809 040	0.069	0.036	0.476	0.249	5.71314E-05
Total	**54**	**153**	**207**			**11 665 409**		**0.230**			**0.000869113**

Average coverage in 2011 =	26.1%	Max. Coverage in 2011 =	**28.7%**
Average weighted coverage in 2011 =	**23.0%**	Min. Coverage in 2011 =	**17.2%**
95% Confidence Interval = +/-	5.8%		

4.5 Knowledge of Warning Signs of Childhood Illness

Table CD.7a indicates that less than half of mothers of children age 0-23 months (44%) know at least one symptom of disease that would prompt them to seek immediate care for their sick child to a health facility.

Table CD.7a: Percentage of mothers of children age 0-23 months know at least one symptom of diseases that would prompt them to take the child immediately to a health facility

	Percentage of mothers of children age 0-23 months that know at least one warning sign of childhood ilnesses	Number of mothers of children age 0-23 months
Area of residence		
Urban	40.5	42
Rural	45.2	166
Literacy of Mother		
Cannot read or Write	43.6	94
Can only read	50.0	28
Can read and write	43.4	83
Total	**44.2**	**208**

These women are more likely from rural areas (45%) than urban areas (51%). The knowledge of disease warning signs does not vary based on the literacy of the mother.

Table CD.7b presents this indicator by Supervision Area, and shows that the Supervision Area under Luiza shows weak performance on knowledge by mothers of warning signs of childhood illness.

Table CD.7b: Percentage of mothers of children 0-23 months who know at least one of the signs/symptoms that prompt one to bring a child immediately to a health facility

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimate population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 - Luiza	4	21	25	8	0.160	1 351 998	0.116	0.019	0.840	0.134	7.22123E-05
Supervision Area 2 - Mwene Ditu	12	13	25	8	0.480	2 250 550	0.193	0.093	0.520	0.250	0.000371605
Supervision Area 3 - Kole	15	10	25	8	0.600	1 770 312	0.152	0.091	0.400	0.240	0.000221091
Supervision Area 4 - Tshumbe	11	13	24	7	0.458	634 342	0.054	0.025	0.542	0.248	3.05879E-05
Supervision Area 5 - Kamina	16	9	25	8	0.640	716 185	0.061	0.039	0.360	0.230	3.47371E-05
Supervision Area 6 - Kolwezi	8	17	25	8	0.320	766 697	0.066	0.021	0.680	0.218	3.75981E-05
Supervision Area 7 - Bukavu 1	6	13	19	6	0.316	1 683 143	0.144	0.046	0.684	0.216	0.000236742
Supervision Area 8 - Bukavu 2	8	11	19	6	0.421	1 683 143	0.144	0.061	0.579	0.244	0.000267094
Supervision Area 9 - Uvira	12	9	21	6	0.571	809 040	0.069	0.040	0.429	0.245	5.60926E-05
Total	**92**	**116**	**208**			**11 665 409**		**0.433**			**0.00132776**

Average coverage in 2011 =	44.2%	Max. Coverage in 2011 =	**50.5%**
Weighted average coverage in 2011 =	**43.3%**	Min. coverage in 2011 =	**36.2%**
95% Confidence Interval = +/-	7.1%		

Table CD.8 presents information on knowledge of the warning signs of suspected pneumonia in children age 0-23 months.

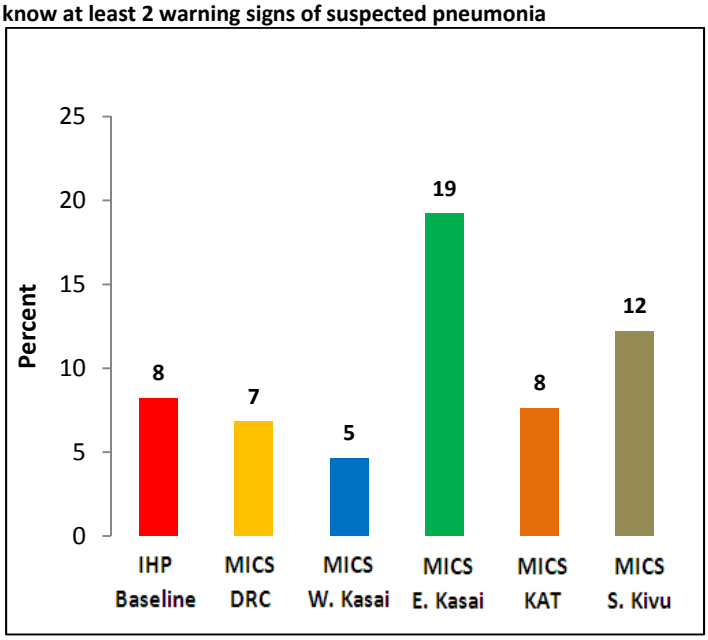
Table CD.8: Percentage of mothers of children 0-23 months who know both warning signs of suspected pneumonia

	Percentage of mothers of children age 0-23 months who know both warning signs of suspected pneumonia	Number of mothers of children age 0-23 months
Place of Residence		
Urban	9.5	42
Rural	7.8	166
Literacy of Mother		
Cannot read or write	7.4	94
Can read only	10.7	31
Can read and write	8.4	83
Total	**8.2**	**208**

Only 8% of mothers of children aged 0-23 months exhibited this knowledge. The differences among places of residence and according to the literacy of the mother were not significant.

As shown on graph CD.7 below, compared to the MICS data, IHP data is identical to the MICS findings for Katanga and closely matches that found at the national level of MICS (7%). However, IHP estimates are significantly below those of South Kivu (12%) and Eastern Kasaï (19%).

Graph CD.7: Percentage of mothers with children 0-23 months who know at least 2 warning signs of suspected pneumonia



CHAPTER 5: FAMILY PLANNING AND MATERNAL HEALTH

5.1 Contraception

5.1.1 Knowledge of contraceptive methods

Table PF.1a below presents the percentage of women (mothers of children 0-23 months old) from 15 to 49 years old who are familiar with at least one modern family planning method according to diverse socio-demographic characteristics.

Table PF.1a: Percentage of women (mothers of children 0-23 months old) from 15 to 49 years old who knows at least one modern family planning method

	Percentage of percentage of women 15 to 49 years old who know at least one modern family planning method	Number of women 15-49 years old surveyed
Place of Residence		
Urban	92.9	42
Rural	80.7	166
Contact with a health professional		
Yes	82.5	120
No	84.1	88
Age of women		
<25 years	88.5	78
>25 years	80.0	130
Degree of literacy		
Cannot read or write	77.7	94
Can read only	71.4	31
Can read and write	95.2	83
Total	83.2	208

This table shows that 83% of women surveyed are familiar with at least one modern method of family planning. Women who have this knowledge are more likely to be living in urban (93%) than rural (81%) areas. More women younger than 25 years old (89%) know at least one modern method of family planning compared to women over 25 years old (88%). More women who are literate (95%) know at least one modern method of family planning compared to those who cannot read or write (78%). Contact with a health professional was not a significant factor in knowledge of modern methods of family planning.

Surveyed women living in the areas of supervision of Kole, Uvira, and Tshumbe have lower knowledge of modern family planning (Table PF.1b) methods than the rest of the supervision areas..

Table PF.1b: Percentage of women 15-49 years old who know at least one modern method of family planning, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini Coverage (p)	Estimated population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
AS 1 – Luiza	24	1	25	20	0.960	1 351 998	0.116	0.111	0.040	0.038	2.06321E-05
AS 2 - Mwene Ditu	24	1	25	20	0.960	2 250 550	0.193	0.185	0.040	0.038	5.71701E-05
AS 3 – Kole	16	9	25	20	0.640	1 770 312	0.152	0.097	0.360	0.230	0.000212247
AS 4 – Tshumbe	17	7	24	19	0.708	634 342	0.054	0.039	0.292	0.207	2.54542E-05
AS 5 – Kamina	14	11	25	20	0.560	716 185	0.061	0.034	0.440	0.246	3.71493E-05
AS 6 – Kolwezi	25	0	25	20	1.000	766 697	0.066	0.066	0.000	0.000	0
AS 7 - Bukavu 1	19	0	19	15	1.000	1 683 143	0.144	0.144	0.000	0.000	0
AS 8 - Bukavu 2	18	1	19	15	0.947	1 683 143	0.144	0.137	0.053	0.050	5.46328E-05
AS 9 – Uvira	16	5	21	17	0.762	809 040	0.069	0.053	0.238	0.181	4.15501E-05
Total	**173**	**35**	**208**			**11 665 409**		**0.866**			**0.000448836**

Average coverage in 2011 =	83.2%	Maximum coverage in 2011 =	**90.8%**
Weighted average coverage in 2011 =	**86.6%**	Minimum coverage in 2011 =	**82.5%**
95% confidence interval = +/-	4.2%		

5.1.2 Use of contraception

Use of modern family planning methods is quite low in the surveyed areas. Only 8% of women 15-49 years old surveyed use a modern method of family planning (table PF.2).

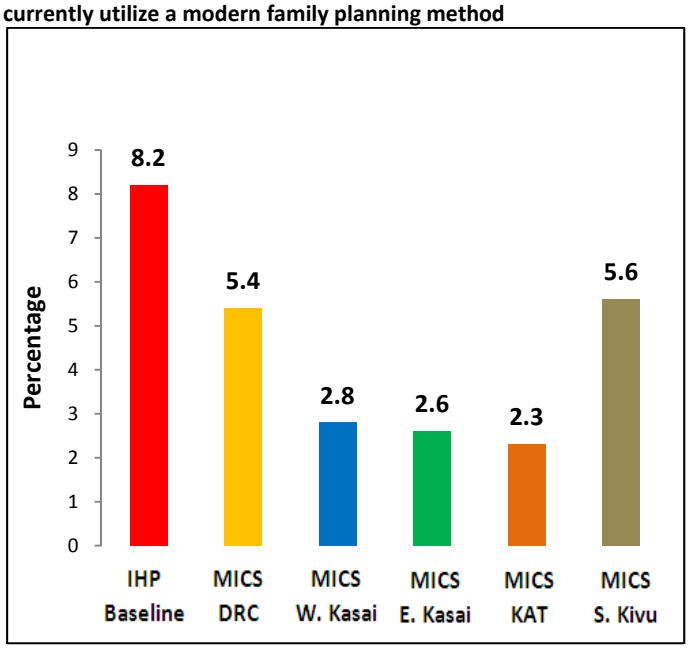
Table PF.2: Percentage of women 15-49 years old who practice a modern family planning method (or whose partners use contraceptives)

	Percentage of women who use modern family planning method	Number of women 15-49 years old surveyed
Place of Residence		
Urban	11.9	42
Rural	7.2	166
Contact with a health professional		
Yes	10.8	120
No	4.5	88
Age of women		
<25 years	10.3	78
>25 years	6.9	130
Degree of literacy		
Cannot read or write	9.6	94
Can read only	0	31
Can read and write	9.6	83
Total	**8.2**	**208**

Women who live in urban areas, who have more frequent contact with health professionals, and who are younger than 25 are more likely to use modern methods of family planning. There is no significant difference between woman who are literate or not.

Graph PF.1 below compares the results from the baseline survey with results from MICS and shows that utilization rates for modern contraception as estimated from the baseline survey are above the rates estimated in the MICS, both at national and provincial levels for the four provinces covered by the project.

Graph 1 PF.1: Percentage of mothers with infants between 0-23 months of age that currently utilize a modern family planning method



5.1.3 Family planning discussion in the household

Table PF.3 presents the percentage of women who have discussed child spacing with their spouses or partners. The survey found only 13% of surveyed women engaged in family planning discussions.

Table PF.3: Percentage of women 15-49 years old who have discussed child spacing with their spouses/partners

	Percentage of women 15-49 years old who have discussed child spacing with their spouses/partners	Number of women 15-49 years old surveyed
Place of Residence		
Urban	19.0	42
Rural	11.4	166
Contact with a health professional		
Yes	13.3	120
No	12.5	88
Age of women		
<25 years	16.7	78
>25 years	10.8	130
Degree of literacy		
Cannot read or write	10.6	94
Can read only	7.1	31
Can read and write	18.1	83
Total	13.0	208

Women who live in urban areas, who are younger than 25, and who can read and write are more likely to discuss child spacing with their spouses or partners.

5.2 Prenatal Care

5.2.1 Prenatal care coverage

The coverage for prenatal care with four or more visits during the last pregnancy of surveyed mothers with children 0-23 months is at 43% (see table SM.1a below).

Table SM.1a: Percentage of mothers of children 0-23 months old who had at least four prenatal consultations during pregnancy with youngest child

	Percentage of mothers who attended at least four prenatal consultations	Number of mothers with children 0-23 months
Place of Residence		
Urban	42.9	42
Rural	42.8	166
Contact with a health professional		
Yes	49.2	120
No	34.1	88
Age of women		
<25 years	47.4	78
>25 years	40.0	130
Degree of literacy		
Cannot read or write	37.2	94
Can read only	39.3	31
Can read and write	50.6	83
Total	**42.8**	**208**

The level of prenatal care coverage is the same whether the place of residence is urban or rural. The coverage is higher among women who have had contact with a health professional (49%) compared to women who did not see a health professional (34%), in women under 25 years old (47% versus 40% among those over 25 years old), and in women who are literate (51% versus 37% among illiterate women).

The IHP baseline estimate for the percentage of women who had four or more prenatal visits did not differ significantly from the MICS survey (Graph SM.1).

Graph SM.1: Percentage of mothers with children 0-23 months who had at least 4 prenatal consultations while pregnant with youngest child

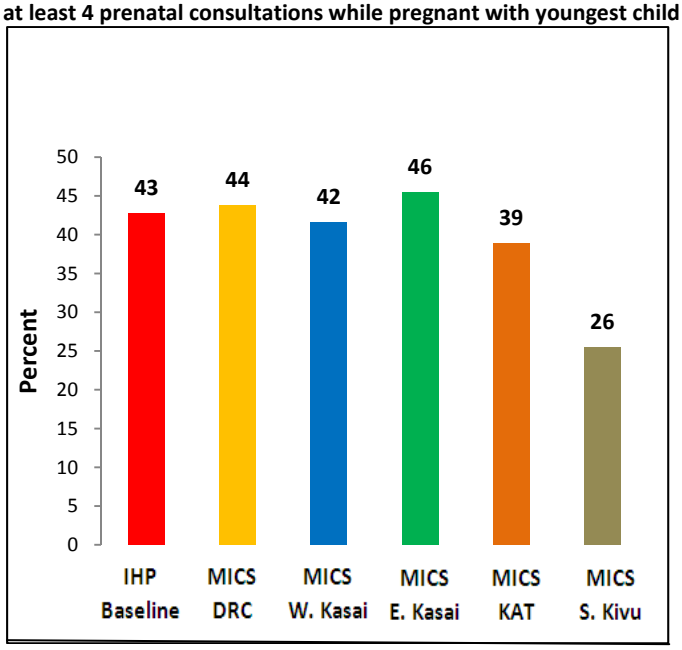


Table SM.1b provides data on this indicator by Supervision Area . It shows that the Supervision Areas of Kamina and Bukavu 1 are under-performing with regard to prenatal care coverage.

Table SM.1b: Percentage of mothers of children 0-23 months old who had at least four prenatal consultations during pregnancy with youngest child, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimate population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 – Luiza	24	1	25	18	0.960	1 351 998	0.116	0.111	0.040	0.038	2.06321E-05
Supervision Area 2 - Mwene Ditu	19	6	25	18	0.760	2 250 550	0.193	0.147	0.240	0.182	0.000271558
Supervision Area 3 – Kole	20	5	25	18	0.800	1 770 312	0.152	0.121	0.200	0.160	0.000147394
Supervision Area 4 – Tshumbe	19	5	24	18	0.792	634 342	0.054	0.043	0.208	0.165	2.03206E-05
Supervision Area 5 – Kamina	14	11	25	18	0.560	716 185	0.061	0.034	0.440	0.246	3.71493E-05
Supervision Area 6 – Kolwezi	23	2	25	18	0.920	766 697	0.066	0.060	0.080	0.074	1.2717E-05
Supervision Area 7 - Bukavu 1	13	6	19	14	0.684	1 683 143	0.144	0.099	0.316	0.216	0.000236742
Supervision Area 8 - Bukavu 2	17	2	19	14	0.895	1 683 143	0.144	0.129	0.105	0.094	0.000103195
Supervision Area 9 – Uvira	18	3	21	16	0.857	809 040	0.069	0.059	0.143	0.122	2.80463E-05
Total	**167**	**41**	**208**			**11 665 409**		**0.804**			**0.000877755**

Average coverage in 2011 =	80.3%	Maximum coverage in 2011 =	**86.3%**
Adjusted average coverage in 2011 =	**80.4%**	Minimum coverage in 2011 =	**74.6%**
95% confidence interval at 95% = +/-	5.8%		

5.2.2 Protection against neonatal tetanus

Mother and baby are protected against neonatal tetanus if, among other things, the mother receives two or more doses of the tetanus toxoid vaccine (TT) while pregnant with that child. The baseline survey found that in IHP-targeted areas, 47% of mothers are protected against TT.

Table SM.2a: Percentage of mothers with children 0-23 months who received at least 2 TT injections while pregnant with youngest child

	Percentage of mothers with children 0-23 months who received 2 TT injections while pregnant with youngest child	Number of mothers with children 0-23 months
Area of residence		
Urban	33.3	42
Rural	50.0	166
Contact with a health professional		
Yes	47.5	120
No	45.5	88
Age		
<25 years	43.6	78
>25 years	48.5	130
Degree of Literacy		
Cannot read or write	48.9	94
Can read only	46.4	31
Can read and write	43.4	83
Total	**46.6**	**208**

The proportion of women protected against neonatal tetanus is higher in rural (50%) than in urban (33%) areas. It is slightly higher depending on whether the mother visited a health professional (48%) or not (46%), and depending on the age of the mother (49% among mothers over 25 years old versus 44% in mothers under 25 years old). Mothers who cannot read and write (49%) were more likely to be protected than those who are literate (43%).

As shown on graph SM.2, the baseline survey and MICS estimates for neonatal tetanus protection were very close (47% and 48%) respectively.

Graph SM.2: Percentage of mothers of children 0-23 months who received at least two doses of tetanus vaccine while pregnant with youngest child

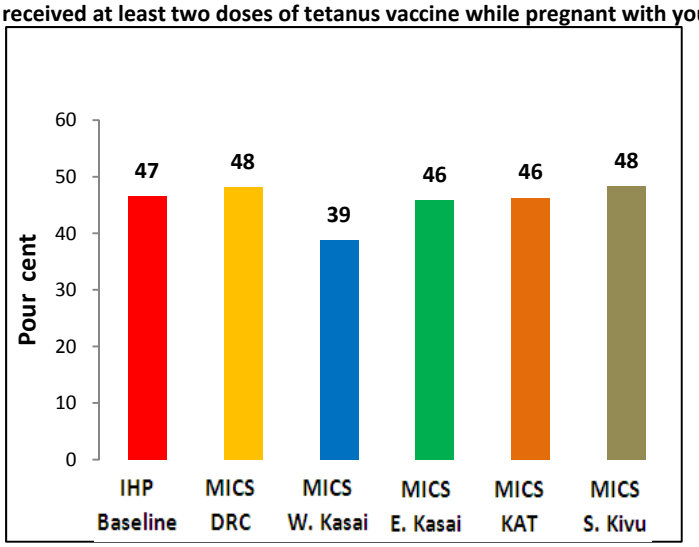


Table SM.2b shows the variation of performance by supervision area for this TT indicators.

Table SM.2b: Percentage of mothers with children 0-23 months old who received at least 2 TT injections while pregnant with youngest child, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimate population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 - Luiza	14	11	25	9	0.560	1 351 998	0.116	0.065	0.440	0.246	0.000132389
Supervision Area 2 - Mwene Ditu	13	12	25	9	0.520	2 250 550	0.193	0.100	0.480	0.250	0.000371605
Supervision Area 3 - Kole	17	8	25	9	0.680	1 770 312	0.152	0.103	0.320	0.218	0.000200456
Supervision Area 4 - Tshumbe	10	14	24	9	0.417	634 342	0.054	0.023	0.583	0.243	2.99462E-05
Supervision Area 5 - Kamina	13	12	25	9	0.520	716 185	0.061	0.032	0.480	0.250	3.76318E-05
Supervision Area 6 - Kolwezi	9	16	25	9	0.360	766 697	0.066	0.024	0.640	0.230	3.98098E-05
Supervision Area 7 - Bukavu 1	6	13	19	7	0.316	1 683 143	0.144	0.046	0.684	0.216	0.000236742
Supervision Area 8 - Bukavu 2	7	12	19	7	0.368	1 683 143	0.144	0.053	0.632	0.233	0.000254953
Supervision Area 9 - Uvira	8	13	21	8	0.381	809 040	0.069	0.026	0.619	0.236	5.40151E-05
Total	**97**	**111**	**208**			**11 665 409**		**0.472**			**0.001357549**

Average coverage in 2011 =	46.6%	Maximum coverage in 2011 =	**54.4%**
Weighted average coverage in 2011 =	**47.2%**	Minimum coverage in 2011 =	**40.0%**
95% confidence interval = +/-	7.2%		

5.2.3 Vitamin A supplements for mothers

Table SM.3a shows information on supplementation of mothers with vitamin A in the IHP-targeted zones. The data in this table indicate that less than one in five mothers (18%) received a dose of vitamin A within two months following the birth of last child.

TableSM.3a: Percentage of mothers with children 0-23 months who received vitamin A supplement 2 months after giving birth to youngest child

	Received a dose of vitamin A within 2 months after childbirth	Number of mothers with children 0-23 months
Place of Residence		
Urban	26.2	42
Rural	15.7	166
Contact with a health professional		
Yes	20.8	120
No	13.6	88
Age		
<25 years	17.9	78
>25 years	17.7	130
Degree of literacy		
Cannot read or write	11.7	94
Can read only	21.4	31
Can read and write	24.1	83
Total	**17.8**	**208**

Women who live in urban areas (26%) are more likely to receive vitamin A supplement than do women from rural areas (16%). Mothers who have contact with health professionals (21%) receive vitamin A more than women who have not been in contact (14%). Mothers who are literate (24%) also receive vitamin A more often than mothers who cannot read and write (12%).

As shown in table SM.3b below, the Supervision Area of Luiza is the area with the lowest percentage of mothers who received one dose of vitamin A two months after the birth of the youngest child.

Table SM.3b: Percentage of mothers with children 0-23 months who received one dose of vitamin A in the 2 months following the birth of youngest child, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimate population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 - Luiza	1	24	25	2	0.040	1 351 998	0.116	0.005	0.960	0.038	2.06321E-05
Supervision Area 2 - Mwene Ditu	5	20	25	2	0.200	2 250 550	0.193	0.039	0.800	0.160	0.000238209
Supervision Area 3 - Kole	3	22	25	2	0.120	1 770 312	0.152	0.018	0.880	0.106	9.728E-05
Supervision Area 4 - Tshumbe	3	21	24	1	0.125	634 342	0.054	0.007	0.875	0.109	1.34758E-05
Supervision Area 5 - Kamina	7	18	25	2	0.280	716 185	0.061	0.017	0.720	0.202	3.03949E-05
Supervision Area 6 - Kolwezi	7	18	25	2	0.280	766 697	0.066	0.018	0.720	0.202	3.48336E-05
Supervision Area 7 - Bukavu 1	4	15	19	1	0.211	1 683 143	0.144	0.030	0.789	0.166	0.000182109
Supervision Area 8 - Bukavu 2	1	18	19	1	0.053	1 683 143	0.144	0.008	0.947	0.050	5.46328E-05
Supervision Area 9 - Uvira	6	15	21	1	0.286	809 040	0.069	0.020	0.714	0.204	4.67439E-05
Total	**37**	**171**	**208**			**11 665 409**		**0.162**			**0.000718311**
Average coverage in 2011 =				17.8%	Max. coverage in 2011 =			**21.4%**			
Weighted average coverage in 2011 =				**16.2%**	Min. coverage in 2001 =			**10.9%**			
95% confidence interval = +/-				5.3%							

5.3 Births

5.3.1 Skilled birth attendants

Seventy-eight percent of mothers interviewed were attended by skilled birth attendants during the birth of their youngest child (Table SM.4a).

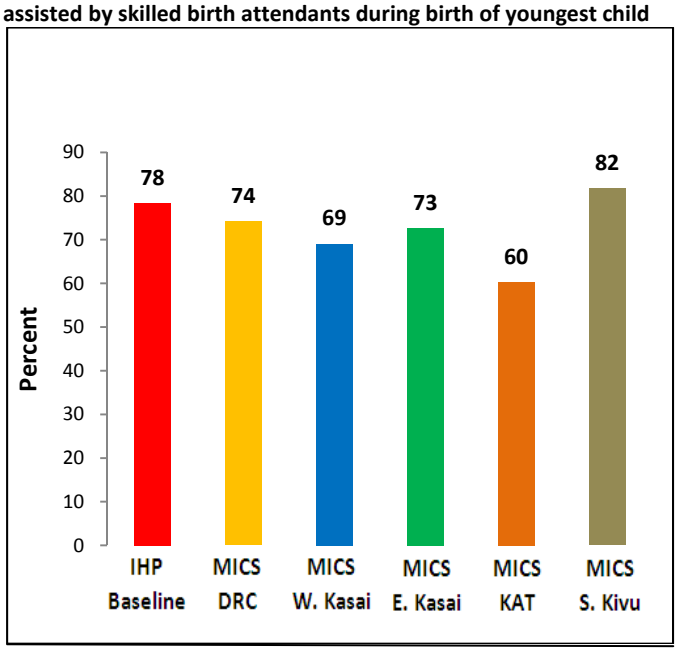
Table SM.4a: Percentage of mothers with children 0-23 months who were assisted by skilled personnel during birth of youngest child

	Birth assisted by skilled personnel	Number of mothers with children 0-23 months
Place of Residence		
Urban	97.6	42
Rural	73.5	166
Contact with a health professional		
Yes	77.5	120
No	79.5	88
Age of women		
<25 years	83.3	78
>25 years	75.4	130
Degree of literacy		
Cannot read or write	66.0	94
Can read only	85.7	31
Can read and write	90.4	83
Total	**78.4**	**208**

Mothers living in urban areas (98%) are more likely to be assisted by skilled personnel during childbirth than those who live in rural areas (74%). Younger mothers (83%) tend to be assisted more frequently by skilled personnel than mothers over 25 years old (75% over 25 years old). Those who can read and write (90%) are also more likely to be assisted by skilled attendants than mothers who are not literate (66%).

IHP's baseline survey estimate of this indicator (78%) is slightly higher than the MICS estimate for the whole country (74%).

Graph SM.3: Percentage of mothers with children 0-23 months assisted by skilled birth attendants during birth of youngest child



As shown on the LQAS analysis below in table SM.4b, the Supervision Areas of Kole and Kamina show lower performance in relation to births attended by skilled health staff than the rest of the areas.

Table SM.4b: Percentage of mothers with children 0-23 months who were assisted by skilled birth attendants during birth of youngest child

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimate population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 – Luiza	21	4	25	18	0.840	1 351 998	0.116	0.097	0.160	0.134	7.22123E-05
Supervision Area 2 - Mwene Ditu	22	3	25	18	0.880	2 250 550	0.193	0.170	0.120	0.106	0.000157218
Supervision Area 3 - Kole	14	11	25	18	0.560	1 770 312	0.152	0.085	0.440	0.246	0.000226987
Supervision Area 4 - Tshumbe	18	6	24	18	0.750	634 342	0.054	0.041	0.250	0.188	2.31013E-05
Supervision Area 5 - Kamina	12	13	25	18	0.480	716 185	0.061	0.029	0.520	0.250	3.76318E-05
Supervision Area 6 - Kolwezi	21	4	25	18	0.840	766 697	0.066	0.055	0.160	0.134	2.32224E-05
Supervision Area 7 - Bukavu 1	18	1	19	14	0.947	1 683 143	0.144	0.137	0.053	0.050	5.46328E-05
Supervision Area 8 - Bukavu 2	17	2	19	14	0.895	1 683 143	0.144	0.129	0.105	0.094	0.000103195
Supervision Area 9 - Uvira	20	1	21	16	0.952	809 040	0.069	0.066	0.048	0.045	1.03875E-05
Total	**163**	**45**	**208**			**11 665 409**		**0.809**			**0.000708588**

Average coverage in 2011 =	78.4%	Max. coverage in 2011 =	**86.2%**
Weighted average coverage in 2011 =	**80.9%**	Min. coverage in 2011 =	**75.7%**
95% confidence interval = +/-	5.2%		

5.3.2 Place of birth

Deliveries in health facilities are important indicators for IHP in terms of measuring access to health services. Overall, nearly four out of five women (79%) gave birth to their youngest child in a health facility.

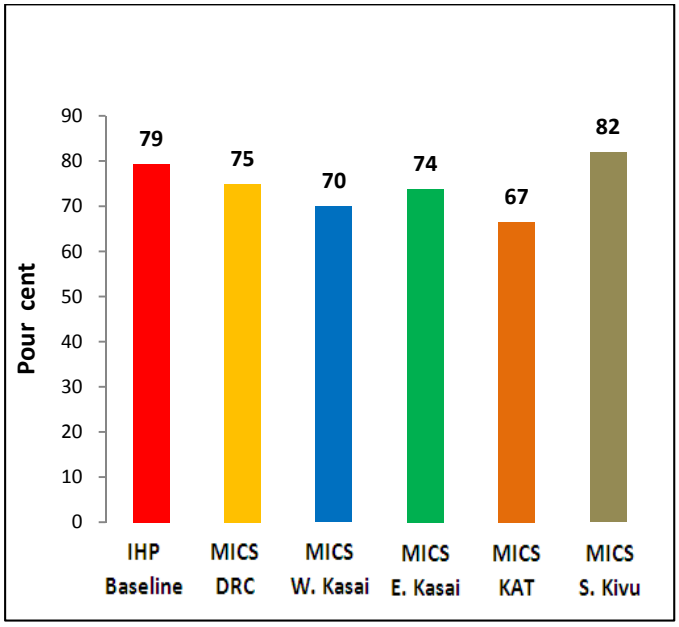
Table SM.5a: Percentage of mothers with children 0-23 months who delivered their youngest child in a health facility

	Birth in a health facility	Number of mothers with children 0-23 months old
Place of Residence		
Urban	100.0	42
Rural	74.1	166
Contact with a health professional		
Yes	81.7	120
No	76.1	88
Age		
<25 years	80.8	78
>25 years	78.5	130
Degree of literacy		
Cannot read or write	69.1	94
Can read only	85.7	31
Can read and write	89.2	83
Total	**79.3**	**208**

In urban areas, all women delivered their last child in a health facility. Mothers who have had contact with a health professional, mothers under 25, and those who are literate are more likely to have been attended by trained personnel during their last delivery.

Graph SM.4 below shows that MICS estimates on health facility deliveries are slightly below that of the IHP baseline survey findings.

Graph SM.4: Percentage of mothers of children 0-23 months who gave birth in a health facility



Births that occurred at health facilities were lowest in Kole and Kamina Supervision Areas (Table SM.5b).

Table SM.5b: Percentage of mothers with children 0-23 months who delivered their youngest child in a health facility, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimate population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 - Luiza	24	1	25	18	0.960	1 351 998	0.116	0.111	0.040	0.038	2.06321E-05
Supervision Area 2 - Mwene Ditu	23	2	25	18	0.920	2 250 550	0.193	0.177	0.080	0.074	0.000109576
Supervision Area 3 - Kole	12	13	25	18	0.480	1 770 312	0.152	0.073	0.520	0.250	0.000229935
Supervision Area 4 - Tshumbe	19	5	24	18	0.792	634 342	0.054	0.043	0.208	0.165	2.03206E-05
Supervision Area 5 - Kamina	13	12	25	18	0.520	716 185	0.061	0.032	0.480	0.250	3.76318E-05
Supervision Area 6 - Kolwezi	21	4	25	18	0.840	766 697	0.066	0.055	0.160	0.134	2.32224E-05
Supervision Area 7 - Bukavu 1	18	1	19	14	0.947	1 683 143	0.144	0.137	0.053	0.050	5.46328E-05
Supervision Area 8 - Bukavu 2	16	3	19	14	0.842	1 683 143	0.144	0.122	0.158	0.133	0.000145687
Supervision Area 9 - Uvira	19	2	21	16	0.905	809 040	0.069	0.063	0.095	0.086	1.97363E-05
Total	**165**	**43**	**208**			**11 665 409**		**0.813**			**0.000661374**

Average coverage in 2011 =	79.3%	Maximum coverage in 2011 =	**86.3%**
Weighted average coverage in 2011 =	**81.3%**	Minimum coverage in 2011 =	**76.2%**
95% confidence interval = +/-	5.0%		

5.4 Postnatal care

Table SM.6 below presents information on the practice of post-natal care in the IHP target area. As shown, only 18% of mothers with children age 0-23 months were examined by medical personnel three days following birth.

163BTable SM.6: Percentage of mothers with children age 0-23 months who were examined by a medical personnel three days following birth of youngest child

	Percentage of mothers with children age 0-23 months who were examined by a medical personnel three days following birth of youngest child	Number of mothers with children 0-23 months
Place of Residence		
Urban	11.9	42
Rural	19.3	166
Contact with a health professional		
Yes	22.5	120
No	11.4	88
Age		
<25 years	10.3	78
>25 years	22.3	130
Degree of literacy		
Cannot read or write	13.8	94
Can read only	25.0	31
Can read and write	20.5	83
Total	**17.8**	**208**

Among the mothers examined by health personnel three days following delivery, 19% live in rural areas and 12% live in urban areas. Mothers who came into contact with a health professional (23%) usually were examined following birth more than mothers who did not have contact with health professionals (11%). Mothers above 25 years tend to be consulted more (22%) than younger mothers (10%), and women who can read and write (21%) are more likely to follow up with a consultation after giving birth than mothers who cannot read or write (14%).

5.5 Knowledge of Fistula

When asked about general knowledge of fistula, about 38% of mothers with children 0-23 months are familiar with this condition, as presented in table SM.7a below.

Table SM.7a: Percentage of mothers of children 0-23 months with general knowledge about fistula

	Knowledge of fistula	Number of mothers with children 0-23 months
Place of Residence		
Urban	28.6	42
Rural	39.8	166
Contact with a health professional		
Yes	40.8	120
No	33.0	88
Age		
<25 years	34.6	78
>25 years	39.2	130
Degree of literacy		
Cannot read or write	38.3	94
Can read only	35.7	31
Can read and write	36.1	83
Total	**37.5**	**208**

Mothers who have general knowledge about the fistula condition are more likely to live in rural areas (40%) than in urban areas (29%), and are more likely to have been in contact with a health professional (41%) than not (33%). Women over 25 years (39%) are more likely to have heard of fistula than women under 25 (35%). The literacy of women does not seem to influence this knowledge significantly.

SM.7b table below shows that the Supervision Areas of Mwene Ditu, Kolwezi, and Kamina show weak performance regarding general knowledge about fistula among surveyed mothers of children aged 0-23 months.

Table SM.7b: Percentage of mothers of children 0-23 months who have heard of fistula, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimate population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 – Luiza	13	12	25	6	0.520	1 351 998	0.116	0.060	0.480	0.250	0.000134109
Supervision Area 2 - Mwene Ditu	4	21	25	6	0.160	2 250 550	0.193	0.031	0.840	0.134	0.000200095
Supervision Area 3 - Kole	18	7	25	6	0.720	1 770 312	0.152	0.109	0.280	0.202	0.000185716
Supervision Area 4 - Tshumbe	18	6	24	6	0.750	634 342	0.054	0.041	0.250	0.188	2.31013E-05
Supervision Area 5 - Kamina	5	20	25	6	0.200	716 185	0.061	0.012	0.800	0.160	2.4123E-05
Supervision Area 6 - Kolwezi	4	21	25	6	0.160	766 697	0.066	0.011	0.840	0.134	2.32224E-05
Supervision Area 7 - Bukavu 1	6	13	19	5	0.316	1 683 143	0.144	0.046	0.684	0.216	0.000236742
Supervision Area 8 - Bukavu 2	6	13	19	5	0.316	1 683 143	0.144	0.046	0.684	0.216	0.000236742
Supervision Area 9 - Uvira	4	17	21	5	0.190	809 040	0.069	0.013	0.810	0.154	3.53176E-05
Total	**78**	**130**	**208**			**11 665 409**		**0,368**			**0.001099169**

Average coverage in 2011 =	37.5%	Maximum coverage in 2011 =	**43.3%**
Weighted average coverage in 2011 =	**36.8%**	Minimum coverage in 2011 =	**30.3%**
95% confidence interval = +/-	6.5%		

CHAPTER 6: HIV/AIDS AND RISKY SEXUAL BEHAVIORS

6.1 Thorough Knowledge of HIV Transmission

A woman is considered to have a thorough knowledge of HIV transmission when she can correctly identify two ways to prevent HIV infection, when she knows that it is possible for a healthy-looking person to have HIV, and when she rejects the two most common misconceptions in the DRC on the transmission of HIV--transmission by mosquito bites and transmission by supernatural means.

Table VS.1a below shows the percentage of women who have heard of AIDS, who know two ways of preventing HIV, who reject the two most common misconceptions about HIV transmission, who know that a healthy looking person can have the AIDS virus, and who have a thorough knowledge of the transmission of HIV.

Table VS.1a: Percentage of women 15-49 years old who have a thorough knowledge of HIV/AIDS transmission

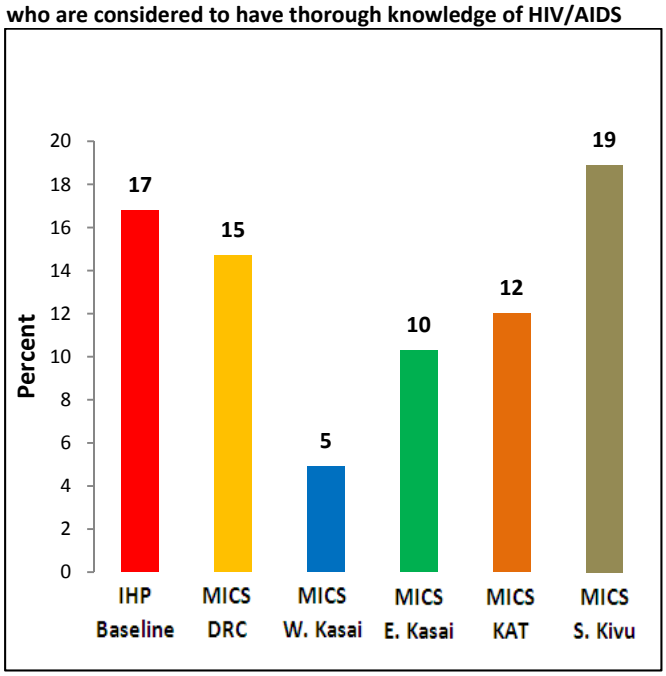
	Percentage of women who have heard about HIV/AIDS	Percentage of women who know two methods of HIV/AIDS prevention	Percentage of women who reject the two most common misconceptions about HIV transmission and know that a healthy-looking person can have the AIDS virus	Percentage of women who have thorough knowledge of HIV/AIDS	Number of women 15-49 years old
Place of Residence					
Urban	100.0	64.3	40.5	28.6	42
Rural	94.6	50.0	22.3	13.9	166
Contact with a health professional					
Yes	95.0	50.8	29.2	19.2	120
No	96.6	55.7	21.6	13.6	88
Age of women					
<25 years	96.2	53.8	33.3	17.9	78
>25 years	95.4	52.3	21.5	16.2	130
Degree of literacy					
Cannot read or write	95.7	47.9	14.9	8.5	94
Can read only	89.3	46.4	42.9	25.0	31
Can read and write	97.6	61.4	33.7	24.1	83
Total	**95.7**	**52.9**	**26.0**	**16.8**	**208**

Almost all women surveyed (96%) have heard of AIDS, but a little more than half can identify only two ways to prevent HIV. Only one in four women (26%) rejects the two most common misconceptions about HIV transmission and knows that a healthy-looking person can have the AIDS virus. In all, only one woman in six (17%) was considered to have a thorough knowledge of the transmission of the virus that causes AIDS.

Women with thorough knowledge of HIV transmission are more likely to live in urban (29%) than rural (14%) areas, more likely to have had contact with a health professional (19%) than not (14%), and more likely to be literate (24%) than illiterate (9%).

The percentage of women who have thorough knowledge of HIV/AIDS estimated by the IHP baseline survey (17%) is slightly higher than the national estimate by MICS (15%). IHP estimates are significantly higher than MICS findings for Eastern Kasaï (5%), Western Kasaï (10%), and Katanga (12%). However, the MICS estimate for South Kivu (19%) is slightly higher than IHP estimates.

Graph VS.1: Percentage of mothers of children 0-23 months who are considered to have thorough knowledge of HIV/AIDS



The table VS.1b below shows that the supervision areas of Kole and Kamina are underperforming with regard to knowledge of transmission of HIV/AIDS.

Table VS.1b: Percentage of women 15-49 years old who have a thorough knowledge of HIV/AIDS, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimated population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 – Luiza	2	23	25	2	0.080	1 351 998	0.116	0.009	0.920	0.074	3.95449E-05
Supervision Area 2 - Mwene Ditu	5	20	25	2	0.200	2 250 550	0.193	0.039	0.800	0.160	0.000238209
Supervision Area 3 - Kole	1	24	25	2	0.040	1 770 312	0.152	0.006	0.960	0.038	3.53745E-05
Supervision Area 4 - Tshumbe	1	23	24	1	0.042	634 342	0.054	0.002	0.958	0.040	4.91973E-06
Supervision Area 5 - Kamina	1	24	25	2	0.040	716 185	0.061	0.002	0.960	0.038	5.78951E-06
Supervision Area 6 - Kolwezi	8	17	25	2	0.320	766 697	0.066	0.021	0.680	0.218	3.75981E-05
Supervision Area 7 - Bukavu 1	3	16	19	1	0.158	1 683 143	0.144	0.023	0.842	0.133	0.000145687
Supervision Area 8 - Bukavu 2	7	12	19	1	0.368	1 683 143	0.144	0.053	0.632	0.233	0.000254953
Supervision Area 9 - Uvira	7	14	21	1	0.333	809 040	0.069	0.023	0.667	0.222	5.08989E-05
Total	**35**	**173**	**208**			**11 665 409**		**0.179**			**0.000812975**

Average coverage in 2011 =	16.8%	Maximum coverage in 2011 =	**23.5%**
Weighted average coverage in 2011 =	**17.9%**	Minimum coverage in 2011 =	**12.3%**
94% confidence interval = +/-	5.6%		

6.2 Knowledge of Mother-to-Child HIV/AIDS Transmission

The level of knowledge concerning HIV transmission from mother to child is indicated on table VS.2a below. About two women in five (43%) know three ways of mother-to-child transmission.

Table VS.2a: Percentage of women 15-49 years old who correctly cited means of HIV transmission from mother to child

Description	Identified all three modes of mother-child HIV transmission	Number of women 15-49 years old
Place of Residence		
Urban	40.5	42
Rural	44.0	166
Contact with a health professional		
Yes	45.8	120
No	39.8	88
Age of women		
<25 years	44.9	78
>25 years	42.3	130
Degree of literacy		
Cannot read or write	44.7	94
Can read only	46.4	31
Can read and write	39.8	83
Total	**43.3**	**208**

Women who can cite three means of transmission more often live in urban areas (44%) than rural (41%). Also, women who have had contact with a health professional (46%) are more likely to have this knowledge than those who have not been in contact with health staff (40%). Interestingly, more women who cannot read or write (45%) cited more means of HIV mother-to-child transmission than women who are literate (40%).

Graph VS.2 below shows that the estimated IHP percentage of women who cited three means of mother-to-child HIV transmission (43%) is significantly higher than MICS estimates both at the national and provincial level.

Graph VS.2: Percentage of mothers of children 0-23 months who cited three means of mother-to-child HIV transmission

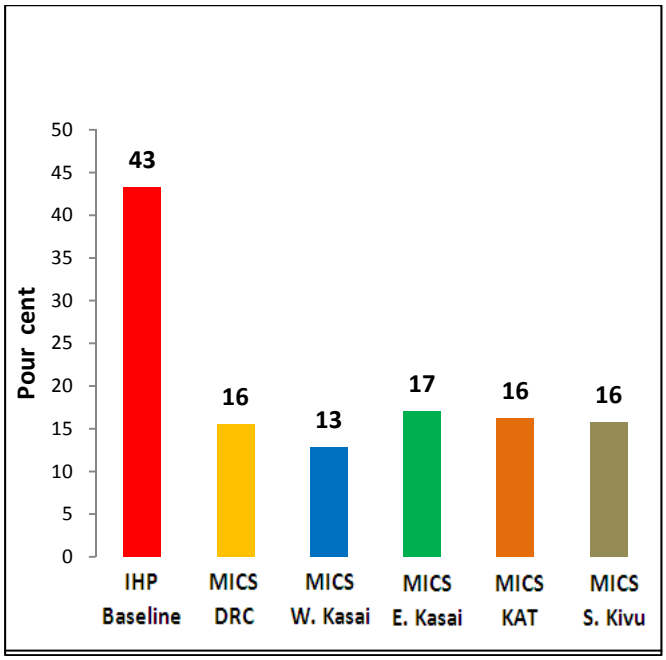


Table VS.2b shows that women living in Kolwezi and Uvira Supervision Areas are underperforming with regard to knowledge about ways of mother-to-child HIV transmission.

Table VS.2b: Percentage of women 15-49 who correctly identified three ways of mother-to-child HIV transmission, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimated population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 – Luiza	9	16	25	9	0.360	1 351 998	0.116	0.042	0.640	0.230	0.000123793
Supervision Area 2 - Mwene Ditu	10	15	25	9	0.400	2 250 550	0.193	0.077	0.600	0.240	0.000357313
Supervision Area 3 - Kole	13	12	25	9	0.520	1 770 312	0.152	0.079	0.480	0.250	0.000229935
Supervision Area 4 - Tshumbe	10	14	24	9	0.417	634 342	0.054	0.023	0.583	0.243	2.99462E-05
Supervision Area 5 - Kamina	10	15	25	9	0.400	716 185	0.061	0.025	0.600	0.240	3.61844E-05
Supervision Area 6 - Kolwezi	8	17	25	9	0.320	766 697	0.066	0.021	0.680	0.218	3.75981E-05
Supervision Area 7 - Bukavu 1	9	10	19	7	0.474	1 683 143	0.144	0.068	0.526	0.249	0.000273164
Supervision Area 8 - Bukavu 2	15	4	19	7	0.789	1 683 143	0.144	0.114	0.211	0.166	0.000182109
Supervision Area 9 - Uvira	6	15	21	8	0.286	809 040	0.069	0.020	0.714	0.204	4.67439E-05
Total	**90**	**118**	**208**			**11 665 409**		**0.468**			**0.001316786**

Average coverage in 2011 =	43.3%	Maximum coverage in 2011 =	**53.9%**
Weighted average coverage in 2011 =	**46.8%**	Minimum coverage in 2011 =	**39.7%**
95% confidence interval = +/-	7.1%		

6.3 Practice of Testing for HIV and Knowledge of HIV status

Knowledge of HIV status is an important step in the fight against the spread of HIV/AIDS. Table VS.3a shows the percentage of women who took a test for HIV during the last 12 months preceding the survey and who obtained the test result.

Table VS.3a: Percentage of women who took a test over the last 12 months preceding the survey and who obtained the test result

Description	Tested and received results	Number of women 15-49 years old
Place of Residence		
Urban	59.5	42
Rural	25.9	166
Contact with a health professional		
Yes	32.5	120
No	33.0	88
Age of women		
<25 years	32.1	78
>25 years	33.1	130
Degree of literacy		
Cannot read or write	27.7	94
Can read only	17.9	31
Can read and write	43.4	83
Total	**32.7**	**208**

The survey found out that one-third (33%) of women have had an HIV test done in the past 12 months preceeding the survey, have obtained the test results, and know their HIV status. This proportion is significantly higher among urban women (60%) than among women living in rural areas (26%). According to the survey, women who are literate are more likely to get tested for HIV/AIDS and obtain results (43%) than women who cannot read and write (28%). The woman's age and contact with a health professional does not seem to affect the practice.

As shown on graph VS. 3 below, IHP estimates for the percentage of women who have been tested for HIV, obtained their results and know their HIV status (33%) are higher than estimates by MICS on the national and provincial levels.

Graph VS.3: Percentage of mothers of children 0-23 months who were tested for HIV during the 12 months preceding the survey and obtained results

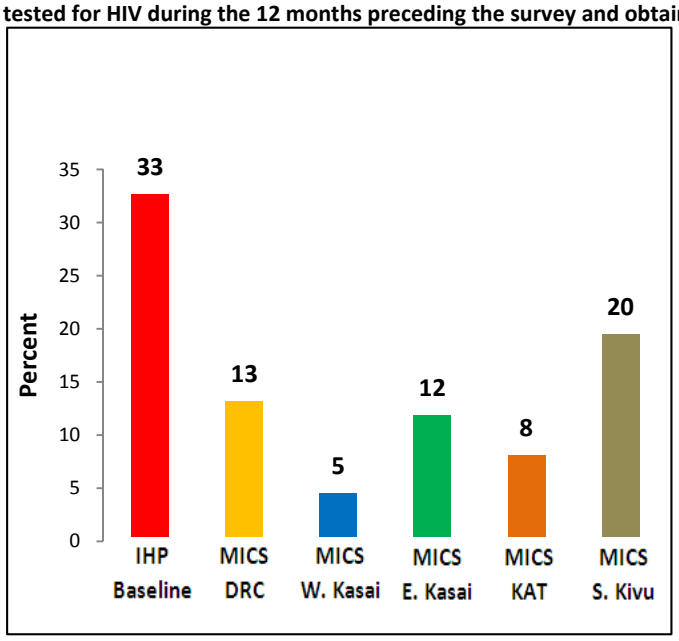


Table VS.3b below analyzes the performance of supervision areas in relationg to women's knowledge of their HIV status.

Table VS.3b: Percentage of women 15-49 years old who were tested for HIV and obtained results during the 12 months preceding the survey, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimated population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 – Luiza	9	16	25	6	0.360	1 351 998	0.116	0.042	0.640	0.230	0.000123793
Supervision Area 2 - Mwene Ditu	5	20	25	6	0.200	2 250 550	0.193	0.039	0.800	0.160	0.000238209
Supervision Area 3 – Kole	5	20	25	6	0.200	1 770 312	0.152	0.030	0.800	0.160	0.000147394
Supervision Area 4 – Tshumbe	1	23	24	6	0.042	634 342	0.054	0.002	0.958	0.040	4.91973E-06
Supervision Area 5 – Kamina	2	23	25	6	0.080	716 185	0.061	0.005	0.920	0.074	1.10966E-05
Supervision Area 6 – Kolwezi	9	16	25	6	0.360	766 697	0.066	0.024	0.640	0.230	3.98098E-05
Supervision Area 7 - Bukavu 1	14	5	19	5	0.737	1 683 143	0.144	0.106	0.263	0.194	0.000212461
Supervision Area 8 - Bukavu 2	11	8	19	5	0.579	1 683 143	0.144	0.084	0.421	0.244	0.000267094
Supervision Area 9 – Uvira	12	9	21	5	0.571	809 040	0.069	0.040	0.429	0.245	5.60926E-05
Total	**68**	**140**	**208**			**11 665 409**		**0.371**			**0.001100868**

Average coverage in 2011 =	32.7%	Maximum coverage in 2011 =	**43.6%**
Weighted average coverage in 2011 =	**37.1%**	Minimum coverage in 2011 =	**30.6%**
95% confidence interval = +/-	6.5%		

According to this analysis, women living in the Supervision areas of Mwene Ditu, Kole, Tshumbe, and Kamina are less likely to get tested for HIV and are therefore less likely to know their HIV/AIDS status.

6.3 High-Risk Sexual Behaviors Linked to HIV Transmission

Table VS.4 below breaks down the percentages of women who engaged in high-risk sexual activity with an occasional partner outside of marriage during the past 12 months preceding the survey and who used a condom during a recent sexual activity.

Table VS.4: Percentage of women 15-49 years old who engaged in high-risk sexual activity with occasional partners in the 12 months preceding the survey and who used a condom in their recent sexual activity

	Percentage of women 15-49 years old who engaged in high-risk sexual activity with an occasional partner outside of marriage during the 12 months preceding the survey and who declared having used a condom during their recent sexual activity.	Number of women 15-49 years old who engaged in sexual activity with an occasional partner during the 12 months preceding the survey.
Place of Residence		
Urban	33.3	3
Rural	11.1	9
Contact with a health professional		
Yes	11.1	9
No	33.3	3
Age of women		
<25 years	.0	2
>25 years	20.0	10
Degree of literacy		
Cannot read or write	16.7	6
Can read only	.0	2
Can read and write	25.0	4
Total	**16.7**	**12**

The numbers reported in this table are too low (2 positive cases out of 12) for conducting statistically significant analyses.

CHAPTER 7: WATER, SUPERVISION AREANITATION AND HYGIENE (WASH)

7.1 Drinking Water

7.1.1 Sources of drinking water supply

Table EA.1a shows data on the principal sources of drinking water in households where mothers of children 0-23 months old live in the IHP-targeted zones and the percentages of mothers who use improved sources of drinking water.

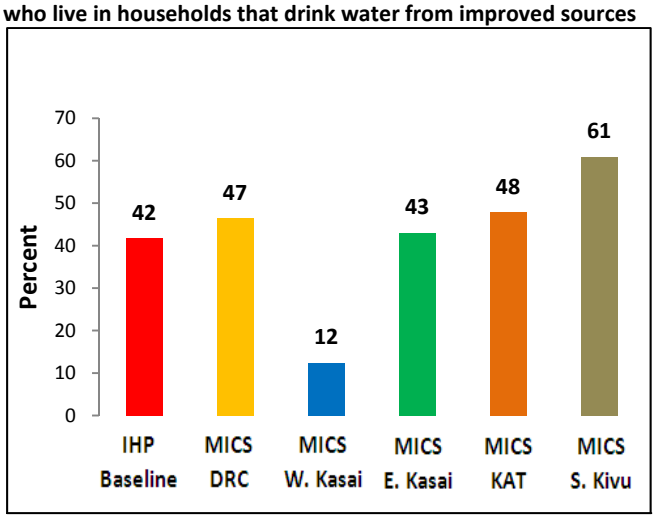
Table EA.1a: Percentage of mothers of children 0-23 months old who live in households that use improved sources of drinking water

	Principal sources of drinking water							Total	Percentage of mothers who use improved sources of drinking water	Number of mothers with children 0-23 months old
	Improved sources				Unimproved sources					
	Tap	Pump well	Protected well	Protected source	Unprotected well	Unprotected source	Surface water (stream, river, dam, lake, pond, canal, irrigation canal)			
Place of residence										
Urban	54.8	2.4	7.1	11.9	4.8	7.1	11.9	100.0	76.2	42
Rural	13.3	2.4	1.8	15.7	7.2	41.0	18.7	100.0	33.1	166
Contact with health professional										
Yes	21.7	3.3	3.3	14.2	6.7	35.0	15.8	100.0	42.5	120
No	21.6	1.1	2.3	15.9	6.8	33.0	19.3	100.0	40.9	88
Mother's age										
<25 years	29.5	1.3	1.3	19.2	.0	37.2	11.5	100.0	51.3	78
>25 years	16.9	3.1	3.8	12.3	10.8	32.3	20.8	100.0	36.2	130
Degree of literacy										
Cannot read or write	13.8	4.3	.0	13.8	5.3	41.5	21.3	100.0	31.9	94
Can read only	17.9	.0	.0	14.3	14.3	35.7	17.9	100.0	32.1	31
Can read and write	32.5	1.2	7.2	15.7	4.8	25.3	13.3	100.0	56.6	83
Total	**21.6**	**2.4**	**2.9**	**14.9**	**6.7**	**34.1**	**17.3**	**100.0**	**41.8**	**208**

Data from this table shows that the principal sources of water from which households of mothers with children 0-23 months old obtain their drinking water are: unprotected source (34%), tap (21%), surface water (17%), and protected source (15%). Less than half of the households surveyed (42%) get their drinking water from improved sources. More mothers who use improved source of drinking water live in urban areas (76%) than in rural areas (33%). Fifty-seven percent of mothers who use improved sources of drinking water can read and write (57%) while 32% are illiterate.

Graph EA1 below compares IHP and MICS percentages of households that use improved sources of drinking water.

Graph EA.1: Percentage of mothers of children 0-23 months who live in households that drink water from improved sources



IHP estimate of the percentage of households that use improved sources of drinking water (42%) is slightly lower than MICS estimates for the national percentage (47%), Eastern Kasaï (43%) and Katanga (48%). IHP estimates are significantly lower than South Kivu (61%) and higher than Western Kasaï (12%).

Table EA.1b below shows the performance of this indicator by Supervision Area.

Table EA.1b: Percentage of mothers of children 0-23 months who live in households that use improved sources of drinking water, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimated population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 - Luiza	6	19	25	9	0.240	1 351 998	0.116	0.028	0.760	0.182	9.80025E-05
Supervision Area 2 - Mwene Ditu	12	13	25	9	0.480	2 250 550	0.193	0.093	0.520	0.250	0.000371605
Supervision Area 3 - Kole	4	21	25	9	0.160	1 770 312	0.152	0.024	0.840	0.134	0.000123811
Supervision Area 4 - Tshumbe	1	23	24	9	0.042	634 342	0.054	0.002	0.958	0.040	4.91973E-06
Supervision Area 5 - Kamina	5	20	25	9	0.200	716 185	0.061	0.012	0.800	0.160	2.4123E-05
Supervision Area 6 - Kolwezi	16	9	25	9	0.640	766 697	0.066	0.042	0.360	0.230	3.98098E-05
Supervision Area 7 - Bukavu 1	19	0	19	7	1.000	1 683 143	0.144	0.144	0.000	0.000	0
Supervision Area 8 - Bukavu 2	14	5	19	7	0.737	1 683 143	0.144	0.106	0.263	0.194	0.000212461
Supervision Area 9 - Uvira	10	11	21	8	0.476	809 040	0.069	0.033	0.524	0.249	5.71314E-05
Total	**87**	**121**	**208**			**11 665 409**		**0.485**			**0.000931864**
Average coverage in 2011 =				41.8%	Maximum coverage in 2011 =			**54.5%**			
Adjusted average coverage in 2011 =				**48.5%**	Minimum coverage in 2011 =			**42.5%**			
Confidence interval at 95% = +/-				6.0%							

We observed that households in the areas of supervision of Luiza, Kole, Tshumbe, and Kamina rarely get their drinking water from improved sources.

7.1.2 Treatment of water in the household

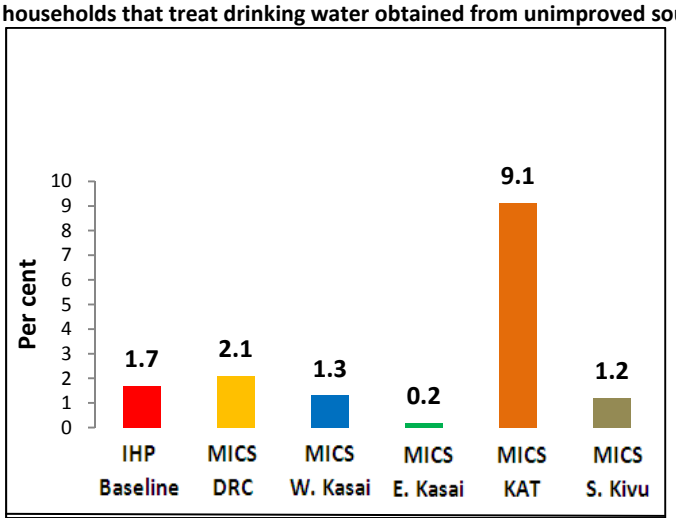
Certain households that acquire drinking water from unimproved sources treat it before drinking. Table EA. 2 below shows the percentage of mothers with children 0-23 months that live in households that treat water acquired from unimproved sources.

Table EA.2: Percentage of mothers with children 0-23 months old that live in households that treat water acquired from non-improved sources

	Percentage of mothers that live in households that properly treat water before drinking	Number of mothers with children 0-23 months old that live in households that acquire water from unimproved sources
Place of residence		
Urban	0.0	10
Rural	1.8	111
Contact with health professional		
Yes	2.9	69
No	0.0	52
Mother's age		
<25 years	5.3	38
>25 years	0.0	83
Degree of literacy		
Cannot read or write	0.0	64
Can read only	5.3	21
Can read and write	2.8	36
Total	**1.7**	**121**

The survey found only 2% of mothers with children 0-23 months old who live in households that treat water acquired it from unimproved sources. This proportion is close to the estimated finding by MICS for the whole country (2.1%) (see graph EA.2).

Graph EA.2: Percentage of mothers of children 0-23 months living in households that treat drinking water obtained from unimproved sources



7.2 Use of Toilets

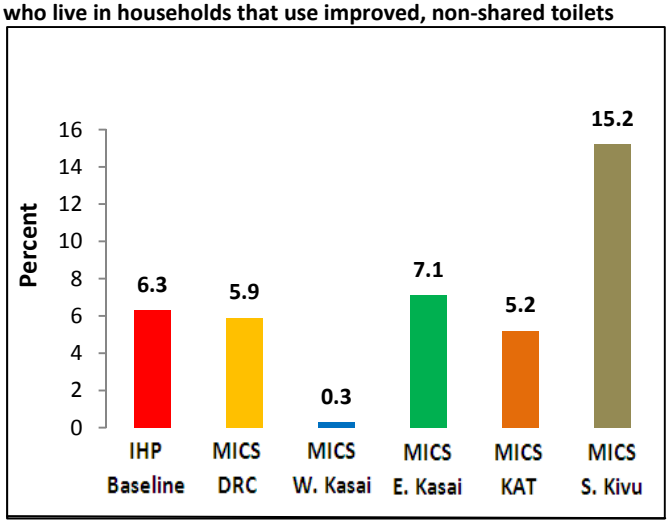
Table EA.3 presents information on the type of toilet used by households and shows the percentage of mothers living in households using improved toilet, improved non-shared toilets and unimproved toilets.
The types of toilets most used are latrines without slab or open-pit toilets. They are found in 74% of households in which mothers live with children 0-23 months. Few households use pit latrine with slab (6%) or flush toilets (4%). There are 14% of households that do not use toilets and practice open defecation in the open air. Only 12% of mothers live in households that use improved toilets, 6% of mothers live in households that use improved non-shared toilets, and 74% of mothers live in households that use unimproved toilets.

Table EA.3: Percentage of mothers with children 0-23 months who live in households that use improved, non-shared toilets

Description	Type of toilets used by the household						Total	Percentage of improved toilet usage	Percentage of improved non-shared toilets	Percentage of unimproved toilet usage	Number of mothers with children 0-23 months
	Improved toilets			Unimproved toilets							
	Flush latrines	Pit latrines with slab	Other improved latrines	Latrines w/o slab/ open pit	Other unimproved latrines	Open-air defecation (no toilet, bush, field)					
Place of residence											
Urban	11.9	9.5	0	71.4	0	7.1	100	21.4	9.5	71.4	42
Rural	1.8	5.4	1.8	74.1	0.6	16.3	100	9.0	5.4	74.7	166
Contact with a healthcare professional											
Yes	4.2	7.5	1.7	72.5	0.8	13.3	100	13.3	5.8	73.3	120
No	3.4	4.5	1.1	75.0	0	15.9	100	9.1	6.8	75.0	88
Age of mother											
<25 years	3.8	6.4	1.3	75.6	0	12.8	100	11.5	5.1	75.6	78
>25 years	3.8	6.2	1.5	72.3	0.8	15.4	100	11.5	6.9	73.1	130
Degree of literacy of mother											
Cannot read or write	0	5.3	1.1	74.5	0	19.1	100	6.4	4.3	74.5	94
Can read only	7.1	3.6	0	71.4	0	17.9	100	10.7	7.1	71.4	31
Can read and write	7.2	8.4	2.4	72.3	1.2	8.4	100	18.1	8.4	73.5	83
Total	**3.8**	**6.3**	**1.4**	**73.6**	**.5**	**14.4**	**100**	**11.5**	**6.3**	**74.0**	**208**

The percentage of households that use improved and non-communal toilets is close to the percentage cited in MICS for the country (6.3% compared to 5.9%).

Graph EA.3: Percentage of mothers of children 0-23 months who live in households that use improved, non-shared toilets



7.3 Handwashing

Hygiene rules require that water and soap be available in a household for hand washing. Table EA.4 shows the percentage of mothers living in households where soap and water are available in designated hand-washing areas.

The data in this table show that only 22% of mothers with children 0-23 months live in households where soap and water are available in areas designated for hand washing.

Table EA.4: Percentage of mothers who live in households where soap and water are available in designated hand-washing areas

	Availability of soap and water in areas designated for hand washing	Number of mothers with children 0-23 months who live in households where soap and water are available in designated hand-washing areas
Place of residence		
Urban	22.2	9
Rural	15.4	13
Contact with health professional		
Yes	23.1	13
No	11.1	9
Mother's age		
<25 years	14.3	7
>25 years	20.0	15
Degree of literacy		
Cannot read or write	14.3	7
Can read only	0	4
Can read and write	27.3	11
Total	18.2	22

Such a low number does not provide a statistically significant result of the availability of soap and water in designated hand-washing areas of the house.

Table EA.5a presents the percentage of mothers with children 0-23 months old who live in households where soap can be found in undesignated areas of the house.

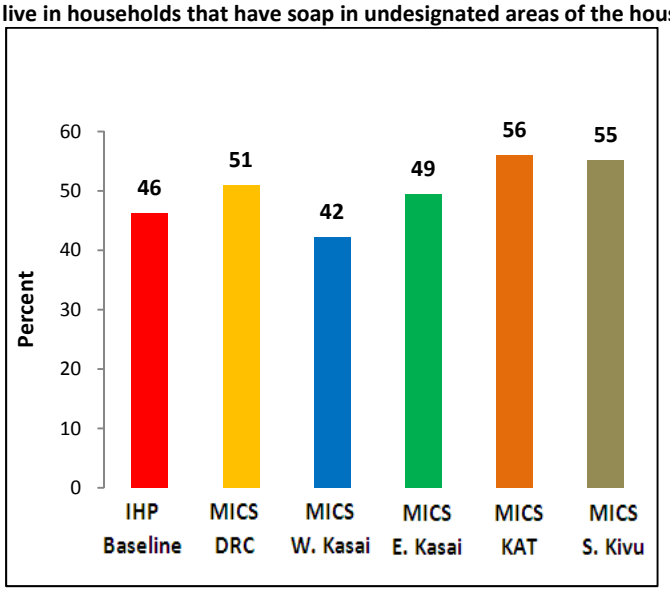
Table EA.5a: Percentage of mothers with children 0-23 months old who live in households where soap is available in undesignated areas of the house

	Availability of soap in undesignated areas of the house	Number of mothers of children 0-23 months old
Place residence		
Urban	69.0	42
Rural	40.4	166
Contact with health professional		
Yes	44.2	120
No	48.9	88
Mother's age		
<25 years	47.4	78
>25 years	45.4	130
Degree of literacy		
Cannot read or write	39.4	94
Can read only	42.9	31
Can read and write	56.6	83
Total	**46.2**	**208**

Overall, 46% of mothers live in households where there was soap in any part of the house. This proportion is higher among mothers living in urban areas (69%) than in rural areas (40%). It also is higher among mothers who are literate (57%) than among those who can neither read nor write (39%). Contact with a health professional does not significantly influence this indicator.

As presented on graph EA.4, the estimated percentage from the baseline survey of households that have soap in undesignated areas of the house does not differ significantly from the MICS estimate (51% for the entire country compared with 46% for the four provinces targeted by the survey).

Graph EA.4: Percentage of mothers of children 0-23 months who live in households that have soap in undesignated areas of the house



Analysis by Supervision Area (Table EA.5b) shows that Luiza, Kole and Tshumbe are underperforming with regard to having soap available for hand washing in the household.

Table EA.5b: Percentage of mothers with children 0-23 months old who live in households where soap is available in undesignated areas of the house, by Supervision Area

Supervision Area	Yes	No	Sample size	Decision rule	Mini coverage (p)	Estimated population size (N)	Weighted factor (Wt)	Mini weighted coverage	q=1-p	p*q	$Wt^2 * (pq)/n$
Supervision Area 1 – Luiza	0	25	25	10	0.000	1 351 998	0.116	0.000	1.000	0.000	0
Supervision Area 2 - Mwene Ditu	20	5	25	10	0.800	2 250 550	0.193	0.154	0.200	0.160	0.000238209
Supervision Area 3 – Kole	4	21	25	10	0.160	1 770 312	0.152	0.024	0.840	0.134	0.000123811
Supervision Area 4 – Tshumbe	4	20	24	10	0.167	634 342	0.054	0.009	0.833	0.139	1.71121E-05
Supervision Area 5 – Kamina	11	14	25	10	0.440	716 185	0.061	0.027	0.560	0.246	3.71493E-05
Supervision Area 6 – Kolwezi	17	8	25	10	0.680	766 697	0.066	0.045	0.320	0.218	3.75981E-05
Supervision Area 7 - Bukavu 1	15	4	19	8	0.789	1 683 143	0.144	0.114	0.211	0.166	0.000182109
Supervision Area 8 - Bukavu 2	12	7	19	8	0.632	1 683 143	0.144	0.091	0.368	0.233	0.000254953
Supervision Area 9 – Uvira	13	8	21	9	0.619	809 040	0.069	0.043	0.381	0.236	5.40151E-05
Total	**96**	**112**	**208**			**11 665 409**		**0.507**			**0.000944957**

Average coverage in 2011 =	46.2%	Maximum coverage in 2011 =	**56.8%**
Adjusted average coverage in 2011 =	**50.7%**	Minimum coverage in 2011 =	**44.7%**
95% confidence interval = +/-	6.0%		

CONCLUSIONS

The IHP baseline survey assessed the knowledge, practices, and coverage of key health areas in the 80 target health zones of the project. Although the comprehensive cross-sectional population-based survey conducted by MSH and its partners in May 2011 revealed vast information about the health status of young children, their mothers, and women of reproductive age, we highlight the following additional conclusions that we feel can assist IHP in delivering high-impact interventions and activities in ways that maximize project effectiveness and efficiency.

Family Planning/Reproductive Health
While women of reproductive age have high knowledge of FP methods (83%), use of at least one modern FP method is quite low (8%), and few women (13%) discuss birth spacing issues with their partners. Effective strategies targeting young women and their partners for increasing the use of modern FP methods should be of high priority.

Child Health
There is a low proportion (28%) of young children 12-23 months of age with complete immunization coverage as recommended by the EPI. While the majority of young children (93%) are vaccinated against TB, there is a need to prioritize vaccination against polio (third dose), yellow fever, DTP 3, and hepatitis B, all of which have low coverage. These figures should be carefully interpreted as there was a high proportion of survey mothers (67.8%) who reported information about their child vaccination status based on recollection and not through the child vaccination card.

Knowledge of danger signs of childhood diseases is poor among mothers of young children. Less than half of mothers of children 0-23 months (44%) know at least one symptom that would trigger them to take the child immediately to a health facility, and very few mothers (8%) are aware of two danger signs of pneumonia. This will require an aggressive and targeted behavior change and communications campaign with simple messages to increase ability to recognize danger signs of childhood diseases and proper care-seeking behaviors through formal information sources of information about health and nutrition.

The treatment of young children with malaria is of concern. Only 26% of children 0-23 months of age who had fever during the two weeks preceding the survey received timely anti-malaria treatment. Diarrhea case management for young children is also of concern. Less than one-third (29%) of children 0-23 months who had diarrhea during the two weeks preceding the survey received ORT (ORS or recommended home fluids, or increased liquids) with continued feeding.

Child Nutrition
Although breastfeeding practices in the areas surveyed are a bit higher than the national average, breastfeeding initiation within the first hour after birth (52%) and exclusive breastfeeding for children 0-5 months of age should increase. More importantly, complementary and active feeding practices among children 6-23 months of age is low (23%) and should be prioritized across all Supervision Areas.

Almost one third (31%) of children 0-23 months of age registered growth retardation. Likely risk factors contributing to growth retardation may be associated with poor intake of solid and semi-solid foods among children 6-23 months of age, and childhood diseases – particularly the poor management of diarrheal diseases and malaria among children 0-23 months of age.

Maternal Health
While the majority of mothers of children ages 0-23 months surveyed gave birth to their youngest child in a health facility (79%) and were attended by skilled health personnel (78%), less than half of mothers surveyed (43%) completed the recommended four prenatal consultations. About 47% received at least two doses of TT vaccine during pregnancy with their youngest child. Moreover, only 18% of mothers received vitamin A supplements and postnatal care consultation within two months following the birth of their child. Prenatal and postnatal care of mothers should be a priority for IHP target areas.

HIV/AIDS
The majority of surveyed women of reproductive age (96%) have heard about HIV/AIDS, but thorough knowledge

about prevention and transmission of the HIV virus is quite low. IHP and other programs should prioritize increasing the availability and use of HIV counseling and testing services. Only one-third (33%) of women of reproductive age living in the IHP target areas have had an HIV test during the last 12 months and received their results.

WATSAN
The treatment of water with appropriate methods is quite low (1.7%) and a high proportion of households (74%) use unimproved toilets. Nearly half of families (46%) reported living in households with soap somewhere in the house, but only 6% have a place in the house designated for hand washing. This situation will require strong interventions about knowledge of and availability of water treatment methods and behavior change strategies for improving hand washing practices.

Characteristics of population and health contacts
Since the population living in the 80 target health zones is young (61% of surveyed household members are 18 years of age or younger), IHP should target interventions, strategies and activities with an increased focus on young people. In addition, key messages and interventions aimed at women or caretakers of young children will need to be accessible to the nearly half (46%) of mothers with children 0-23 months of age who do not read or write.

Of particular importance are the adoption of behavior change and communication strategies with a small number of key messages that can be delivered through preferred information sources for health and nutrition through formal networks at both health facility and community levels that include doctors, nurses, community health workers, health educators, and others.

As there are a number of health issues facing young children, mothers and women of reproductive age – particularly young women – integrated strategies for the effective delivery of essential health services at both health facility and community levels should be a priority.

Methodology
The use of LQAS provides information for the entire project area and for Supervision Areas. This provides useful information not only for reporting project effectiveness in the entire project area with the anticipated evaluations in subsequent years (mid-term and final) but for planning of interventions and activities in each coordinating office. By identifying Supervision Areas with low performance against baseline coverage and expected final targets, IHP staff will be able to prioritize resources.

At the same time, by identifying Supervision Areas with high performance against baseline coverage and expected final targets, IHP staff will be able to identify potential models from those high-performing Supervision Areas that might be replicable in other low-performing Supervision Areas within the IHP target areas.

Setting of end-of-project targets
These important baseline findings for the entire project area and for particular Supervision Areas will greatly help the IHP technical team to determine anticipated end-of-project targets for each performance indicator and those included in the IHP Performance Monitoring Plan (PMP). This exercise should take into account existing project resources, evidence of impact of technical interventions, and coverage of health issues in similar settings in DRC. Such an analysis will allow the prioritization of project resources, particularly in low-performing Supervision Areas, while sustaining the work and learning from high-performance Supervision Areas within the IHP target areas. Replicating the best practices of the high performing Supervision Areas is a significant opportunity to improve performance on indicators across the entire project area.

As there are other USAID implementing partners working in DRC to improve the health of women and children, IHP should maximize synergies with those partners by sharing approaches, tools, and strategies for reaching young children, their mothers, and young women of reproductive age with life-saving interventions.

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ANNEXES

ANNEX A: LIST OF INDICATORS

	INDICATOR	NUMERATOR	DENOMINATOR
1.	**CONTACT WITH HEALTH SERVICES**		
1.1	Proportion of mothers with children 0-23 months who have been in contact with a health professional at least once in the month before the survey	Number of mothers with children 0-23 months who have been in contact with a health professional at least once in the month before the survey	Number of mothers with children ages 0-23 months surveyed
1.2	Proportion of mothers with children 0-23 months who learned two or more health practices through contact with a health professional in the month before the survey	Number of mothers with children 0-23 months who learned two or more health practices through contact with a health professional in the month before the survey	Number of mothers with children ages 0-23 months who had at least one contact with a health professional one month preceding the survey
1.3	Proportion of mothers with children 0-23 months who received information on health or nutrition a: through formal networks b: through informal networks	Number of mothers with children 0-23 months who received information on health or nutrition a: through formal networks b: through informal networks	Number of mothers with children ages 0-23 months surveyed
1.4	Proportion of mothers with children 0-23 months who, in the month before the survey, received health messages a. from health personnel b. from mass media	Number of mothers with children 0-23 months who, in the month before the survey, received health messages a. from health personnel b. from mass media	Number of mothers with children ages 0-23 months surveyed
2.	**INFANT NUTRITION**		
2.1a 2.1b	Proportion of children 0-23 months who: (a) fall below -2 standard deviation compared to the median **weight-for-age** WHO reference population (moderate and severe) (b) fall below -3 standard deviation compared to the median **weight-for-age** WHO reference population (severe)	Number of children 0-23 months who: (a) fall below -2 standard deviation compared to the median **weight-for-age** WHO reference population (moderate and severe) (b) fall below -3 standard deviation compared to the median **weight-for-age** WHO reference population (severe)	Number of children ages 0-23 months surveyed
2.2a 2.2b	Proportion of children 0-23 months who: (a) fall below -2 standard deviation compared to the median **height-for-age** WHO reference population (moderate and severe) (b) fall below -3 standard deviation compared to the median **height-for-age** WHO reference population (severe)	Number of children 0-23 months who: (a) fall below -2 standard deviation compared to the median **height-for-age** WHO reference population (moderate and severe) (b) fall below -3 standard deviation compared to the median **height-for-age** WHO reference population (severe)	Number of children ages 0-23 months surveyed
2.3a 2.3b	Proportion of children 0-23 months who: (a) fall below -2 standard deviation compared to the median **weight-for-height** WHO reference population (moderate and severe) (b) fall below -3 standard deviation compared to the median **weight-for-height** WHO reference population (severe	Number of children 0-23 months who: (a) fall below -2 standard deviation compared to the median **weight-for-height** WHO reference population (moderate and severe) (b) fall below -3 standard deviation compared to the median **weight-for-height** WHO reference population (severe	Number of children ages 0-23 months surveyed
2.4	Proportion of children 0-23 months who were breastfed during the first hour after birth	Number of children 0-23 months who were breastfed during the first hour after birth	Number of children ages 0-23 months surveyed
2.5	Proportion of children under 6 months living with their mother who are exclusively breastfed	Number of children under 6 months living with their mother who are exclusively breastfed	Number of children ages 0-5 months surveyed

2.5	Proportion of children 6-23 months who received solid foods, semi-solid foods or porridge for the required minimum number of meals a day during the day preceding the survey	Number of children 6-23 months who received solid foods, semi-solid foods or porridge for the required minimum number of meals a day during the day preceding the survey	Number of children ages 6-23 months surveyed
2.6	Proportion of children 6-23 months who received a dose of vitamin A in the past 6 months	Number of children 6-23 months who received a dose of vitamin A in the past 6 months	Number of children ages 6-23 months surveyed

	INDICATOR	**NUMERATOR**	**DENOMINATOR**
3.	**VACCINATION COVERAGE**		
3.1	Proportion of children 12-23 months who received the BCG vaccine before their 1st birthday	Number of children 12-23 months who received the BCG vaccine	Number of children ages 12-23 months surveyed
3.2	Proportion of children 12-23 months who received all 3 doses of the VPO vaccine (VPO3) before their 1st birthday	Number of children 12-23 months who received all 3 doses of the VPO vaccine (VPO3)	Number of children ages 12-23 months surveyed
3.3	Proportion of children 12-23 months who received all 3 doses of the DTP vaccine (DTP3) before their 1st birthday	Number of children 12-23 months who received all 3 doses of the DTP vaccine (DTP3)	Number of children ages 12-23 months surveyed
3.4	Proportion of children 12-23 months vaccinated against the measles before their 1st birthday	Number of children 12-23 months vaccinated against the measles	Number of children ages 12-23 months surveyed
3.5	Proportion of children 12-23 month who received all 3 doses of the Hepatitis B vaccine before their 1st birthday	Number of children 12-23 month who received all 3 doses of the Hepatitis B vaccine	Number of children ages 12-23 months surveyed
3.6	Proportion of children 12-23 months vaccinated against yellow fever before their 1st birthday	Number of children 12-23 months vaccinated against yellow fever	Number of children ages 12-23 months surveyed
4.	**CHILD HEALTH AND AWARENESS OF SYMPTOMS**		
4.1	Proportion of children 0-23 months with suspected pneumonia (cough with quick and difficult breath) in the 2 weeks before the survey who were taken to appropriate health services	Number of children 0-23 months with suspected pneumonia (cough with quick and difficult breath) in the 2 weeks before the survey who were taken to appropriate health services	Number of children 0-23 months with suspected pneumonia in the 2 weeks before the survey
4.2	Proportion of children 0-23 months with suspected pneumonia (cough with quick and difficult breath) in the 2 weeks before the survey who were treated with antibiotics	Number of children 0-23 months with suspected pneumonia (cough with quick and difficult breath) in the 2 weeks before the survey who were treated with antibiotics	Number of children 0-23 months with suspected pneumonia in the 2 weeks before the survey
4.3	Proportion of children 0-23 months who had diarrhea in the 2 weeks before the survey who received ORT (ORS packet or recommended household fluids or more) and who continued to be fed during the diarrhea	Number of children 0-23 months who had diarrhea in the 2 weeks before the survey who received ORT (ORS packet or recommended household fluids or more) and who continued to be fed during the diarrhea	Number of children 0-23 months who had diarrhea in the 2 weeks before the survey
4.4	Proportion of children 0-23 months who had a fever in the 2 weeks before the survey and who received appropriate ant malarial treatment in line with the national policy within 24 hours of the onset of symptoms	Number of children 0-23 months who had a fever in the 2 weeks before the survey and who received appropriate ant malarial treatment in line with the national policy within 24 hours of the onset of symptoms	Number of children 0-23 months who had a fever in the 2 weeks before the survey
4.5	Proportion of children 0-23 months who had at least one permanent insecticide-treated net (ITN) or net treated within the year before the survey	Number of children 0-23 months who had at least one permanent insecticide-treated net (ITN) or net treated within the year before the survey	Number of children ages 0-23 months surveyed
4.6	Proportion of children 0-23 months who slept under an ITN the night before the survey	Number of children 0-23 months who slept under an ITN the night before the survey	Number of children ages 0-23 months surveyed

4.7	Proportion of pregnant women who slept under an ITN the night before the survey	Number of pregnant women who slept under an ITN the night before the survey	Number of pregnant women surveyed
4.8	Proportion of mothers of children 0-23 months who were at least aware of the signs/symptoms that indicate the need to take the child for immediate medical attention	Number of mothers of children 0-23 months who were at least aware of the signs/symptoms that indicate the need to take the child for immediate medical attention	Number of mothers with children ages 0-23 months surveyed
4.9	Proportion of mothers of children 0-23 months who were aware of the 2 danger signs of pneumonia among children	Number of mothers of children 0-23 months who were aware of the 2 danger signs of pneumonia among children	Number of mothers with children ages 0-23 months surveyed

	INDICATOR	**NUMERATOR**	**DENOMINATOR**
5.	**FAMILY PLANNING**		
5.1	Proportion of women 15-49 years old who were aware of at least one modern method of family planning	Number of women 15-49 years old who were aware of at least one modern method of family planning	Number of women 15-49 years old surveyed
5.2	Proportion of women 15-49 years old who actually use a modern method of family planning	Number of women 15-49 years old who actually use a modern method of family planning	Number of women 15-49 years old surveyed
5.3	Proportion of women 15-49 years old who had a discussion with their partners about the spacing between births	Number of women 15-49 years old who had a discussion with their partners about the spacing between births	Number of women 15-49 years old surveyed
6.	**MATERNAL HEALTH**		
6.1	Proportion of mother of children 0-23 months who had at least 4 prenatal visits during pregnancy with the youngest child	Number of mother of children 0-23 months who had at least 4 prenatal visits during pregnancy with the youngest child	Number of mothers with children ages 0-23 months surveyed
6.2	Proportion of mother of children 0-23 months who received at least 2 tetanus vaccines during pregnancy with the youngest child	Number of mother of children 0-23 months who received at least 2 tetanus vaccines during pregnancy with the youngest child	Number of mothers with children ages 0-23 months surveyed
6.3	Proportion of mother of children 0-23 months who received a dose of vitamin A in the 2 months after the birth of their youngest child	Number of mother of children 0-23 months who received a dose of vitamin A in the 2 months after the birth of their youngest child	Number of mothers with children ages 0-23 months surveyed
6.4	Proportion of mother of children 0-23 months who had qualified personnel at the birth of their youngest child	Number of mother of children 0-23 months who had qualified personnel at the birth of their youngest child	Number of mothers with children ages 0-23 months surveyed
6.5	Proportion of mother of children 0-23 months who gave birth in a medical setting	Number of mother of children 0-23 months who gave birth in a medical setting	Number of mothers with children ages 0-23 months surveyed
6.6	Proportion of mother of children 0-23 months who were examined by qualified medical personnel in the three days following giving birth	Number of mother of children 0-23 months who were examined by qualified medical personnel in the three days following giving birth	Number of mothers with children ages 0-23 months surveyed
6.7	Proportion of mother of children 0-23 months who had heard of fistula	Number of mother of children 0-23 months who had heard of fistula	Number of mothers with children ages 0-23 months surveyed
7.	**HIV/AIDS AND SEXUAL RISK FACTORS (VS)**		
7.1	Proportion of women 15-49 years old who could correctly identify 2 means of prevention against HIV infection, know that someone who appears to be in good health can have HIV, and rejected the 2 most common misconceptions on HIV transmission	Number of women 15-49 years old who could correctly identify 2 means of prevention against HIV infection, know that someone who appears to be in good health can have HIV, and rejected the 2 most common misconceptions on HIV transmission	Number of women 15-49 years old (mother of children ages 0-23 months) surveyed

7.2	Proportion of women 15-49 years old who correctly identified the 3 modes of mother-child transmission of HIV	Number of women 15-49 years old who correctly identified the 3 modes of mother-child transmission of HIV	Number of women 15-49 years old (mother of children ages 0-23 months) surveyed
7.3	Proportion of women 15-49 years old who were tested for HIV in the last 12 months and know the results	Number of women 15-49 years old who were tested for HIV in the last 12 months and know the results	Number of women 15-49 years old (mother of children ages 0-23 months) surveyed
7.4	Proportion of women 15-49 years old who engaged in high-risk sexual activity with occasional partners in the 12 months preceding the survey and who used a condom in their recent sexual activity	Number of women 15-49 years old who engaged in high-risk sexual activity with occasional partners in the 12 months preceding the survey and who used a condom in their recent sexual activity	Number of women 15-49 years old who engaged in high-risk sexual activity with occasional partners in the 12 months preceding the survey

	INDICATOR	**NUMERATOR**	**DENOMINATOR**
8.	**WATER, SANITATION AND HYGIENE**		
8.1	Proportion of mothers of children 0-23 months living in households using improved sources of drinking water	Number of mothers of children 0-23 months living in households using improved sources of drinking water	Number of mothers with children ages 0-23 months surveyed
8.2	Proportion of mothers of children 0-23 months living in households using appropriate treatment methods for drinking water	Number of mothers of children 0-23 months living in households using appropriate treatment methods for drinking water	Number of mothers of children 0-23 months living in households using unimproved sources of drinking water
8.3	Proportion of mothers of children 0-23 months living in households using improved non-communal toilets	Number of mothers of children 0-23 months living in households using improved non-communal toilets	Number of mothers with children ages 0-23 months surveyed
8.4	Proportion of mothers of children 0-23 months living in households with water and soap in a particular hand washing location	Number of mothers of children 0-23 months living in households with water and soap in a particular hand washing location	Number of mothers with children ages 0-23 months surveyed
8.5	Proportion of mothers of children 0-23 months living in households with soap found anywhere in the house	Number of mothers of children 0-23 months living in households with soap found anywhere in the house	Number of mothers with children ages 0-23 months surveyed

ANNEX B: LQAS TABLE – DECISION RULE

LQAS Table: Decision rule for a sample size of 12 to 30 and a target/average coverage of 10% to 95%																		
Sample size *	**Average coverage (baseline)/annual target coverage (monitoring and evaluation)**																	
	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%
12	N/A	N/A	1	1	2	2	3	4	5	5	6	7	7	8	8	9	10	11
13	N/A	N/A	1	1	2	3	3	4	5	6	6	7	8	8	9	10	11	11
14	N/A	N/A	1	1	2	3	4	4	5	6	7	8	8	9	10	11	11	12
15	N/A	N/A	1	2	2	3	4	5	6	6	7	8	9	10	10	11	12	13
16	N/A	N/A	1	2	2	3	4	5	6	7	8	9	9	10	11	12	13	14
17	N/A	N/A	1	2	2	3	4	5	6	7	8	9	10	11	12	13	14	15
18	N/A	N/A	1	2	2	3	5	6	7	8	9	10	11	11	12	13	14	16
19	N/A	N/A	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
20	N/A	N/A	1	2	3	4	5	6	7	8	9	11	12	13	14	15	16	17
21	N/A	N/A	1	2	3	4	5	6	8	9	10	11	12	13	14	16	17	18
22	N/A	N/A	1	2	3	4	5	7	8	9	10	12	13	14	15	16	18	19
23	N/A	N/A	1	2	3	4	6	7	8	10	11	12	13	14	16	17	18	20
24	N/A	N/A	1	2	3	4	6	7	9	10	11	13	14	15	16	18	19	21
25	N/A	1	2	2	4	5	6	8	9	10	12	13	14	16	17	18	20	21
26	N/A	1	2	3	4	5	6	8	9	11	12	14	15	16	18	19	21	22
27	N/A	1	2	3	4	5	7	8	10	11	13	14	15	17	18	20	21	23
28	N/A	1	2	3	4	5	7	8	10	12	13	15	16	18	19	21	22	24
29	N/A	1	2	3	4	5	7	9	10	12	13	15	17	18	20	21	23	25
30	N/A	1	2	3	4	5	7	9	11	12	14	16	17	19	20	22	24	26

N/A: Not applicable means that LQAS cannot be used in this evaluation because the coverage is either too low or too high for an evaluation. This table assumes that the lowest threshold is 30 percentage points above the highest threshold.

Light gray cells indicate alpha or beta errors greater than or equal to 10%.

Dark gray cells indicate alpha or beta errors above 15%.

ANNEX C: TIMELINE OF ENTIRE BASELINE STUDY

IHP Baseline Study - Timeline (rev. 5/22/11)	**Feb 14-28** (2 weeks)	**Mar 1-11** (2 weeks)	**Mar 14-25** (2 weeks)	**April 1-7** (1 week)	**April 8-22** (2 weeks)	**April 25-May 6** (2 weeks)	**May 9-13** (1 week)	**May 16** (1 day)	**M** (1
Phase I: Preliminary Planning									
Develop objectives and rationale of baseline study	**x**								
Begin coordination with in-country team	**x**								
Finalize revision of PMP according to Mission reporting requirements*	**x**								
Collect secondary data	**x**	**x**							
Develop a SOW for external/local consultant	**x**								
Identify potential consultant for in-country support	**x**								
Prepare a detailed implementation plan for baseline study	**x**	**x**							
Prepare a detailed budget for baseline study	**x**	**x**							
Hire external/local consultant		**x**							
Inform USAID/DRC and other implementing partners details of baseline study		**x**							
Phase II: In-Country Preparations for Data Collection									
Make the process participatory	**x**	**x**	**x**		**x**	**x**	**x**	**x**	
Determine needs and information gaps		**x**	**x**						
Develop a comprehensive logistical plan			**x**	**x**					
Design a sampling strategy for HH survey (LQAS)			**x**	**x**					
Recruit and train supervisors and interviewers for HH survey				**x**					
Coordinate with field (coordinating) offices to notify communities and HZs				**x**					
Prepare all materials and supplies for data collection activities				**x**					
Phase III: Data collection									
Collect data - HH survey						**x**	**x**	**x**	
Complete all data collection						**x**	**x**	**x**	
Phase IV: In-country Data Analysis, Interpretation, Documentation & Sharing									
Tabulate survey questionnaires									
Analyze data from HH survey									

Complete PMP with baseline figures, annual benchmarks and final targets									
Write preliminary baseline study report									
Finalize baseline study report									
Submit final version of baseline study report to USAID/DRC									
Disseminate baseline study results with USAID and other key stakeholders									

Notes:

* Subject to coordination with Jose Tchofa and approval from Richard Matendo from USAID/DRC

PROSANI Baseline Study - Planning and Timeline	**Feb 14-28** (2 weeks)	**Mar 1-11** (2 weeks)	**Mar 14-25** (2 weeks)	**April 4 – 23** (3 weeks)	**April 25 – June 3** (6 weeks)	**May 24 – June 11** (3 week)	**June 12 – July 5** (3 weeks)	**May 25** (1 day)	**May 26-June 1** (1 week)	**June 2 -7** (1 week)	**June 8** (1 day)	**June 9-22** (2 weeks)
Phase IV: In-country Data Analysis, Interpretation, Documentation & Sharing												
Analyze data from HH survey							x					
Complete PMP with baseline figures, annual benchmarks and final targets							x					
Write preliminary baseline study report							x					
Submit preliminary baseline study report to USAID								x				
Collect feedback from USAID/DRC									x			
Finalize baseline study report										x		
Submit final version of baseline study report to USAID/DRC											x	
Disseminate baseline study results with USAID and other key stakeholders												x

Notes:

* Subject to coordination with Jose Tchofa and approval from Richard Matendo from USAID/DRC

ANNEX D: SURVEY STAFF

Survey Coordinator

Simon MAKAYA M. MBENZA

Pool Supervisors

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Interviewers

LUIZA
1. Bakamana Pierre
2. Bakandingamba Rosette
3. Bupela Muela Célestine
4. Tshibangu François

MWENE DITU
1. André Mulumba Luhuta
2. Faustin Katambwe Tshibamba
3. Jean Kalombo Mpumbue
4. Robert Ntumba Kankolongo

KOLE
1. Etshimbo Salomon
2. Kitumbu Hilaire
3. Ngelo Pierre
4. Shongo Jean

TSHUMBE
1. Nende Josephine
2. Omba Junior
3. Shungu Daniel
4. Yangake Bijou

KAMINA
1. Claude Nsangua Kalenga
2. Ernest Kasongo wa Ilunga
3. Jérome Kambilo Kalenga
4. Rachidi Mapendo Ntambwe

KOLWEZI
1. Annie Mbombo Tshimbeji
2. Dimitri Muamba Mwehu
3. Jérémie Motema Matondo
4. Pacome Papayi Potopoto

BUKAVU 1
1. Kadekere Kwigomba Innocent
2. Mwanza Furaha Anny
3. Biatoto Makebu Chala
4. Mulumeoderhwa Bugabanda Freddy

BUKAVU 2
1. Mutambala Masuku Gildard
2. Kizungu Sangi alain
3. Itongwa Kanefu Janvier
4. Lushugurhi Bin Sanduku Patient

UVIRA
1. Cinguvu Kapumbwa Loris
2. Ngongo Safi Françoise
3. Djuma Kivunde Blaise
4. Alanga Kahenga Baltazar
5. Kapama Kapota Michel
6. Kashindi Papy

DATA ENTRY STAFF

IT Expert

Omba Omombo

Typists

Team A	*Team B*
1. Mfumu Cédric	1. Bulemba Bukudia Guélord
2. Justin	2. Lusakumunu Tuka Lily-Grace
3. Nsele Asokolo Dodi	3. Makamba Ndosimao Roddy
4. Shabani Saleh	4. Nobela Bosa Eric
	5. Nseka Muanza Georges

OTHER MSH STAFF

CLM M&E Director	Juan-Carlos Alegre
DRC IHP M&E Specialist	Alidor Kuamba

ANNEX E: CHECKLISTS FOR SUPERVISORS

Quality Control Checklist for Supervisors

NAME OF INTERVIEWER: _____ **NAME OF SUPERVISOR:** _____

PROVINCE: _____ **SUPERVISION AREA LOCATION:** _____

HEALTH ZONE: _____ **HEALTH AREA:** _____ **DATE:** ____/____/____ (dd/mm/yy)

	DID THE INTERVIEWER. . .	**PERFORMED CORRECTLY?**		
		YES	*NO*	*Not Assessed*
1.	Select the *household* correctly?			
2.	Select the *respondent* correctly?			
3.	Introduce him/herself correctly?			
4.	Read the consent statement at the beginning of the interview?			
5.	Correctly record information on cover page (such as interview date, name of community, mother's/child's name, mother's/child's age/date of birth, child's sex)?			
6.	Speak clearly during the interview?			
7.	Use culturally appropriate body language?			
8.	Have neutral facial expressions/body language (did not react positively or negatively to the respondent's answers)?			
9.	Ask leading questions that might have influenced the respondent's answers?			
10.	Read the questions exactly as they were written?			
11.	Write legibly on the questionnaire?			
12.	Follow the skip patterns correctly?			
13.	Read responses aloud when supposed to?			
14.	Prompt the mother for all answers (say "Anything else?") for questions that allow multiple responses?			
15.	Weigh the child correctly?			
16.	Measure the child correctly?			

1 2 3 4 5 6 7 8 9 10

needs more training — excellent

- APPROXIMATE DURATION OF INTERVIEW: _____ minutes

- GENERAL NOTES: _____

_____

_____

SUPERVISOR'S SIGNATURE: _____

ANNEX F: FIELD IMPLEMENTATION CHECKLIST

(To be completed by each survey team.)

The following is a detailed checklist of items and aspects to check out for the implementation of the survey in the field. Checking these items and aspects will minimize any challenges or difficulties that survey teams may encounter during the implementation of the survey.

I. Transportation

- ❑ Car/van
- ❑ Driver
- ❑ Motorcycles
- ❑ Petrol/Gas
- ❑ Community guide (someone who is familiar with the communities—can also be the driver)

Depending on resources and the layout of the project area, some teams will use motorcycles while others may use a vehicle. For those going in vehicles, more than one survey team may be assigned to the same vehicle and driver. The team(s) and the driver should agree upon the drop-off and pick-up times and locations within each sample area.

II. Food and Other Provisions

- ❑ Drinking Water
- ❑ Bag lunch/food allowance
- ❑ First Aid Kit

III. Survey Equipment

For interviewers

- ❑ Pencils/pens/erasers
- ❑ Clipboards
- ❑ Adequate copies of the questionnaire (for at least one day's worth of interviews)
- ❑ Thick plastic bags to keep all survey questionnaires clean and dry
- ❑ Medicines for display during the interview, namely:
  - ORS packet
  - Vitamin A capsules
- ❑ Tools for random selection, such as:
  - Empty bottle or other designated object (if using spin-the-bottle technique)
  - Coin (for flip-the-coin technique)
  - Random number tables
  - Blank paper
- ❑ Quick reference sheet with protocols for household and respondent selection
- ❑ Necessary equipment for anthropometric measurement, for example:
  - Scales (previously calibrated)
  - Measuring boards (previously calibrated)

For Supervisors

- ❑ List of selected communities and number of clusters in each; each survey team and their cluster assignments (particularly important if more than one team will be conducting interviews in the same community)
- ❑ Extra copies of questionnaires
- ❑ Extra pens/pencils/erasers
- ❑ Extra thick plastic bags for keeping all survey questionnaires clean and dry
- ❑ Extra vitamin A capsules, ORS packets
- ❑ Quality-control checklists
- ❑ Maps/listing of households in the sample area

IV. Use of Consent Forms

Survey teams must always obtain consent (written or verbally) from the interviewee before beginning the survey. All questions are entirely optional and the interviewee has the right to refuse answering any particular survey question.

V. About Security

Although survey teams are required to complete the assigned number of household surveys in their respective Supervision Areas, the Supervisor should always exercise proper judgment with regard to security for the survey team during the survey implementation.

ANNEX G: SURVEY QUESTIONNAIRES

MANAGEMENT SCIENCES FOR HEALTH (MSH)
PROJET INTEGRE DE SANTE (PROSANI)

QUESTIONNAIRE MERES D'ENFANTS DE 0-23 MOIS

CADRE D'INFORMATION SUR LA MERE D'ENFANT DE 0-23 MOIS	
Ce questionnaire doit être administré à la mère dont le plus jeune enfant est âgé de 0-23 mois	
01. Nom et Numéro de la communauté Nom _____ ___ ___ ___	**02. Numéro de ménage dans la communauté** ___ ___
03. Nom et numéro de l'Aire de Santé Nom _____ ___ ___	**04. Nom et numéro de la Zone de Santé** Nom _____ ___
05. Nom et numéro de l'Aire de Supervision (A.S.) Nom _____ ___	
06. Nom et code de la Province Kasaï Occidental ……..... 1 Kasaï Oriental ……..…….... 2 Katanga …….. 3 Sud-Kivu …….. 4	**07. Milieu de résidence** Urbain …….. 1 Rural …….. 2
08. Nom et Numéro de la mère dans l'A.S. Nom _____ ___ ___	**09. Nom de l'enfant** _____
10. Date de naissance de l'enfant Jour Mois Année ____ ____ / ____ ____/ ____ ____ ____ ____	**11. Age de l'enfant (en mois)** ____ ____
12. Nom et code de l'enquêteur/enquêtrice Nom_____ ___ ___ ___	**13. Jour / Mois / Année de l'interview** ___ ___ / ___ ___ / ___ ___ ___ ___

NOUS TRAVAILLONS SUR UN PROJET CONCERNANT LA SANTE DES MERES ET DES ENFANTS. JE VOUDRAIS VOUS PARLER DE CES SUJETS A PROPOS DE (***nom de l'enfant***). L'INTERVIEW DEVRAIT PRENDRE ENVIRON 30 MINUTES. TOUTES LES INFORMATIONS QUE NOUS RECUEILLONS RESTERONT STRICTEMENT CONFIDENTIELLES ET VOS REPONSES NE SERONT JAMAIS CONNUES DE PERSONNE EN DEHORS DU CADRE DU PROJET.

PUIS-JE COMMENCER MAINTENANT ?

- ☐ *Oui, permission accordée ⇨ Allez au module « Composition du ménage » pour commencer l'interview.*
- ☐ *Non, permission non accordée ⇨ Discutez ce résultat avec votre chef hiérarchique.*

14. Contrôlé sur le terrain par (Nom et code): Nom _____ ___ ___ ___	**15. Agent de saisie (Nom et code):** Nom _____ ___ ___

MODULE 1: COMPOSITION DU MENAGE						**CM**				
Pour toutes les personnes du ménage						Pour tous les enfants de 5 à 24 ans		Pour toutes les personnes âgées de 15 ans ou plus		
CM1	CM2	CM3	CM4	CM5	CM6	CM7	CM8	CM9	CM10	CM11
N° Ordre	**NOM**	**Lien de parenté** 1= C.M. 2= Epouse 3= Fils/Fille 4= Autre Parent 5= Non Parent	**Sexe** 1= Masc 2= Fém	**Age (en années révolues)**	**Situation d'activité** 1= Enfant Bas âge 2= Enfant non scol. 3= Elève / Etudiant 4= Travailleur salarié 5= Travailleur indép. 6= Retraité 7= Ménagère 8= Chômeur 9= Autre inactif	***Fréquentation scolaire actuelle*** (Nom) fréquente-t-il un établissement scolaire au cours de l'année scolaire 2010-2011 ? 1= Oui 2= Non ⇨CM9	**Niveau d'instruction** A quel niveau est-il ? 0 = Maternel 1= Primaire 2= Secondaire ou + 3= Programme non formel 9 = NSP	**Degré d'alphabétisation** 1= Ne sait ni lire ni écrire 2= Sait lire seulement 3= Sait lire et écrire	**Plus haut niveau d'instruction atteint** 0 = Maternel 1= Primaire 2= Secondaire ou + 3= Programme non formel 9 = NSP	**Etat matrimonial** 1= Célibataire 2= Marié 3= Uni de fait 4= Divorcé /Séparé. 5= Veuf /Veuve
01		1 2 3 4 5	1 2	/__/__/	1 2 3 4 5 6 7 8 9	1 2	0 1 2 3 9	1 2 3	0 1 2 3 9	1 2 3 4 5
02		1 2 3 4 5	1 2	/__/__/	1 2 3 4 5 6 7 8 9	1 2	0 1 2 3 9	1 2 3	0 1 2 3 9	1 2 3 4 5
03		1 2 3 4 5	1 2	/__/__/	1 2 3 4 5 6 7 8 9	1 2	0 1 2 3 9	1 2 3	0 1 2 3 9	1 2 3 4 5
04		1 2 3 4 5	1 2	/__/__/	1 2 3 4 5 6 7 8 9	1 2	0 1 2 3 9	1 2 3	0 1 2 3 9	1 2 3 4 5
05		1 2 3 4 5	1 2	/__/__/	1 2 3 4 5 6 7 8 9	1 2	0 1 2 3 9	1 2 3	0 1 2 3 9	1 2 3 4 5
06		1 2 3 4 5	1 2	/__/__/	1 2 3 4 5 6 7 8 9	1 2	0 1 2 3 9	1 2 3	0 1 2 3 9	1 2 3 4 5
07		1 2 3 4 5	1 2	/__/__/	1 2 3 4 5 6 7 8 9	1 2	0 1 2 3 9	1 2 3	0 1 2 3 9	1 2 3 4 5
08		1 2 3 4 5	1 2	/__/__/	1 2 3 4 5 6 7 8 9	1 2	0 1 2 3 9	1 2 3	0 1 2 3 9	1 2 3 4 5
09		1 2 3 4 5	1 2	/__/__/	1 2 3 4 5 6 7 8 9	1 2	0 1 2 3 9	1 2 3	0 1 2 3 9	1 2 3 4 5
10		1 2 3 4 5	1 2	/__/__/	1 2 3 4 5 6 7 8 9	1 2	0 1 2 3 9	1 2 3	0 1 2 3 9	1 2 3 4 5
11		1 2 3 4 5	1 2	/__/__/	1 2 3 4 5 6 7 8 9	1 2	0 1 2 3 9	1 2 3	0 1 2 3 9	1 2 3 4 5
12		1 2 3 4 5	1 2	/__/__/	1 2 3 4 5 6 7 8 9	1 2	0 1 2 3 9	1 2 3	0 1 2 3 9	1 2 3 4 5
13		1 2 3 4 5	1 2	/__/__/	1 2 3 4 5 6 7 8 9	1 2	0 1 2 3 9	1 2 3	0 1 2 3 9	1 2 3 4 5
14		1 2 3 4 5	1 2	/__/__/	1 2 3 4 5 6 7 8 9	1 2	0 1 2 3 9	1 2 3	0 1 2 3 9	1 2 3 4 5
15		1 2 3 4 5	1 2	/__/__/	1 2 3 4 5 6 7 8 9	1 2	0 1 2 3 9	1 2 3	0 1 2 3 9	1 2 3 4 5
16		1 2 3 4 5	1 2	/__/__/	1 2 3 4 5 6 7 8 9	1 2	0 1 2 3 9	1 2 3	0 1 2 3 9	1 2 3 4 5
17		1 2 3 4 5	1 2	/__/__/	1 2 3 4 5 6 7 8 9	1 2	0 1 2 3 9	1 2 3	0 1 2 3 9	1 2 3 4 5
18		1 2 3 4 5	1 2	/__/__/	1 2 3 4 5 6 7 8 9	1 2	0 1 2 3 9	1 2 3	0 1 2 3 9	1 2 3 4 5
19		1 2 3 4 5	1 2	/__/__/	1 2 3 4 5 6 7 8 9	1 2	0 1 2 3 9	1 2 3	0 1 2 3 9	1 2 3 4 5
20		1 2 3 4 5	1 2	/__/__/	1 2 3 4 5 6 7 8 9	1 2	0 1 2 3 9	1 2 3	0 1 2 3 9	1 2 3 4 5

MODULE 2: EAU ET ASAINISSEMENT		EA
EA1. D'OU PROVIENT **PRINCIPALEMENT** L'EAU QUE BOIVENT LES MEMBRES DE VOTRE MENAGE ?	Robinet Dans le logement …… 11 Dans concession, cour ou parcelle …….. 12 Robinet du voisin …….. 13 Robinet public / Borne fontaine …….. 14 Puits à pompe, Forage ……..... 21 Puits creusé Puits protégé ……31 Puits non protégé …… 32 Eau de source Source protégée …… 41 Source non protégée …… 42 Eau de surface (rivière, fleuve, barrage, lac, mare, canal, canal d'irrigation) 81 Autre (*précisez*) _____ 96	11⇨EA3 12⇨EA3 13⇨EA3
EA2. OU CETTE SOURCE D'APPROVISIONNEMENT EN EAU EST-ELLE SITUEE ?	Dans logement …… 1 Dans cour / parcelle …… 2 Ailleurs …….. 3	
EA3. FAITES-VOUS QUELQUE CHOSE POUR RENDRE L'EAU PLUS SAINE AVANT DE LA BOIRE ?	Oui …… 1 Non …… 2 NSP …… 8	2⇨EA5 8⇨EA5
EA4. HABITUELLEMENT, QUE FAITES-VOUS POUR RENDRE L'EAU QUE VOUS BUVEZ PLUS SAINE ? *Insistez:* AUTRE CHOSE? *Enregistrez tout ce qui est mentionné.*	La faire bouillir …… A Y ajouter de l'eau de Javel / chlore …… B La filtrer à travers un linge …… C Utiliser un filtre (céramique, sable, composite, etc.) …….. D Désinfection solaire …… E La laisser reposer …….. F Autre (*précisez*)_____ X NSP …… Z	
EA5. HABITUELLEMENT, QUEL TYPE DE TOILETTES LES MEMBRES DE VOTRE MENAGE UTILISENT-ILS? *Si "chasse d'eau" ou "chasse d'eau manuelle", insistez:* OU VONT LES EAUX USEES ? *Si nécessaire, demandez la permission de voir les toilettes.*	Toilettes avec chasse d'eau avec ou sans réservoir d'eau Connectée à système d'égouts…….. 11 Connectée à une fosse septique……12 Reliée à des latrines …….. 13 Reliée à autre chose…….. 14 Reliée à endroit inconnu/pas sûr/NSP où .. 15 Fosses/latrines Latrines améliorées ventilées (LAV)….21 Latrines à fosses avec dalle……...22 Latrines à fosses sans dalle/trou ouvert 23 Toilettes à compostage ……31 Seaux……41 Toilettes/latrines suspendues……51 Pas de toilettes, nature ……95 Autre (précisez) _____ 96	95⇨EA9
EA6. PARTAGEZ-VOUS CES TOILETTES AVEC D'AUTRES PERSONNES QUI NE SONT PAS MEMBRES DE VOTRE MENAGE ?	Oui……..1 Non……2	2⇨ EA9
EA7. PARTAGEZ-VOUS CES TOILETTES SEULEMENT AVEC DES MEMBRES D'AUTRES MENAGES QUE VOUS CONNAISSEZ, OU EST-CE QUE N'IMPORTE QUI PEUT UTILISER CES TOILETTES ?	Autres ménages seulement (pas publiques) …….1 Toilettes publiques ……..2	2⇨ EA9
EA8. AU TOTAL, COMBIEN DE MENAGES, Y COMPRIS VOTRE MENAGE, UTILISENT CES TOILETTES ?	Nombre de ménages (si moins de 10)…….. 0 __ Dix ménages ou plus……10 NSP……98	

EA9. MONTREZ-MOI, S'IL VOUS PLAIT, LA OU LES MEMBRES DE VOTRE MENAGE SE LAVENT LES MAINS LA PLUPART DU TEMPS.	Observé …… 1 Pas observé …… 2	2 ⇨EA12
EA10. *Observer s'il y a de l'eau au lieu spécifique de lavage des mains* *Contrôler en vérifiant s'il y a de l'eau au robinet/pompe/ou bassin, dans le seau, container d'eau ou objet similaire.*	Eau disponible …… 1 Eau non disponible …… 2	
EA11. *Enregistrez si du savon ou d'autres produits nettoyants sont présents dans l'endroit spécial prévu pour se laver les mains.* *Encerclez tout ce qui est mentionné.*	Morceau de savon …… A Nettoyant (Poudre / Liquide / Pâte) …… B Savon liquide …… C Cendre / Boue / Sable …… D Rien …… Y	⇨Module suivant
EA12. AVEZ-VOUS DU SAVON OU D'AUTRES PRODUITS NETTOYANTS (***ou d'autres produits locaux utilisés comme produits nettoyants***) DANS VOTRE MENAGE POUR LE LAVAGE DES MAINS?	Oui ..... 1 Non 2	2⇨Module suivant
EA13. POUVEZ-VOUS, S'IL VOUS PLAIT, ME LE MONTRER? *Enregistrez l'observation. Encerclez tout ce qui est mentionné*	Morceau de savon …… A Nettoyant (Poudre / Liquide / Pâte) …… B Savon liquide …… C Cendre / Boue / Sable …… D N'a pas pu montrer/A refusé de montrer … Y Autre (précisez) …… X	

MODULE 3: CONTRACEPTION		**CO**
Ce module concerne toutes les femmes âgées de 15-49 ans non enceintes. *Maintenant, je voudrais vous poser des questions sur la planification familiale – les différents moyens ou méthodes qu'un couple peut utiliser pour retarder ou éviter une grossesse.* ENCERCLEZ LE CODE 1 A CO1 POUR CHAQUE METHODE CITEE DE FAÇON SPONTANEE. PUIS, LISEZ LE NOM ET LA DESCRIPTION DE CHAQUE METHODE NON CITEE SPONTANEMENT. ENCERCLEZ LE CODE 1 SI LA METHODE EST RECONNUE ET LE CODE 2 SI ELLE N'EST PAS RECONNUE.		
CO1. DE QUELS MOYENS OU METHODES AVEZ-VOUS ENTENDU PARLER ? Pour les méthodes non citées spontanément, demandez Avez-VOUS DEJA ENTENDU PARLER DE (METHODE) ?		
CO1a STÉRILISupervision AreaTION FÉMININE Les femmes peuvent subir une opération pour éviter d'avoir d'autres enfants.	Oui.....1 Non _____ 2	
CO1b STÉRILISupervision AreaTION MASCULINE Les hommes peuvent subir une opération pour Eviter d'avoir d'autres enfants.	Oui.....1 Non.....2	
CO1c PILULE Les femmes peuvent prendre une pilule chaque jour pour éviter de tomber enceinte	Oui.....1 Non.....2	
CO1d DIU Les femmes peuvent avoir un stérilet que le médecin ou l'infirmière leur place à l'intérieur.	Oui.....1 Non.....2	
CO1e INJECTIONS Les femmes peuvent avoir une injection faite par du personnel de santé pour éviter de tomber enceinte pendant un mois ou plus.	Oui.....1 Non.....2	
CO1f IMPLANTS Les femmes peuvent se faire insérer sous la peau de La partie supérieure du bras plusieurs petits bâtonnets qui les empêchent de tomber enceinte pendant une année ou plus.	Oui.....1 Non.....2	
CO1g CONDOM Les hommes peuvent se mettre une capote en caoutchouc au pénis pendant les rapports sexuels.	Oui.....1 Non.....2	
CO1h CONDOM FÉMININ Les femmes peuvent se placer un étui dans leur vagin avant les rapports sexuels	Oui.....1 Non.....2	
CO1b DIAPHRAGME Les femmes peuvent se placer un diaphragme dans leur vagin avant les rapports sexuels.	Oui.....1 Non.....2	
CO1i COMPRIME, MOUSSE OU GELÉE Les femmes peuvent s'insérer un comprimé, se mettre de la gelée ou de la crème dans leur vagin avant les rapports sexuels.	Oui.....1 Non.....2	
CO1j ABSTINENCE PERIODIQUE/RYTHME/CALENDRIER Une femme sexuellement active peut éviter une grossesse en évitant les rapports sexuels les jours du mois où elle a plus de chances de tomber enceinte.	Oui.....1 Non.....2	
CO1k RETRAIT Les hommes peuvent faire attention et se retirer avant l'éjaculation.	Oui.....1 Non.....2	
CO1l PILULE DU LENDEMAIN Les femmes peuvent prendre des pilules les jours après les rapports sexuels, jusqu'au troisième jour après, pour éviter de tomber enceinte.	Oui.....1 Non.....2	
CO1m Avez-vous entendu parler d'autres moyens ou méthodes que les femmes ou les hommes peuvent utiliser pour éviter une grossesse ?	Oui.....1 _____ (Préciser) Non.....2	
CO2. CERTAINS COUPLES UTILISENT DIFFERENTS MOYENS OU METHODES POUR RETARDER OU EVITER UNE	Oui.....1	

GROSSESSE. EN CE MOMENT, FAITES-VOUS QUELQUE CHOSE OU UTILISEZ-VOUS UNE METHODE POUR RETARDER OU EVITER UNE GROSSESSE ?	Non.....2	2⇨CO4
C03. QUE FAITES-VOUS ACTUELLEMENT POUR RETARDER OU EVITER UNE GROSSESSE ? *Ne suggérez pas de réponse.* *Si plus d'une méthode est mentionnée, encerclez chaque méthode.*	Stérilisation féminine .....A Stérilisation masculine.....B DIU ..... C Injections ..... D Implants.....E Pilules.....F Condom masculin..... G Condom féminin ..... H Diaphragme.....I Mousse/gelée ..... J Méthode de l'Allaitement Maternel et de l'Aménorrhée (MAMA).....K Abstinence périodique/Rythme/Calendrier .....L Retrait.....M Pilule du lendemain……N Autre (*précisez*) _____ X	
C04. AU COURS DES DERNIERS MOIS, AVEZ-VOUS DISCUTE DE LA PRATIQUE DE LA PLANIFICATION FAMILIALE AVEC VOS AMIS OU AMIES, VOS VOISINS OU VOISINES OU VOS PARENTS OU PARENTES ?	Oui.....1 Non.....2	2⇨MODULE SUIVANT
C05. AVEC QUI EN AVEZ-VOUS DISCUTE ? QUELQU'UN D'AUTRE ? Enregistrez tout ce qui est mentionné.	Mari/Partenaire……A Mère……B Père……C Sœurs……D Frères……E Fils……F Filles……G Belle-mère……H Ami(e)s, Voisin(e)s……I Autre (*précisez)*_____ X	

MODULE 4: VIH/SIDA		VS
VS1. MAINTENANT, JE VOUDRAIS VOUS PARLER D'UN AUTRE SUJET. AVEZ-VOUS DEJA ENTENDU PARLER D'UNE MALADIE APPELEE SIDA ?	Oui ..... 1 Non 2	 2⇨VS12
VS2. EST-CE QUE LES GENS PEUVENT REDUIRE LEUR RISQUE DE CONTRACTER LE VIRUS DU SIDA EN AYANT SEULEMENT UN PARTENAIRE SEXUEL QUI N'EST PAS INFECTE ET QUI N'A AUCUN AUTRE PARTENAIRE ?	Oui ..... 1 Non ..... 2 NSP 8	
VS3. EST-CE QUE LES GENS PEUVENT ATTRAPER LE VIRUS DU SIDA PAR SORCELLERIE OU AUTRES MOYENS SURNATURELS ?	Oui ..... 1 Non ..... 2 NSP 8	
VS4. EST-CE QUE LES GENS PEUVENT REDUIRE LEUR RISQUE DE CONTRACTER LE VIRUS DU SIDA EN UTILISANT UN CONDOM CHAQUE FOIS QU'ILS ONT DES RAPPORTS SEXUELS ?	Oui ..... 1 Non ..... 2 NSP 8	
VS5. EST-CE QUE LES GENS PEUVENT CONTRACTER LE VIRUS DU SIDA PAR DES PIQURES DE MOUSTIQUES ?	Oui ..... 1 Non ..... 2 NSP 8	
VS6. EST-CE QUE LES GENS PEUVENT CONTRACTER LE VIRUS DU SIDA EN PARTAGEANT LA NOURRITURE AVEC UNE PERSONNE ATTEINTE DU SIDA ?	Oui ..... 1 Non ..... 2 NSP 8	
VS7. EST-IL POSSIBLE QU'UNE PERSONNE PARAISSANT EN BONNE SANTE AIT, EN FAIT, LE VIRUS DU SIDA ?	Oui ..... 1 Non ..... 2 NSP 8	
VS8. EST-CE QUE LE VIRUS QUI CAUSE LE SIDA PEUT ETRE TRANSMIS DE LA MERE A SON BEBE ?	Oui Non NSP	
[A] AU COURS DE LA GROSSESSE ?	Au cours de la grossesse 1 2 8	
[B] PENDANT L'ACCOUCHEMENT ?	Pendant l'accouchement 1 2 8	
[C] EN ALLAITANT ?	En allaitant 1 2 8	
VS9. JE NE VEUX PAS CONNAITRE LES RESULTATS MAIS AVEZ-VOUS DEJA EFFECTUE UN TEST POUR SAVOIR SI VOUS AVIEZ LE VIRUS DU SIDA ?	Oui ..... 1 Non 2	 2⇨VS12
VS10. QUAND AVEZ-VOUS EFFECTUE LE TEST DU VIH/SIDA POUR LA DERNIERE FOIS ?	Il y a moins de 12 mois ..... 1 Il y a 12-23 mois ..... 2 Il y a 2 ans ou plus 3	
VS11. JE NE VEUX PAS CONNAITRE LES RESULTATS, MAIS, AVEZ-VOUS OBTENU LES RESULTATS DU TEST ?	Oui ..... 1 Non ..... 2 NSP 8	

Maintenant, je voudrais vous poser quelques questions sur votre activité sexuelle afin de mieux comprendre certains problèmes de la vie. Les informations que vous nous fournirez resteront strictement confidentielles.

Vérifiez la présence d'autres personnes, avant de continuer l'interview. Faites tout votre possible pour vous trouver en privé avec l'enquêtée.

VS12. ÊTES-VOUS ACTUELLEMENT MARIEE OU VIVEZ-VOUS ACTUELLEMENT AVEC UN HOMME, COMME SI VOUS ETIEZ MARIEE ?	Oui, actuellement mariée ..... 1 Oui, vit avec un homme ..... 2 Non, pas en union 3	
VS13. QUAND AVEZ-VOUS EU DES RAPPORTS SEXUELS POUR LA DERNIERE FOIS ? *Enregistrer en 'nombre d'années' seulement si les derniers rapports sexuels ont eu lieu il y a un an ou plus. Si 12 mois ou plus, la réponse doit être enregistrée en années.*	Il y a … jours ..... 1 __ __ Il y a … semaines ..... 2 __ __ Il y a … mois ..... 3 __ __ Il y a …ans ..... 4 __ __	4⇨**Module suivant**
VS14. LA DERNIERE FOIS QUE VOUS AVEZ EU DES RAPPORTS SEXUELS, EST-CE QU'UN CONDOM A ETE UTILISE ?	Oui ..... 1 Non 2	
VS15. QUELLE ETAIT VOTRE RELATION AVEC LA PERSONNE AVEC QUI VOUS AVEZ EU VOS DERNIERS RAPPORTS SEXUELS? *Si la personne est un 'petit ami' ou 'fiancé', demandez:* VIVIEZ-VOUS ENSEMBLE COMME SI VOUS ETIEZ MARIE ? *Si 'Oui', encerclez '01' ou'02'ou '03''04'. Si 'Non', encerclez '05'.*	Epoux ..... 01 Partenaire cohabitant..... 02 Ex-époux..... 03 Ex- partenaire cohabitant..... 04 Petit ami / fiancé ..... 05 Rencontre occasionnelle ..... 06 Travailleur (se) du sexe ..... 07 Autre (*précisez*) _____96	

MODULE 5: SANTÉ MATERNELLE		**SM**
Ce module concerne toutes les femmes qui ont un enfant âgé de 0-23 mois. Enregistrez ici le nom de l'enfant _____ *Quand vous posez les questions suivantes, utilisez le nom de l'enfant, là où c'est indiqué.*		
SM1. AVEZ-VOUS REÇU DES SOINS PRENATALS AU COURS DE LA GROSSESSE DE (*nom*) ?	Oui .....1 Non 2	 2⇨SM4
SM2. QUI AVEZ-VOUS VU ? *Insistez:* QUELQU'UN D'AUTRE ? *Insistez pour obtenir le type de personne vue et encerclez toutes les réponses données.*	Professionnel de la santé: Médecin ..... A Infirmier/Infirmière..... B Accoucheuse ..... D Sage-femme ..... E Autre personne Accoucheuse traditionnelle..... F Agent de santé communautaire.....G Autre (*précisez*) _____ X	
SM3. COMBIEN DE FOIS AVEZ-VOUS REÇU DES SOINS PRENATALS AU COURS DE CETTE GROSSESSE ?	Nombre de fois .....__ __ NSP 98	
SM4. AVEZ-VOUS UN CARNET OU AUTRE DOCUMENT DANS LEQUEL SONT INSCRITES TOUTES VOS VACCINATIONS ? PUIS-JE LE VOIR, S'IL VOUS PLAIT ? *Si un carnet vous est présenté, utilisez-le pour les réponses aux questions suivantes.*	Oui (carnet vu).....1 Oui (carnet non vu).....2 Non .....3 NSP 8	
SM5. QUAND VOUS ETIEZ ENCEINTE DE (*nom*), VOUS A-T-ON FAIT UNE INJECTION DANS LE BRAS OU A L'EPAULE POUR EVITER AU BEBE DE CONTRACTER LE TETANOS, C'EST-A-DIRE DES CONVULSIONS APRES LA NAISSANCE ?	Oui .....1 Non .....2 NSP 8	 2⇨SM7 8⇨SM7
SM6. COMBIEN DE FOIS AVEZ-VOUS REÇU CETTE INJECTION CONTRE LE TETANOS AU COURS DE LA GROSSESSE DE (*nom*)? *Si 7 fois ou plus, enregistrez '7'.*	Nombre de fois .....__ NSP 8	
SM7. QUI VOUS A ASSISTE PENDANT L'ACCOUCHEMENT DE (*nom*) ? *Insistez:* QUELQU'UN D'AUTRE ? *Insistez pour le type de personne qui a assisté l'accouchement et encerclez toutes les réponses mentionnées.* *Si l'enquêtée déclare que personne ne l'a assistée, insistez pour déterminer si aucun adulte n'était présent lors de l'accouchement.*	Professionnel de la santé: Médecin ..... A Infirmier/Infirmière..... B Accoucheuse ..... D Sage-femme ..... E Autre personne Accoucheuse traditionnelle..... F Agent de santé communautaire.....G Parent(e) / Ami(e) ..... H Autre (*précisez*) _____ X Personne ..... Y	

SM8. OU AVEZ-VOUS ACCOUCHE DE (*nom*) ? *Insistez pour obtenir le type d'endroit.* *Si vous ne pouvez déterminer si l'endroit est un établissement public ou privé, inscrivez le nom de l'endroit.* _____ *(Nom de l'endroit)*	Domicile Votre domicile.....11 Autre domicile.....12 Secteur médical public Hôpital du Gouvernement.....21 Clinique / Centre de santé du Gouv. .....22 Poste de santé du Gouv. .....23 Autre public (*précisez*) _____ 26 Secteur médical privé Hôpital privé.....31 Clinique privée.....32 Maternité privée.....33 Autre privé médical (*précisez*) _____ 36 Autre (*précisez*) _____ 96	
SM9. APRES LA NAISSANCE DE (*nom*), EST-CE QU'UN PROFESSIONNEL DE LA SANTE OU UNE AUTRE PERSONNE VOUS A EXAMINEE ?	Oui .....1 Non 2	2⇨SM12
SM10. APRES COMBIEN DE JOURS OU DE SEMAINES APRES L'ACCOUCHEMENT AVEZ-VOUS EU VOTRE PREMIER EXAMEN DE SANTE ? *Encerclez '1' et inscrivez "00" jour si même jour.*	Nombre de jours après ACC .....1 __ __ Nombre de semaines après ACC.....2 __ __ NSP 998	
SM11. QUI VOUS A EXAMINEE ? *Insistez:* QUELQU'UN D'AUTRE ? *Insistez pour obtenir le type de personne vue et encerclez toutes les réponses données.*	Professionnel de la santé: Médecin ..... A Infirmier/Infirmière..... B Accoucheuse ..... D Sage-femme ..... E Autre personne Accoucheuse traditionnelle .....F Agent de santé communautaire .....G Guérisseur traditionnel…….. H Maman du quartier/village…… I Autre (*précisez*)..... X	
SM12. DANS LES MOIS QUI ONT SUIVI L'ACCOUCHEMENT, AVEZ-VOUS RECU UNE DOSE DE VITAMINE A COMME CELLE-CI ?*Montrez la capsule*.	Oui .....1 Non 2	2⇨SM14
SM13. COMBIEN DE TEMPS APRES LA NAISSANCE DE (nom) AVEZ-VOUS REÇU LA PREMIERE DOSE DE VITAMINE A ?	Avant 1 mois …… 1 Entre 1 et 2 mois …….. 2 Entre 2 et 6 mois ……3 Après 6 mois …….. 4 NSP …….. 8	
SM14. MAINTENANT, JE VOUDRAIS VOUS PARLER D'UN AUTRE SUJET. AVEZ-VOUS DEJA ENTENDU PARLER D'UNE MALADIE APPELEE FISTULE, c'est-à-dire la maladie qui fait que la femme perd de l'urine et/ou défèque continuellement.	Oui .....1 Non …….. 2	**2⇨MODULE SUIVANT**
SM15. SELON VOUS, QUELLE EST LA PRINCIPALE CAUSE DE CETTE MALADIE ?	Accouchement …… 1 Intervention chirurgicale …… 2 Traumatisme …….. 3 NSP 8	
SM16. JE NE VEUX PAS CONNAITRE LE NOM, MAIS, Y A-T-IL, DANS VOTRE COMMUNAUTE, UNE FEMME QUI SOUFFRE DE CETTE MALADIE ?	Oui .....1 Non …….. 2 NSP …….. 8	

MODULE 6: SYMPTOMES DE MALADIES		SY
SY1. IL ARRIVE PARFOIS QUE LES ENFANTS SOIENT GRAVEMENT MALADES ET DOIVENT ETRE CONDUITS IMMEDIATEMENT DANS UN ETABLISSEMENT DE SANTE. QUELS SONT LES TYPES DE SYMPTOMES QUI VOUS INCITERAIENT A EMMENER IMMEDIATEMENT VOTRE ENFANT DANS UN ETABLISSEMENT DE SANTE ? *Insistez:* AUCUN AUTRE SYMPTOME ? *Insistez pour autres signes ou symptômes jusqu'à ce que la mère ne se souvienne plus d'autre signes ou symptômes.* *Encerclez tous les symptômes mentionnés, mais ne suggérez PAS de réponses*	Enfant incapable de boire ou de téter ..... A État de l'enfant s'aggrave..... B Enfant devient fiévreux..... C Enfant respire rapidement..... D Enfant a des difficultés pour respirer..... E Enfant a du sang dans les selles .....F Enfant boit difficilement ..... G Enfant fait la diarrhée ..... H Enfant fait des vomissements .....I Autre (*précisez*) _____ X Autre (*précisez*) _____ Y Autre (*précisez*) _____ Z	

MODULE 7: CONTACTS AVEC LES SERVICES DE SANTE		CS-SIS
CS1. AU COURS DU DERNIER MOIS, COMBIEN DE FOIS ETES-VOUS ENTREE EN CONTACT AVEC LES PROFESSIONNELS DE SANTE SUIVANTS:	Catégories de codage Fréquemment (4 fois ou plus) Parfois (1-3 fois) Ne jamais (0 fois)	
Médicin	1 2 3	
Infirmière/Sage-femme	1 2 3	
Relais communautaire	1 2 3	
Personne chargée du contrôle de croissance	1 2 3	
Acchoucheuse qualifiée	1 2 3	
Guérisseur traditionnel	1 2 3	
Autre (précisez): _____	1 2 3	
S'IL Y AVAIT AU MOINS UN CONTACT DE SANTE MENTIONNE CI-DESSUS, PASSEZ A LA QUESTION SUIVANTE. SINON, PASSEZ À LA QUESTION RC4.		
CS2. A quelle occasion êtes-vous entrée en contact avec cette (ces) personne (s) ?	Visites de routine ……..... A Visites de sensibilisation sur un sujet de santé ……..…….....… B Visites pour annoncer une activité future ..... C Autre (précisez) _____ X	

CS3 QUELLES PRATIQUES DE SANTE AVEZ-VOUS APPRISES AU CONTACT DE CES PROFESSIONNELS DE SANTE ? *INSISTEZ:* AUTRE PRATIQUE ? *ENREGISTREZ TOUT CE QUI EST MENTIONNE.*	L'allaitement maternel exclusif …… A Une bonne nutrition…… .B Les Vaccinations…….. C La prévention et traitement de la diarrhée…… D La prévention et traitement des infections respiratoires aiguës …….. E La prévention et traitement du paludisme……F L'éducation et l'utilisation de méthodes de planification familiale…….. G La prévention et le traitement du VIH / SIDA……H Autre (précisez): _____ X	
CS4. auprès de qui avez-vous l'habitude d'obtenir des informations générales ou des conseils en matière de sante ou de nutrition ? *Enregistrez tout ce qui est mentionné.*	Réseau formel Médecin .....A Infirmier/Sage-femme .....B Sage-femme auxiliaire ..... C Relais communautaire .....D Personne contrôle de la croissance ..... E Acchoucheuse qualifiée .....F Réseau informel L'époux / partenaire ..... G Mère / Mère adoptive .....H Sœur ..... I Grand-parent ..... J Tante ..... K Ami/voisin ..... L Guérisseur traditionnel ..... M Anciens du Village ..... N Autre (précisez) _____ X	
CS5. AU COURS DU DERNIER MOIS, AVEZ-VOUS REÇU DES MESSAGES DE SANTE A TRAVERS LES CANAUX SUIVANTS?	Oui Non Relais communautaires? ..... 1 2 Médecin ou infirmière? ..... 1 2 Membre de famille? ..... 1 2 Radio? ..... 1 2 Journal/revue? …..... 1 2 Télévision? ..... 1 2 Ecole ..... 1 2 Autre: (précisez): _____	

Observations de l'enquêteur/enquêtrice

Observations du Superviseur

MANAGEMENT SCIENCES FOR HEALTH (MSH)
PROJET DE SANTE INTEGRE (PROSANI)

QUESTIONNAIRE ENFANTS DE 0-5 MOIS

CADRE D'INFORMATION SUR L'ENFANT DE 0-5 MOIS	
Ce questionnaire doit être administré à la mère dont le plus jeune enfant est âgé de 0-5 mois	
01. Nom et Numéro de la communauté Nom _____ ___ ___ ___	**02. Numéro de ménage dans la communauté** ___ ___
03. Nom et numéro de l'Aire de Santé Nom _____ ___ ___	**04. Nom et numéro de la Zone de Santé** Nom _____ ___
05. Nom et numéro de l'Aire de Supervision (A.S.) Nom _____ ___	
06. Nom et code de la Province Kasaï Occidental …….... 1 Kasaï Oriental ……..…….... 2 Katanga …….... 3 Sud-Kivu …….... 4	**07. Milieu de résidence** Urbain …….. 1 Rural …….. 2
08. Nom et Numéro de l'enfant dans l'A.S. Nom _____ ___ ___	**09. Nom de la mère (répondante)** _____
10. Date de naissance de l'enfant Jour Mois Année ____ ____ / ____ ____/ ____ ____ ____ ____	**11. Age de l'enfant (en mois)** ____ ____
12. Nom et code de l'enquêteur/enquêtrice Nom_____ ___ ___ ___	**13. Jour / Mois / Année de l'interview** ___ ___ / ___ ___ / ___ ___ ___ ___

NOUS TRAVAILLONS SUR UN PROJET CONCERNANT LA SANTE DES MERES ET DES ENFANTS. JE VOUDRAIS VOUS PARLER DE CES SUJETS A PROPOS DE (***nom de l'enfant***). L'INTERVIEW DEVRAIT PRENDRE ENVIRON 30 MINUTES. TOUTES LES INFORMATIONS QUE NOUS RECUEILLONS RESTERONT STRICTEMENT CONFIDENTIELLES ET VOS REPONSES NE SERONT JAMAIS CONNUES DE PERSONNE EN DEHORS DU CADRE DU PROJET.

PUIS-JE COMMENCER MAINTENANT ?

- ☐ *Oui, permission accordée ⇨ Allez au module « Composition du ménage » pour commencer l'interview.*
- ☐ *Non, permission non accordée ⇨ Discutez ce résultat avec votre chef hiérarchique.*

14. Contrôlé sur le terrain par (Nom et code): Nom _____ ___ ___ ___	**15. Agent de saisie (Nom et code):** Nom _____ ___ ___

MODULE 1: ALLAITEMENT		AL
AL1. EST-CE QUE (*nom*) A ETE ALLAITE ?	Oui ..... 1 Non ..... 2 NSP 8	 2⇨AL3 8⇨AL3
AL2. EST-CE QUE (*nom*) EST ENCORE ALLAITE?	Oui ..... 1 Non ..... 2 NSP 8	
AL3. JE VOUDRAIS MAINTENANT VOUS DEMANDER QUELS LIQUIDES (*nom*) A RECU HIER PENDANT LE JOUR OU LA NUIT. JE CHERCHE A SAVOIR SI (*nom*) A REÇU CE LIQUIDE MEME S'IL ETAIT MELANGE AVEC D'AUTRES ALIMENTS. EST-CE QUE (*nom*) A BU DE L'EAU HIER, PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	
AL4. EST-CE QUE (*nom*) A BU UNE PREPARATION POUR BEBE VENDUE EN COMMERCE (lait maternisé) PRECISER) HIER, PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	 2⇨AL6 8⇨AL6
AL5. COMBIEN DE FOIS (*nom*) A T-IL BU UNE PREPARATION POUR BEBE VENDUE EN COMMERCE ?	Nombre de fois ..... __ __	
AL6. EST-CE QUE (*nom*) A BU DU LAIT TEL QUE DU LAIT EN BOITE, EN POUDRE OU DU LAIT FRAIS D'ANIMAL, HIER PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	 2⇨AL8 8⇨AL8
AL7. COMBIEN DE FOIS (*nom*) A T-IL BU DU LAIT EN BOITE, EN POUDRE OU DU LAIT FRAIS D'ANIMAL ?	Nombre de fois ..... __ __	
AL8. EST-CE QUE (*nom*) A BU DES JUS DE FRUITS OU DES BOISSONS A BASE DE JUS, HIER PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	
AL9. EST-CE QUE (*nom*) A BU DE LA SOUPE (POTAGE) HIER PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	
AL10. EST-CE QUE (*nom*) A BU DES SUPPLEMENTS VITAMINIQUES OU MINERAUX OU DES MEDICAMENTS, HIER PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	
AL11. EST-CE QUE (*nom*) A BU UNE SRO (SOLUTION DE REHYDRATATION ORALE) HIER PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	
AL12. EST-CE QUE (*nom*) A BU DU THE /INFUSION, HIER PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	

AL13. EST-CE QUE (*nom*) A BU D'AUTRES LIQUIDES HIER PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	
AL14. EST-CE QUE (*nom*) A BU OU MANGE DES YAOURTS HIER, PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	 2⇨AL16 8⇨AL16
AL15. COMBIEN DE FOIS (*nom*) A T-IL BU OU MANGE DES YAOURTS HIER, PENDANT LE JOUR OU LA NUIT ?	Nombre de fois ..... __ __	
AL16. EST-CE QUE (*nom*) A MANGE DE LA BOUILLIE LEGERE HIER, PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	
AL17. EST-CE QUE (*nom*) A MANGE DES ALIMENTS SOLIDES OU SEMI SOLIDES (EN BOUILLIE, PUREE) HIER, PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	 2⇨FIN 8⇨FIN
AL18. COMBIEN DE FOIS (*nom*) A T-IL MANGE DES ALIMENTS SOLIDES OU SEMI SOLIDES (EN BOUILLIE, PUREE) HIER, PENDANT LE JOUR OU LA NUIT ?	Nombre de fois ..... __ __	

Observations de l’enquêteur/enquêtrice

Observations du Superviseur

MANAGEMENT SCIENCES FOR HEALTH (MSH)
PROJET DE SANTE INTEGRE (PROSANI)

QUESTIONNAIRE ENFANT DE 6-23 MOIS

CADRE D'INFORMATION SUR L'ENFANT DE 6-23 MOIS	
Ce questionnaire doit être administré à la mère dont le plus jeune enfant est âgé de 6-23 mois	
01. Nom et Numéro de la communauté Nom _____ ___ ___ ___	**02. Numéro de ménage dans la communauté** ___ ___
03. Nom et numéro de l'Aire de Santé Nom _____ ___ ___	**04. Nom et numéro de la Zone de Santé** Nom _____ ___
05. Nom et numéro de l'Aire de Supervision (A.S.) Nom _____ ___	
06. Nom et code de la Province Kasaï Occidental …….. 1 Kasaï Oriental …….. 2 Katanga …….. 3 Sud-Kivu …….. 4	**07. Milieu de résidence** Urbain …….. 1 Rural …….. 2
08. Nom et Numéro de l'enfant dans l'A.S. Nom _____ ___ ___	**09. Nom de la mère (Répondante)** _____
10. Date de naissance de l'enfant Jour Mois Année ____ ____ / ____ ____/ ____ ____ ____ ____	**11. Age de l'enfant (en mois)** ____ ____
12. Nom et code de l'enquêteur/enquêtrice Nom_____ ___ ___ ___	**13. Jour / Mois / Année de l'interview** ___ ___ / ___ ___ / ___ ___ ___ ___

NOUS TRAVAILLONS SUR UN PROJET CONCERNANT LA SANTE DES MERES ET DES ENFANTS. JE VOUDRAIS VOUS PARLER DE CES SUJETS A PROPOS DE (***nom de l'enfant***). L'INTERVIEW DEVRAIT PRENDRE ENVIRON 30 MINUTES. TOUTES LES INFORMATIONS QUE NOUS RECUEILLONS RESTERONT STRICTEMENT CONFIDENTIELLES ET VOS REPONSES NE SERONT JAMAIS CONNUES DE PERSONNE EN DEHORS DU CADRE DU PROJET.

PUIS-JE COMMENCER MAINTENANT ?

- ☐ *OUI, PERMISSION ACCORDEE ⇨ Allez au module « Composition du ménage » pour commencer l'INTERVIEW.*
- ☐ *NON, PERMISSION NON ACCORDEE ⇨ DISCUTEZ CE RESULTAT AVEC VOTRE CHEF HIERARCHIQUE.*

14. Contrôlé sur le terrain par (Nom et code): Nom _____ ___ ___ ___	**15. Agent de saisie (Nom et code):** Nom _____ ___ ___

MODULE 1: ALIMENTATION DE L'ENFANT		AE
AE1. EST-CE QUE (*NOM*) A ETE ALLAITE ?	Oui ..... 1 Non ..... 2 NSP 8	 2⇨AL3 8⇨AL3
AE2. EST-CE QUE (*NOM*) EST ENCORE ALLAITE?	Oui ..... 1 Non ..... 2 NSP 8	
AE3. JE VOUDRAIS MAINTENANT VOUS DEMANDER QUELS LIQUIDES (*NOM*) A RECU HIER PENDANT LE JOUR OU LA NUIT. JE CHERCHE A SAVOIR SI (*NOM*) A REÇU CE LIQUIDE MEME S'IL ETAIT MELANGE AVEC D'AUTRES ALIMENTS. EST-CE QUE (*NOM*) A BU DE L'EAU HIER, PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	
AE4. EST-CE QUE (*NOM*) A BU UNE PREPARATION POUR BEBE VENDUE EN COMMERCE (LAIT MATERNISE) PRECISER) HIER, PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	 2⇨AL6 8⇨AL6
AE5. COMBIEN DE FOIS (*NOM*) A T-IL BU UNE PREPARATION POUR BEBE VENDUE EN COMMERCE ?	Nombre de fois ..... __ __	
AE6. EST-CE QUE (*NOM*) A BU DU LAIT TEL QUE DU LAIT EN BOITE, EN POUDRE OU DU LAIT FRAIS D'ANIMAL, HIER PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	 2⇨AL8 8⇨AL8
AE7. COMBIEN DE FOIS (*NOM*) A T-IL BU DU LAIT EN BOITE, EN POUDRE OU DU LAIT FRAIS D'ANIMAL ?	Nombre de fois ..... __ __	
AE8. EST-CE QUE (*NOM*) A BU DES JUS DE FRUITS OU DES BOISSONS A BASE DE JUS, HIER PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	
AE9. EST-CE QUE (*NOM*) A BU DE LA SOUPE (POTAGE) HIER PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	
AE10. EST-CE QUE (*NOM*) A BU DES SUPPLEMENTS VITAMINIQUES OU MINERAUX OU DES MEDICAMENTS, HIER PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	
AE11. EST-CE QUE (*NOM*) A BU UNE SRO (SOLUTION DE REHYDRATATION ORALE) HIER PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	
AE12. EST-CE QUE (*NOM*) A BU DU THE /INFUSION, HIER PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	

AE13. EST-CE QUE (*nom*) A BU D'AUTRES LIQUIDES HIER PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	
AE14. EST-CE QUE (*nom*) A BU OU MANGE DES YAOURTS HIER, PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	 2⇨AE16 8⇨AE16
AE15. COMBIEN DE FOIS (*nom*) A T-IL BU OU MANGE DES YAOURTS HIER, PENDANT LE JOUR OU LA NUIT ?	Nombre de fois ..... __ __	
AE16. EST-CE QUE (*nom*) A MANGE DE LA BOUILLIE LEGERE HIER, PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	
AE17. EST-CE QUE (*nom*) A MANGE DES ALIMENTS SOLIDES OU SEMI SOLIDES (EN BOUILLIE, PUREE) HIER, PENDANT LE JOUR OU LA NUIT ?	Oui ..... 1 Non ..... 2 NSP 8	 2⇨Module suivant 8⇨module suivant
AE18. COMBIEN DE FOIS (*nom*) A T-IL MANGE DES ALIMENTS SOLIDES OU SEMI SOLIDES (EN BOUILLIE, PUREE) HIER, PENDANT LE JOUR OU LA NUIT ?	Nombre de fois ..... __ __	

MODULE 2: SUPPLEMENTATION EN VITAMINE A		**VA**
VA1. EST-CE QUE (*nom*) A REÇU UNE DOSE DE VITAMINE A, DOSE COMME CELA, AU COURS DES 6 DERNIERS MOIS ? *Montrez les types d'ampoules/capsule / sirops les plus communs*	Oui ..... 1 Non ..... 2 NSP 8	**2⇨ FIN** **8⇨ FIN**
VA2. A QUELLE DATE (nom) A-T-IL REÇU LA DOSE LA PLUS RECENTE ? *Enregistrez la date de la prise de Vitamine la plus récente telle que vue sur le carnet de vaccination* *Ecrivez '44' pour jour si le carnet montre qu'une dose de Vit A a été donnée mais que la date n'a pas été enregistrée ; laissez le mois et l'année en blanc.*	Jour ..... __ __ Mois ..... __ __ Année ..... __ __ __ __ Pas de mention de Vitamine A portée sur le carnet ..... 99999994 Pas de carnet /carnet pas vu 99999995	
VA3. A quelle occasion (nom) a-t-il reçu la vitamine A ?	*Campagne* ..... 1 *Routine* ..... 2 *Cas de maladie* ..... 3 *Autre* 6	

Observations de l'enquêteur/enquêtrice

Observations du Superviseur

MANAGEMENT SCIENCES FOR HEALTH (MSH)
PROJET DE SANTE INTEGRE (PROSANI)

QUESTIONNAIRE ENFANT DE 12-23 MOIS

CADRE D'INFORMATION SUR L'ENFANT DE 12-23 MOIS

Ce questionnaire doit être administré à la mère dont le plus jeune enfant est âgé de 12-23 mois

01. Nom et Numéro de la communauté Nom _____ ___ ___ ___	**02. Numéro de ménage dans la communauté** ___ ___
03. Nom et numéro de l'Aire de Santé Nom _____ ___ ___	**04. Nom et numéro de la Zone de Santé** Nom _____ ___
05. Nom et numéro de l'Aire de Supervision (A.S.) Nom _____ ___	
06. Nom et code de la Province Kasaï Occidental ……..… 1 Kasaï Oriental ……..…… 2 Katanga …… 3 Sud-Kivu …… 4	**07. Milieu de résidence** Urbain …….. 1 Rural …… 2
08. Nom et Numéro de l'enfant dans l'A.S. Nom _____ ___ ___	**09. Nom de la mère (Répondante)** _____
10. Date de naissance de l'enfant Jour Mois Année ____ ____ / ____ ____/ ____ ____ ____ ____	**11. Age de l'enfant (en mois)** ____ ____
12. Nom et code de l'enquêteur/enquêtrice Nom_____ ___ ___ ___	**13. Jour / Mois / Année de l'interview** ___ ___ / ___ ___ / ___ ___ ___ ___

NOUS TRAVAILLONS SUR UN PROJET CONCERNANT LA SANTE DES MERES ET DES ENFANTS. JE VOUDRAIS VOUS PARLER DE CES SUJETS A PROPOS DE (***nom de l'enfant***). L'INTERVIEW DEVRAIT PRENDRE ENVIRON 30 MINUTES. TOUTES LES INFORMATIONS QUE NOUS RECUEILLONS RESTERONT STRICTEMENT CONFIDENTIELLES ET VOS REPONSES NE SERONT JAMAIS CONNUES DE PERSONNE EN DEHORS DU CADRE DU PROJET.

PUIS-JE COMMENCER MAINTENANT ?

- ☐ *OUI, PERMISSION ACCORDEE ⇨ Allez au module « Composition du ménage » pour commencer l'INTERVIEW.*
- ☐ *NON, PERMISSION NON ACCORDEE ⇨ DISCUTEZ CE RESULTAT AVEC VOTRE CHEF HIERARCHIQUE.*

14. Contrôlé sur le terrain par (Nom et code): Nom _____ ___ ___ ___	**15. Agent de saisie (Nom et code):** Nom _____ ___ ___

MODULE 1: VACCINATIONS **VA**

Si un carnet (une carte) de vaccination (ou une fiche de consultation préscolaire) est disponible, recopiez les dates à VA3 pour chaque vaccination enregistrée sur le carnet (la carte ou la fiche de consultation préscolaire). Les questions VA6-VA17 servent à enregistrer les vaccinations qui ne sont pas inscrites sur le carnet (la carte ou la fiche de consultation préscolaire). Vous ne poserez les questions VA6 à VA17 que si le carnet (carte ou fiche de consultation préscolaire) n'est pas disponible.

VA1. AVEZ-VOUS UN CARNET (UNE CARTE/FICHE DE CONSULTATION PRESCOLAIRE) OU LES VACCINATIONS DE (*nom*) SONT ENREGISTREES? (SI *Oui*) PUIS-JE LE VOIR, S'IL VOUS PLAIT ?	Oui, vu ..... 1 Oui, non vu ..... 2 Pas de carnet 3	1⇨VA3 2⇨VA6
VA2. AVEZ-VOUS DEJA EU UN CARNET (UNE CARTE/ FICHE DE CONSULTATION PRESCOLAIRE) DE VACCINATION POUR (*nom*) ?	Oui ..... 1 Non 2	1⇨VA6 2⇨VA6

VA3.
(a) Recopiez les dates de chaque vaccination à partir du carnet (de la carte/fiche de consultation préscolaire).
(b) Inscrivez '44'dans la colonne jour si le carnet (la carte/fiche de consultation préscolaire) montre que le vaccin a été donné mais que la date n'a pas été enregistrée.

		Date des vaccinations								
		Jour		Mois		Année				
BCG	BCG									
POLIO À LA NAISSANCE	VPO0									
POLIO 1	VPO 1									
POLIO 2	VPO 2									
POLIO 3	VPO 3									
DTCOQ 1	DTCOQ1									
DTCOQ 2	DTCOQ2									
DTCOQ 3	DTCOQ 3									
HEPB1	H1									
HEPB2	H2									
HEPB3	H3									
ROUGEOLE (VAR)	VAR									
FIÈVRE JAUNE	VAA									

VA4. *Vérifiez VA3. Est-ce que toutes les vaccinations (du BCG à la Fièvre Jaune) sont enregistrées?*

☐ *Oui⇨ Fin de l'interview*

☐ *Non ⇨ Continuez avec VA5*

VA5. EN PLUS DE CE QUI EST ENREGISTRE SUR CE CARNET (CETTE CARTE/FICHE DE CONSULTATION PRESCOLAIRE), EST-CE QUE (*nom*) A REÇU D'AUTRES VACCINS – Y COMPRIS DES VACCINS REÇUS AU COURS DES CAMPAGNES OU DES JOURNEES DE VACCINATIONS ? *Enregistrez 'Oui' seulement si l'enquêtée mentionne des vaccins qui figurent dans le tableau ci-dessus.*	Oui ..... 1 *(Insistez pour les vaccins et inscrivez '66' à la colonne jour correspondante pour chaque vaccin mentionné. Ensuite, terminez l'interview* Non ..... 2 NSP 8	 2⇨Fin 8⇨Fin
VA6. EST-CE QUE (*nom*) A DEJA REÇU DES VACCINS POUR LUI EVITER DE CONTRACTER DES MALADIES, Y COMPRIS DES VACCINS REÇUS AU COURS DES CAMPAGNES OU DE JOURNEES DE VACCINATIONS ?	Oui ..... 1 Non ..... 2 NSP 8	 2⇨ Fin 8⇨ Fin
VA7. EST-CE QUE (*nom*) A DEJA REÇU LE VACCIN DU BCG CONTRE LA TUBERCULOSE – C'EST-A-DIRE UNE INJECTION FAITE A L'AVANT BRAS GAUCHE ET QUI LAISSE HABITUELLEMENT UNE CICATRICE ?	Oui ..... 1 Non ..... 2 NSP 8	
VA8. EST-CE QUE (*nom*) A REÇU UN « VACCIN SOUS FORME DE GOUTTES DANS LA BOUCHE » POUR LE/LA PROTEGER CONTRE DES MALADIES - C'EST-A-DIRE LA POLIO ?	Oui ..... 1 Non ..... 2 NSP 8	 2⇨ VA11 8⇨ VA11
VA9. EST-CE QUE LA PREMIERE DOSE DU VACCIN CONTRE LA POLIO A ETE DONNEE DANS LES DEUX SEMAINES QUI ONT SUIVI LA NAISSANCE OU PLUS TARD ?	Dans les 2 premières semaines ..... 1 Plus tard..... 2	
VA10. COMBIEN DE FOIS LE VACCIN CONTRE LA POLIO A-T-IL ETE DONNE ?	Nombre de fois ..... __	
VA11. EST-CE QUE (*nom*) A DEJA REÇU « LE VACCIN DTCOQ » – C'EST-A-DIRE UNE INJECTION A LA CUISSE OU A LA FESSE – POUR LUI EVITER DE CONTRACTER LE TETANOS, LA COQUELUCHE ET LA DIPHTERIE ? *Insistez en précisant que le vaccin du DTCoq est parfois donné en même temps que la polio*	Oui ..... 1 Non ..... 2 NSP 8	 2⇨VA13 8⇨VA13
VA12. COMBIEN DE FOIS A-T-ON DONNE A (*nom*) LE VACCIN DTCOQ ?	Nombre de fois ..... __	
VA13. EST-CE QUE (*nom*) A DEJA REÇU LE VACCIN CONTRE L'HEPATITE B – C'EST-A-DIRE UNE INJECTION A LA CUISSE OU A LA FESSE – POUR LUI EVITER DE CONTRACTER L'HEPATITE B *Insistez en précisant que le vaccin contre l'hépatite B est parfois donné en même temps que les vaccins de la polio et du DTCoq*	Oui ..... 1 Non ..... 2 NSP 8	 2⇨VA16 8⇨VA16
VA14. EST-CE QUE LA PREMIERE DOSE D'HEPATITE B A ETE DONNEE DANS LES 24 H APRES LA NAISSANCE OU PLUS TARD ?	Dans les 24 h après naissance ..... 1 Plus tard..... 2	
VA15. COMBIEN DE FOIS LE VACCIN CONTRE L'HEPATITE B A-T-IL ETE DONNE ?	Nombre de fois ..... __	
VA16. EST-CE QUE (*nom*) A DEJA REÇU LE « VACCIN CONTRE LA ROUGEOLE » OU VAR - C'EST-A-DIRE UNE INJECTION FAITE AU BRAS GAUCHE A L'AGE DE **9** MOIS OU PLUS - POUR LUI EVITER DE CONTRACTER LA ROUGEOLE ?	Oui ..... 1 Non ..... 2 NSP 8	

VA17. EST-CE QUE (*nom*) A DEJA REÇU UNE INJECTION CONTRE LA FIEVRE JAUNE - C'EST-A-DIRE UNE INJECTION FAITE AU BRAS DROIT A L'AGE DE **9** MOIS OU PLUS - POUR LUI EVITER DE CONTRACTER LA FIEVRE JAUNE ? *Insistez en précisant que le vaccin de la fièvre jaune est parfois donné en même temps que le vaccin de la rougeole.*	Oui ..... 1 Non ..... 2 NSP 8	

Observations de l’enquêteur/enquêtrice

Observations du Superviseur

MANAGEMENT SCIENCES FOR HEALTH (MSH)
PROJET DE SANTE INTEGRE (PROSANI)

QUESTIONNAIRE ENFANTS DE 0-23 MOIS

CADRE D'INFORMATION SUR L'ENFANT DE 0-23 MOIS	
Ce questionnaire doit être administré à la mère dont le plus jeune enfant est âgé de 0-23 mois	
01. Nom et Numéro de la communauté Nom _____ ___ ___ ___	**02. Numéro de ménage dans la communauté** ___ ___
03. Nom et numéro de l'Aire de Santé Nom _____ ___ ___	**04. Nom et numéro de la Zone de Santé** Nom _____ ___
05. Nom et numéro de l'Aire de Supervision (A.S.) Nom _____ ___	
06. Nom et code de la Province Kasaï Occidental …….... 1 Kasaï Oriental ……..…….... 2 Katanga …….. 3 Sud-Kivu …….. 4	**07. Milieu de résidence** Urbain …….. 1 Rural …….. 2
08. Nom et Numéro de l'enfant dans l'A.S. Nom _____ ___ ___	**09. Nom de la mère (Répondante)** _____
10. Date de naissance de l'enfant Jour Mois Année ____ ____ / ____ ____/ ____ ____ ____ ____	**11. Age de l'enfant (en mois)** ____ ____
12. Nom et code de l'enquêteur/enquêtrice Nom_____ ___ ___ ___	**13. Jour / Mois / Année de l'interview** ___ ___ / ___ ___ / ___ ___ ___ ___

NOUS TRAVAILLONS SUR UN PROJET CONCERNANT LA SANTE DES MERES ET DES ENFANTS. JE VOUDRAIS VOUS PARLER DE CES SUJETS A PROPOS DE (***nom de l'enfant***). L'INTERVIEW DEVRAIT PRENDRE ENVIRON 30 MINUTES. TOUTES LES INFORMATIONS QUE NOUS RECUEILLONS RESTERONT STRICTEMENT CONFIDENTIELLES ET VOS REPONSES NE SERONT JAMAIS CONNUES DE PERSONNE EN DEHORS DU CADRE DU PROJET.

PUIS-JE COMMENCER MAINTENANT ?

- ☐ *OUI, PERMISSION ACCORDEE ⇨ Allez au module « Composition du ménage » pour commencer l'INTERVIEW.*
- ☐ *NON, PERMISSION NON ACCORDEE ⇨ DISCUTEZ CE RESULTAT AVEC VOTRE CHEF HIERARCHIQUE.*

14. Contrôlé sur le terrain par (Nom et code): Nom _____ ___ ___ ___	**15. Agent de saisie (Nom et code):** Nom _____ ___ ___

MODULE 1: ALLAITEMENT INITIAL		**AP**
Ce module concerne toutes les femmes qui ont un enfant âgé de 0-23 mois. Enregistrez ici le nom de l'enfant _____ *Quand vous posez les questions suivantes, utilisez le nom de l'enfant, là où c'est indiqué.*		
AP1. AVEZ-VOUS ALLAITE (*NOM*)?	Oui .....1 Non 2	2⇨ MODULE SUIVANT
AP2. COMBIEN DE TEMPS APRES LA NAISSANCE AVEZ-VOUS MIS (*NOM*) AU SEIN POUR LA PREMIERE FOIS ? SI MOINS D'1 HEURE, NOTEZ '00' HEURE. SI MOINS DE 24 HEURES, NOTEZ EN HEURES. AUTREMENT, NOTEZ EN JOURS	Immédiatement.....000 Heures .....1 __ __ Jours.....2 __ __ Ne sait pas/ Ne se rappelle pas 998	

MODULE 2: MOUSTIQUAIRE IMPREGNEE D'INSECTICIDE		MI
MI1. EST-CE QUE VOTRE MENAGE POSSEDE DES MOUSTIQUAIRES QUI PEUVENT ETRE UTILISEES POUR DORMIR ?	Oui …….. 1 Non …….. 2	**2⇨Module suivant**
MI2. COMBIEN DE MOUSTIQUAIRES VOTRE MENAGE POSSEDE T-IL ? *Si le ménage possède 7 moustiquaires ou plus, inscrivez '7'*	Nombre de moustiquaires..... ___	
MI3. (*Nom de l'enfant*) A-T-IL (ELLE) DORMI SOUS UNE MOUSTIQUAIRE LA NUIT DERNIERE	Oui …… 1 Non …… 2	**2⇨Module suivant**
Demandez à l'enquêté de vous montrer la moustiquaire sous laquelle l'enfant a dormi la nuit précédant l'enquête.		
MI4. *Moustiquaire observée?*	Observée ..... ……1 Non observée 2	**2⇨MI6**
MI5. *Observez ou demandez la marque/type de moustiquaire*	Moustiquaire imprégnée de longue durée Permanet (Serena) ..... 11 Olyset ..... ….12 Net Protect ..... 13 Duranet ..... 14 Interceptor ..... 15 Autre (*précisez)* _____ 16 NSP marque..... 18 Autre moustiquaire *(précisez)* _____31 NSP marque / type 98	
MI6. OU AVEZ-VOUS OBTENU CETTE MOUSTIQUAIRE ?	Lors d'une campagne …….. 1 Dans un centre de santé…….. 2 Autre *(précisez)* _____6	
MI7. DEPUIS COMBIEN DE MOIS VOTRE MENAGE A T-IL CETTE MOUSTIQUAIRE? *Si moins d'un mois, enregistrez '00'*	Nombre de Mois…….. ___ ___ Plus de 36 mois .....…..95 NSP / Pas sûr 98	
MI8. *Vérifiez MI5 pour le type de moustiquaire*	☐ *Longue durée (11-18)* ☐ *Autre*	⇨ *Module suivant*
MI9. QUAND VOUS AVEZ OBTENU CETTE MOUSTIQUAIRE, ETAIT-ELLE DEJA TRAITEE AVEC UN INSECTICIDE QUI TUE OU ELOIGNE LES MOUSTIQUES?	Oui ..... 1 Non ..... 2 NSP / Pas sûr 8	
MI10. DEPUIS QUE VOUS AVEZ CETTE MOUSTIQUAIRE, A-T-ELLE ETE TREMPEE OU PLONGEE DANS UN LIQUIDE QUI TUE OU ELOIGNE LES MOUSTIQUES ?	Oui …… 1 Non ..... 2 ⇨ Module suivant NSP / Pas sûr …… 8 ⇨ Module suivant	
MI11. COMBIEN DE MOIS SE SONT ECOULES DEPUIS QUE LA MOUSTIQUAIRE A ETE TREMPEE OU PLONGEE POUR LA DERNIERE FOIS ? *Si moins d'un mois, enregistrez '00'*	Nombre de Mois ..... ___ ___ Plus de 24 mois ..... 95 NSP / Pas sûr 98	

MODULE 3: ANTHROPOMÉTRIE		AN
Après avoir rempli tous les modules, le technicien pèse et mesure la taille de l'enfant. *Enregistrez ci-dessous le poids et la taille mesurée en position allongée.*		
AN1. Nom et code du mesureur:	Nom_____ ___ ___ ___	
AN2. Poids de l'enfant	Kilogrammes (kg) .....__ __ . __	
AN3. Taille de l'enfant en position allongée	Taille (cm) .....1 __ __ __ . __	

Observations de l'enquêteur/enquêtrice

Observations du Superviseur

MANAGEMENT SCIENCES FOR HEALTH (MSH)
PROJET DE SANTE INTEGRE (PROSANI)

QUESTIONNAIRE ENFANTS DE 0-23 MOIS AVEC DIARRHEE

CADRE D'INFORMATION SUR L'ENFANT DE 0-23 MOIS AVEC DIARRHEE	
Ce questionnaire doit être administré à la mère dont le plus jeune enfant âgé de 0-23 mois a eu de la diarrhée au cours des deux semaines précédant l'enquête.	
01. Nom et Numéro de la communauté Nom _____ ___ ___ ___	**02. Numéro de ménage dans la communauté** ___ ___
03. Nom et numéro de l'Aire de Santé Nom _____ ___ ___	**04. Nom et numéro de la Zone de Santé** Nom _____ ___
05. Nom et numéro de l'Aire de Supervision (A.S.) Nom _____ ___	
06. Nom et code de la Province Kasaï Occidental …….... 1 Kasaï Oriental ……..…….... 2 Katanga …….. 3 Sud-Kivu …….. 4	**07. Milieu de résidence** Urbain …….. 1 Rural …….. 2
08. Nom et Numéro de l'enfant dans l'A.S. Nom _____ ___ ___	**09. Nom de la mère (Répondante)** _____
10. Date de naissance de l'enfant Jour Mois Année ____ ____ / ____ ____/ ____ ____ ____ ____	**11. Age de l'enfant (en mois)** ____ ____
12. Nom et code de l'enquêteur/enquêtrice Nom_____ ___ ___ ___	**13. Jour / Mois / Année de l'interview** ___ ___ / ___ ___ / ___ ___ ___ ___

NOUS TRAVAILLONS SUR UN PROJET CONCERNANT LA SANTE DES MERES ET DES ENFANTS. JE VOUDRAIS VOUS PARLER DE CES SUJETS A PROPOS DE (***nom de l'enfant***). L'INTERVIEW DEVRAIT PRENDRE ENVIRON 30 MINUTES. TOUTES LES INFORMATIONS QUE NOUS RECUEILLONS RESTERONT STRICTEMENT CONFIDENTIELLES ET VOS REPONSES NE SERONT JAMAIS CONNUES DE PERSONNE EN DEHORS DU CADRE DU PROJET.

PUIS-JE COMMENCER MAINTENANT ?

☐ *OUI, PERMISSION ACCORDEE* ⇨ *Allez au module « Composition du ménage » pour commencer l'INTERVIEW.*

☐ *NON, PERMISSION NON ACCORDEE* ⇨ *DISCUTEZ CE RESULTAT AVEC VOTRE CHEF HIERARCHIQUE.*

14. Contrôlé sur le terrain par (Nom et code): Nom _____ ___ ___ ___	**15. Agent de saisie (Nom et code):** Nom _____ ___ ___

MODULE 1: TRAITEMENT DE LA DIARRHEE		TD
TD1. EST-CE QUE (*nom*) A EU LA DIARRHEE AU COURS DES DEUX DERNIERES SEMAINES ?	Oui ..... 1 Non ..... 2 NSP 8	 2⇨FIN 8⇨FIN
TD2. JE VOUDRAIS SAVOIR QUELLE QUANTITE DE LIQUIDES A ETE DONNEE A (*nom*) DURANT SA DIARRHEE (Y COMPRIS LE LAIT MATERNEL). PENDANT QUE (*nom*) AVAIT LA DIARRHEE, A T-IL/ELLE RECU A BOIRE MOINS QUE D'HABITUDE, ENVIRON LA MEME QUANTITE OU PLUS QUE D'HABITUDE ? *Si moins, insistez*: EST-CE QU'IL/ELLE A RECU BEAUCOUP MOINS A BOIRE QUE D'HABITUDE, OU UN PEU MOINS A BOIRE QUE D'HABITUDE ?	Beaucoup moins ..... 1 Un peu moins ..... 2 Environ la même quantité ..... 3 Plus ..... 4 Rien à boire ..... 5 NSP 8	
TD3. PENDANT QUE (*nom*) AVAIT LA DIARRHEE, A-T-IL/ELLE RECU A MANGER MOINS QUE D'HABITUDE, ENVIRON LA MEME QUANTITE, PLUS QUE D'HABITUDE OU N'A-T-IL/ELLE RIEN MANGE ? *Si moins, insistez*: EST-CE QU'IL/ELLE A RECU BEAUCOUP MOINS A MANGER QUE D'HABITUDE, OU UN PEU MOINS A MANGER QUE D'HABITUDE ?	Beaucoup moins ..... 1 Un peu moins ..... 2 Environ la même quantité ..... 3 Plus ..... 4 A stoppé nourriture ..... 5 N'a jamais donné à manger ..... 6 NSP 8	
TD4. AU COURS DE SA DIARRHEE, AVEZ-VOUS DONNE A BOIRE A (*nom*) L'UN DES PRODUITS SUIVANTS: *Lisez à haute voix le nom de chaque produit et enregistrez la réponse avant de passer au produit suivant.* [A] UN LIQUIDE PREPARE A PARTIR D'UN SACHET SPECIAL APPELE (*nom local du sachet de solution SRO*) ? [B] UN LIQUIDE SRO PRECONDITIONNE POUR LA DIARRHEE ? [C] UN LIQUIDE MAISON (SOLUTION SALEE SUCREE-SSS =*recommandé par le gouvernement*) ?	O N NSP Liquide sachet SRO ..... 1 2 8 Liquide SRO préconditionné ..... 1 2 8 Liquide maison recommandé 1 2 8	
TD5. EST-CE QUE QUELQUE CHOSE (D'AUTRE) A ETE DONNE POUR TRAITER LA DIARRHEE ?	Oui ..... 1 Non ..... 2 NSP 8	 2⇨FIN 8⇨FIN

TD6. QU'A-T-ON DONNE (D'AUTRE) POUR TRAITER LA DIARRHEE? *Insistez:* RIEN D'AUTRE ? *Enregistrez tous les traitements donnés. Inscrivez les noms de tous les médicaments mentionnés.* _____ *(Noms des médicaments)*	Comprimé ou Sirop Antibiotique..... A Antimotilité..... B Zinc..... C Autre (pas antibiotique, antimotilité ou zinc)..... G Comprimé ou sirop inconnu ..... H Injection Antibiotique..... L Non-antibiotique ..... M Injection inconnue ..... N Intraveineuse..... O Remède maison/ herbes médicinales..... Q Autre (*précisez*) _____ X	

Observations de l’enquêteur/enquêtrice

Observations du Superviseur

MANAGEMENT SCIENCES FOR HEALTH (MSH)
PROJET DE SANTE INTEGRE (PROSANI)

QUESTIONNAIRE ENFANTS DE 0-23 MOIS AVEC PNEUMONIE PRESUMEE

CADRE D'INFORMATION SUR L'ENFANT DE 0-23 MOIS AVEC PNEUMONIE PRESUMEE	
Ce questionnaire doit être administré à la mère dont le plus jeune enfant âgé de 0-23 mois a eu une pneumonie présumée au cours des deux semaines précédant l'enquête.	
01. Nom et Numéro de la communauté Nom _____ ___ ___ ___	**02. Numéro de ménage dans la communauté** ___ ___
03. Nom et numéro de l'Aire de Santé Nom _____ ___ ___	**04. Nom et numéro de la Zone de Santé** Nom _____ ___
05. Nom et numéro de l'Aire de Supervision (A.S.) Nom _____ ___	
06. Nom et code de la Province Kasaï Occidental ……..... 1 Kasaï Oriental ……..…….... 2 Katanga …….. 3 Sud-Kivu …… 4	**07. Milieu de résidence** Urbain …….. 1 Rural …… 2
08. Nom et Numéro de l'enfant dans l'A.S. Nom _____ ___ ___	**09. Nom de la mère (Répondante)** _____
10. Date de naissance de l'enfant Jour Mois Année ____ ____ / ____ ____/ ____ ____ ____ ____	**11. Age de l'enfant (en mois)** ____ ____
12. Nom et code de l'enquêteur/enquêtrice Nom_____ ___ ___ ___	**13. Jour / Mois / Année de l'interview** ___ ___ / ___ ___ / ___ ___ ___ ___

NOUS TRAVAILLONS SUR UN PROJET CONCERNANT LA SANTE DES MERES ET DES ENFANTS. JE VOUDRAIS VOUS PARLER DE CES SUJETS A PROPOS DE (***nom de l'enfant***). L'INTERVIEW DEVRAIT PRENDRE ENVIRON 30 MINUTES. TOUTES LES INFORMATIONS QUE NOUS RECUEILLONS RESTERONT STRICTEMENT CONFIDENTIELLES ET VOS REPONSES NE SERONT JAMAIS CONNUES DE PERSONNE EN DEHORS DU CADRE DU PROJET.

PUIS-JE COMMENCER MAINTENANT ?

- ☐ *OUI, PERMISSION ACCORDEE ⇨ Allez au module « Composition du ménage » pour commencer l'INTERVIEW.*
- ☐ *NON, PERMISSION NON ACCORDEE ⇨ DISCUTEZ CE RESULTAT AVEC VOTRE CHEF HIERARCHIQUE.*

14. Contrôlé sur le terrain par (Nom et code):	**15. Agent de saisie (Nom et code):**
Nom _____ ___ ___ ___	Nom _____ ___ ___

MODULE 1: TRAITEMENT DE LA PNEUMONIE PRESUMEE	PP	
PP1. EST-CE QU'AU COURS DES DEUX DERNIERES SEMAINES, (*nom*) A ETE MALADE AVEC DE LA TOUX ?	Oui .....1 Non .....2 NSP 8	 2⇨ Fin 2⇨ Fin
PP2. QUAND (*nom*) ETAIT MALADE AVEC DE LA TOUX, EST-CE QU'IL/ELLE RESPIRAIT PLUS VITE QUE D'HABITUDE AVEC UN SOUFFLE COURT ET RAPIDE OU EST-CE QU'IL/ELLE AVAIT DES DIFFICULTES POUR RESPIRER ?	Oui .....1 Non .....2 NSP 8	 2⇨ Fin 2⇨ Fin
PP3. AVEZ-VOUS RECHERCHE DES CONSEILS OU UN TRAITEMENT POUR LA MALADIE A L'EXTERIEUR DE LA MAISON ?	Oui .....1 Non .....2 NSP 8	 2⇨ PP5 2⇨ PP5
PP4. OU AVEZ-VOUS RECHERCHE DES CONSEILS OU UN TRAITEMENT ? *Insistez:* NULLE PART AILLEURS ? *Encerclez tous les endroits mentionnés, Mais ne suggérez PAS de réponse.* *Insistez pour identifiez chaque type d'endroit.* *Si vous ne pouvez déterminer si l'endroit appartient au secteur public ou privé, inscrivez le nom de l'endroit.* _____ *(Nom de l'endroit)*	Secteur public Hôpital de l'Etat ..... A Centre de santé de l'Etat ..... B Poste de santé de l'Etat..... C Agent de santé communautaire ..... D Clinique mobile/communautaire ..... E Autre public (*précisez*) _____ H Secteur médical privé Hôpital/clinique privé .....I Médecin privé .....J Pharmacie privée ..... K Clinique mobile .....L Autre médical privé (*précisez*) _____ O Autre source Parent (e)/ Ami (e ..... P Boutique .....Q Praticien traditionnel ..... R Eglises ..... S Autre (*précisez*) _____X	
PP5. EST-CE QU'ON A DONNE A (*nom*) UN MEDICAMENT POUR TRAITER CETTE MALADIE ?	Oui .....1 Non .....2 NSP 8	 2⇨ Fin 2⇨ Fin
PP6. QUEL MEDICAMENT A-T-ON DONNE A (*nom*) ? *Insistez:* AUCUN AUTRE MEDICAMENT ? *Encerclez tous les médicaments donnés. Inscrivez le nom des marques de tous les médicaments mentionnés.* _____ *(Nom des médicaments)*	Antibiotique Comprimé / Sirop..... A Injection ..... B Antipaludéens.....M Paracétamol/Panadol/Acétaminophène..... P Aspirine.....Q Ibuprofen ..... R Autre (*précisez*) _____X NSP .....Z	

Observations de l’enquêteur/enquêtrice

Observations du Superviseur

MANAGEMENT SCIENCES FOR HEALTH (MSH)
PROJET DE SANTE INTEGRE (PROSANI)

QUESTIONNAIRE ENFANTS DE 0-23 MOIS AVEC FIEVRE

CADRE D'INFORMATION SUR L'ENFANT DE 0-23 MOIS AVEC FIEVRE	
Ce questionnaire doit être administré à la mère dont le plus jeune enfant âgé de 0-23 mois a eu de la fièvre au cours des deux semaines précédant l'enquête.	
01. Nom et Numéro de la communauté Nom _____ ___ ___ ___	**02. Numéro de ménage dans la communauté** ___ ___
03. Nom et numéro de l'Aire de Santé Nom _____ ___ ___	**04. Nom et numéro de la Zone de Santé** Nom _____ ___
05. Nom et numéro de l'Aire de Supervision (A.S.) Nom _____ ___	
06. Nom et code de la Province Kasaï Occidental …….... 1 Kasaï Oriental ……..…….... 2 Katanga …….. 3 Sud-Kivu …….. 4	**07. Milieu de résidence** Urbain …….. 1 Rural …….. 2
08. Nom et Numéro de l'enfant dans l'A.S. Nom _____ ___ ___	**09. Nom de la mère (Répondante)** _____
10. Date de naissance de l'enfant Jour Mois Année ____ ____ / ____ ____/ ____ ____ ____ ____	**11. Age de l'enfant (en mois)** ____ ____
12. Nom et code de l'enquêteur/enquêtrice Nom_____ ___ ___ ___	**13. Jour / Mois / Année de l'interview** ___ ___ / ___ ___ / ___ ___ ___ ___

NOUS TRAVAILLONS SUR UN PROJET CONCERNANT LA SANTE DES MERES ET DES ENFANTS. JE VOUDRAIS VOUS PARLER DE CES SUJETS A PROPOS DE (***nom de l'enfant***). L'INTERVIEW DEVRAIT PRENDRE ENVIRON 30 MINUTES. TOUTES LES INFORMATIONS QUE NOUS RECUEILLONS RESTERONT STRICTEMENT CONFIDENTIELLES ET VOS REPONSES NE SERONT JAMAIS CONNUES DE PERSONNE EN DEHORS DU CADRE DU PROJET.

PUIS-JE COMMENCER MAINTENANT ?

☐ *OUI, PERMISSION ACCORDEE ⇨ Allez au module « Composition du ménage » pour commencer l'INTERVIEW.*

☐ *NON, PERMISSION NON ACCORDEE ⇨ DISCUTEZ CE RESULTAT AVEC VOTRE CHEF HIERARCHIQUE.*

14. Contrôlé sur le terrain par (Nom et code):	**15. Agent de saisie (Nom et code):**
Nom _____ ___ ___ ___	Nom _____ ___ ___

MODULE 1: TRAITEMENT DU PALUDISME		TP
TP1. AU COURS DES DEUX DERNIERES SEMAINES, EST-CE QUE (*nom*) A ETE MALADE AVEC DE LA FIEVRE ?	Oui..... 1 Non..... 2 NSP..... 8	
TP2. À N'IMPORTE QUEL MOMENT DURANT SA MALADIE, EST-CE QUE (*nom*) A EU DU SANG PRELEVE AU BOUT DE SON DOIGT OU AU TALON POUR EFFECTUER UN TEST ?	Oui..... 1 Non..... 2 NSP..... 8	
TP3. AVEZ-VOUS RECHERCHE DES CONSEILS OU UN TRAITEMENT QUELQUE PART OU AUPRES DE QUELQU'UN POUR LA MALADIE ?	Oui..... 1 Non..... 2 NSP..... 8	 2⇨TP8 8⇨TP8
TP4. EST-CE QUE (*nom*) A ETE EMMENE DANS UN ETABLISSEMENT DE SANTE DURANT SA MALADIE ?	Oui..... 1 Non..... 2 NSP..... 8	 2⇨TP8 8⇨TP8
TP5. EST-CE QUE L'ON A DONNE A (*nom*) UN MEDICAMENT POUR LA FIEVRE OU LE PALUDISME DANS CET ETABLISSEMENT DE SANTE ?	Oui..... 1 Non..... 2 NSP..... 8	 2⇨TP7 8⇨TP7
TP6. QUEL MEDICAMENT A-T- ON DONNE A (*nom*) ? *Insistez:* AUCUN AUTRE MEDICAMENT ? *Encerclez tous les médicaments mentionnés. Si des médicaments ont été donnés, inscrivez les noms de tous les médicaments.* _____ *(Nom des médicaments)*	*Antipaludéens:* SP (*)…….....A Chloroquine…….....B Amodiaquine/Camoquin/ Flavoquine.....C Quinine.....D Combinaison avec Artémisinine(**) .....E Antipaludique/site de soins à base communautaire .....F Autre antipaludique (*précisez*) _____H *Antibiotiques* Comprimés / Sirop .....I Injection..... J *Autres médicaments:* Paracétamol/ Panadol /Acétaminophen .P Aspirine ..... Q Ibuprofen .....R Autre (*précisez*)_____X NSP.....Z	
TP7. EST-CE QU'ON A DONNE A (*nom*) UN MEDICAMENT POUR LA FIEVRE OU LE PALUDISME AVANT D'ETRE CONDUIT DANS UN ETABLISSEMENT DE SANTE ?	Oui..... 1 Non..... 2 NSP..... 8	1⇨TP9 2⇨TP10 8⇨TP10
TP8. EST-CE QU'ON A DONNE A (*nom*) UN MEDICAMENT POUR LA FIEVRE OU LE PALUDISME AU COURS DE CETTE MALADIE ?	Oui..... 1 Non..... 2 NSP..... 8	 2⇨TP10 8⇨TP10

(*) SP = Falcidox, Malariadexin, Fansidar, Paludose, etc.
(**)Combinaison avec Artémisinine = Serenadose, Luther, Coartem, Co-arinate, Co-arsucam, Artemod, Arsumoon, etc.

TP9. QUEL MEDICAMENT A-T-ON DONNE A (*nom*) ?	*Antipaludéens:* SP (*)..... A	

Insistez: AUCUN AUTRE MEDICAMENT ? *Encerclez tous les médicaments mentionnés. Si des médicaments ont été donnés, inscrivez les noms de tous les médicaments.* _____ *(Nom des médicaments)* .	Chloroquine ..... B Amodiaquine/Camoquin/Flavoquine ..... C Quinine ..... D Combinaison avec Artémisinine(**)..... E Antipaludique/site de soins à base communautaire .....F Autre antipaludique (*précisez*) _____ H *Antibiotiques* Comprimés / Sirop.....I Injection .....J *Autres médicaments:* Paracétamol/ Panadol /Acétaminophen. P Aspirine.....Q Ibuprofen ..... R Autre (*précisez*) _____ X NSP .....Z	
TP10. *Vérifiez TP6 et TP9: Antipaludéens mentionnés (codes A - H)?* ☐ *Oui. ⇨ Continuez avec TP11* ☐ *Non. ⇨ Fin de l'interview*		
TP11. COMBIEN DE TEMPS APRES QUE LA FIEVRE AIT COMMENCE, (*nom*) A-T-IL/ELLE PRIS POUR LA PREMIERE FOIS (*nom de l'antipaludéen déclaré à TP6 ou TP9*)? *Si plusieurs antipaludéens ont été déclarés à TP6 ou TP9, donnez le nom de tous les antipaludéens mentionnés* *Enregistrez combien de temps après le début de la fièvre le premier antipaludéen a été donné.*	Même jour .....0 Jour suivant .....1 2 jours après début de la fièvre.....2 3 jours après début de la fièvre.....3 4 jours ou plus après début de la fièvre .....4 NSP 8	

(*) SP = Falcidox, Malariadexin, Fansidar, Paludose, etc.
(**)Combinaison avec Artémisinine = Serenadose, Luther, Coartem, Co-arinate, Co-arsucam, Artemod, Arsumoon, etc.

Observations de l’enquêteur/enquêtrice

Observations du Superviseur

MANAGEMENT SCIENCES FOR HEALTH (MSH)
PROJET DE SANTE INTEGRE (PROSANI)

QUESTIONNAIRE FEMMES ENCEINTES

CADRE D'INFORMATION SUR LA FEMME ENCEINTE	
Ce questionnaire doit être administré à la femme enceinte.	
01. Nom et Numéro de la communauté Nom _____ ___ ___ ___	**02. Numéro de ménage dans la communauté** ___ ___
03. Nom et numéro de l'Aire de Santé Nom _____ ___ ___	**04. Nom et numéro de la Zone de Santé** Nom _____ ___
05. Nom et numéro de l'Aire de Supervision (A.S.) Nom _____ ___	
06. Nom et code de la Province Kasaï Occidental …….... 1 Kasaï Oriental ……..…….... 2 Katanga …….. 3 Sud-Kivu …….. 4	**07. Milieu de résidence** Urbain …….. 1 Rural …….. 2
08. Nom de la femme Nom _____ ___ ___	**09. Numéro de la femme dans l'A.S.** ___ ___
10. Date de naissance de la femme Jour Mois Année ____ ____ / ____ ____/ ____ ____ ____ ____	**11. Age de la femme (en années)** ____ ____
12. Nom et code de l'enquêteur/enquêtrice Nom_____ ___ ___ ___	**13. Jour / Mois / Année de l'interview** ___ ___ / ___ ___ / ___ ___ ___ ___

NOUS TRAVAILLONS SUR UN PROJET CONCERNANT LA SANTE DES MERES ET DES ENFANTS. JE VOUDRAIS VOUS PARLER DE CES SUJETS. L'INTERVIEW DEVRAIT PRENDRE ENVIRON 10 MINUTES. TOUTES LES INFORMATIONS QUE NOUS RECUEILLONS RESTERONT STRICTEMENT CONFIDENTIELLES ET VOS REPONSES NE SERONT JAMAIS CONNUES DE PERSONNE EN DEHORS DU CADRE DU PROJET.

PUIS-JE COMMENCER MAINTENANT ?

- ☐ *Oui, permission accordée ⇨ Allez au module « Composition du ménage » pour commencer l'interview.*
- ☐ *Non, permission non accordée ⇨ Discutez ce résultat avec votre chef hiérarchique.*

14. Contrôlé sur le terrain par (Nom et code): Nom _____ ___ ___ ___	**15. Agent de saisie (Nom et code):** Nom _____ ___ ___

MODULE 1: MOUSTIQUAIRE IMPREGNEE D'INSECTICIDE		MI
MI1. EST-CE QUE VOTRE MENAGE POSSEDE DES MOUSTIQUAIRES QUI PEUVENT ETRE UTILISEES POUR DORMIR ?	Oui …….. 1 Non …….. 2	**2⇨Module suivant**
MI2. COMBIEN DE MOUSTIQUAIRES VOTRE MENAGE POSSEDE T-IL ? *Si le ménage possède 7 moustiquaires ou plus, inscrivez '7'*	Nombre de moustiquaires..... ___	
MI3. AVEZ-VOUS DORMI SOUS UNE MOUSTIQUAIRE LA NUIT DERNIERE ?	Oui …… 1 Non …… 2	**2⇨Module suivant**
Demandez à l'enquêté de vous montrer la moustiquaire sous laquelle la femme a dormi la nuit précédant l'enquête.		
MI4. *Moustiquaire observée?*	Observée ..... ……1 Non observée 2	**2⇨MI6**
MI5. *Observez ou demandez la marque/type de moustiquaire*	Moustiquaire imprégnée de longue durée Permanet (Serena) ..... 11 Olyset ..... ….12 Net Protect ..... 13 Duranet ..... 14 Interceptor ..... 15 Autre (*précisez)* _____ 16 NSP marque..... 18 Autre moustiquaire *(précisez)* _____31 NSP marque / type 98	
MI6. OU AVEZ-VOUS OBTENU CETTE MOUSTIQUAIRE ?	Lors d'une campagne …….. 1 Dans un centre de santé…….. 2 Autre *(précisez)* _____6	
MI7. DEPUIS COMBIEN DE MOIS VOTRE MENAGE A T-IL CETTE MOUSTIQUAIRE? *Si moins d'un mois, enregistrez '00'*	Nombre de Mois…….. ___ ___ Plus de 36 mois ..... …..95 NSP / Pas sûr 98	
MI8. *Vérifiez MI5 pour le type de moustiquaire*	☐ *Longue durée (11-18)* ☐ *Autre*	⇨ *Module suivant*
MI9. QUAND VOUS AVEZ OBTENU CETTE MOUSTIQUAIRE, ETAIT-ELLE DEJA TRAITEE AVEC UN INSECTICIDE QUI TUE OU ELOIGNE LES MOUSTIQUES?	Oui ..... 1 Non ..... 2 NSP / Pas sûr 8	
MI10. DEPUIS QUE VOUS AVEZ CETTE MOUSTIQUAIRE, A-T-ELLE ETE TREMPEE OU PLONGEE DANS UN LIQUIDE QUI TUE OU ELOIGNE LES MOUSTIQUES ?	Oui …… 1 Non ..... 2 ⇨ Module suivant NSP / Pas sûr …… 8 ⇨ Module suivant	
MI11. COMBIEN DE MOIS SE SONT ECOULES DEPUIS QUE LA MOUSTIQUAIRE A ETE TREMPEE OU PLONGEE POUR LA DERNIERE FOIS ? *Si moins d'un mois, enregistrez '00'*	Nombre de Mois ..... ___ ___ Plus de 24 mois ..... 95 NSP / Pas sûr 98	

Observations de l’enquêteur/enquêtrice

Observations du Superviseur