

INTEGRATED DISEASE SURVEILLANCE PROJECT
NCD RISK FACTOR SURVEILLANCE

**TRAINING MANUAL FOR FIELD WORKERS AND
FIELD SUPERVISORS**

FIELD MANUAL

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1. Question by Question instruction guide

INDIVIDUAL RESPONDENT QUESTIONNAIRE

The purpose of the question-by-question instruction guide is to provide background information to the interviewers (Field Workers) as to what is intended by each question. This information would help them to clarify the questions asked by the respondents. Interviewers (Field Workers) can use this information when respondents request clarification about specific questions and they do not know the answer. Interviewers and supervisors should refrain from offering their own interpretations. Questions are in bold in the Question-by-Question instruction.

Before administering the questionnaire, please go through the section on “conducting interviews in the field” which details the way to approach the respondent, contact procedures, gaining consent, handling refusals, and interviewing techniques.

The **cover page** records the questions on the residential contact details and ensures that consent has been obtained. The state, census block / village number, Primary sampling unit number, Households will be coded and recorded accordingly.

I.1. State code: Each state will have a code number, which should be entered

I.2 Name of State: Write the name of the State

I.3 Area of interview

Insert the relevant area number in the box

I.4 Interview code

Each interviewer will be assigned a code, which will remain same throughout the study. In case the person discontinues being part of the study, then the next appointed person would be given a new code number. Start giving codes from 001 onwards

I.5 Date of completion of questionnaire

Please enter the complete date

I.6 Census block, Village number

Census block will be applicable in urban areas and village number in rural areas.

I.7 Primary Sampling Unit number: All primary Sampling Units will be numbered and this must be entered.

I.8 Household code

Each household will be numbered and coded. This will be applicable in both Urban and Rural areas.

I.9 Complete residential address and contact phone number

This should be enough to make a repeat home visit or communicate if required later on.

I.10 & 11. Consent has been read out to respondent and obtained

Give the respondent the Information sheet and obtain consent in due manner. The consent form has to be retained by the Investigator.

Demographic information

Section 1

1.1 How old are you?

Record respondents age in years.

Many Individuals may not know their exact dates of birth and/or age and therefore their age has to be estimated by interviewing them about their recollection of widely known major events, age of children, brothers etc.

1.2 Over the past 12 months what work have you been doing?

The main purpose of this question is to register the person's relationship to the labor market. In so doing, it will help answer questions such as whether or not health status contributes to unemployment, or whether people in different kinds of occupations may be confronted to different risk factors.

List of work status

Self-employed:

An individual, who produces goods for sale or earns an income through provision of services to different people or firms. The individual works alone or with intermittent assistance from others, but does not employ anyone for a paid wage or salary on a regular basis.

Non-paid - subsistence farming etc.

An individual who spends significant amount of time working for a volunteer organization, family business, family farm or other similar activity without pay.

Student

An individual, whose primary activity is engaging in studies at elementary, secondary, university or technical schools.

Homemaker (household chores)

An individual, whose primary activity is in carrying out household tasks without being paid.

Retired

An individual who has earned income during some period in the workforce or as an employer and who is no longer working due to age.

Unemployed - able to work

An individual who could work but does not currently have a job or business. (Excluding homemaker)

Unemployed - unable to work

An individual who cannot work because of his/her health status.

1.3 What is the highest education level?

This refers to the highest level of education successfully completed. If a person attended a few months of the first year of secondary school but did not complete the year, the option "primary school completed" will be recorded. If a person only attended a few years of primary school or never went to school, the option "less than primary school" will be recorded.

Health related behavior

Section 2

Tobacco use

Smoking is the main way tobacco is used world-wide and the manufactured, filter-tipped cigarette is becoming increasingly dominant as the major tobacco product. Other forms of smoked tobacco are potentially as dangerous, although the adverse consequences of some of them are more limited because the smoke is not usually inhaled. In India, tobacco is chewed, sucked or inhaled with significant adverse effects on the local tissues.

Since smokeless tobacco use is common in India and has major health effects this has been included in the questionnaire.

The questions below ask about current smoking or use of any tobacco products:

Tobacco Smoking:

II.1 How often do you smoke any tobacco product?

Record the appropriate response

II.2 If past smoker, how old were you when you stopped smoking? This question is for past smokers of tobacco products only.

II. 3-5, for daily smokers only

These questions are for daily smokers only.

II. 3. How old were you when you first started smoking daily?

Think of the time when the respondent started to smoke any tobacco products daily.

II. 4. On an average, how many of the following do you smoke daily?

(Code 77 for don't know and 88 for not applicable)

Specify the number of each tobacco product the respondent is smoking and/or using each day. Specify zero if no products were used in each category instead of leaving categories blank.

List of smoked tobacco products

- Cigarettes
- Cigarillos
- Cigars
- Cheroots
- Chuttas
- Bidis
- Goza / Hookah

**Add photos and illustrations as appropriate,(depending on local conditions)*

II. 5. During the past 12 months have you ever reduced or stopped smoking, as a conscious decision, even for a short period?

Think of the past year only. Record the appropriate response

Smokeless tobacco use

III.1. How *often* do you consume any smokeless tobacco product?

III.2. Do you *currently use* smokeless tobacco products *daily*?

This question is for daily users of smokeless tobacco products only.

III.3. How old were you when you first started consuming tobacco products *daily*?

Think of the time when the respondent started to use any smokeless tobacco products daily.

III.4. On average, how many times a day do you use...

Record for each type of smokeless tobacco products.

III.5. During the past 12 months have you ever reduced or stopped consuming smokeless tobacco, as a conscious decision, even for a short period?

Think of the past year only. Record the appropriate response.

List of Smokeless Tobacco products: Snuff, Ghutka, Chewing tobacco, tobacco with paan

Alcohol consumption:

Section IV

Alcohol consumption has a U-shaped relationship with ischaemic heart disease and is as well a strong risk factor for hepatic cirrhosis and many other types of injury. It has also been consistently and positively associated with cancers, such as breast cancer. The consumption of alcohol is episodic and asking individuals about their average (daily) consumption is, therefore, problematic. For a given level of average daily consumption, the pattern of drinking itself strongly influences the risk of non-communicable diseases, with bouts of heavy drinking being closely related to at least injury and to hemorrhagic stroke. Therefore, for ease of recall and relevance, surveys of drinking should attempt to capture both amount and pattern. However, patterns of drinking vary considerably depending on the cultural setting. While some communities abstain from alcohol entirely or may use alcohol on very rare and specific occasions, such as the birth of a baby, others usually consume it at different times of day and days of the week. Some factors may affect drinking patterns, such as the payment of salaries or wages on a weekly, fortnightly or monthly basis, or simply the end of the working week. Drinking may also be traditionally associated with particular religious or other holidays, and may also vary in a more general way with the season of the year. The definition of a “standard drink” needs to be modified to reflect local patterns of alcohol consumption. This includes types and strengths of products, common measures, and local terms used for both. If domestic manufacture of beer, wine or spirit is common, information on the usual ethanol content of such products will be required to determine the volume of absolute alcohol that is a “standard drink”.

There are questions concerned with frequency and quantity.

IV.1. Have you *ever* consumed a drink that contains alcohol such as [beer, whisky, rum, gin, brandy, or other local products]?

Use Show cards in Annex 1.

IV.2. Have you consumed alcohol within the *past 12 months*?

Think of the past year only.

IV.3. In the past 12 months, *how frequently* have you had at least one drink?

Think of the past year only. Record appropriate option.

IV.4. When you drink alcohol, on average, how many drinks do you have during one day?

Help the respondent by averaging out the total number of drinks

IV.5. During the past 12 months have you ever reduced or stopped drinking, as a conscious decision, even for a short period

Think of the past year only.

A "standard drink" is the amount of ethanol contained in standard glasses of beer, wine, fortified wine such as sherry, and spirits. Depending on the region, these amounts will vary between 8 and 13 grams of ethanol, but usually contains 10 gms of ethanol

Use the following Showcard:

Alcohol show card

Alcohol Consumption

1 standard drink =

1 standard bottle of **regular beer** (285ml), 1 single measure of **spirits** (30ml), 1 medium size glass of **wine** (120ml), 1 measure of **aperitif** (60ml)

(Note: net alcohol content of a *standard drink* is 8-13 g. of ethanol)

ALCOHOL EQUIVALENTS:

Wine:

- 1 GLASS OF WINE 1 Drink
- 1 BOTTLE OF WINE 6 Drinks
- 1 "WINE COOLER" 1 Drink

Beer:

- 1 BOTTLE OF BEER 1 Drink
- 1 CASE OF BEER 24 Drinks

Hard Liquor:

- 1 HIGHBALL OR SHORT GLASS 1 Drink
- 1/2 PINT OF LIQUOR 6 Drinks
- 1 PINT OF LIQUOR 12 Drinks
- 1 FIFTH OF LIQUOR 20 Drinks
- 1 QUART OF LIQUOR 24 Drinks
- 1 FULL BOTTLE OF COUNTRY LIQUOR, WHISKY, GIN, RUM (750 ML) 24 Drinks
- HALF BOTTLE (1 PINT) OF COUNTRY LIQUOR, WHISKY, GIN, RUM (375 ML) 12 Drinks
- QUARTER BOTTLE (1 Nip) OF COUNTRY LIQUOR, WHISKY, GIN, RUM (375 ML) 6 Drinks

**Add photos and illustrations as appropriate*

Alcohol Consumption

1 standard drink =



1 standard bottle of
regular beer (285ml)



1 single measure
of spirits (30ml)



1 medium size glass of
wine (120ml)



1 measure of aperitif
(60ml)

(note: net alcohol content of a *standard drink* is 8-13 g. of ethanol)

Section V

Diet:

This section serves to seek any relation between the diet consumed and occurrence of NCDs.

Information about population dietary habits and how these are changing underpins rational planning and improvement on nutrition-related health policies and programmes. The measurement of single or selected aspects of food habits is more straightforward than measuring whole diets in comprehensive nutrition surveys. In the absence of information on overall food intake, short dietary questions can be used to assess more limited aspects of food intake and can provide both qualitative and quantitative information on intake over varying periods of time.

The nutrition card from Annex 1 gives best examples of fruits and vegetables to be considered as the most typical. Each picture represents the size of a serving. (*Please remember, do not include potatoes as vegetables*).

V.1. In a typical week, on how many days do you eat fruits?

Think of any fruit using the “Nutrition card”. By “typical week” we mean on a typical week when a person is eating fruit and not the average over the period of enquiry.

V.2. How many servings of fruit do you eat on one of those days?

Think of one day the respondent can recall easily.

V.3. In a typical week, on how many days do you eat vegetables?

Think of any vegetable using the “Nutrition card”. By “typical week” we mean on a typical week when a person is eating vegetable and not the average over the period of enquiry.

V.4. How many servings of vegetables do you eat on one of those days?

Think of one day the respondent can recall easily.

V.5. During the past 12 months have you increased their consumption as a conscious decision, even for a short period?

Think of last one year.

V.5. What type of oil or fat is most often used for meal preparation in your household?

SELECT ONLY ONE

Please enter ‘others’ name

Record the appropriate response.

V.6. During the past 12 months have you ever reduced oil or fat consumption in your food as a conscious decision, even for a short period?

Think of the past year only

V.7. In the past 6 months, how often did you consume each of the following foods? (Encircle the appropriate response for each food item)

The different types of food consumed by the subject and the frequency of their consumption in past 6 months are asked. Think of past 6 months only.

Diet show card

VEGETABLES

Are considered to be: 1 serving Examples

Raw green leafy vegetables 1 cup Spinach, salad, etc. Other vegetables, cooked or chopped raw ½ cup Tomatoes, carrots, pumpkin, corn, Chinese cabbage, fresh beans, onion, etc. Vegetable juice ½ cup


FRUIT


Is considered to be: 1 serving Examples

Apple, banana, orange 1 medium size piece,

Chopped, cooked, canned fruit ½ cup

Fruit juice ½ cup Juice from fruit, not artificially flavoured

VEGETABLES are considered to be:	1 serving	Examples
Raw green leafy vegetables	1 cup	Spinach, salad, etc.
Other vegetables, cooked or chopped raw	½ cup	Tomatoes, carrots, pumpkin, corn, Chinese cabbage, fresh beans, onion, etc. 
Vegetable juice	½ cup	

FRUIT Is considered to be:	1 serving	Examples
Apple, banana, orange	1 medium size piece	
Chopped, cooked, canned fruit	½ cup	
Fruit juice	½ cup	Juice from fruit, not artificially flavoured

WHO recommends consumption of at least 400 grams of vegetables and fruits per day – or 5 servings of 80 grams of fruits and vegetables per day. One serving= 80 grams standard (translated into different units of cup depending on type of vegetable and standard cup measures. Tubers such as potato and cassava are not included in this recommendation

Common examples of other vegetables common in India include: Cabbage, Tomatoes, Ochre (ladies finger), Brinjal, fresh beans, onion, etc.

Section VI

Physical activity

Regular physical activity has important health benefits. It can reduce the risk of heart disease, stroke, diabetes, breast cancer, colon cancer, and osteoporosis. It can also help in weight loss and weight maintenance and reduce the risk of falls in the elderly.

Assessing patterns of physical activity is complex. These questions are to help determine if the subjects lead an active or sedentary lifestyle. The questions are divided into sections to assess the level of activity in three different settings: **at work** (which includes paid and unpaid work, in and outside of the home), **for transport** (to get places) and for **recreation or leisure**. Some people will be physically active in all three settings; others may not be active in any of the settings.

The rural population might find regular non-work related leisure time physical activity hard to understand, exerting to keep fit. Efforts would have to be made explains this to them that regular activities like cycling to nearby towns to watch movies can be included in this category. Similarly outdoor and indoor sports, which are physically active like badminton, jogging, football, cricket, swimming, etc. are asked for. Chess, which do not have any significant physical activity, involved would not be considered in this category. It is necessary to be accurate with frequency and duration of the physical activity as well as how long ago such a routine was started. Such information would give clearer gradients with health promotion and education.

Introductory Statement:

The next questions are about the time respondent spends doing different types of physical activity. The questions will have to be answered by respondent even if he/she doesn't consider himself/herself to be an active person. The introductory statement is very important. It explains to the respondent what domains of activity should be included - work, house and yard work, to get from place-to-place (transport-related) and recreation, exercise or sports. This opening statement should not be omitted.

The respondent will have to think first about the time he spends doing work. He/she can think of work as the things that he/she has to do such as paid or unpaid work, household chores, harvesting food, fishing or hunting for food, seeking employment.

VI.1. Does your work involve *vigorous-intensity activity* that causes large increases in breathing or heart rate like [*heavy lifting, carry loads, digging or construction work*] for at least 10 minutes at a time?

INSERT EXAMPLES & USE SHOWCARD

For those respondents who does some activity at work the following set of questions?

(2a and 2b) will assess the type and amount of activity

The respondent answers 'Yes' or 'no.' If 'No' Skip to 5.

VI 2a In a typical week, on how many days do you do vigorous activities as part of your work?

The respondent should consider a 'typical' or 'usual' working week. Valid responses range from 1-7.

VI. 2b How much time do you spend doing vigorous activities at work on a typical day?

The respondent should consider the total amount of time spent on a typical day in a typical week doing vigorous activity.

NOTE: the responder is asked to consider only those activities undertaken continuously for 10 minutes or more. Very high responses (responses over 4 hours) should be probed to be sure this is typical, undertaken at moderate-intensity, and that the activity was undertaken continuously for 10 minutes or more.

VI.3 Does your work involve moderate-intensity activity that causes small increases in breathing or heart rate such as brisk walking [or carrying light loads] for at least 10 minutes at a time?

INSERT EXAMPLES & USE SHOWCARD

The respondent answers ‘Yes’ or ‘no.’ If ‘No’ Skip to 4.

VI.3a In a typical week, on how many days do you do moderate-intensity activities as part of your work?

The respondent should consider a ‘typical’ or ‘usual’ working week. Valid responses range from 1-7.

VI.3b How much time do you spend doing moderate intensity activities at work on a typical day?

The respondent should consider the total amount of time spent on a typical day in a typical week doing moderate-intensity physical activity.

NOTE: the responder is asked to consider only those activities undertaken continuously for 10 minutes or more. Very high responses (responses over 4 hours) should be probed to be sure this is typical, undertaken at moderate-intensity, and that the activity was undertaken continuously for 10 minutes or more

Introductory statement:

Other than activities that you’ve already mentioned, I would like to ask you about the way you travel to and from places for example to work, for shopping, to market, to church [insert other examples if needed]

The introductory statement to the following question on transport-related physical activity is very important. It asks the respondent to think about how they travel (get from place-to-place). This statement should not be omitted.

VI.4. Do you walk or use a bicycle (*pedal cycle*) for at least 10 minutes continuously to get to and from places

The respondent answers ‘Yes’ or ‘no.’ If ‘No’ Skip to P9.

VI.4a. In a typical week, on how many days do you walk or bicycle for at least 10 minutes to get to and from places?

The respondent should consider a ‘typical’ or ‘usual’ week. Valid responses range from 1-7.

VI.4b. How much time would you spend walking or bicycling for travel on a typical day?

The respondent should consider the total amount of time spent on a typical day in a typical week walking and cycling (or other physically active modes) for transportation.

NOTE: the responder is asked to consider only those trips that last of at least 10 minutes or more. Very high responses (responses over 4 hours) should be probed to be sure this is typical and that the activity was undertaken continuously for 10 minutes or more

Introductory Statement:

The next questions ask about activities you do in your leisure time, for recreation or fitness for example sports [insert culturally relevant terms]. Do not include the physical activities you do at work or for travel mentioned already

The introductory statement to the following question on activity undertaken as part of recreation, discretionary or leisure time. It is important to focus on only this type of activity and not to include activities already mentioned. This statement should not be omitted.

VI.5. Do you do any vigorous intensity sports, fitness or recreational (*leisure*) activities that cause large increases in breathing or heart rate like [running or football,] for at least 10 minutes at a time?

INSERT EXAMPLES & USE SHOWCARD. The respondent answers ‘Yes’ or ‘no.’ If ‘Yes’ Skip to 6

In a typical week, on how many days do you do vigorous intensity sports, fitness or recreational (*leisure*) activities? The respondent answers ‘Yes’ or ‘no.’ If ‘No’ Skip to P12.

VI.5a In a typical week, on how many days do you do vigorous intensity sports, fitness or recreational (*leisure*) activities?

The respondent should consider a ‘typical’ or ‘usual’ week. Valid responses range from 1-7.

VI.5b. How much time do you spend doing vigorous intensity sports, fitness or recreational activities on a typical day?

The respondent should consider the total amount of time spent on a typical day in a typical week doing vigorous activity for recreation.

NOTE: the responder is asked to consider only those activities undertaken continuously for 10 minutes or more. Very high responses (responses over 4 hours) should be probed to be sure this is typical, undertaken at moderate-intensity, and that the activity was undertaken continuously for 10 minutes or more.

VI.6. Do you do any moderate-intensity sports, fitness or recreational (*leisure*) activities that causes a small increase in breathing or heart rate such as brisk walking, [cycling or swimming] for at least 10 minutes at a time?

The respondent answers ‘Yes’ or ‘no.’ If ‘No’ Skip to 7

VI.6a In a typical week, on how many days do you do moderate-intensity sports, fitness or recreational (*leisure*) activities?

The respondent should consider a ‘typical’ or ‘usual’ week. Valid responses range from 1-7.

VI.6b. How much time do you spend doing moderate intensity sports, fitness or recreational (*leisure*) activities on a typical day?

The respondent should consider the total amount of time spent on a typical day in a typical week doing moderate-intensity physical activity.

NOTE: the responder is asked to consider only those activities undertaken continuously for 10 minutes or more. Very high responses (responses over 4 hours) should be probed to be sure this is typical, undertaken at moderate-intensity, and that the activity was undertaken continuously for 10 minutes or more

The following question is about sitting or reclining at work, at home, getting to and from places, or with friends including time spent [sitting at a desk, sitting with friends, travelling in car, bus, train, reading, playing cards or watching television], but do not include time spent sleeping.

INSERT EXAMPLES & USE SHOWCARD

VI.7. How much time do you usually spend sitting or reclining on a typical day?

The respondent should consider all sitting and provide an estimate of the total time.

VI.8. During the past 12 months have you increased your physical activity as a conscious decision, even for a short period at;

Work
Travel
Leisure

Physical activities show card

MODERATE

Physical Activities Involve moderate physical effort. This make you breathe somewhat harder than normal

Examples:

- Cleaning
- Farming
- Painting/plastering
- Gardening
- Swimming
- Climbing stairs



VIGOROUS

Physical Activities

Involve hard physical effort. This makes you breathe much harder than normal

Examples:

- Carrying heavy loads
- Heavy construction
- Digging
- Shovelling
- Sawing wood
- Running
- Strenuous sports

<p style="text-align: center;">MODERATE Physical Activities</p>	<p style="text-align: center;">VIGOROUS Physical Activities</p>
Involve moderate physical effort	Involve hard physical effort
This make you breathe somewhat harder than normal	This makes you breathe much harder than normal
<p>Examples:</p> <ul style="list-style-type: none"> • Cleaning • Farming • Painting/plastering • Gardening • Swimming  • Climbing stairs 	<p>Examples:</p> <ul style="list-style-type: none"> • Carrying heavy loads • Heavy construction • Digging • Shovelling • Sawing wood • Running  • Strenuous sports

WHO recommends at least 30 minutes or more of moderate-intensity physical activity like brisk walking on most, or preferably all, days of the week.

Treatment history

Section VII

This section aims to chart the current major illnesses like hypertension and diabetes in the population. It tries to cater to those who know about their illnesses and those who have

the disease symptoms but have not been diagnosed. The diseases measured are type 2 diabetes and hypertension, since they are often asymptomatic.

VII. 1. When was your blood pressure last measured by a health professional?

It is important that a health professional who has training/experience in the same recorded the blood pressure.

VII. 2. During the past 12 months have you been told by a doctor or health worker that you have elevated blood pressure or hypertension?

Consider only the past 12 months.

VII. 3. Are you currently receiving any treatment for high blood pressure prescribed by a doctor or other health worker?

The treatment could be in any form but specific for high blood pressure.

VII. 4. Have you had your blood sugar measured in the last 12 months? It is important that a health professional who has training/experience in the same recorded the blood sugar.

VII. 5. Have you ever been told by a doctor or health worker that you have diabetes?

Consider only the past 12 months. If No, then go to Physical Examination

VII. 6. Are you currently receiving any treatment for high blood sugar prescribed by a doctor or other health worker?

The treatment could be in any form but specific for high blood sugar.

2. QUESTIONNAIRE FILLING INSTRUCTIONS

I. QUESTIONNAIRE CONVENTIONS

The objectives are the following:

- Identify and use interviewer instructions correctly throughout the questionnaire
- Recognize typographical conventions and what they mean
- Learn how to use visual aids

1. Interviewer Instructions

- Anything written in standard print is to be read to the respondent.

Example: I.1. How old are you? (Completed years)

- Anything written in *italics* (uppercase or lowercase) is an interviewer's and/or supervisor's instruction and should not be read aloud.

2. Skips within Questions

- There is a specific column for skip instructions. Skipped questions must be left blank.

Example:

II. 1. How often do you smoke any tobacco product?	Never	1	<input type="checkbox"/>	<i>If never or occasionally go to next section</i>
	Occasionally	2		
	Daily	3		
	Past smoker	4		

3. Words In Bold

- Words, which are in bold within questions, are key words or phrases that need to be emphasized when read to the respondent.

Example:

II. 1. How **often** do you smoke any tobacco product?

4. Verbatim Entries

A line below the question indicates where the response must be recorded. Responses should never be changed but recorded exactly as stated.

Example:

Other (please specify):

5. Brackets

- Items in brackets [] contain examples to illustrate a point and are to be read to the Respondent.

Example:

Does your work involve vigorous activity, like [heavy lifting, digging or construction work] for at least 10 minutes at a time?

6. Visual Aids

- The function of visual aids is to help respondents remember important information while answering questions and rate different items.

Visual aids include cue cards and response options.

Enough time must be allowed for respondents to examine the cards and think about their responses.

Interviewer instructions are given throughout the questionnaire so the interviewer knows when to produce the visual aids and how to use them. Practice is recommended beforehand in order to facilitate the flow of the interview.

3. Operational instructions for measurement of variables

It is necessary to standardize anthropometric measurements for surveillance in order to prevent variations between field workers.

Protocols for physical measures:

Step 2 includes the addition of simple physical measurements, such as blood pressure, height, weight and waist circumference. As physical measures are involved, Step 2 requires a direct contact with the participant, most often during a field survey.

It is important that equipment necessary for collecting these physical measures are readily available and in good condition to allow these parameters to be assessed as accurately as possible.

The physical measures should be taken from the participant in the following order:

- Blood pressure
- Height
- Weight
- Waist Circumference

For detailed procedures for each measure please see the following data collection protocols.

Height measurement protocol

Equipment

Adult Portable Height-length Measuring Boards, Stadiometers

Assembling the Measuring Board

1. Separate the pieces of board (3 pieces) by unscrewing the knot in the back.
2. Assemble the 3 pieces by attaching each one on top of the other in order.
3. Lock the latches in the back.
4. Make sure the board is placed on a firm surface against a wall.

Measuring Height Using the adequate Measuring Boards

5. Ask the participant to remove shoes, socks, slippers and any head gear (hat, cap, hair bows, comb, ribbons, etc).
6. Ask the participant to stand on the board facing you. Put their feet together and heels against the back board, knees straight.
7. Ask the participant to look straight ahead and NOT look up.
8. Make sure the eyes are the same level as the ears.
9. Move the measuring down and place on top of head. Read the height in centimeters to the exact point.
10. Record the height measurement in centimetres in the participant's instrument.
11. Remember to record the code number of the staff who took the measurements in the space provided for in the participant's instrument.

Weight measurement protocol

General principles

Putting the Scale into Operation

1. Electronic Scales (Seca) which is battery operated is recommended.
2. Put the scale on a firm, flat surface NOT on a carpet or a sloping surface. You can place a board under the scale to keep it steady.
4. Turn on the scale. The display will show 0.0.

Taking the weight

1. Ask participant to remove footwear and socks.
2. Ask the participant to step onto scale putting one foot on each of the footprints.
3. Ask the participant to stand still, facing forward and arms on the side and wait until told to step off.
4. The weight will be in kilograms. Record the weight in kilograms on the participant's instrument.

If the participant wants to know his/her weight, you can convert into pounds by x 2.2. You can record this in the participant's Result Form

5. It is also important that the staff who took the measurement to record his/her code number in the spaces provided in the participant's instrument.

Waist circumference measurement protocol

Equipment

Constant tension tape (Figure Finder Tape Measure), tape measure & pen.

Procedure

A private area is necessary for this station.

This measure is taken at the level of the midpoint between the inferior margin of the last rib and the crest of the ileum in the mid-axillary plane. The landmarks should be located by palpation, marked and the midpoint found using a tape measure. The measurement is taken at the end of a normal expiration with the arms relaxed at the sides. The measurement should not be the minimum circumference.

Note: This measurement should be taken WITHOUT clothing, that is, directly over the skin. If this is not possible, the measurement may be taken over light clothing. It must NOT be taken over thick or bulky clothing. This type of clothing must be removed. The observer must read the measurement at the level of the tape to avoid parallax errors.

1. In the mid-axillary plane, locate and mark the inferior margin of the last rib and the crest of the ileum with a fine pen. Find the midpoint with a tape measure and mark the point. Apply the tension tape over the marked midpoint. Take care to ensure that the tape is horizontal across the back.
2. Ask the participant to stand with their feet together with their arms placed at the side with the palms of the hands facing inwards and to breathe out.
3. Measure to the nearest 0.1 cm.
4. Record the measurement on the participant's questionnaire. Measure only once and record.
5. It is also important that the staff who took the measurement to record their code number in the space provided in the questionnaire.

Before measuring Waist circumference in female participants ask the participant if they are pregnant and record the answer. If pregnant, do not measure waist circumference.

Blood pressure measurement

Preparation of the Participant

1. Verify questionnaires with the participant's identity.
2. Introduce yourself to the participant.
3. Advise participant to sit quietly and rest for 5 minutes with the legs uncrossed.
4. The time the participant is seated is recorded on the Data Collection Summary.
5. The process involved is explained to the participant. Reassure the participant prior to measurement of blood pressure.
6. The RIGHT arm is selected for blood pressure measurement. If for any other reason the left arm is used, note this down in the Data Collection Summary.

Equipment

OMRON Digital Automatic Blood Pressure Monitor (DABPM)

OMRON Digital Automatic Blood Pressure Monitor (DABPM) Protocol

How to apply the cuff

1. Place the right arm of the participant on the table with the palm facing upward.
2. Select the appropriate cuff size for the participant using the following table:

Arm Circumference Cuff Size

17-22 Small (S)

22-32 Medium (M)

32-42 Large (L)

>42 Extra Large (XL)

3. Align the *artery position mark ART* with the brachial artery (where the pulse is palpated just above the elbow joint anteriorly).
4. The right arm should be free of any clothing. When necessary, roll up the sleeves of the participant's clothing. Wrap the cuff snugly onto the right arm and securely fasten it with the Velcro tape. The lower edge of the cuff should be placed 1.2 to 2.5 cm above the inner side of the elbow joint.
5. Keep the level of the cuff at the same level as the heart during measurement.

Measuring the blood pressure

1. Set the MODE of the machine to AVG and P-Set to Auto. With these settings, the machine will give two consecutive blood pressure measurements.
2. Push START to begin blood pressure measurements.
3. The **first reading** will be displayed followed by the **second** after a one-minute interval.
4. **Record only the first and second readings** and NOT the average pressure reading as displayed.
5. Verify the values for the first and second readings by pushing the DEFLATION button.
6. If the difference between the first and second readings is 10 mm Hg or more then a third reading is required. For a third blood pressure reading, set MODE to SINGLE then press START. Record with third blood pressure reading and the pulse.
7. Inform the participant the blood pressure readings ONLY after the whole process is completed.
8. Check that all readings are correctly filled in the questionnaire.
9. Direct the participant to the next station, *WAIST measurement*.

10. Place the participant's file at the bottom of the *WAIST Measurement Box* or *STEP 3 Box*.

Sphygmomanometer Protocol (not recommended)

The sphygmomanometer is only used in the following circumstances:

- The OMRON DABP is not functioning.
- THE OMRON DABP display shows multiple errors.
- To cross check OMRON blood pressure readings in various clinical states such as irregular pulse, peripheral circulatory disturbance, extreme hypotension.
- For weekly calibration of the OMRON DABP Monitor.
- If an extra large cuff was needed as there was no extra large cuff for the OMRONS.
-

Measuring the blood pressure

Items 1-5 are the same as the OMRON DABP Monitor

6. Palpate the right radial artery and inflate cuff until pulsation disappears. Continue to inflate 30 mm Hg beyond this point.

7. Apply the bell of the stethoscope to the right antecubital fossa and listen for pulse sounds while deflating the cuff slowly.

8. Record the systolic blood pressure (SBP) when a pulse is first audible.

9. Record the diastolic blood pressure (DBP) when the pulse sound disappears.

10. Deflate the cuff fully and let the arm rest for one minute before a second reading is taken. A pulse count for one full minute is taken prior to each measurement of the blood pressure.

11. If the difference between the two readings is 10 mm Hg or more then a third reading is required.

4 (a). Performance Checklist for Weight and Height Measurement

Cluster No. _____

Technician No. _____

Protocol	Activity	OK	Not OK
Weight Measurement	Place scale on a flat surface		
	Ask participant to remove shoes. Hat. Heavy bulky clothing and to empty then pockets		
	Record technician and equipment number on Instrument		
	<u>Only if no display.</u> Turn power switch		
	Participant advised to stand on scale once display shows 0.0		
	Advice participant to stand on scale looking forward with hands at side		
	Record to the nearest 0.1 kg		
	Fill in Instrument correctly		
	Direct patient to next station		
Height measurement	Ask participant to remove shoes. Socks. Headgear		
	Record technician and equipment number on instrument		
	Advice participant to stand on the “feet” with his heels together firmly against backstop and with shoulder relaxed		
	Advice participant to look slightly downwards bringing the top of the head to the height point of measurement (align ear hole with bottom of eye)		
	Lower measuring arm gently onto head of participant and ask him her to “breathe in and stand tall”		
	Read off participant’s height from the read-off area of the measuring board to the nearest 0.1 cm		
	Advice participant to step away from measuring board		
	Record reading on Instrument		
	Direct participant to next station		
Set-up of Height measuring Board	Slot the sections together properly		
	Please measuring board on a level surface floor against the wall		

4 (b) Performance Checklist for Waist Measurement

Cluster No. _____

Technician No. _____

Protocol	Activity	OK	Not OK
Waist Measurement with Constant Tape Measure	Ensure that measurement should be taken without clothing or over light clothing		
	Record technician and equipment number on instrument		
	Locate the mid-axillary plane		
	Locate inferior margin of last rib and crest of the ileum and mark with a pen.		
	Find the midpoint with a tape measure and mark the point		
	Apply tension tape is horizontal across the back		
	Ensure that the tape is horizontal across the back.		
	Ask the participant to stand with feet together arms placed at the side with palms of hands facing inwards and breathe out		
	Apply appropriate constant tape pressure		
	Measure to the nearest 0.1 cm		
	Record reading on instrument		
	Direct participant to next station.		

Before measuring Waist circumference in female participants ask the participant if they are pregnant and record the answer. If pregnant, do not measure waist circumference.

**4 (c) Performance Checklist for Blood Pressure Measurement
(BP with Manual Device) not recommended**

Cluster No. _____

Technician No. _____

Protocol	Activity	OK	Not OK
Blood Pressure Measurements – Preparation of Participant and placement of cuff	Advice participant to sit quietly for 5 minutes		
	Record technician and equipment number on instruments		
	Place RIGHT arm on table with palm facing upwards		
	Measure RIGHT arm circumference		
	Choose appropriate cuff size and record		
	Ensure that arm is free of clothing		
	Place cuff correctly on arm (“ART” in line with brachial artery)		
	Keep cuff at same level of heart during measurement		
Blood Pressure Measurement – use of manual sphygmomanometer	Put stethoscope earpieces in ear and sets to bell		
	Palpate pulse at either brachial or radial artery		
	Pump up pressure unit unable to feel pulse and then adds another 30 mmHg		
	Apply the bell of the stethoscope to the right antecubital fossa		
	Listens for pulse sounds while deflating the cuff slowly		
	Record 1 st BP reading		
	Deflate the cuff fully and lets the arm rest for one minute before a second reading is taken		
	Pump up pressure unit unable to fell pulse and then adds another 30 mmHg		
	Apply the bell of the \stethoscope to the right antecubital fossa		
	Listen for pulse sounds while deflating the cuff slowly		
	Records 2 nd BP reading		
	Check the difference between the 1 st and 2 nd reading		
	If difference is more than 10 mmHg. Take 3 rd reading of BP after deflating the cuff fully. Waiting for one minute and record properly		
	Inform participant of BP result ONLY after completion of procedure		
	Check to see Instrument is filled correctly		
Direct participant to next station			

5. Mapping and Household Listing:

A mapping and household listing operation would be carried out in each selected PSU. The household listing operation would provide necessary framework for selecting households in the second stage. This involves the following steps:

- Preparation of up to date notional and layout sketch maps each selected PSU.
- Assigning numbers to structures
- Recording address of the structures
- Identifying residential structures
- Listing names of all the household heads in residential structures

50 Households will be selected in each PSU.

Each survey team supervisor would be provided with:

1) Layout sketch map, 2) Original Household Listing 3) List of selected Households

The details of objectives of mapping and listing, responsibilities of listing staff, listing materials, definition of terms, locating PSU, preparing maps, listing households, household selection can be obtained from the “Methodology Manual”

6. Conducting interviews in the field

Approaching the public

The interviewer has to clearly communicate the objectives of the survey to the respondent. He should establish a good rapport by introducing himself and the survey well. A leaflet presenting the objectives of the survey are details in the Participation Information Sheet, which is given to participants and explained.

Collection of data will be done by asking the participants valuable questions and by seeking for their cooperation where measurements are to be taken. Interviewers should not forget that they are asking participants for their time so they should be polite and well prepared to explain.

The following are tips addressed to interviewers in view of establishing contact with the people:

- Act as though you expect to receive friendly co-operation and behave accordingly.
- Start the interview only when you have introduced yourself, have exchanged greetings and have explained the purpose of the survey.
- Remember to pin your name tag at all times.
- Stress the confidentiality of the information you are collecting.
- Be tactful. If you feel that a person is not ready to assist you, do not force them but be prepared to come back.
- Thank them for their help and cooperation.

An interview will have many of the features of a normal conversation. It should be as natural as possible and be conducted politely. However, an interview differs from a normal conversation because the interviewer has the job of finding out and recording a list of facts and behaviors relating to the respondent. The interviewer must therefore stress on the confidentiality of information he/she is collecting. The respondent needs to feel comfortable about the survey and can refuse to be interviewed as participation is voluntary. The interviewer needs to reassure him and will have already explained what the survey is about, providing all the necessary information and making sure the respondent understands the implications of his/her participation before giving his/her consent. The information given should be simple and clear and adapted to the respondent's level of understanding.

Gaining consent

Consent must be documented by asking the respondent to sign an Informed Consent Form before doing the interview. The form must mention who will be doing the study, the reason for carrying out the study, who will have access to the information provided and should also stress on the confidentiality of the information provided. The interviewer must check that the respondent has read and understood the form before signing it, and should offer to go over it with him /her emphasizing the different items mentioned. If the respondent is illiterate or unable to read for himself / herself (e.g. due to a visual impairment), the form will be read and explained to him / her. The Participation Information which will have been read previously to the participants is complementary to the informed consent form in the sense that it explains clearly the objectives of the study, what each Step involves the benefits of the study and the participant's rights.

In cases where the respondent is being dissuaded from, or coerced into, participating in the study by a third party such as a spouse, relative or any other member in the community, the interviewer should make it clear that it is the respondent alone who must decide whether or not s/he wishes to be interviewed.

Contact procedures

Contact attempts must be made by actually knocking at the door of the household, simply walking by and thinking that no one is actually at home cannot be counted as an attempted contact.

Household members may not be available at the time of the first visit. Interviewers need to make at least 3 different visits to a household or eligible respondent when trying to obtain an interview. At the beginning of each day, they should examine the cover sheets of their questionnaires to see if they have made any appointments for revisiting a household or eligible respondent. If no appointments were made, they can make their call backs to a household or respondent at a different time than the earlier visits. Scheduling call backs at different times is important in reducing the rate of non response. Evenings and weekends are generally preferred for interviewing, especially in urban areas. This needs however to be adapted on a country basis level as weekends in some countries are not the same days as in others. Instructions from the door knock recruitment form are particularly helpful for this section, they should be used in conjunction with the household tracking form and the individual household tracking form. Both latter forms should be filled in properly and as accurately as possible.

Issues encountered during interviews

Several issues are encountered during interviews. This section describes potential problems and how to handle them.

Language Issue

'Interpreters of convenience', such as members of the participant's family or household, the village headman, or domestic staff in the health system may lead to incorrect data being recorded. If you find that you are not getting sufficient co-operation due to language barrier, report the case to the Project Manager as this will highlight the possible need for skilled interpreters.

Interruption during the interview

Interruptions may occur during an interview but if it becomes too long and the interviewer's presence is clearly an inconvenience; he/she can suggest returning at another time to complete the interview. The interviewer should remain patient and polite.

Handling Refusals

Some respondents may refuse to be interviewed. Interviewers need to be prepared to obtain co-operation from a respondent who does not want to be interviewed. Successful handling of these respondents depends upon the resourcefulness of the interviewer. If the interviewer is pleasant and good-natured, yet professional in his or her approach, most respondents will cooperate. Interviewers should understand that this is an important survey and should be able to convey that idea to the respondents. The reasons for refusal are various and quite different from one to respondent to another. Some respondents may not refuse outright but may express some hesitancy, reservation or hostility. Interviewers will quickly become sensitive to distinguish the variations between refusals (i.e. hesitancy from a strong refusal.) Interviewers should show patience and understanding towards respondents hesitations and should be able to adapt to fit the respondent's objection with a token agreement and understanding of his/her viewpoint, that is, saying something like, 'I can understand that' or 'You certainly have the right to feel that way.' This takes the respondent off the defensive side. The interviewer should try to leave before receiving a partial or an absolute 'no'. The interviewer may have visited the respondent at a bad time or he/she may have misunderstood the purpose of the visit. The interviewer may have more luck with the respondent during a subsequent visit.

Interviewing Techniques

Asking Questions

While asking questions, the interviewer should not discuss or comment on any issues relating to non-communicable diseases and their risk factors as the respondents may not give accurate answers to the questions but give the answers the interviewers are looking for. The interviewer should point out that there are no right or wrong answers and that the interview is not a test. It is important to ask questions according to certain rules to avoid biased answers and ensure comparability of data.

All options must be read to the respondent except for DK, Don't remember, Refuse, NA and other.

- Questions should be read as they are written in the text. The wording should not be changed.
- The order of the questions should not be changed.
- Questions should be read slowly and clearly emphasizing key words in bold.
- Questions should be read in a pleasant voice that conveys interest and professionalism.
- It is important to maintain good eye contact and adopt body language that is culturally appropriate.
- The entire question should be read to the respondent and the interviewer should make sure that he/she has heard it completely.

Assumptions should never be made about the respondents' answers because of their health condition or lifestyle. The interviewer may be tempted to skip certain questions because of assumptions or make comments such as "I know this probably doesn't apply to you, but..." This practice may prevent getting accurate and unbiased information or learn to what extent answers to earlier questions actually do predict answers to later ones. The interview should not be rushed and respondent must be allowed enough time to understand and answer a question. If he/she feels pressured to give a quick reply, he may answer anything that crosses his mind or say that he "doesn't know". In addition, trying to have a rushed interview will slow things down, as questions will need to be repeated a second time.

Clarification

Clarification is needed when the respondent:

- Is unable to answer the question asked.
- Does not seem to understand the question and gives an inappropriate reply
- Does not seem to have heard the question
- Is taking time to answer the question and hesitates
- Asks about a specific part of the question to be repeated. It is acceptable for the interviewer to repeat only that part
- Asks for one option to be repeated. The interviewer should read all options again but may omit one option if it has clearly been eliminated by the respondent
- Asks for one term to be clarified. The interviewer should refer to the definitions provided in the question by question instruction guide

Probing

Probing is needed when the respondent:

- Seems to understand the question but gives a response that is not appropriate
- Does not seem to understand what is asked
- Misinterprets the question
- Cannot make up his mind
- Digresses from the topic or gives irrelevant information
- Needs to expand on what he has said or clarify his response
- Gives incomplete information or his answer is unclear
- Says that he doesn't know the answer

The following are a few probing techniques the interviewer can use;

- **Repeating the question.** The respondent may come up with the right answer if he/she hears the question a second time
- **Making a pause.** This gives the respondent time to collect his/her thoughts and expand on his/her answer.
- **Repeat the respondents' reply.** This is often a very effective way of having the respondent reflect of the answer he/she has just given.
- **Use neutral introductions** to avoid biasing responses. The interviewer as mentioned previously should never give the impression that he/she approves or disapproves what the respondents say, or that his answer is right or wrong.

The following gives an insight of some common probing situations;

- Don't know (DK)
When the respondent says "I don't know" to a question, the general rule is to repeat the question. If the respondent still doesn't know, the interviewer should probe once before recording (DK). An effort at recall should be encouraged with a probe such as : " Could you give me your best estimate"
If there is no DK option, DK should be recorded in the left margin.
If after probing the answer is still "don't know", it may mean that the respondent:
 - _ Is taking time to think and wants to gain time
 - _ Does not want to answer because of personal reasons
 - _ In fact does not know or has no opinion
- Not applicable (NA)
Occasionally, the interviewer may ask a question that the respondent feels does not apply to him/her. The interviewer should ask him/her why the question does not apply to him/her and write down NA if it is clear that the question is irrelevant. If this option is not available, it should be recorded in the left margin.

DK, Don't remember, NA and refuse should be used only as an absolute last resort.

Feedback

It is important that the interviewer tells the respondent when he/she is doing well. This will keep the motivation going and encourage good performance.

Feedback is needed when the respondent:

- Needs to focus and get his attention back on the question
- Is digressing from the topic
- Is making inappropriate or personal inquiries
- Is performing well: listens attentively and answers appropriately

Once all this is done, the interviewer will have to record the information and review each of the

Recording information

- Use a pencil for writing. It will be easier to erase any information from the questionnaire or rewrite words or sentences. The interviewer should not erase any notes made, as they can be useful.
- Check that all the questions have been asked. If a question has been skipped by mistake, it can be corrected. If the respondent decides to change his/her mind on one of the options, the new answer must then be recorded.
- Check that each interview is identified and the identification information is completed on each questionnaire.
- The questions are to be read out as stated in the instrument, in order to have unbiased and reliable data. A number of things can be done to achieve this:
 - Record only answers that is relevant to the survey.
 - Comments or explanations can be recorded in brackets in the questionnaire next to the corresponding question.
 - Keep the respondent’s interest. If the interviewer is too absorbed recording the answers the respondent may get bored. It is useful to say the respondent’s response aloud as the interviewer writes it down. This will allow the respondent to modify his reply or expand on it once she/he hears it.

Other techniques

- **Uncertainty about the respondent’s answer**

If the interviewer is uncertain about a respondent’s answer, the question should be repeated and the answer recorded exactly (i.e. paraphrasing a response when in doubt is not permitted) and later to be checked with the supervisor for clarification prior to data entry.

If a question does not apply to a respondent and “NA” is not an option in the questionnaire, one suggestion is to record “NA” on the left margin and entered in the data entry program. Most questions will have “NA” in the program. The same thing will be done for the response ”DK”. If after probing, the respondent is unable to give an answer, “DK” should be recorded in the left margin and later entered in the program.

- **Missing data**

During an interview, if an interviewer notices that s/he missed a question, s/he should go back and ask the question, making a note in the margin that the question was asked out of sequence. If the missing data is not discovered until after the interview, the researcher must recontact the respondent.

Refusals to answer questions should always be recorded. The interviewer should code it as a “Refuse” option. Before accepting a refusal, the interviewer should explain the objective of the question to the respondent.

Editing

Before leaving the household or the clinical setting, the interviewer should review the questionnaire to check that it is complete and that no questions have been omitted. Right after the interview, the interviewer should spend time checking the questionnaire and make sure that:

- All the questions have been answered
- The information recorded is clear and legible for others to read
- Comments are being indicated between slashes

The interviewer should also edit the coversheet and check that all the information has been completed including the ID number.

Additional handout:

Guide for conducting structured interviews

Structure interviews capture vital information. The aim of a structured interview is to measure facts and people's attitudes accurately and in such a way that if one were to repeat it at another time one would get the same answer.

It is, therefore, very important to get the structured interview right. Respondents need to be able to provide truthful answers, which reflect their lives. Careful and precise interviewing techniques are essential to ensure the collection of complete, standardized, unbiased and accurate data. Much research has been undertaken to identify what works in getting the best from a structured interview and what does not.

Response and accuracy is likely to be increased if the interviewer looks happy, appears positive. It is likely to be decreased if the interviewer looks tense. Matching up respondents with interviewers is particularly difficult. It is, therefore, vital that the questions in a structured interview are asked in the same way and that the responses are recorded in the same way by the interviewer.

The following provide essential steps and aids to help conduct the structured interview.

The interviewer

Foremost the interviewer needs to:

- Know and understand what the study is about-inside out.
- Understand the questionnaire
- Be familiar with the pre-coded questions and those which are open
- To be able to conduct the questionnaire in a uniform manner.

Good interviewers

- Are sensitive and trustworthy
- Have an ability to establish a rapport with a wide range of people
- Are friendly and positive
- Are good listener and do not interrupt people before they have finished speaking
- Are committed and preserving
- Have the ability to adopt a neutral manner (showing neither approval or disapproval)
- Have legible handwriting
- Are adept at leaving the respondent happy
- Are good planners
- Are able to ensure and maintain confidentiality
- Dress neutrally-suitable for any kind of home
- Have good intuition about when it is appropriate to approach respondents or not.

The interview

The interviewers must approach potential respondents in a positive manner in order to encourage them to participate. The critical moment is when the interviewers introduce themselves.

Always present your ID card. Be honest about the study's aims and let them know how long the interview will take. Always provide respondents with details about the study the information on who to contact if should they want to.

Find a place where the interview can be conducted in private without interruptions.

Most respondent want to be seen in the best possible light and will want to give answers that reflect this. They will want to answer in such a way as to please the interviewer. The reliability of the information collected will be dependent on the rapport and satisfactory relationship established during the introduction. If a respondent feels anxious or uneasy they may be less likely to want to provide personal information.

When asking questions, the interviewers must always

- Be sensitive to the needs of the respondent; e.g. Not sitting in sunlight, comfortable seats etc.
- Be encouraging
- Use the exact words printed in the questionnaire, and in the exact order: changing words or sentence orders will introduce serious bias to the study
- Speak in a non-judgmental manner
- Express in a non-judgmental manner
- Express polite interest
- Read the questions and pre-coded answers out in reasonable volume and speed ensure the respondent has heard and understood the question
- Look at the respondent has heard and heard and question to pick up on any visual clues of embarrassment or unease
- Accurately record the answer on the questionnaire

Never

- Appear surprised or disapproving
- Express opinions or beliefs
- Make assumptions about respondents likely answers
- Hurry the respondent for answers
- Ask questions in a biased or leading way
- Ring a category that comes nearest to the respondent's reply. If the codes does not exit, recording the exact words used by the respondent in their response.
- Allow long silences be become embarrassing
- Apologies for asking personal or embarrassing questions

If the interviewers appear hesitant, reluctant, unconfident negative or thinks a questions is too personal, then the respondent will be influenced and will decline to give an accurate answers. In fact they will encourage negative response.

It is important to maintain the respondent's interest and motivation throughout the interview.

It is common for respondents to go off the topic and talk about other issues not relevant in the questionnaire. The interviewers have to be skilled to bring respondents back to the point. If this is done firmly from the onset, further problems are less likely to recur. The following phrases may be helpful:

“This is important information that we can cover a little later can we now focus on “
“What you say is most interesting but could I just ask you now on”

Another problem with respondents who go off the topic is that they may have imparted some information that is useful in the questionnaire. Asking them again may give rise to irritability. But, it is very important never to assume the answer. To avoid potential irritability-prefix the question with:

“I know you have already mentioned this, but can I just check”

“Now you have already said something about this, but I would like to ask you this question”

It is never a good idea to break off the interview- it compromises the rapport and relationship already established. It is important to ensure that the respondent is fully aware of how long they are committing themselves to the interview.

If interviewers are seriously worried about a respondent (very high blood pressure) the interviewer should offer to put the respondent in contact with a suitable professional. If accepted, ensure that this is put in writing and signed by the respondent. If the respondent refuses, only contact a professional if it is seen as a case of emergency.

Probing and Prompts

A probe is a stimulus, which is used to obtain information from respondent who experience discomfort, hesitation or feel unhappy to reveal information about themselves. Directive probing techniques are acceptable if one is eliciting factual information. Here, it is important to motive respondents in an undemanding and understanding tone. The aim is to encourage respondents to give accurate information probes listed below may help.

“Can you tell me more about?”

“In what way”

“Can you describe?”

“What sort of (office do you do)”

Before, writing your answer down, can I just check?”

Third parties

Caution should be exercised when other people want to sit on the interview. The presence of a third party will always influence the respondent and will lead to biased answers. This is best avoided.

Hesitancy, misunderstanding and non –response

Some respondent may seem hesitant in answering question and the interviewers could affirm this with “there is no right or wrong answer in this –we just to get your ideas. Some will ask the interviewers for their opinion and here it is important not to give opinions but to explain that it is the respondent’s opinion that matters. Some may want to answer with a “don’t know” and this can many different meanings.e.g. It may mask misunderstanding of the question, (see next paragraph) May not want to important to record such information on the questionnaire.

When respondent genuinely do not and may ask the interviewers to explain it. In this case the interviewers should repeat the question and if no answer is forthcoming make a note of it on the questionnaire. It is important not to succumb explaining the question. Interviewers will give different explanations evoking different answer.

If a respondent is very reluctant to answer a question, it may help if the interviewers:

- Confirms that the information given is confidential
- That replies will be aggregated in tables so that individual responses cannot be identified.

If the respondent still feels unwilling to respond, a note should be made of it and the next question pursued.

Ultimately, if respondent refuse to take part or answer and question, there wishes must be respected. The interviewer should apologies for the inconvenience. Most interviewers achieve 8/10 response rate.

Often a respondent will change their minds and a follow-up letter may help.

End of interview

Interviewers must leave their respondent in a positive frame of mind. After the interview, interviewers must:

- Check the questionnaire to ensure all arts are completed
- Must be prepared to spend time explaining the study further
- Emphasize how the information obtained is vital to the study
- Ensure complete confidentiality
- Thank respondent for their willingness to share their experiences
- Ensure the respondent has information and a contact point about the study should they require further information

7. QUALITY CONTROL OF DATA

Why is it important?

Quality control means to reduce errors to a minimum. It is important in any survey to have data as accurate as possible within practical data collection arrangement. This is because survey results determine the further course of actions to be taken by concerned ministries and agencies.

In order to achieve this, questionnaires have been carefully designed and procedures have been put into place in order to be followed. Training is part of the overall quality control to ensure that the team member involved in the survey understand the methodology and concept in the same way.

One of the most important stages of data quality control is interviewing and completing questionnaires. Therefore, you have the great responsibility of maintaining a high standard of data collection throughout the field survey.

Two-Stage Data Quality Control in the Field

Stage 1: By Team Members

- Interviewer to record correct identification of each respondent.
- Interviewer to carry out first check if questionnaire is complete and consistent.
- Interviewer also makes sure his/her writing or marking are clear for each question. Think of the person entering this vast amount of data onto a computer.
- Person responsible for physical measurement and blood test to follow the exact procedure. Record the result clearly.
- Staff to complete the check out procedures.

Only after the point mentioned above have been observed will a questionnaire be handed to a Project Manager/ supervisor for a final check.

Stage2: Project manager / Supervisor

- Project manager will counter check that the questionnaire is complete.
- Check consistency and calculated fingers.
- A project Manager / supervisor also checks with the individual household Form and make sure everybody has been interviewed and all forms have been collected.
- Only when everything is in good order will a Project Manager / supervisor fill in the section for Master Sheet.
- The Project Manager/ supervisor will determine from the Master Sheet if the required sample size has been achieved.
- When an entire E.A. / PSU is completed questionnaires are handed over to the Principle Investigator.

Remember: Once you leave the site, there will be no way to collect or correct data. So make sure you do a good job while at the site.

8. Glossary

Alcohol: a broad range of beverages containing alcohol (ethanol, including wine (10 to 14% alcohol), beer (0.5 to 14% alcohol), distilled spirits (greater than 20% alcohol), ciders and other local beverages.

Head of household; this can differ across countries. The definition used in most countries is the following: The person who has the decision making power and therefore it is not necessarily the person who earns the most. Decision making power in terms of financial decisions.

Moderate intensity physical activity: Refers to activities which take moderate physical effort and than make you breathe somewhat harder than normal. Examples include carrying light loads, bicycling at a regular pace, or double tennis. Walking is not included in the question assessing moderate physical activity because another item assesses all types of walking separately. Moderate intensity activities require an energy expenditure of 3-6 METs. (Appropriate local examples should be substituted).

Participant is preferred to respondent. The term participant is preferred as STEP 2 and 3 are not questionnaires but consist physical and biochemical measurements.

Physical Activity: refers to activities undertaken at work, around the home and garden, to get to and from places (i.e., for transport) and for recreation, fitness, exercise or sport. Only activities meeting specific thresholds of intensity and that were undertaken in the 7 days preceding the interview are assessed in the questionnaire.

Risk Factor: refers to any attribute, characteristic, or exposure of an individual, which increases the likelihood of developing a disease, or other unwanted condition/event.

Serving (of fruit or vegetable): for vegetables this refers to one cup of raw, leafy green vegetables, (spinach, salad etc...), one half cup of other vegetables, cooked or chopped raw (tomatoes, pumpkin, beans etc...), or a half cup of vegetable juice. For fruits, this refers to one medium sized piece of fruit (banana, apple, kiwi etc...) or a half cup of chopped, cooked or canned fruit or a half cup of juice from a fruit (not artificially flavored).

Standard drink: The net alcohol content of a standard drink is 8-13 g. of ethanol. This is the equivalent of 1 regular beer (285ml), a single measure of spirits (30 ml), a medium-sized glass of wine (120 ml), or a measure of aperitif (60 ml).

Team Leader and Supervisor mean the same. For consistency purposes, we use the term supervisor.

Tobacco products: any item containing tobacco including manufactured cigarettes, cigars, pipes, hand rolled cigarettes and commodities specific to different regions like bidis (rolled tobacco leaves), narguileh or sheesha (traditional water pipe used for smoking tobacco), chewing tobacco or snuff.

Usual Resident: Surveys use different definitions. Countries will, depending on the information available, decide on which definition to use. The definition will have to be standardized in the country.

Vigorous intensity activity: Refers to activities which take hard physical effort and which make you breathe much harder than normal. Examples include heavy lifting, digging, aerobics, or fast bicycling.

Vigorous activities require an energy expenditure of greater than 6 METs. (Appropriate local examples should be substituted).

Walking: Refers to walking that is undertaken at work and at home, walking to travel from place to place, and any other walking undertaken for recreation, sport, exercise, or leisure.

9. Frequently Asked Questions

- Why is it important to adhere to the stated protocol strictly when measuring blood pressure, waist circumference, height and weight?
- How should we deal with subjects who refuse to participate in the surveillance or are not cooperative?
- Is it necessary to keep record of the participants who refuse to participate in the surveillance?
- Why should we administer the questionnaire to a participant *in isolation*?
- What advice should we give to participants, who are found to have high blood pressure, or those who use tobacco or alcohol, or those who are obese?
- How should we respond to questions related to health and diseases, which the participants ask while administering the questionnaire?
- Why are we asking about tobacco, alcohol, diet and measuring blood pressure, when we should be looking at malnutrition, gastroenteritis, malaria, hepatitis or AIDS which are more common diseases in India?