TRAINING GUIDELINES FOR NFHS-3

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INTRODUCTION

The training of interviewers, editors, and supervisors is critical to ensuring the quality of NFHS-3 data. This training constitutes one of the major activities conducted by Research Organizations implementing NFHS-3.

This manual was produced as an aid to all organizations involved in implementing NFHS-3 for use in the design and implementation of field staff training. This document provides general guidelines for organizing and conducting the training of the field staff. The Interviewer's and Supervisor's Manuals, which contain more detailed discussion of specific elements of the questionnaire and fieldwork procedures, also should be used during training.

These guidelines are intended to establish a standard approach to NFHS-3 data collection. It is important to understand that variation in NFHS-3 procedures may undermine the quality and comparability of the data across states and between teams.

Field staff hired to be health investigators will be centrally trained by IIPS for two weeks before they join the main field staff training in the state.

I. RECRUITMENT OF FIELDWORKERS

Good field workers are essential for a successful survey. Each NFHS-3 team is composed of a supervisor, field editor, 4 interviewers, and 2 health investigators. The selection of the field workers is the first step to obtaining high-quality data.

CHARACTERISTICS OF FIELD STAFF

Before the recruitment of field staff begins, determine the characteristics that each team member should have. Keep in mind the following when advertising and interviewing candidates:

SEX

- In NFHS-3, respondents are always interviewed by a member of the same sex. According to the NFHS-3 guidelines, each team will have 3 female and 1 male interviewers in all states except Andhra Pradesh, Karnataka, Maharshatra, Manipur, Nagaland, Tamil Nadu and Uttar Pradesh, where each team will have 2 female and 2 male interviewers.
- The field editors are generally female so that they can observe interviews with female respondents.
- Health investigators can be either male or female.

LANGUAGE ABILITIES

- All trainees must be able to read and understand English. Comprehension of written and spoken English is critical because all instructions and answer codes in NFHS-3 questionnaires are in English.
- Determine the languages in which interviews will be conducted in the state and how many speakers of each language are needed. This calculation should take into account the distribution of languages in the selected state sample (not the distribution in the entire state).
- Be sure to test the candidate's fluency, both written and spoken, in the language in which questionnaires are to be fielded.
- Hire interviewers who can speak minority languages. Using translators should be a last resort.
- When recruiting speakers for minority languages, find interviewers who also know the main language(s) in which interviews will be conducted.

EDUCATIONAL BACKGROUND

- All candidates must be able to be read, write, and do basic arithmetic. Thus, all field staff must have formal education through at least high school, although a higher level of education is highly desirable.
- In general, supervisors and field editors should have higher educational qualifications than interviewers.

PROFESSIONAL EXPERIENCE

- Previous survey experience is not necessary, although it is helpful for

supervisors and field editors.

- Health investigators must have medical, nutrition, health or laboratory training or experience handling blood.

OTHER SKILLS

- Building rapport with respondents, whether it is to get information or to get them to agree to provide their blood for testing, is an art. All field staff must have strong interpersonal skills and a strong commitment to the objectives of NFHS-3.

NUMBER OF CANDIDATES RECRUITED

- The number of field staff needed will depend on the household sample size in the state and whether men have to be interviewed in every household or not. In states where men have to be interviewed in every household, teams are expected to take 5 days to complete the targeted number of 30 households in each PSU; in the remaining states, teams are expected to complete the target in 4 days. Allowing for one-half day for travel between PSUs, the number of teams needed, and accordingly, the number of field staff needed, can be estimated. The field organization for a state will be provided with the estimated number of teams for the state and the required team composition.

- Always recruit extra field staff who can fill in for those who drop out or are dismissed during training. Always hire and train 10-15 percent more people than you have calculated are necessary for fieldwork. Sex and language capabilities should be taken into account when determining the number of backup field staff.

FINDING FIELD STAFF

Begin recruiting field staff only after deciding upon the necessary interviewer and health investigator qualifications.

- It is possible to place an advertisement in newspapers or magazines. An announcement may be placed on bulletin boards at universities. Word of mouth may also be an effective way of finding candidates, but may result in pressure to hire certain individuals who have personal contacts.

- Consider recruiting locally through branch offices. There are two main advantages to recruiting in the same region where the interviewers will be working. The first is that it will be easier for field staff to visit their families on free days. The second is that if there are regional language variations, it may be easier to find speakers of the local languages.

SELECTING INTERVIEWERS

The selection of interviewers should be composed of two main parts: a test and an interview. Standardization of the selection process will help you pick

the best candidates and will also provide a sound excuse if there is pressure to hire an individual who does not have the proper skills or qualifications.

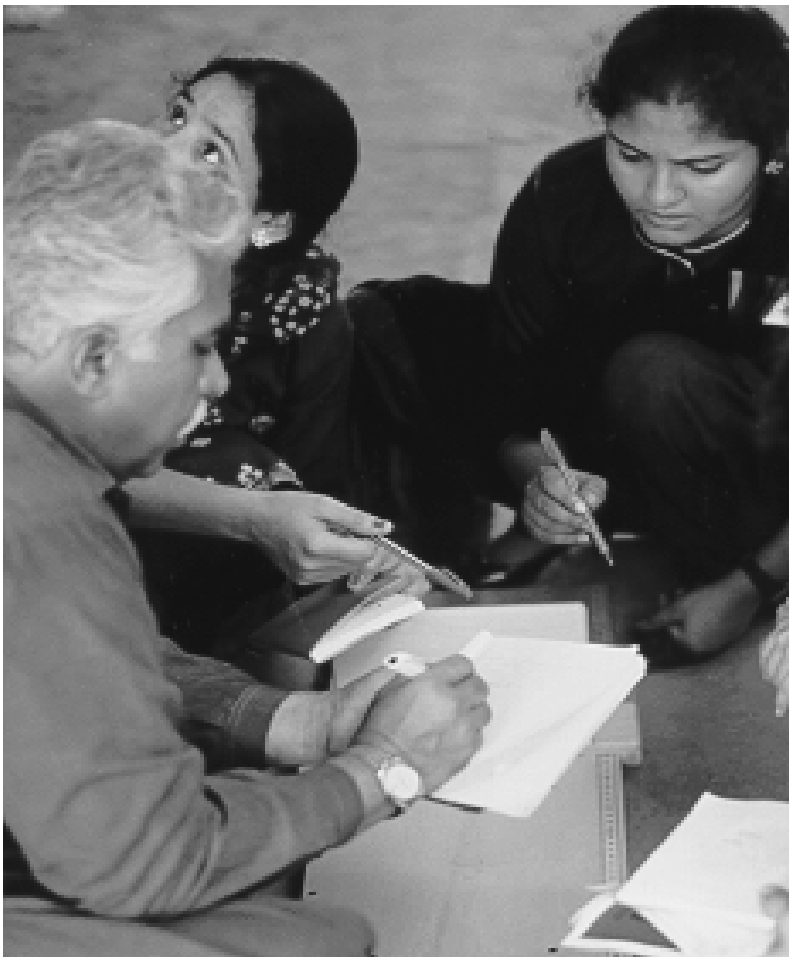
THE TEST

A short written test can provide an assessment of a candidate's ability to become a good interviewer. The test may include a couple of easy arithmetic problems (addition, subtraction, and multiplication) and a short text with multiple-choice questions. The test should be prepared in English and in the language of the questionnaire. This will allow you to test the candidate's understanding of both English and the interview language. *Remember, an interviewer may speak a language but not be able to read it proficiently.*

- Interviewer role-playing is another testing strategy. The candidate is given a sheet with 3-4 questions that have been taken from the questionnaire, including instructions, and must ask the questions and record the answers given by the "respondent". This kind of test will allow an evaluation of the candidates' 1) ability to read and understand directions, 2) neatness of handwriting, 3) attention to detail, 4) language abilities.

THE INTERVIEW

If a test cannot be given, have each candidate fill out a short application form before the interview. This will give some indication of the candidate's ability to follow directions and will provide a handwriting sample.



Standardize the selection of candidates by asking them the same questions. The questions may be typed up on a sheet of paper with space left for the recruiters' comments. If one sheet is used for each candidate, the recruiters' comments can be saved for future reference.

The interview should cover the following areas:

TOPIC	DETAILS
Educational and professional background	♦ Formal educational attainment. ♦ Special training. ♦ Previous work experience including the employer and the specific duties of the position.
Language ability	♦ Knowledge of English and level of proficiency in reading and speaking. ♦ Knowledge of other languages and level of proficiency in reading and speaking. ♦ To test proficiency in a language: 1) converse in the language for a few minutes, or 2) ask the candidate to read aloud several questions written in the language and then provide answers.
Availability for duration of survey period	Careful questioning can help identify individuals who know that they will not be available during the whole period. In cases where a candidate is proposing to take a leave of absence from a permanent job, survey organizers may ask the candidate to submit a letter from her/his employer stating that she/he will be given a leave of absence for the required dates. ♦ When asking candidates about their availability, remember that surveys can sometimes run over the expected amount of time.
Daily schedule	♦ Explain that this job requires significant hours on the evenings and weekends. ♦ Ask if she/he is willing to work whenever needed.
Willingness to work and stay in a rural area/different part of the state	♦ Explain that field staff will be based around the state, some in rural areas. ♦ Ask if there are places she/he is not willing to work. ♦ If a candidate is likely to work in a certain part of the state (based on language ability, for example), make sure to mention this in the interview.
Physical fitness	♦ Explain the physical requirements of the job (including extensive walking and carrying of equipment). ♦ Ask if the candidate is physically able to handle the job.
Goals and interests	♦ Ask the candidate why she/he wants the job. ♦ Discuss how this experience can help the candidate achieve future goals.

There must also be a subjective component to the interview process. In particular, try to understand whether or not the candidate has the following personal attributes:

Appropriate appearance and demeanor

- Interviewers and health investigators must approach strangers with confidence and be able to interact comfortably with people and children from a variety of backgrounds. The candidate's dress should allow her/him to fit into the communities in which she/he will be working. Also, because of the content of the questionnaires, it may be a distinct disadvantage if field staff appear too young.

Maturity

- The field staff will spend most of their work time alone and will have to use their judgement on a daily basis. Each fieldworker needs to be mature enough to handle the problems that inevitably come up in the field.

Curiosity, attention to detail, and interest in other people

- Being able to relate to people of all backgrounds, put them at ease and win their confidence are very important attributes for field workers.

GIVE INFORMATION

- Invite the candidate to ask questions.

- Candidates should be fully informed about the requirements of the job, conditions of fieldwork, and the salary range and payment schedule. Consider preparing a basic information sheet to give to each candidate.

II. ADMINISTRATIVE AND LOGISTICAL ASPECTS OF TRAINING

Only senior staff of the responsible field organization who have completed the Training-of-Trainers (TOT) conducted by IIPS will conduct the training of NFHS-3 field staff.

TRAINERS FOR INTERVIEWER TRAINING

Recommended training personnel:

- The two senior people trained at the TOT should deliver all classroom lectures and oversee the field practice sessions. Both persons should attend the training course at all times, to ensure uniformity of instruction.
- One senior staff person, who is not directly involved in the training course, should be responsible for most of the administrative and logistical tasks during the training period. This allows the trainers to focus exclusively on the course.
- Team supervisors may make presentations on specific topics or discuss problems they noticed while observing practice interviews.
- Invite outside lecturers to provide in-depth information on selected topics, e.g.:

TOPIC	MATERIALS AND SPECIAL EQUIPMENT
Family Planning Methods ♦ Discuss all methods on contraceptive use table ♦ Explain different types of delivery systems	Samples of contraceptive methods Copies of pamphlets/brochures advertising family planning
Maternal and Child Health ♦ Types of health service personnel and delivery points ♦ Focus topics such as nutrition and malaria ♦ Vaccination types and schedules ♦ Common treatments for diarrhea, respiratory infection, and malaria ♦ Current and recent health promotion campaigns	Vitamin A capsules Iron tablets Health cards Vaccination cards ORS packets
Domestic Violence and Women's Status ♦ What is domestic violence? ♦ Ethical issues relating to research on domestic violence. ♦ Programmes to reduce domestic violence ♦ Laws protecting women.	
AIDS ♦ Facts about HIV and AIDS and how the infection spreads. ♦ The government's role in combating AIDS in India. ♦ The meaning and availability of VCT.	

- All health investigators will be centrally trained by IIPS in a two-week training course in anthropometric measurements, anaemia testing and blood collection for HIV. On completing this training the health investigators will join the field staff training at the state level. The most accomplished of these health investigators should train all other field staff on interviewers' role in supporting and assisting the health investigators in the field.

TRAINING DURATION

The training for NFHS-3 should be 3.5 to 4 weeks long depending on the number of working hours per day and work days per week (see Annex 1). The schedule should be flexible enough to allow for a few extra days in case trainers decide that field workers are not yet ready to begin actual data collection.

TRAINING SCHEDULE

- In-class training should last no more than 8 hours per day (preferably 6-7 hours).

- Begin each class on time. Take attendance every morning and keep track of late arrivals.

- Break every one and a half to two hours.

- Trainers should meet for at least one-half hour at the end of the day to evaluate the day's work and plan activities for the next day.

- Trainers will also be expected to work after hours to correct tests and edit practice questionnaires, which should be returned to the trainees the following day and discussed.

- Trainers should prepare quizzes that can be quickly administered

- If a large number of individuals are to be trained (more than 35), two or more separate training sessions may be organized. In order to maximize standardization of instruction, however, it may be preferable to keep all of the participants together for lectures, and then split them into smaller working groups.

- In states where the Research Organization has a contractual commitment to conduct two or three separate trainings simultaneously, it will be necessary to establish reliable and frequent contact between the training sites. This will maximize uniformity in answering questions that arise during the course of training.

- Train more persons than are ultimately needed for field work. A general rule is to train 10 percent more candidates than will be selected. This ra-

tio should be higher if several languages are used or if there are other reasons why interviewers cannot be shifted between teams.

- Trainees may be eliminated whenever appropriate during the course. Some extras should be retained throughout the course, however, in case some candidates drop out at the last moment.

- Those trainees who are not selected as field workers may be assigned other duties for which they are qualified. For example, those who are not selected as supervisors may qualify as interviewers, and those who are not selected as interviewers may be used as questionnaire control clerks in the office.

- In addition to the field staff, data processing staff also must receive detailed instruction on the questionnaires. The easiest way to accomplish this is to include them in the interviewers' training course if possible.

LOCATION OF TRAINING

Training should be organized in a location with:

1. Adequate space and light
2. A minimum of noise
3. A large blackboard
4. Comfortable seating for all participants, preferably at tables

Ideally, the training site should have several extra rooms reserved. These rooms can be used to hold special sessions for supervisors/field editors, or smaller practice groups.

MATERIALS FOR TRAINING

TRAINING MATERIALS FOR INTERVIEWERS

ITEM	QUANTITY PER INTERVIEWER
Interviewers' Manual Use extensively throughout training.	1
Questionnaires	10–12 of each
Blue ball point pens	2
Clipboards (Optional)	1
Briefcase/plastic binder (Optional)	1

ADDITIONAL MATERIALS FOR SUPERVISORS AND FIELD EDITORS

ITEM	QUANTITY PER PERSON
Supervisor's and Field Editor's Manual	1
Red ball point pens	2

The best training aid is, of course, the trainer. Trainers should be well-informed about the survey in general and should have studied the questionnaires and manuals in detail. An unprepared trainer can have disastrous results on both the quality of the data and the morale of the field staff.

TEACHING MATERIALS

ITEM	COMMENTS
Chalk (colored, if possible)	If blackboard is available
Posterboard or large sheets of paper	
Large felt marking pens	
Overhead projector	
♦ Screen	If overhead is not available, use enlargements of questionnaire pages.
♦ Transparencies of each page of questionnaire	
♦ Colored transparency pens	
Prepared quizzes and tests	
Copies of all control forms	See Supervisor's Manual
Sample maps and household listing forms	
Samples of additional fieldwork materials	See below

ADDITIONAL MATERIALS FOR FIELDWORK

ITEM
Vaccinations cards (Samples of all types used in country)
ORS packets (Samples of all types used in country)
Vitamin A capsules
Iron capsules
Salt testing kits
Height boards and weighing scales
Blood testing supplies and equipment

III. CONTENT OF THE TRAINING COURSE

One of the primary objectives of training is to promote a sense of enthusiasm and pride among the prospective field staff. The best work is accomplished by those who care about what they are doing, feel that their work is important, and sense that they are respected by their superiors.

HOW TO BUILD MORALE

Active involvement in the training process is a good way to motivate interviewers. Trust and positive reinforcement are key to creating an effective learning environment. Here are some ideas that may create such an environment:

Get to know the participants — Begin training with introductions or a mixer. Ask trainees to wear nametags the first couple of days, and learn their names as quickly as possible.

Stress the importance of the survey — Explain to interviewers why these data are needed. Discuss how the data collected in previous NFHS surveys were used, and show copies of previous NFHS state and national reports.

Ask questions — Trainers should regularly call on those trainees who seem less attentive, but should take care not to embarrass anyone.

Encourage trainees to ask questions — Trainers should reinforce good questions with praise and should be careful not to show disappointment or frustration at bad questions. Slower trainees may eventually become the best interviewers.

Occasionally, ask a trainee to read aloud — Having a trainee read an important part of the Interviewer's Manual to the class can encourage participation and vary the presentation. But do not let them go on for more than a few minutes before changing readers.

Avoid pointing out individual trainees' errors in front of the class — Errors can be brought to the attention of the group without mentioning the individual who made them.

Emphasize cooperation — While it should be made clear that trainees are competing for a limited number of positions, it is still important for trainers to emphasize the need for teamwork and cooperation.

Be willing to accept criticism — If a candidate happens to point out a particular shortcoming of the questionnaire or method of presentation, don't get defensive.

Do something special for the participants — You may want to issue certificates of course completion, hold a party at the end of training, or print T-shirts, vests, briefcases, etc. with the survey title or logo.

TECHNIQUES OF TRAINING

MOCK INTERVIEW

- In a mock interview, one trainee interviews another. "Respondents" need not answer truthfully, if they do not want to. It is often useful to do mock interviews in groups of three or four so that two participants can observe the interview and take notes of the problems that occur. When the first interview in a group is finished, interviewers can rotate so that all members of the group get a chance to practice.

- Trainers should move from group to group, listening to parts of each interview and making note of any problems or errors. These should be discussed section by section with the whole class.

- Make mock interviews a regular activity. Trainees will gain practice in reading and administering the questionnaire and trainers will have an opportunity to assess participants' understanding and skills development.

- Interviewers should have lots of practice in all of the languages in which they will be working.

DEMONSTRATION INTERVIEW

- This is an interview (or part of an interview) conducted either by a trainer or a supervisor in front of the class. The benefit of this exercise is to show how a good and efficient interview is conducted. Demonstration interviews are particularly useful early in training to show trainees what the process of interviewing is like.

- Demonstration interviews can also be used to give examples of how to probe for ages and dates, how to handle an uncooperative respondent or how to tactfully get rid of unwanted listeners at an interview, or any aspect of filling in the questionnaire with which trainees are having particular difficulty.

- Trainees can record in their own questionnaires the answers given during demonstration interviews. After discussing the interview, the trainer should then review the correct answers with the trainees.

FRONT-OF-CLASS INTERVIEW

- In this approach a trainee comes to the front of the class to do an interview or partial interview. Respondents can be selected from among the trainers or trainees.

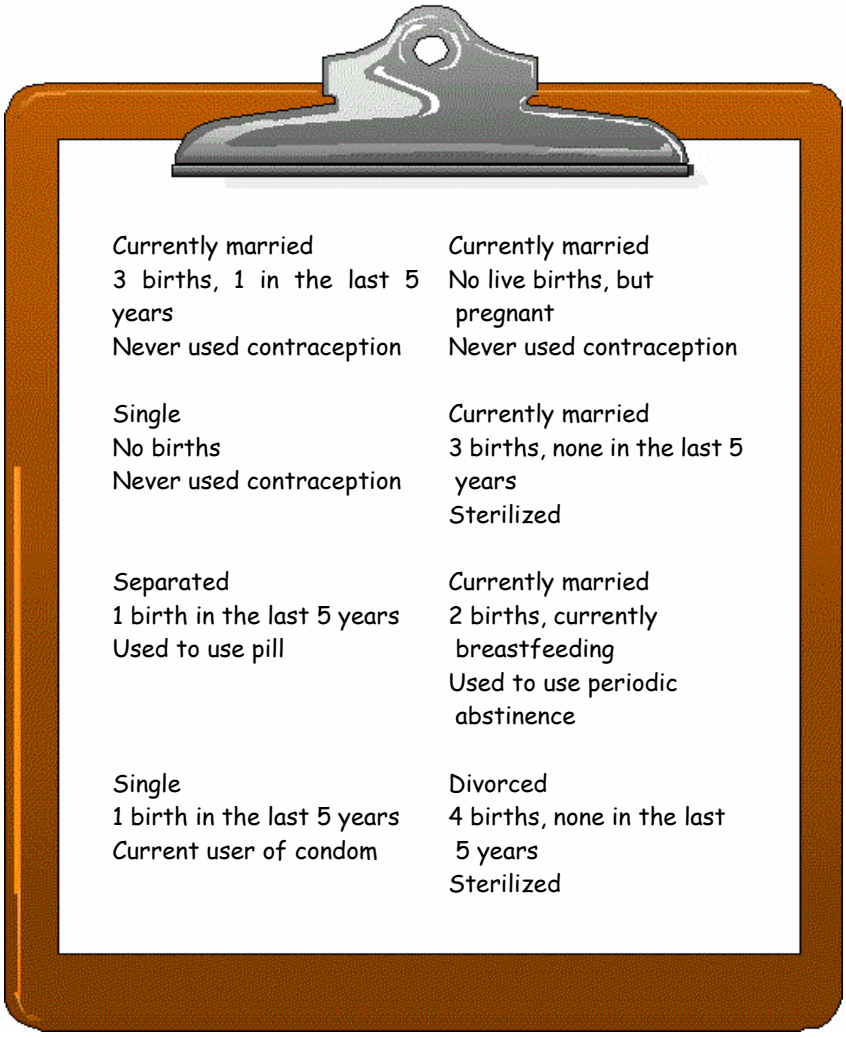
- The rest of the class should listen and either fill in their own questionnaires or make notes to give feedback after the completion of the interview.

- This approach allows you to check whether trainees notice the errors being made and to correct errors made by the interviewer. It is useful to tape record these exercises, so that the problems can be illustrated by playing back the relevant part(s).

An active training style is strongly recommended. A variety of teaching methods should be used, with an emphasis on supervised practice.

For the above exercises, it is useful to assign different characteristics to the 'respondent' to ensure that trainees have practice covering different parts of the questionnaire and are exposed to different situations.

Below are some examples of combinations of respondent characteristics to use in these exercises. Before the interview begins, the 'respondent' may want to jot down the names and birth dates of her 'children' to ensure reasonably consistent answers:



If there are enough blank vaccination cards available, the respondent can also fill out one (in pencil, so it can be changed for another interview) to show to the 'interviewer'. The cards should be attached to the questionnaire so that the 'supervisor' can check that the dates were copied correctly.

DEMONSTRATION INTERVIEW WITH REAL RESPONDENT

- Find women who are willing to be interviewed in front of the class. These respondents may be found among employees of the institution carrying out the survey. They should be told that they do not need to answer possibly embarrassing questions exactly. Make sure that the

trainees are aware of this.

- This exercise simulates a real interview because the respondent does not know in advance what specific questions will be asked, and the trainees will be exposed to common interviewing problems.

PRACTICING ANTHROPOMETRIC MEASUREMENTS

- Trained health investigators should demonstrate proper weighing and measuring techniques in front of the entire class. Ask participants to follow along in their interviewer's manuals.

- Participants should split into teams to practice. Team members who are observing the measurer and assistant should read the directions step-by-step and provide feedback on their observations.

- Arrange practice sessions at nearby kindergartens and health facilities so that interviewers can practice assisting the health investigators and the health investigators continue to get practice. Each participant should also have experience assisting with the measuring of children lying down (under age two).

ANAEMIA TRAINING

- Health investigators will need to continue practicing anaemia testing and the collection of blood for HIV testing in the classroom and at a local health facility even after their centralized training has been completed.

FIELD PRACTICE

Scheduling

- Field practice should be conducted at the end of the training period so that participants benefit from administering the entire questionnaire. It is advisable to allow interviewers to first practice without the health investigators. However, after the first field practice all team members should practice working together.

- Two to three whole days should be devoted to field practice. For each day of field practice, spend sufficient time in the classroom reviewing questionnaires and discussing problems.

Location

- The areas selected for field practice should be as close to the training site as possible and should contain a sufficient number of eligible respondents.

- It is helpful to schedule field practice in both rural and urban areas.

Practice interviewing is perhaps the most significant part of interviewer training. In an actual interview situation, the trainee will become aware of the issues she/he does not understand. The supervisors and trainers will be able to identify those sections of the questionnaire where trainees are making mistakes. Towards the end of the training session, several days should be set aside for practice in the field.

- Make arrangements in several clusters if a large number of interviewer candidates are being trained. This will ensure that there are enough respondents for everyone to have practice.

- If the questionnaire has been translated into more than one language, make sure to select clusters where all versions of the questionnaire may be practiced.

- *Field practice should not be conducted in an area selected for the actual survey.*

Organization

- It is usually easiest to organize trainees into teams, with trainers or supervisors to accompany each team.

- All training staff should observe as many interviews as possible. This will allow them to give participants individual feedback and also use interviewer performance as a basis for making decisions about field staff.

- During the first session, trainees should just concentrate on conducting interviews with eligible women and men (after completing the household schedule). During later practice sessions, use of the control forms and use of maps can be added in order to gradually approximate actual field demands.

Feedback

- The trainees will have questions after practice interviewing and time should be allocated for classroom discussion following practice interview sessions.

- An especially important part of practice interviewing is that the trainee receives feedback on her/his performance. It is very important that this be done so that interviewer errors or faulty techniques are corrected before they become ingrained habits. During the training period, time must be allocated for discussing interviews and edited questionnaires with each interviewer.

- If there are many interviewer candidates, ask them to exchange questionnaires for editing. Then supervisors and training staff can review the editing and lead team discussions of problems. This exercise helps identify candidates for field editor positions and also allows supervisors and senior staff to identify misconceptions among the interviewer candidates.

THE AGENDA FOR INTERVIEWER TRAINING

GENERAL GUIDELINES

The illustrative agenda given in ANNEX 1 shows how a typical interviewer- training course may be scheduled. Note that the agenda describes morning and afternoon sessions. The local cultural and logistical setting will determine the particular daily routine, but keep in mind the following:

- Training days more than 8 hours in length are counterproductive. Mid-

morning and mid-afternoon breaks are recommended.

- Certain parts of the questionnaire, by their very nature and length, require more time than others.

- The sections covered later will generally require less time than sections presented earlier simply because the trainees will have become familiar with the fundamentals of questionnaire administration, i.e., skip patterns, consistency checking, etc.

- Whenever possible, training that involves physical activities (e.g. mock interviews, field practice, etc.) should be scheduled later in the day when the trainees' energy and attention may be lower.

- Organizers of the training course should remember to include two extra days in the schedule to allow for delays or extra training.

ANTHROPOMETRY/ ANAEMIA TESTING TRAINING

- One full day should be scheduled for anthropometry training.

- In order to find adequate numbers of mother-child pairs for practice, organize trips to nearby nursery schools and/or clinics.

DATA QUALITY

Inform interviewers that their performance will be monitored for quality throughout field work; supervisors will periodically spot-check households and field editors will review all completed questionnaires. Intentional data manipulation will result in immediate dismissal, and the interviewers should know that the senior staff can and will detect data manipulation if it occurs. This can be demonstrated by charts showing displacement of ages or birth dates (see discussion of field check tables in section 3).

HOMEWORK

Outside of the formal training hours, it will be useful to assign some light homework. Homework assignments may include:

1. Reading from the relevant sections of the Interviewer's Manual before they are covered in class
2. Practice interviewing friends or family

EVALUATION AND TESTING OF TRAINEES

TESTS

During both supervisors' and interviewers' training, at least two tests should be administered: one after the questionnaires have been explained in detail and one towards the end of the training course.

- The tests should not be too complicated. The goal of the tests is to identify specific candidates who are having difficulties with concepts or procedures and to establish a basis for decision-making when candidates are judged to be of nearly equal ability based on other criteria. ANNEX 2 provides illustrative test questions. Trainers should keep records of test scores and performance on practice interviews, since it is sometimes necessary to have some objective criteria on which to base

the dismissal of candidates.

QUIZZES

Short, periodic quizzes can be an effective means of identifying problems. The quizzes should be reviewed (interviewers may grade their own quiz or switch with the person sitting next to them) and discussed immediately.

TESTING AND EVALUATION TECHNIQUES

- After grading tests or quizzes, review the questions one by one.
- Grade tests and quizzes immediately, so that you can return them to trainees the following day.
- It is useful to make intentional errors on selected pages of the questionnaire (especially the tables) and ask trainees to find and describe the errors. This method is particularly effective in identifying individuals to serve as field editors.

PERSONAL EVALUATION

- Tests should not be the only criteria for evaluating trainees. In order to fully assess a candidate's ability to administer the questionnaire, trainers need to observe all candidates from the first day of training.

IV. SUPERVISOR AND FIELD EDITOR TRAINING

THE CANDIDATES

Supervisors may be selected from those participating in the general field staff training. This selection should be based, as much as is possible, on objective criteria (see section on Evaluating and Testing of Trainees).

LOGISTICS

SCHEDULE

If supervisors are identified prior to the general field staff training, they should receive several days of specialized training before the general field staff training course begins. If they are selected from those participating in the general field staff training, then 1-2 days must be set aside towards the end of the training to work with the supervisors.

Field editors are usually selected from the pool of field staff trainees and should join the supervisors for the specialized training on how to observe interviews, how to edit questionnaires, and how to organize completed questionnaires for transport to headquarters.

If possible, it is helpful to train the supervisors and field editors before the final day of field practice so as to simulate as closely as possible the conditions of the actual field work. This also allows trainers to check the work of the supervisors and field editors.

MATERIALS

The Supervisor's and Editor's Manual will be the focus of the supervisor and field editor training.

Make up and discuss some examples of questionnaire pages with errors (especially the birth history). Supervisors and field editors can be asked to find the errors and then told how to mark them.

CONTENT OF TRAINING COURSE

In addition to the topics covered for interviewers, supervisors should receive additional instruction in the following areas:

- Sample implementation and map reading, including one day in a sample segment to practice reading the map and locating selected households.
- How to observe interviews, edit questionnaires, and give feedback to interviewers.
- How to best coordinate the work of the interviewers and health investigators.
- Obtaining PSU altitude information.
- Principles of, and strategies for, data quality monitoring.

- Team leadership, including facilitating team communication, dealing with problems, etc.

EVALUATION

Giving supervisors and field editors a brief test (consisting, for example, of questionnaires with errors) is a good way to evaluate their ability to find errors and deal with them appropriately. If possible, on the final day of field practice, interviewers should be organized into teams each with a supervisor and field editor. Trainers can then observe supervisors' and field editors' performance in the field. Completed questionnaires should be edited during the field practice or immediately thereafter and then given to trainers to review that evening.

ROLE OF SUPERVISORS DURING INTERVIEWER TRAINING

An advantage of having previously identified supervisors, is that they can assist during the general field staff training. This will be an opportunity for the supervisors to gain experience, in addition to establishing their leadership in the survey.

- Supervisors may assist with the mock interviews, supervising each group in turn, and with the practice interviews in the field.

- Supervisors should help edit questionnaires and be a resource for the trainers.

- It is helpful for the trainer(s) to call on supervisors to participate from time to time in order to identify them as leaders.

- Some supervisors may be used to give demonstration interviews.

V. FIELDWORK SUPERVISION

Training does not end when fieldwork is launched. Interviewers need close supervision, especially in the first few days of field work. Very often, interviewers have not had enough practice with problems frequently encountered in the field. Supervisors and field editors will need to work together to identify interviewers who require extra assistance or retraining.

SUPERVISION OF EARLY FIELDWORK

LOGISTICS

Unless logistics and language variations do not allow, all of the field teams should start work in a small area to allow for maximum supervision, at least for a few days. If this is not feasible, senior staff should arrange to visit each team at least once within the first week of fieldwork. If serious problems are evident, it may be necessary to recall one or more teams for further training.

OBSERVATION OF INTERVIEWS

Each interviewer should be observed during the first two days of field work. To accomplish this, supervisors, field editors, and senior staff will have to sit in on interviews and give immediate feedback to interviewers.

EDITING QUESTIONNAIRES

NFHS-3 procedures call for thoroughly editing all completed questionnaires within a day of the interview; this is particularly important during the first few days of fieldwork. Supervisors and field editors should share the task to ensure that all questionnaires are thoroughly scrutinized and all errors are tactfully discussed with the interviewer.

DAILY TEAM MEETINGS

Setting aside half an hour a day for a team meeting can be a valuable mechanism for discussing problems, setting schedules and reviewing rules. Such meetings allow team members to air grievances and can serve to avert potentially bigger problems. This is particularly important in light of the many sensitive topics on which data are being collected. Hearing from respondents about their experience of child death or domestic violence, for example, can be deeply disturbing for interviewers and these daily meetings should be a forum in which team members feel free to discuss their anxieties and inevitable sense of helplessness.

RE-INTERVIEWS

One of the supervisor's responsibilities is to conduct re-interviews with approximately 5 percent of the households covered in the survey. The supervisor visits the household a day or two after the original interview and fills only the household questionnaire. The purpose of the re-interviews is to ensure that the interviewers are visiting the selected households and to ensure that they do not intentionally misreport ages so as to reduce their workload. The supervisor should compare the re-interview questionnaire with the original questionnaire and discuss any discrepancies with the interviewer.

MONITORING DATA QUALITY WITH FIELD-CHECK TABLES

Data quality is closely linked to the performance of interviewers and their supervisors with respect to the identification of selected households and eligible respondents as well as the accurate completion of the questionnaires. The teams' performance should be monitored closely throughout fieldwork.

USING FIELD-CHECK TABLES

- Field-check tables are one way of monitoring data quality while the field work is still in progress. They are tabulations of data which are produced periodically by the data processing chief in order to monitor the performance of each team separately. Each table focuses on an important aspect of data quality. Annex 3 contains a detailed description of each table.

- These tables help maintain an ongoing link between teams in the field and senior staff at survey headquarters. Use of these tabulations is crucial during early field work while there remains the option of personnel retraining or re-interviewing of problem sample segments. If the data from a team show problems, it may be useful to produce individual interviewer-level tabulations that would identify whether the problems are team-wide or restricted to one or two team members.

LIMITATIONS OF FIELD-CHECK TABLES

- During the initial stages of fieldwork, when quality control is especially important, not enough questionnaires have been completed to generate field-check tables for each team.

- One option is to produce field-check tables for all interviewers after the first few days of fieldwork. This is another reason to begin fieldwork in a geographically-restricted area. After approximately 100 questionnaires have been completed tables can be run and feedback given to all of the teams as a group.

- Field-check tables should never be used as a substitute for the fieldwork supervision methods listed in the preceding section.

CONTINUING SUPERVISION OF FIELDWORK

It is important to keep monitoring interviewer performance throughout the duration of the fieldwork. Both the supervisor and the field editor should continue to sit in on interviews until the end of fieldwork. Senior staff should also observe as many interviews as possible when they visit teams.

ANNEX 1 ILLUSTRATIVE TRAINING AGENDA

	MORNING	AFTERNOON
Day 1 **Introduction and overview of NFHS-3**	Opening Ceremony. Introductions. Introduction to the NFHS programme; brief overview of the population and health conditions in the state and India. Objectives of NFHS-3, overview of the project, general organization, data processing and analysis, and period of performance. Role and importance of interviewers and supervisors in NFHS-3. Importance of results. (Interviewer's Manual Section I). Administrative matters, rate and timing of payment, survey regulations.	Introduction to all three questionnaires and manuals. Description of the sample and eligibility criteria. General section-by-section explanation of all three questionnaires.
Day 2 **General techniques and procedures; Household Questionnaire**	Techniques of interviewing (Interviewer's Manual Section II). Field Procedures (Interviewer's Manual Section III). Quick demonstration interview including how to read and obtain informed consent. How to record answers on the questionnaire and how to correct errors (Interviewers' Manual Section IV).	Explanation of the Cover Page of the Household Questionnaire, informed consent, and household roster; handling of eligibility criteria; examples (Interviewers' Manual Section V).
Day 3 **Household Questionnaire contd.**	Complete the question-by-question explanation of the Household Questionnaire. Demonstrate salt testing Demonstrate and practice how to use the grid to select one woman per household for Section 10 of the Woman's Questionnaire.	Explain how to fill out Columns 69-72A in the biomarker section. Practice in groups (mock interviews) filling in the Household Questionnaire. Discussion of problems.

	MORNING	AFTERNOON
Day 4 **Start Woman's Questionnaire Sections 1 and 2**	Explanation of Cover Page, informed consent and Section 1 of the Woman's Questionnaire (Interviewers' Manual Sections VI A and B). Detailed discussion of how to collect age information and use of age/date conversion charts, consistency checking, etc. Examples. Quiz on age calculation	Explanation of Section 2 of the Woman's Questionnaire (Interviewers' Manual Section VI C). Detailed discussion of Section 2, including training on use of calendar for births and pregnancies (Column 1) and use of ultrasound (Column 2). Examples on birth history and calendar.
Day 5 **Section 2 contd., Section 3**	Brief review of the birth history and the calendar in the Woman's Questionnaire. Mock interviews in groups, covering Sections 1 and 2. Discussion of group practice on Section 2. Solutions to problems.	Explanation of Section 3A, including how to fill out Column 3 of the calendar (Interviewers' Manual Section VI D). Examples. Lecture (by invited speaker) on human reproduction in relation to methods of family planning.
Day 6 **Section 3 contd.**	Discussion of Sections 3B and 3C of the Woman's Questionnaire (Interviewers' Manual Sections VI E and F). Completing the calendar (Columns 1 and 4) Front-of-class practice of Sections 1-3.	Mock interviews on Sections 3A, B and C. Review of practice. Lecture (by invited speaker) on national child health initiatives as they relate to topics covered in questionnaire.
Day 7 **Section 4**	Introduction and explanation of Section 4 (Interviewers' Manual Section VI G).	Complete question-by-question explanation of Section 4. Front-of-class practice of Section 4.
Day 8 **Sections 5**	Quiz on Household Questionnaire and Women's Questionnaire Sections 1-4 and review of answers Mock interviews on Section 4. Discussion of problems.	Start explanation of Section 5 (Interviewers' Manual Section VI H). Practice filling out immunization information from mock immunization cards.

	MORNING	AFTERNOON
Day 9 **Sections 5 and 6**	Complete explanation of Section 5. Explain Section 5A (Interviewers' Manual Section VI I). .	Front-of class practice of Sections 5 and 5A. Mock interviews on Sections 5 and 5A.
Day 10 **Sections 7 and 8**	Explanation of Section 6 (Interviewers' Manual Section VI J). Front-of-class practice of Section 6. Review Quiz on household roster, age eligibility, and the calendar.	Explanation of Sections 7 and 8 (Interviewers' Manual Sections VI K and L). Mock interviews on Sections 6-8. Discussion of results of quiz and problems.
Day 11 **Section 9**	Lecture (from invited speaker) on HIV and AIDS. Discussion of Section 9 (Interviewers' Manual Sections VI M).	Finish Section 9. Mock interviews on Section 9. Discussion of problems.
Day 12 **Section 10**	Lecture (from invited speaker) on domestic violence. Special training on domestic violence (See Training Guidelines for the Implementation of the Household Relations Section of NFHS-3).	Discussion of Section 10 (Interviewers' Manual Section VI N). Mock interview with Section 10. Discussion of problems.
Day 13 **Men's Questionnaire**	Completing the Woman's Questionnaire (Interviewer's Manual Section VI O). Returning to the Household Questionnaire (Interviewer's Manual Section P). Men's Questionnaire (Interviewers' Manual Section VII).	Finish the Men's Questionnaire. Mock interview with the Men's Questionnaire.
Day 14 **Review/ practice/test**	Health Investigators join interviewer training.	
	Review of the complete Woman's Questionnaire. Discussion of problem parts of questionnaire (age determination, birth history, recording child immunizations, and calendar).	Mock interviews with all questionnaires. Test.

<table>
<tr><th></th><th>MORNING</th><th>AFTERNOON</th></tr>
<tr><td><u>Day 15</u>
Continue practice</td><td>Continue mock interviews (in different language groups if there is more than one interview language).</td><td>.
In class interviews with real respondents.</td></tr>
<tr><td><u>Day 16</u>
Height and weight training</td><td colspan="2">Demonstration of anaemia testing and HIV blood collection.

Training in height and weight measurement (Interviewers' Manual Appendix A).</td></tr>
<tr><td rowspan="2"><u>Day 17</u>
Field practice for interviewers (no height, weight, and blood testing); Health Investigators practice at health clinic/ anganwadi</td><td colspan="2">Health investigators go to anganwadi and/or health clinic to practice.</td></tr>
<tr><td colspan="2">Field practice in pairs (preferably one more experienced and one less experienced interviewer trainees together) with all trainers observing and assisting in finding suitable respondents.

Each trainee to do at least two interviews. Health investigators cover at least two households each.

Identify potential supervisors and allow them to edit questionnaires in the field and give to trainers to re-edit.</td></tr>
<tr><td rowspan="2"><u>Day 18</u>
Field practice review; Discussion of forms and editing for supervisors and editors</td><td colspan="2">Discussion of previous day's practice.

Trainers and supervisors to review problems, errors, and observations made during field practice.

Trainers to return edited questionnaires and discuss with each trainee individually.</td></tr>
<tr><td><u>Identification of prospective field editors</u>:

Administer test that emphasizes catching errors in completed questionnaires.

Prospective field editors identified by senior staff</td><td><u>Additional training of supervisors and editors using the Supervisor’s and Editor’s Manual</u>:

Use of maps
Principles of editing questionnaires.
Explanation of Control Forms.
.</td></tr>
<tr><td><u>Day 19</u>
Field practice with health investigators</td><td colspan="2">Field practice in teams working in URBAN mock sample segments; supervisors assign work from household listing sheets, use maps, use Supervisor's Assignment Sheets and trainees use Interviewer's/Health Investigator’s Assignment Sheets. Potential editors should conduct some interviews and also practice editing.</td></tr>
<tr><td><u>Day 20</u>
Field practice with health investigators</td><td colspan="2">Field practice in RURAL mock sample segment.</td></tr>
</table>

<table>
<tr><th></th><th>MORNING</th><th>AFTERNOON</th></tr>
<tr><td rowspan="4"><u>Day 21</u>
Review, test, administrative issues;
Training for Supervisors and Editors</td><td colspan="2">Health investigators pack and prepare all equipment to take into the field.</td></tr>
<tr><td>Discussion of practice interviews.

Time for extra review of any persistent problems.</td><td>Final selection of interviewers and field editors by team and supervisor

Administrative matters.
.</td></tr>
<tr><td colspan="2">Additional training for supervisors and editors.

Discussion of methods of data quality monitoring -- field editing, spot-checking, and field-check tables.</td></tr>
<tr><td rowspan="2"><u>Day 22</u>
Supervisors' and Editors' training contd., Administrative and logistical issues</td><td>Trainees informed of final selection.

Health investigators assigned to teams.

Interviewers leave.

Health investigators prepare for field work</td><td rowspan="2">Meeting of senior field staff, data processing chief, supervisors, and drivers to go over preparation for main survey work (see Part IV of this document).

Procedures for monitoring sample implementation and data quality, use and timing of field-check tables.</td></tr>
<tr><td>Complete additional training of supervisors and editors

Logistics of main survey fieldwork</td></tr>
</table>

ANNEX 3 SAMPLE TEST QUESTIONS

TIPS FOR TESTING

- Keep tests relatively short.
- Avoid essay or short answer questions.
- Consider giving brief quizzes (2-4 questions) once or twice a week.
- Give the correct answers immediately after collecting the tests.
- Return corrected quizzes/tests the following day and review any problems.

OTHER TESTING TECHNIQUES

- Provide information for the calendar and ask participants to fill in.
- Give a birth history table with mistakes and ask participants to edit. Mistakes could include:
  1) an inconsistency between birth date and age,
  2) a birth interval of less than 7 months,
  3) age at death recorded as 1 year, and
  4) missing answers to questions such as 213 or 221. This is a particularly good exercise for field editors and supervisors.
- Ask trainees to copy the dates from a sample vaccination card to the vaccination table. Include some inconsistent dates on the card and ask the trainees to identify these inconsistencies.

SAMPLE TEST QUESTIONS

HOUSEHOLD QUESTIONNAIRE

1) Who qualifies to answer the household questionnaire? (Check one)

____Any member of the household
____Any adult who is in the dwelling at the time of the interview
____Any member of the household who is 15 years of age or older.
____Any female ages 15-49 who is a member of the household or slept there the previous night.

2) Should each of the following be listed on the household schedule? (Yes or No)

____The 14-year-old niece of the head of the household who lives in the household during the week and returns to her village each weekend.
____A three-day-old baby who lives with his mother in the household.
____A male cousin of the head of household who came to visit yesterday, spent the night, but will return to his own home in the evening.
____The nanny who comes to the household at 7 AM each morning and stays all day long.
____A man who is considered the head of the household but is currently living and working in another town and only comes home once a month.

3) What do you do if the originally selected household has moved away and another household is living in their dwelling? (Check one)

____Find the originally selected household.
____Interview the household that is there.
____Skip that household completely.
____Substitute another household.

4) Who is eligible for interview with the Woman=s Questionnaire? (Yes or No)

____The 50-year-old female head of household.
____A 15-year old girl, a neighbor, who spent last night in the household.
____A 20-year-old nanny who comes to the house every day to look after the children.
____A female relative from another village who temporarily is living with the family and will celebrate her 50th birthday at the end of the week.

5) What do you do if a person originally identified in the household schedule is later determined to be neither a usual resident nor to have slept in the household the night before? (Check one)

____Make a note in the margin.
____Tell the supervisor.
____Inform the respondent that you represent NSO and that it is important to obtain accurate data.
____Delete this person by drawing a line through the row and renumber all subsequent listings.

6) How do you change the following answer to 05?

```
+-----+
|0  | 4|
+-----+
```

7) For an interview conducted in December 2005, which of the following persons have consistent information?

	Mo. of Birth	Yr. of Birth	Age
a)	01	98	7
b)	10	80	25
c)	03	87	18
d)	08	57	48

8) For each individual listed below, fill in columns (16) and (17).

	Has (NAME) ever attended school?	What is the highest standard (NAME) has completed?
	(16)	(17)
	YES NO	STANDARD
(a) a woman finished her third year in college	1 2	☐☐
(b) a woman attended primary school but never finished her first year	1 2	☐☐
(c) a child completed 8 years of school, but never attended secondary school	1 2	☐☐
(d) a child who is 5 years old is in second year of kindergarten.	1 2	☐☐

CODES
Education standard
00 = less than one year completed
98 = DK

9) You are filling in the household questionnaire. The respondent, Ameena, says that her husband, Ahmed, is the head of the household. After you have completed columns 2, 3, and 4 for Ahmed and Ameena, she tells you that her sister Jahana is visiting and stayed in the house the previous night. Jahana is 36 years old. Please complete line 3 for Jahana.

LINE NO.	USUAL RESIDENTS AND VISITORS	RELATIONSHIP TO HEAD OF HOUSEHOLD	SEX	RESIDENCE		AGE	ELIGIBILITY		
	Please give me the names of the persons who usually live in your household and guests of the household who stayed here last night, starting with the head of the household.	What is the relationship of (NAME) to the head of the household?*	Is (NAME) male or female?	Does (NAME) usually live here?	Did (NAME) stay here last night?	How old is (NAME)?	CIRCLE LINE NUMBER OF ALL WOMEN AGE 15-49	CIRCLE LINE NUMBER OF ALL MEN AGE 15-54	CIRCLE LINE NUMBER OF ALL CHILD-REN UNDER AGE 6
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(9)	(10	(11)
01		☐☐	M F 1 2	YES NO 1 2	YES NO 1 2	IN YEARS ☐☐	01	01	01
02		☐☐	1 2	1 2	1 2	☐☐	02	02	02
03		☐☐	1 2	1 2	1 2	☐☐	03	03	03

* CODES FOR Q.3 RELATIONSHIP TO HEAD OF HOUSEHOLD:

01 = HEAD
02 = WIFE OR HUSBAND
03 = SON OR DAUGHTER
04 = SON-IN-LAW OR DAUGHTER-IN-LAW
05 = GRANDCHILD
06 = PARENT
07 = PARENT-IN-LAW
08 = BROTHER OR SISTER
09= BROTHER-IN-LAW OR SISTER-IN-LAW
10=NEICE/NEPHEW
11 = OTHER RELATIVE
12 = ADOPTED/FOSTER/ STEPCHILD
13 = DOMESTIC SERVANT
14 = OTHER NOT RELATED
98 = DON=T KNOW

WOMEN'S QUESTIONNAIRE SECTION 1

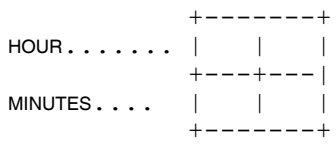
1) What do you do if you find out during the individual interview that the respondent is 14 years of age? (Check one)

____Continue with the interview, but write A14 YEARS OLD@ at the top of the first page of the questionnaire.
____Politely excuse yourself and ask your supervisor what to do.
____Ask a few more questions, terminate the interview, and write AINELIGIBLE@ at the top of the first page of the questionnaire.
____Double-check the age of the respondent by asking other members of the household.

2) What do you do if an eligible woman is at a neighbor's home at the time you complete the Household Questionnaire? (Check one)

____Interview all other eligible respondents, make an appointment for the woman who is not there and leave.
____Make an appointment to return when the woman will be there.
____Try to find the woman.
____Substitute another woman of eligible age.

3) How do you record half past one in the afternoon in Question 101?



WOMEN'S QUESTIONNAIRE SECTION 2

1) Which of the following should be included in the birth history:

	YES	NO
A stillborn baby	1	2
A child born the day before the survey	1	2
A child adopted by the respondent	1	2
A baby boy who died after 1 day	1	2

2) What do you record in Question 220 if a woman says that her child died when he was two weeks old? (After probing, the woman still can not give a more precise age at death in days.)

212 What name was given to your (first/next) baby? (NAME)	213 Were any of these births twins?	214 Is (NAME) a boy or a girl?	215 In what month and year was (NAME) born? PROBE: What is his/her birthday?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COM-PLETED YEARS.	218 IF ALIVE: Is (NAME) living with you?	219 IF ALIVE: RECORD HOUSEHOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD)	220 IF DEAD: How old was (NAME) when he/she died? IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.
01	SING....1 MULT...2	BOY .. 1 GIRL . 2	MONTH.. ☐☐ YEAR ☐☐☐☐	YES.....1 NO.....2 → 220	AGE IN YEARS ☐☐	YES..... 1 NO 2	LINE NUMBER ☐☐ → (NEXT BIRTH)	DAYS..... 1 ☐☐ MONTHS.. 2 ☐☐ YEARS ..... 3 ☐☐

3) What do you record in Question 220 if a women states that her child died when he was one year old?
[NOTE: This is a tricky question. In fact, nothing should be recorded yet. The interviewer is first expected to probe to determine the exact age at death <u>in months</u>.]

4) What do you record in Question 220 if a women states that her child died when he was 11 and a half months old?

5) You are filling out the birth history table and the respondent has told you that she has 2 children, Raju and Reena. Raju was born in April 1993 and Reena was born in

September 1996. When you ask Q 221, she says that she did give birth to a baby girl in January 1995, but the baby died a few hours later, before she could even be named. Complete the birth history:

212 What name was given to your (first/next) baby? (NAME)	213 Were any of these births twins?	214 Is (NAME) a boy or a girl?	215 In what month and year was (NAME) born? PROBE: What is his/her birthday?	216 Is (NAME) still alive?	217 IF ALIVE: How old was (NAME) at his/her last birthday? RECORD AGE IN COM-PLETED YEARS.	218 IF ALIVE: Is (NAME) living with you?	219 IF ALIVE: RECORD HOUSEHOLD LINE NUMBER OF CHILD (RECORD '00' IF CHILD NOT LISTED IN HOUSEHOLD)	220 IF DEAD: How old was (NAME) when he/she died? IF '1 YR', PROBE: How many months old was (NAME)? RECORD DAYS IF LESS THAN 1 MONTH; MONTHS IF LESS THAN TWO YEARS; OR YEARS.	221 Were there any other live births between (NAME OF PREVIOUS BIRTH) and (NAME)?
01	SING....1 MULT...2	BOY .. 1 GIRL . 2	MONTH.. YEAR	YES.....1 NO.....2 220	AGE IN YEARS	YES..... 1 NO 2	LINE NUMBER (NEXT BIRTH)	DAYS..... 1 MONTHS.. 2 YEARS 3	
02	SING....1 MULT...2	BOY .. 1 GIRL . 2	MONTH.. YEAR	YES.....1 NO.....2 220	AGE IN YEARS	YES..... 1 NO 2	LINE NUMBER (GO TO 221)	DAYS..... 1 MONTHS.. 2 YEARS 3	YES ..... 1 NO 2
03	SING....1 MULT...2	BOY .. 1 GIRL . 2	MONTH.. YEAR	YES.....1 NO.....2 220	AGE IN YEARS	YES..... 1 NO 2	LINE NUMBER (GO TO 221)	DAYS..... 1 MONTHS.. 2 YEARS 3	YES ..... 1 NO 2

CALENDAR

Fill out the calendar for the following respondents:

1) A woman who has no children, has never been pregnant, was married in December 1998 and has never used any contraception.

2) A woman has had one birth, Anju, in March 2001. She was pregnant with Anju for 8 months. Two months after Anju's birth she started using the loop. She stopped using in April 2003 to have another child. She gave birth to Anil in May 2004 after a 9 month pregnancy. She had an ultrasound at the time of Anil but not at the time of Anju. She got sterilized in December 2004. The respondent was married in July 1998. After 6 months her gauna was performed.

3) A woman is unmarried, has never had a pregnancy or birth, and never used contraception.

4) A woman married June 1999. Gauna was performed one year later in May 2000. Her first husband died in January 2002. She was remarried in April 2005. She has

never been pregnant and never used contraception.

5) A woman has been married continuously since Decemeber 1990. She has three daughters. The youngest, Meena, was born in January 2000. At that time she did not have an ultrasound. She has been trying to have a son ever since. She had a pregnancy terminated after four months in May 2001 after an ultrasound. She then became pregnant again in April 2003. She aborted again after four months after an ultrasound. She is now 4 months pregnant and the ultrasound has told her that she is going to have a son. She used the condom between her first and second births but never again.

WOMEN'S QUESTIONNAIRE SECTION 3

1) Does it count as periodic abstinence if a woman does not have sex during a certain period of the month because she or her husband did not feel like it?

2) In response to question 328 (source of current method of contraception), the respondent, who has already stated that she and her husband use condoms, says that her husband is responsible for obtaining them.

True or False: You should circle code 33 for AFRIEND/RELATIVE.@

WOMEN'S QUESTIONNAIRE SECTION 4

1) How do you record the answer if a woman tells you that she first put (NAME) to the breast 36 hours after his birth? (Question 467)

IMMEDIATELY/
WITHIN HALF AN
HOUR ...000

HOURS 1

DAYS 2

Before beginning section 4 (Pregnancy, Postnatal Care and Breastfeeding), you must fill in the line number, name and survival status of each child born in 2000 or later. If a woman had twins, should they be considered as one birth, or separate births?

WOMEN'S QUESTIONNAIRE SECTION 7

1) After the respondent has stated that she would choose to have three children in her whole life, she gives the following response to question 715: AAt least one of each, God willing.@ Record her response below:

715	How many of these children would you like to be boys, how many would you like to be girls and for how many would the sex not matter?	BOYS GIRLS EITHER NUMBER ..... ☐☐ .... ☐☐ ..... ☐☐ OTHER _____ 96 (SPECIFY)	

WOMEN'S QUESTIONNAIRE SECTION 8

1) In response to questions 810, a woman says that she teaches history at the local high school and she sells vegetables at the local market on the weekends. Record her response:

810	What is your occupation, that is, what kind of work do you mainly do?	☐☐	

2) When asked question 805 (What is your husband's occupation? That is, what does he mainly do?) The respondent says the following: AUnfortunately, my husband is unemployed. He has been out of work since his taxi which he used to drive broke down last year." You write:

_____
_____
_____

ANSWER KEY

HOUSEHOLD QUESTIONNAIRE

1)
2)
3)
4)
5)
6)
7)
8)
9)

WOMEN'S QUESTIONNAIRE SECTION 1

1)
2)
3)

WOMEN'S QUESTIONNAIRE SECTION 2

1)
2)
3)
4)
5)

CALENDAR

1)
2)
3)
4)
5)

WOMEN'S QUESTIONNAIRE SECTION 3

1)
2)

WOMEN'S QUESTIONNAIRE SECTION 4

1)

WOMEN'S QUESTIONNAIRE SECTION 7

1)

WOMEN'S QUESTIONNAIRE SECTION 8

1)
2)

ANNEX 3 FIELD-CHECK TABLES

Data quality is closely linked to the performance of interviewers and their supervisors. Field-check tables are one way of monitoring data quality while the fieldwork is still in progress. They are tabulations of data that are produced periodically by the data processing chief in order to monitor the performance of each team separately. Each table focuses on an important aspect of data quality.

RUNNING THE FIELD-CHECK TABLES

The data processing chief will be responsible for producing the field-check tables at regular intervals. The first round should be run when 200-300 household questionnaires have been received and entered at survey headquarters. Field-check tables should be produced every two weeks.

- In general, the field-check tables produced after the first round are cumulative. As an alternative, the data processing chief can analyze the data by specific periods of fieldwork. This will give a better idea of the quality of the most recent data collected by the team.

REPORTING THE FINDINGS FROM THE FIELD-CHECK TABLES

Immediate action should be taken to address problems. The supervisors of the teams falling short of the targets should be told immediately of the specific problems observed. The supervisors are then responsible for reviewing with the interviewers, field editor, and health investigators, the relevant sections of the questionnaire or procedures that are associated with each problem. If the problem is severe and persists after team members have been notified, stopping data collection may be justified. Retraining, or in some cases dismissal, may be necessary.

Whenever problems are detected, a brief (one page or less) written report should be produced by senior staff of the relevant Research Organization detailing the specific teams and individuals who had problems and what actions were taken. The report should be completed within a few days and no more than a week of table production. One copy of each report should be kept with the Research Organization and one copy should be sent to the NFHS team at IIPS.

HOW TO USE THE TABLES

To help identify teams with problems, each table has a target. The target is based on either prior knowledge about the indicator or on a preset NFHS-3 goal.

Teams not meeting the targets are identified in each table. It should be noted that flagged teams are not necessarily doing a bad job. Senior staff should

consider the following before taking any action:

- *Where is the team working?* There may be variation in team results due to the region in which they are working (a rural area versus the capital city, for example).

- *On how many cases is performance being evaluated?* Sometimes a team will not meet the target because only a small number of cases have been entered into CS-Pro. This is particularly true at the start of fieldwork. Even after a month of fieldwork, the flow of the questionnaires through data processing may mean that only one or two clusters have been entered for a particular team.

- *How far away is the team from the target?* The degree of the problem should also be considered. Sometimes several teams may be flagged, but one team is quite close to the target while another is significantly short of the goal.

- *Has a team been given enough time to improve*? Even after a team is informed of mistakes, improvements will not appear in the tables immediately because of the lag time in data processing.

If data collection problems are discovered at the team level, it is useful to investigate whether problems are team-wide or restricted to one or two of the team members. This can be done through the examination of individual-level tabulations, which can be requested from the data processing supervisor.

INTERPRETING THE FILED-CHECK TABLES

Field-check tables include summary tables (one set for the women's survey and one for the men's survey) of the teams' performance on all of the data quality indicators. These can assist senior staff in identifying teams that are weak overall.

The following tables are based on hypothetical results from the household and women's questionnaires. Tables based on the men's questionnaires will be identical to those based on the women's questionnaires.

TABLE FC-1: HOUSEHOLD RESPONSE RATES

Serious biases can be introduced in the data when a significant proportion of the sampled households are, for whatever reason, not interviewed. The level of household "non-response" needs to be kept low (no greater than 5 percent) so that the results from the survey are representative of the country as a whole, and not only of those households that are convenient to find and interview.

Field-check Table 1 (FC-1) monitors the performance of field workers in terms of non-response to the household questionnaire. The second to the

last column calculates the percentage of households that have been either successfully interviewed (Col. (1)) or refused (Col. (5)). For the purpose of meeting the target, both results are considered acceptable, because the household respondent has a legitimate right to refuse to be interviewed. The last column of FC-1 shows the teams that have not met the target. As an aid for survey staff, the third to the last column presents the household response rate as it will be calculated in the NFHS-3 reports. The other columns may be used to identify specific problems and areas where retraining may be necessary. For example, if one team appears to be having problems with refusals, then they may need additional training on non-response conversion.

FC-1: Percent distribution of sampled households by results of household interview, according to interviewer team.
Target is the percentage of selected households with result code 1 (Completed) and 5 (Refused) >= 95%

	Result of household interview													
Team	Completed (1)	HH present, no respondent (2)	HH absent (3)	Postponed (4)	Refused (5)	Dwelling vacant (6)	Dwelling destroyed (7)	Dwelling not found (8)	Other (9)	TOTAL	N	Household response rate (%)*	Percentage of completed and refused interviews (1)+(5)	**Target not met**
Team 1	95.7	0.4	1.9	0.0	0.2	1.1	0.3	0.3	0.1	100.0	748	99.1	95.9	-
Team 2	94.2	0.1	2.2	0.0	0.2	2.9	0.1	0.3	0.0	100.0	796	99.4	94.4	**94.4**
Team 3	97.7	0.2	1.1	0.0	0.1	0.8	0.0	0.0	0.1	100.0	856	99.7	97.8	-
Team 4	92.2	1.9	0.3	0.0	0.0	5.1	0.1	0.2	0.2	100.0	681	97.8	92.2	**92.2**
Team 5	93.6	0.1	3.6	0.0	0.1	1.9	0.2	0.2	0.3	100.0	777	99.6	93.7	**93.7**
Total	94.8	0.5	1.8	0.0	0.1	2.3	0.1	0.2	0.1	100.0	3,858	99.1	94.9	**94.9**

* Household (HH) response rate = (1) / (1+2+4+5+8) * 100

Interpretation: Teams 2, 4, and 5 have been flagged for not meeting the result target of at least 95 percent. A high proportion of vacant dwellings (Col. (6)) has led to a lower percentage of completed and refused interviews for Teams 2 and 4. Senior staff should first consider the area in which the teams are working to determine whether there is a regional explanation for this response rate (for example, maybe there was recent flooding in the area). Teams 2 and 5 have higher rates of households being absent (Col. (3)). Once again, the region of the work, timing of fieldwork, etc. should be considered. However, overall, this suggests that some team members are not following NFHS-3 procedures for contacting households. It may be helpful to run this table by team member to determine whether the problem is isolated to one or more specific interviewers or whether the problem is teamwide. The supervisor should be notified of the problem and advised to double-check households reported as vacant or absent.

TABLE FC-2: ELIGIBLE WOMEN RESPONSE RATES
(THIS TABLE WILL ALSO BE PRODUCED FOR MEN)

As with household response rates, response rates for individual women are expected to be high to ensure that the representativeness of NFHS-3 data. Field-check Table 2 (FC-2) monitors the performance of interviewers in regard to the result of the individual questionnaire. The format of the table and its interpretation are similar to FC-1. For women, the target has been set at 95% or more and for men, at 90% or more.

FC-2: Percent distribution of DE FACTO eligible women by result of individual interview, according to interviewer team.
Target is the percentage of eligible women with result codes 1 (Completed) and 4 (Refused) target >= 95%

	Result of individual interview (DE FACTO women)										
Team	Com-pleted (1)	Not at home (2)	Post-poned (3)	Re-fused (4)	Partly Completed (5)	Incapaci-tated (6)	Other (7)	TOTAL	N	Percent-age of completed and re-fused interviews (1)+(4)	**Target not met**
Team 1	98.3	1.1	0.0	0.3	0.1	0.1	0.1	100.0	795	98.6	-
Team 2	98.2	1.2	0.2	0.2	0.0	0.1	0.1	100.0	887	98.4	-
Team 3	97.3	2.4	0.0	0.0	0.0	0.1	0.2	100.0	1,078	97.3	-
Team 4	92.8	3.7	0.5	2.0	0.3	0.2	0.5	100.0	758	94.8	**94.8**
Team 5	93.9	4.6	0.0	0.1	0.5	0.3	0.6	100.0	977	94.0	**94.0**
Total	96.4	2.6	0.1	0.2	0.2	0.2	0.3	100.0	4,495	96.6	-

Interpretation: Teams 4 and 5 have been flagged, although neither team is seriously short of the target. For Team 5, the high percentage of women who were not at home suggests a lapse in proper field procedures. Although the difficulty in locating respondents can vary by urban-rural residence, it is possible that at least some interviewers are not taking time for return visits to the household. Although "refused" is considered an acceptable interview result, Team 4 has an unusually high refusal rate compared to other teams. If senior staff cannot find a reasonable explanation for the differential (such as working in an urban area, where response rates are often lower), interviewers should be retrained in non-response conversion techniques.

TABLE FC-3: AGE DISPLACEMENT (12-18)
(THIS TABLE WILL ALSO BE PRODUCED FOR MEN)

Collection of age information in the household schedule must be done accurately and honestly to obtain a representative sample of women and of men. Sometimes these data are manipulated by the interviewer in order to conduct fewer individual interviews. Field-check Table 3 (FC-3) indicates whether interviewers are intentionally displacing the ages of young women from the eligible range (15 and over) to an ineligible age (14 and under). Essentially, we are looking for a deficit of women 15 years old compared with those 14 years old.

FC-3: Number of all women age 12-18 years listed in the household schedule by single year of age and age ratio 15/14, according to interviewer team.

Target is age ratio >= 0.8

Team	Women's age (12 - 18 years)							TOTAL	Age ratio (women 15/ women 14)	**Target not met**
	12	13	14	15	16	17	18			
Team 1	10	11	11	8	8	7	9	64	0.73	**0.73**
Team 2	11	11	12	9	8	10	7	68	0.78	**0.78**
Team 3	12	12	11	13	11	11	9	79	1.18	-
Team 4	12	16	13	5	6	8	7	67	0.38	**0.38**
Team 5	14	11	10	11	11	9	8	74	1.18	-
Total	59	62	56	46	44	44	40	352	0.83	-

Interpretation: In this example, there is a deficit of women 15 years old, compared with women 14 years old. Normally, one would expect roughly equal numbers of women at these two ages and therefore the age ratios should be near 1.00. To allow for natural variation, a target of at least 0.8 has been set. It appears that members of three teams are "pushing" significant numbers of women aged 15 across the eligibility boundary to age 14 so that they will not have to interview them. In particular, there is evidence of severe age displacement by Team 4.

TABLE FC-4: CHILDREN EVER BORN

In order to accurately calculate fertility and mortality rates, it is important to have a complete listing of children born to women in the sample. Field-check Table 4 (FC-4) calculates the mean number of children ever born (CEB) to all women with a completed interview. The target should be set at a minimum of 75% of the known CEB for the state. If teams fall below the target, it is possible that some children born to respondents are not being recorded in the birth history. It is important to verify where the teams are working, since some regions and probably urban areas may have lower fertility rates and/or a younger age distribution of women. Nonetheless, it should be kept in mind that the difference between the urban and rural CEB is often not as large as differentials in the total fertility rate.

FC-4: Number of ALL WOMEN with a completed interview, total number of children ever born (CEB), and mean number of CEB, according to interviewer team.

The illustrative target for this table is >=2.3 [This target should be adjusted for each state)

Team	Number of ALL women with a completed interview	Total number of children ever born	Mean CEB	
	(1)	(2)	(3)=(2)/(1)	**Target not met**
Team 1	396	1,069	2.70	-
Team 2	450	1,206	2.68	-
Team 3	400	722	1.81	**1.81**
Team 4	385	982	2.55	-
Team 5	410	1,025	2.50	-
Total	2,041	5,004	2.45	

Interpretation: In this example, Team 3 has been flagged. The problem should be discussed with the team and the team should be closely monitored.

TABLE FC-5: BIRTH DISPLACEMENT

Some interviewers intentionally displace the birth dates of children from the fourth or fifth year to the sixth year before the year of the survey, so as to decrease the length and difficulty of their assigned interviewing task. This practice seriously undermines the quality of the data. Field-check Table 5 (FC-5) measures the performance of interviewers regarding displacement of births from calendar year 2000 (which is the cutoff year) or later to years before 2000. If significant displacement has occurred, the birth year ratio will be found to be much lower than 1.00, which is the observed ratio when a smooth change in the number of births is observed from the year to year.

FC-5: Number of births since 1996 by year of birth and birth year ratio, according to interviewer team (based on births of all women).
Target is birth year ratio >= 0.8

	Year of birth													
Team	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Miss-ing	TOTAL	Birth year ratio (2000/1999)	**Target not met**
Team 1	48	46	52	47	35	38	36	36	35	15	0	388	0.74	**0.74**
Team 2	40	37	47	45	38	41	33	27	37	12	1	358	0.84	-
Team 3	47	46	51	54	50	44	42	38	39	13	1	425	0.93	-
Team 4	36	47	41	50	28	31	30	35	31	13	1	343	0.56	**0.56**
Team 5	45	43	51	51	26	49	33	43	28	14	1	384	0.51	**0.51**
Total	216	219	242	247	177	203	174	179	170	67	4	1,898	0.72	**0.72**

Interpretation: Three teams are clearly below the target. The degree of the problem, however, is particularly severe among Teams 4 and 5. Because of the large number of cases, the only explanation is deliberate manipulation of birth dates and this serious problem should be addressed immediately. If individual-level tabulations identify that the problem is restricted to only some of the team members, the interviewers who are doing well may be reassigned to other teams, or be kept in some other capacity.

TABLE FC-6: COMPLETENESS OF DATE/AGE INFORMATION FOR BIRTHS

One of the main objectives of the survey is to estimate fertility rates for women and mortality rates for different age groups of children. The calculation of both of these indicators requires accurate information on date of birth. Field-check Table 6 (FC-6) monitors the performance of interviewers regarding the completeness of the dates of birth for children recorded in the birth history. The table is divided into two parts, one for surviving children (FC-6L) and one for deceased children (FC-6D). Since we know that information concerning deceased children is typically less complete, different targets must be set.

FC-6L: Percent distribution of births by completeness of date of birth/age information, according to interviewer team (based on births of all women).

Target (based on Column 1) is percentage of births with information on year AND month of birth >= 98%

LIVING CHILDREN

Team	Completeness of reporting: Year and month of birth (1)	Year of birth and age (2)	Year of birth only (3)	Age only (4)	Other (5)	No data (6)	TOTAL	N	**Target not met (based on column 1)**
Team 1	100.0	0.0	0.0	0.0	0.0	0.0	100.0	656	-
Team 2	99.7	0.2	0.1	0.0	0.0	0.0	100.0	732	-
Team 3	99.8	0.0	0.2	0.0	0.0	0.0	100.0	890	-
Team 4	94.8	1.6	1.5	1.2	0.1	0.8	100.0	623	**94.8**
Team 5	100.0	0.0	0.0	0.0	0.0	0.0	100.0	806	-
Total	99.0	0.3	0.4	0.2	0.0	0.1	100.0	3,707	-

Interpretation: Table FC-6L shows the distribution by year and month of birth for all living children. Team 4 is well below the set target of 98%. It is important to note the relatively large percentage of children for which Team 4 interviewers were able to obtain only year of birth (Col. (3)) or the age of the child (Col. (4)). Furthermore, only Team 4 has cases with no data (Col. (6)).

FC-6D: Percent distribution of births by completeness of date of birth information, according to interviewer team (based on births of all women).

Target (based on Column 1) is the percentage of births with information on year AND month of birth >= 97%

DEAD CHILDREN

Team	Completeness of reporting: Year and month of birth (1)	Year of birth only (2)	Month of birth only (3)	No data (4)	TOTAL	N	**Target not met**
Team 1	98.0	2.0	0.0	0.0	100.0	131	-
Team 2	99.0	0.9	0.1	0.0	100.0	146	-
Team 3	95.8	4.0	0.2	0.0	100.0	178	**95.8**
Team 4	88.9	7.9	1.1	2.1	100.0	125	**88.9**
Team 5	97.5	2.4	0.0	0.1	100.0	161	-
Total	96.0	3.3	0.3	0.4	100.0	741	**96.0**

In Table FC-6D, Team 4 has once again been flagged. In this table the team is seriously short of the target. In almost 8 percent of cases, they were able to collect only the year of birth, and in 2 percent of cases, they collected no information on birth date whatsoever. While some variation in completeness of birth data may be explained by regional differences, it seems clear that Team 4, and to some extent Team 3, are performing poorly. It should be noted that this problem extends beyond interviewers, because the supervisor and field editor should have caught these types of missing data.

TABLE FC-7: HEAPING ON AGE AT DEATH

A common problem in the collection of data on age at death is “heaping” at 12 months of age. In other words, a large number of deaths are reported at 12 months relative to the number reported at months 8, 9, 10, and 11, or at months 13, 14, 15 and 16. Such heaping can result in the underestimation of the infant mortality rate (based on deaths in months 0-11) and overestimation of the child mortality rate (based on deaths at age 1-4 years).

Heaping of deaths at 12 months of age is the result of two frequently encountered interviewing situations. The first situation occurs when respondents report ages at death as "one year", even though the death may have occurred at 10 months, 13 months, etc. Some interviewers will record "1 year" (incorrectly) or (also incorrect) simply convert "1 year" to 12 months and record that without probing. The second situation in which heaping occurs is when a respondent initially reports that she does not know the age but, when encouraged to recall the age, reports in terms of a preferred number of months (i.e., 12 rather than 11 or 13).

Field-check Table 7 (FC-7) monitors the performance of interviewers in two areas: recording age at death as “1 year” and “heaping” of age at death at 12 months. To interpret the table, senior staff should look at the “target not met” column to identify teams with heaping at 12 months (or “1 year”). The target for this ratio is set in NFHS-3 as less than 1.5. However, regardless of whether or not teams have been flagged, the column on deaths reported at “1 year” should also be examined, since this is incorrect reporting and should be discussed with interviewers, supervisors, and field editors.

FC-7: Number of deaths in the 15 years preceding the survey occurring at 8-16 months of age by reported months of age at death (including age at death reported as "one year") and 12 months ratio, according to interviewer team. Includes deaths for which a calendar period of death could not be assigned because of missing date of birth information. Deaths lacking age at death are not included. (Based on births of all women)

Target is 12 months ratio <1.5

	Age at death (in months)										Total 8-16 months (including "1 year")	12 months ratio (including "1 year")*	**Target not met**
					12 months								
Team	8 m.	9 m.	10 m.	11 m.	12 m.	Reported as "1 year"	13 m.	14 m.	15 m.	16 m.			
Team 1	10	4	4	4	3	4	3	2	2	1	37	1.7	**1.7**
Team 2	14	8	3	2	4	5	1	2	4	3	46	1.8	**1.8**
Team 3	20	12	5	2	4	5	2	1	3	2	56	1.4	-
Team 4	8	12	6	3	7	11	0	0	2	4	53	3.1	**3.1**
Team 5	10	8	4	3	2	5	3	2	4	3	44	1.4	-
Total	62	44	22	14	20	30	9	7	15	13	236	1.9	**1.9**

* 12 months ratio = (deaths at 12 months + deaths reported at "1 year") / ((all deaths 8-16 m.) / 9)

Interpretation: Teams 1, 2 and 4 have all been flagged for not meeting the target. The table indicates that Team 4, in particular, has serious problems with heaping on death at age 12 months and inaccurate reporting of death at “1 year”. Clearly interviewers on Team 4 are not probing when necessary and the supervisor and field editor have allowed this problem to slip past the

editing stage. In addition to following up with Teams 1, 2, and 4, it is also advisable to send a memo to all teams with a reminder of the rules for recording age at death, since all teams have some reporting of death at "1 year".

TABLE FC-8: NEONATAL DEATHS/INFANT DEATHS

Underreporting of births and of deceased children seriously undermines data quality. Unfortunately, there is no certain way to determine whether an individual interviewer or team is omitting births of children who subsequently died. This is because sampling fluctuations and genuine regional differences can produce differences among teams and individuals that are unrelated to data quality. Therefore, no target is set for this table. Nevertheless, Field-check Table 8 (FC-8) is useful in determining whether gross underreporting of infant deaths is occurring.

The table is calculated on data from the 15 years preceding the survey. The last column is a ratio of infant deaths to total births. This is a crude measure of the infant mortality rate for the 15 years preceding the survey and it may be helpful to compare this rate with official rates for the same 15-year period (the midpoint, for example). To interpret this column, if the infant deaths to total births ratio is substantially lower in one or more teams than in other teams (after accounting for the possible difference in sample segments), then omission of infant deaths could have occurred.

The second to the last column is the ratio of neonatal to infant deaths. There are two points to keep in mind when interpreting this column. The first is to look for variation in the ratio. If one team has a lower neonatal to infant death ratio than other teams, this team should be "flagged" and their work location should be determined. Next, it is useful to compare the last two columns to each other. In general, as infant mortality declines in a country, the relative share of the neonatal deaths increases. If a team has a low neonatal to infant death ratio and a relatively low ratio of infant deaths to total births, this strongly suggests that the members of the team are failing to uncover infant deaths.

FC-8: Number of births in the 15 years before the survey by survival status and age at death (for those who died), the ratio of neonatal deaths (<1 month) to all infant deaths (<12 months), and the ratio of infant deaths to all births, according to interviewer team. (Births in last 15 years to all women (including deaths without a birth date given). Deaths incorrectly recorded at "1 year" are included in deaths at 12+ months)

	ALL BIRTHS							RATIO	
	Age at death in months for children who died					Still alive	Total births	Neonatal to infant (1)/(1+2)	Infant deaths to total births (per thousand) (1+2)/(7)
	< 1 month	1-11 months	12+ months	Missing	Total dead				
Team	(1)	(2)	(3)	(4)	(5)=(1+2+3+4)	(6)	(7)=(5+6)		
Team 1	25	47	54	14	140	2,022	2,162	0.35	33.3
Team 2	63	45	74	1	183	1,545	1,728	0.58	62.5
Team 3	79	72	69	1	221	1,291	1,512	0.52	99.9
Team 4	86	148	92	1	327	1,693	2,020	0.37	115.8
Team 5	175	208	131	0	514	1,739	2,253	0.46	170.0
Total	428	520	420	17	1,385	8,290	9,675	0.45	98.0

Interpretation: Two things are striking about this table. The first is the range of ratios of infant deaths to total births. Although regional variation may be a factor, it is possible that the lower values of Team 1 as well as of Team 2, indicate that interviewers are failing to uncover some childhood deaths. In addition to the low ratio of infant deaths to total births, Team 1 also has a very low ratio of neonatal to infant deaths. Taken together, this is strong evidence that infant deaths have been omitted.

TABLE FC-9: VACCINATION CARD COVERAGE

Experience has shown that some interviewers are often not effective at getting the respondent to produce the immunization card (for Section 4), even when the mother says that she has a card for the child. This is especially true in cases when there are several children born since the cutoff date. Field-check Table 10 (FC-10) monitors interviewer performance in obtaining child immunization cards, once mothers have said that they have one for the child(ren). The target for the proportion of cards seen is at least 90%.

FC-9: Percentage of living children born since January 2000 who currently have a vaccination card, and of these, percentage for whom the card was seen by interviewer, according to interviewer team.

Target is percentage of cards seen >= 90%

Team	Vaccination card reported (%)	Vaccination card seen by interviewer (%)	Number of children	Proportion of cards seen (%)	**Target not met**
	(1)	(2)	(3)	(4)=(2)/(1)	
Team 1	83.2	57.3	532	68.9	**68.9**
Team 2	80.7	73.5	456	91.1	**-**
Team 3	77.0	67.8	619	88.1	**88.1**
Team 4	87.3	68.6	482	78.6	**78.6**
Team 5	74.3	72.1	492	97.0	**-**
Total	80.3	76.6	2,581	95.4	**-**

Interpretation: In this example, three teams have not met the target. While Team 3 is relatively close to the target, Teams 1 and 4 seem to have a serious problem with ensuring that the mother shows a card that she has already reported possessing.

TABLE FC-10: CONSISTENCY OF CHILD CHARACTERISTICS

Field-check Table 10 (FC-10) is a consistency check between information given in the birth history section of the women's questionnaire and the anthropometry/anaemia section of the household questionnaire. This check can only be performed for de jure (usual residents) women, since women who are visitors in the household may have children who live with them but who are not visitors in the household where the interview takes place. To ensure the accurate calculation of indicators, the information on the month and year of birth and sex of the child should be the same in both the birth history section and in the anthropometry/anaemia section. It is up to the data collectors to record this information accurately and the responsibility of the field editor to check for consistency. Therefore, a target of 99 percent has been set for this table.

FC-10: Number of children under 5 recorded in the birth histories of DE JURE women as living with their mother and number and percentage for which anthropometry/anaemia section of the Household Questionnaire has a child with the same month and year of birth and sex, according to interviewer team.

Target is percentage in column (3) >= 99%

	Children under 5 living with their mother according to the birth history (only for DE JURE mothers)			
		For whom anthropometry/anaemia section has a child with the same month and year of birth and sex		
	Total number	Number	%	
Team	(1)	(2)	(3)=(2)/(1)	**Target not met**
Team 1	1,400	1,396	99.7	**-**
Team 2	1,391	1,387	99.7	**-**
Team 3	1,092	1,080	98.9	**98.9**
Team 4	1,080	1,045	96.8	**96.8**
Team 5	1,298	1,294	99.7	**-**
Total	6,261	6,202	99.1	**-**

Interpretation: Teams 3 and 4 have not met the target. Team 3 is very close to the target while team 4 is clearly well below the target. Team 4 should be contacted and the problem discussed. Team 3 should be monitored in future field check tables and by NFHS-3 coordinators who visit the team.

TABLE FC-11C: ANTHROPOMETRY (CHILDREN)

Anthropometry provides one of the most important indicators of nutritional status. To ensure accurate results, overall response rates should be high and the data should be valid. Column 8 of Field-check Table 11C (FC-11C)

gives the percentage of measured children with height and weight data out of the valid range. The valid range is predetermined and is based on the age and sex of the child. Because date of birth is necessary for proper calculation of anthropometry, Table FC-11C also shows the percentage of children under five with incomplete date of birth by team. Column (10) shows the percentage of children under five with both anthropometric data within the valid range and a complete date of birth. The last column flags teams who do not achieve at least 90% valid data. In addition to Columns (8)-(10) and the target column, Columns (2)-(5) should also be reviewed to ensure that no teams show an unusually high level of non-response.

FC-11C: Percent distribution of all children under 5 by result of height and weight measurements, percentage of children measured who have out of range values or incomplete date of birth and percentage with valid data for anthropometry, according to interviewer team

Target = percentage of valid data >= 90%

	Result of height and weight measurement							Among children measured			
Team	Meas-ured (1)	Child not present (2)	Re-fused (3)	Other (4)	Miss-ing (5)	TOTAL (6)	Number of chil-dren < 5 (7)	Ht. and/or wt. out of range (%) (8)	Date of birth incom-plete (%) (9)	Valid data (%) (10)=(1)+(3)-((((8)+(9))*(1))/100)	**Target not met**
Team 1	97.2	1.5	0.0	0.0	1.3	100.0	1,883	0.7	0.6	95.9	-
Team 2	98.6	0.2	0.6	0.1	0.5	100.0	1,188	0.8	0.7	97.7	-
Team 3	93.2	0.8	0.5	0.0	5.5	100.0	1,297	2.9	1.2	89.9	**89.9**
Team 4	88.9	0.3	0.0	0.0	10.8	100.0	1,612	3.5	2.1	83.9	**83.9**
Team 5	97.7	0.9	0.0	0.0	1.4	100.0	1,660	0.7	0.4	96.6	-
Total	95.1	0.8	0.2	0.0	3.9	100.0	7,640	1.7	1.0	92.7	-

Interpretation: While both teams 3 and 4 have been flagged for not meeting the target, there is a difference between the two teams in the degree of shortfall, with only Team 4 being well below the target. Studying the table reveals the reasons for Team 4's poor performance. First, data are missing (Col. (5)) for almost 11 percent of children identified as eligible for anthropometry. Team 3, although close to the target, is also doing poorly in terms of missing data. Missing data is a serious problem and must be minimized. Furthermore, Team 4 (and to a certain extent, Team 3) are not as successful as other teams in terms of validity of data and completeness of birth dates.

TABLE FC-11W: ANTHROPOMETRY FOR WOMEN (THIS TABLE WILL ALSO BE PRODUCED FOR MEN.)

Women's anthropometry data are also being collected in NFHS-3. Field-check Table 12 (FC-12) is similar to FC-1, except that it is not necessary to check for the completeness of birth data.

FC-11W: Percent distribution of ALL women with a completed individual interview by result of height and weight measurement, and percentage of valid data for anthropometry, according to interviewer team

Target is percentage of valid data >= 95%

	Result of height and weight measurement									
Team	Meas-ured (1)	Woman not present (2)	Woman refused (3)	Other (4)	Miss-ing (5)	TOTAL (6)	Number of women (7)	Among women measured, ht. and/or wt. out of range (%) (8)	Valid data (%) (9)=((1)+(3))-(((8)*(1))/100)	**Target not met**
Team 1	97.2	1.2	0.8	0.1	0.7	100.0	795	0.7	97.3	-
Team 2	98.4	0.1	1.1	0.1	0.3	100.0	887	0.8	98.7	-
Team 3	95.4	0.7	0.7	0.2	3.0	100.0	1,078	2.8	93.4	**93.4**
Team 4	92.0	0.2	1.9	0.6	5.3	100.0	758	3.5	90.7	**90.7**
Team 5	97.9	0.8	0.5	0.1	0.7	100.0	977	0.7	97.7	-
Total	96.3	0.6	1.0	0.2	1.9	100.0	4,495	1.7	95.7	-

Note: Heights <100 cm and >200 cm, and weights <20 kg and >150 kg are out of range

Interpretation: Teams 3 and 4 have been flagged for not meeting the target of 95% valid data. Once again, they have noticeably more missing data (Col. (5)) than other teams.

TABLES FC-12C AND FC-12W: ANAEMIA (CHILDREN AND WOMEN) (THIS TABLE WILL ALSO BE PRODUCED FOR MEN.)

Field-check Tables 12C (FC-12C) and 13W (FC13W) also check for non-valid data for anaemia testing. Valid haemoglobin levels have been set for women and children. The ranges of valid levels are broad enough to accept any possible real measurement. The target is at least 95 percent valid data.

FC-12C: Percent distribution of ALL children under 5 years by result of anaemia testing, and percentage of valid data for anaemia, according to interviewer team.

Target is percentage of valid data >= 95%

	Result of anaemia testing									
Team	Meas-ured (1)	Child not present (2)	Refused* (3)	Other (4)	Missing (5)	TOTAL (6)	Number of chil-dren < 5 (7)	Among chil-dren meas-ured, hae-moglobin level out of range (%)** (8)	Valid data (%) (9)=((1)+(3))-(((8)*(1))/100)	**Target not met**
Team 1	96.1	0.9	1.1	0.8	1.1	100.0	656	0.7	96.5	-
Team 2	97.8	0.1	1.0	0.2	0.9	100.0	732	0.2	98.6	-
Team 3	96.5	0.3	0.4	2.1	0.7	100.0	890	1.2	95.7	-
Team 4	92.8	0.1	2.3	3.5	1.3	100.0	623	3.1	92.2	**92.2**
Team 5	97.6	0.5	0.4	0.6	0.9	100.0	806	0.5	97.5	-
Total	96.3	0,4	1.0	1.4	1.0	100.0	3,707	1.0	96.3	-

* Refused (column 3) = refused in Q.79 (consent statement) OR Q.82 (result code)

** Hemoglobin levels <2 g/dl and >26 g/dl are out of range

FC-12W: Percent distribution of ALL women by result of anemia testing, and percentage of valid data for anemia, according to interviewer team.

Target is percentage of valid data >= 95%

Team	Result of anemia testing: Measured	Woman not present	Refused*	Other	Missing	TOTAL	Number of women	Among women measured, hemoglobin level out of range (%)**	Valid data (%)	Target not met
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)=((1)+(3))-(((8)*(1))/100)	
Team 1	96.9	0.7	1.1	0.2	1.1	100.0	795	0.4	97.6	-
Team 2	98.7	0.1	1.0	0.2	0.0	100.0	887	0.3	99.4	-
Team 3	96.5	0.6	0.7	1.5	0.7	100.0	1,078	1.2	96.0	-
Team 4	94.6	0.1	1.3	2.7	1.3	100.0	758	2.1	93.9	**93.9**
Team 5	98.4	0.5	0.4	0.3	0.4	100.0	977	0.2	98.6	-
Total	97.1	0.4	0.9	1.0	0.7	100.0	4,495	0.8	97.2	-

* Refused (column 3) = refused in Q.79 (consent statement) OR Q.82 (result code)

** Hemoglobin levels <2 g/dl and >26 g/dl are out of range

Interpretation: In both Tables 12C and 12W, Teams 3 and 4 are missing more data than other teams (Col. (5)). Furthermore, Team 4 has been flagged for not meeting the target.

TABLES FC-13: BLOOD COLLECTION FOR HIV (THIS TABLE WILL ALSO BE PRODUCED FOR MEN.)

Field-check Table 13 (FC-13) checks for non-response for blood collection for HIV testing. An individual has the right to refuse to her/his blood for HIV testing even when she/he has agreed to be interviewed. However, the precision of the HIV estimate depends critically on keeping non-response as low as possible. Often people refuse to give blood because they do not understand why their blood is being taken or they question the confidentiality of the test or they do not trust the health investigator. High rates of refusal may suggest that a health investigator is not successful in explaining the importance of the HIV testing and its complete confidentiality. It may also mean that the time lag between completion of all interviews in a household and the arrival of the health investigator is too long so that respondents who may have otherwise agreed to the testing are no longer available. Field Check Table 13 monitors the performance of a team on collecting blood for HIV testing from persons who have been interviewed. The target is the same for women and men and is 95 percent or higher of women and men with completed interviews.

FC-13: Percent distribution of interviewed women by result of HIV testing, according to interviewer team

Target is percentage MEASURED (COL.1) >= 95%

WOMEN WITH COMPLETED INTERVIEWED

	Result of HIV testing							
Team	Measured (1)	Woman not present (2)	Refused* (3)	Other (5)	Missing (6)	TOTAL (7)	Number of women (8)	**Target not met**
Team 1	96.9	1.1	1.1	0.8	0.1	100.0	795	**-**
Team 2	97.8	0.1	0.9	0.2	1.0	100.0	887	**-**
Team 3	95.6	0.6	1.0	2.1	0.7	100.0	1,078	**-**
Team 4	91.8	2.1	3.0	1.8	1.3	100.0	758	**91.8**
Team 5	92.3	1.3	5.4	0.6	0.4	100.0	977	**92.3**
Total	94.9	1.0	2.3	1.1	0.7	100.0	4,495	**-**

* Refused (column 3) = refused in Q.80(consent statement) OR Q.83 (result code)

Interpretation: Teams 4 and 5 are getting much higher non-response rates than the other teams and have not met the target. The supervisors of these teams should discuss the problem with each health investigator and, if necessary, accompany the health investigator to reassure respondents and help answer their questions. The supervisor should also examine the logistics of fieldwork to make sure that health investigators are communicating with the interviewers and are able to reach households when needed.

TABLES FC-14: RESPONSE RATES FOR THE HOUSEHOLD RELATIONS SECTION OF THE WOMAN'S QUESTIONNAIRE

Collection of domestic violence information in the Woman's Questionnaire must be done honestly to obtain a representative sample of women. This is the only section in the questionnaire in which the interviewer has the 'freedom' not to implement the section if privacy cannot be obtained. This freedom can be misused by interviewers in order to deliberately shorten the in interview. Field-check Table 14 monitors whether some teams have lower rates of implementation of the Household Relations section than other teams. Interviewers are trained to make every possible effort to obtain privacy. Supervisors and editors are also trained to assist interviewers if they need help in obtaining privacy. Table FC-14 monitors whether some teams have lower completion rates for this section than other teams, and whether the target set at less than five percent of women eligible for the domestic violence for who privacy could not be obtained, is being met.

FC-14: Household Relations: Women eligible for section on household relations and percentage not interviewed since privacy could not be obtained, by interviewer team.

Target is privacy not obtained for < 5% of women eligible for the Household Relations Section

Team	Total number of eligible women for the household relations section (1)	Percentage with privacy not obtained (not interviewed) (2)	**Target not met**
Team 1	705	3.0	**-**
Team 2	794	2.0	**-**
Team 3	800	6.0	**6.0**
Team 4	798	4.0	**-**
Team 5	765	7.0	**7.0**
Total	3,862	4.4	**-**

Interpretation: Teams 3 and 5 have higher non-completion rates for the Household Relations section than other teams and have not met the target. The Team 3 and 5 supervisors and editors should discuss this with the interviewers and identify the problem. If necessary they need to be available to help out interviewers if they need someone to distract other family members while the section is being implemented.

FC-15 SUMMARY TABLE OF UNMET TARGETS (THIS TABLE WILL ALSO BE PRODUCED FOR THE MEN'S SURVEY)

Field-check Table 15 provides senior staff of the Research Organization and NFHS-3 with a summary of team performance. Use of this table should not be a substitute for careful review of the preceding tables. If a team did not meet a target on a specific table, they are flagged with a '1' in the appropriate column. In addition to providing an overall measure of team performance, there are two ways this table can be used. First, it shows whether or not there is a particular indicator for which all teams missed the target. Second, the performance of the teams may be compared to each other. The aim should be that no target is missed by any team.

FC-15: Summary Table: Overall performance of teams.

	TARGETS NOT MET																
Table #	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11C**	**11W**	**12C**	**12W**	**13**	**14**	**Total**
Team 1	1	-	-	-	-	-	1	-		-	-	-	-	-	-	-	2
Team 2	1	-	1	-	-	-	1	-	-	-	-	-	-	-	-	1	4
Team 3	1	-	-	-	-	-	-	-	1	1	1	1	-	-	-	-	5
Team 4	1	1		1	1	1	1	-		1	1	1	1		1	1	12
Team 5	1	1	-	1	-	-	-	-	-	-	-	-	-	-	-	-	3
Total	4	2	2	2	1	1	3	0	1	2	2	2	1	1	1	2	

Interpretation: It is clear that Team 4 is doing a particularly poor job compared with the other teams. They missed almost all the targets (11 of 16). A senior staff member should visit the team immediately to discuss the problems and do some retraining of both interviewers and the supervisor and field editor. The other teams are also missing targets and should be closely monitored. Target 1 has been missed by every team. All teams should be retrained in techniques to reduce non-response at the household level.