

**KAGERA HEALTH AND DEVELOPMENT SURVEY
2004**

MANUAL FOR SUPERVISORS

University of Dar es Salaam
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INTRODUCTION

A. Overview

In the Kagera Health and Development Survey (KHDS) 2004, the supervisor is the key link between the field work, the project management and data entry operations.

Prior the field work, the Supervisor has the following responsibilities:

- Reviewing the Questionnaires and their respective manuals.
- Revisiting the former clusters¹ and collecting information on the spreading of Household.
- Recruitment of interviewers.
- Training of recruited interviewers.

During the field work the supervisor has the principal responsibilities of field team management and quality control of the data collection effort. These responsibilities include:

- Managing the field team when away from Bukoba office.
- Detection of errors on the questionnaires before the team leaves the village. This will be done by direct consultations with respondent and review of the questionnaires.
- The Supervisor is responsible for the management of the team's personnel and equipment (including 2 GPS receivers assigned to each team).
- The supervisor is the channel for communication between the project management and the field team. He/she sees that the advice of the management is followed and keeps the team informed of any data collections and entry problems.

To do these things, the supervisor must have a good understanding of the work to be done by each member of the field team. In other words, the supervisor must be familiar with the content not only of this manual but also of the instruction manuals for the interviewers and the data entry operator.

B. Background

The Supervisors should refer to the Interviewer Manual for the description of:

- the objectives of the KHDS-2
- description of the surveys
- project team organization
- interviewer's tasks
- description of purpose and instructions for sections of the Household Questionnaire

C. Supervisor's Tasks

The remainder of this manual summarizes the tasks of the supervisor. Sections I-XII provide more detailed information on each task. Since the supervisor must check the work of all of the field team members, you should also be familiar with the contents of the Interviewer Manual, the Anthropometry Instruction, and the GPS Instructions.

¹ Households interviewed in the 1991-1994 KHDS resided in 51 clusters (or Enumeration Areas, EAs) in all 6 districts of Kagera.

The supervisor plays a critical role during the field work when the data are collected using various survey instruments. The most important of the supervisor's responsibilities is to ensure the quality of the data collected and entered. To this end, a number of specific tasks have been assigned to him/her:

- I. Preparing the team.
- II. Introduction to the community. The supervisor introduces the members of the field team to the village leaders and explains the purpose of the survey in each of the localities to be surveyed.
- III. Finding the selected households. The supervisor must help the interviewers to find the selected households. The supervisor must also help the interviewers to persuade reluctant households to participate.
- IV. Preparing the questionnaires for Interviews
- V. Verification and coding of the household questionnaires. The supervisor will check that the questionnaires have been correctly completed. If necessary, he/she will ask the interviewers to go back to the household to complete the questionnaires. Once the household questionnaire is complete, the supervisor must code the household enterprises in Section 13.
- VI. Monitoring interviews. Every day the supervisor will select at random at least one of the households interviewed on the previous day, to reinterview by asking certain questions again. Once every week during the survey, the supervisor will accompany each interviewer on one of their visits to observe his/her interview techniques.
- VII. Review data entry reports. The Data Entry Manager will provide the supervisor with short reports highlighting problems found on household or other questionnaires and forms. The supervisor should give feedback to the interviewers regarding these reports.
- VIII. Complete the Adult Mortality Questionnaire.
- IX. Confirm that the Anthropometric Questionnaire is completed.
- X. Community, Price and School questionnaires. The supervisor will be responsible for completing the community questionnaire, in discussion with local authorities and citizens. The supervisor will also conduct the price and school questionnaires in each cluster.
- XI. Submitting all completed paperwork.
- XII. Managing the equipment and team members.
- XIII. Relationship with Management

The tasks and responsibilities of the supervisor are explained in detail in the following sections.

I. PREPARING THE TEAM

Before you being in a community, the project team will prepare a list of households to be interviewed. It is your responsibility to make sure you have all the necessary equipment and information to interview these households if they can be contacted.

Before you enter the next community, make sure your team is prepared. Confirm that:

- the team has enough questionnaires (plus some extra copies) for the number of households you are expected to interview. This includes Household, Anthropometric and Mortality Questionnaires.
- you have the Household Tracking Form (including Individual and Informant Tracking Forms) and Previous Children Living Elsewhere Rosters for all households listed
- you have blank copies of the Community, School and Price Questionnaires
- all 3 GPS units are working properly and you have back-up batteries
- all Anthropometric equipment is working properly (which requires calibrating them).
- the scale (for the price survey) is working properly
- every interviewer has a working calculator
- you have enough copies of the Verification, Direct Observation, and Re-Interview Forms

II. INTRODUCTION TO THE COMMUNITY

The supervisor will arrive in the community with the rest of the team the day before the start of the interviewing. Accompanied by the interviewers, the supervisor will visit the chairman and other leaders to explain the purpose of the survey, introduce the members of the team and discuss the interview schedule for the time in the community. They will already have been informed of the team's arrival through the announcement sent earlier and during the tracking phase before the main field work began.

A. Explanation of the Survey

First, the supervisor should introduce himself/herself and the interviewers and say that they are working for the Kagera Health and Development Survey, Sponsored by the University of Dar es Salaam and the World Bank. This is a re-survey of the same communities interviewed in 1991-94. Next, he/she should explain that:

- They are interviewing households to find out what present living conditions are like, especially health and economic situation. This survey is the follow-up of the previous survey which was done in 1991- 1994. The survey is thus very important for planners, so that they will know how to improve people's living standards. It has been approved by the Tanzania Commission for Science and Technology (COSTECH) and by Regional Authorities.
- The households that will be interviewed are those which emerged from the former interviewed households in 1991-94.
- The survey is not concerned in any way with taxes. All of the information collected is strictly confidential. The results will be analyzed for all households as a group; the results for individual households will not be revealed.

B. Contacting the Households

The day the team arrives in the village there will be no interviews. The interviewers, accompanied by the supervisor and the 10-cell leaders, should use the time to make contact with all the households who will be interviewed during the week, to introduce themselves, explain the purpose of the survey and set a day and time for the interviews. The interviewer should always be accompanied by the 10-cell leader and the supervisor when he/she first makes contact with the household.

C. Recruitment of Interpreters

In some instances the respondents will not speak Kiswahili and will need the help of an interpreter to answer the questions. If there is someone among the interviewers who speaks the local dialect, care should be taken to see that he/she is sent to households that need an interpreter.

If none of the interviewers speak the local language, then an interpreter will be needed. There are two ways of finding an interpreter: (1) ask the head of household to choose someone; or (2) ask the village chairman or 10-cell leader to recruit someone.

The best interpreter is someone chosen by the respondent, since the questions are confidential and the interpreter must be someone the respondent is willing to trust. The supervisor should be aware, however, that there are certain problems with this solution. First, it is difficult to know how good the translation is. The respondent's friend who speaks Kiswahili may not speak it well enough to translate everything said during the interview, and he will not want to admit it.

Another problem that often arises is that the interpreter chosen by the respondent knows the household's affairs so well that he wants to answer the questions directly without translating them for the respondent. If that happens, the interpreter will have to be reminded, frequently but politely, that the respondent is the person who was chosen to be interviewed and that only the respondent's answers can be recorded on the questionnaire.

III. FINDING THE SELECTED HOUSEHOLDS

The total number of household to be interviewed will be identified after the pre-visit tracking. We expect at least 3 times as many households to have emerged from the 800 household which were interviewed previously (1991-1994). The majority of households to be interviewed will be living in the original 51 sample clusters (also known as communities or enumeration areas). The next largest group will be living in nearby villages. The households in the original KHDS 51 clusters and those in nearby villages will be interviewed during the main field work. For the remaining households which have migrated to further locations (including outside of the region of Kagera), they will be interviewed during the tracking phase of the field work.

Before arriving in the area to be surveyed you will be given the list of the households to be interviewed, constructed after the pre-visit tracking activities. Several problems can arise, however:

- You may have difficulties in finding a particular household, either because the information noted during pre-visit was not well documented or because the households has again moved to another area.
- The respondents for all sections may not be available on the day of interview.
- A household may refuse to take part in the survey or to answer the questions in certain sections.

A. Difficulties in Finding a Household

If the interviewer cannot find one of the households, the supervisor should go with him/her to the place and ask for information from the neighbors, the 10-cell leader, or the village chairman.

If the interviewer finds that the household identified in the pre-visit tracking has merged with another households, the Household Tracking Form should be appropriately updated. **NOTE:** Each team will have multiple copies of the Household Tracking Form for a former KHDS 1991-94 household (since the former 1991-94 households have now split-off into several new households). It is the responsibility of the Supervisor to maintain ONE master copy of a Household Tracking Form for each former 1991-94 households). This master copy is returned to Headquarters so that the Household Tracking Form data base can be updated.

B. Absence of Respondents.

Each part of the interview is directed to a specific respondent. If the person who is supposed to reply to any part of the questionnaire is not available on the interviewer's first visit, he must inquire when he may return to interview that person.

C. Refusals

In some cases, an individual respondent or an entire household may refuse to participate. Interviewers may encounter two different kinds of refusal: a total refusal to take any part in the survey, or a refusal to answer questions once the interview has begun. To avoid refusals, the interviewer must be very careful in his/her first contacts with the household.

The most frequent reasons for refusal to cooperate are:

- *The respondents fear that any information they may reveal on their income will be used for tax purposes.* This fear, which is found most commonly among upper income urban households, can be reduced if the interviewers stress certain points, as follows:
 - Any information provided will be kept strictly confidential. Taken together with information collected from other families it will enable the researchers to obtain an overall view of the conditions of households, without revealing anything at all about any specific household. The secrecy of the data will thus be maintained.
 - The survey will enable the researchers to design better policies for improving the health and standard of living of everyone in the region. Households will benefit from providing accurate data which will only be used to help them.
- The respondents do not wish to have an interviewer in their home for such a long time. The best way of coping with this situation, which is also encountered most frequently in urban households, is for the interviewers to:
 - make sure that their personal appearance is excellent;
 - show their identification proving that they are working for Afya na Maendeleo (Kagera Health and Development Survey) Project;
 - be extremely courteous toward members of the household. It is essential to follow this at all times, even when interviewers are not well received; and,
 - offer to return at a time or on a day that is more convenient for the household.

If the interviewer cannot persuade the household to cooperate, the supervisor must him or herself visit the household and try to persuade it to do so. The supervisor may ask whether the interviewer has been polite, and so forth. If the household still refuses to cooperate, a replacement must be found, following the rules set out below.

IV. VERIFICATION AND CODING OF THE HOUSEHOLD QUESTIONNAIRES

A. Verification of the Household Questionnaire

Every morning in the field, before the team sets out for more interviews, you must verify that all completed household interviews from the previous day have questionnaires that are completely filled out. That is to say, that everyone who should have been interviewed has replied and that every section is complete. Verification must be made before Household questionnaire is returned to the Data Entry team in Bukoba.

You must complete a *Verification Form* for each household questionnaire returned to Bukoba. Each step of verification is described in the Verification Form.

If any of the items on the Verification Form is unsatisfactory, you must return the questionnaire to the interviewer and ask him/her to correct it immediately, before leaving to interview a new household.

B. Coding of the Household Questionnaire

Almost all of the responses to the household questionnaire have been pre-coded and are marked on the questionnaire. The interviewer will copy the codes into the questionnaire during the interview. However, there is one place in the questionnaire where the supervisor must provide a code or complete the question. This is in the Section 3 on Main Activities of the Household, the column for Question 6 labeled "OFFICE USE". The supervisor must write the code that corresponds to the type of each business or profession listed. The code list is below.

Section 3 Question 6: Codes For Businesses And Professions

- 01 Trader
- 02 Stall holder
- 03 Shopkeeper/merchant/duka owner
- 04 Restaurant or bar owner
- 05 Service station or garage owner
- 06 Taxi driver, truck driver, bus driver
- 07 Other non-farm business
- 08 Blacksmith, tinsmith, goldsmith or other metal worker
- 09 Welder, plumber, locksmith
- 10 Carpenter
- 11 Tailor
- 12 Repairman
- 13 Mechanic/garage
- 14 Mason, bricklayer
- 15 Electrician
- 16 Painter
- 17 Hairdresser/hairsalon owner

- 18 Shoemaker
- 19 Butcher
- 20 Handicrafts (weaving, pottery, jewelry, artist)
- 21 Photographer
- 22 Doctor, surgeon, dentist, traditional healer, traditional midwife, pharmacist
- 23 Lawyer
- 24 Engineer
- 25 Other profession or trade

V. MONITORING INTERVIEWS

The supervisor must carry out two types of checks on the quality of the household interview:

- You must visit some of the households already interviewed to ask certain questions again
- You must observe one interview conducted by each interviewer each week.

A. Reinterviews

The first type of check is made after all of the questionnaires for the previous day have been verified. One of these questionnaires will be selected at random for the re-interview. You can make the choice by flipping a coin (twice - once to choose the interviewer and the second time to choose the household).

On arriving at the household, you should introduce yourself politely and explain that you are participating in the survey and wish to know whether an interviewer came on the previous day to ask some questions. You should ask whether the interviewer was polite and what the household thought of the interview. Then, looking at the questionnaire that was filled out, you should ask certain questions again and verify certain information.

All the questions that should be checked are listed on the *Reinterview Form*. One of these forms should be filled out for each re-interview. The result of the check on each section should be noted in the right-hand column. The result can be either:

- Satisfactory, when all of the answers agree, or
- Unsatisfactory, when it appears from one or more of the checks made that the questionnaire was not completed correctly.

In the second case, the result reflects a very serious state of affairs, which should only happen rarely, with inexperienced interviewers. The most probable cause is that the interviewer did not probe sufficiently for the response. You should discuss the matter with the interviewer to find out whether the same problem is likely to have occurred in other interviews. You should offer advice on how to prevent it from happening again. If necessary, you should instruct the interviewer to do the interviews again.

If the supervisor has reason to think that the interviewer falsified information (for example, by suggesting answers to respondents to save time, or by deliberately omitting certain questions), the project management should be informed immediately.

In any event, you must keep the re-interview forms in the team's file, with all of the other documents relating to the cluster. You should indicate on the Survey Information Sheet, in the appropriate box in the sections on verification of each round, whether or not a re-interview took place, in the box "RE-INTERVIEW?"

B. Observation of interviews

Once every week, the supervisor should sit with each interviewer during an interview to observe the way he/she asks the questions. You should remain with the interviewer throughout the whole interview; you should not arrive or leave in the middle of the interview.

During the interview, you should not talk to the interviewer or the respondent. The interviewer should not ask for advice during the interview. The interviewer should act as though he/she were alone. The supervisor should make notes on any questions or concepts that the interviewer has difficulty in asking or in understanding and also on all the things that the interviewer does well. Everything must be written down on the spot so that it is not forgotten.

All these comments are to be written on a *Direct Observation Form* provided by the Management Team. The main points on the information form are:

- Presentation of the interviewer. Did the interviewer greet everyone before beginning the interview? Did he/she introduce himself/herself by explaining that he/she is working for the Afya na Maendeleo project? Did the interviewer explain the objectives of the survey properly, how the household was chosen and that the interview would be completely confidential? What personal impression did the interviewer make? Was he/she polite and patient with the respondents during the interview? Did he/she thank everyone at the end?
- How did he ask the questions? Did he/she ask the questions exactly as they appear in the questionnaire? Did he/she try to help the respondent think through the answer when he/she had trouble estimating an expenditure or the land area, for instance? Did he/she accept "I don't know" as an answer without probing?
- Time spent on the interview. Did the interviewer avoid gossiping with people, while still being very polite? Did he/she ask the questions quickly, without hesitating? You should note the time at which the interviewer begins each section.
- Impartiality. Did the interviewer have a neutral attitude toward the questions and answers during the interview? Did he/she volunteer an opinion? Did the interviewer appear surprise or shocked or disapproving about any of the answers? Did he/she suggest answers when asking the questions?

Immediately after the interview, you should discuss the results with the interviewer. First, you should ask the interviewer what he/she thinks about the interview -- where he/she feels he/she did well and what he/she could do better. Then you should discuss with the interviewer the things he/she did not mention (the good as well as the bad things).

A summary of each observed interview should be noted on the Interview Observation Form.

VI. REVIEW DATA ENTRY REPORTS

The data entry operators in Bukoba will be entering all information from the questionnaires onto the microcomputer.

A. Errors on completed questionnaires

The Data Entry Manager will then run a number of automatic computer checks on the information. The program will generate a list of the errors (such as values out of range or inconsistencies in the questionnaire for missing sections). The objective of supervisory checks of the data entry is to review the questionnaires as quickly as possible in order to:

- inform supervisors of any problems related to the completion of the household questionnaire
- possibly to reinterview households to correct information that is inconsistent on the first completed questionnaire.

So that this check can be carried out, the Data Entry Manager will give you the results of the data entry team's review throughout the field work.

Here are three examples of the type of errors that will be identified during data entry:

- Suppose that the only possible responses to a given question are "yes" (code 1) or "no" (code 2) but 3 was entered. Code 3 is not an allowable response (it is out of range), and it will appear in a dark rectangle on the printout.
- If the skip pattern was not correctly followed, then the printout will enclose the inconsistent answers in a dark rectangle on the printout. For example, suppose that the interviewer was supposed to answer the first question in a section, then to skip to the fourth question. Instead, he wrote answers to questions 1, 2, 3 and 4.
- If in Section 01, the Household Roster, the response to Question 5 (date of birth) is 150430 (April 15, 1930) and the response to Question 6 (age) is 20 years, the two responses are inconsistent.
- The mother of individual no 08, individual 02 is too young.
- Individual no 05 is less than 7 years, must not answer Section 5.
- Individual no 01 is missing Section 7.

B. Correction of errors

In no instance should anyone on the project team change or "correct" the data from the questionnaire without having asked the questions again of the household. Since in most cases, the data will be entered after the team has completed a cluster, for most types of errors, only those that can be corrected in the office are those that do not change the respondent's answer. Thus, it is critical that the supervisor check questionnaire carefully before they are returned to Bukoba.

VII. MORTALITY QUESTIONNAIRE

For any Household Tracking Forms with a previous household member reported deceased, there will be one Mortality Questionnaire completed. It should be completed after all household interviews for the corresponding Household Tracking are completed, with the exception of households not near the community. For example, consider the following Household Tracking Form:

1. Old six-digit ID NO.		
31	15	1
31	15	2
31	15	3
31	15	4
31	15	5
31	15	6
31	15	7
31	15	8

7. Where does [...] currently reside?
SAME VILLAGE.....1
NEARBY VILLAGE...2
KAGERA.....3
TANZANIA.....4
NEIGH. COUNTRY...5
ANOTHER COUNTRY..6
DIED.....7
DON'T KNOW.....8
CODE
1
8
1
2
2
4
7
2

9. Are there residing with any other previous HH members?	10. NEW TEMPORARY HH No.
YES....1	
NO.....2	
DK.....3	
	01
1	01
1	02
1	02
2	03
1	02

You should complete a Mortality Questionnaire for 31 15 after interviews for 31 15 01 and 31 15 02. Because 31 15 03 is located in another region, so it will be interviewed after the main field work.

VIII. ANTHROPOMETRIC QUESTIONNAIRE

The supervisor has three main tasks related to supervision of the anthropometric work. First, to check the actual measuring of the children. Second, to re-check the data collected in the households against international norms. Third, to regularly check equipment to find out if there are any missing parts or broken down equipment that needs repairing or replacement.

The supervisor should observe the collection of anthropometric data by the interviewers. In the back of the Anthropometric Instructions is a checklist to guide the supervisor.

Upon completion of data collection in the cluster, the field supervisor should to re-examine the anthropometric data collected. Two data tables on weight and height/length for children under 60 months by age and sex are presented in Annex 1. The supervisor should make a comparison of data collected with that in this table. If the weight or height/length data is lower than the weight or height/length data in the column headed 3% or higher than the weight or height/length in the column headed 97%, then the child is outside the range of acceptable values. For example, a male child of 2 years and 6 months (30 months) should be between 10.9 kgs and 16.8 kgs in weight. If the child is less than 10.9 kgs, he is underweight or if he is more than 16.8 kgs, he is overweight. That male child should also be between 83.8 cms and 97.1 cms tall. If the child is less than 83.8 cms, he is stunted or if he is more than 97.1 cms, he is taller than the norm. When children are outside the norms, the supervisor should re-visit the household to ensure that the measurements were correct.

In addition, the supervisor should re-examine the condition of the measuring board and scale. If the equipment is out-of-order, prompt notice should be given to the Project team in Bukoba for replacement or repair.

IX. COMMUNITY, PRICE AND SCHOOL QUESTIONNAIRES

The Supervisor is responsible for completing community, price and school questionnaires in each community. They should be familiar with the instructions on how to complete these surveys.

X. SUBMITTING ALL COMPLETED PAPERWORK.

Upon completion for interviews in a community, the supervisor will be responsible for submitting all completed paperwork to the Bukoba office. The supervisor should prepare a short summary report for the community, highlighting all details or direct observations of note for the project management team.

The *Summary Report* is a short report to the Project team in Bukoba highlighting any problems or issues of note for the Project management team. This report should cover problems or difficulties encountered; solutions for those problems or difficulties; and other information that would be interesting to the project team in Bukoba related to:

- Data collection: Any problems or concerns in fielding any of the survey instruments.
- Transportation: The report will include information on any difficulties encountered by enumerators and field supervisors in (a) traveling between clusters; or (b) traveling within the cluster.
- Height and weight: The report will describe the collection of the anthropometric data and any difficulties encountered. The report will detail any equipment that must be repaired or replaced.
- Personnel: The report will make note of the behavior of the interviewers: (a) are they punctual; (b) do they treat the respondents with respect; (c) do they coordinate with the local authorities; etc. The report will indicate if there are conflicts between the interviewers. The report will also note the quality of the work being done by the interviewers.
- Logistics: The report will provide information on any problems in the flow of questionnaires and materials either from the field to Bukoba or from Bukoba to the field. Any questionnaires or materials that are not being received in the field should be highlighted in the report.
- Schedule: The supervisor will provide information on the compliance of the field work with the established schedule: (a) is the work being completed on time; (b) is there sufficient time allowed for travel between clusters; etc. Provide explanations of any delays, tasks that are incomplete and solutions adopted.
- Observations: Describe any aspects not previously covered

The *Household Completion Form* is given to the supervisor before they arrive in the community. It is a list of all households that are expected to be interviewed. It is based on the pre-visits information collected in October-November 2003. If some households listed could not be interviewed, it should be noted on this form.

If any of the information on a Household Tracking Form changes, such as a previous household member now being reported as deceased, the supervisor should return a *Revised Household Tracking Form* which is simply a marked version of the original Household Tracking Form. The correction should be clearly noted on the form. Only submit a Revised Household Tracking Forms when there is a change noted. Each household can have at most one Revised Household Tracking Form. Most households will probably have no revisions to their tracking form.

The completed paperwork for every cluster your team completes consists of:

Summary Report

Household Interview Completion Form

Revised Household Tracking Form (*if any*)

For Each Household Interviewed:

Household Questionnaire

Anthropometric Questionnaire

Verification Form

Direct Observation Forms

Reinterview Forms

Adult Mortality Questionnaires (*if any*)

Community Questionnaire (1)

Price Questionnaire (1)

School Questionnaire(s) (1-3)

ANNEX 1 - WEIGHT AND HEIGHT/LENGTH BY AGE FOR CHILDREN UNDER 60 MONTHS

Age		Male weight			Female weight		
Year	Month	3%	50%	97%	3%	50%	97%
0	0	2.5	3.3	4.2	2.3	3.2	3.9
0	1	3.0	4.3	5.6	2.9	4.0	5.0
0	2	3.6	5.2	6.7	3.4	4.7	6.0
0	3	4.2	6.0	7.6	4.0	5.4	6.9
0	4	4.8	6.7	8.4	4.6	6.0	7.6
0	5	5.4	7.3	9.1	5.1	6.7	8.3
0	6	6.0	7.8	9.7	5.6	7.2	8.9
0	7	6.5	8.3	10.2	6.0	7.7	9.5
0	8	7.0	8.8	10.7	6.4	8.2	10.0
0	9	7.4	9.2	11.1	6.7	8.6	10.4
0	10	7.7	9.5	11.5	7.0	8.9	10.8
0	11	8.0	9.9	11.9	7.3	9.2	11.2
1	0	8.2	10.2	12.2	7.6	9.5	11.5
1	1	8.5	10.4	12.5	7.8	9.8	11.8
1	2	8.7	10.7	12.8	8.0	10.0	12.0
1	3	8.8	10.9	13.1	8.1	10.2	12.3
1	4	9.0	11.1	13.3	8.3	10.4	12.5
1	5	9.1	11.3	13.6	8.5	10.6	12.7
1	6	9.3	11.5	13.8	8.6	10.8	13.0
1	7	9.4	11.7	14.0	8.8	11.0	13.2
1	8	9.5	11.8	14.2	8.9	11.2	13.4
1	9	9.7	12.0	14.4	9.1	11.4	13.6
1	10	9.8	12.2	14.6	9.3	11.5	13.9
1	11	9.9	12.4	14.8	9.4	11.7	14.1
2	0	10.2	12.3	15.5	9.6	11.8	14.4
2	1	10.3	12.5	15.7	9.7	12.0	14.8
2	2	10.4	12.7	15.9	9.9	12.2	15.1
2	3	10.6	12.9	16.1	10.1	12.4	15.4
2	4	10.7	13.1	16.4	10.2	12.6	15.7
2	5	10.8	13.3	16.6	10.4	12.8	16.0
2	6	10.9	13.5	16.8	10.5	13.0	16.2
2	7	11.0	13.7	17.0	10.6	13.2	16.5
2	8	11.1	13.9	17.2	10.8	13.4	16.8
2	9	11.3	14.1	17.4	10.9	13.6	17.0
2	10	11.4	14.3	17.6	11.1	13.8	17.3
2	11	11.5	14.4	17.8	11.2	13.9	17.5
3	0	11.6	14.6	18.0	11.3	14.1	17.8
3	1	11.7	14.8	18.2	11.5	14.3	18.0
3	2	11.9	15.0	18.5	11.6	14.4	18.3
3	3	12.0	15.2	18.7	11.7	14.6	18.5
3	4	12.1	15.3	18.9	11.8	14.8	18.7
3	5	12.2	15.5	19.1	12.0	14.9	18.9

Age		Male weight			Female weight		
Year	Month	3%	50%	97%	3%	50%	97%
3	6	12.4	15.7	19.3	12.1	15.1	19.1
3	7	12.5	15.8	19.5	12.2	15.2	19.4
3	8	12.6	16.0	19.7	12.3	15.4	19.6
3	9	12.7	16.2	19.9	12.4	15.5	19.8
3	10	12.9	16.4	20.1	12.5	15.7	20.0
3	11	13.0	16.5	20.3	12.6	15.8	20.2

4	0	13.1	16.7	20.5	12.8	16.0	20.4
4	1	13.2	16.9	20.8	12.9	16.1	20.6
4	2	13.4	17.0	21.0	13.0	16.2	20.8
4	3	13.5	17.2	21.2	13.1	16.4	21.0
4	4	13.6	17.4	21.4	13.2	16.5	21.2
4	5	13.8	17.5	21.6	13.3	16.7	21.4

4	6	13.9	17.7	21.8	13.4	16.8	21.6
4	7	14.0	17.9	22.1	13.5	17.0	21.8
4	8	14.2	18.0	22.3	13.6	17.1	22.1
4	9	14.3	18.2	22.5	13.7	17.2	22.3
4	10	14.4	18.3	22.7	13.8	17.4	22.5
4	11	14.6	18.5	23.0	13.9	17.5	22.7
5	0	14.7	18.7	23.2	14.0	17.7	22.9

Age		Male height/length			Female height/length		
Year	Month	3%	50%	97%	3%	50%	97%
0	6	62.8	67.8	72.9	61.0	65.9	70.9
0	7	64.5	69.5	74.5	62.5	67.6	72.6
0	8	66.0	71.0	76.0	64.0	69.1	74.2
0	9	67.4	72.3	77.3	65.3	70.4	75.6
0	10	68.7	73.6	78.6	66.6	71.8	77.0
0	11	69.9	74.9	79.9	67.8	73.1	78.3

1	0	71.0	76.1	81.2	69.0	74.3	79.6
1	1	72.1	77.2	82.4	70.1	75.6	80.9
1	2	73.1	78.3	83.6	71.2	76.7	82.1
1	3	74.1	79.4	84.8	72.2	77.8	83.3
1	4	75.0	80.4	85.9	73.2	78.9	84.5
1	5	75.9	81.4	87.0	74.2	79.9	85.6

1	6	76.7	82.4	88.1	75.1	80.9	86.7
1	7	77.5	83.3	89.2	76.1	81.9	87.8
1	8	78.3	84.2	90.2	77.0	82.9	88.8
1	9	79.1	85.1	91.2	77.8	83.8	89.8
1	10	79.8	86.0	92.2	78.7	84.7	90.8
1	11	80.6	86.8	93.1	79.5	85.6	91.7

2	0	79.6	85.6	91.6	78.5	86.5	92.6
2	1	80.3	86.4	92.5	79.2	85.4	91.5
2	2	81.0	87.2	93.5	80.0	86.2	92.4
2	3	81.7	88.1	94.4	80.7	87.0	93.4

2	4	82.4	88.9	95.3	81.4	87.9	94.3
2	5	83.1	89.7	96.2	82.2	88.7	95.2
2	6	83.8	90.4	97.1	82.9	89.5	96.0
2	7	84.5	91.2	97.9	83.6	90.2	96.9
2	8	85.2	92.0	98.8	84.3	91.0	97.7
2	9	85.8	92.7	99.6	84.9	91.7	98.6
2	10	86.5	93.5	100.5	85.6	92.5	99.4
2	11	87.1	94.2	101.3	86.3	93.2	100.1
3	0	87.8	94.9	102.1	86.9	93.9	100.9
3	1	88.4	95.6	102.9	87.6	94.6	101.7
3	2	89.0	96.3	103.7	88.2	95.3	102.4
3	3	89.6	97.0	104.4	88.8	96.0	103.1
3	4	90.2	97.7	105.2	89.4	96.6	103.9
3	5	90.9	98.4	106.0	90.0	97.3	104.6
3	6	91.5	99.1	106.7	90.6	97.9	105.3
3	7	92.0	99.7	107.4	91.2	98.6	105.9
3	8	92.6	100.4	108.2	91.8	99.2	106.6
3	9	93.2	101.0	108.9	92.3	99.8	107.3
3	10	93.8	101.7	109.6	92.9	100.4	107.9
3	11	94.4	102.3	110.3	93.5	101.0	108.6
4	0	94.9	102.9	111.0	94.0	101.6	109.2
4	1	95.5	103.6	111.6	94.6	102.2	109.9
4	2	96.0	104.2	112.3	95.1	102.8	110.5
4	3	96.6	104.8	113.0	95.6	103.4	111.1
4	4	97.1	105.4	113.6	96.1	104.0	111.8
4	5	97.7	106.0	114.3	96.6	104.5	112.4
4	6	98.2	106.6	114.9	97.2	105.1	113.0
4	7	98.7	107.1	115.5	97.7	105.6	113.6
4	8	99.2	107.7	116.2	98.1	106.2	114.2
4	9	99.8	108.3	116.8	98.6	106.7	114.9
4	10	100.3	108.8	117.4	99.1	107.3	115.5
4	11	100.8	109.4	118.0	99.6	107.8	116.1
5	0	101.3	109.9	118.6	100.1	108.4	116.7