

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

**Project Director's Manual**



**International Institute for Population Sciences  
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# **Project Director's Manual**

## **I. INTRODUCTION**

NFHS-3 is a nation wide survey involving collaborative efforts of 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 (ROs) will conduct and coordinate survey operations in all 29 states of India. 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.

The NFHS-3 is a complex task involving different activities which broadly can be classified under a) mapping and houselisting, b) data collection-conducting interviews and collection of biomarkers and c) data processing. In each state a large number of personnel of different types are involved in implementing the project. For training these staff members in all the states NFHS-3 uses two-tier training scheme. The In-charge of all these activities i.e. Mapping and houselisting, data collection and data processing from all the states are trained in centralized training programmes conducted by the nodal agency. The persons trained by the nodal agency train all the staff actually carrying out these activities and coordinate the respective activities in their state. The exception for this two-tier training scheme is health investigators' training. All the health investigators are trained directly in centralized training programme conducted by the nodal agency. The manuals on Mapping and Houselisting, Interviewer's Manual, Supervisor's and Editor's Manual and Health Investigator's Manual provide ready reference for all the activities of persons responsible for respective activities. The Training Guidelines manual provides standardized procedures for interviewers' training.

The Project Director in the central office who is overall in-charge of NFHS-3 in the state may be busy in the administrative matters and might not be aware of various protocols and procedures as he/she may not have attended any training conducted for NFHS-3. However, it is necessary that the Project Director should know all the activities and protocols involved in NFHS-3 as he/she has responsibility of overall implementation of the project. Though all the persons involved in NFHS-3 activities are well equipped in all the task they are supposed to carry out, it is necessary that each person involved in NFHS-3 should know about all the steps involved in all the project activities. Project Director is expected oversee all the

project activities and observe that all the set protocols are followed by the concerned persons. This manual provides a short list of all the activities and protocols involved in NFHS-3.

The first important responsibility of the Project Director is to have regular communication with IIPS. During the entire project period IIPS will communicate with Project Director mainly through e-mail. Project director should promptly check the e-mails, reply to IIPS and communicate with concerned project staff.

## **II. MAPPING AND HOUSELISTING**

This is the first activity of NFHS-3 which all the Research Organizations will undertake.

### **A. NFHS-3 Sample**

IIPS will provide a list of selected sample areas- Primary Sampling Units (PSUs) – in the state to respective ROs. The NFHS-3 sample areas will be spread across almost all the districts in a state. The PSUs in rural areas are villages selected from the list of all villages in a state. Since all the smaller villages having 5-49 households are linked with the neighbouring villages, some PSUs may be a group of two or more villages. In urban area the PSUs are wards in cities selected from the list of all the wards in all the cities of the state. In eight cities of Chennai, Delhi, Hyderabad, Indore, Kolkata, Meerut, Mumbai and Nagpur the selected PSUs will be census enumeration blocks (CEBs) selected separately from slum and non-slum areas.

Once the list of PSUs for a state is made available the RO will start obtaining maps of selected villages and the number of CEBs in each ward and number of HHS in each CEB as per census of India, 2001. Using the procedure given by IIPS, ROs will select one CEB from each ward in the list of urban PSUs. Once the selection of CEBs is done ROs will obtain maps of selected CEBs. The mapping and listing is done in villages and in these selected CEBs.

### **B. Mapping Houselisting Teams**

Depending on the number of PSUs in a state ROs will form the number of teams for mapping & houselisting operation. Each team will have one mapper and

one lister. These teams will visit villages and selected CEBs. They will draw location maps and layout map of each village and selected CEB in urban areas as shown in maps given in the manual of mapping and houselisting.

### **C. Segmentation of Large Villages**

All the villages with number of HHs more than 500 will be segmented into 3 or more smaller segments of size 150-200 HHs each. The number of segments to be made will be based on the number of HHs in a village. The details of the procedure of segmentation are described in the Mapping and Houselisting manual. For all the segmented villages separate layout maps will be prepared for two selected segments. From the segments made two segments will be selected as per procedure given by IIPS. The details of segmentation will be shown in the form 5 in the manual of mapping and houselisting.

### **D. Mapping, Numbering of Structures and Houselisting**

After preparing the location map the teams will number all the structures in the selected CEBs in urban areas and villages and prepare the layout map. In segmented villages the structures in the selected segments only will be numbered. The numbers will be marked on the front outer wall of the structure. All the structures and households-non-residential as well as residential- will be listed on the form 2 of manual of mapping and houselisting. The details of the procedure of houselisting are described in the Mapping and Houselisting manual.

### **E. Houselisting Forms**

The number of HHs listed in each village, urban CEBs and slum-non-slum CEBs in the eight cities will be recorded in the forms no. 3, 4, 4A respectively. For each rural/ urban/ city PSUs in a state forms number 1 (Location and Layout maps) and 2 will be filled. Form number 5 will be filled for each segmented village in a state. As soon as the information are recorded in the forms number 2 and 5, the summary of information will be recorded in the relevant form- numbers 3, 4 and 4A- which are at the state level forms. In eight cities of Chennai, Delhi, Hyderabad, Indore, Kolkata, Meerut, Mumbai and Nagpur two separate forms (Form No.4A) will be filled for non-slum and slum PSUs.

Project Director may periodically check whether for each of the PSUs for

which mapping and houselisting is completed all the necessary maps are sketched and forms are filled correctly.

## **F. Household Selection**

For selecting sample of households in each of the PSU, IIPS will provide EXCEL spreadsheet. Once all the households in all PSUs are listed and the total number of listed HHs is available, that number is entered in the EXCEL spreadsheet. The spreadsheet provides the numbers of HHs selected for the survey, for men's interviews and for HIV testing. The procedure to use the spreadsheet is described in the manual. Project Director may verify the selection of HHs.

Project Director may also ensure that mapping and houselisting in all the PSUs is completed before launching the data collection so that he/she can concentrate only on one activity at a time.

Once the sample selection is over, the organization is ready for data collection.

## **III. DATA COLLECTION**

Before launching the data collection work there are many preparations to be done.

### **A. Field Staff**

The foremost among them is the recruitment of the field staff. Depending on the state sample size and the duration of data collection the nodal agency will fix the number of field teams. The composition of teams is also fixed. Each field team will have three female investigators, one male investigator, one female editor, one supervisor-preferably male and two health investigators. In high HIV prevalence states (Andhra Pradesh, Karnataka, Manipur, Maharashtra, Nagaland and Tamil Nadu) and in Uttar Pradesh the teams will have two male and female investigators each. All these team members need to undergo training. Project Director needs to ensure that the fixed number of teams with required composition are recruited and trained and work in the field throughout the data collection period. Besides field staff, one person should be appointed exclusively for transporting DBS. The duty of this person is collection of DBS from different teams and depositing them with Ranbaxy's collection centers.

## **B. Training of Field Staff**

For all the field staff four weeks training programme is required to be organized. The training should comprise of classroom discussion of each of the questionnaire, question by question, lectures on special topics like family planning methods, RCH programme, HIV/ AIDS, Domestic violence etc. In the training programme equal emphasis should be given to classroom sessions and practice sessions. After completion of the discussion of every few sections mock interviews and practice interviews should be conducted. Before launching the actual data collection in any area (other than NFHS-3 sample area) the dress rehearsal of data collection should be done at least for three days. The data collection should start immediately after the field practice so as to minimize recall lapse.

The manual on Training Guidelines describes in detail how the training should be conducted. Project Director should ensure that training is conducted in the state language. He/she also occasionally attend the training sessions to ensure that trainers are effective in communicating and trainees are capturing the contents of training.

## **C. Questionnaires and Manuals**

IIPS gives hard and soft copies of all the three questionnaires- Household, Woman's and Man's. These are bilingual questionnaires in English and Hindi. ROs will translate them in the state language and replace Hindi part by state language. ROs will print these questionnaires in sufficient number considering the state sample size, copies required for field practice during training sessions and some wastage during fieldwork. It is essential to use better quality paper and good binding to minimize tearing of the QREs, as each questionnaire is handled by many persons, like male, female, health investigators, supervisor, field editor, office editor, data entry operator, verifier etc. Printing of cover pages of three QREs in three different colors would help in easy identification of QREs. It is mandatory to obtain IIPS' approval after translating the questionnaires and before giving for printing. Project Director may personally supervise the checking of the copies of QREs before giving for printing to ensure that printed QREs are error free. IIPS also gives soft and hard copies of the manual of Mapping and Houselisting, Interviewer's Manual, Supervisor's and Editor's Manual and Health Investigator's Manual, NFHS-3 Project Guidelines and Training Guidelines. ROs will print/ photocopy these manuals in sufficient number so that each field staff gets one copy of the manual relevant for his/ her job.

#### **D. Establishing Contacts with VCT Centers**

The other preparations include collection of many documents, forms and supplies required for the fieldwork. It is necessary to collect the list of all the Voluntary Counseling and Testing Centers (VCTC) in a state from the State AIDS Control Society (SACS) in the state capital. It is necessary that a senior person from RO visits SACS, brief the in-charge of SACS about NFHS-3 and inform them about referral to different VCTC during fieldwork and request them to provide free HIV testing in different centers. A copy of the letter from NACO (given by IIPS) will help in this. It is also necessary to collect HIV Information Brochures from SACS which is required to be given to each household from where blood sample are collected for HIV testing.

#### **E. Establishing Contacts with Ranbaxy Collection Centers**

For smooth deposition of Dried Blood Samples for HIV testing it is necessary to have contacts with Ranbaxy collection Centers in the state. IIPS will provide a list of all the collection centers as well as Ranbaxy's Area Sales Managers (ASMs) and Sales Officers (SOs) in the state. It is necessary that a senior person from RO meets ASM and brief him/her about utilizing the collection centers in the state.

#### **F. List of Women's Organizations**

The ROs are also required to collect a list of organizations providing help/support to women-victims of domestic violence. If the respondent of section on Household Relations in woman's questionnaire expresses the desire to know about or contact such organizations it is necessary to have the list ready with female investigator so that she can give her the contact number of nearby organization. It would be better if these organizations are contacted in advance and briefed about NFHS-3.

Depending on the spread of PSUs in a state, RO can decide which VCT centers and Ranbaxy's collection centers can be utilized. ROs need to make tentative plan of fieldwork in each PSU.

Project director should ensure that before launching the fieldwork all the necessary agencies are contacted. In case of any problem in establishing the contact, he/she may personally contact or visit the concerned agency.



## **G. Field Documents and Other Items**

Besides questionnaires ROs will require many other documents, forms, and supplies during fieldwork. Some of these are required one per PSU, some for each investigator, some for each team and others for each sampled household or for each individual respondent. Accordingly their quantity has to be fixed. Following is the list of items required for the fieldwork:

### **Fieldwork documents:**

- 1. Photo Identity Card- for each field staff**
- 2. Letters of introduction –for each field staff**
- 3. Household, Woman’s and Man’s Questionnaires**
- 4. Supervisor's/Editor's Assignment Sheets-for each PSU**
- 5. Interviewer's Assignment Sheets- for each investigator for each day of fieldwork**
- 6. Health Investigator’s Assignment Sheets-for each health investigator for each day of fieldwork**
- 7. Interviewer’s Progress Sheets-for each investigator**
- 8. Blood Sample Transmittal Sheets-daily for each health investigator**
- 9. PSU Information Forms-for each supervisor**
- 10. Cards with contact information of the Director, IIPS and NFHS-3 State Coordinator of the selected RO-for each sampled household**
- 11. Anaemia brochures (three types) to be given to respondents with their haemoglobin level and height and weight measurements recorded-for each respondent whose biomarkers are done**
- 12. Anaemia Referral Letters- for each respondent found with haemoglobin level < 7 mg/dl**
- 13. HIV Information Brochure- for each household from where blood is collected for HIV test**
- 14. Voucher for free VCT- for each respondent whose blood is collected for HIV test**
- 15. List of places that provide assistance to victims of domestic violence- for each female respondent selected for section on household relation and expresses the need to contact women’s organization**

16. Literacy cards-for each investigator
17. Sample Immunization Cards-for each female investigator
18. ORS packets-for each female investigator
19. Vitamin A tablets/syrup-for each female investigator
20. Iron and folic acid tablets/syrup-for each female investigator
21. Salt Test Kit-for each investigator
22. Cool Box (capacity 1200 cc)- for each team

**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.
- Large Envelopes to store completed questionnaires
- First aid kit
- Anaemia and HIV field supplies (detailed in the Health Investigator's Manual, supplied by IIPS)
- Torch and batteries
- Monetary advances for field expenses

It would be better if all the documents required to be given to respondents are printed in the form of books with perforations on the pages so that single document can be easily removed from the book. Project director may personally ensure that all the necessary documents are printed in sufficient numbers and items are procured.

#### **H. Hiring Vehicles during Fieldwork**

For all the fieldwork days vehicles with capacity of minimum 8 persons (excluding driver) need to be hired separately for each team. Besides these vehicles daily one additional vehicle (*not per team*) need to be hired for transporting DBS from field to Ranbaxy collection center. For any emergency like breakdown of vehicle the supervisor of the team should have power to take decisions and have money to spend without prior permission of central office. Ideally a team should

retain the same vehicle and driver throughout the survey period as in that way driver also understand the nature of the survey, becomes the part of the team and helps in managing the fieldwork logistics.

### **I. Communication between Project Office and Field Staff**

For continuous communication between project central office and all the teams it is necessary that team supervisor has mobile phone. This will facilitate communicating all the instructions/ clarifications from IIPS to all the field teams and any problem in the field to central office.

### **J. Fieldwork Plan**

If the team has already established contact with 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, then on an average in each PSU with sample size of 30 households data collection is expected to take 5 days in Uttar Pradesh and six high HIV prevalence states and 4 days in all other states. Based on this estimate and taking into account the travel time from one district to another central office should chalk out the tentative plan for field work and field movement. Unless the sample size in any PSU exceeds 50 HHs only a single team will work in a PSU. It is essential to plan the movement of each team. Advance planning will help supervisor in making arrangements of stay at different places conveniently located from PSUs in that area and making contacts with VCTC and Ranbaxy Collection Center in that area.

Before leaving the project headquarter, based on the number of PSUs and HHS to be visited, each team supervisor should estimate the number of QREs and the other supplies to be carried with. In consultation with Health Investigators supervisor will also estimate the anaemia and HIV supplies to be carried with the team. Project director and supervisor will also chalk out the plan of transportation of filled-in QREs to the project office.

During the fieldwork period teams will have to stay in different places. Though in remote places it might not be possible to hire good hotel rooms, the reasonable comforts and security of the teams and sufficient and secured storage room for questionnaires, other supplies, medical equipment and supplies should be taken care of.

## **K. Fieldwork Preparation**

Once the team reaches to place of stay, it is necessary that team supervisor visits the PSU on the previous day of data collection, brief the village *surpanch* and local community leaders about the survey and request for their cooperation. The Mapping and Houselisting Team might have already established contacts with villagers at the time of listing but it is essential to do one prior visit again. Else the entire team may have to lose first half day of the fieldwork in search of village *surpanch* and taking his/her permission for fieldwork. In most of the cases community leaders readily extend the cooperation. However, in few difficult situations of rejection, like politically disturbed areas or posh metropolitan localities intervention by senior person like Project Director is desirable.

Before starting for the fieldwork in a PSU, team supervisor already know about the number of selected households and the number of HHs for Man's interview and HIV testing in the PSU. Before starting fieldwork in PSU, team supervisor will fill up the Form 1 about Supervisor/ Editor's Assignment Sheet. In the first five columns he/she will enter the details of all the sampled HHs in that PSU. Then on the first day as he/she allots the HHs to individual male and female interviewers and health investigators column 6 of those first few HHs will be filled. As interviewers/ health investigators get their assignment of that day they will fill up the details of their assignment in Interviewer's Assignment Sheet (Form 2) and Health Investigator's Assignment Sheet (form 4) respectively.

Depending on the expected work of the day team supervisor and Health Investigator will estimate the quantity of health supplies for a day and pack them up.

After reaching the PSU and initiating the fieldwork supervisor will collect PSU information about the altitude and *Anganwadi* (slum/ non-slum status in case of eight cities) for PSU Information Form (Form 6). The steps to fill up all the above mentioned forma are described in Supervisor/ Editor's Manual, Interviewer's Manual and Health Investigator's Manual.

## **L. Data Collection in a HH**

The steps in data collection in a HH are as follows:

1. Household Interview-and filling up names, line number of persons eligible for biomarkers

2. Salt Testing for Iodine
3. Individual respondent's interview
4. Measurement of height, weight and haemoglobin content in the blood for respondent
5. Measurement of height, weight and haemoglobin content in the blood for all the children in the HH who are born after 1<sup>st</sup> January 2001

### **HH Questionnaire**

The first QRE to be administered in the HH is HH QRE which will be administered either by male investigator or female investigator. The Identification Details on the cover page of HH QRE will have to be entered as soon as that HH is assigned to the investigator. The respondent of HH QRE can be any adult (age 18+) usual resident of the HH.

The first step of the HH interview is seeking consent for the interview. The investigator has to read the consent statement in verbatim, give the respondent the IIPS Director's contact card and sign the consent form by marking whether respondent agrees or disagrees for interview. The HH interview will start only if the respondent gives consent for the interview. In case if respondent does not agree for the interview supervisor should make efforts to convince him/her. But even after repeated requests if the respondent does not agree for the interview then investigator should thank the respondent and leave the house. Even if the HH interview is not conducted, there should be a HH QRE with identification details and result code as *REFUSED*, The same holds good for locked houses and HHs with no competent respondent. All the instructions about filling up the QRE are given in Interviewer's Manual.

While conducting HH interview presence of other persons is acceptable. If necessary, respondent can ask few details from other HH members.

After completion of HH interview Investigator asks for a sample of cooking salt and tests for Iodine content. After the test Investigator has to Inform respondent about Iodine contents of the salt. The next step is the selection of one female member from HH roster for the section on Household Relations with the help of the table on the page 11 of HH QRE and recording names and line numbers of all the HH members eligible for biomarkers in the biomarker section of HH QRE. This is the end of HH QRE and at this stage the result code of HH QRE will be

*COMPLETED* which will be entered on the cover page of HH QRE as well as in the Interviewer's Assignment Sheet.

### **Woman's Questionnaire**

After completion of the HH interview only, individual interviews start. IN NO CASE INDIVIDUAL INTERVIEWS WILL BE CONDUCTED BEFORE HH INTERVIEW. If the Investigator conducting HH interview is female, then she will refer to HH roster to find any woman eligible for individual interview All women age 15-49 who are either usual resident of the HH or visitors who stayed in that HH on previous night are eligible for individual interview. ONLY FEMALE INVESTIGATOR CAN INTERVIEW FEMALES. The first step towards individual interview is seeking informed consent. Investigator has to read informed consent statement. Even if the eligible woman had given HH interview and given consent for HH interview just half an hour back, investigator has to seek consent for individual interview once again.

While interviewing, all the questions have to be read in verbatim. QREs will be filled only by interviewing the respondent and not asking information from other persons. All the instructions about filling up the QRE are given in Interviewer's Manual. During interview strict privacy will have to be maintained as respondent has given consent for the interview on the condition of confidentiality. Even females like editor/ any supervising & monitoring team member can observe the interview only by seeking respondent's permission. HOWEVER, THEY ALSO SHOULD LEAVE INTERVIEW WHEN SECTIONS ON SEXUAL ACTIVITY AND HOUSEHOLD RELATIONS ARE BEING ASKED.

In individual interview if respondent is not able to inform age and birth date, interviewer will have to make efforts to estimate age based on age at marriage, age at first pregnancy, eldest child' age etc. If estimated age and reported education differ from age recorded in HH QRE, no change will be made in HHQRE. Only if estimated age of the respondent is less than 15 or above 50, i.e. when respondent becomes ineligible for the interview her age will be corrected in HH QRE.

In individual interview if the respondent had schooling less than 5 years then asks the respondent to read a sentence from *LITERACY CARD* to determine her literacy status.

In woman's interview while administering sections 4 and 5 respondent is helped in replying by showing *IMMUNIZATION CARD, IFA TABLETS, VITAMIN A BOTTLE and ORS PACKETS*. In case if the respondent has Immunization card of the child then the information from it will be copied.

Section 10 of woman's questionnaire on Household Relations is asked to only one eligible woman from the HH even if there are more than one eligible woman in HH. This section will not be administered if privacy is not obtained. Special instructions for administering this section are provided in the Domestic Violence Manual. If the respondent of this section expresses the desire to seek help for the violence she is experiencing at home, investigator has to give her contact telephone number/ address of nearby organization/ agency working for support of victims of domestic violence.

After completion of the interview the result code of woman's interview will be recorded on the cover page of woman's QRE as well as on the Interviewer's Assignment Sheet.

Once a woman's interview is completed she is eligible for biomarker measurement.

If in the HH there are two or more eligible respondents then female investigator should complete all the interviews in the HH (depending on the availability of the respondents) and hand over the household questionnaire to male investigator if the HH is selected for Man's interview or HIV testing. Otherwise she will hand over the filled in HH QRE and Woman's QREs to supervisor.

### **Man's Questionnaire**

All men age 15-54 who are either usual resident of HH or visitors who stayed in that HH on previous night are eligible for individual interview. Only male investigator can interview males. All the steps in Man's interview are same as those to be followed in the case of Woman's Interview.

### **M. Field Editing**

The field editor in each team has the responsibility to edit all the completed QREs on regular basis and complete the editing before leaving the field. Project Director has to ensure that in each PSU field editors are completing their editing work.

## **IV. BIOMARKERS**

In NFHS-3 biomarker measurement includes:

- *Measurement of height and weight for all eligible men and women and children born since January 2001*
- *Measurement of haemoglobin contents of blood for all eligible men and women and children born since January 2001 (excluding those below 6 months)*
- *Collection of blood samples from eligible men and women for HIV test*

### **A. Equipments for Height & Weight Measurement**

Each Health Investigator will be provided one weighing scale and one height board at the beginning of fieldwork. The Health Investigator has to carry them to field every day. The weighing scale works on solar power and if kept in the dark for long time it takes a couple of minutes to start. The weighing machine should not be exposed to extreme heat.

### **B. Materials and Supplies for Performing Finger (Heel) Prick for Anaemia Testing**

1. Non-powdered disposable Latex gloves
2. Alcohol preps
3. Sterile gauze pads
4. Retractable lancets for adults and children
5. HemoCue Photometer System
  - i. HemoCue microcuvette
  - ii. HemoCue Hb 201 + photometer
6. Adhesive bandages (Band-aids)

### **C. Materials and Supplies for HIV Testing**

1. Desiccants
2. Humidity indicator card
3. Filter paper cards
4. Bar code labels



5. Drying box with drying rack
6. Low gas-permeable bags (small ziplock bags)
7. Glassine paper
8. Large ziplock bags
9. Clean paper sheets
10. Plastic bags for biohazardous waste

The description and utility of each of the above item is provided in Health Investigator's manual.

All these above mentioned material will be supplied by IIPS. In addition to these all the Research Organizations have to buy Cool boxes (one for each team) of the 1200cc capacity and material necessary for the disposal of the biohazardous waste.

Following are the protocols to be followed in case of biomarkers

1. Biomarkers will be done only after completion of the individual interview of the person. In no case, biomarker will be done before interview.
2. Biomarkers of the children will be done after mother's interview. However, if mother is not present/ cannot be interviewed child's biomarker can be done.
3. Only health investigators will do biomarkers. Interviewers can help them only in the measurement of height and weight.

#### **D. Informed Consent**

- Blood testing for anaemia and blood collection for HIV will be done only after obtaining informed consent.
- Separate consent will be taken for anaemia testing and blood collection for HIV testing
- For blood testing of children informed consent will be taken from parents/ guardians.
- For blood testing of never married persons age 15-17 informed consent will be sought from both, parent/ guardian and the respondent.

## E. Biomarkers-Protocol

- After height, weight measurement and anaemia testing, Anaemia Information Brochures will be given to the respondents. Separate Brochures will be given to Pregnant women, Men and Women
- Height, weight and haemoglobin levels will be recorded on Information Brochures
- Health investigator will inform respondents their height, weight and anaemia status and give advice if respondent is found anaemic
- For every person with haemoglobin level below 7 mg/ml referral letter for free treatment in the nearby government health facility will be given. If the person agrees then the health facility will be informed about his/her case
- Before drawing blood sample for HIV testing three copies of bar code labels are to be pasted one each on filter paper, HH questionnaire and transmittal sheet.
- After drawing blood for HIV testing each respondent will be given voucher for free HIV testing in VCTC. Even if the respondent declines for HIV test he/she will be given VCTC voucher.
- After completion of all the eligible respondents' blood collection for HIV testing in the household, HIV Information Brochure will be given.

## F. Storing and Transporting DBS

The blood drops for HIV testing are collected on the **five** circles of filter paper card. **AT LEAST THREE OF THE FIVE CIRCLES HAVE TO BE FILLED COMPLETELY BY BLOOD DROPS, OTHERWISE THE BLOOD SAMPLE WILL BE OF NO USE.** The blood samples on the filter paper cards are allowed to dry for over night in the Drying Box specially provided for that purpose. After allowing them to dry over night, each single Dried Blood samples (DBS) is covered by glassine paper and packed in low gas permeable bag. All these packed single DBS of one PSU collected by one health investigator are further packed in large ziplock bag along with corresponding transmittal sheet. These are then transferred to cool box and stored there till they are taken to the laboratory. These DBS should never be exposed to sunlight and the humidity level in the cool box should be carefully monitored. DBS samples should not be allowed to come into contact with other DBS during handling, storing and transporting.

After completing each PSU, health investigator has to count DBS, supervisor has to verify the counting and then both need to sign the transmittal sheet.

Periodically a person responsible will visit team and collect DBS to deposit in the Ranbaxy Collection Center. While handing over DBS the Pick-up person will again count DBS and sign the transmittal sheet.

The procedure of biomarker measurement is described in detail in Health Investigator's manual.

At the end of the day, team supervisor has to update the Supervisor's/ Editor's Assignment Sheet, referring to the Interviewers' and Health Investigators' Assignment Sheets.

## **G. Disposal of Biohazardous Waste**

All the Research Organizations are responsible for the disposal of bio-waste material. They have to procure following items on their own.

- 1. Kerosene oil, 2 liters/day/team**
- 2. 4% Sodium Hypo chloride solution, 2 liters/day/team**
- 3. Match boxes, 2 boxes/day/team**
- 4. Spade or *Kudaal* or *Gainti* (to dig a pit in ground), 1 per team**
- 5. Heavy duty Ziplock bags (polyethylene), 14" x 18" approx. (not smaller than this), 4 bags/day/team**
- 6. Forceps with blades longer than 18 inches**
- 7. Scissor, cutting scissors, blades, 4-5" long, 1/team**

Following the procedure described in the Health Investigator's Manual the daily waste need to be disposed off.

During the initial stage of the fieldwork, Project Director should visit the survey sites to oversee whether the survey is going on smoothly and the non-response is low.

## **V. 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 area into the envelopes provided. On the outside of the envelope, she/he 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/he 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. Project Director should instruct the supervisor of each team to follow these instructions to avoid the loss of questionnaires or information.

### **A. Packing the Filled-in Questionnaires**

1. All Woman's and Man's Questionnaires from one household are separately arranged in ascending order of the line numbers in HH roster and put inside their respective Household 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.

## **VI. OFFICE EDITING, DATA ENTRY, VERIFICATION AND FIELD CHECK TABLES**

The filled in questionnaires need to be stored in the office in a secured space. As the data is collected under confidentiality clause, it is essential that no person other than office editor, data entry operator and verifier have access to QREs. The Office editor will code all the open ended questions, translate all the specifications under code category "OTHER" into English and once again edit the QRE for consistency checks and correct skips. The office edited QRE will be entered by data entry operator. Upon data entry, all the errors in the entry detected by the computer will be corrected by the operator and then the QREs of that PSU are ready for verification. The verifier will enter the QRE independently and correct all the errors detected in his/her entry. Upon his/her correction computer will match two data sets and detect the differences. Once the differences are resolved and data corrected the data is ready for generating field check tables. All the steps involved in office editing, data entry and data verification are described in the manual on Guidelines for secondary Data Editing and Data processing Manual.

After completion of data entry and verification of about 5-6 PSUs Field check tables will be generated and sent to IIPS for feed back. Project Director should communicate the feed back from IIPS to field teams immediately, and ensure that corrective measures are implemented.

After completing data entry, verification and data entry correction of all the QREs from all the sampled PSUs in a state Research Organizations will send the

data files to IIPS. IIPS will run the secondary edit checks on these data files. If some errors are detected IIPS will ask RO for some verification. Research Organizations need to correct the data files by referring QRE wherever necessary. The Research Organization's commitment towards NFHS-3 will be over only after sending corrected data files to IIPS and getting IIPS clearance.