

4. DATA COLLECTOR MANUAL



NEW ENGLAND RESEARCH INSTITUTES, INC.

Boston Area Community Health (BACH) Survey Data Collector Manual

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4.7 Instructions for Enumeration

4.7.1 Introduction

An important part of the BACH Survey involves a methodological sub-study in which we will conduct a systematic enumeration of 10 half Census blocks. In brief, the enumeration involves going door-to-door (as in the decennial Census) and asking block residents some basis questions about their households. These questions are identical to those included in the screener for the main part of the BACH Survey and are intended to ascertain whether there is a potentially eligible person residing at a household.

The enumeration is considered a methodological sub-study because, after the enumeration is complete, BACH Survey staff will compare the list of names obtained using this screening method versus the list of name shown on the Boston Resident List for the same Census blocks. This comparison can indicate the completeness of and agreement between both sources of data. Additionally, the BACH Survey staff will compare the costs of identifying and enrolling respondents through enumeration versus the costs of identifying and enrolling respondents through the Boston Resident List. This chapter will discuss the materials, procedures, and steps associated with the enumeration effort.

4.7.2 Definitions

The enumeration aspect of the BACH Survey requires the data collectors to enumerate census tracts and the blocks within those tracts.

Census Tracts

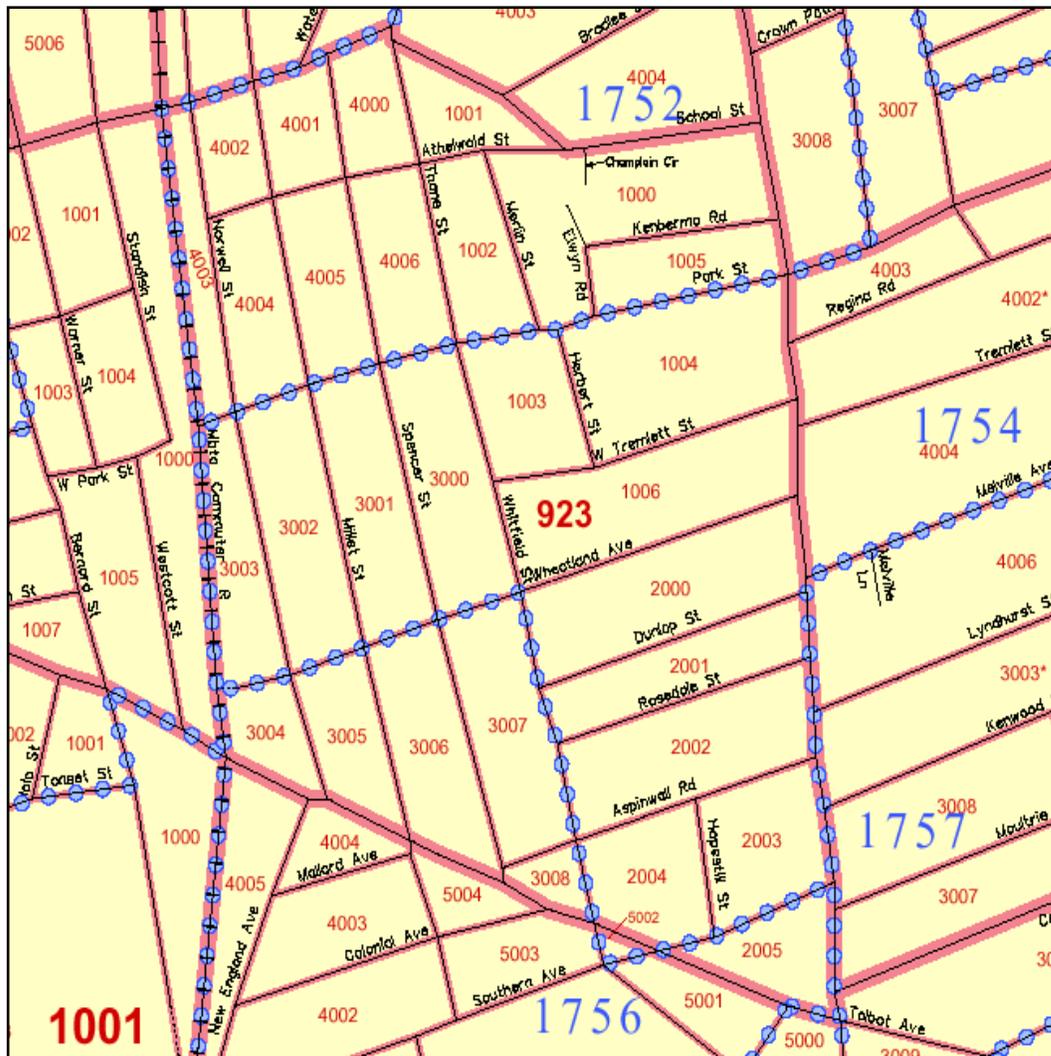
A census tract is generally a small geographic area within a larger metropolitan area. The Census Bureau establishes the boundaries of a census tract. Tract boundaries are established with the intention of being maintained over time so statistical comparisons can be made from census to census. However, occasional changes may be made in boundaries due to physical changes in street patterns. Tracts generally have between 2500 and 8000 residents and are designed to be relatively homogeneous with respect to population characteristics, economic status, and living conditions. Census tracts are identified by a 4-digit number and may have two digits suffix e.g.

6059.02. Leading zeros in a tract number do not appear on maps (e.g. CT 0918 will be shown on the map as 918). An example of a Census Tract Map is included below as *Exhibit 5.1*.

Blocks

Each census tract consists of smaller geographic areas called blocks. A block is formed by the more or less rectangular boundaries of four streets. An example of a Block Map is shown below as *Exhibit 5.2*. Blocks are typically assigned three digit identification numbers. Like census tracts, census data for population characteristics, economic status and living conditions can be obtained for each block. The blocks used for this project have been selected based on their Hispanic and Black populations. The blocks were selected in this manner to ensure that we attain a sample of 6,000 men and women, evenly distributed across race/ethnic groups.

Exhibit 5.1 – Sample Census Tract Map



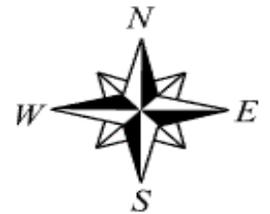
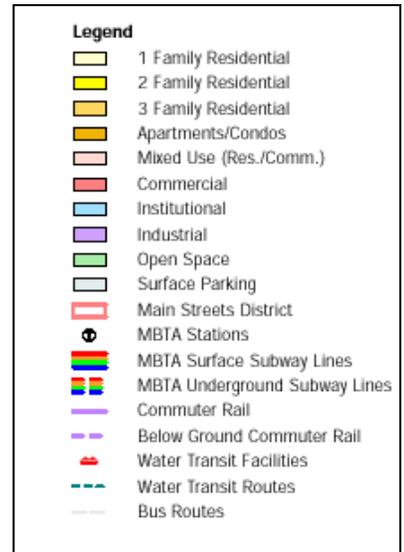
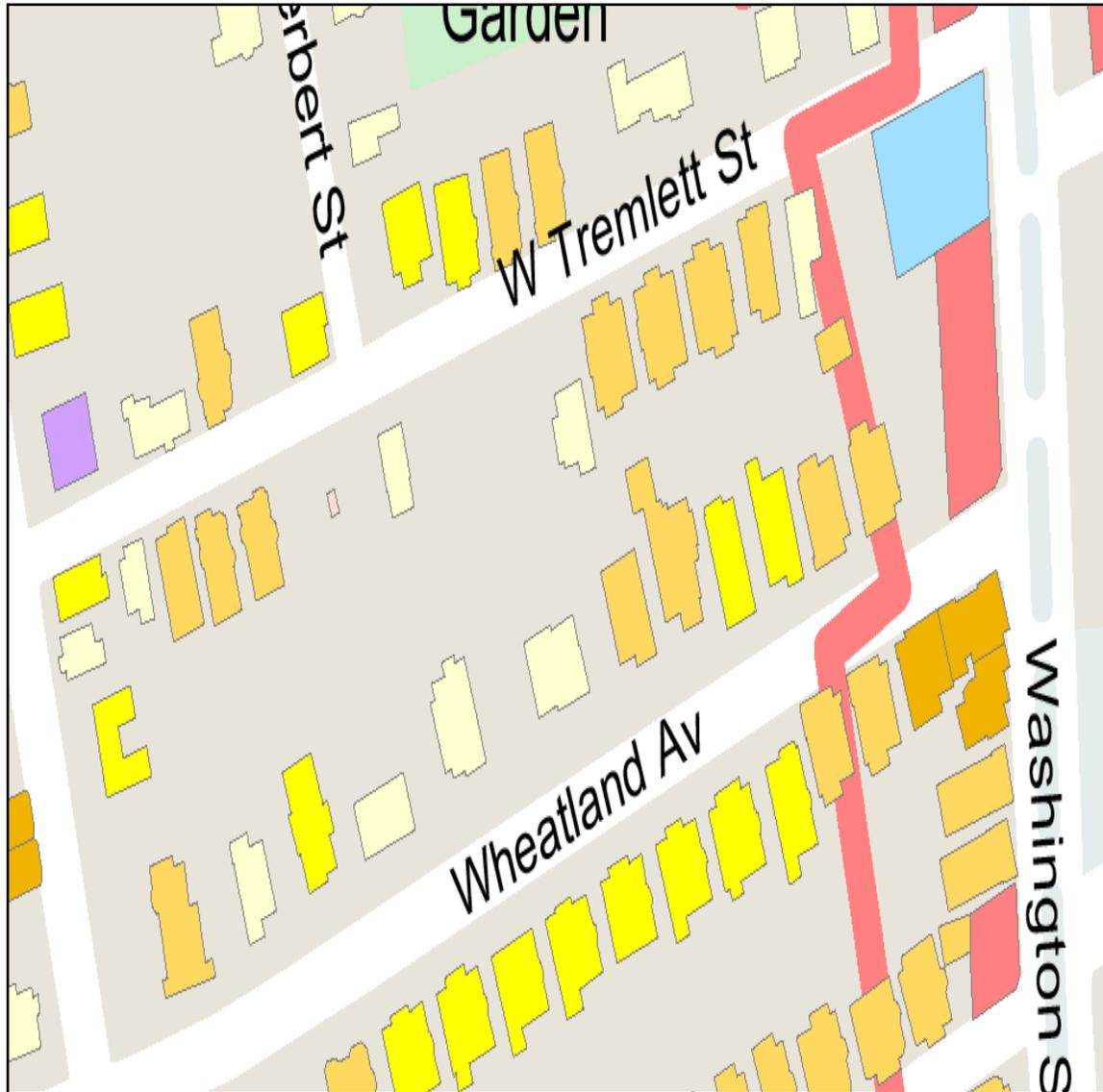
**CENSUS TRACT #: 923
(DORCHESTER CENTER)**

BOUNDARIES:

- NORTH:** School St.
- WEST:** MBTA Commuter Rail
- SOUTH:** Talbot Ave.
- EAST:** Washington St.



Exhibit 5.2 – Sample Census Block Map



Other Enumeration Definitions

Refer to these definitions when marking the enumeration map and/or deciding whether a structure qualifies as a housing unit that should be enumerated.

1. STRUCTURE = a building constructed with a roof. Structures may be used for residential, commercial, industrial, recreational, service or storage purposes.
2. LOT = a parcel of land that does not contain a structure. A lot may be vacant land or it may contain amenities and improvements. Amenities and improvements include:

Parking lots	Parks
Playgrounds	Tennis courts
Swimming pools	Farm land
Cemeteries	Land undergoing development
Dumps or landfills	

3. HOUSING UNIT = a house, an apartment, a group of rooms, or a single room that is occupied (or vacant, but intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live and eat separately from other persons in the building and which have direct access from outside the building or through a common hall. Housing units include:

Single family homes	Two or more family homes
Apartments	Townhouses
Condominiums	Mobile homes

4. INSTITUTION = housing units that provide for the care and custody of residents. We will **not** be enumerating residents of institutions. Institutions include

Facilities for the physically of mentally retarded	Hospitals or wards for patients with chronic diseases
Homes for unmarried mothers	Nursing, convalescent, and rest homes for people who require assistance with daily tasks and/or skilled nursing services
Orphanages	Penal facilities and correctional institutions

5. GROUP QUARTERS UNITS (GQUs)= housing units (other than institutions) which do NOT provide for the care and custody of residents, and that have 10 or

more unrelated individuals living there. We **will** be enumerating group quarters units. GQUs include:

Rooming and boarding houses	Communes
Dormitories or military barracks	Convents or monasteries
Mission or shelters	

Specific procedures on how to enumerate GQUs are presented later in this chapter.

6. **STRUCTURES WITHOUT LIVING QUARTERS** = Structures that do not contain housing units, institutions or other group quarters. These structures may be commercial (e.g., store), tax-exempt (e.g., police station) or other types of real property (e.g., garage). Below is a list of these kinds of structures:

<u>Commercial Property</u>	<u>Tax-Exempt Property</u>	<u>Other Real Property</u>
Office building	Church	Detached garage
Professional building	School	Shed
Service station	Post office	Greenhouse
Bank	Government office	
Retail store	Police station	
Restaurant	Fire station	
Bar, tavern	Public library	
Manufacturing	Public utility	
Industrial		
Warehouse		

4.7.3 Enumeration Materials

The following is a list of the materials that will be issued to you once you have completed training and are ready to go to the field:

1. Maps of census blocks
2. Block Tracking Forms
3. Household Tracking Forms
4. Household Data Forms, including supplemental sheets for households with 7+ people 30-79 years old
5. Enumeration Manual
6. Identification
 - a) Name tag
 - b) Signed letters of endorsement
7. Brochures
8. Clip board

9. Pencils/pens
10. Cell phone

4.7.4 Daily Work Organization and Timeline

Your daily schedule as an enumerator will look like this:

1. The enumerator reports to the Data Collection Supervisor and receives his/her block assignments for the day. Enumerators will work on one block at a time, and the Data Collection Supervisor will be in close contact with the enumerator on the progress of the block she/he is working on.
2. The enumerator answers any questions that the Data Collection Supervisor may have about the enumerator's completed work.
3. The enumerator travels to the block(s) assigned to him/her with the other team member(s).
4. Once the enumerators arrive at the block for the first time, they drive or walk around the block to "scope" it out. The enumerator will need to make changes to the block maps as necessary.
5. The enumerators will begin the enumeration in the Northwest corner of the block. The enumeration should continue in a clockwise fashion around the block.
6. The enumerator will attempt to contact someone in each housing unit within the block.
7. Depending on whether or not a resident was contacted, was eligible, and agreed to participate, the enumerator will fill out the appropriate forms.
8. At the end of the day the enumerator will contact the Data Collection Supervisor and report what he/she has done.
9. Once a block is completed, the enumerator returns the Census Block Map, Block Tracking Form, and Household Tracking Forms for that census block back to the Data Collection Supervisor.

The remainder of this chapter will focus on these enumeration procedures individually and in detail.

4.7.5 Block Assessment (Scoping)

Prior to beginning enumeration of a block, you will need to assess the block. The steps in this process are:

1. Review the census track maps with the Data Collection Supervisor at the beginning of the week. Each block will be divided with a line and the side of the block you are to enumerate will be clearly marked. Step 2 below involving “scoping” applies to the whole block, however.
2. The second step is to locate that block and drive or walk around it to determine that the geographic boundaries are unchanged from the previous census block map. The physical boundaries of a block may change over time (i.e. parks are built, roads restructured, etc.). This is also a good time to get an idea of the physical properties of the block such as the estimated number of housing units, vacant buildings, businesses, other structures and lots. This procedure, orienting oneself to the geographic and physical properties of the block, is called scoping.

If the enumerator finds that the block has in fact changed geographically and no longer has the same street boundaries as depicted on the census block map, he or she then draws a second map depicting the current existing boundaries. If the block no longer exists the enumerator draws a map depicting the current geographic area as clearly as possible, notes the block no longer exists (on the Block Tracking Form) and goes to the next block to be enumerated.

Once the boundaries and structures of the block have been verified, add the street numbers of each structure on the map provided (e.g., 9 Galen Street). Indicate the street numbers for both halves of the block.

3. Once you are done noting street numbers, you are ready to start enumerating the half block. Begin in the most northwestern corner of the half block. Determine the disposition of the first separate unit of land using the Block Tracking Form. The Block Tracking Form is outlined in the next section.

4.7.6 Filling Out the Block Tracking Form

The Block Tracking Form should be filled out for each housing unit you encounter in the block, even if you do not make contact with a household member. Fill out this form before you attempt to contact someone in any household.

1. Record the Census Track Number and Block Number in the boxes provided. This information can be found on your block maps. Looking at the first section of land in the Northwest corner of the map, you will begin filling out the first line in the grid on the Block Tracking Form.

2. Record your Data Collector ID number. Each Data Collector records his/her ID number in the space provided. If you are part of a data collection pair, then you and your partner should both record your codes.
3. Record the date that you enumerated the specific block.
4. If the first unit of land contains a structure with a housing unit, then the first housing unit will be given a sequence number. You will be recording a sequence number for each household unit on the block. The first household unit that you come to should be assigned the sequence number 1. Only assign ONE sequence number per unit. Sequence numbers SHOULD ONLY be assigned to household units.

Do not record sequence numbers for all the household units you observe, since there may be more units once you start enumerating households within a structure (such as an apartment building, tenement, etc.) Provide sequence numbers for the first few housing units, so that all members of the team can begin contacting residents and enumerating. When you are ready to move on to the next housing unit, review the Block Tracking Form to make sure it is still accurate, since additional units may need to be added to the form.

5. Record the housing unit's address.
 - a) Include the housing unit's number, if one exists. (For example, 240 Brookline Road)
 - b) Include the street or road name that the housing unit is on.
 - c) Include the apartment or unit number of the specific household within the housing unit.
 - For structures, if no address is available, provide a brief description of the building and its location in proximity to other structures.
 - For housing units, if no unit # is available, provide a description of it's location in the building (e.g. 2nd floor, door on left side of hall).
 - Company names should be included for businesses.
 - Lots should be identified in terms of their amenities and structures in proximity to them.
6. Record the best Description code for the particular unit of land that you are evaluating. Choose only one. (If you are unsure, make a note of your questions and speak with the Data Collection Supervisor.)

Explanation of the Description Codes:

RES = Residential, any parcel of land that serves as living quarters to at least one person. Living quarters include a house, apartment, mobile home, tent, boat, shelters, group quarters, dormitories, and barracks.

COMM = Commercial, any quarters of structures that are being used for nonresidential purposes.

INST = Institution, a structure that houses people under formally authorized, supervised care or custody.

MIX = Mixed use, the parcel of land is used for more than one use, as defined by these Description Codes. This may include residential and commercial use, institution and commercial use, or residential (where the residents are not in any way associated with the institution) and an institution.

LOT = a parcel of land that does not contain a structure. A lot may be vacant land or it may contain amenities and improvements.

OTH = Other, any other Description of the parcel of land that does not fall into these categories. Specify in the Comments section of the Block Tracking Form.

7. Record the number of units that the structure has in it, such as the number of apartments that are in an apartment building. The number of units in the building will be placed on the line for the first housing unit in that structure. So, if a structure has 3 units in it, there would be three lines filled out on the Block Tracking Form for the three units, but you would put the number of units (3 in this example) on the first line.
8. Use the space available for the notes to explain any unusual circumstances, the reason for the disposition given, additional descriptive notes, etc.
9. The Block Tracking Form should be filled out even if a lot is empty, the structure is an institution, the land is a parking lot, or wholly commercial structures.

It is extremely important for each Enumeration Team to remember to update and review the Block Tracking Form after they have visited each residence.

4.7.7 Household Tracking Form

When you are ready to begin enumerating households, you will be using the Household Tracking Form. This form should be filled out even if you do not make contact with a household member.

1. Record the Census Tract Number, Block Number, and Sequence Number in the boxes provided. This information can be found on your block maps and the Block Tracking Form.
2. Record the housing unit's address:
 - a) Record the street or road name of the housing unit.
 - b) Record the apartment or unit number of the specific household within the structure.
 - c) Record the city, state, and zip code (will be provided).
 - For structures, if no address is available, provide a brief description of the building and its location in proximity to other structures. Or if the residence has a corresponding mailbox, record the name found on the mailbox or apartment directory.
 - For housing units, if no unit # is available, provide a description of its location in the building (e.g. 2nd floor, door on left side of hall).
3. Record your attempt number in the first column. The attempt number is the number of times in which you have attempted to contact an adult at this specific household.
4. Record your Data Collector ID number. Each Data Collector records his/her ID number in the space provided. If a pair of Data Collectors does the enumeration, than both should record their codes.
5. Record the date of your attempt number. Include the day, month, and year.
6. Record the day of the week that you attempted to contact an adult household member (for example, Monday, Wednesday.) **You should NOT return to the housing unit on the same day of the week for each attempt, unless asked to do so by a household member or instructed to do so by the Data Collection Supervisor.**
7. Record the time of the day that you attempted to contact an adult household member (for example, 1:20pm or 6:45pm.) **You should NOT return to the housing unit at the same time of the day for each attempt, unless asked to do so by a household member or instructed to by the Data Collection Supervisor.**

8. Record the mode: (T/F/M) For the enumeration effort, you will always enter an “F” here for field.
9. Record the TEMPORARY DISPOSITION code that best describes what happened once you attempted to contact an adult household member. Refer to the list of codes on the Household Tracking Form. (Choose only one code. If you think your experience includes two or more of these codes, make a note and discuss this with the Data Collection Supervisor.)

The following is a list of the Temporary Disposition codes:

TREF = Temporary Refused, occurs when a reliable adult household member has temporarily refused the interview. For example, the resident is busy at this time but will participate at a later time.

TNOA = Temporarily No Answer, occurs when no one answers the door when you attempt to contact the household, but the housing unit is clearly occupied.

TMIN = Temporary Minor, occurs when a minor or unreliable adult (intoxicated, is not a resident of the household, severe mental illness) answers the door. If they inform you that a reliable adult is not home, then code this attempt as TMIN.

TACC = Temporarily unable to obtain Access, occurs when you cannot get into the apartment building and need the superintendent’s permission, the complex gates are locked, etc.

TLAN = Temporary Language, occurs when the respondent speaks Spanish but you do not, or the person who answered the door spoke another language entirely. If the initial respondent was speaking Spanish, notify your bilingual partner to complete the enumeration. If the language was something other than Spanish, try to determine if there is someone else in the household that speaks English or Spanish.

TPAR = Temporary Partial, occurs when the respondent has partially completed the enumeration, had/chose to stop but is willing to finish the enumeration at another time.

TOTH = Temporary Other, occurs when something other than the above Disposition codes has occurred at a residence.

Here are the Final Disposition codes:

FCOM = Final Completed, occurs when the enumeration has been fully completed by a reliable adult household member.

FREF = Final Refusal, occurs when a reliable adult household member refuses to participate in the study now and in the future. For example, the respondent slams the door in your face or asks to be left alone.

FABN = Final Abandoned, occurs when the household that you are attempting to enumerate is abandoned or condemned.

FMIN = Final Minor, occurs when the minor or unreliable adult informs you that an adult will never be home, does not live at this residence or a reliable adult is not available.

FACC = Final inability to gain Access, occurs when you cannot gain entry into the building at all.

FLAN = Final Language, occurs when the respondent speaks neither English nor Spanish but a different language altogether.

FPAR = Final Partial, occurs when the respondent has partially completed the enumeration, had/chose to stop and is not willing to complete the enumeration at another time.

FOTH = Final Other, occurs when something other than the above Disposition codes has occurred at a residence.

NOTE: Final codes will only be assigned to housing units after review by the Data Collection Supervisor. Enumerators should hold all **non-completed** cases, and review them with the Data Collection Supervisor during the weekly conference. All **completed** enumerations should be turned in to the Data Collection Supervisor as soon as possible.

10. Record any comments that you might have, explain any unusual circumstances, the reason for the disposition given, additional descriptive notes, etc.
11. The FINAL DISPOSITION will state whether or not there are any eligible participants residing in the household. The FINAL DISPOSITION CODE, # ATTEMPTS, DATE AND MODE, will be determined and recorded by the Data Collection Supervisor.

4.7.8 Making Contact with Household Member (Section A of the Household Data Form)

When you make initial contact with a housing unit, you will use the Household Data Form to record information about the household and its members. Follow the guidelines below on using this form and making contact with respondents in a housing unit.

1. For mutli-family homes and apartment buildings, begin at the top floor and the unit farthest from the main entrance of the building. For other structures with housing units, begin at what appears to be the main entrance for each individual household.

2. Ring the bell or knock on the door of the housing unit.
 - a) If someone answers the door, identify yourself and show him or her your ID, and any other forms of identification that are needed (such as the certification letter or business cards). Evaluate your next steps depending on who answers the door. Some examples of possible circumstances appear below under #4.
 - b) If no one answers the door, leave a brochure and complete the Household Tracking Form, using TNOA in the DISP column for that attempt. The brochure should always be left **out of sight**, such as under the door of the housing unit. **Never** leave the brochure on the doorstep, since it can indicate that no one is home. Also, it is illegal for you to leave anything in the mailbox.
3. For each household contacted, the following information must be filled out in Section A of the Household Data Form (much of the information needed can be obtained from the Household Tracking Form):
 - a) Sampling Mode (for the purposes of the enumeration pilot study, this will always be “DOOR_TO_DOOR ENUMERATION”)
 - b) Census Tract Number
 - c) Block Number
 - d) Household Sequence Number
 - e) Your Data Collector ID Number
 - f) The date, including the month, day and year
 - g) The language that the interview was conducted in

NOTE: Some of this information can be filled out ahead of time. You should plan to have the Sample Mode, Census tract number, block number, the sequence number and your Data Collector ID number filled out BEFORE attempting to make contact with the household. This will cut down on the amount of paperwork you need to do while you are trying to obtain the respondent’s full participation.

4. Use the enumeration script when contacting a household member. The following are a few examples of situations you may encounter while contacting residents in the census blocks selected for this study.
 - a) *The preferred language of the person who answers the door is not a language you speak.* If the respondent speaks Spanish and you are not bilingual, inform the respondent, to the best of your ability, that another data

collector will return to ask them some questions. If the respondent is speaking a language other than Spanish, try to the best of your ability to determine whether or not there is another person in the household who speaks English or Spanish. Enter the following on the Household Tracking Form for this attempt:

- Record the attempt number, your Data Collector ID#, and the date and time you spoke with the respondent on your Household Tracking Form. Contact your bilingual data-collecting partner. If the respondent does not speak English *or* Spanish, thank them for their time and move to the next housing unit.
- Enter the Code TLAN in the DISP Column for this attempt.
- Record notes in the COMMENTS section of the Household Tracking Form that are appropriate for this attempt (such as the need for a bilingual, or to follow up with another member of the household).

b) ***The person who answers the door is a minor.*** If the respondent is a child or young teen, ask if there is an adult home. If so, read enumeration script to available adult. If not, find out when an adult might be available. Record the following for this attempt on the Household Tracking Form:

- Attempt number, your Data Collector ID#, the date, day and time of the contact.
- Enter the code TMIN in the DISP column for this attempt.
- If you were able to find out when an adult might be available to answer some questions, record that information in the COMMENTS section.

c) ***The person who answers the door is not a reliable source.*** If the respondent is not cognitively intact, is not a permanent resident or relative, etc., ask to speak with someone else in the household. If someone else is not available, make a note on the Household Tracking Form. In addition to the standard information you would fill out on the Household Tracking Form (Attempt #, Data Collector ID #, Day, Date, and Time), you would record the code TMIN in the DISP column for this attempt.

- d) *The person who answers the door tries to send you away.* Read the enumeration script. If the respondent refuses to speak with you, explain that the enumeration is confidential, will only take a few minutes, and that the entire block will be enumerated. Show them the signed letter of endorsement and brochure. If they still refuse to participate, thank them for their time, and enter code TREF in the DISP column on the Household Tracking Form. Do NOT fill out the Household Data Form for Pilot Enumeration.
- e) *You try to begin enumerating an apartment building, but the building is locked.* For a controlled access situation, there are a couple of things you could try. You could:
- Take down any information you see about who manages the building. Sometimes the management company is listed with a phone number. If you are able to reach someone, explain the study briefly and suggest a face-to-face meeting with building management.
 - If a buzzer is available, use this to persuade one of the residents to participate and let you in.
 - If names are listed next to buzzers or mailboxes, record one or two of these for the next attempt. It is easier to persuade a resident or the management company to let you in if you are able to name one of the residents you are going to try to enumerate.

For this attempt, you would record the standard information on the Household Tracking Form (Attempt number, Data Collector Id #, Day, Date, and Time). You would also record TACC in the DISP column. You would also record any information you were able to collect outside the building (management name and phone number, resident names) in the COMMENTS section for this attempt.

NOTE: If you encounter a number of controlled access buildings in the block you are working, you should contact the Data Collection Supervisor as soon as possible. It may be necessary to contact the local police precinct, community center, etc. to explain the study and its purpose, and the Data Collection Supervisor will help with this.

5. If you have contacted a reliable adult who is willing to participate in the enumeration, continue on with SECTION B of the HOUSEHOLD DATA FORM.

4.7.9 Filling Out the Household Data Form (Section B)

Once you have contacted someone who can provide you information about the household, you will use Section B of the Household Data Form to complete the enumeration. The steps include:

1. Read the full introduction on page 1 of the Household Data Form. This introduction provides a brief background of the study. The introduction is also a verbal assurance of confidentiality, which must be read to every respondent before beginning the interview. Once you have read the introduction to the respondent, initial the form to the right of the introduction text.
2. Hand the respondent a signed letter of endorsement. Inform them that the interview will not take any more than five minutes of their time. While the respondent is looking over the letter of endorsement, finish filling out SECTION A of the form.
3. Ask the respondent if there are any other housing units present on the premises. Examples might include a garage apartment, or one level of a three story building that is actually two units. Remember, we need to enumerate *all* units within each of these census blocks, so make sure you confirm with the respondent that you haven't missed any units.
4. Ask the respondent if they have any questions.
5. Proceed with the enumeration questions B1-B8.
6. The first column is reserved for the primary respondent (the person supplying the information) only if he/she is between the ages of 30 and 79. If the respondent is not between the ages of 30 and 79, skip the first column and begin in the second column with the first person in the household who is between the ages of 30 and 79 years old.
7. Determine whether or not anyone in the household is eligible for the study, using the eligibility criteria on the Household Data Form. If anyone in the household is eligible for the study, you will read the respondent the Eligible Script listed on your enumeration script card. If no one in the household is eligible for the study, you will read the Ineligible Script, which thanks the respondent for their time and cooperation.

8. Potential respondents identified during the enumeration will be re-contacted and re-screened within 2 weeks to 1 month of the enumeration. SRC staff will arrange appointments for the full interview then.
9. At a later date, the information will then be entered into the ADEPT DMS. ADEPT will be used to assist in scheduling the re-contact and re-screen.
10. Leave a brochure with the respondent.
11. When you complete an enumeration at a household, go back to the Household Tracking Form for that household. Enter the code FCOM in the DISP column for the final attempt you made at that address. Record any questions and/or problems that happened during the enumeration in the COMMENTS section.
12. Attach the Household Tracking Form on top of the Household Data Forms you used for this household, and return these to the Data Collection Supervisor when you return to NERI.
13. Move on to the next address.

4.7.10 Enumerating Group Quarters Units

Given that Group Quarters Units (GQUs) are comprised of 9+ unrelated persons who share common facilities such as a kitchen or bathroom (see definitions above). Enumerating a GQU is a bit different than enumerating a housing unit. Sometimes you will not realize the unit is a GQU until after you start enumerating. **The basic principle of enumerating such a unit is that each person in the GQU is treated as a separate household.**

Follow these steps when you realize the structure you are enumerating is a GQU:

1. Locate a person in the household who is an adult, and who is capable and willing to give you information about the members of the GQU. Use the Household Tracking Form as you normally would to record your attempts to contact someone in the GQU.
2. Begin enumerating the GQU as you would any other housing unit, using the Household Data Form. If the contact person indicates that there are more than 10 adults 30-79 years old in the unit, then you will know the unit is a GQU. If the person you are speaking with is 30-79 years old, put their information in the first column as normal.

3. For the remainder of the adults, ask only for the names and contact information. It will be too time consuming to ask the contact person about all adults living in the household, and the contact person may not know the exact ages of everyone living there. Record this information on the Household Data Form.
 4. Once you are done getting the names, ask the contact person if any of the other people are home. Try to talk to as many of these people as you can, and ask them Q.B2-B8 on the Household Data Form. For those residents that are not home, try to get an idea of when you can come back and get their information.
 5. Once you have enumerated as much of the GQU as you can, you will need to fill out a separate Household Data Form for each person in the GQU. Take the information off of the form you used in the unit, and copy it onto a fresh form, putting each person's information in the left-hand column of the grid.
1. Obviously, for some GQUs you will have to make return trips to get information from people you missed during the first visit.

4.7.11 Safety

NERI takes the safety of its' staff very seriously. Therefore, your safety and the safety of the respondent are of primary importance in every instance. The safety of the data is then secondary.

Working in the Field

1. Dress
 - Dress professionally but sensibly. Jeans and sneakers are not professional attire. Wearing expensive jewelry or other flashy items is discouraged. The idea is to dress so that you will not stand out in the area you are working.
2. Be prepared for your workday the day before
 - Know exactly where you are going.
 - Invest in a good map. The project should reimburse you for or provide you with one.
3. Arriving and entering the block
 - When you arrive at the respondents' home, be alert to your surroundings. Pay attention to the neighborhood and the people in your vicinity. Situations such as a large group of individuals involved in heated discussion should be avoided.

- Know where you are going. Sometimes it may be necessary to drive around the block a few times to be certain that you understand the neighborhood before you start scoping the block.
- Make sure you obey the parking regulations of the area you are working.
- Carry only the items essential for doing the enumeration. Extra items such as a purse or briefcase should be left in the car out of site. This also should be done well before you arrive at the block. Putting a purse or briefcase in your trunk AFTER you park your car is simply advertising that something that you feel is valuable is now locked in the trunk of your car.
- Enumerators are being sent out in teams of at least two people for safety reasons. However, if you don't feel safe getting out of your car you should leave the area. Then notify the Data Collection Supervisor as soon as possible and explain the situation.

4. Cell phone usage

- NERI will provide each enumerator the use of a cell phone. The cell phone you are issued is to be used for emergency purposes only. Do not use the cell phone NERI issues to you for personal calls.

4.8 Instructions for Telephone Screening

4.8.1 Introduction

The majority of BACH respondents will be obtained by calling residents using resident lists from the Boston Redevelopment Authority. For this telephone screening, Data Collectors will be using NERI's CATI ADEPT system. This chapter will take you through the process step-by-step.

4.8.2 The Contact Record for Screener: Telephone

The Contact Record form will contain all the basic information about each case, as well as provide a case history created by Data Collectors who worked on it. The Contact Record Form itself is shown in Appendix B. The form contains the following:

1. The Census Tract, Block #, and Household ID # for the case. This information will be preprinted on the Contact Record in the upper right-hand corner.
2. The boxes above the grid contain a number of pieces of information about the resident we are trying to contact:
 - a) First and last name
 - b) Address, city, state, and zip code
 - c) Home phone number
 - d) Date of birth
 - e) Gender
3. Below that on the form will be pre-printed information about any letters that have been sent to the resident. NERI will be sending letters out to all residents from the resident lists prior to the beginning of the telephone screening effort.
4. The grid in the center of the page is where the Data Collectors will record the results of all efforts to contact the resident. So, for each call you make to try to screen a particular resident, you will record the following:
 - a) The attempt number
 - b) Your Data Collector ID number
 - c) The Date, Day, and Time of the call
 - d) The mode (For this effort it will always be "T" for Telephone)
 - e) The disposition code for the attempt. A list of disposition codes are included in this manual as Appendix F.

- f) Any comments you think are relevant to the call and could be useful to another Data Collector working the case later.

NOTE: It is essential that all Data Collectors fill out the grid on the Contact Record consistently and completely. You will often be working cases that have been worked earlier by other Data Collectors, and any information you can get from previous attempts can be valuable in completing the screening and enrolling the respondent.

4.8.3 Telephone Screening

Follow the guidelines below on making telephone contact with an eligible resident on the resident list.

1. Dial the home phone number on the Contact Record form.
2. If someone answers the phone, ask for the resident whose name appears on the Contact Record. This person will be considered the “primary respondent” for the household.
3. If you are able to reach the primary respondent him/herself, use the script that comes up on the CATI screen to introduce the study and obtain participation in the screening.
4. The next section will record some basic information about the case. The CATI screen will ask you to enter the following pieces of information:
 - A1. Sampling Mode (for the telephone screening, this will always be “RESIDENT LIST”)
 - A2. Census tract number (enter this from the Contact Record form)
 - A2a. Block number (enter this from the Contact Record form)
 - A2b. Household sequence number (enter this from the Contact Record form)
 - A3. Your Interviewer ID number
 - A4. The date, including the month, day and year
 - A5. The language that the interview was conducted in
5. Continue on to the screening questions, starting with Question B1. If there is no one in the household between the ages of 30-79, you will thank the respondent and terminate the call. Fill out the Contact Record for the call, using the appropriate disposition code.

6. If there is a person or persons between the ages of 30-79 living in the household, you will collect information about them using Questions B2-B8. The question by question specifications (or QxQs) for these screening questions are shown in **Appendix C** of this manual.
7. If the primary respondent him/herself is between the ages of 30-79, you will start with him/her. At the end of the screening, the CATI program will inform you whether or not the primary respondent is eligible to participate in the study. If the primary respondent is not eligible to participate, you will read the Ineligible Script that comes up on the CATI screen. If the primary respondent is eligible, you will read the Eligible Script that comes on the CATI screen, and you will try to enroll the respondent in the study, as well as set up an appointment for an In-home interview. This process is covered below in **Section 6.4**.
8. After completing the screening (and enrollment, if necessary) with the primary respondent, you will then ask for the names and ages of the other persons living in the household that are 30-79 years old. If there are other 30-79 year olds, you will ask if that person or persons are available to speak to you, and you will screen them using Questions B2-B8.
9. If the respondent is not 30-79 years old, but someone else is, you will again ask for the person's name and age, and ask if that person or persons are available to speak to you, and you will screen them using Questions B2-B8.
10. You will have to speak to each person 30-79 years old individually to confirm his or her eligibility for the study.
11. If any of the others in the household are eligible for the study, you will try to enroll them and set up an appointment. That process is covered in the next section.

4.8.4 Making the Appointment

Once you have successfully screened a respondent, determined eligibility for the study, and read the respondent the Eligible Script, you will set up an appointment with the respondent for an In-home interview. These appointments must be set up within 14 days of the date you screened the respondent. **The appointments will need to be set up for not later than 1 hour after the respondent's normal waking time.**

When setting up an appointment with a respondent, you will:

- Ask the respondent about their normal waking time, and whether or not their waking time will be any different on the particular date they are scheduled.
- Schedule the appointment for 1 hour after the respondent's normal waking time.
- Ask for directions (from nearest main intersection).
- Ask about the parking situation & any restrictions.
- Ask how the Data Collector will identify the house (house color, etc.).
- Ask about visibility of the house number.
- Ask if there are any pets in the home.
- Allow at least 2 hours for each in-home visit to be completed.

Once the screening is completed and an In-Home visit is scheduled, the Data Collector will record the following information first on the Contact Record and then in the Project Appointment Book using pencil:

- The Respondent ID# (use one ID label)
- Neighborhood (where the visit is to be conducted)
- Telephone number with area code
- Time of visit
- Your Data Collector ID#

The information will then be entered into the ADEPT DMS and a contact record will be generated for the examiner the regarding the appointment has been scheduled with. Rescheduled appointments will be handled by the interviewer/examiner.

Additional Notes on Scheduling Appointments

1. Please let respondent know that a supervisor or another examiner MAY attend the appointment for quality assurance purposes and mark that you have asked this in comments section of Contact Record form.
2. Be sure to verify respondents' addresses and note any changes in the correction box on the right-hand side of the Contact Record form.
3. Any changes or additions made to the information on the Contact Record form needs to be put under the "Corrections" section. This includes work numbers. Also, if you would like certain information to get to the Data Collectors that will be handling the appointment, please put an arrow pointing from the information to the "Instructions" section so that the Data Manager will know to input this into the computer.
4. Try to obtain and document clear and concise directions from respondents including a cross street and how to enter the building; Information such as: "A

tall building” and “A well known building” is not enough information for the field Data Collector.

5. Please tell respondents that a Data Collector will be calling to confirm appointment times. Be sure to ask respondents to give you a specific time and/or window of time that they will be available for the field examiners to call them and confirm their appointment. Please note this in the instructions section of the Contact Record.
6. Make sure there is 2 ½ hours scheduled for each appointment.
7. Appointments should be scheduled end-to-end whenever possible. Try to schedule respondents who have late waking times on days that have an early appointment scheduled
8. There should be no more than 3 appointments a day for any particular Data Collector.
9. Try to be sure that work is divided as evenly as possible across Data Collectors.

4.8.5 Protocol for Answering Machine Messages

While screening and enrolling respondents, you will reach many answering machines. Since our goal is to enlist participation with respondents, we need to carefully manage the number of messages we leave for any one respondent. With that in mind, we will handle answering machine messages like this:

1. You will leave a message after 5 no-message-left calls. The actual message will be:

“Hello. This is (INSERT NAME) from New England Research Institutes. I’m trying to reach (INSERT RESPONDENT’S NAME) about an important study being conducted for the National Institutes of Health.”
2. After the first message has been left for the respondent, wait for 3 more no-message-left calls before you leave another message.
3. Only leave a total of 2 messages. After a second message is left, please put the Contact Record in the Data Collection Supervisor’s bin.

4.8.6 Screening Tips

A couple of things to remember when screening respondents:

1. When screening and enrolling respondents, even if you sense resistance towards an In-home interview, please try to get them to do the screener. The theory behind this is twofold:
 - If you get someone to do the screener, you have the opportunity to build rapport with the respondent. This may calm their fears and make it so they are not resistant to the In-home interview. An example would be to say: “Let me just see if you are eligible first”.
 - Second, if we screen them and find that they are NOT eligible, we can have a disposition of ineligible instead of refusal, which helps to make our response rate more accurate.
2. When screening a participant, please be sure to fully complete the CATI screener and check to see that all information is entered and accepted, even if the person is ineligible. We need this information to show why these respondents are ineligible.

4.8.7 Telephone Interviewer Schedules

Please write your schedule on the BACH calendar as far in advance as possible and try your best to stick to the time you commit. Your work on this project is very important.

4.9 Instructions for Field Screening

4.9.1 Introduction

Field screening is an integral part of the BACH Survey, since not all eligible households on the selected Census blocks will be able to be contacted via telephone. Some households do not have a listed telephone number and others do not have a working telephone in their residences. Because the BACH Survey is a community-based study providing a snapshot of the areas we are interviewing in, we need to do in-person follow-up to make sure that all residents in the selected areas have a chance to participate in the survey.

This chapter will discuss the materials, procedures, and steps associated with the field screening effort.

4.9.2 Definitions

The BACH survey is sampling geographic designations known as **Census blocks**. A Census block is formed by the more or less rectangular boundaries of four streets. Blocks are typically assigned four-digit identification numbers (e.g., 2008). Together with the Census tract identification number (e.g., 0403.00), each block in Boston can be located exactly, including the names of the streets that form its boundaries.

Census data for population characteristics, economic status and living conditions can be obtained for each block. The blocks used for this project have been selected based on their Hispanic and Black populations. The blocks were selected in this manner to ensure that we attain a total sample of 6,000 men and women, evenly distributed across race/ethnic groups.

The field screening effort will consist of screening each **housing unit** needing field follow-up. A housing unit is a house, an apartment, a group of rooms, or a single room that is occupied (or vacant, but intended for occupancy) as separate living quarters. Separate living quarters are those in which the occupants live and eat separately from other persons in the building and which have direct access from outside the building or through a common hall. Housing units include:

Single family homes
Apartments
Condominiums

Two or more family homes
Townhouses
Mobile homes

4.9.3 Field Tracing Materials

The following is a list of the materials that will be issued to you once you have completed training and are ready to go to the field:

1. Contact Record Forms
2. Screener Forms
3. Data Collector Manual
4. Identification
 - a) Name tag
 - b) Signed letter of endorsement
5. Brochures
6. Clip board
7. Pencils/pens
8. Cell phone

4.9.4 The Contact Record Form

When you are ready to begin screening households, you will begin using the Contact Record Form. This form should be filled out even if you do not make contact with a household member.

1. The following information will be provided on the Contact Record Form:
 - Census Tract Number
 - Block Number
 - The housing unit's address
 - The name of the primary respondent for the household. This individual will be the first point of contact for the household. In some cases, the primary respondent will not be available (away for more than 3 months, doesn't live there anymore, etc.), in which case you will **re-appoint** a new primary respondent. This is covered below in *Section 7.5*.
2. Record your attempt number in the first column. The attempt number is the number of times in which you have attempted to contact the primary respondent at this specific household.
3. Record your Data Collector ID number. Each Data Collector records his/her ID number in the space provided.
4. Record the date of this attempt. Include the day, month, and year.

5. Record the day of the week that you attempted to contact an adult household member (for example, “Monday”, “Wednesday”.) **You should NOT return to the same housing unit on the same day of the week for each attempt, unless asked to do so by a household member or instructed to do so by the Data Collection Supervisor.**
6. Record the time of the day that you attempted to contact an adult household member in military time (so 7:00 AM is listed as 07:00, and 3:00 PM is listed as 15:00. **You should NOT return to the housing unit at the same time of the day for each attempt, unless asked to do so by a household member or instructed to by the Data Collection Supervisor.**
7. Record the mode: (T/F/M/X) For the screening effort, you will always enter an “F” here for field.
8. Record the TEMPORARY DISPOSITION code that best describes what happened once you attempted to contact an adult household member. Refer to the list of codes on the Contact Record Form. Choose only one code. If you think your experience includes two or more of these codes, make a note and discuss this with the Data Collection Supervisor.

The following is a list of the Temporary Disposition codes:

TREF = Temporary Refused, this occurs when a reliable adult household member has temporarily refused the interview. For example, the resident is busy at this time but will participate at a later time.

TNOA = Temporary No Answer, this occurs when no one answers the door when you attempt to contact the household, but the housing unit is clearly occupied.

TUNV = Temporary Unavailable, occurs when the resident listed on the Contact Record lives at the housing unit, but was not available at the time of the Data Collector’s attempt to contact him/her.

TMIN = Temporary Minor, this occurs when a minor or unreliable adult (e.g. cognitively impaired, intoxicated, is not a resident of the household, severe mental illness) answers the door. Use your best judgment on these types of situations. If they inform you that a reliable adult is not home, then code this attempt as TMIN.

TACC = Temporarily unable to obtain Access, this occurs when you cannot get into the apartment building and need the superintendent’s permission, the complex gates are locked, etc.

TLAN = Temporary Language, this occurs when the respondent speaks another language that you do not, or the person who answered the door

spoke a language other than English or Spanish. If the initial respondent was speaking Spanish, notify your bilingual partner to complete the screening. If the language was something other than Spanish, try to determine if there is someone else in the household that speaks English or Spanish.

TPAR = Temporary Partial, this occurs when the respondent has partially completed the screening, had/chose to stop but is willing to finish the screening at another time.

TOTH = Temporary Other, this occurs when something other than the above Disposition codes has occurred at a residence.

Here are the Final Disposition codes:

FCOM = Final Completed, this occurs when the screening has been fully completed by the primary or re-appointed primary respondent of the household.

FREF = Final Refusal, this occurs when the primary or re-appointed primary respondent refuses to participate in the study now and in the future. For example, the respondent slams the door in your face or asks to be left alone.

FABN = Final Abandoned, this occurs when the household that you are attempting to enumerate is abandoned or condemned.

FMIN = Final Minor, this occurs when the minor or unreliable adult informs you that an adult will never be home, does not live at this residence or a reliable adult is not available.

FACC = Final inability to gain Access, this occurs when you cannot gain entry into the building at all.

FLAN = Final Language, occurs when the respondent speaks neither English nor Spanish but a different language altogether.

FPAR = Final Partial, occurs when the respondent has partially completed the screening, had/chose to stop and is not willing to complete the screening at another time.

FUNV = Final Unavailable, occurs when the Data Collector has made the maximum number of attempts without contacting the primary or a re-appointed primary respondent.

FOTH = Final Other, occurs when something other than the above Disposition codes has occurred at a residence.

NOTE: Final codes will only be assigned to housing units after review by the Data Collection Supervisor (even FCOM). Enumerators should hold all **non-completed** cases, and review them with the Data Collection Supervisor during the weekly conference. All screenings that you

believe are complete (i.e., with a disposition of TCOM) should be turned in to the Data Collection Supervisor as soon as possible.

9. Record any comments that you might have, explain any unusual circumstances, the reason for the disposition given, additional descriptive notes, etc.
10. The FINAL DISPOSITION will state whether or not there are any eligible participants residing in the household. The FINAL DISPOSITION CODE, # ATTEMPTS, DATE AND MODE, will be determined and recorded by the Data Collection Supervisor. (I HAVE A QUESTION ABOUT THIS. I DON'T SEE A FINAL DISPO ABOVE THAT HAS ELIGIBILITY INFORMATION)

4.9.5 Making Contact with Housing Units

When you make initial contact with a housing unit, you will use the Household Contact Script (the **yellow** script form) to introduce yourself and the BACH survey, as well as to gather information about the **primary respondent** listed on the Contact Record Form. The steps involved in using the Household Contact Script include:

1. Ring the bell or knock on the door of the housing unit. If someone answers the door, use the introductory script on the Household Contact Script to introduce yourself and NERI, asking to speak with the primary respondent listed on the Contact Record Form. Also, you will want your ID to be visible, and have your authorization letter handy to be presented to the resident if needed, as well as the QA sheet to answer any questions the resident might have. Confirm that you are at the right address. Evaluate your next steps depending on who answers the door. Some examples of possible circumstances appear below.

a) ***You try to make contact at the housing unit, but no one answers the door.*** In this situation, you should:

- Complete the Contact Record Form, recording the attempt number, your Data Collector ID#, the date and time of the attempt, "F" for field in the mode column, and TNOA in the DISP column for that attempt.
- Leave a BACH brochure. The brochure should always be left **out of sight**, such as under the door of the housing unit. **Never** leave the brochure on the doorstep, since it can indicate that no one is home. Also, it is illegal for you to leave anything in the mailbox.

b) ***The preferred language of the person who answers the door is not a language you speak.*** If the respondent speaks Spanish and you are not bilingual, inform the respondent, to the best of your ability, that another data collector will return to ask them some questions. If the respondent is speaking a language other than Spanish, try to the best of your ability to determine whether or not there is another person in the household who speaks English or Spanish. Enter the following on the Contact Record Form for this attempt:

- Complete the Contact Record Form, recording the attempt number, your Data Collector ID#, the date and time of the attempt, “F” for field in the mode column, and TLAN in the DISP column for that attempt.
- Record notes in the COMMENTS section of the Contact Record Form that are appropriate for this attempt (such as the need for a bilingual, or to follow up with another member of the household).
- If the respondent does not speak English *or* Spanish, thank them for their time and move to the next housing unit in your assignment.

c) ***The person who answers the door is a minor.*** If the respondent is a child or young teen, ask if there is an adult home. If so, read screening script to available adult. If not, find out when an adult might be available. Record the following for this attempt on the Contact Record Form:

- Complete the Contact Record Form, recording the attempt number, your Data Collector ID#, the date and time of the attempt, “F” for field in the mode column, and TMIN in the DISP column for that attempt.
- If you were able to find out when an adult might be available to answer some questions, record that information in the COMMENTS section.

d) ***The person who answers the door is not a reliable source.*** If the respondent is cognitively impaired, is not a permanent resident or relative, etc., ask to speak with someone else in the household. In addition to the standard information you would fill out on the Contact Record Form (Attempt #, Data Collector ID #, Day, Date, and Time, “F” for field in the

mode column), you would record the code TMIN in the DISP column for this attempt. Record and relevant information in the COMMENTS section.

- e) *The person who answers the door tries to send you away.* Read the introductory script on the Household Script Form. If the respondent refuses to speak with you, explain that the screening is confidential, will only take a few minutes, and that the entire block will be screened. Show them the signed letter of endorsement and brochure. If they still refuse to participate, use the script at D1 of the form to thank them for their time, and enter code TREF in the DISP column on the Contact Record Form. Do NOT fill out the Household Screening Form for this housing unit.
- f) *You try to begin screening housing units in an apartment building, but the building is locked.* For a controlled access situation, there are a couple of things you could try. You could:
- Take down any information you see about who manages the building. Sometimes the management company is listed with a phone number. If you are able to reach someone, explain the study briefly and suggest a face-to-face meeting with building management.
 - If a buzzer is available, use this to persuade one of the residents to participate and let you in.
 - If names are listed next to buzzers or mailboxes, record one or two of these for the next attempt. It is easier to persuade a resident or the management company to let you in if you are able to name one of the residents you are going to try to enumerate.

For this attempt, you would record the standard information on the Contact Record Form (Attempt number, Data Collector Id #, Day, Date, and Time, and “F” for field in the mode column). You would also record TACC in the DISP column. You would also record any information you were able to collect outside the building (management name and phone number, resident names) in the COMMENTS section for this attempt.

NOTE: If you encounter a number of controlled access buildings in the block you are working, you should contact the Data Collection Supervisor as soon as possible. It may be necessary to contact the

local police precinct, community center, etc. to explain the study and its purpose, and the Data Collection Supervisor will help with this.

- g) *You talk someone in the household 18 years or older.* In this situation, you would move on to Question B1 of the Household Contact Script to see if the resident whose name is listed on the Contact Record is available.
2. If the primary respondent is available, you will move to Question C2, reintroduce yourself to the person as necessary, and ask Questions C2a and C2b before moving on to the Household Screener Form, which is discussed in *Section 7.6*.
 3. If the primary resident is NOT available, you will continue to Question B1.a. in order to find out whether the resident is temporarily or permanently unavailable. If the resident is temporarily unavailable, you will explain that a NERI representative will call again at a more convenient time for the primary respondent, end the attempt, and fill out the Contact Record for the housing unit (TUNV is the disposition code you would use).
 4. If the primary resident is UNAVAILABLE FOR 3 MONTHS OR MORE or NO LONGER A RESIDENT OF THIS ADDRESS, you will move to Question C1 to “re-appoint” a new primary respondent for the household. This re-appointed primary will be the person you will attempt to screen in the field.

4.9.6 The Household Screener Form

Once you have administered the script and are speaking with the primary or re-appointed primary, you will move on to the Household Screener Form (the **yellow** screener form). The steps involved in using this form are:

1. Read the full introduction on page 1 of the Household Screener Form. This introduction provides a brief background of the study. The introduction is also a verbal assurance of confidentiality and informed consent, which must be read to every respondent before beginning the interview. Once you have read the introduction to the respondent, initial the form to the right of the introduction text.
2. For each household contacted, the following information must be filled out in Section A of the Household Screener Form (much of the information needed can be obtained from the Contact Record Form). It can be filled out after the screening is complete, so that the respondent is not kept waiting. The information needed in the section includes:

- a) The Participant ID field (Q.A1) will remain **blank** during the field screening process.
 - b) The date, including the month, day and year at Q.A2.
 - c) Your interviewer ID at Q.A3.
 - d) The Household ID from the Contact Record at Q.A4.
 - e) Census Tract Number from the Contact Record at Q.A5.
 - f) Block Number from the Contact Record at Q.A5a.
 - h) The language that the screening was conducted in (this will be filled out at the conclusion of the screening) at Q.A.6.
 - i) Q.A7 will always be “RESIDENT LIST.”
 - j) At Q.A8, you will record who the screening is being conducted with: PRIMARY means the individual listed on the Contact Record Form, RE-APPOINTED PRIMARY means you have determined that the individual listed on the Contact Record Form is unavailable to be screened, and you are completing the screening with another adult resident of the household.
 - k) Q.A9 will always be “IN-PERSON” for the field screening.
3. Proceed to Section B. Q.B1 will establish whether there is anyone in the household who is in the eligible age range for our study. If there are no household members who are 30-79 years old, you will read the script below Q.B1.
 4. Q.B2, B3, and B3a determine whether the primary respondent (or re-appointed primary) is age eligible (Q.B2), whether anyone else in the household is age eligible (Q.B3), and how many others are in the age range (Q.B3a).
 5. At Q.B4, check the appropriate boxes based on the responses to QB2-B3a. Use the instructions in the box below to determine where to go in the screening form.
 6. Section C is for the primary or re-appointed primary respondent if he/she is between the ages of 30 and 79. Ask Q.C1-C6. Q.C7 asks whether or not the respondent is eligible, based on his/her answers to Q.C3-C5. If the respondent is not eligible, specify the reason at Q.C7a.

7. Section D is for all others in the household between the ages of 30 and 79. Ask the primary or re-appointed primary respondent about each using Q.D1-D6. Q.D7 asks whether or not the respondent is eligible, based on his/her answers to Q.D3-D5. If the respondent is not eligible, specify the reason at Q.D7a. Use Q.D8 to move on to the next resident aged 30-79. You should have the same number of Section Ds completed as the respondent stated there were residents at Q.B3a.
8. Section E is blank and should be skipped during the field screening.
9. Section F contains the scripts you will use to end the contact with the primary respondent. The end scripts listed on the final two pages of the Household Screener Form are to be used as follows:
 - a) If the primary respondent is eligible for the study at Q.C7, you will read the F1 script for eligible respondents, and continue through the remainder of the page as directed. Questions F1c-F1d1a are **ONLY** to be asked of female respondents 55 years old or younger. If the primary or re-appointed primary answers YES at Q.F1a, you will go ahead and set up an appointment with the respondent. The process for setting up appointments is covered below in **Section 7.7**.
 - b) If a female respondent 55 years old or younger has given birth in the last 6 months at F1c, **OR** is pregnant beyond the 1st trimester at F1d1, **OR** is having a problem pregnancy at QF1d1a, then read the F2 script labeled **IF PREGNANT** so that the interview appointment can be scheduled for 6-12 months from now.
 - c) If there are **NO** eligible residents living in the housing unit, read the F3 script labeled **IF INELIGIBLE**.
 - d) If the primary or re-appointed primary is not eligible, but another resident is eligible based on the answers to D3-D5, then read the F4 script labeled **IF PERSON SPEAKING TO IS INELIGIBLE, BUT ANOTHER PERSON IN THE HOUSEHOLD IS ELIGIBLE**.
 - e) If the primary or re-appointed primary refuses, but another resident is eligible based on the answers to D3-D5, then read the F5 script labeled **IF PERSON REFUSES, BUT ANOTHER PERSON IN HOUSEHOLD IS ELIGIBLE**. The person would have to refuse **AFTER** giving out information on others in the housing unit in Section D for this script to be appropriate.

- f) If the primary or re-appointed primary refuses to continue during the administration of the Household Screener, read the F6 script labeled IF REFUSAL.
- g) Leave a brochure with the respondent.
- h) When you complete a screening at a housing unit, go back to the Contact Record for that household. Enter the code FCOM in the DISP column for the final attempt you made at that address. Record any questions and/or problems that happened during the screening in the COMMENTS section.
- i) Attach the Contact Record Form on top of the Household Screener Form you used for this household, and return these to the Data Collection Supervisor when you return to NERI.
- j) Move on to the next address in your assignment.

4.9.7 Setting Up Appointments in the Field

Once you have successfully screened a primary or re-appointed primary respondent, determined eligibility for the study, read the respondent the F1 script, and the respondent has agreed to participate, you will set up an appointment with the respondent for an In-home interview. These appointments should be set up roughly 14 days after the date you screened the respondent.

In terms of the appointment itself, the following guidelines need to be followed:

1. **If the respondent is male**, schedule the appointment for 1 hour after the respondent's normal waking time.
2. Record the appointment time and date in the Comments section of the Contact Record. Fill out the Appointment Record Form and hand it to the respondent as a reminder about the appointment.
3. Be sure to verify respondents' addresses and note any changes on the Contact Record.
4. Fill out all items in the Directions section below Q.F1e.
5. Try to obtain and document clear and concise directions from respondents including a cross street and how to enter the building; Information such as: "A tall building" and "A well known building" is not enough information for the field Data Collector.

6. Please let the respondent know that a supervisor or another Field Data Collector MAY attend the appointment for quality assurance purposes. Record that you have asked this in comments section of Contact Record Form.
7. Please tell respondents that a Data Collector will be calling to confirm appointment times. Be sure to ask respondents to give you a specific time and/or window of time that they will be available for the Field Data Collector to call them and confirm their appointment. Please note this in the Comments section of the Household Screener Form.

4.9.8 Screening Individuals in the Field

Once you have successfully screened a primary or re-appointed primary respondent and set up and appointment, but others in the household are not available to be screened, you will bring the Household Screener Form back to NERI and BACH telephone staff will follow up with the others in the household. However, there may be situations in which other age eligible individuals in the household are available and willing to be screened after the primary has been screened. In these situations, you would use the Individual Script Form and the Individual Screener Form (the **green** script and screener) to screen others in the household. If others in the household already know about the study, you can proceed directly to the screener form and fill out a script form later.

4.9.9 The Individual Screening Form

This form is very similar to the Household Screener Form. The form and how it should be administered is covered below.

1. For each individual screened, the following information must be filled out in Section A of the Individual Screener Form (much of the information needed can be obtained from the Contact Record):
 - a) The Participant ID field (Q.A1) will remain **blank** during the field screening process.
 - b) The date, including the month, day and year at Q.A2.
 - c) Your interviewer ID at Q.A3.
 - d) Census Tract Number from the Contact Record at Q.A4.
 - e) Block Number from the Contact Record at Q.A4a.

- f) The language that the interview was conducted in (this will be filled out at the conclusion of the screening) at Q.A.5.
 - g) Q.A6 will always be “IN-PERSON” for the field screening.
2. Read the full introduction on page 1 of the Individual Screener Form. This introduction provides a brief background of the study. The introduction is also a verbal assurance of confidentiality and informed consent, which must be read to every respondent before beginning the interview. Once you have read the introduction to the respondent, initial the form to the right of the introduction text.
 3. Proceed to Section C, and ask Questions C1-C6. Question C7 asks whether or not the respondent is eligible, based on his/her answers to Questions C3-C5. If the respondent is not eligible, specify the reason at Q.C7a.
 4. Section D contains the scripts you will use to end the contact with the primary respondent. The end scripts listed on the final two pages of the Household Screener are to be used as follows:
 - a) If the individual is eligible for the study at Q.C7, you will read the D1 script for eligible respondents, and continue through the remainder of the page as directed. Questions D1c-D1d1a are ONLY to be asked of female respondents 55 years old or younger. If the individual answers YES at Q.D1a, you will go ahead and set up an appointment with the respondent. The process for setting up appointments is covered above in **Section 7.7**.
 - b) If a female respondent 55 years old or younger has given birth in the last 6 months at D1c, OR is pregnant beyond the 1st trimester at D1d1, OR is having a problem pregnancy at QD1d1a, then read the D2 script labeled IF PREGNANT so that the interview appointment can be scheduled for 6-12 months from now.
 - c) If the individual is not eligible based on the answers to Q.C3-C5, read the D3 script labeled IF INELIGIBLE.
 - d) If the primary or re-appointed primary refuses to continue during the administration of the Household Screener, read the D4 script labeled IF REFUSAL.
 - e) Leave a brochure with the respondent.

- f) Attach the Individual Screener Form underneath the Household Screener Form you used for this household, and return these to the Data Collection Supervisor when you return to NERI.
- g) Screen the next individual in the household (if there are any more available), or move on to the next address in your assignment.

4.9.10 Field Safety

NERI takes the safety of its' staff very seriously. Therefore, your safety and the safety of the respondent are of primary importance in every instance. The safety of the data is then secondary.

Working in the Field

1. Dress

- Dress professionally but sensibly. Jeans and sneakers are not professional attire. Wearing expensive jewelry or other flashy items is discouraged. The idea is to dress so that you will not stand out in the area you are working.

2. Arriving and entering the block

- When you arrive at the respondents' home, be alert to your surroundings. Pay attention to the neighborhood and the people in your vicinity. Situations such as a large group of individuals involved in heated discussion should be avoided.
- Be prepared for your workday the day before. Know exactly where you are going. Sometimes it may be necessary to drive around the block a few times to be certain that you understand the neighborhood before you start screening households.
- Make sure you obey the parking regulations of the area you are working.
- Carry only the items essential for doing the screening. Extra items such as a purse or briefcase should be left in the car out of site. This also should be done well before you arrive at the block. Putting a purse or briefcase in your trunk **AFTER** you park your car is simply advertising that something that you feel is valuable is now locked in the trunk of your car.
- Enumerators are being sent out in teams of at least two people for safety reasons. However, if you don't feel safe getting out of your car you should leave the area. Then notify the Data Collection Supervisor as soon as possible and explain the situation.

4.10 The In-Home Interview

4.10.1 Contact Information Record

The Contact Information Record contains the respondent's name, address, and appointment time. The data on the Contact record are obtained by the Data Collectors involved in the telephone or field screening at the time they set up the home visit appointment. The sheet goes to the Research Assistant, who sends out a reminder letter to the respondent. Included with the reminder letter is a nutrition survey. The respondent is asked to complete this survey prior to the scheduled appointment. The Research Assistant then prepares the individual home visit packet. The Contact record is put in the home visit packet and locked in a lateral file until the day of the visit.

The Contact Information record is a means of documenting every attempt to contact the respondent. The day, date and time are all recorded on this sheet, as well as the Data Collector's ID #. The outcome of the visit is recorded under the comment section. Data Collectors must be as specific as possible regarding the outcome of the visit, and what, if any, further follow-up is required.

4.10.2 Informed Consent

All respondents are asked to sign 2 copies of the consent form at the beginning of the home visit. One copy is returned to the Data Collector and the other goes to the respondent. This form describes the physiologic measures to be obtained at the visit and all risks involved in each of these procedures. In signing this form, the respondent acknowledges that he understands what measures will be taken and what, if any, risks will be involved.

4.10.3 Report Result Consent

All of the information obtained at the home visit is strictly confidential. Because these data are confidential, the respondent must sign a release if he wishes us to send the report results to his physician or other health care provider.

4.10.4 Home Visit Questionnaire and Protocol

The Home Visit questionnaire covers items on medication use, psychosocial assessment, tobacco/alcohol consumption, physical activity, cognitive functioning and sociodemographics. All physiologic measurements are recorded here as well.

4.10.5 General Instructions

Some general rules guide Data Collectors in administering questionnaires and are also useful to researchers who must interpret results. They are as follows:

1. Each item on the questionnaire requires some action on the part of the Data Collector. If questions are “not applicable”, they should be marked as such. Any item left blank on the instrument must be justified by the Data Collector. Otherwise, blank items are assumed to have been incorrectly skipped. Blanks and zeros are not used interchangeably; items left blank (or not circled) by Data Collectors appear as blank fields on computerized records.
2. All items in **UPPER CASE TYPE** are instructions or prompts to the Data Collector and should not be read aloud. Items in **lower case type** in both questions and responses should be read aloud to respondents exactly as written. Items in lower case type appearing in parentheses are alternative forms of questions applicable to particular respondents.
3. Probes should always be used where indicated. In cases where information must be recalled by the respondent, probes are used until the respondent indicates that he has no further pertinent information. This is called an exhaustive probe.
4. Any neutral comments or probes used to obtain clearer and fuller responses must be recorded in the questionnaire in parentheses. Some standard probes and their abbreviations are as follows:

Repeat Question	(RQ)
Anything Else	(AE)
Any Other Reasons	(AO)
Which would be closer to the way you feel?	(WHICH CLOSER)
Can you be more specific?	(SPECIFIC)
(Any probe already indicated in the question)	(P)
There are no right or wrong answers	(NO RIGHT OR WRONG)
Any recollection at all?	(ANY REC.)

5. The introduction at the beginning of the instrument should be read to each respondent before conducting the interview.

6. If a respondent refuses to answer a question that begins a skip pattern, then each follow-up question in the skip pattern becomes “not applicable”.
7. Data Collectors should use the left hand margin to report any unusual circumstances about the response. Respondent comments written here should be in quotes and Data Collector comments should be in parentheses.

AS A GENERAL RULE, IF YOU AS THE DATA COLLECTOR EVER HAVE DOUBTS REGARDING THE CATEGORIZATION OF AN ANSWER, AND IF THIS WILL AFFECT WHETHER FOLLOW-UP DATA WILL NEED TO BE OBTAINED, ALWAYS ERR ON THE SIDE OF COLLECTING EXTRA DATA. IT IS EASIER TO DISCARD DATA COLLECTED IN ERROR THAN TO GO BACK AND COLLECT DATA NOT OBTAINED INITIALLY.

4.10.6 Sequence of Events

The home visit takes approximately 60-90 minutes. The sequence of events is as follows:

Introduction

The Data Collector arrives at the respondent's house at the arranged time. After a brief introduction, the Data Collector sits with the respondent and tells him how the next 90 minutes will be spent, mentioning each of the measures to be obtained. At this time, the Data Collector also answers any questions the respondent may have about the study or the visit. The starting time is noted on the instrument.

Pre-questionnaire Preparations

1. Have the respondent gather all medications that they currently have in their home and place them on a table or other surface on which the interview is being conducted.
2. Have the respondent retrieve their reading glasses if needed.
3. Make sure that the respondent is wearing a shirt with loose sleeves. If they aren't wearing a shirt with loose sleeves, ask them to change into one prior to the beginning of the interview.
4. Have the respondent retrieve the nutrition and personality surveys.
5. Have the respondent read the consent form and sign. Add your signature and record the date once he has done so. Leave 1 copy with the respondent.

6. While the respondent is reading the consent form, fill in the respondent's age and year of previous interview on pages _____ of the interview.

4.11 Field Equipment and Field Bag Technique

4.11.1 Field Equipment

Each Data Collector is responsible for keeping his/her field bag stocked with all the supplies necessary to conduct a complete visit.

Bag Inventory

Each Field Bag should be stocked with the following items:

Scale with working batteries (Norelco HS-7)

Height Packet:

Batteries

Paper towels

Set square

Cloth tape roll

Folding wooden rule

Measuring tape

Blood Starter Kit:

Paper towels packed in paper bags (3)

1 roll of 1" paper tape

2 vacutainer holders

2 # 22 needles

2 # 21 needles

1 10 ml Sst

1 biohazard container

1 tourniquet

2 ammonia ampules

4 latex gloves

Blood Packet:

3 10 ml SST

2 10 ml lavender top

2 #22 needles

2 # 21 needles

2 alcohol prep pads

5 gauze squares

1 Band-Aid strip

Handwash Packet:

- Paper bags
- Liquid soap
- Hand lotion (optional)
- Fold-over sandwich size plastic bag
- Paper towels

Outer Pocket:

- Chux/Old newspapers
- ADC Blood Pressure Monitoring System
- Stethoscope

Field tech folder contents:

- Extra questionnaire
- Extra consent forms
- Field tech introduction letter
- “Missed you” notes/ door hangers
- Street map

Field Manual Sections:

- Emergency procedures, incident report forms
- Referrals
- Question by question rationale

Extra pens and pencils

4.11.2 Reordering Supplies

All supply stocks are kept in the collection area. There will be a sheet left in the collection area on which supply requests can be made. It is the Data Collector’s responsibility to make notation on this sheet when an item is running low. It should also be brought to the attention of the Data Collection Supervisor if it is something that is immediately required.

4.11.3 Equipment Description, Calibration, and Maintenance

- Major items are labeled with NERI inventory numbers. A current record of this is kept in the lab book under inventory.
- Every Data Collector is responsible for the day-to-day maintenance of the field bag and its contents. Any broken or malfunctioning equipment should be labeled as such and turned in to the Data Collection Supervisor.
- Equipment has been standardized for use across all projects. The following section lists major equipment and any special instructions in use and maintenance.

4.11.4 BP Sphygmomanometer (ADC)

- Protect this item from breakage by carefully packing it with the gauge into the designated pocket. Roll up cuff and place it in its pocket. Place the blood pressure monitoring system in your field bag in such a way that it won't take the brunt of setting the field bag down repeatedly.
- Observe for the calibration of the manometer. If the needle gauge does not read '0' with the bladder completely deflated deliver it to Data Collection Supervisor.
- Pediatric and large cuffs are easily exchanged with the adult cuff by twisting motion at the joint of the tube leading to the gauge.

4.11.5 The Scale

- A paper towel is placed on the scale first before the respondent steps onto it. The same paper towel is folded dirty side in and used to wipe off the bottom before returning it to the plastic bag.
- The scale requires four 1.5-volt AA batteries. Spares should be carried at all times and batteries should be replaced if the digital read-out begins to fade.
- The scale should be allowed to warm up before use if stored in the car during cold months.
- Every month on the day of project meetings, or as designated by the Data Collection Supervisor, Data Collectors will routinely bring in their scales for calibration. Fifty pounds of weight are placed on the scale and the reading is recorded in the lab book. This should indicate any drift or malfunction.

4.11.6 The Stethoscope

- Clean earpieces with alcohol as needed. If necessary they can be removed from the metal and washed with soapy warm water.
- Check the diaphragm for cracks or dents that could affect sound transmission. Return these to the Data Collection Supervisor for replacement.

4.11.7 Bag Technique

The following guidelines are established to assist you in keeping yourself, the respondent, and the bag contents clean and organized during field visits. These guidelines are intended to ensure that the field experience is consistent regardless, of which Data Collector is involved.

Equipment and Supplies

Before leaving the office to go into the field, check the equipment and supplies you need against the check list in the field manual and be sure all equipment is in proper working order: Any equipment which needs replacement or repair should be labeled and given to the Data Collection Supervisor.

Packing the Bag

You will increase your efficiency and avoid confusion if you are consistent in how you pack your bag. Be sure to include your folder any necessary maps, directions, forms, instruments, labels and other papers you need for the field visit.

Setting Up a Working Area

Once inside the home, choose with the respondent's approval a working area of at least standard table height and large enough for your bag and is consent. This **MUST** be a steady, flat, hard surface - preferably a countertop or table. Avoid upholstered furniture in your work. It is unstable and difficult to clean if soiled and may harbor organisms for transfer.

Before putting your bag down, spread out chux, to cover the working surface. If necessary, put the bag down on a chair until you prepare your field, but never place bag on a chair or table without some protection (newspaper or chux) under it. Chux will protect against spillage and provide a two-way bacteriostatic barrier. Place the unopened bag at one corner, leaving a large working area. Make sure that all corners of the bag are on the chux. It's surprisingly easy to mar a wooden surface.

Removing Your Coat

Fold it so the inside remains inside, and the outside is out- side. Drape over a straight-backed, unupholstered chair, or allow the respondent to take it from you to hang it up.

Seating Arrangements

When possible seat yourself and respondent at right angles to one another across a corner of the table. This provides good support of the respondent's arm for such procedures as BP and venipuncture, while leaving working space on both sides of the arm.

Precautions when Using Bag

1. Sometimes modifications of bag technique are necessary. For instance, you may need to perform venipuncture on someone who needs to lie down on the couch. The same general rules apply in terms of setting up your field, but attention must be paid to protecting the couch and carefully positioning the respondent by placing a towel covered pillow under the arm that will be used.
8. Never leave your bag for more than a few minutes at a time.
9. Keep all compartment zippers closed when not in use.
10. Never leave your bag laying flat on the floor.
11. The inside of the bag and its contents should be considered a clean area. Articles removed from the bag should be placed on a clean surface, preferably on the couch.
12. Technicians should make sure that any articles removed from the bag are clean before being replaced in the bag.

Procedures

1. The bag should be packed so that all the equipment needed for a particular procedure (e.g. height/weight, venipuncture) can easily be removed for each procedure.
2. Remove only the necessary equipment and close the bag.
3. Return the equipment to the bag before moving on the next procedure. This keeps you organized and the field clear of unnecessary clutter.

Handwashing

- Before and after performing technical procedures, handwashing should be done. Ask to use a bathroom sink to wash your hands. Kitchen sinks are acceptable if the respondent prefers.

- It is wise to use the paper towels to turn off the faucet in the home. Bathroom fixtures can be loaded with germs. After thoroughly washing and drying hands, place the used paper towels into the plastic sandwich bag and dispose of it into the paper sandwich bag.

4.12 Taking Physical Measures

4.12.1 Introduction

As part of the Boston Area Community Health Survey, physical measurements (e.g. arm circumference, pulse, blood pressure, height, weight, waist and hip circumference, blood draws etc.) will be taken from respondents who consent to participating in the survey. These measurements will be taken for research purposes, not as diagnostic tests. Taking measurements in a survey situation does not constitute a medical diagnosis of disease, and will be used only as a statistical description of the survey population. This chapter presents information on how to prepare the respondent for the measurements and instructions for carrying out and recording the measurements.

At the baseline visit, the **data collector** will take physical measurements in the following order:

- Height
- Weight
- Waist and hip circumference

At the baseline visit, the **phlebotomist** will take the following physical measurements:

- First pulse
- Arm circumference
- First blood pressure
- Second pulse
- Second blood pressure
- Blood draw

Prior to the start of the study, all data collectors will receive the appropriate training for the physical measures. This training will be provided by NERI's Survey Research Center. Trained NERI-certified phlebotomists will be conducting the blood draws and blood pressures.

The data collectors and phlebotomists will refer to the Physical Measures Form of the Baseline Interview (see Appendix H) to document the measurements taken. More specifically, the data collectors and phlebotomists will document the date and time when the interview began and when the anthropometrics section ended, the clothing worn during the measurements, as well as all the readings for standing height, waist, hip, and weight, etc., taken during the visit. The data collectors and phlebotomists will also use the form to document any problems or any unusual

situations, for example, if the respondent is too ill or obese to obtain the measurements. For detailed instructions on completing Physical Measures Form, see the Q by Q's.

4.12.2 Equipment and Maintenance

Equipment Needed

The **data collector** will need the following instruments to obtain the anthropometrics measurements:

- 1) Height:
 - 25 foot retractable metal tape measure
 - Set square
 - White tape
 - Pencil
 - Brown paper bag

- 2) Weight:
 - Digital scale
 - Protective bag
 - 6 AA Batteries
 - 5 lb weight
 - Paper gowns

- 3) Hip and waist circumference:
 - Measuring tape 200 cm in length

The **phlebotomists** will need the following instruments to obtain the anthropometrics measurements:

- 1) Arm circumference:
 - Measuring tape 200 cm in length

- 2) Pulse:
 - Stopwatch

- 3) Blood pressure:
 - Blood pressure machine
 - Cuffs (adult standard, adult large, adult thigh, pedi-cuff)
 - Stethoscope

- 4) Blood draw:
 - Soap
 - Paper towels packed into baggies
 - Brown paper lunch bags (2 +)

- Starter kit:
 - 1 roll of 1” paper tape
 - 2 vacutainer holders
 - 2 # 21 needles
 - 2 # 20 needles
 - 2 10 ml SST
 - 1 biohazard container
 - 1 latex free tourniquet
 - 2 ammonia ampoules

5) Blood packet:

- Non-latex gloves
- 3 10 ml SST
- 2 # 21 needles
- 2 # 20 needles
- 2 Butterfly needles **if approved to use butterfly needles
- 4 6 ml SST (for use with butterfly blood draw only)
- 2 alcohol pads
- 6 gauze squares
- 3 latex free band-aid strips
- Cooler for transportation
- Gel pad for the cooler
- Hardboard container
- Pre-printed labels

Responsibilities of the Data Collector and Phlebotomist in Maintaining the Equipment

The BACH Survey will provide all measuring devices. It is the data collector’s responsibility to keep the measuring instruments and equipment clean and in good working condition. Some devices are not designed for the type of portable use to which they will be subjected, and therefore must be handled with great care. Any problems with the instruments should be reported immediately to the field supervisor. The following section describes each measuring device and explains how to calibrate it if calibration is necessary.

Description of the Tape Measure

A 200 cm fabric tape measure will be used for hip, waist, arm and calf circumference measurements. Once per week, check the tape for any damage that might affect its reliability, such as tears, knots, etc.

The tape measure used in this study for height will be a folding wooden ruler with a metal extension. Once per week, check the ruler for any damage that might affect its reliability, such as cracks, numbers worn away, etc.

Description and Calibration of the Scale

The scale is a portable digital scale, which runs on an AC current adaptor or 6 AA batteries.

Standardizing the digital scale: The scale will need to be calibrated at the beginning of the study and during the course of the study once per week. The data collector will perform the calibration himself or herself. This will be done by weighing an assistant (or the data collector can weigh him/herself) each week without and then with a standard 5 lb weight. The standardization should be done at New England Research Institutes at the beginning of each week. The following are the steps for the standardization procedure:

1. Plug scale in by inserting the black AC adaptor jack into the jack holder on the left side of the scale display box. Plug the AC adaptor into the AC wall outlet. Place the display box on a table or other flat surface. If there is no appropriate AC power source, 6 AA batteries may be used. The batteries are inserted at the lower right corner of the display box. Turn the small white screw counterclockwise until the entire tray can slide out, place the 6 AA batteries as indicated on the bottom of the tray, replace the tray in the display box, and tighten the white screw by turning it clockwise until it tightens.
2. Turn scale on by pressing the ON/ZERO button located at the top right corner of the display box. 88888 will flash momentarily and then the display will register 0.0 and the black arrow will indicate CENTER ZERO.
3. Make sure that the scale is set to read in pounds. To do this, push the kg/lb indicator at the bottom right of the display box until the black arrow in the display window is pointing to the lb.
4. Place the scale on the floor on a flat surface. Avoid carpeted floors or uneven surfaces with bumps or depressions if possible. If a wooden or linoleum or other hard surface is available, it should be used.
5. At this point, the assistant should be asked to step up on the scale WITHOUT holding the standard weight.
6. The scale will begin to display the weight. When it has displayed the final weight, the black arrow will begin to indicate the WEIGHT LOCK. Record this measurement to the nearest 0.2lb, under “weight” in the Scale Calibration Log. The assistant should step off the scale.
7. Next, the assistant should step on the scale holding the 5 lb weight. When the scale displays the final weight, the will begin to blink the figure to the nearest 0.2lb.
8. Record this measurement, to the nearest 0.2 lb, under “weight with standard weight” in the Scale Calibration Log. If there is a discrepancy of greater or less

than 0.2 lb between the weight with the 5 lb weight and without it, the discrepancy should be reported to the Data Collector Supervisor at once.

9. Turn the scale off using the OFF button in the right middle of the display box. If the scale is not turned off after 20 minutes, it will be automatically turned off to preserve battery life.

Maintenance of the Scale

- Replace the batteries when the digital display reads “Lo” and the black arrow is on in the battery replacement warning mark “+”
- Clean the scale with alcohol pad following each use.
- Store the scale in the bag provided.

4.12.3 General Guidelines for Reading and Recording Measurements

Taking anthropometric measurements can seem deceptively simple and are often done poorly with errors occurring frequently. At all times, the data collector should minimize any measuring errors due to measuring techniques. Presented below are general guidelines for reading and recording measurements in order to help ensure a high degree of accuracy and reproducible results.

Reading the Measurements

The following are guidelines for reading the tape measure.

The reading area of the tape/tape measure is in numbered metric units. The reading area is reproduced below in Figure 3a. Each centimeter (cm) is divided into ten gradations, [i.e., small vertical lines that are 0.1 cm or 1 millimeter (mm) apart]. The line at 0.5 cm is slightly longer (Figure 3a). The tape has both inches and centimeters. All measurements should be taken in centimeters. Be careful to read the tape measure from right to left. For example (Figure 3a), the reading in the illustration below is 26.5 cm, NOT 27.5 cm.

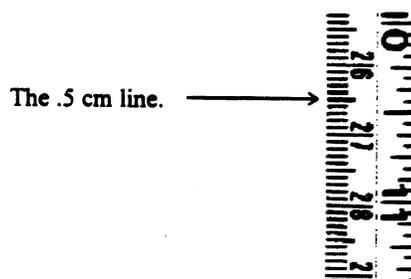


Figure 3a. The 0.5 cm Line

It is very important that you keep the Physical Measures Form next to you during the measurement so that you can record the measurement immediately after you have read it. A delay in recording the measurements increases the chance of error. The following section describes the procedure for recording measurements.

Recording Numbers and Making Corrections

- Place numbers in appropriate boxes for the measurements. Be careful to make clear and neat numbers the same way every time. Make sure that numbers are written inside the boundaries of the box on the Physical Measures Form.
- Height, weight, waist and hip circumference will be recorded in the form of a 3-digit number, followed by a decimal point, then a one-unit digit at the end. The decimal point is indicated on the form already.
- Systolic and diastolic blood pressures will be recorded in the form of a three-digit number. Pulse will also be recorded as a three-digit number.
- Place a leading zero to the left of all two-digit numbers. Example: Weight 49.2 kg would be recorded as 049.2 in the boxes.
- Fill in all boxes. Make sure to put numbers, including zeros, in the correct boxes. The correct way of recording a weight that is 45 kg is 045.0.
- If a measurement cannot be obtained for any reason, do not leave the boxes blank. Record this as either a “refusal” (-7) or a “don’t know” (-8).
- Use black pen only. If you make a mistake, cross it out using one horizontal line through the ENTIRE number. Initial and date it after you have crossed it out. Then, rewrite the measurement below the boxes.

4.12.4 Pregnancy Protocol

At the beginning of the interview, data collectors will ask all women whether or not they are pregnant and if so what is their gestational age. Gestational age is defined as the number of completed weeks and days of pregnancy. It is important to identify all pregnant women because her weight, waist and hip circumference and blood draw protocols differ slightly from the rest of the respondents. Even if you think that the respondent is definitely pregnant, make sure to ask whether or not they are anyway. Record the respondent’s response in the Physical Measures Form.

Pregnant women should only have the following measurements taken if they are in their first trimester of pregnancy; weight, waist and hip circumference and blood draw. If the respondent is in their second or third trimester, they will not have their study visit, anthropometrics, and blood draw until they are at least six months postpartum. [Note: the household and individual screener

asks about pregnancy and postpones interviews with women who are past the first trimester or less than six months postpartum. Nonetheless, ask the respondent the pregnancy questions and do not continue with the anthropometric measures and blood draw if they are in their second or third trimester of pregnancy or less than six months postpartum.] Refer to the notices regarding the pregnancy protocol at the end of the instructions for each measurement.

Trimesters:

First Trimester = 1 - 12 weeks

Second Trimester = 13 - 26 weeks

Third Trimester = 27 – 41+ weeks

4.12.5 Data Collectors Physical Measurements Manual

This section contains information about the measurements that the Data Collectors will have to take, including the height, weight, and hip and waist circumference.

Preparing the Respondent for Measurements

The data collector should explain to the participant each of the measurements to be taken and answer any questions the respondent may have. At all times, the data collector will explain to the respondent exactly what he/she is doing and show each measuring instrument to the respondent before proceeding with the measurements.

The respondent should have been informed in advance to wear comfortable, light loose-fitting clothes for the interview. This information is included in the reminder letter that the respondent should have received. If not, the respondent can be given the choice to change into his or her own loose-fitting clothing or the paper gown that the data collector has with them.

Questions that the Respondent Might Have

Q: Why are you checking my weight in kilograms?

A: A kilogram is a metric measurement of weight. A kilogram equals 2.2 pounds. For this study, we weigh everyone in kilograms.

Q: What if I'm too heavy for your scale?

A: Our scale goes up to 440 pounds. If you think your weight is close to that, we don't have to weigh you. You can tell me your most recent weight in pounds, then it will be converted to kilograms for purposes of the study.

Q: Why are you measuring my height, waist, and hip circumference in centimeters?

A: A centimeter is a metric measurement of length. A centimeter equals 0.4 inches. An inch equals 2.54 centimeters. For this study, we are doing everyone's measurements in centimeters.

Q: Why are you taking my measurements twice?

A: We are doing everyone's measurements twice to make certain the measurements are accurate.

Measuring Height

a. Preparation

1. Explain the procedure to the respondent.
2. The respondent should remove his/her shoes (socks are okay).
3. Ask the respondent to stand with her/his feet (heels together) flat on the floor, with heels, hips, back and head directly against the wall.
4. Ask the respondent to tilt their head forward, so that you can place a strip of tape on the wall in a vertical position over the area where height will be marked. (Do not press tape tightly to wall to avoid harming paint or wallpaper during the removal of the tape.)
5. Once the tape is in place, ask the respondent to look straight ahead with his/her head against the wall.
6. Recheck to make sure heels and hips are against the wall.

b. Measurement

1. Rest the wooden base of the set square against the wall above the respondent's head with the right angle toward the floor.
2. Ask the respondent to take a deep breath and stand as tall as possible. Slide the set square slowly down until it touches the top of the respondent's scalp, carefully centered with the respondent's nose. Make sure that the wooden edge is flat and held steadily against the wall. (The data collector may need to stand on a chair if the respondent is taller than they are.)
3. Mark the tape exactly where the corner of the right angle touches the tape. Be sure to mark the tape from underneath the wood of the set square, pencil angled upward. The respondent may relax and resume normal breathing.
4. Remove the square and ask the respondent to step away.
5. Open the tape measure and make sure the black button is locked in the "free" position.
6. Secure the tape measure against the wall by pressing it with your foot at the "0" end with the metal tip.

7. Keeping the ruler flat against the wall, read the measurement on the ruler closest to the mark on the tape, and record to the nearest 0.1 cm. You may lock the black button in stop to prevent the measuring tape from retracting during the measurement. Read the tape measure from right to left. You will see 1-9 cm
8. repeated over and over on the tape measure, to determine the number that should precede this number, refer to the cm marking in **RED** that is to the **RIGHT** of the actual cm marking. **For the majority of the respondents, just below the ten centimeter gradients, you will see “1M”. This means you must add 100 centimeters to the reading. If you see “2M” just below the centimeter gradient, you must add 200 centimeters to the reading.** ten For example, if you determine that the mark on the tape is at 2.5 cm to the left of the 60 cm marker in red and 1M is just below this, the reading would be 162.5 cm.
9. If it is necessary, use a straight chair or stool to approach eye level to see the mark on the tape.
10. Record the height in centimeters in the Physical Measures Form, and remove the tape. Position the black button on the tape measure to “free” and the tape will retract on its own. Check the recorded measurement for legibility.
11. Make note of anything that may affect the respondent’s height measurement, such as: braids, hair, refusal to take off a cap, etc.
12. Discard the tape into the brown paper bag.

c. Exceptions

If for any reason the respondent cannot stand properly for measurement (e.g. Kyphosis, wheelchair-bound, unsteadiness without a cane, etc.), accept the respondent’s stated measurement and record it in feet and inches. Record the measurement in the comments section of the Physical Measures Form that the measurement is self-reported. Mark exactly who reported the measurement (whether it was the respondent or someone else). If someone other than the respondent, record that person’s relationship to the respondent. Do not record anything in the usual space for the height measurement.

PREGNANCY PROTOCOL: There are no modifications to the height measurement for pregnant women.

Measuring Weight

a. Instructions for Measuring Weight

1. Plug scale in by inserting the black AC adaptor jack into the jack holder on the left side of the scale display box. Plug the AC adaptor into the AC wall outlet,

- preferably not near a television or radio as this may interfere with the reading. If there is no appropriate AC power source, 6 AA batteries may be used. The batteries are inserted at the lower right corner of the display box. Turn the small white screw counterclockwise until the entire tray slides out, place the 6 AA
2. batteries as indicated on the bottom of the tray, replace the tray in the display box, and turn the screw clockwise until it tightens.
 3. Place the display box on a table or other flat surface. Turn scale on by pressing the ON/ZERO button located at the top right corner of the display box. 88888 will flash momentarily and then the display will register 0.0 and the black arrow will indicate CENTER ZERO.
 4. Make sure that the scale is set to read in kilograms. To do this, push the kg/lb indicator at the bottom right of the display box until the black arrow in the display window is pointing to the kg.
 5. Place the scale on the floor on a flat surface. Avoid carpeted floors or surfaces with bumps or depressions if possible. If a wooden or linoleum or other hard surface is available, it should be used.
 6. Make sure that any heavy outer clothing and shoes are removed.
 7. At this point, the respondent should be asked to step up on the scale with weight centered. He/she should be asked to stand as still as possible, facing forward with his/her arms at his/her sides and looking straight ahead.
 8. The scale will begin to display the weight. When it has displayed the final weight, the black arrow will indicate WEIGHT LOCK at the upper left corner of the display window.
 9. Record the actual weight in kg to the nearest 0.1 kg under “weight” in the Physical Measures Form. Check the recorded measurement for legibility.
 10. If you attempt to weigh a respondent who weighs more than 440 lbs, a series of dashes ----- will appear in the display. The scales are calibrated for up to 440 pounds. If the respondent says that he/she is too heavy for the scale, ask the respondent for a self-reported weight. Record the measurement in the comments section of the Physical Measures Form that the measurement is self-reported. Mark exactly who reported the measurement (whether it was the respondent, or someone else (record that person’s relationship to the respondent)). Do not record anything in the usual space for the weight measurement. If window.
 11. Be sure to note in Physical Measurements Form any problems that might affect the weight measurement (e.g., respondent is missing a limb, wearing a prosthesis at the time of the measurement, too heavy for the scale, unable to balance well, etc.).

PREGNANCY PROTOCOL: If the pregnant respondent reports at the beginning of the interview that she is in her first trimester (1 – 12 weeks) of pregnancy measure her weight otherwise do not.

Measuring Waist and Hip Circumference

A flexible measuring tape will be used to obtain waist and hip circumferences. Measurements will be made directly over light clothing.

a. Instructions for Measuring Waist Circumference

All respondents are to be asked to have this measurement taken over light clothing. If they refuse, the measurement may be taken over their existing clothing, please note the characteristics of the clothing, for example, whether it was a heavy pair of pants, a girdle, etc., and note it in the Physical Measures Form. The data collector will need to record which method was used in the Physical Measures Form.

Over Light Clothing: The respondent should be asked to wear the lightest clothing possible with no restrictive undergarments (i.e. girdle, control top pantyhose, etc.) and should be instructed to remove any belts and to lower thick waistbands on clothing so that the tape may be correctly positioned.

Face the respondent and ask him/her to stand erect, with the abdomen relaxed, arms at sides and feet together.

Place the “0” end of the measuring tape at the level of the natural waist, which is the narrowest part of the torso, as seen from the anterior aspect (Note that this is normally above the level of the belly button or navel, see Figure 4a). Ask the respondent to firmly place a finger on that end of the measuring tape to keep it in place and turn slowly so that the tape is wrapping around the respondent. If the respondent cannot hold the tape, the data collector should try to hold it in place him/ herself or use a piece of non-adhesive tape to hold the end measuring tape in place. Be sure that the tape is positioned in a horizontal plane and that it is not twisted. In some obese respondents, it may be difficult to identify a waist narrowing. In such cases, the smallest horizontal circumference should be measured in the area between the ribs and the iliac crest (the outer, upper thigh). If it becomes too awkward for the respondent to “turn”, you may circle around them instead. However, their waist must remain at your eye level to assure that the tape is positioned in a horizontal plane.)

The measurement should be taken at the end of a normal expiration, with the tape fitting snugly without compressing the skin.

Make sure that the zero end of the tape is below the measurement value.

Record the actual measurement to the nearest 0.1cm. If the reading falls between the two lines, record the measurement of the LOWER number. Check the recorded measurement for legibility.

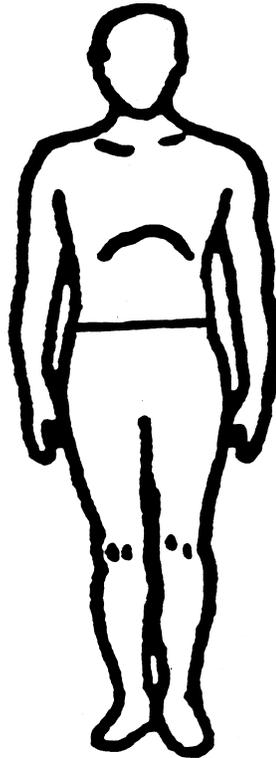


Figure 4a. Measuring Tape Position for Waist Circumference

Instructions for Measuring Hip Circumference

All respondents are to be asked to have this measurement taken over light clothing. If they refuse this method, the measurement may be taken over the respondent's existing clothing. The data collector must record which method was used in Physical Measures Form.

Explain the procedure to the respondent. Ask the respondent to remove the clothing necessary to complete the measure in light clothing only. Every effort should be made to protect the respondent's sense of dignity.

Ask the respondent to stand straight with arms at sides and feet together. If the respondent is wearing light clothing, the folds of his/her clothing should be held close to the skin.

Squat at the side of the respondent so that the level of maximum extension of the buttocks can be seen.

Place the tape around the location of the largest circumference of the hips. The tape should be placed in a horizontal plane without compressing the skin (see Figure 4b). Ask the respondent to firmly place a finger on that “0” end of the measuring tape to keep it in place and to turn slowly so that the tape is wrapping around the respondent. If the respondent cannot hold the tape, the data collector should try to hold it in place him/herself or use a piece of non-adhesive tape to hold the end measuring tape in place. Once again, be sure that the tape is positioned in a horizontal plane and that it is not twisted. If it becomes too awkward for the respondent to “turn”, you may circle around them instead. However, their hip must remain at your eye level to assure that the tape is positioned in a horizontal plane.

Make sure that the zero end of the tape is below the measurement value.

Keep the tape in contact with the respondent’s skin, without indenting the soft tissues.

When you are satisfied with the position of the tape, read the actual hip circumference measurement to the nearest 0.1 cm. If the reading falls between the two lines, record the measurement of the LOWER number.

Immediately record the measurement to the nearest 0.1 cm in Physical Measures Form. Check the recorded measurement for legibility.

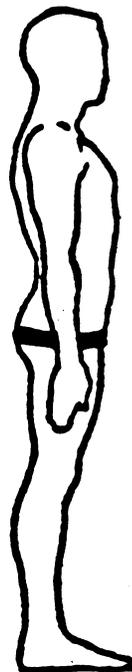


Figure 4b. Measuring Tape Position for Hip Circumference

PREGNANCY PROTOCOL: If the pregnant respondent reports at the beginning of the interview that she is in her first trimester (1 – 12 weeks) of pregnancy, measure her waist and hip circumference otherwise do not.

4.12.6 Phlebotomists Physical Measurements Manual

This section contains information about the measurements that the phlebotomists will have to administer, including the blood pressures, the pulses, and the blood draw. The data collector should not be conducting any of these measurements.

Preparing the Respondent for Measurements

The phlebotomists should explain each of the measurements to be taken and answer any questions the respondent may have. At all times, the phlebotomist will explain to the respondent exactly what he/she is doing and show each measuring instrument to the respondent before proceeding with the measurements.

When the appointment was arranged, the respondent should have been informed in advance to wear comfortable, light loose-fitting clothes at the time of the interview. This information is included in the reminder letter that the respondent should have received. If not, the respondent can be given the choice to change if necessary into his or her own loose-fitting clothing.

Questions that the Respondent Might Have

a. Pulse

Q: Why are you taking my pulse?

A: Your pulse rate tells us how many times a minute your heart is beating and helps give a general idea of how your heart is working.

Q: Will it hurt?

A: No, but you should try to stay as still as possible when I'm taking your pulse.

Q: Why are you checking it twice?

A: We check it twice to make sure the readings are correct.

b. Arm Circumference

Q: Why are you measuring my arm circumference?

A: We measure your arm circumference to find the correct blood pressure cuff size for an accurate measurement of your blood pressure.

c. Blood Pressures

Q: What are blood pressures used for?

A: Blood pressures are used to determine the blood flow in your arteries.

d. Blood Draw

Q: Why are you drawing my blood?

A: If respondent is male: We are drawing your blood to obtain your cholesterol and triglyceride levels, we also measure testosterone and other male hormones. If you have consented, we will also be storing your blood for tests at a later date. If respondent is female: If you have consented, we will be storing your blood for tests at a later date. The maximum amount of blood drawn will be 2 tubes, or about 4 teaspoons.

Q: Will it hurt?

A: You may feel a temporary slight pain when the needle is inserted in the vein. In addition, you may develop a bruise at the site. If I am unable to get your blood on the first try, I'll ask your permission to try once more to get your blood. If I can't get your blood after the second try, which is rare, I'll ask your permission to have another blood draw technician come back at a time that is convenient for you to obtain your blood sample.

Q: What type of training have you had?

A: I have had specialized classroom and practice training on blood drawing and am a certified phlebotomist. I have done blood draws for_____. (Time)

Q: Can I get AIDS from having my blood drawn?

A: No, you cannot get AIDS from having your blood drawn because each time I draw someone's blood, I use new gloves and a new sterile needle that is used for your blood draw only. I put the needle in a used needle box and take it with me when I leave for disposal.

Q: What if my results are abnormal?

A: We will be contacting you in a few months, by telephone if a result is not within normal range. We will also send a letter with your lab results to your home and encourage you to discuss them with your doctor. If you have agreed in writing, we will also send a copy of the letter directly to your doctor.

Measuring Pulse

The respondent should have been seated quietly for a two-minute period. Explain the procedure to the respondent.

1. If there are abrasions, open wounds, or scabs on the arm, gloves should be worn during the examination of the arm for the pulse measurements.
2. Locate the brachial and radial pulse points in the right arm.
3. With the right palm of the hand of the respondent turned upward, the data collector should place two fingers of their own hand in the outer part of the crease of the wrist. Press firmly. You will feel a pulsating motion under your fingers. This is the radial pulse.

4. You should ready the stopwatch by pressing the “mode” button located at the center top of the stopwatch until it reads “0:00 00. Then press the “start/stop” button located on the top right of the stopwatch and begin to count the number of pulsations. When the stopwatch reads 0:30 press the “start/stop” button again and stop counting the pulsations at this point. Record the first measurement under “First Pulse” in the Physical Measures Form.
5. Go on to the first blood pressure reading, then wait two minutes and then repeat the pulse measure and record the second measurements under “Second Pulse” in the Physical Measures Form. Check the recorded measurement for legibility.

Note: Both pulse and blood pressure will be measured in the same arm. The right arm will always be used unless specific conditions prohibit its use. Use the following guidelines:

- If the radial pulse cannot be felt in the right arm proceed with the left arm.
- If the radial pulse cannot be felt in either arm, the pulse procedure should be terminated and this noted in Physical Measures Form, on the protocol.

PREGNANCY PROTOCOL: There are no modifications to the pulse measurement for pregnant women.

Measuring Arm Circumference for Blood Pressure Measurement

In order to take the blood pressures, you must determine the cuff size you will need. This is done by measuring the respondent’s arm circumference. It is very important that the cuff size be determined accurately because a poor fit can lead to falsely high or low readings.

Cuff size indicates the width of the cuff’s bladder, not the length of the cuff. The standard cuff will fit the average adult arm and calf. Although a descriptive cuff size may appear on the cuff – such as, “pediatric” or “large adult”- proper cuff size is based on the arm circumference, not on a person’s age. The correct size cuff is being used when the straight-line markings on the adjoining surfaces of the cuff overlap. The cuff is an improper size if the straight line markings of the cuff overreach (the cuff is too big) or just barely meet (it is too small). The cuff should NOT squeeze tightly around the arm or calf to make it fit.

The most accurate method to select cuff size for the **arm** is as follows:

1. Respondents should bare their right arm. If a rolled sleeve is tight, the respondent will need to change shirts. This should be noted at the beginning of the interview before everyone has been seated. If the respondent can easily slip their arm out of their shirt, without taking off their shirt, they may choose to do so, rather than put on the paper gown. Make sure that the respondent does not feel cold.
2. The arm should be supported at heart level on a surface such as a kitchen table or propped up by the data collector. Heart level is considered to be the level of the

4th intercostal space at the sternum. The arm should be slightly flexed with the palm facing upward. Find the mid-point of the upper arm between the elbow and shoulder.

3. Using the measuring tape, place the end of the tape at the widest point of the upper arm, ask the respondent to firmly place a finger on that end of the measuring tape to keep it in place. If the respondent cannot hold the tape, the data collectors should try to hold it in place him or herself or use a piece of non-adhesive tape to hold the end measuring tape in place. Slowly wrap the tape around the respondent's arm until it meets the end, where the respondent's finger is. Be sure that the tape is positioned in a horizontal plane and that it is not twisted. Record the measurement. Check the recorded measurement for legibility. This measurement will be used to select the cuff size for the blood pressure measurement.
4. Refer to the laminated card provided to determine appropriate cuff based on circumference obtained.

The following table shows the cuff sizes and the corresponding arm measurements that would be appropriate for each. This measurement technique does not have to be used routinely if the data collector is certain of cuff size using the line markings on the cuff itself.

<u>Arm and Calf Circumference</u>	<u>Cuff Name</u>
18-26 cm	Pediatric
25-40 cm	Adult
40-50.8 cm	Large Adult
50.8-61.5 cm	Thigh

Measuring Blood Pressure Using Aneroid Cuff and a Stethoscope

*****ALL BLOOD PRESSURES MUST BE COMPLETED BEFORE THE PHLEBOTOMY.**

a. Examining the Arm

The blood pressure measurements should be taken from the right arm, if possible. If the respondent indicates any reason why the blood pressure procedure should not be done on the right arm, use the left. If there is a problem with both arms, do not take the blood pressure and note this in Physical Measures Form.

The process of taking blood pressure measurements begins with observing/examining the respondent's arm while talking to him/her (see box).

Do NOTE: Do not measure the respondent's blood pressure in the right arm if:

- The respondent tells you that they have an A.V. fistula or fistula for dialysis in the right arm, even if the fistula is not being used at the present time. A.V. fistula stands for arteriovenous fistula. An AV fistula involves the surgical joining of an artery and vein under the skin. The increased blood volume stretches the elastic vein to allow a larger volume of blood flow. Turbulent blood flow over the AV fistula is commonly felt and termed a thrill.



- You observe a large, raised prominent vessel in the arm that when you palpated emits a buzzing sensation.
- The respondent tells you that they have had a mastectomy or lumpectomy with axillary node dissection on the right breast/axilla.
 - You notice the skin on the right arm is taut, shiny, or if the arm is noticeably larger than the left.
 - The respondent tells you that they have right-sided weakness from a CVA (stroke).

If any of these situations occur, examine the left arm, under the same precautions as those for the right. Do not take the respondent's blood pressure if any condition is present in both arms. Note this in Physical Measures Form of the protocol.

b. Obtaining the Blood Pressure Measurements

1. Ask the respondent Questions A6-A7 on the Physical Measures Form before proceeding to the blood pressure readings. If the respondent reports any unusual activity not captured in these questions, record this in the "Comments" section of the Physical Measures Form, Question E2. (Note: do not ask the respondent to refrain from smoking as it is felt to be too much of a burden). Explain to the respondent that his/her pressure will be checked twice as a matter of routine and that our study does it in a manner that they may not be familiar with, but that it is very accurate. Ask that s/he keep her/his legs uncrossed while their BP is being measured and to refrain from talking during the reading.

2. The respondent should sit in a relaxed position for 2 minutes before the reading. If the respondent gets out of the chair before the 2 minutes have passed, start over when s/he sits down again. It helps to let the respondent know this so they can cooperate.
3. If the respondent cannot sit as prescribed, measure BP how s/he is most comfortable and record the position next to the reading (e.g. lying down, standing).
4. Select the appropriate cuff size based on the arm circumference measurement you took earlier.
5. Wrap the cuff around the respondent's bare arm so that the cuff brachial pulse mark line is over the brachial pulse. The lower edge of the cuff, with its tubing connections, should be placed about one inch above the natural crease at the inner edge of the elbow. The respondent's palm should be facing up and resting on a chair arm or table. Next, find the radial wrist pulse, close the valve, and squeeze the bulb rapidly to inflate the bladder. As the bladder pressure rises above the systolic pressure, the cuff squeezes the artery and stops the flow of blood in the arm. When the blood is not flowing, you will no longer feel the pulse. Read the gauge when the wrist pulse disappears. This reading is your estimate of the systolic pressure.
6. As soon as you have read the gauge, open the valve and let all of the air out of the bladder. Wait approximately 1 minute before performing the blood pressure measurement.
7. Position the project provided stethoscope ear pieces facing forward in your ears. Position the diaphragm over the brachial artery you have palpated so that it rests lightly on the skin, not enough to obliterate the pulse. Inflate the bladder to 30 mm above the estimate of the systolic pressure.
8. Let the air out of the bladder slowly and listen for the first rhythmic pulse sound in sequence while reading the gauge. The reading on the gauge when you first hear a pulse is the systolic pressure.
9. Keep letting air out slowly. The reading when you hear the very last rhythmic pulse sound is the diastolic pressure.
10. Record the first measurement under the "First Systolic Blood Pressure" and "First Diastolic Blood Pressure" on the Physical Measures Form.
11. Proceed with the second pulse measurement after waiting two minutes and then take the second blood pressure measurement. Record the measurement under the "Second Systolic Blood Pressure" and "Second Diastolic Blood Pressure" on the Physical Measures Form. Check the recorded measurement for legibility.

- Record the second blood pressure reading on the respondent's blood pressure card (Figure 6a) and check the appropriate corresponding category box. At the conclusion of the interview, give this card to the respondent to keep. The guidelines are taken from the National Heart, Lung and Blood Institute of the National Institutes of Health.

FIGURE 6a

NEW ENGLAND RESEARCH INSTITUTES

Blood Pressure: _____/_____ Date: _____/_____/_____

_____ Below 140/90 -- Annual recheck recommended.

_____ 140/90 or above: Please notify your health care provider.

_____ 200/115 or above: A physician should check you blood pressure today or tomorrow.

The American Heart Association recommends that a physician should recheck any blood pressure above 140/90.

- Avoid labeling someone's blood pressure as "normal, high or low." It is best to say, "ACCORDING TO AMERICAN HEART ASSOCIATION GUIDELINES IT IS BEST TO SEE A BLOOD PRESSURE BELOW 140/90." Remember - we do not diagnose, and under no circumstances do we tell someone they have high blood pressure or "hypertension." That condition cannot be determined by an isolated reading. If a referral is recommended by our guidelines, check the appropriate box and stress the importance of a follow-up re-check.

PREGNANCY PROTOCOL: There are no modifications to the blood pressure measurement for pregnant women.

Drawing Blood

*****BLOOD DRAW SHOULD BE DONE ONLY AFTER ALL BLOOD PRESSURE MEASURES ARE COMPLETED**

To review, the BACH Survey is drawing blood for 2 purposes: one is to analyze the hormone, cholesterol, and lipid levels of the male respondents; the other is to archive blood samples of both male and female respondents for potential future analyses. Approximately 10 ml of each consenting male respondent's blood will be used for the hormone, cholesterol, and lipids tests

and 10 ml will be archived. All 20 ml of each consenting female respondent's blood will be archived.

1. Before you begin, refer to the consent form that the respondent signed at the beginning of the interview to verify that the respondent has consented to the blood draw.
2. Next, refer to the laminated card, Figures 6b and 6c, to determine the appropriate tube(s) to draw.
3. Do the following blood draws according to what the respondent consented to:
If the respondent is MALE and consented to the question on page 2 regarding archival, then draw the following tubes:

(2) 10 ml SST or (3) 6 ml SST if using butterfly needle

If the respondent is MALE and did NOT consent to the question on page 2 regarding archival, then draw the following tube:

(1) 10ml SST or (2) 6 ml SST if using butterfly needle (the second 6 ml SST should be 2/3 full)

If the respondent is FEMALE and consented to the question on page 2 regarding archival, then draw the following tubes:

(2) 10 ml SST or (3) 6 ml SST

If the respondent is FEMALE and did NOT consent to the question on page 2 regarding archival, then do NOT draw blood.

a. Selecting the Vein

1. The data collectors should have asked the respondent ahead of time if they are taking any blood thinning medication or if they have bleeding tendencies or hemophilia. If the respondent does take blood thinning medication or they do have bleeding tendencies or hemophilia, DO NOT draw their blood. This information is captured in Questions A8-A9 in the Physical Measures Form.
2. The Cephalic, Median Cubital and Basilic vein in the Antecubital fossa are the only veins to be used. These veins are readily accessible for venipuncture because of their size and superficial location. The muscular and connective tissue in this area act as natural supports to prevent rolling.
3. Seat the respondent beside a table or a hard surface that they can lay their arm on, with his/her bare arm positioned palm up on the hard surface.
4. Inspect and select arm with the most accessible vein. The respondent's past experience may help in this selection.

5. Apply tourniquet above respondent's elbow or approximately 1½" above the intended site. The tourniquet must be applied tightly enough to compress the vein but not the deeper brachial artery.
6. Ask respondent to open and close his fist; this action pumps blood into the vein.
7. Locate the vein by palpation. If in doubt about the vein, examine the other arm.
8. Obese people may have too much fatty tissue over the veins to see them easily and this is one reason why a good phlebotomist works only by palpation.

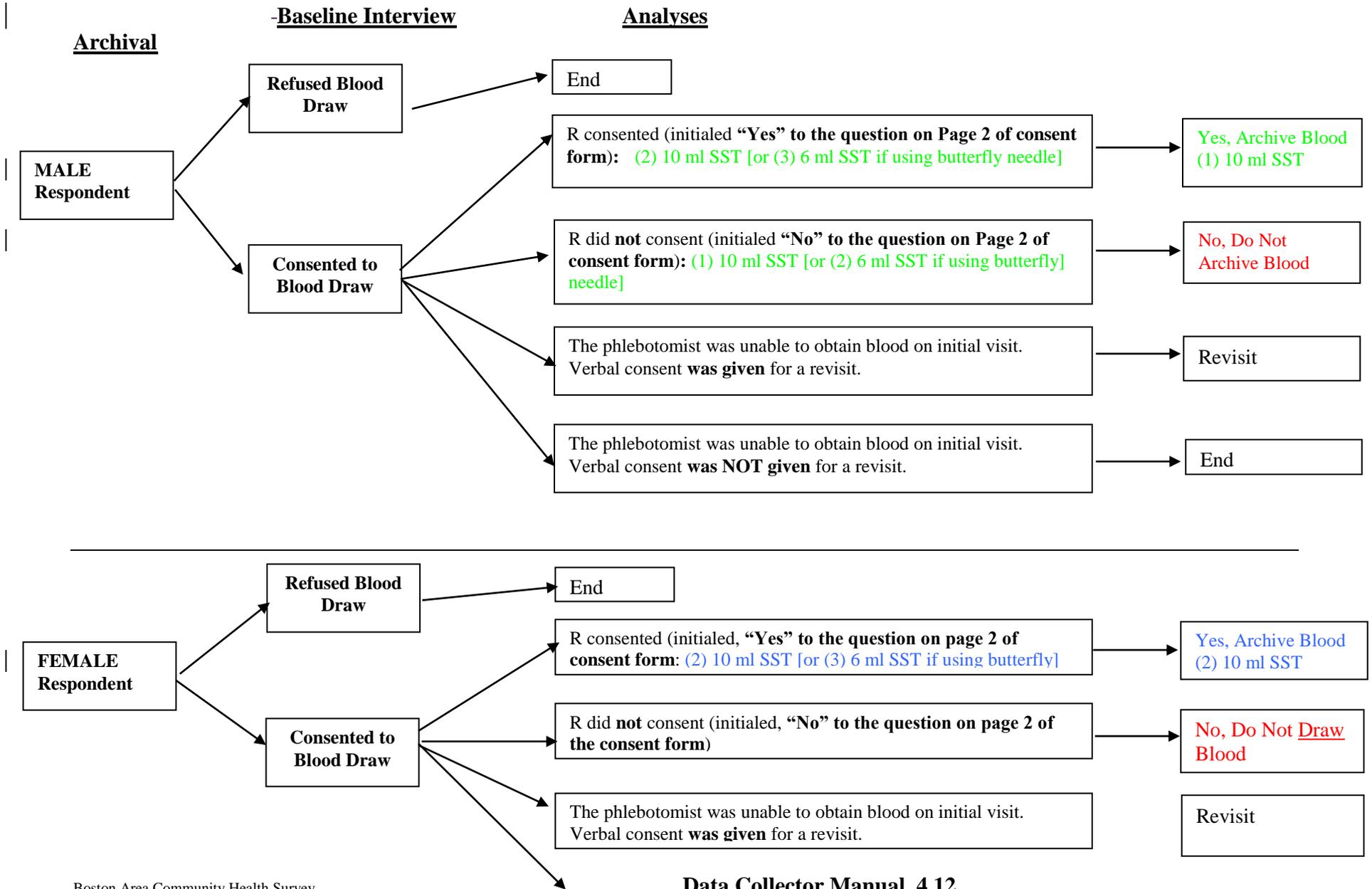
***NOTE:** Do not draw respondent's blood from the selected arm if:

- The respondent tells you that they have an A.V. fistula or fistula for dialysis in the right arm, even if the fistula is not being used at the present time. A.V. fistula stands for arteriovenous fistula. An AV fistula involves the surgical joining of an artery and vein under the skin. The increased blood volume stretches the elastic vein to allow a larger volume of blood flow. Turbulent blood flow over the AV fistula is commonly felt and termed a thrill.
- You observe a large, raised prominent vessel in the arm that when you palpated omits a buzzing sensation.
- The respondent tells you that they have had a mastectomy or lumpectomy with axillary node dissection on the selected side.
- You notice the skin on the arm is taut, shiny, or if the arm is noticeably larger than the other arm.
- Do not take the respondent's blood if they are taking any blood thinning medications, or tell you they have bleeding tendencies or hemophilia.

b. Removing Blood Sample

After initial examination of the arm, put on disposable latex-free gloves. These gloves will be worn throughout the blood drawing procedure. Although this will not prevent needle sticks, wearing gloves will reduce the risk of absorption of any blood or fluids through cuts or abrasions on the surface of the hands.

FIGURE 6b: BLOOD DRAW FLOW CHART





The phlebotomist was unable to obtain blood on initial visit.
Verbal consent **was NOT given** for a revisit.



End

If there are abrasions, open wounds, or scabs on the arm, gloves should be worn during all examinations of the arm.

1. Attach covered needle to vacutainer holder. Loosely insert the first vacutainer into the holder without puncturing the rubber stopper. **FILL SST TUBES FIRST.**
2. Thoroughly cleanse the site with the alcohol swab using firm pressure. Allow site to air-dry at least 30 seconds before drying with a gauze square to prevent stinging when the needle punctures the skin. If the clean area is contaminated by repalpation, repeat the cleansing process.
3. Keeping the chosen vein in sight, pick up assembled vacutainer. Remove needle shield carefully avoiding contamination. Hold the needle with bevel facing up.
4. With free hand, anchor the vein by pulling the skin tautly, using thumb and index finger. Instruct the respondent to close and hold his fist.
5. Before inserting the needle, you may instruct respondent to turn his head if he wishes. Insert the needle into the vein following the angle of the vein.
6. Gently push the vacutainer tube into the end of the holder in order to puncture through the stopper into the vacuum. Always brace the holder with one hand while pushing tube into needle with the other hand.
7. When the blood starts to flow, the respondent may unclench his/her fist.
8. At the most, with full written consent for all measurements, two 10 ml SST **OR** three 6 ml SST tubes will need to be filled (depending on need).
9. Release the tourniquet as the last tube is filling. **NEVER REMOVE NEEDLE BEFORE LOOSENING TOURNIQUET.**
10. When the tubes are filled:
 - a) Remove last tube from the needle
 - b) Place a clean gauze over the puncture site while removing the needle from the vein.
 - c) Remove needle and apply firm pressure to the site.
 - d) The used needle, still attached to the vacutainer holder, should be disposed of by inserting it into the top of the red plastic Biohazard container. If using a vacutainer needle, you must place the orange safety tip portion of the device against a firm object such as a table with the needle facing away from you, push on this until the orange cover snaps into place to cover the entire exposed portion of the needle, then discard the entire device in the Biohazard disposal container. If using the Safety lock blood collection set, when finished with the blood draw, push the yellow sheath up over the needle until it clicks into place, then dispose of the entire device in the Biohazard container. **The red plastic Biohazard unit**

should be open on the tabletop during the setup for phlebotomy, not having to be opened when you have the used needle in hand. When the disposable plastic needle container is 1/2 to 2/3 full, bend the clear tab on the plastic lid away from the opening when sliding the lid completely forward to ensure it is permanently closed. Be sure the rear edge of the sliding lid snaps down into the groove on final closure. Dispose of the entire container (without removing the used needles) in the contaminated waste containers located in the collection facility. When these containers are full, they will be sealed and removed for incineration.

- d) Gently invert all the tubes five times.
 - e) Ask the respondent to continue applying pressure until instructed to stop by you. (Do not ask respondent to bend the arm to apply pressure, as this keeps the puncture wound open and will cause a hematoma.) You may also instruct the respondent to raise his arm above his head while applying pressure
11. Inspect the puncture wound. If bleeding has stopped, apply a band-aid over the site. If respondent is allergic to adhesive, use micropore tape over a gauze pad instead. If the respondent is latex sensitive, inform them that we only use latex free band-aids.
 12. All paper waste materials that do not have any blood on them, including the disposable latex gloves and used gauze must be placed in the brown paper bag and given to the respondent for disposal. If the materials have any blood dispose of them in the biohazard waste container. The waste container will be exchanged at NERI.

c. Labeling the Blood Samples

The phlebotomists will be given printed ID labels ahead of time. If for some reason a prepared label is not available complete the following steps:

- Write the respondent's identification number
- The date and time the blood was drawn, check that it is legible
- The sex of the respondent
- Apply the label to the tube
- Place the filled vacutainers in a small plastic bag and put them in the hardboard holder.
- All waste with blood on it, needles, gauze, band-aids, must be discarded in the biohazard waste container.

Offer the respondent juice and snacks, or allow the respondent to get their own food, to prevent fainting or hypoglycemia.

d. Care of Blood

1. Place all samples in separate plastic bags upright in the cardboard holder and place them in the “dirty” section in your carry bag.
2. When you return to your car, transfer filled tubes into cooler. Line cooler with a plastic bag in case of tube breakage. A cooler should be used at all times, regardless of the outside temperature. The gel pad must be refrozen every night.
3. The blood **must be** delivered to the lab to be spun down immediately after the last appointment of the day. **THERE SHOULD BE NO EXCEPTIONS!**

e. Points to Remember

1. Wash your hands carefully before drawing blood from each respondent. Also wash your hands carefully after removing your gloves from the blood draw. (If for some reason you are unable to wash your hands with soap and water, wash them with antiseptic gel.)
2. Watch for and avoid scarred puncture sites.
3. Use a new vacutainer and a clean needle for each new blood draw.
4. Some respondents may have small veins. These veins are often quite fragile and tend to collapse. If the veins are small, an experienced phlebotomist (who will be determined by the field supervisor) should use a butterfly needle to draw the respondent’s blood. Per NERI standard, if you need to use a butterfly needle, you must use 6 ml SST so you do not exert high pressure on a small vein. Refer to the flow chart for the corresponding number of 6 ml SST to draw. If the phlebotomist is not deemed to have enough experience by the field supervisor, the blood draw may have to be done another day.
5. Elderly respondents, 60 and up, tend to bruise easily because their veins are less elastic. Apply the tourniquet less tightly and maintain pressure over the venipuncture site for at least 3 minutes.
6. Avoid puncturing 2 sides of the vein or partial penetration of the vein, which may cause hematoma formation.
7. Always palpate or feel for the vein, even when it is seen, thus aiding in finding deeper unseen veins. The vein will feel like an elastic tube that gives under pressure of you finger.

Note: At the first sign of uncontrolled hematoma formation (blood flow from needle wound into the tissues), the tourniquet should be released, the needle removed immediately, and gentle pressure applied to the site with clean gauze.

f. Trouble Shooting

1. Feeling faint – A respondent may report that he/she is feeling faint. This could be brought on by fear of having his/her blood drawn or by the sight of blood. Have

the respondent remain seated with his/her head down between their knees and arms to his/her side. If the respondent does faint, get the person lying flat as quickly as possible, with the feet elevated. Loosen any tight clothing. Remove the needle from their vein after removing the tourniquet. Check to see that the breathing is unobstructed. Use the ammonia salts. Check the respondent's pulse. If the respondent revives immediately, have him/her rest for 10 – 15 minutes. If the respondent does not revive immediately, or if his/her pulse or breathing is abnormal, CALL 911 IMMEDIATELY.

2. Collapsed vein – If the vein collapses, do not remove the needle. Untie the tourniquet leaving it loosely in place on the arm so that the vein can begin to fill. Then twist the tourniquet with your free hand. If blood does not flow into the vacutainer, remove the needle and ask permission to try the other arm. Sometimes the blood will flow again if the needle is pulled back slightly. Be careful not to pull back too much for the needle may become dislocated.
3. Non-prominent vein – Apply the tourniquet and milk the vein by opening and closing the fist and/or stroke the vein in the direction of the heart. Tap sharply with the index and second finger. NOTE: Always palpate or feel for the vein, even when it is seen, thus aiding in finding deeper unseen veins. The vein will feel like an elastic tube that gives under the pressure of your finger.
4. Arteries pulsate – Make sure that the structure you feel is not pulsating.
5. Blood fails to enter the needle-
 - a) The needle may not have been introduced far enough. Advance it a little more.
 - b) The needle may have gone to one side of the vein. Partially withdraw it and gently relocate the needle.
 - c) The needle may have gone through the vein. Slowly withdraw the needle back into the lumen.
6. Failure to obtain blood – Given that the respondent consented to the blood drawing:
 - a) If you are unable to obtain blood with the first puncture, try again on the other arm, but only with the respondent's continued verbal consent.
 - b) If you are unable to obtain a sample with either arm, obtain the respondent's continued verbal consent for another venipuncture by another phlebotomist at a later date.

PREGANCY PROTOCOL: If the pregnant respondent reports at the beginning of the interview that she is in her first trimester (1 – 12 weeks) of pregnancy proceed with the blood draw otherwise do not.

g. Rescheduling in the Event of an Unsuccessful or Missed Venipuncture

Despite precautions and troubleshooting, occasionally it is not possible to obtain a blood sample during the interview. This may occur for a variety of reasons, such as the respondent feels

uncomfortable after one failed attempt and postpones the second, the respondent or phlebotomist misses the blood draw appointment, the respondent has veins that collapse easily, etc. (see above). It is necessary to obtain verbal consent and reschedule the blood draw appointment for another time, either with a phlebotomist or with the project team member who is designated for performing the challenging blood draws. *Rescheduling must occur within 1-2 business days of the original appointment. The blood draw should be completed within a week.* Here are the steps for reporting an unsuccessful phlebotomy visit so that rescheduling can occur within this time frame:

1. Record the appropriate venipuncture disposition on the respondent's Phlebotomy Contact Record (see page 8-11 of the Data Collector Manual)
2. After you have returned to your car, telephone the field supervisor using the project cell phone and notify him/her that the venipuncture was unsuccessful or missed and why. Leave a voice mail message if need be.
3. Call the specimen processor and notify him/her that the venipuncture did not occur, so that she/he is not waiting for the blood. Leave a voice mail message if need be. **DO NOT NOTIFY THIS PERSON WITH THE EXPECTATION THAT THEY WILL RESCHEDULE THE APPOINTMENT AND PERFORM THE BLOOD DRAW OR THAT THEY WILL NOTIFY THE FIELD SUPERVISOR.**
4. Return all materials to the field supervisor as you would under the usual circumstances.

Once notified of the unsuccessful blood draw, the telephone staff will contact the respondent to schedule another blood draw appointment. Depending on the circumstances, a phlebotomist or the person who is designated to do difficult blood draws will be sent for the next appointment. Generally, the person designated for the difficult blood draws will be scheduled if the first phlebotomist tried and failed twice because the respondent had "poor veins". All potential phlebotomists are in the electronic appointment book; however, the person designated for difficult blood draws is only to be scheduled by the telephone staff.

In order for the rescheduled appointment to be successful, it is important that the original field technician/phlebotomist provide the second phlebotomist or person designated to do difficult blood draws with information about the following:

1. The number of 10 ml SST consented to (from informed consent, Page 2)
2. The number of tubes drawn (0, 1, or 2)
3. The size of tubes drawn (6 ml or 10 ml)

Record this information in the appropriate COMMENTS FIELD of the Contact Record and turn it in to the field supervisor when you return to NERI. The information should be recorded with the number of and type of SST *obtained* over the number and type of SST *expected*. For example:

1. If the original phlebotomist obtained 0 tubes from someone with poor veins who needed the butterfly needle *and* who consented to the archival, then the following would be recorded in the Comments Field: 0 6ml/3 6ml. This means that 0 6 ml tubes were obtained out of the 3 6 ml tubes expected.
2. Or if the original phlebotomist obtained 1 tube from someone with strong veins who consented to archival, then the following would be recorded: 1 10ml/2 10ml.
3. Of if the original phlebotomist obtained 0 tubes from someone with poor veins who needed the butterfly needle and who did not consent to the archival, then the following would be recorded in the Comments Field: 0 6ml/2 6ml. ETC.

The contact record will go to the second phlebotomist or the person designated to do the difficult blood draws.

Further, attach all labels for the blood draw to the contact record, so that they are available to the next person. THIS IS VERY IMPORTANT. In the event that you have used the labels for the blood draw, notify the field supervisor so that new labels can be printed. This occurrence should be rare, however, because the protocol requires that you apply labels *after* the blood draw has been completed.

4.12.7 Resource Referrals

A field data collector's role is not to counsel. However, a situation may arise when a respondent will request additional information from the data collector or the Field Supervisor, regarding health care and other general health concerns, or social problems they may be having. It is acceptable to provide the individual with the name and number of the appropriate referral agency. This would also apply to the individuals we identify as having high blood pressure, are overweight, have high blood sugar levels and/or have elevated cholesterol levels.

This section includes a list of possible referral agencies, a list of community health centers in each community, community hospitals and health lines that the respondent can contact for more information. This list should be offered only when the respondent has no physician or other health care provider. Reassure the respondents who do not have health care insurance that all health care facilities receive some federal funds, must offer free care to those patients without insurance. Give the respondent a copy of all of the resources and referrals that NERI has

compiled (Appendix J). The data collector may need to help the respondent determine what resource may be best for them.

If you are concerned about a respondent who expresses no need for assistance or whose situation seems unique or beyond the scope of our resources, discuss the situation with your Field Supervisor. In addition, any specific questions or problems encountered in the field should be directed to the Field Supervisor, as necessary.

Data collectors should carry these numbers with them at all times, either in their field bag, wallet, etc.

Fire, Police, Ambulance	911
State Police	617-740-7536
NERI	617-923-7747

Dave DesRoches (Field Supervisor)	617-923-7747, ext. 201
Heather Cochran (Data Collection Supervisor)	617 923-7747, ext. 466
Rich Eder (Deputy Director SRC)	617-923-7747, ext. 406
Cheryl Caswell (Director, SRC)	617-923-7747, ext. 311
Elizabeth Clouse, RN,C (Research Specialist)	617-923-7747, ext. 521
John McKinlay (Principal investigator)	617-923-7747, ext. 512
Marlene Goldman (Principal investigator)	617-923-7747, ext. 445
Stephanie Fonda (Project Director)	617-923-7747, ext. 331
Susan Harris (Project Director)	617-923-7747, ext. 297
Kirsten Tilney (Senior Research Assistant)	617-923-7747, ext. 318

4.12.8 Emergencies and Mishaps

CPR Procedure

Data collectors and phlebotomists are not to initiate CPR unless they are certified to do so.

1. Establish unresponsiveness
2. Call for “Help” 911
3. Open airway
4. Look, listen, and feel for air exchange
5. If no air exchange, give 2 even, quick breaths
6. Feel for carotid pulse
7. If no pulse, find landmark for cardiac compressions
8. Begin cardiac compressions, give 15 compressions
9. Give two breaths and return for 15 cardiac compressions
10. Repeat until four cycles are completed
11. Check for respirations (look, listen, feel)
12. Check for pulse

13. If no respiration or pulse, give 1 breath and continue with 4 cycles of 15 compressions per 2 artificial ventilations.

Continue with the cycle of chest compressions and artificial ventilations until emergency personnel arrive. They will take over the resuscitation attempt. When they have done so, the field supervisor should be notified and an incident report should be completed.

Hemorrhage

Although highly unlikely, there is a slight possibility that during a veinpuncture, the respondent may bleed profusely from the site of the puncture. The profuse bleeding may be due to a variety of factors; an artery is more profuse than from a vein; the individual may have bleeding tendencies of which he/she is not aware; of the activity and the heat of the day may dilate peripheral blood vessels causing an increased tendency to bleed.

Regardless of the cause, the first intervention should always be to apply direct pressure to the bleeding site. A pressure dressing should be applied to the site using a 2" x 2" gauze and adhesive tape. Elevating the limb, i.e., placing it higher than heart level helps to decrease the blood supply to the area.

Hypoglycemia

Hypoglycemia is commonly called low blood sugar. It occurs in diabetics when a person has been in a prolonged fasting state, has taken too much medication, either pills or insulin or both to lower the blood sugar, has eaten too little food for the amount of insulin taken, or has exercised too strenuously or drunk too much alcohol. Hypoglycemia can also occur in non-diabetics, however it is much less common in this population. Causes are similar, including prolonged fasting, strenuous exercise, and excessive intake of alcohol.

Hypoglycemia symptoms typically have a rapid onset. The person may tremble, sweat profusely, look pale and be cool and clammy to touch. They may be irritable, confused, drowsy or hungry. If untreated, hypoglycemia can progress to loss of consciousness, coma and death as the blood sugar continues to drop without intervention.

Treatment for hypoglycemia is aimed at restoring blood sugar levels to normal. The respondent should be given a carbohydrate-containing snack such as 6 ounces of fruit juice or regular soda. They should not be given any extra sugar, cookies, cake, etc. as this may contribute to further hypoglycemia by increasing the blood sugar rapidly and then decreasing the blood sugar again after it is digested. If a respondent is unable to tolerate food by mouth because of altered mental status, you should call 911 and continue to monitor the respondent until help arrives. The field supervisor should then be notified. An incident report should also be completed.

Symptoms of hypoglycemia should improve rapidly, and the respondent should be encouraged to eat a small meal with some protein content like a peanut butter or meat sandwich and a glass of milk. This helps to prevent another hypoglycemic reaction. The respondent should be encouraged to check their blood sugar if they know how and have the appropriate equipment.

They should also be encouraged to check their blood sugar more frequently until it returns to normal. They should also be encouraged to contact their health care provider to report the episode of hypoglycemia and determine whether an adjustment in treatment is needed.

Seizure

On very rare occasions, performing venipuncture has been associated with the occurrence of a seizure in a respondent who has a history of seizure activity. A seizure is a temporary disturbance of brain activity that results in involuntary movements of the body. Seizures that involve one part of the body are called focal seizures, and seizures that involve the entire body are called grand mal seizures and may involve a decrease in the level of consciousness.

Seizure first aid is aimed at protecting the respondent from injury and getting medical help as needed. Lower the respondent gently to the floor and position them on their side. You should clear sharp objects and furniture away from the respondent to protect them from further injury. If the respondent begins to vomit, ensure that they are positioned on their side so the vomit does not obstruct their airway. Do not put anything in the respondent's mouth.

When the seizure activity stops, the respondent may be only partially conscious or unconscious. Check for respirations, they may be shallow. Also check the pulse to determine if resuscitation is necessary. Call 911, then continue to monitor the respondent until help arrives. If possible, note the time the seizure began and ended. After emergency personnel arrive, the field supervisor should be notified and an incident report completed.

4.13 Transportation Protocol for Interviews Conducted at NERI and Other Community Locations (Other than the Respondent's home)

4.13.1 Overview

The majority of interviews conducted for the BACH Survey will generally take place in the respondents' homes. However, for a variety of reasons, some respondents may prefer to complete the interview in a location other than their home, such as a family member or friend's home, or at NERI. All respondents will be provided with the different options available of where he/she can complete the interview. Should a respondent choose to have his/her interview conducted some place other than his/her home, these types of interviews may, then, require the respondent to travel. To minimize the respondents' burden of traveling to and from an interview, the BACH Survey has devised this general transportation protocol. The Protocol is intended to cover most situations that may arise and to present the "*Appointment Location Script*" (Script) used during the scheduling of appointments. The Script is included with this Protocol.

4.13.2 Scheduling Appointments (other than in the respondent's home)

To inform respondents of his/her options, BACH telephone staff (or in the case of field staff screening/enlisting participation) must utilize the "Appointment Location Script" once the respondent has indicated that he/she is interested in scheduling an appointment. The 'Script' will provide the respondent with standardized general information regarding location options and then travel options. The Transportation Protocol will provide data collectors and other staff with the details of procedures. The Script does not require data entry in ADEPT.

4.13.3 Transportation to and from NERI

Respondents may travel to and from NERI for an interview using public transit, their own car, or taxi.

Public Transit

a. Administrative Notification that a Respondent Will Be Traveling via Public Transportation

Once the appointment is set and the respondent indicates that he/she wants the interview to take place at NERI, the telephone or field data collector must follow the administrative procedures below to ensure that the appointment goes smoothly.

1. Confirm with the respondent the details of the appointment (appointment date and time, that the interview is to take place at NERI, directions, etc.).

2. Document that the respondent will be taking public transportation in the “different address for appointment” section on the screener. Field screeners/tracers are to note this information on the field contact record (HHCR).
3. Notify the Telephone Supervisor of the study ID number, and the date and time of appointment via a BACH memo.
4. The Telephone Supervisor will notify the project RA and Field Supervisor of the appointment (with use of public transportation) via an e-mail message.

b. Arrival

The field data collector should first look for the respondent in the reception area at least 10 minutes before the appointment is scheduled to begin. If the respondent is not there, then the data collector should proceed immediately to the front door (facing Watertown Square) to greet the respondent as they arrive. In cases when appointments are scheduled to occur during NERI off-hours (i.e., weekends, before 8:30am, after 5:30pm), the data collector should always meet the respondent at the front doors to the building.

c. Reimbursement

With respect to reimbursement for the use of public transit, the BACH Survey will reimburse respondents with cash at the completion of the interview. FYI: The cash is kept in a “BACH Survey Petty Cash Box” in the Finance Department’s safe, so the BACH project staff must be notified at least 24 hours in advance that a respondent plans to use public transit. The Telephone Supervisor will notify the project RA (Carol Minas) of the appointment needing cash via an email message. The project RA (Carol Minas) will then get the Cash Box from the safe and have monies available for the field data collector at the time of the interview. A small amount of money (up to \$10, in \$1.00 increments) will be sealed in an envelope and left at the receptionist desk with the field data collector’s name on it.

Due to the difficulty of obtaining receipts from public transit drivers, we will take the respondent’s word regarding the amount that they will spend for a roundtrip ride to and from NERI. The field data collector dispenses the requested amount (rounding the amount up to the nearest dollar) and then completes a Public Transit Reimbursement Form (included at the end of this protocol). To complete the form, indicate that public transit was used to travel to and from NERI (round trip), the date of the reimbursement, and the amount of the reimbursement. The respondent and then the data collector must sign this form.

d. Departure

When the interview has been completed, the data collector must escort the respondent to the main doors leading to Watertown Square. After the respondent has left, the Public Transit Reimbursement Form and any cash balance must then be returned to the Field Supervisor (monies and form should be put in the envelope with the study ID on it and placed in the Field

Supervisor's box. The Field Supervisor will forward the remaining monies and the Transit Reimbursement Form to the project RA (Jane Liva).

Personal Car

In many instances, BACH Survey respondents who elect to complete an interview at NERI will travel here by car. When this happens, they will be advised that we will provide him/her with a parking space in our private parking lot. There will be parking spaces set aside in the NERI parking lot (TBD by the office manager). The space number will be assigned/coordinated by the Field Supervisor and noted on the field contact record. The respondent should be informed of the specific space number when the field data collector calls the night before to confirm the appointment.

a. Administrative Notification that a Respondent Will Be Traveling to NERI by Car.

Once the appointment is set and the respondent indicates that he/she wants the interview to take place at NERI, the data collector must follow the administrative procedures below to ensure that the appointment goes smoothly.

1. Confirm with the respondent the details of the appointment (e.g., appointment date and time, that the appointment is to take place at NERI, directions, how they will be notified about the parking space, etc.). Note that if a respondent does not have a phone, they need to be notified of the parking space by letter or when they arrive for their appointment and are met by the field technician.
2. Document that the respondent will be traveling to NERI by car in the "different address for appointment" section on the screener. Field screeners/tracers are to note this information on the field contact record (HHCR).
3. Notify the Telephone Supervisor of the study ID number, appointment date and time via a BACH memo.
4. The Telephone Supervisor will notify the Field Supervisor of the appointment at NERI needing a parking space.

b. Arrival

The field data collector should first check the reception area for the respondent at least 10 minutes before the interview is scheduled to begin. If he/she is not there, the data collector should proceed immediately to the back door (facing the garage) to greet the respondent as they arrive. If the appointment is on the weekend, before 8:00 a.m. or after 5:30 (Monday – Friday), the field data collector must meet the respondent at the back door, since the outside doors to the building are locked and there is no receptionist after 5:30.

c. Departure

After the interview is complete, the data collector should escort the respondent to the back doors.

Taxi

The BACH Survey also gives respondents the option of traveling to NERI by taxi. We use Newton Yellow Cab for this purpose, both to bring respondents to NERI for his/her scheduled interview and to bring him/her to their destinations after the interview.

a. Administrative Notification that a Respondent Is Traveling to NERI via a Taxi

Once the appointment is set and the respondent indicates that he/she wants the interview to take place at NERI, the data collector must follow the administrative procedures below to ensure that the appointment goes smoothly.

1. Confirm with the respondent the details of the appointment (e.g., appointment date and time, that the appointment is to take place at NERI, that we will make arrangements for a cab to pick him/her up, etc.). If the respondent does not have a phone, the project will send them a letter notifying them of what time to expect the taxi (it usually arrives for pick-ups 45 minutes before the appointment time).
2. Document that the respondent will be traveling to NERI via a taxi, in the “different address for appointment” section on the screener. Field screeners/tracers are to note this information on the field contact record (HHCR).
3. Notify the Telephone Supervisor (using a BACH memo) ASAP of the study ID number, date and time of appointment, and that the respondent is traveling to NERI via taxi.
4. The Telephone Supervisor will then notify the project RA (Carol Minas) and the Field Supervisor about the appointment via e-mail.

The BACH project RA contacts Newton Yellow Cab (617-332-7700) 24 hours in advance (or within the previous day, if a full 24 hours is not available) to schedule the taxi for the trip to NERI. The project RA will inform Newton Yellow Cab that they are to use a NERI cab voucher for this pick up.

When the field data collector contacts the respondent (the night before) to confirm the appointment, he/she will remind the respondent that a taxi has been arranged to bring him/her to NERI and the time to expect the cab.

b. Arrival

On the day of the appointment, the field data collector should first check the reception area for the respondent at least 10 minutes before the interview is to begin. If the respondent is not there, the data collector must proceed immediately to the front door (facing Watertown Square) to greet

the respondent as they arrive. For appointments scheduled for completion during NERI off-hours (i.e., weekends, before 8:30am, after 5:30pm), the data collector must always meet the respondent at the front doors to the building.

c. Departure

During the interview, the data collector should temporarily halt the process to arrange for the respondent's trip from NERI. The best time for this interruption is immediately after giving the SAQ to the respondent. Use the phone in the interview room to call the project RA (Carol Minas at extension 291) who will then call Newton Yellow Cab to make the arrangements for the return trip.

At the end of the interview, the data collector must escort the respondent to the taxi. Before the respondent enters the taxi, confirm that this is indeed the cab that was called, that the NERI account will be charged, and the destination of the respondent. No further action is needed once the taxi has departed.

4.13.4 Notification to Field Data Collectors (mode of transportation/parking space assignment)

Information obtained by the telephone staff regarding the location of the appointment and the mode of transportation will appear on the field contact record under "different address for appointment." The Field Supervisor will coordinate a parking space (if applicable) with the Office Manager and will notify the field data collector by documenting the parking space number on the field contact record.

4.13.5 Notification to Respondents

Any Respondent with an appointment at NERI should receive written directions in the mail with information on how to get to NERI via taxi, private car, or public transportation. These directions should be sent with the standard confirmation letter/pre-interview package. Telephone data collectors should advise respondents regarding directions as best as they can, as well as informing respondents of the details of the transportation mode the respondent elected. Additionally, the field data collector will confirm the following information the night before using the standardized appointment confirmation call:

- Appointment date and time
- Location of interview and transportation mode
- Parking space number (if applicable)
- Directions (if speaking with the respondent)