

**NATIONAL FAMILY HEALTH SURVEY, INDIA 2005-2006
(NFHS-3)**

Supervisor's and Editor's Manual

For Use with the NFHS-3 Questionnaires



**International Institute for Population Sciences
Mumbai**

January 2006

CONTENTS

Note for Survey Organizers on How to Use This Manual	1
--	---

I. INTRODUCTION TO NFHS-3

A. Survey Objectives.....	2
B. Organization of Field Staff	3
C. Training	4
D. Responsibilities of the Field Supervisor	4
E. Responsibilities of the Field Editor	6

II. PREPARING FOR FIELDWORK

A. Collecting Materials for Fieldwork	7
B. Arranging Transportation and Accommodations	8
C. Contacting Local Authorities.....	8
D. Contacting the Central Office	8
E. Using Maps to Locate PSUs	8
Figure 1: Example of a General PSU Map	10
Figure 2: Example of a Sketch Map	11
F. Finding Selected Households.....	12
Figure 3: Importance of Identifying all PSU Boundaries.....	13

III. ORGANIZING AND SUPERVISING FIELDWORK

A. Assigning Work to Interviewers	15
B. Reducing Nonresponse	16
C. Handling Pending Interviews	18
D. Maintaining Motivation and Morale.....	19
E. Determining and Recording PSU Information	20

IV. MAINTAINING FIELDWORK CONTROL SHEETS

A. Supervisor's/Editor's Assignment Sheet.....	21
B. Interviewer's and Health Investigator's Assignment Sheet.....	23
C. Interviewer Progress Sheet	23
D. Blood Sample Transmittal Sheet.....	24
E. PSU Information Form.....	24

V. MONITORING INTERVIEWER PERFORMANCE

A. Observing Interviews	26
B. Evaluating Interviewer Performance.....	27
C. Re-interviews.....	27

VI. EDITING QUESTIONNAIRES

A. General Instructions	29
B. Editing the Household Questionnaire.....	30
C. Editing the Woman's (and Man's) Questionnaire	33
D. Organizing Questionnaires for Return to the Office	41
E. Forwarding Questionnaires to the Head Office	41
F. Ensuring Blood Samples reach the Collection Centre	42
G. Anaemia Referrals	42

Annex 1:	Supervisor's/Editor's Assignment Sheet.....	43
Annex 2:	Interviewer's Assignment Sheet	44
Annex 3:	Interviewer's Progress Sheet.....	45
Annex 4:	Health Investigator's Assignment Sheet.....	46
Annex 5:	Blood Sample Transmittal Sheet	47
Annex 6:	PSU Information Form	48
Annex 7:	Height and Weight Charts.....	49

NOTE FOR SURVEY ORGANIZERS ON HOW TO USE THIS MANUAL

This manual is designed to explain to field supervisors and field editors how to do their jobs. The instructions for both positions have been combined into one manual because supervisors and field editors are expected to share many activities, e.g., editing questionnaires and tracking interviewers' performance. Like other NFHS-3 manuals, this manual details the standard NFHS-3 protocol for how to organize and implement the survey. The manual also describes the roles and responsibilities of field supervisors and editors.

The most responsible and mature field staff should be appointed to the positions of field supervisor and field editor. Supervisors can be either male or female. It is desirable that field editors be women, since they will be observing interviews with female respondents about personal topics having to do with family building and child care. Female editors could also be used to observe men's interviews. It is assumed that it would be less awkward for female editors to observe men's interviews than vice versa.

In cases in which supervisors and field editors have been designated prior to the interviewer training, it is important that they participate in the interviewer training. In other cases, the final selection of supervisors and field editors will be made after completion of interviewer training. In either case, following interviewer training and prior to the beginning of fieldwork for the main survey, 1-2 days of additional training should be provided on the specific duties of supervisors and field editors. This is to ensure that all teams will be following a uniform set of procedures. The additional training is particularly important for individuals who did not participate in the pretest but were selected to be supervisors or field editors at the conclusion of interviewer training. It is at this additional training that this manual will be discussed in detail.

I. INTRODUCTION TO NFHS-3

Field supervisors and field editors for the NFHS-3 project have an important position. They are the primary links between the director of field operations and the interviewers. As such, they are responsible for ensuring both the quality and progress of fieldwork.

This manual has been prepared to provide the information needed by field supervisors and field editors to carry out their duties. Candidates for the positions of field supervisor and field editor for the survey should study this manual carefully during their training. They should also study the Interviewer's Manual, since it is necessary to thoroughly understand the questionnaire and the procedures for completing it. Individuals selected to serve as supervisors and field editors should continue to refer to these manuals throughout the fieldwork period.

A. SURVEY OBJECTIVES

India's third National Family Health Survey (NFHS-3), like its predecessors, NFHS-1 (conducted in 1992-93) and NFHS-2 (conducted in 1998-99), will be conducted under the stewardship of the Ministry of Health and Family Welfare (MOHFW), Government of India (GOI), coordinated by the International Institute for Population Sciences (IIPS), Mumbai, and implemented by renowned survey organizations and Population Research Centres. Technical assistance for all phases of NFHS-3 will again be provided by Macro International, USA. The overall objectives of the NFHS programme are:

- To strengthen India's demographic and health database by estimating reliable state-level and national-level indicators of population, maternal and child health, HIV/AIDS, and nutrition;
- To facilitate evidence-based decision making in population, health and nutrition;
- To strengthen the survey research capabilities of Indian institutions and to provide high quality data to policymakers, family welfare and health programme managers, government agencies, NGOs, international agencies, and researchers.

Each successive round of the NFHS has had two specific goals: a) to provide essential data on health and family welfare needed by the Ministry of Health and Family Welfare and other agencies for policy and programme purposes, and b) to provide information on important emerging health and family welfare issues. To meet the first of these two aims, NFHS-3, like NFHS-1 and NFHS-2, will:

- Provide estimates of the levels of fertility, infant and child mortality, and other family welfare and health indicators by background characteristics at the national and state levels; and

- Measure trends in family welfare and health indicators over time at the national and state levels.

NFHS-3 will also provide information on several new and emerging issues including:

- perinatal mortality, male involvement in family welfare, adolescent reproductive health, high-risk sexual behaviour, family life education, safe injections, tuberculosis, and malaria;
- family welfare and health conditions among slum dwellers; and
- HIV prevalence for adult women and men at the national level, for each of the six high HIV prevalence states, namely, Andhra Pradesh, Karnataka, Maharashtra, Manipur, Nagaland, and Tamil Nadu, and for Uttar Pradesh.

Data from the NFHS-3 survey will be used by policy-makers to evaluate the demographic and health status of the population of the states and for India as a whole. For example, information on the immunization coverage among young children may be used to assess the success of the government's vaccination programme and might point to areas of the country that should be specially targeted to improve coverage in the future. Data on the types of contraceptive methods used by couples may be utilized to determine the numbers of commodities that need to be ordered in future years. Because the survey covers many inter-related topics, it will be possible to investigate things like whether children who are too closely spaced together are more likely to die in early childhood and whether childhood malnutrition is declining or increasing. The information collected in this survey will be used by researchers for many years to come.

B. ORGANIZATION OF FIELD STAFF

NFHS-3 is a survey project involving several agencies and many individuals. The International Institute for Population Sciences (IIPS), Mumbai, has the major responsibility for coordinating the survey operations throughout the country. Eighteen Research Organizations will conduct and coordinate survey operations in all 29 states of India. [NAME OF RESEARCH ORGANIZATION] is responsible for all survey operations in [STATE NAME]. Financial support for the NFHS-3 is being provided by the USAID, DFID, the Bill and Melinda Gates Foundation, UNICEF, UNFPA and the Government of India.

NFHS-3 fieldwork is conducted using a team concept. Depending on the state, each team will consist of 2 or 3 female interviewers, 1 or 2 male interviewers, a supervisor, a field editor and 2 health investigators. Each team will be accompanied by a driver. Team supervisors will be responsible for their team. The supervisor will be assisted by the field editor, who will be in charge of the team in the absence of the supervisor and will edit each and every questionnaire in the field. Any problems with the completion of the questionnaire found during the editing of the questionnaires need to be corrected in the field. This can involve revisiting the respondent if necessary.

The health investigators will be responsible for the anthropometric measurements and anaemia testing of eligible women, men, and children and for drawing blood from eligible women and men for HIV testing. All interviewers will be trained to assist the health investigators in taking the anthropometric measurements (height and weight) of women, men, and children.

In the central office there will be a team of coordinators responsible for supervising fieldwork teams. These coordinators will ensure the regular progress of data collection in the Primary Sampling Units (PSUs). They will also monitor data quality and provide for the regular transfer of completed questionnaires to the central office and blood samples for HIV testing to the designated collection centres. Data entry staff and computer programmers will be assigned to the project.

The specific duties of the field supervisor and field editor are described below. However, since the workload of the field supervisor and the field editor will vary from day to day, it is expected that they will assist each other in completing their respective duties.

C. TRAINING

Active involvement of supervisors and field editors in interviewer training is necessary for an understanding of the role of the interviewer and the problems teams may encounter during fieldwork. Supervisors and field editors should participate with interviewer trainees in "role playing" interviews and supervise the practice interviewing in the field prior to the start of fieldwork. The latter activity gives supervisors, field editors and interviewers experience in working together as a team.

After completion of interviewer training, the final selection of supervisors and field editors will be made. Following interviewer training and prior to the beginning of fieldwork for the main survey, 1-2 days of additional training will be provided on the specific duties of supervisors and field editors. This is to ensure that all teams will be following a uniform set of procedures.

D. RESPONSIBILITIES OF THE FIELD SUPERVISOR

The field supervisor is the senior member of the field team. He/she is responsible for the well-being and safety of team members, as well as the completion of the assigned workload and the maintenance of data quality. The supervisor receives his/her assignments from and reports to the field coordinator/project director. The specific responsibilities of the supervisor are to make the necessary preparations for the fieldwork, to organize and direct the fieldwork, and to conduct periodic spot-check re-interviews.

In order to prepare for fieldwork, the supervisor must:

- (1) obtain sample household lists and maps for each area in which his/her team will be working;

- (2) become familiar with the area where the team will be working and determine the best arrangements for travel and accommodations;
- (3) contact local authorities to inform them about the survey and to gain their support and cooperation, especially in motivating selected households to participate in the anaemia and HIV testing;
- (4) obtain all monetary advances, supplies, and equipment necessary for the team to complete its assigned interviews. Careful preparation by the supervisor is important for facilitating the work of the team in the field, for maintaining interviewer morale, and for ensuring contact with the central office throughout the fieldwork.

During the fieldwork, the supervisor will:

- (1) assign work to interviewers, taking into account the linguistic competence of individual interviewers, and ensure that there is an equitable distribution of the workload;
- (2) coordinate the work of interviewers and health investigators to minimize the time it takes for health investigators to reach households when they are needed;
- (3) maintain fieldwork control sheets, and make sure that assignments are carried out;
- (4) regularly send completed questionnaires and progress reports to the central office and keep the central office informed of the team's location;
- (5) communicate any problems to the field coordinator/project director;
- (6) take charge of the team vehicle, ensuring that it is kept in good condition and that it is used only for project work;
- (7) conduct frequent debriefing sessions for the team so that all members can have an opportunity to share their experiences, worries and concerns. This will facilitate the discussion of common problems and help to diffuse any emotional anxieties;
- (8) make an effort to develop a positive team spirit; a congenial work atmosphere, along with careful planning of field activities, contribute to the overall quality of the survey;
- (9) ensure that the DBS samples are picked up by the Field DBS Collector in the DBS collection vehicle or delivered to the designated collection centre **within 5 days of the collection of the sample**;
- (10) assist the health investigators to ensure that the DBS samples are tallied and stored and packed according to protocol;
- (11) conduct re-interviews;

(12) collect information on the altitude of every PSU (urban and rural) and on coverage of the PSU by an anganwadi or ICDS centre, and record this information on the PSU Information Form.

[(13)] in Chennai, Delhi, Hyderabad, Indore, Kolkata, Meerut, Mumbai, and Nagpur only, determine whether he/she would classify the PSU as being in a slum or non-slum area according to the following definition and record the classification on the PSU Information Form.

“A slum is a compact area of at least 60-70 households of poorly built congested tenements, in an unhygienic environment, usually with inadequate infrastructure and lacking in proper sanitary and drinking water facilities.”

E. RESPONSIBILITIES OF THE FIELD EDITOR

The specific duties of the field editor are to monitor interviewer performance. Close supervision of interviewers and editing of completed interviews are essential to assure that accurate and complete data are collected. Because the collection of high quality data is crucial to the success of the survey, it is important that mature, responsible women be recruited as field editors and that they execute their duties with care and precision. This is especially important during the initial phases of fieldwork when it is possible to eliminate interviewer error patterns before they become habits.

Monitoring interviewer performance requires that the field editor:

- (1) observe at least one interview every day;
- (2) edit all completed questionnaires in the field; editing must be completed prior to leaving the sample area. To the extent possible, the supervisor should assist the editor in performing this task so that all interviews are edited while still in the sample area;
- (3) conduct regular review sessions with interviewers and advise them of any problems found in their questionnaires;
- (4) keep completed questionnaires from a sample area in order and pack them up to be sent to the central office.

II. PREPARING FOR FIELDWORK

A. COLLECTING MATERIALS FOR FIELDWORK

Before leaving for the field, the supervisor is responsible for collecting adequate supplies of the materials the team will need in the field. These items are listed below:

Fieldwork documents:

- Supervisor's and Editor's Manual
- Interviewer's Manual
- Maps and household listing forms for all PSUs in the assigned area
- Letters of introduction
- Cards with contact information of the Director, IIPS
- Household, Woman's and Man's Questionnaires [in the appropriate languages]
- Supervisor's/Editor's Assignment Sheets
- Interviewer's Assignment Sheets
- Health Investigator's Assignment Sheets
- Interviewer's Progress Sheets
- Anaemia brochures (three types) to give to respondents with their haemoglobin level and height and weight measurements recorded
- Blood Sample Transmittal Sheets
- PSU Information Forms
- Severe Anaemia Referral Letters
- HIV VCT Brochure
- Voucher for free VCT
- List of places that provide assistance to victims of domestic violence
- Forms for recording altitude of PSUs
- Sample Immunization Cards
- ORS packets
- Vitamin A tablets/syrup
- Iron and folic acid tablets/syrup
- Salt Test Kit

Supplies:

- Blue pens for interviewers
- Red pens for the field editor and supervisor
- Clipboards, briefcases
- Paper clips, scissors, string, staplers and staples, cello tape, etc.
- Envelopes to store completed questionnaires
- First aid kit
- Anaemia and HIV field supplies (detailed in the Anthropometry, Anaemia and HIV Field Manual)
- Torch and batteries
- Monetary advances for field expenses

The supervisor should have sufficient funds to cover expenses for the team, including funds for fuel and minor vehicle repairs, for guides, for bearers to help carry health equipment/supplies (if necessary), and for communicating with the central office. Advances for per diem allowances will be given directly to individual interviewers, field editors and supervisors.

[Include a brief description of procedures for making periodic payments to the teams in the particular state.]

B. ARRANGING TRANSPORTATION AND ACCOMMODATIONS

It is the supervisor's responsibility to make all necessary travel arrangements for his or her team, whenever possible, in consultation with the central office. Vehicles are generally provided to transport the team to assigned work areas; however, in some cases it may be necessary to arrange for other means of transportation. The supervisor is responsible for the maintenance and security of the team vehicle. The vehicle should be used exclusively for survey-related travel, and when not in use, it should be kept in a safe place. The driver of the vehicle takes instructions from the supervisor.

In addition to arranging transportation, the supervisor is in charge of arranging for food and lodging for the team. The lodging should be reasonably comfortable, located as close as possible to the interview area, and should provide secure space to store survey materials. Since travel to rural PSUs is often long and difficult, the supervisor may have to arrange for the team to stay in a central place.

C. CONTACTING LOCAL AUTHORITIES

It is the supervisor's responsibility to contact the district and local officials before starting work in an area. Letters of introduction will be provided, but tact and sensitivity in explaining the purpose of the survey will help win the cooperation needed to carry out the interviews.

D. CONTACTING THE CENTRAL OFFICE

The supervisor should arrange for a system to maintain regular contact with the central office staff before leaving for the field. Regular contact is needed for supervision of the team by central office staff, payment of team members, the return of completed questionnaires for timely data processing and the timely collection of the HIV samples.

E. USING MAPS TO LOCATE PSUs

A major responsibility of the field supervisor is to assist interviewers in locating households in the sample. The director of field operations/project director will provide the supervisor with maps and a copy of the household listing for each of the PSUs in which his or her team will be working. These documents enable the team to identify the PSU boundaries and to

locate the households selected for the sample. The representativeness of the sample depends on finding and visiting every sampled household.

Regional or provincial maps help the supervisor to determine the location of sample areas and the distance to them, while general PSU maps and sketch maps of the sampled PSU will help identify how to reach selected households or dwellings.

Each team will be given general PSU maps, household listing forms and sketch maps and/or written descriptions of the boundaries of selected areas. A PSU (also called a cluster) is the smallest working unit in any census or survey operation that can easily be covered by one enumerator. It has identifiable boundaries and lies wholly within an administrative or statistical area. The general PSU maps may show more than one PSU (see Figure 1). Each PSU is identified by a number (e.g., EA-05, enumeration area 05). Symbols are used to indicate certain features on the map such as roads, footpaths, rivers, localities, boundaries, etc. If symbols are shown on the map, the supervisor and editor should know how to interpret them by using the legend. Examples of the types of symbols found on PSU maps appear in Figure 1. Sketch maps show more details of the selected PSU. An example of a sketch map is shown in Figure 2.

Figure 1: Example of a general PSU map

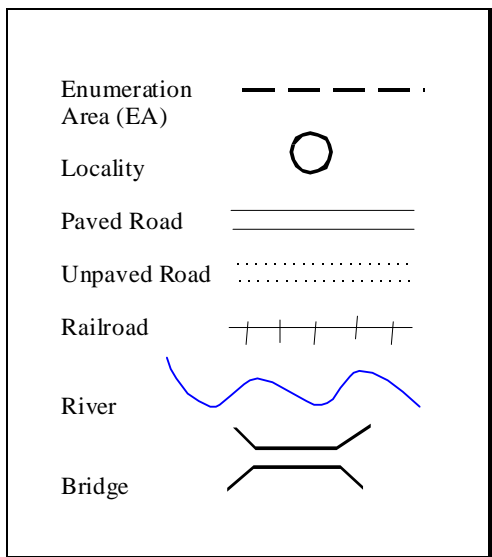
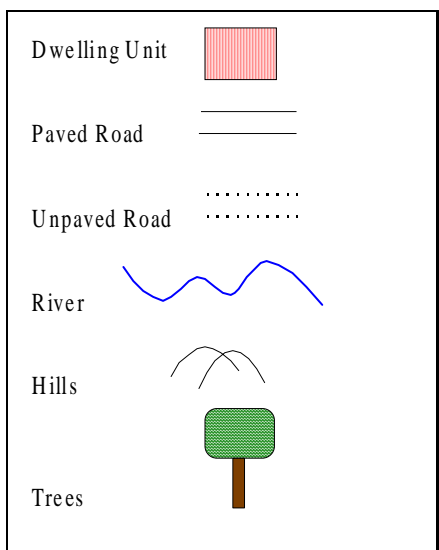
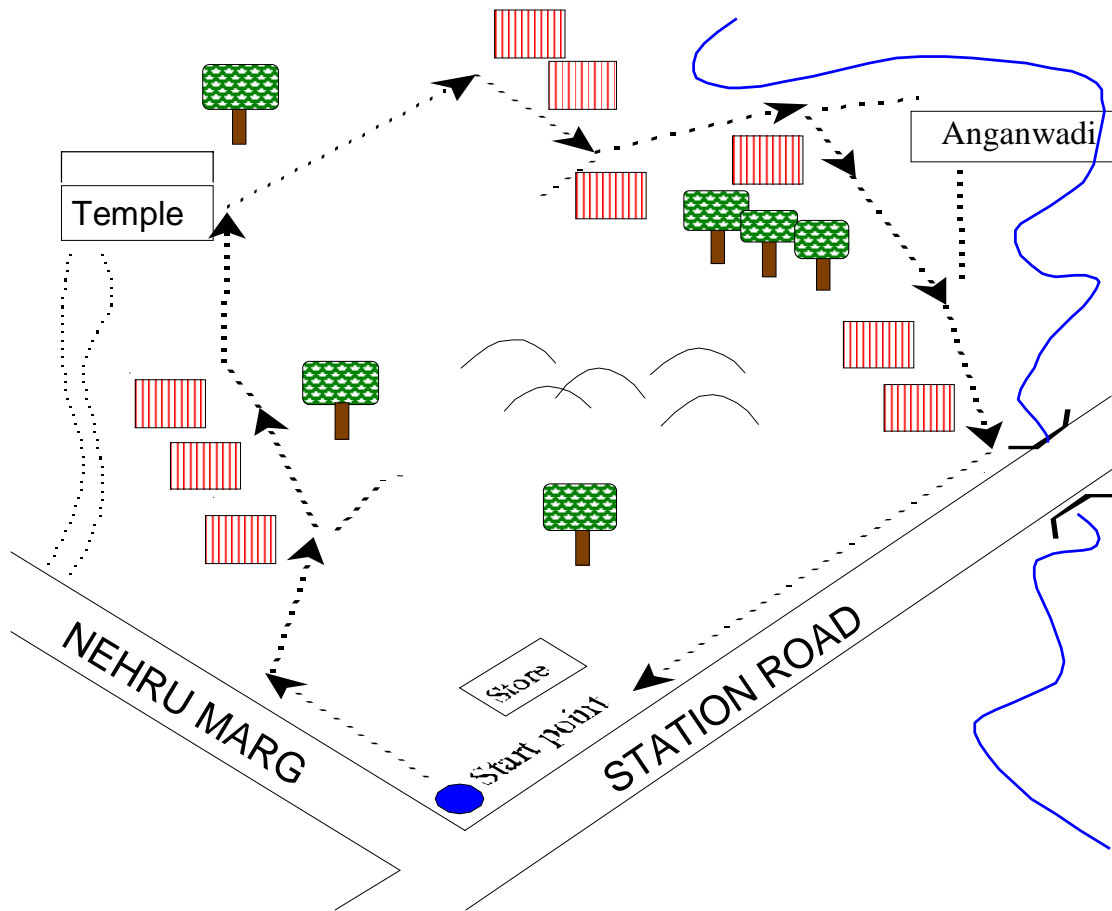


Figure 2: Example of a sketch map



In most PSUs, the boundaries follow easily recognizable land features (such as rivers, roads, railroads, swamps, etc.). However, at times boundaries are invisible lines. The location and determination of invisible boundaries will require some ingenuity. The following guidelines are suggested to locate the selected PSUs:

- (1) Identify on the map the road used to reach the PSU. When you reach what appears to be the PSU boundary, verify this by checking the location of actual terrain features and landmarks against their location on the map. Do not depend on one single feature; use as many as possible.
- (2) It is usually possible to locate unnamed roads or imaginary lines by inquiring among people living in the vicinity. In most cases, these people will know where the villages or other landmarks are and, by locating these, you can usually determine where the boundary runs. Local authorities such as the Sarpanch, as well as residents, may be helpful.
- (3) While there are cases in which boundaries shown on the map no longer exist or have changed location (e.g., a road has been relocated or a river has changed course), do not be hasty in jumping to conclusions. If you cannot locate a PSU, go on to the next one and discuss the matter later with the [field coordinator/project director] in order to get any other information that will allow you to locate the PSU correctly.
- (4) In urban areas, street names will often help you to locate the general area of PSUs. Boundaries can be streets, alleys, streams, city limits, power cables, walls, rows of trees, etc.
- (5) Check the general shape of the PSU. This will help you to find out if you are in the right place.
- (6) Read the written description.
- (7) You should locate all the PSU boundaries before you begin interviewing. For example, if the PSU is a rectangular block, the names of three boundary streets is not enough to unequivocally identify the PSU; check all four boundary streets (see Figure 3).

[Describe any numbering system which may have been adopted during the sample listing, and how interviewers can use this to locate selected households or dwellings.]

F. FINDING SELECTED HOUSEHOLDS

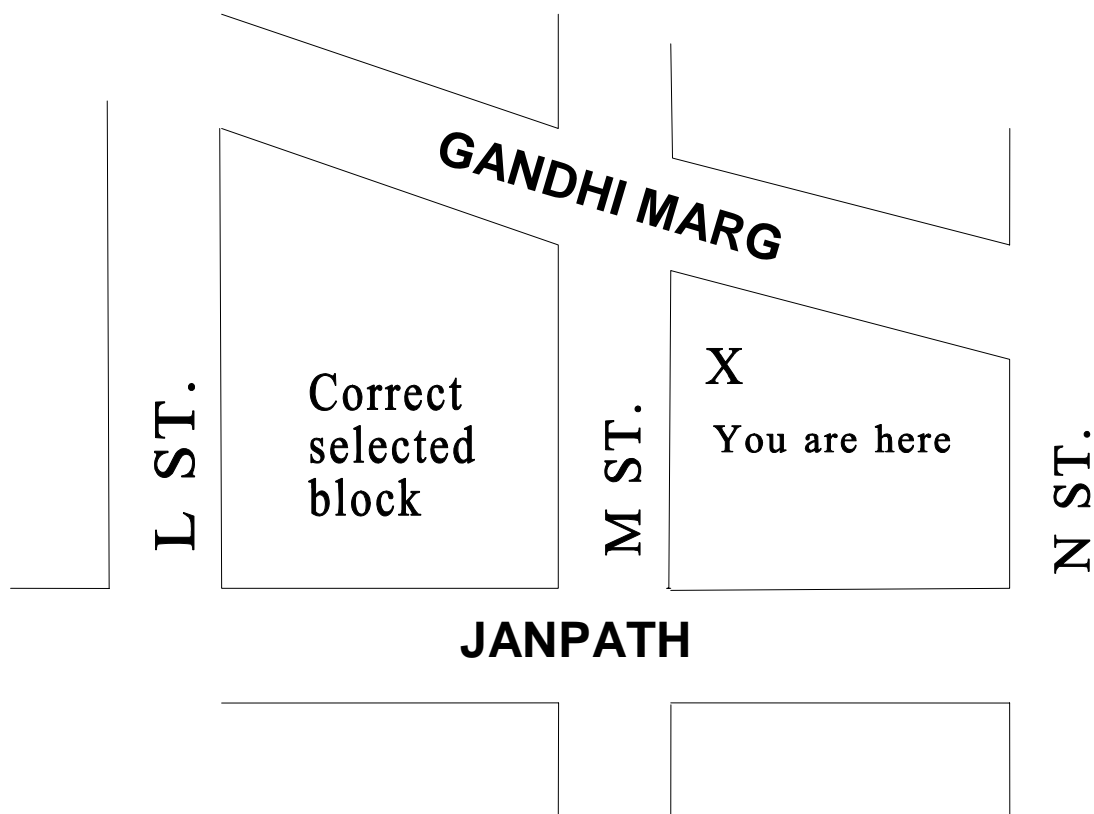
[Section to be adapted to reflect specific characteristics of sample design.]

In most cases, the selected households can be located by referring to the household listing form or to the detailed maps of the selected PSUs. Because people move around, and sometimes the listing teams may have made errors, you may have difficulty locating the

residents of dwellings that were selected. Here are examples of some problems you may encounter and how to deal with them:

- (1) The household in the selected dwelling has moved away and the structure is vacant. If a household has moved out of the structure where it was listed and no one is living in the structure, you should consider the structure vacant and enter code "6" (DWELLING VACANT/ADDRESS NOT A DWELLING) on your Supervisor's/Editor's Assignment Sheet. (This sheet is shown in Annex 1 and described in Section IV A)

Figure 3: Importance of identifying all PSU boundaries



- (2) The household in the selected dwelling has moved away and a new one is now living in the same structure. In this case, the new household should be interviewed.
- (3) The dwelling number and name of household head do not match what is found in the field. Say, for example, that Sohan Ram Agarwal is listed as the household head for dwelling NFHS-003, but when the interviewer goes to NFHS-003 she finds that the household living there is headed by Ramtirath Nath. Consider whichever household is living in NFHS-003 as the selected household, i.e., the household headed by Ramtirath Nath should be interviewed. Check carefully, however, that you are indeed in the right PSU and have identified the correct dwelling.
- (4) The household listed in a selected dwelling is actually living in a dwelling that was

not selected. If, for example, Sohan Ram Agarwal is listed as the household head for dwelling NFHS-003, but he actually lives in NFHS-028, the household living in NFHS-003 should be interviewed. In other words, if there is a discrepancy between the dwelling number and the name of the household head, interview whoever is living in the selected dwelling. Again, make absolutely sure that you are in the right PSU and have identified the selected dwelling correctly.

- (5) The listing shows only one household in the dwelling but two households are living there now. In this case, both households should be interviewed. If the original household listed had been selected for the men's survey, and if at the time of interview more than one household is found, conduct the men's survey in all the households found there. Make a note on your Supervisor's/Editor's Assignment Sheet next to the household that was not on the listing. Assign the new household a household number, enter the number on your Supervisor's/Editor's Assignment Sheet, and instruct the interviewer to enter the new household number on the Interviewer's Assignment Sheet (Annex 2) and on the questionnaire. However, if the listing shows two households, only one of which was selected, and you find two or more households there now, only interview the one which had been selected and ignore the rest.
- (6) The head of the household has changed. In some cases, the person who is listed as the household head may have moved away or died since the listing. Interview the household that is living there now.
- (7) The house is all closed up and the neighbours say the people are away and will be back in several days or weeks. Code as a "3" (ENTIRE HOUSEHOLD ABSENT FOR EXTENDED PERIOD OF TIME) on the Supervisor's/Editor's Assignment Sheet.
- (8) The house is all closed up and the neighbours say that no one lives there; the household has moved away permanently. Enter code "6" (DWELLING VACANT OR ADDRESS NOT A DWELLING) on the Supervisor's/Editor's Assignment Sheet.
- (9) A selected dwelling is actually a shop and no one lives there. Check very carefully to see if anyone is living there. If not, enter code "6" (DWELLING VACANT OR ADDRESS NOT A DWELLING) on the Supervisor's/Editor's Assignment Sheet.
- (10) A selected structure is not found in the PSU, and residents say that the dwelling was destroyed in a recent fire. Enter a code "7" (DWELLING DESTROYED) on the Supervisor's/Editor's Assignment Sheet.

III. ORGANIZING AND SUPERVISING FIELDWORK

A. ASSIGNING WORK TO INTERVIEWERS

The following tips may be helpful to the supervisor in assigning work:

- (1) Make daily work assignments. Be sure each interviewer has enough work to do for the day, taking into account the duration of an interview and the working conditions in the area. The director of field operations will advise you about how many interviews to assign per day.
- (2) Assign more interviews than an interviewer can actually do in one day. This will be necessary because some households and/or women/men may not be available for interview at the time of the interviewer's visit. Sometimes there may be as many as three or four of these cases a day for a particular interviewer. Assign fewer households at the beginning of the survey to allow time for discussion of problems and for close supervision.
- (3) Distribute work fairly among the interviewers. Work should be assigned taking into account the capabilities and strengths of each interviewer but never consistently assigning more difficult workloads to certain interviewers. Drawing numbers out of a hat is a good system to ensure that team and interviewer assignments are distributed on a random basis and that interviewers are aware of this. Bad feelings among the interviewers can be avoided by using this system. If an interviewer is unlucky and consistently draws difficult assignments, the supervisor can purposely provide that interviewer with some easier assignments.
- (4) Ensure that each interviewer has all the required information and materials for completing the work assignment.
- (5) Maintain complete records each day using the control sheets (see Section IV). All assignments and work completed by each interviewer and for each work area should be carefully monitored for completeness and accuracy.
- (6) Make sure that all selected households and eligible women and men for that PSU have been interviewed, and that all anaemia testing and HIV sample collection have been completed and appropriate referrals and information brochures have been distributed before leaving an area. See Section C, for details on how to handle pending interviews.
- (7) Coordinate the roles of the interviewers and health investigators. Ensure that one of the two health investigators is available to go to a household as soon as possible after the eligible persons in the household have all been interviewed. It is ideal if the health investigator can reach the household when the interview with the last eligible member is just being completed. This way the interviewer will be available to assist the health investigator with the height and weight measurement. The availability of

an interviewer to assist the health investigator is most important in households with small children.

- (8) Finally, it is the responsibility of the supervisor to make sure that the interviewers fully understand the instructions given to them and that they adhere to the work schedule. The work schedule is prepared in advance by the central office and adherence to it is crucial to avoid overruns in the total amount of time and money allocated for the fieldwork. Supervisors should also monitor the work of each interviewer to assess whether she/he is performing according to the standards set by the central office.

B. REDUCING NONRESPONSE

One of the most serious problems in a sample survey of this type is nonresponse, that is, failure to obtain information for selected households or failure to interview eligible women and men. A serious bias could result if the level of nonresponse is high. One of the most important duties of the supervisor and editor is to try to minimize this problem and to obtain the most complete information possible. In many cases, interviewers will need to make return visits to households in the evening or on the weekends to reduce nonresponse. It is a time-consuming task and requires strict monitoring by means of the control sheets.

Non-response may be classified into three basic types:

Type 1: the interviewer is unable to locate the selected household;

Type 2: the interviewer is unable to locate the eligible respondent for the woman's/man's interview;

Type 3: the respondent refuses to be interviewed.

Various ways of dealing with these types of nonresponse are discussed below.

Type 1 - The interviewer is unable to locate the selected household

- (a) *Occupied structure inaccessible.* There may be some occupied structures for which no interviews can be done because of impassable roads, etc. The interviewer should be instructed to hold the questionnaire until later. She/he should make another attempt to reach the dwelling at a later date when the situation may have changed. The supervisor should immediately inform the director of field operations of any difficulty in gaining access to a whole PSU or a sizable number of structures within the same PSU.
- (b) *Structure not found.* The supervisor should make sure the interviewer has tried several times to locate the structure using the household listing form, maps, etc. If she/he is still unsuccessful, the supervisor or field editor should attempt to locate the structure, and ask neighbours if they know anything about the structure or the household members. Again, if this problem occurs frequently, it should be reported to the director of field operations. Although no interview has taken place, the cover

sheet of a Household Questionnaire should be filled out and code "8" (DWELLING NOT FOUND) filled in for the result code.

- (c) *Structure nonresidential, vacant, or demolished.* If the interviewer indicates that a structure is not a dwelling unit or that it is vacant or demolished, the supervisor or editor should verify that this is the case. If the interviewer is correct, there is no need for further call backs (return visits). **Although no interview has taken place, the cover sheet of a Household Questionnaire should be filled out.**

Type 2 - The interviewer is unable to locate the respondent for an individual interview

- (a) *No one home at time of call.* The interviewer should make every effort to contact neighbours to find out when the members of the household will be at home or where they might be contacted. At least three visits should be made to locate the household members. Sometimes it may be necessary to call at meal times, in the early morning, evening, or on the weekend. This is particularly true for men who may be away at work during office hours. However, the interviewer should not make "hit or miss" calls just to fill the quota of three visits. **Under no circumstances is it acceptable to make all three visits on the same day.**
- (b) *Respondent temporarily absent.* The respondent may not be at home or may be unable to complete the interview at the time of the first call. The interviewer should find out from other household members or neighbours when the respondent can best be contacted, and a return visit should be made then. If the respondent is still not at home at the time of the second visit, another time should be set for a return visit. At least three attempts should be made to locate the respondent. If the interviewer is not able to complete the entire interview during the initial visit, the procedure for call backs should be followed.

Type 3 - The respondent refuses to be interviewed

The number of refusals reported by each interviewer should be closely monitored. If an interviewer reports an unusually high number of refusals, it may indicate that she/he gives up too easily or explains the survey inadequately. If this appears to be the case, the supervisor or editor should observe the interviewer promptly. Suggestions for handling potential refusals:

- (a) *Approach respondent from her/his point of view.* Refusals may stem from misconceptions about the survey, or other prejudices. The interviewer must consider the respondent's point of view, adapt to it, and reassure her/him. If there is a linguistic or ethnic barrier between the respondent and the interviewer, the supervisor should, if possible, send a different interviewer to complete the questionnaire.
- (b) *Postpone the interview to another day.* If the interviewer senses that she/he has arrived at an inconvenient or awkward time, she/he should try to leave before the respondent gives a final "no"; the interviewer can then return another day when circumstances are more likely to result in a successful interview.

- (c) *Have the field editor carry out the interview for a difficult female respondent.* The field editor's knowledge, skill, and maturity may enable her to complete a difficult interview when the assigned interviewer has been unable to do so.

Nonresponse for anaemia testing and HIV dried blood spots (DBS) collection

NFHS-3 includes anaemia testing and the collection of blood on filter paper to carry out HIV testing in the laboratory. Anaemia testing will be conducted on all children six months or older born since January 2001 (whether or not their parents were interviewed or live in the household), women age 15-49 and men age 15-54 living in the selected households. Blood for HIV testing will be collected only from eligible women and men. Blood collection for anaemia and HIV testing on eligible women and men will be carried out only if the individual interview for the woman/man has been completed.

The anaemia test results will be provided immediately to women and men who are tested. Their haemoglobin level (and those of their children or any children in their care) along with their height and weight, will be recorded on the relevant form and provided to the respondents. This form will be part of an anaemia information brochure which should be given to all households irrespective of whether any member of the household has been tested for anaemia. In addition, those suffering from severe anaemia will be provided with a referral form to a designated medical facility.

HIV testing is anonymous, that is, individual respondents will not be given the results of their HIV status in the field (since the testing will be conducted by the SRL Ranbaxy laboratory in Mumbai), nor will individual identity be maintained in the data file. It is the responsibility of the health investigators, as well as interviewers, supervisors and editors to always explain that the respondent's confidentiality will be maintained throughout the process. All eligible women and men in households selected for the HIV blood collection will be given a voucher for **free** HIV testing at a VCT (Voluntary Counseling and Testing) centre and an informational brochure that describes HIV and VCT, regardless of whether eligible women and men in these households consented to give their blood for HIV testing.

Since this is a highly sensitive process, supervisors and editors should exercise an enormous amount of patience and tact in educating respondents to participate in this process. Field experience has shown that non-cooperation is often the result of misconceptions, lack of knowledge and disbelief about the confidentiality of the HIV testing process. Thus, building rapport and discussing this process in a frank and easy manner greatly reduces refusal.

C. HANDLING PENDING INTERVIEWS

When information has not been collected from a selected household or from an eligible respondent and the return visits have not been completed, the interview is considered "pending." All materials pertaining to this interview should remain with the interviewer until she/he has completed the pending interview. Supervisors and field editors should keep track of all assignments on the Supervisor's/Editor's Assignment Sheet (see Section IV A).

Completing call backs for pending interviews is time-consuming and should be carefully planned. NFHS-3 protocol requires at least two call-backs after the first attempt. If a few interviews remain pending as interviewing in a PSU nears completion, one or two interviewers should be assigned to remain in the area and complete the interviews, while the rest of the team proceeds to the next assignment area. In this way, the whole team is not kept waiting for one or two interviewers to finish. Clear instructions should be left with the interviewers as to where and when to rejoin the team and what method of transportation should be used.

D. MAINTAINING MOTIVATION AND MORALE

The supervisor and editor play a vital role in creating and maintaining motivation and morale among the interviewers, two elements that are essential to good quality work. In order to achieve this it is necessary to make sure that interviewers:

- understand clearly what is expected of them;
- are properly guided and supervised in their work;
- receive recognition for good work;
- are stimulated to improve their work;
- work in tranquil and secure conditions.

In working with the interviewers it may be useful to adhere to the following principles:

- (1) Rather than giving direct orders, try to gain voluntary compliance before demanding it.
- (2) Without losing a sense of authority, try to involve the interviewers in decision-making, and at the same time see to it that the decision remains firm.
- (3) When pointing out an error, do it with tact, in a friendly manner, and in private. Listen to the interviewer's explanation, show her/him that you are trying to help, and examine the causes of the problem together.
- (4) When interviewers voice complaints, listen with patience and try to resolve them.
- (5) Try to foster team spirit and group work.
- (6) Under no circumstances show preference for one or another of the interviewers.
- (7) Try to develop a friendly and informal atmosphere.

Hold frequent debriefing sessions with the entire team allowing all members to talk about their experiences in the field and their anxieties and concerns. Living in the field away from families and being exposed on a daily basis to the suffering of respondents can often affect team members adversely. In particular listening to respondents' stories of domestic violence, child death, or poverty can cause interviewers to become emotionally upset or

even depressed. Talking about these emotions with others can help relieve the sense of helplessness that such exposure can cause.

Finally, remember that encouraging words, instructions, and constructive criticism are not worth anything unless the supervisor and editor set good examples. It is important to *demonstrate* punctuality, enthusiasm, and dedication in order to demand the same of other team members. Never give the impression that you are working less than other members of the team, or that you are enjoying special privileges; this may produce a lack of faith in the project and cause general discontent. An ill-prepared supervisor or editor will not be able to demand quality work from interviewers, and will lose credibility and authority. Interviewer morale and motivation depend on your morale and motivation.

E. DETERMINING AND RECORDING THE ALTITUDE OF THE PSU

Record the information on the altitude of each PSU and coverage of the PSU by an anganwadi or ICDS centre on the PSU Information Form (Annex 6). The supervisor should obtain this information as soon as possible on reaching a PSU, so that this is not forgotten.

IV. MAINTAINING FIELDWORK CONTROL SHEETS

Control of fieldwork within sample PSUs is maintained by keeping control sheets (field forms). Five forms are used to maintain control of questionnaires and measure progress:

1. the Supervisor's/Editor's Assignment Sheet
2. the Interviewer's Assignment Sheet;
3. the Interviewer Progress Sheet;
4. the Health Investigator's Assignment Sheet;
5. the Blood Sample Transmittal Form.

A. SUPERVISOR'S/EDITOR'S ASSIGNMENT SHEET

One Supervisor's/Editor's Assignment Sheet should be completed for each PSU by the supervisor/editor and returned to the head office with the questionnaires from that PSU. An example of the Supervisor's/Editor's Assignment Sheet is shown in Annex 1.

The first step in completing the Supervisor's/Editor's Assignment Sheet is to copy the PSU identification information (the state number and PSU number) from the household listing form or the map and then record your name and supervisor number.

The next step is to record the information for all selected households from the household listing form. They should be written on the Supervisor's/Editor's Assignment Sheet **in the same order** in which they are written on the household listing forms. When the households are written in a different order, it causes unnecessary confusion during the data processing operation. The director of field operations will provide the supervisor with the appropriate form for each PSU the team is assigned.

Several pages of the Supervisor's/Editor's Assignment Sheet will usually be needed to list all of the selected households in a PSU. The state and PSU number should be filled in on all of the pages, and the pages should be numbered sequentially in the space provided at the top of the sheet (e.g., page 1 of 5, page 2 of 5, etc.). If an additional sheet is needed, either because additional households were found during the interviewing or because a household has more than three eligible women or men, the supervisor should staple that sheet to the others for that PSU and correct the total number of sheets reported for the PSU.

Using the guidelines in Section III, the supervisor should assign each interviewer a number of households to interview. In states where men are to be interviewed in only a sub-sample of selected households, supervisors must ensure that interviewers have correctly noted the households where men are to be interviewed and health investigators have correctly noted the subset of households in which they have to collect blood for HIV testing. When making household interview assignments, Columns 1-6 of the Supervisor's/Editor's Assignment Sheet should be completed.

At the end of each day, the interviewers will return the completed questionnaires to the field editor or supervisor for checking. In addition, all blood samples collected in the field should be tallied, stored in a dry place, and once dry, carefully packed by the health investigators (instructions on the procedures involved in carrying out the anaemia testing and the collection of the dried blood spots for HIV testing, and for the storing and packing of the samples are discussed in the Anthropometry, Anaemia and HIV Field Manual. It is the supervisor's responsibility that all DBS samples are picked up by the DBS collection vehicle or dropped off to the designated SRL Ranbaxy collection centre within five days of the blood having been collected.

Either the supervisor or editor should use the information on the cover pages of the questionnaires to complete the remaining columns of the Supervisor's/Editor's Assignment Sheet.

First, review the Household, Woman's and Man's Questionnaires to check:

- (1) that eligible women and men have been correctly identified on the Household Questionnaire;
- (2) that each eligible woman has a Woman's Questionnaire, even if the interview was not completed;
- (3) that each eligible man in a household selected for the men's survey has a Man's Questionnaire, even if the interview was not completed;
- (4) that the identification information on the cover pages of the Household, Woman's and Man's Questionnaires is correct.

Second, copy the information from the questionnaires about the results of the interview into Columns (7-16) of the Supervisor's/Editor's Assignment Sheet. Record the final result of the Household interview in Column (7), the number of eligible women and men in Columns (8) and (9). The line number of each eligible woman is listed in Column (10), the final result of the woman's interviews in Column (11), and whether the woman's blood sample was collected for HIV testing in Column (12). Similar information is completed for the man's interview in Columns (13-15).

If there are more eligible women and/or men in a household than there is space on the Assignment Sheet, the results for that household should be entered on the final page of the Supervisor's/Editor's Assignment Sheet. (Put a line through the information for that household where it was originally listed and put a note "SEE PAGE 5". On page 5, take the space for 2 households so that there is room to list up to 6 eligible women).

Remarks and comments regarding the interviewer assignment, results, or interviews may be recorded in Column 16. For example, reassignment of a pending interview may be recorded here, or a change in the name of a household head. Also note here any irregularities observed during spot checks or re-interviews.

Check to be sure that you have listed all the households on the Supervisor's/Editor's Assignment Sheet that were selected on the household listing form or map for that PSU. To ensure this, you are required to fill in the boxes at the bottom of the Supervisor's/Editor's Assignment Sheet marked: "Number of households selected" and "Number of Household Questionnaires." There can never be fewer Household Questionnaires than selected households or dwellings, but there can be more. In addition to this information, fill in the number of woman's and man's questionnaires completed, the number of women and men eligible for blood collection and the number of blood samples collected.

Always start a new PSU on a separate Supervisor's/Editor's Assignment Sheet. Be sure to write neatly, since these forms will be used for control purposes in the central office.

B. INTERVIEWER'S AND HEALTH INVESTIGATOR'S ASSIGNMENT SHEETS

Individual interviewers will fill out an Interviewer's Assignment Sheet (Annex 2) for each PSU (it will usually be necessary to use more than one sheet per PSU) and individual health investigators will fill out a Health Investigator's Assignment Sheet (Annex 4). The Interviewer's and Health Investigator's Assignment Sheets are similar to the Supervisor's/Editor's Assignment Sheet, and help each interviewer/health investigator keep track of the households assigned to her/him. The supervisor and editor should review the Interviewer's and Health Investigator's Assignment Sheets each evening and discuss the results of the interviews/measurements.

It is the supervisor's responsibility to provide all the identification information that goes in the top panel of the Household Questionnaire. This information should be available in the listing form provided by the central office that will be used to locate selected households.

C. INTERVIEWER PROGRESS SHEET

The supervisor will keep an Interviewer Progress Sheet (see Annex 3) on each interviewer. The supervisor will update the Progress Sheet at the end of work in each PSU. The supervisor will keep these sheets until the end of fieldwork (they will not be included in the package of questionnaires going back to the central office).

The Interviewer Progress Sheet is designed to give the supervisor and editor an objective and continuous measure of the interviewer's performance. Serious discord within a team can occur when one interviewer does much less work than the others. These cases must be identified and examined in order to assess whether there is good reason for lower performance, or whether the interviewer is just taking it easy, leaving her/his colleagues to do most of the work. Similarly, this sheet will allow you to identify whether an interviewer is getting more nonresponses or refusals than others on the team. In such a case, spot checking should be carried out to determine if the nonresponses or refusals are due to poor interviewer performance. If the interviewer is at fault, the supervisor should have a serious talk with her/him, pointing out the problems, suggesting ways she/he can improve, and indicating that she/he must perform better. If her/his performance does not improve, the

director of field operations must be informed. He or she will decide what further action to take.

Assign one Interviewer Progress Sheet (see Annex 3) for each interviewer. The supervisor will make entries on the sheet each time a PSU is completed. The procedure for filling in the Interviewer Progress Sheet is as follows:

Column (1): Enter each PSU number on a separate line in Column (1).

Columns (2) and (4): For each PSU, enter the number of completed Household Questionnaires (i.e., questionnaires with result code "1") in Column (2) and the number of Household Questionnaires not completed (with result codes "2"- "9") in Column (4).

Columns (6) and (8): Enter the number of Woman's or Man's Questionnaires completed in Column (6) and the number not completed in Column (8).

Columns (3), (5), and (7): The figures recorded in Columns (3), (5), and (7) are cumulative for all PSUs. In Column (3) you will keep a cumulative count of the numbers recorded in Column (2), and in Column (5) you will keep a cumulative count of the numbers recorded in Column (4), etc.

The cumulative figures make it possible to check at any time the number of interviews assigned to an interviewer and the results of her/his work. The supervisor and field editor can also check to see if the workloads and the completion rates are approximately the same for all interviewers.

D. BLOOD SAMPLE TRANSMITTAL SHEET

This form is used to keep track of the blood samples collected for HIV testing. Just before the health investigator, who is trained to perform the blood collection procedure, begins pricking the respondent's finger, he/she will place one of the three bar code labels on the back side of the Blood Sample Transmittal Form (Annex 5). One more of the same bar code labels will be placed on the Household Questionnaire, while the third is placed on the filter paper where the blood spots are collected.

At the end of each day health investigators must count the number of DBS samples collected and ensure that the bar code labels on the Household Questionnaire, the filter paper and the transmittal form are identical for each respondent. The supervisor must oversee the entire process and ensure that the health investigators follow all necessary instructions to dry the DBS before packing the samples. Once dry and individually packed, all samples must be appropriately packed for collection by the Field DBS Collector whose job it is to collect DBS samples from all the field teams in the DBS collection vehicle (or for direct delivery to the designated SRL Ranbaxy Collection Centre).

Before handing over the samples to the Field DBS Collector (or at the Collection Centre, as necessary), the supervisor and health investigator must fill out Row 1 on the front of the Transmittal Form. First, the number of blood samples being handed over must be verified

by both the health investigator and the supervisor. This number should be entered in Column (3), the health investigator must sign in Column (4), and the supervisor must sign in Column (5) to verify that the number in Column (3) is correct, enter the date in Column (6), and make any notes of discrepancies in Column (7). The Field DBS Collector will then verify the total number of samples collected and fill in Row 2 by entering the number of samples collected in Column (3), signing in Column (5), putting the date in Column (6), and making a note of any discrepancies in Column (7), before carrying the samples to the designated SRL Ranbaxy collection centre for transportation to Mumbai. Each Transmittal Form must be enclosed in the large Zip-Lock bag with the corresponding samples and be carried away by the Field DBS Collector to the collection centre.

In the case when the supervisor is the one who is directly delivering the samples to the designated Ranbaxy collection centre, there is an additional step to be followed. The supervisor must ensure that the person receiving the samples at the collection centre counts the samples being delivered and fills out Row 3 of the form: he/she must enter the number of samples received in Column (3), sign in Column (5), enter the date in Column (6) and make a note of any discrepancy in Column (7). After Row 3 is filled, the form should be returned to the Zip Lock Bag containing the samples so that it will reach Ranbaxy along with the samples.

E. PSU INFORMATION FORM

This form should be completed by the team supervisor. The form contains information about the altitude of the PSU and about coverage of the PSU by an anganwadi or ICDS centre. Information about the altitude of the PSU is needed because altitude adjustments have to be made to in the anaemia calculations at higher altitudes. For most PSUs, the altitude will be less than 1,000 metres. For those PSUs, circle code '9995'. For PSUs at 1,000 metres or above, the supervisor will need to find out the approximate altitude of the PSU. You should be able to obtain this information from local officials, from altitude markers on the side of the highway, or from altitude information on railway stations. If different parts of the PSU are at different altitudes, try to obtain an estimate of the altitude at a central point in the PSU. The altitude column of the PSU Information Form must be filled in for every PSU.

The last column of the PSU Information Form is used to record whether or not the PSU is in an area that is covered by an anganwadi/ICDS centre. If the PSU is covered by an anganwadi/ICDS centre, either in the PSU or nearby, circle code '1' for YES and record the year in which the programme started for that PSU. This information can be obtained from local officials or residents. The coverage column must be filled in for every PSU (in both urban and rural areas).

V. MONITORING INTERVIEWER PERFORMANCE

Controlling the quality of the data collection is the most important function of the field editor. Throughout the fieldwork she will be responsible for observing interviews and carrying out field editing. By checking the interviewers' work regularly the field editor can ensure that the quality of the data collection remains high throughout the survey. It may be necessary to observe the interviewers more frequently at the beginning of the survey and again toward the end. In the beginning, the interviewers may make errors due to lack of experience or lack of familiarity with the questionnaire; these can be corrected with additional training as the survey progresses. Toward the end of the survey, interviewers may become bored or lazy in anticipation of the end of fieldwork; lack of attention to detail may result in carelessness with the data. To maintain the quality of data, the field editor should check the performance of interviewers thoroughly at these times.

A. OBSERVING INTERVIEWS

The purpose of the observation is to evaluate and improve interviewer performance and to look for errors and misconceptions that cannot be detected through editing. It is common for a completed questionnaire to be technically free of errors, but for the interviewer to have asked a number of questions inaccurately. Even if the field editor does not know the language in which the interview is being conducted, she can detect a great deal from watching how the interviewer conducts herself/himself, how she/he treats the respondent and how she/he fills out the questionnaire. The field editor should observe each interviewer many times throughout the course of fieldwork. The first observation should take place during interviewer training and may also be used as a screening device in the selection of interviewer candidates. Each interviewer should also be observed during the first two days of fieldwork so that any errors made consistently are caught immediately. Additional observations of each interviewer's performance should be made during the rest of the fieldwork. The field editor should observe at least one interview per day during the course of the fieldwork, with the heaviest observation at the beginning and end.

During the interview, the field editor should sit close enough to see what the interviewer is writing. This way, she can see if the interviewer interprets the respondent correctly and follows the proper skip patterns. It is important to make notes of problem areas and points to be discussed later with the interviewer. The editor should not intervene during the course of the interview and should try to conduct herself in such a manner as not to make the interviewer or respondent nervous or uneasy. Only in cases where serious mistakes are being committed by the interviewer should the editor intervene.

After each observation, the field editor and interviewer should discuss the interviewer's performance. The questionnaire should be reviewed, and the field editor should mention things that the interviewer did correctly as well as any problems or mistakes.

B. EVALUATING INTERVIEWER PERFORMANCE

The field editor should meet daily with the interviewers to discuss the quality of their work. In most cases mistakes can be corrected and interviewing style improved by pointing out and discussing errors at regular meetings. At team meetings, the field editor should point out mistakes discovered during observation of interviews or noticed during questionnaire editing (see Chapter VI). She should discuss examples of actual mistakes, being careful not to embarrass individual interviewers. Re-reading relevant sections from the Interviewer's Manual together with the team can help to resolve problems. The field editor can also encourage the interviewers to talk about any situations they encountered in the field which were not covered in training. The group should discuss whether or not the situation was handled properly, and how similar situations should be handled in the future. Team members can learn a lot from one another in these meetings and should feel free to discuss their own mistakes without fear of embarrassment.

The editor and supervisor should expect to spend considerable time evaluating and instructing interviewers at the start of fieldwork. If they feel that the quality of work is not adequate, the interviewing should stop until errors and problems have been fully resolved. In some cases, an interviewer may fail to improve and will have to be replaced. This applies particularly in the case of interviewers who have been dishonest in the recording of ages of women and/or children.

C. RE-INTERVIEWS

As said before, the most important function of the supervisor is to ensure that the information collected by the interviewers is accurate. A powerful tool in checking the quality of the data is to systematically spot-check the information for particular households. This is done by re-interviewing some households and checking the results with what was collected by the interviewer. Re-interviews help reduce three types of problems that affect the accuracy of the survey data.

First, re-interviews are used to check that the interviewer actually interviewed the selected household. Sometimes interviewers either inadvertently locate the wrong household or they may deliberately interview a household that is smaller or a household in which someone is home at the time they are in that area, thus making it easier to finish their work quickly. Occasionally, an interviewer may not interview any household and just fill in a questionnaire on her own. Re-interviewing is a means of detecting these problems.

Another problem that arises frequently is that some interviewers may deliberately subtract years from the age of women or men who are 15 to 19 or add years to women who are over 40 or men who are over 45 in order to place them outside the age range of eligibility for the Woman's Questionnaire or the Man's Questionnaire, respectively. Sometimes interviewers may simply omit eligible women from the household listing, especially if they are visitors in the household. In these ways, they reduce their workload. If this happens frequently, it can have a substantial impact on the quality of the data.

Similarly, interviewers may deliberately subtract a year or two from the date of birth of a child in order to avoid having to ask all of the questions in Sections 4 and 5 for that child. A

shrewd interviewer may also change the age of the child on the household questionnaire to avoid suspicion. Or interviewers may omit listing a child altogether.

In order to reduce the occurrence of such problems, supervisors will be responsible for conducting at least one re-interview in each PSU. The supervisor should focus the re-interviews on households that contain women or men at the border-line ages, i.e., 12 to 14, women age 50 to 55, men age 55 to 60, or children age 6 or 7. Also, supervisors should make sure that households from all of the team's interviewers are occasionally re-interviewed. The re-interview should, if possible, be made on the same day as the interviewer's visit so that any visitors who stayed there the night before can still be contacted.

To conduct the re-interview, the supervisor should take a blank Household Questionnaire, fill in the identification information on the cover sheet with a red pen, and write clearly "RE-INTERVIEW" on the top of the cover page. The supervisor should then visit the selected household with only the re-interview questionnaire (i.e., without taking the original questionnaire) and interview the household, filling Columns (2)-(7) of the Household Questionnaire only. After completing the re-interview, the supervisor should obtain the original questionnaire and compare the information. He or she should write the results of the comparison on the re-interview questionnaire, for example: "identical listings"; "Person on Line 02 not in original questionnaire"; "Person on Line 05 in original questionnaire not there now"; "Child on Line 06 was age 07 in original questionnaire"; "Eligible woman/man on Line 08 not in original questionnaire".

Some differences in information are to be expected, especially if a different household member is interviewed during the re-interview. However, if the supervisor discovers an eligible woman or man who was not identified in the original interview, he or she should call this to the interviewer's attention and send her/him back to interview the eligible woman/man. Similarly, if a child who is less than age six was either omitted from the original questionnaire or listed as being age six or older in the original questionnaire, the interviewer should return to gather the missing information on the original questionnaire. If such omissions or displacements occur frequently with the same interviewer, the supervisor should send the field editor to observe the interviewer and should check the interviewer's work very closely. It is expected that interviewers will be less tempted to displace or omit women or births if they know that this practice will be exposed during re-interviews.

The re-interview questionnaires should be included with the other materials sent back to the central office when fieldwork in the PSU is completed.

VI. EDITING QUESTIONNAIRES

Ensuring that questionnaires are edited for completeness, legibility and consistency is the most important task of the field editor. *Every* questionnaire must be completely checked in the field. This is necessary because even a small error can create much bigger problems after the information has been entered into the computer and tabulations have been run. Often, small errors can be corrected just by asking the interviewer. For example, if an answer of "02 MONTHS" is inconsistent with another response, the interviewer may recall that the respondent said "2 years," and the error can easily be corrected. In other cases, the interviewer will have to go back to the respondent to get the correct information. Timely editing permits correction of questionnaires in the field.

Since errors make the analysis of the data much more difficult, the data processing staff has prepared a computer program that will check each questionnaire and print out a list of errors. If the errors are major ones, an entire questionnaire may be omitted from the analysis. As you are editing questionnaires in the field, it may help to try imagining how the questionnaire would look to a clerk in the office. Would he or she be able to read the responses? Are the answers consistent? Since editing is such an important task, we have prepared a set of instructions that describe the procedures for editing questionnaires.

A. GENERAL INSTRUCTIONS

- (1) As you go through the questionnaires, mark any errors or problems with a red pen and write the page number or the question number on the back of the questionnaire in the space for observations; this way, you can quickly remember later what problems you found. When you have completed the editing, discuss with each interviewer, individually, your observations. Any errors which you find frequently should be discussed with the whole team.
- (2) If the problems are major, such as discrepancies in the birth history or the health sections, it will be necessary to go back to interview the respondent again. If a return visit is not possible, try to establish with the interviewer's assistance, the correct response from other information in the questionnaire. If this is not possible, take the following action:
 - (a) If the response is missing (i.e., there is no answer recorded because the question was not asked), enter a code of "9" ("99," "999") and circle that code with your red pen.
 - (b) If the response is inconsistent with other information in the questionnaire and you cannot determine the correct response, enter a code "7" ("97," "997") and circle that code with your red pen.

NOTE: UNDER NO CIRCUMSTANCES SHOULD YOU MAKE UP AN ANSWER.

- (3) In checking through each questionnaire be sure that the numbers entered in boxes are readable and that the circles used by the interviewer to select the pre-coded numbers clearly mark only one of the choices (except in cases where more than one code is allowed).
- (4) In checking each questionnaire, make certain that the respondent was asked all questions appropriate for her/him (check that the interviewer followed the skip instructions). You will need to look for:
 - (a) Questions for which a response is recorded when it appears there should be *no* response (in this case, cross out the response by drawing two lines through the code with your red pen);
 - (b) Questions for which *no* response is recorded when it appears there *should* be a response (in this case, try to find the correct response as described in paragraph (2) above).

Correct errors following the system described in the Interviewer's Manual, e.g., drawing two lines through the existing code and circling or writing the new code. *ALWAYS USE A RED PEN WHEN MAKING CORRECTIONS.*
- (5) Check the ranges for all variables that are not pre-coded (e.g., a woman cannot have 24 sons living with her) and carry out the other consistency checks which are listed. Mark any inconsistencies with a red pen and try to determine the correct responses as described in paragraph (2) above.
- (6) The field editor should advise the team supervisor about questionnaires which have been returned to interviewers for further work. All questionnaires for a given PSU which have been edited and corrected should be arranged in numerical order according to the household or dwelling number (see Section E: Organizing Questionnaires for Return to the Office).

B. EDITING THE HOUSEHOLD QUESTIONNAIRE

In editing the Household Questionnaire, be sure to:

- (1) Check that the household identification information has been completed correctly.
- (2) Code the information on the cover page of the Household Questionnaire if the interviewer has not done so. If the final result code is "2" through "8", check to see that the remaining pages are blank. If the final result code is "1," continue to check the following pages of the Household Questionnaire.
- (3) Check that Columns (2) through (7) have been filled for each person listed. There should be no blanks in these columns and that Column (8) has been filled for each person age 10 or older.

- (4) Check that the line numbers of all women age 15-49 have been circled in Column (9) and all men age 15-54 in Column (10). If you find errors regarding eligible women and men in the household, check with the interviewer to make certain the correct number of interviews have been conducted in that household.
- (5) Check that the line numbers of all children under age 6 (that is, ages 0-5) have been circled in Column (11).
- (6) Check that Column (12) is filled ONLY for children age 0-4. (Columns (15)-(29) should be blank for children for whom this column has been filled.)
- (7) Check that there is information in Columns (13) and (14) for each person 0-17 years of age. Check that the line numbers recorded in Column (13) refer to women who are old enough to be the child's mother and that the line numbers in Column (14) refer to men who are old enough to be the child's father. The boxes in these columns must contain a valid line number or the code "00" (if the mother/father does not live in the household) or "95" (if the mother/father is dead).
- (8) If the answer in Column (16) is "YES", then there must be information in Column (17), and if the person is 5-18 years of age, also in Column (18). If the answer in Column (16) is "NO", then Columns (17) through (22) should be blank; these columns should also be blank for anyone 19 or older even if Column (16) is "YES".
- (9) Check that the interviewer followed the correct skip pattern in Columns (18) through (20), that is, if the answer in Column (18) is "YES", then there must be a standard recorded in Column (19) and if the answer in Column (18) is "NO", then there must be a code circled in Column (20), there must be some reason given in Column (22) and Column (19) should be blank. If the answer in Column (20) is "YES" then there must be a standard recorded in Column (21), but if it is "NO" then Column (21) should be blank. Column (22) should have information only if Column (18) is "NO".
- (10) Check that the standard of education is more or less appropriate for the age of the child, keeping in mind that some children may be very advanced or quite far behind in school for their age. Still, one would not expect, say, a 7 year-old child to have attended standard 12. If the level of education appears to be grossly out of line with the child's age, make a note on the back of the questionnaire and check with the interviewer.
- (11) Check that Columns (23) to (29) are filled only for children age 5-14 years. In Columns (24), (27) and (29), hours worked should be filled only if the answer was "YES" in the preceding column.
- (12) Check the boxes at the bottom of the listing of persons (Q. 4A) to make sure the interviewer went through these questions.

- (13) Check that the TOTAL PERSONS IN HOUSEHOLD recorded on the cover sheet is equal to the number of persons listed in the Household Schedule and that the TOTAL ELIGIBLE WOMEN and MEN on the cover page is equal to the number whose line numbers are circled in Column (9) and (10).
- (14) Check Qs. 30, 31 and 31 A. If the answer to Q. 30 is "YES", then there should be at least one valid line number for a usual resident of the household in the boxes in Q. 31. For every line number filled in for Q. 31, either "YES" or "NO" must be coded in Q. 31 A; if there was only one usual member in the household who has tuberculosis, then the line numbers in the remaining three rows should be recorded as '95'.
- (15) There should be a "1" or "2" code circled for each of the items listed in Q. 47. Check that answers to Qs. 53-55 have been recorded.
- (16) Check Q. 68 to make sure that salt was tested in the household. If salt was not tested, either code "4" must be circled or code "6" must be circled and a reason must be given.
- (17) Check the table for the selection of women for the households relations questions to make sure that the selection was done correctly. If not, discuss with the interviewer to make sure that she/he does not commit the same error again. If there are no eligible women in the household, the table should be blank. Otherwise, the table must be completed and the two boxes at the bottom of the table must contain the line number (in the Household Schedule) of the woman selected for the household relations section.
- (18) Check Columns (69)-(71) to see that all women age 15-49, all men age 15-54, and all children under age 6 are listed and that the line numbers, names and ages correspond to the information in Columns (9), (10), (11) (2), and (7). Check that the information in all the subsequent columns is appropriately filled in for all women, men and children who were measured. Make sure that the information in Column (72A) is consistent with the marital status recorded in Column (8) and that the pregnancy status in Column (72B) is shown for every woman. The pregnancy status should be consistent with the pregnancy status for that woman in Q. 227 in the Woman's Questionnaire if she has completed a woman's interview. Make sure that the day of birth is entered for all children in Column (72C).
- (19) Check to make sure that all eligible children in the selected households have been measured or the result code is "2", "3", or "6", check that the weight and height in Columns (73) and (74) lie within the ranges specified in Annex 7. If a measure falls outside the acceptable range, the measurer should revisit the household, re-measure the child, and check that the child's age has been correctly recorded. If a child who is under age 6 years is born before January 2001, the child should be excluded from height, weight and anaemia measurements.
- (20) Check to make sure that Column (78) is filled for all females and males age 15-17 who have never been married (or who live in a household with no adults age 18 or

older) and for children born in January 2001 or later who are age 6 months or more. Check that the consent statement has been read and signed by the interviewer in Column (79), the result of the haemoglobin test has been recorded in Column (81), and the final result has been recorded in Column (82). In addition, check that Q. 85 and all columns of Q. 86 have been correctly filled. The name of each person whose haemoglobin level is below the cut-off should be entered, a referral form should have been given to each such respondent (or to the parent in the case of severely anaemic children), and a code should be circled to indicate whether the respondent has agreed to be referred.

- (21) Check to make sure that the consent statement has been read to all women and men eligible for HIV testing and signed by the interviewer in Column (80) and the result has been recorded in Column (83). In addition, check to make sure that the bar code label in Column (84) matches the bar code labels in the transmittal form and the filter paper for each respondent who provided a blood sample for HIV testing.
- (22) Check that the number of Woman's Questionnaires returned with each Household Questionnaire is the same as the number of eligible women reported on the cover page. Also check that the number of Man's Questionnaires returned for all households selected for the men's survey is the same as the number of eligible men reported on the cover page. Speak with the interviewer when there is any inconsistency.

C. EDITING THE WOMAN'S (AND MAN'S) QUESTIONNAIRE

Check to see that *skip* instructions have been followed, that answers are readable, and that answers to related questions are consistent.

Cover Sheet

- (1) Check that the identification information has been completed correctly. This information must be the same as that on the Cover Sheet of the Household Questionnaire. Check that the line number of the woman or man is the same as it is in the Household Questionnaire.
- (2) Code the information on the Cover Sheet if the interviewer has not done so. Check to make sure that each woman has been correctly coded on the Cover Page of the Woman's Questionnaire for whether she should receive the Household Relations Section (Section 10) in the Woman's Questionnaire or not. If she is selected, the section should have been filled out. Only one eligible woman per household should have been asked this section.
- (3) If the final result code is not "1" or "5", check to see that the remaining pages are blank. If the final result is either "1" or "5", continue to check the remaining pages of the Woman's and Man's Questionnaire.

Even though the following sections address the Woman's Questionnaire, similar checks should be carried out for the Man's Questionnaire where relevant.

Section 1. Respondent's Background

- (1) TIME STARTED INTERVIEW. Check the ranges for hour and minutes in Q. 101. The hour must be 23 or less and the minutes must be 59 or less.
- (2) DATE OF BIRTH. Check that the answer to Q. 104 (month of birth) ranges from "01" to "12" or is "98"; that year of birth is not less than "1955" (for men, year of birth should not be less than "1950") and not greater than "1990", or "9998," and that Q. 105 ranges from "15" to "49". For men the range for the corresponding question (Q. 107) should be "15" to "54". Q. 105 must have an answer even if it is only the interviewer's best estimate. It can never be left blank. Also check that the date of birth and age are consistent. If these responses are inconsistent, discuss the problem with the interviewer.

If at all possible, an effort should be made to revisit the respondent to resolve the inconsistency since age is one of the most important pieces of information collected in the questionnaire. If a revisit cannot be scheduled, it may be necessary to look at other information in the Household and Woman's Questionnaires in an effort to resolve the inconsistency. Items which should be considered include:

- age recorded for respondent in Household Questionnaire;
- number of live births;
- date of birth of respondent's first child;
- date or age at first marriage.

- (3) AGE. If the respondent's age is either less than "15" or more than "49", write "NOT ELIGIBLE" on the cover of the Woman's Questionnaire, after checking that the interviewer has correctly reported the woman's age. This questionnaire should not be processed. Also check, and correct if necessary, the age of this woman in the Household Questionnaire.

Section 2. Reproduction

- (1) CHILDREN EVER BORN. Check that Q. 208 is equal to the sum of the six values in Questions 203, 205 and 207. Q. 208 must have a code filled in. If the respondent has never had any births, the interviewer should have recorded "00" in Q. 208. Make sure the interviewer has marked the appropriate box in Q. 210.
- (2) TOTAL NUMBER OF BIRTHS. Check that the total number of births listed in the birth history is equal to the number in Q. 208. If fewer births are registered in the history than in Qs. 201-208, you will have to send the interviewer back to the respondent to complete the information. If more births are listed in the history,

correct Qs. 201-208 to be consistent with the number of births recorded in the history.

- (3) LIVING AND DEAD SONS AND DAUGHTERS. Check that the numbers of living sons, living daughters, dead sons and dead daughters recorded in Qs. 203, 205 and 207 are equal to the respective numbers recorded in the birth history.
- (4) AGE AT DEATH. Check the consistency of Qs. 215 and 220. A child cannot have died at an older age than he would be if he had lived. For example, a child born two years ago could not have died at age three. Also, make sure that the age at death is completed in DAYS or MONTHS or YEARS and not, for example, in DAYS and MONTHS. A simple response of "1 year" in Q. 220 is unacceptable. If you find such a case, the interviewer should be sent back to the respondent to determine at what age in MONTHS the child died. We need to know whether the baby died before or after his or her first birthday.
- (5) AGE OF LIVING CHILDREN. Check the consistency of Qs. 215 and 217 for each living child listed on the birth history. Either the ARITHMETIC or CHART METHOD described in the Interviewer's Manual may be used to perform this check.
- (6) BIRTH ORDER. Using the information in Qs. 215 and 217, check the birth order in the left of the column under Q. 212 for each child listed on the birth history. If you find a birth out of order, correct the order number by drawing arrows and changing the order numbers printed in Q. 212.
- (7) BIRTH INTERVALS. After checking the birth order, check that the interval between births is at least 9 months unless the two births being checked are twins. If the interval between two single births is less than 9 months, the interviewer (or field editor) should return to check the information in the birth history with the respondent.
- (8) AGE AT FIRST BIRTH. After checking the birth order, use the respondent's age (Q. 105) and the age of her firstborn child to check that she was at least 12 years of age at her first birth. Inconsistencies between the age of the respondent and the date of the first birth generally arise from the following circumstances:
 - (a) The child is not the respondent's own (biological) child;
 - (b) The respondent's birth date/age (Qs. 104 and 105) are incorrect;
 - (c) The birth date (age) of the first child (Qs. 215 and 217) are incorrect.

A call back to the respondent should be made, if at all possible, to determine the source of error.

- (9) ANY OTHER BIRTHS THAT DIED

Check that Qs. 221 (all rows, except the first row), 222 and 223 are all coded. If any one of these is a "YES", the birth should have been entered in the birth history with

the chronological order of the birth order properly indicated and birth orders of all other children corrected, as relevant.

- (10) Check the number entered in Q. 225 against the information on birth dates in 215.
- (11) Check entries in the calendar:
 - a) All births and pregnancies correctly recorded. If there are 6 or fewer "Ps" for any birth, check with the interviewer to make sure that the birth was a live birth and that she correctly recorded the number of months pregnant.
 - b) Check that the filter Q. 233 corresponds with the year given in Q. 232. If the respondent has had a pregnancy termination in January 2001 or later, the calendar should contain information on one or more terminated pregnancies and Qs. 234-239 should be filled in, as appropriate.
 - c) Check that for every birth, pregnancy, or pregnancy termination, Column 2 has been filled with a "Y" or "N" in the boxes corresponding to "B" or "T" (or the current month for women who are currently pregnant in Column (1).
- (12) LAST MENSTRUAL PERIOD. Check that Q. 240 has been filled in correctly. If a length of time is given, only one set of boxes (DAYS or WEEKS or MONTHS or YEARS) should be filled in.

Section 3A. Marriage and Cohabitation

- (1) HUSBAND'S LINE NUMBER. If the husband is listed in the Household Schedule, check that the name and line number in Q. 305 are consistent with what is listed in the Household Questionnaire and that the person is male.
- (2) YEAR OR AGE AT MARRIAGE. Check that the year in Q. 309/309A is in the range from her year of birth in Q. 104 to "2006" or "9998". If a year is reported in Q. 309/309A, then no age should be reported in Q. 310. If Q. 309/309A is "9998", then there must be an age at marriage recorded in Q. 310. Check that the age in Q. 310 is less than "50".
- (3) YEAR OR AGE AT COHABITATION: Age at cohabitation can be less than age at marriage. Check that the year in Q. 312 is in the range from 10 years after her year of birth in Q. 104 through "2006" or "9998". If Q. 312 is "9998", then there must be an age at cohabitation recorded in Q. 313. Check that the age in Q. 313 is in the range of "10" through "50".
- (4) Check Column 3 of the calendar. Is the information on gauna, marriage and cohabitation correctly filled out? Check to see that the information in Qs. 309/309A or 310 and Qs. 312 or 313 is compatible with Column 3 of the calendar. No cell of Column 3 should be empty for any respondent.

Section 3B. Contraception

- (1) HEARD OF OR USED METHODS. Wherever a code "1" in Q. 318 has been circled for a specific method, Q. 320 should always be completed for that method if the woman has ever had sex.
- (2) CURRENTLY USING. Check that if the respondent is currently using a family planning method (Q. 330/330A has a code circled), Q. 320 for that method has been coded "1".
- (3) CONTRACEPTIVE FILTERS. Check that no more than one code is circled in Qs. 345 and 351.
- (4) SKIPS AND FILTERS. Check through the remaining pages of Section 3B to ensure that all skip instructions were followed correctly, that the filters have been correctly marked, and that the appropriate questions have been answered.
- (5) Check that Column (1) of the calendar includes complete information on contraceptive use. No cell should contain more than one code. No cell in Column (1) should be empty; each cell should contain only valid codes (B, T, P, codes for one of the contraceptive methods, or "0" for no method). Check that Column (4) has been filled in for each method that was used and discontinued. There should be as many codes as methods used and then discontinued. If no method was used since January 2001, Column (4) should be empty.

Section 3C. Contacts with Health Personnel

- (1) Check Qs. 357 and 360. If any row is filled in, then all rows must be filled in. It is not possible for all four rows to be coded "00".
- (2) Check all skips and filters for accuracy.

Section 4. Pregnancy, Delivery, Postnatal Care and Nutrition

- (1) IDENTIFICATION. Check the information in the birth history to make certain that each birth in January 2001 or later has been entered in Qs. 403 and 404. The line number, name, and survival status should be recorded. Questions in Section 4 should be asked for living children and for children who have died. If the respondent had no births in January 2001 or later, Section 4 will not be asked, but check that the interviewer properly skipped to Q. 556.
- (2) SKIPS AND FILTERS. Check the skip pattern throughout the section; make sure that all filters have been correctly marked, and that the proper questions were asked.
- (3) Check that every item in Q. 479 and Q. 480 has been coded for the youngest child born in 2003 or later who is living with her..

- (4) Check the responses written in OTHER (SPECIFY) in Qs. 409, 410, 438, 439, 444, 446, 450, 451, 457, 458, and 469 to make sure that the responses do not fit in any of the other coding categories.

Section 5. Immunization, Health and Women's Nutrition

- (1) IDENTIFICATION. Check that the line numbers and names recorded in Qs. 502 and 503 are the same as in Qs. 403 and 404. If a child has died, Qs. 502 and 503 should be filled in for that child, but Qs. 504-552 should not be asked for that child.
- (2) VACCINATION DATES. For each child with an immunization record that was seen by the interviewer ("YES, SEEN" in Q. 509), check that the date of each vaccination is consistent with the child's date of birth. For example, a vaccination cannot be prior to the date of birth. Check also that the dates for the four polio and the three DPT vaccinations are in chronological order.
- (3) Check that all women with a code circled in Q. 513 skip to Q. 516 and leave the questions on the mother's recall of child vaccinations blank.
- (4) SKIPS AND FILTERS. Check the skip pattern throughout the section, making sure that all filters have been correctly marked and that the appropriate questions have been asked of the respondent.

Section 5A. Utilization of ICDS services

Make sure that this section includes all children born since January 2000. This includes all of the same children listed in Qs. 502-503, plus all children born in 2000, whether they are living or dead.

Section 6. Sexual Life

- (1) LAST INTERCOURSE. Make sure that only one set of boxes is filled in Q. 606, i.e., DAYS or WEEKS or MONTHS or YEARS. If more than one category has been coded, recalculate the answer and enter it at the appropriate unit of measurement. Make sure that YEARS AGO is not coded '00'. If it is, and the woman has had sex in the last 12 months, the interviewer will have to return to ask the woman Qs. 607-616. If MONTHS AGO is coded 12 or more, recalculate the answer in terms of YEARS AGO and delete any responses to Qs. 607-616.
- (2) LENGTH OF RELATIONSHIP. Make sure that only one set of boxes is filled in Q. 611, i.e., DAYS or MONTHS or YEARS. If more than one category has been coded, recalculate the answer and enter it in the appropriate unit of measurement.
- (3) Check that Q. 613 and, as necessary, Q. 614 are asked only for women age 15-24.

Section 7. Fertility Preferences

- (1) DESIRED SPACING. Check that only one set of boxes is filled out in Q. 704, either MONTHS or YEARS.
- (2) PREFERENCE FOR BOYS OR GIRLS. Check that the sum of the number of boys, girls and either given in Q. 715 is equal to the number in Q. 714.
- (3) Check that all items in Qs. 716 and 723 are coded.
- (4) Check the responses written in OTHER (SPECIFY) in Qs. 708, 712, and 713 to make sure that the responses do not fit in any of the other coding categories.

Section 8. Husband's Background and Woman's Work

- (1) OCCUPATION. Make sure that the occupations written in Q. 805 and Q. 810 are legible and specific (e.g., BUSINESS, GOVERNMENT, or SALES is not specific enough).
- (2) SKIPS AND FILTERS. Check that filters have been marked correctly, and skip instructions followed.
- (3) Check that all items in Qs. 822, 824, 828, and 829 are coded.

Section 9. AIDS and Other Sexually Transmitted Diseases

- (1) SKIPS AND FILTERS. Check that filters have been marked correctly, and skip instructions followed.
- (2) Check that Q. 936B is coded for each item for which Q. 936A is "YES". Similarly, check that Q. 936D is coded for each item for which Q. 936C is "YES".
- (3) Check the responses written in OTHER (SPECIFY) in Qs. 902, 910, 919, 921, and 935 to make sure that the responses do not fit in any of the other coding categories.

Section 10. Household Relations

- (1) Check that this section is completed only for the one woman in the household that was selected for this section.
- (2) If privacy was not possible (Q. 1001='2'), then Q. 1027 should be filled out. If an interviewer is frequently returning a code of Q. 1001='2', discuss the problem with the interviewer. The editor or supervisor may need to help ensure privacy.
- (3) In Qs. 1003, 1004A, 1005A, and 1008, all items must be coded.

- (4) Check that Qs. 1004B and 1005B are not asked for widows. Also they should be filled only for items coded YES in Q. 1004A and Q. 1005A, respectively.
- (6) Check all filters and skips for accuracy.
- (7) Check that Q. 1026 is filled for all types of interruptions.

Summary of Editing Checks for the Questionnaire

- 1. Range and consistency of Qs. 104 and 105.
- 2. Numerical consistency of Qs. 203, 205, 207 and 208.
- 3. Consistency of birth history with Qs. 203, 205, 207 and 208.
- 4. Numerical consistency of Qs. 215 and 217.
- 5. Q. 220 reported in days if less than 1 month and in months if less than 2 years.
- 6. Correct order of births in Q. 215.
- 7. Birth intervals 9 months or more; respondent's age at first birth 12 years or older.
- 8. Response to Q. 240 (last menstrual period) recorded correctly.
- 9. Range of values for Qs. 309/309A and 310 (year and age at marriage), as well as Qs. 312 and 313.
- 10. Consistency of Qs. 318 and 320.
- 11. Consistency of Qs. 329 and 320.
- 12. Check for completeness and internal consistency of all columns of the calendar.
- 13. Consistency of entries in Q. 403 and 404 with the birth history.
- 14. Consistency of entries in Qs. 502 and 503 with Qs. 403 and 404.
- 15. Consistency of dates in vaccination record.
- 16. Response to Q. 606 (date of last intercourse) recorded correctly.
- 17. Response to Q. 704 (desired spacing of next birth) recorded correctly.
- 18. Consistency of Qs. 714 and 715.
- 19. Occupation (Qs. 805 and 810) legible and specific.

D. ORGANIZING QUESTIONNAIRES FOR RETURN TO THE OFFICE

- (1) Put all of the Woman's and Man's Questionnaires inside their respective Household Questionnaires. If there is more than one Woman's Questionnaire in a household, organize them sequentially in ascending order of the line numbers of the women. Put the Man's Questionnaires after the Woman's Questionnaires. Any continuation questionnaires (e.g., if there are more than 12 children in a birth history) should be inside the primary questionnaire, and should have "CONTINUATION" written across the top of the cover sheet. The primary questionnaire for that set should say "SEE CONTINUATION" across the top of the cover sheet.
- (2) Organize all questionnaires in numerical order by household number within the PSU.
- (3) Check the questionnaires in the PSU against the Supervisor's/Editor's Assignment Sheet to make certain that:
 - (a) The correct number of Household Questionnaires are present;
 - (b) The household final result codes are correct;
 - (c) The correct number of Woman's and Man's Questionnaires are present;
 - (d) The woman's and man's final result codes are correct.

Remember, there must be a Woman's Questionnaire assigned for each eligible woman, even if the interview was not conducted. Those questionnaires will be blank except for the identification information and the result codes. Similarly, there must be a Man's Questionnaire assigned for each eligible man in the households selected for the men's survey, even if the interview was not conducted.

E. FORWARDING QUESTIONNAIRES TO THE HEAD OFFICE

Once all the checking described above has been completed and any differences have been reconciled, the field editor should put all the questionnaires along with the Supervisor's/Editor's Assignment Sheet, the PSU Information Form, and the sketch maps for the sample point into the envelopes provided. On the outside of the envelope, she should write the PSU number, the location identification information, and the number of Household Questionnaires for that PSU. If the questionnaires are too bulky to fit into one envelope, she should use two or more and write PACKET 1 OF 3, PACKET 2 OF 3, etc., on the outside of each envelope. The packets should be kept securely until they can be transported to the central office. The director of field operations will provide specific instructions about how and when to send the questionnaires from each PSU. It is very important that questionnaires are bundled and labeled properly, and protected from dampness and dust. Follow these instructions to avoid the loss of questionnaires or information.

F. ENSURING BLOOD SAMPLES REACH THE COLLECTION CENTRE

Check to make sure that the number of blood samples collected correspond to the number of women and men whose blood was collected for HIV testing in each household and that the total number of samples tally with the total number of blood samples collected in each PSU. Also make sure that the three bar code labels for each individual tested (in the Household Questionnaire, the filter paper and the transmittal form) are identical. With the Health Investigators, package all samples collected carefully according to the instructions in the Anthropometry, Anaemia and HIV Testing Field Manual. Both the health investigators and the supervisor should fill in and sign the transmittal form before the samples are handed over to the Field DBS Collector for delivery to the collection centre. Remember that all blood samples have to reach the collection centre within 5 days from the time of collection. It is the responsibility of the supervisor to notify the head office if samples have not been collected within this time period.

G. ANAEMIA REFERRALS

If there are any severely anaemic women or children in the PSU who agree to have their anaemia status sent to the local health centre, complete the Anaemia Referral Letter and Form and give or send them to the designated health officials.

NFHS-3 SUPERVISOR'S/EDITOR'S ASSIGNMENT SHEET

STATE		PSU NUMBER		SUPERVISOR'S NAME					SUPERVISOR'S NUMBER						
HOUSEHOLDS									WOMEN			MEN			NOTES
NFHS-3 HOUSEHOLD NUMBER	STRUCTURE NUMBER OR ADDRESS	NAME OF HOUSEHOLD HEAD	HOUSEHOLD SELECTED FOR		INTERVIEWER AND HEALTH INVESTIGATOR ASSIGNED/DATE ASSIGNED	FINAL RESULT	TOTAL ELIGIBLE WOMEN	TOTAL ELIGIBLE MEN	LINE NUMBER OF ELIG. WOMAN	INTERVIEW FINAL RESULT	HIV BLOOD SAMPLE TAKEN?	LINE NUMBER OF ELIG. MAN	INTERVIEW FINAL RESULT	HIV BLOOD SAMPLE TAKEN?	
(1)	(2)	(3)	MEN'S SURVEY	HIV	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
			Y N	Y N							Y N			Y N	
			Y N	Y N							Y N			Y N	
			Y N	Y N							Y N			Y N	
			Y N	Y N							Y N			Y N	
			Y N	Y N							Y N			Y N	
			Y N	Y N							Y N			Y N	
			Y N	Y N							Y N			Y N	
			Y N	Y N							Y N			Y N	

CODES FOR COLUMN (7)

CODES FOR COLUMN (11) AND (14)

- 1 COMPLETED
- 2 NO HH MEMBER AT HOME/NO COMPETENT RESPONDENT
- 3 ENTIRE HH ABSENT FOR EXTENDED PERIOD
- 4 POSTPONED
- 5 REFUSED

- 6 DWELLING VACANT/ADDRESS NOT A DWELLING
- 7 DWELLING DESTROYED
- 8 DWELLING NOT FOUND
- 9 OTHER

- 1 COMPLETED
- 2 NOT AT HOME
- 3 POSTPONED
- 4 REFUSED
- 5 PARTLY COMPLETED
- 6 INCAPACITATED
- 7 OTHER

NUMBER OF HOUSEHOLDS SELECTED	NUMBER OF HOUSEHOLD QUESTIONNAIRES	NUMBER OF WOMEN'S QUESTIONNAIRES	NUMBER OF MEN'S QUESTIONNAIRES	NUMBER OF RESPONDENTS ELIGIBLE FOR HIV BLOOD SAMPLES	NUMBER OF BLOOD HIV SAMPLES
-------------------------------	------------------------------------	----------------------------------	--------------------------------	--	-----------------------------

**ANNEX 2
NFHS-3 INTERVIEWER'S ASSIGNMENT SHEET**

STATE <input style="width:20px;" type="text"/>	PSU NUMBER <input style="width:20px;" type="text"/>	DISTRICT _____	TEHSIL/ TALUK _____	CITY/ TOWN/ VILLAGE _____	CITY SIZE/RURAL AREA CODES 1 MEGA CITY <input style="width:20px;" type="checkbox"/> 2 LARGE CITY 3 SMALL CITY 4 LARGE TOWN 5 SMALL TOWN 6 RURAL									
INTERVIEWER'S NAME _____		INTERVIEWER NUMBER <input style="width:20px;" type="text"/>	NO. OF WOMEN'S QUESTIONNAIRES <input style="width:20px;" type="text"/>	NO. OF MEN'S QUESTIONNAIRES <input style="width:20px;" type="text"/>										
HOUSEHOLDS								WOMEN			MEN			NOTES
NFHS-3 HOUSEHOLD NUMBER (1)	STRUCTURE NUMBER OR ADDRESS (2)	NAME OF HEAD OF HOUSEHOLD (3)	DATE ASSIGNED (4)	HOUSEHD SELECTED FOR MEN'S INTERVIEW? (5)	FINAL RESULT (6)	TOTAL ELIGIBLE WOMEN (7)	TOTAL ELIGIBLE MEN (8)	NAME OF ELIGIBLE WOMAN (9)	LINE NUMBER OF ELIG. WOMAN (10)	INTERVIEW FINAL RESULT (11)	NAME OF ELIGIBLE MAN (12)	LINE NUMBER OF ELIG. MAN (13)	INTERVIEW FINAL RESULT (14)	
				Y N										
				Y N										
				Y N										
				Y N										
				Y N										

CODES FOR COLUMN (6)

- 1 COMPLETED
- 2 NO HH MEMBER AT HOME/NO COMPETENT RESPONDENT
- 3 ENTIRE HH ABSENT FOR EXTENDED PERIOD
- 4 POSTPONED
- 5 REFUSED

- 6 DWELLING VACANT/ADDRESS NOT A DWELLING
- 7 DWELLING DESTROYED
- 8 DWELLING NOT FOUND
- 9 OTHER

CODES FOR COLUMN (11) AND (14)

- 1 COMPLETED
- 2 NOT AT HOME
- 3 POSTPONED
- 4 REFUSED
- 5 PARTLY COMPLETED
- 6 INCAPACITATED
- 7 OTHER

**ANNEX 4
NFHS-3 HEALTH INVESTIGATOR'S ASSIGNMENT SHEET**

PSU NUMBER <div style="border: 1px solid black; width: 60px; height: 20px; margin: 5px auto;"></div>	HEALTH INVESTIGATOR'S NAME -----	HEALTH INV. NUMBER <div style="border: 1px solid black; width: 60px; height: 20px; margin: 5px auto;"></div>	NO. OF ELIGIBLE RESPONDENTS FOR BLOOD SAMPLES <div style="border: 1px solid black; width: 40px; height: 20px; margin: 5px auto;"></div>				COUNT OF BLOOD SAMPLES <div style="border: 1px solid black; width: 40px; height: 20px; margin: 5px auto;"></div>									
HOUSEHOLDS				CHILDREN		WOMEN					MEN					
NFHS-3 STRUCTURE NUMBER AND HOUSEHOLD NUMBER (1)	NAME OF HOUSEHOLD HEAD AND ADDRESS (2)	HOUSEHOLD SELECTED FOR:		LINE NUMBER OF CHILDREN ELIGIBLE FOR ANAEMIA TESTING (5)	CHILD TESTED FOR ANAEMIA (Y=YES; N=NO) (6)	TOTAL ELIGIBLE WOMEN (7)	LINE NUMBER OF ELIGIBLE WOMAN (8)	INTERVIEW FINAL RESULT (9)	TESTED FOR ANAEMIA (Y=YES; N=NO) (10)	BLOOD SAMPLE TAKEN? (Y=YES; N=NO) (11)	TOTAL ELIGIBLE MEN (12)	LINE NUMBER OF ELIGIBLE MAN (13)	INTERVIEW FINAL RESULT (14)	TESTED FOR ANAEMIA (Y=YES; N=NO) (15)	BLOOD SAMPLE TAKEN? (Y=YES; N=NO) (16)	NOTES (17)
		MALE INTERVIEW (Y=YES; N=NO) (3)	HIV TESTING (Y=YES; N=NO) (4)													
		Y N	Y N		Y N				Y N	Y N				Y N	Y N	
					Y N				Y N	Y N				Y N	Y N	
					Y N				Y N	Y N				Y N	Y N	
		Y N	Y N		Y N				Y N	Y N				Y N	Y N	
					Y N				Y N	Y N				Y N	Y N	
					Y N				Y N	Y N				Y N	Y N	
					Y N				Y N	Y N				Y N	Y N	
		Y N	Y N		Y N				Y N	Y N				Y N	Y N	
					Y N				Y N	Y N				Y N	Y N	
					Y N				Y N	Y N				Y N	Y N	
TOTAL NUMBER OF MAN'S QUESTIONNAIRES <div style="border: 1px solid black; width: 40px; height: 20px; margin: 5px auto;"></div>		TOTAL NUMBER OF WOMAN'S QUESTIONNAIRES <div style="border: 1px solid black; width: 40px; height: 20px; margin: 5px auto;"></div>		NUMBER OF BLOOD SAMPLES TAKEN FOR WOMEN <div style="border: 1px solid black; width: 40px; height: 20px; margin: 5px auto;"></div>		NUMBER OF BLOOD SAMPLES TAKEN FOR MEN <div style="border: 1px solid black; width: 40px; height: 20px; margin: 5px auto;"></div>										

ANNEX 5
BLOOD SAMPLE TRANSMITTAL SHEET

--	--

STATE NUMBER

--	--	--

PSU NUMBER

--

PLACE NAME

FOLD AND KEEP SHEET IN LARGE ZIP-LOCK BAG WITH SAMPLES
UNTIL FINAL SIGNATURE HAS BEEN OBTAINED

FORM 5

PERSON SENDING/ RECEIVING SAMPLES	TIME TO FILL IN FORM	TOTAL COUNT OF BLOOD SAMPLES	SIGNATURE (CONFIRMING THAT EACH SAMPLE IS PRESENT—SEE BACK OF FORM)	SIGNATURE (CONFIRMING THAT THE NUMBER OF BLOOD SAMPLES MATCHES COL. 3)	DATE	NOTES (NOTE ANY DISCREPANCY IN NUMBERS OF SAMPLES)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)		
HEALTH INVESTIGATOR/ SUPERVISOR	WHEN CLUSTER IS COMPLETED	<table border="1" style="width: 100%; height: 30px;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%;"></td> </tr> </table>						
SAMPLE PICK UP VEHICLE/ PERSON INCHARGE	WHEN SAMPLES ARE PICKED UP IN FIELD	<table border="1" style="width: 100%; height: 30px;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%;"></td> </tr> </table>						
RECEIVER AT THE BLOOD COLLECTION CENTRE	UPON ARRIVAL AT THE BLOOD COLLECTION CENTRE	<table border="1" style="width: 100%; height: 30px;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%;"></td> </tr> </table>						
RECEIVER AT RANBAXY	UPON ARRIVAL AT THE RANBAXY LABORATORY	<table border="1" style="width: 100%; height: 30px;"> <tr> <td style="width: 50%;"></td> <td style="width: 50%;"></td> </tr> </table>						

INSTRUCTIONS

HEALTH INVESTIGATOR: Upon completion of a cluster, verify that the unique bar code (identification) number on each blood sample (filter paper card) collected and stored in the large zip-lock bag labeled with that cluster number corresponds to a bar code number pasted to the back of this transmittal sheet and vice-versa. Note any discrepancies in Column (7). Count and record the total number of blood samples in Column (3). Sign your name in Column (4) and the date in Column (6). Fold and store this transmittal sheet in the large zip-lock bag.

FIELD TEAM SUPERVISOR: After the technician has verified the blood samples, you will conduct a second verification. Verify that the unique bar code (identification) number on each blood sample (filter paper card) collected and stored in the large zip-lock bag labeled with that cluster number corresponds to a bar code number pasted to the back of this transmittal sheet and vice-versa. Note any discrepancies in Column (7). Count and verify the total number of blood samples in Column (3). Sign your name in Column (5) and the date in Column (6). Refold and store this transmittal sheet in the large zip-lock bag.

SAMPLE PICK UP PERSON: Before returning to the sample collection centres after visiting a team in the field, you will verify the number of blood samples collected in each completed cluster that you are carrying back with you. For each completed cluster, count and record the total number of blood samples stored in the large zip-lock bag labeled with that cluster number in Column (3). Note any discrepancies in Column (7). Sign your name in Column (5) and the date in Column (6). Refold and store this transmittal sheet in the large zip-lock bag.

RECEIVER AT THE COLLECTION CENTRE: For each large zip-lock bag arriving from the field, you will verify the number of blood samples received. Count and record the total number of blood samples stored in the large zip-lock bag labeled with the cluster number in Column (3). Note any discrepancies in Column (7). Sign your name in Column (5) and the date in Column (6). Photocopy both sides of this transmittal sheet and file the photocopies (as instructed) in a designated, locking file cabinet. Refold and store the original transmittal sheet in the large zip-lock bag. Follow the Ranbaxy protocol for sending blood samples to the Ranbaxy Lab in Mumbai.

RECEIVER AT THE RANBAXY LAB: Upon receiving blood samples from the Blood collection centres, verify that the unique bar code (identification) number on each blood sample (filter paper card) collected and stored in the large zip-lock bag labeled with the cluster number corresponds to a bar code number pasted to the back of this transmittal sheet and vice-versa. Note any discrepancies in Column (7). Count and record the total number of blood samples in Column (3). Sign your name in Column (4) and the date in Column (6). Photocopy both sides of this transmittal sheet after signing and dating. Send the photocopies (as instructed) to the office of the Research Organization. Follow the NFHS-3/ Ranbaxy lab protocol for storing and processing blood samples.

Note: this form will be destroyed under the direction of the Lab Director after all blood samples have been completely processed and a Final HIV Test Result has been determined for each usable sample.

**ANNEX 6
PSU INFORMATION FORM**

STATE _____
PAGES

PAGE _____ OF _____

DISTRICT	TEHSIL/TALUK	CITY/TOWN/VILLAGE	CITY SIZE/ RURAL AREA*	PSU NUMBER	ALTITUDE	PSU COVERAGE BY ANGANWADI/ICDS CENTRE AND YEAR ESTABLISHED (IF YES)
_____	_____	_____	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	METRES..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> < 1,000 METRES.....9995	YES...1 NO...2 YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
_____	_____	_____	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	METRES..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> < 1,000 METRES.....9995	YES...1 NO...2 YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
_____	_____	_____	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	METRES..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> < 1,000 METRES.....9995	YES...1 NO...2 YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
_____	_____	_____	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	METRES..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> < 1,000 METRES.....9995	YES...1 NO...2 YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
_____	_____	_____	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	METRES..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> < 1,000 METRES.....9995	YES...1 NO...2 YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
_____	_____	_____	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	METRES..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> < 1,000 METRES.....9995	YES...1 NO...2 YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>
_____	_____	_____	<input type="checkbox"/>	<input type="text"/> <input type="text"/> <input type="text"/>	METRES..... <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/> < 1,000 METRES.....9995	YES...1 NO...2 YEAR <input type="text"/> <input type="text"/> <input type="text"/> <input type="text"/>

* CODES FOR CITY SIZE/RURAL AREA

MEGA CITY=1, LARGE CITY=2, SMALL CITY=3, LARGE TOWN=4, SMALL TOWN=5, RURAL=6

NAME OF SUPERVISOR _____

ANNEX 7
LENGTH (cm)

MALES			FEMALES	
Minimum	Maximum	Age in months	Minimum	Maximum
36.0	74.0	00 - 02	36.0	72.0
45.0	83.0	03 - 05	44.0	80.0
51.0	87.0	06 - 08	50.0	86.0
56.0	91.0	09 - 11	54.0	90.0
59.0	96.0	12 - 14	57.0	95.0
62.0	100.0	15 - 17	60.0	99.0
64.0	104.0	18 - 20	62.0	102.0
65.0	107.0	21 - 23	64.0	106.0
67.0	108.0	24 - 26	66.0	107.0
68.0	112.0	27 - 29	68.0	111.0
70.0	115.0	30 - 32	69.0	114.0
71.0	118.0	33 - 35	71.0	117.0
73.0	121.0	36 - 38	72.0	120.0
74.0	124.0	39 - 41	74.0	122.0
75.0	127.0	42 - 44	75.0	124.0
77.0	129.0	45 - 47	77.0	126.0
78.0	132.0	48 - 50	78.0	129.0
79.0	134.0	51 - 53	79.0	131.0
80.0	136.0	54 - 56	81.0	133.0
82.0	139.0	57 - 60	81.0	136.0

WEIGHT (kg)

MALES			FEMALES	
Minimum	Maximum	Age in months	Minimum	Maximum
0.5	10.0	00 - 02	0.5	9.0
1.0	13.0	03 - 05	1.0	12.0
2.0	15.0	06 - 08	2.0	14.0
3.0	16.5	09 - 11	2.5	15.5
4.0	17.5	12 - 14	3.0	16.5
4.0	18.5	15 - 17	3.5	17.5
4.0	19.5	18 - 20	3.5	18.5
4.5	20.5	21 - 23	4.0	19.5
4.5	23.0	24 - 26	4.5	21.5
5.0	24.0	27 - 29	5.0	23.0
5.0	24.5	30 - 32	5.0	24.5
5.0	25.5	33 - 35	5.0	25.5
5.0	26.0	36 - 38	5.0	27.0
5.0	27.0	39 - 41	5.0	28.0
5.0	28.0	42 - 44	5.5	29.0
5.0	29.0	45 - 47	5.5	30.0
5.0	30.0	48 - 50	5.5	31.0
5.0	31.0	51 - 53	5.5	32.0
5.5	32.0	54 - 56	6.0	33.0
5.5	33.0	57 - 60	6.0	34.5

