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#### 6. CONTACT PROCEDURES

This chapter provides a description of procedures you should follow to make contact with the household. It is essential that these procedures be observed since they have been designed to aid you in contacting all households in the sample as quickly and efficiently as possible.

### 6.1 Contact Attempts

To complete the Screener, Relationship, Family and SP questionnaires and the Dust Collection Process, you will be allowed to make a specific number of **attempts** to the sampled address. To be considered an attempt, your visit to a household:

- Must be made in person, not on the telephone;
- Must be made at a different time of day than previously unsuccessful attempts. That is, your visit must be made at a time that maximizes the possibility of finding someone at home; and
- Must be made by going to the household's door and knocking. In other words, simply driving by the house to see if it looks like someone is home does not count as an attempt.

Each one of your attempts to contact a household should satisfy the criteria listed here and you should record all attempts on the Call Record on the back of the Household Folder.

#### **6.1.1** Planning Your Contacts

The main question to ask yourself when attempting to contact a household is, "When is a household adult most likely to be home?" For respondents who have daytime jobs, weekday evenings may be a good time. In industrial areas with plants that operate several shifts a day, many respondents may not be available on weekday evenings; you may have to try them on a morning or weekend. When your first attempt fails, try at a different time of day on your next attempt. So long as you have no better

information, continue to schedule your attempts at the different times respondents are likely to be at home. These are the following:

- Weekday evenings;
- Weekday afternoons;
- Weekend; and
- Weekday mornings.

Most people's lives fall into a pattern. There are certain times of the day and days of the week when they are usually at home. By timing your attempts to fit different patterns, you will increase your chances of contacting your respondent.

Remember, though, that it is most important to stagger the timing of your attempts when you have no additional information about when a respondent is likely to be home. Whenever you do have reasonably reliable information on when a respondent will be home—something learned from another member of the respondent's household, from a neighbor, or from your own observations of the neighborhood—take that information into account. Plan your attempts so that with each successive effort you have a better chance of finding the respondent at home.

### 6.1.2 Number of Attempts

You are allowed only a limited number of in-person attempts to each household assigned to you. Specifically, your supervisor will usually allow a total of **four** attempts or visits to the household to complete the Screener. Upon completion of the Screener, if the household contains SP(s), you will usually be allowed up to **four** additional attempts to complete the household interviews. However, please note that the number of visits allowed is a judgment call made by your supervisor. Often he or she will require you to make several **more** attempts to contact the household in order to finalize a case.

For most of your assigned addresses, you will find four attempts, **when scheduled efficiently**, more than adequate to complete the work. If you are, however, unable to complete a Screener within the first four attempts to a household or the remainder of the questionnaires within four additional attempts, you should complete the Screener Non-Interview Form or the SP Card for extended interviews

(see Chapter 10 for details about both these forms) and discuss the case with your supervisor at your next conference. He or she may require several more attempts depending upon the likelihood of finalizing the case. **Never** make further attempts unless instructed to do so by your supervisor.

## 6.1.3 Neighbor Contacts

Whenever you make an in-person attempt and find that no one is home at the assigned dwelling unit (DU), you should make an effort to contact a neighbor to obtain information **on a likely time to find someone at home**. During neighbor contacts you should perform the following:

- Introduce yourself. State your name, that you are working on a health study for the U.S. Public Health Service, show your ID, and explain the purpose of your visit.
- Obtain the "best time" to call on the assigned household. (Be sure the neighbor understands which household you are referring to.) This does not have to be a specific day or time; any information about the household's availability should be recorded. Record whatever information you obtain on the Call Record as well as the name, position or description of, and the address for, the person you spoke to.

There are four basic considerations to keep in mind whenever you contact a neighbor:

- 1. "Neighbor" refers not only to the person who lives next door to the assigned household but also to anyone in the immediate vicinity—a building manager, a mailman passing by, someone in the yard across the street from the assigned address—who might be able to give you information about the household.
- 2. Before contacting a nearby resident, always check your other assignments and Listing Sheets for the area to make sure the neighbor household you choose is not a sampled household itself. Do not attempt a neighbor contact at an address you will be contacting later for an interview. However, once you have completed the interview, you may use that household as a neighbor contact.
- 3. Never contact the same neighbor more than once.
- 4. Unless specifically asked, do not leave the advance letter or any study specific materials with the neighbor you contact. You should leave the Call-Back card at the assigned address when no one is at home at the time of your attempt (see Chapter 10).
- 5. Neighbor contacts should be recorded on the Call Record on the back of the Household Folder.

6. SPECIAL NOTE: If, after two attempts at the selected DU, it appears that you may not reach an eligible household member, be sure to attempt to complete the Neighbor Information Form with two knowledgeable neighbors. SEE SECTION 10.3 SPECIFICATIONS.

## 6.2 Using the Result of Contacts Page

It is essential that you keep the Result of Contacts page (Exhibit 6-1) current by making your entries immediately after each attempt. This page should be completed according to the following specifications:

- **Attempt Number**: All attempts are entered on the Result of Contacts page as they occur. All in-person attempts should be consecutively numbered in this column.
- **Interviewer ID Number:** Enter your ID.
- **Day of Week:** Using abbreviations, enter the day of the week (e.g., Fri.).
- **Date:** Enter digits to represent the month, day and year (e.g., 10/6/99).
- **Time:** Enter the time of your attempt and specify AM or PM.
- Result of Contact: Enter a result code for each contact attempt you make to complete any part of a case (i.e., Screener, Relationship, Sample Person, Family, Dust Collection, or Appointment Scheduling). All of the result codes, as they appear on the Household Folder, and their definitions are provided in Section 6.3.
- **Remarks**: Enter all information that helps to describe what happened during a contact that does not have a final result.
- WAS A NON RESPONSE LETTER SENT: For field office use only.

## **Entering Result Codes on the Household Folder**

Every attempt you make to locate, contact, and interview a household must be recorded on the Result of Contacts page and given a result code. All of the result codes are listed on page five of the Household Folder (see Exhibit 6-2).

Exhibit 6-1. Call Record

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Exhibit 6-2. Household Call Record Result Codes

		CALL RECORD RESULT CODES		
SCREENER CODES	RELATIONSHIP CODES	SAMPLE PERSON FAMILY CODES	DUST COLLECTION CODES	MEG APPOINTMENT SCHEDULING CODES
Complete - No SP 8.  Complete - With SP 9.  SUPERVISION USE CORLY.  Complete - SP 9 Based on Nor-Hill  Internation - With SP 9 Based on Nor-Hill  Internation -	Press   10	Compite (1) Illeas (1)	Gerepter 90 Nesse, 20 Resselvant 20 Resselva	Scheduled 111 Streets 211 Consect from Schuld 22 Schuldbreaded 22 Schuldbreaded 22 Mort Afference 22 Mort Afference 22 Longage Profeire 22 Connet (Specify) 23 Connet (Specify) 23 Connet (Specify) 23
REASONS FOR F	REASONS FOR REFUSING SP QUESTIONNAIRE OR MEC APPOINTMENT	C APPOINTMENT	HOME EXAM APPT SCHEDULING CODES	HOME EXAM RESULT CODES
HEALTH RELATED REASONS	PERSONAL REASONS	SAMPLE PERSONT FAMILY CODES	TO BE USED BY INTERVIEWERS/F.O. SCHEDILING THE HOME EXAM	TO BE USED BY HOME EXAMINES
Note	HH INTERFREMDUST COLLECTION Not interested 12 Necent When Is Se Bethered 14 Necent When Is Se Bethered 14 Supplies and Prinary 14 Longlase Problems 17 Longlase Problems 17 Longlase Problems 17 Longlase Problems 17 Longlase Problems 18 Longlase About Medicare or Other 18 Concernor About Medicare or Other 18 Never Stoke Whit St Only Hermodiary 23 Never Stoke Whit St Only Hermodiary 23 Other (Specify) 23 Other (Specify)	VEC. RIGORE EXAM  And I clarated	Scheduled   11   11   12   12   13   13   14   15   15   15   15   15   15   15	Examined Carceled Car

The outcome for each Screener, Relationship, Sample Person, Family Questionnaire, the Dust Collection Process and scheduling the mobile examination center (MEC) appointment, should be assigned a one or two digit result code. Screener result codes will be used for **every** household; then, depending on the outcome of the Screener, you **may** also use Relationship, Sample Person, Family, Dust Collection and Exam Appointment Scheduling codes.

#### **Screener Result Codes**

The code should be recorded on the appropriate line of the Result of Contacts page under the Screener result column.

All of the Screener result codes, as they appear on the Household Folder, and their definitions, are provided below.

- 1 **Complete, No SPs:** A Screener has been completed but no SPs have been selected for the study.
- 2 **Complete, With SPs:** A Screener has been completed and the household has one or more SPs.
- 3 FOR SUPERVISOR USE ONLY.
- 4 FOR SUPERVISOR USE ONLY.
- 5 FOR SUPERVISOR USE ONLY.
- 6- **Unable to Enter Structure:** It is not possible to contact the sampled household because of a security system that keeps the building locked and you have tried to enter by contacting the building management staff, etc.
- 7 **Vacant:** The unit is unoccupied at the time of contact.
- 8 **Not a Dwelling Unit:** The unit does not qualify as a dwelling unit (e.g., seasonal home, commercial, etc.). The unit has been demolished, destroyed, or cannot be found.
- 20 **Illness:** A Screener cannot be completed because the person(s) living in the household have a **serious** health or physical problem that prevents them from being interviewed.
- 22 **Refusal/Breakoff:** A Screener cannot be started because the respondent refuses to answer any questions (REFUSAL). A Screener cannot be completed because the respondent refuses to continue after answering one (or more) question(s) (BREAKOFF).

- 23 **Not At Home:** You were unable to find an eligible Screener respondent at home.
- 24 **Unavailable During Field Period:** A Screener cannot be completed because all adult household members are away and will not be back for the duration of the field period (e.g., institutionalized, on vacation, out of country, etc.).
- 25 Language Problems: A Screener cannot be completed because all household members speak a language other than English or Spanish and a household translator is not available.
- 26 **Other:** A Screener cannot be completed because of a reason other than those listed above. SPECIFY in "Remarks" column.

### **Relationship Codes**

If you have completed the Screener and there is at least one eligible person in the household, you will be required to ask several more questions about the relationship of household members to each other. Although these questions are considered to be part of the screening process on NHANES, they actually constitute a separate questionnaire. Therefore, you will need to assign a one or two digit result code to this Relationship questionnaire. The code is recorded when the relationship questions have been answered (complete) or when all attempts to complete the questionnaire have resulted in a final code. The code is recorded under the appropriate line of the call record under "Relationship Results".

- 10 **Complete:** The Relationship Questionnaire have been completed.
- 20 **Illness:** The Relationship Questionnaire cannot be completed because the person(s) living in the household have a **serious** health or physical problem that prevents them from being interviewed.
- 22 Refusal/Breakoff: The Relationship Questionnaire cannot be started because the person refuses to answer any questions (REFUSAL). The Relationship questions cannot be completed because the respondent refuses to continue after answering one or more questions (BREAKOFF).
- 23 **Not At Home:** You were unable to find an eligible respondent at home.
- 24 **Unavailable During Field Period:** The Relationship Questionnaire cannot be completed because all adult family members are unavailable for the duration of the field period (e.g., institutionalized, on vacation, out-of-country, etc.).
- 25 **Language Problem:** The Relationship Questionnaire cannot be completed because all eligible respondents speak a language other than English or Spanish and a household translator is not available.

26 - **Other:** A Relationship Questionnaire cannot be completed because of a reason other than those listed above. SPECIFY in "Remarks" column.

## **Family Result Codes**

For eligible households you will need to assign a one or two digit result code for the Family Questionnaire. Note: You may be required to administer more than one Family Questionnaire in a household. If this is the case, start your Result of Contacts in a new row, leaving space between families, place the appropriate Family Number in the "Result Code" box. (See Example #3 on page 6-15.) The code is recorded on the appropriate line of the Call Record under the "Family Result" column.

- 10 **Complete:** A Family Questionnaire has been completed with an adult family member.
- 20 **Illness:** The Family Questionnaire cannot be completed because all adult family members have a **serious** health or physical problem that prevents them from being interviewed.
- 21 **Consent Form Refusal:** The Family Questionnaire cannot be started because the respondent refuses to sign the Household Interview Consent Form.
- 22 **Refusal/Breakoff:** The Family Questionnaire cannot be started because the respondent refuses to answer any questions for reasons other than the consent form (REFUSAL). The respondent begins the Family Questionnaire but refuses to continue before it is completed (BREAKOFF).
- 23 **Eligible Respondent Not at Home:** There is no adult family member at home to complete the Family Questionnaire.
- 24 **Eligible Respondent Unavailable During Field Period:** The Family Questionnaire cannot be completed because all adult family members are unavailable for the duration of the field period (e.g., institutionalized, on vacation, out of country, etc.).
- 25 **Language Problem:** The Family Questionnaire cannot be administered because all family members speak a language other than Spanish or English and a household translator is not available.
- 26 **Other:** A Family Questionnaire cannot be completed because of a reason other than those listed above. SPECIFY in "Remarks" column.

## Sample Person (SP) Codes

If you have completed the Screener and there is at least one SP (Screener Result Code = 2), you will need to assign a one or two digit code for **each** SP selected in the household. The SP Result Code should be recorded on the appropriate line of the Call Record for the correct SP. The SP Quex box number on the Call Record should correspond to the SP's Person Number in the Participant ID.

- 10 **Complete:** The SP Questionnaire has been completed with the SP or a proxy respondent.
- 20 **Illness:** The SP Questionnaire cannot be completed because the SP (or the proxy) has a **serious** health or physical problem that prevents him/her from being interviewed and no proxy respondent is available.
- 21 **Consent Form Refusal:** The SP Questionnaire cannot be started because the SP refuses to sign the Interview Consent Form.
- 22 **Refusal/Breakoff:** The SP Questionnaire cannot be started because the SP refuses to answer any question for reasons other than the consent form (REFUSAL). The SP begins the SP Questionnaire but refuses to continue before it is completed (BREAKOFF).
- 23 **Not at Home:** An attempt was made to contact the SP but s/he was not at home.
- 24 **Unavailable During Field Period:** The SP Questionnaire cannot be completed because the SP is away and will not be back for the duration of the field period (e.g., institutionalized, on vacation, out of country, etc.).
- 25 **Language Problem:** The SP Questionnaire cannot be completed because the SP or proxy speaks a language other than English or Spanish and no household translator is available.
- 26 **Other:** The SP Questionnaire cannot be completed because of a reason other than those listed above. SPECIFY in "Remarks" column.

#### **Dust Collection Codes**

If the household has been selected for the dust collection process, you will need to assign a one or two digit Dust Collection result code to indicate the final outcome of this process. These codes are specified below:

- 10 **Complete:** The Dust Collection process has been completed with an adult household member.
- 20 **Illness:** The Dust Collection process cannot be completed because all adult family members have a **serious** health or physical problem that prevents the interviewer from performing the dust collection process.
- 21 **Consent Form Refusal:** The Dust Collection process cannot be started because the respondent refuses to sign the Dust Collection Consent Form.
- 22 **Refusal/Breakoff:** The Dust Collection process cannot be started because the respondent refuses to allow the process to begin for reasons other than the consent form (REFUSAL). The respondent begins the Dust Collection process but refuses to continue before it is completed (BREAKOFF).
- 23 **Eligible Respondent Not at Home:** There is no adult family member at home to complete the Dust Collection process.
- 24 **Eligible Respondent Unavailable During Field Period:** The Dust Collection process cannot be completed because all adult family members are unavailable for the duration of the field period (e.g., institutionalized, on vacation, out of country, etc.).
- 25 **Language Problem:** The Dust Collection process cannot be completed because all family members speak a language other than Spanish or English and a household translator is not available.
- 26 **Other:** The Dust Collection process cannot be completed because of a reason other than those listed above. SPECIFY in "Remarks" column.

## **MEC Exam Appointment Scheduling Codes**

When you have completed all the necessary questionnaires for an SP you will need to assign a one or two digit MEC Exam Appointment Scheduling Code to indicate the result of your attempt to schedule the SP for an exam appointment.

All of the Exam Appointment Scheduling result codes as they appear on the Household Folder and their definitions are provided below.

- 11 **Appointment Scheduled:** MEC appointment has been confirmed for an SP.
- 20 **Illness:** The MEC exam appointment cannot be made because the SP has a **serious** health or physical problem that prevents him/her from being examined.

- 21 **Consent/Assent Form Refusal:** The SP/parent refuses to make a MEC appointment because the SP/parent refuses to sign the MEC Consent Form.
- 22 **Refusal:** The SP/parent refuses to make a MEC appointment for reasons other than the consent form.
- 23 **Not At Home:** The eligible SP/parent is not at home to set up a MEC appointment.
- 24 **Unavailable During Field Period:** The MEC exam appointment cannot be made because the SP is unavailable for the duration of the field period (e.g., institutionalized, on vacation, out of country, etc.).
- 25 **Language Problem:** The MEC exam appointment cannot be made because the SP speaks a language other than English or Spanish and no household translator is available.
- 26 **Other:** The questionnaire cannot be completed because of a reason other than those listed above. SPECIFY in "Remarks" column.

**Note:** Reason Codes (bottom left) are discussed in Chapter 10. Result codes associated with the Home Exam (bottom right) are discussed in Chapter 9.

## **Examples of Entries on the Result of Contacts Page**

The following examples illustrate some situations an interviewer could encounter and how the Household Call Record would be completed for each.

# EXAMPLE 1:

examination appointments for the mother and the son were scheduled. The daughter was at work, so he arranged an appointment to return the following evening. On the third visit, he completed the SP Questionnaire with the daughter and made an examination appointment with her. This household was not selected for the Dust Collection process. Interviewer MCS made an initial, attempt to a DU and found no one at home. On the second visit he contacted the female head of household in a single-family household and completed the Screener and Relationship questions. Three SPs were selected: #1 - the wife, #2 - her 20-year-old daughter, and #3 - her 10-year-old son. He completed the SP Questionnaire with the wife. She was also the proxy respondent for the SP Questionnaire for the 10-year-old child. The Family Questionnaire was completed, and

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# EXAMPLE 2:

#3 (daughter) was traveling and was not expected home for at least 4 months. The interviewer completed the Family Questionnaire and the child's (SP #2) Questionnaire with the father of the family. He also scheduled an examination appointment for the young son (SP #2). Since the household was selected for Dust Collection, he completed this process while he was there. He returned to the household on Saturday but no one was home. After contacting other DUs in the area, he stopped by again. SP #1 (wife) was home, and he completed the SP Questionnaire and scheduled an examination appointment with her. Interviewer ROC made an initial attempt to a DU and completed the Screener and Relationship questions with the father of a four person family household. Two adult SPs (wife and daughter) and one child SP (son) were selected. SP #1 (wife) was at work. SP

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# EXAMPLE 3:

Interviewer RTL made two unsuccessful attempts to a DU. After contacting a neighbor, she found out they were usually home on Saturday afternoors. On the third attempt, she completed the Screener and the Relationship questions with a household adult. There were two families in the household—the first family had I SP while the second family had two SPs—one adult and one child 12 years old. Since all household members had other commitments that day, the interviewer arranged an appointment to return the following afternoon. At that time, she completed the Family and SP Questionnaire for the first family, and the Family Questionnaire and both Sample Person Questionnaires for the second family. She also scheduled examination appointments for all SPs. This household was not selected for Dust Collection.

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# EXAMPLE 4:

Interviewer KLA made an initial attempt to a DU and completed the Screener and Relationship Module. All 4 members of the household were identified as SPs but were too busy to complete any further interviews. The interviewer was told to come back in the morning of the next day but when she did, no one was home. The interviewer made a third attempt that evening. At that time she completed all SP questionnaires, the Family questionnaire and made appointments for all SPs to come to the MEC. The household was not eligible for the dust collection process.

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## 6.4 Accessing Your Cases on the Pentop

When Screener cases are assigned to you, they are also loaded onto your pentop. For each Screener with an eligible SP, you will need to do several other interviews (components). CAPI will create the necessary components for you to work. Those components are:

- A set of Relationship questions for each household.
- An SP Questionnaire for each eligible SP.
- A Family Questionnaire for each family with an SP.
- A Dust Collection Module. (If the household has a child age 1-5.)
- An Appointment Module to be completed for **each** SP when the MEC appointment is scheduled (see Chapter 8).

CAPI offers you several ways to view all the cases assigned to you and all the components of each case. To view your list of cases, double tap on the Interview Management Icon and single tap on the "Interview" button in the upper left hand corner of the screen.

CAPI will automatically default to your list of Screener cases. A list of Screener cases is displayed in Exhibit 6-3. Note the following:

- The shaded bar near the top of the screen indicates the type of cases you have accessed. In Exhibit 6-3, the shaded bar is labeled "List Displayed: Screener Cases",
- The color of the rows representing each Screener case (light blue) corresponds to the button labeled "Screener" in the bottom left hand corner of your screen.
- You may view other lists of components assigned to you (Relationship Questions, SP Questionnaires, Family Questionnaires, Dust Collection Questionnaire and Appointment Modules) by tapping **once** on the appropriate button at the bottom of the screen. (Exhibits 6-4 through 6-8.)
- You may view a list of **all** cases assigned to you (i.e., the Screener, Relationship Questions, SP Questionnaires, Family Questionnaires, Dust Collection Module, and Appointment Module) by tapping **once** on the "ALL CASES" button in the upper left corner above your case list (Exhibit 6-9).

Exhibit 6-3. List of Screener Cases

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06	0002	00	00	New Construction (final)	1117 PALMER RD #14 FT WASHINGTON, 20744
06	0003	00	00	Not Worked	1201 PALMER RD #3 FT WASHINGTON, 20744
06	0005	00	00	Complete, No SPs (final)	N 1201 PALMER RD #11 FT WASHINGTON, 20744
06	0007	00	00	Complete, with SPs (final)	1203 PALMER RD #5 FT WASHINGTON, 20744
06	8000	00	00	Language Problem (reassign)	1203 PALMER RD #9 FT WASHINGTON, 20744
06	0009	00	00	Complete, No SPs (final)	1203 PALMER RD #13 FT WASHINGTON, 20744
06	0010	00	00	Not Worked	1205 PALMER RD #3 FT WASHINGTON, 20744
06	0011	00	00	Partially Worked	1205 PALMER RD #7 FT WASHINGTON, 20744
06	0014	00	00	Complete, with SPs (final)	1207 PALMER RD #7 FT WASHINGTON, 20744
06	0015	00	00	Not Worked	1207 PALMER RD #11 FT WASHINGTON, 20744
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■ To see a list of components for a **specific case**, tap once on the appropriate case from any case list then tap once on the "H.H. LIST" button in the upper right hand corner of the case list.

Exhibit 6-4 through 6-10 are examples of the various assignment lists you may access of your pentop.

## 6.5 Entering Final Result Codes (Dispositions) on Your Pentop

CAPI **automatically** assigns a "COMPLETE" result to the Screener when you administer it. CAPI also automatically assigns a "Complete" result for the other components of the case (Relationship, SP, Family and Dust Collection) after you have completed them except the appointment.

A finalized or reassign result code must be entered for each component (Screener, Relationship, SP, Family Questionnaire, Dust Collection and the Consent/Appointment Module) when:

- The questionnaire is to be pulled from your pentop (you no longer will attempt to work on the questionnaire and you are turning it in to your supervisor), or
- When you exit the questionnaire before it has been completed and it is to be reassigned or finalized.

Specifications for entering results appear below.

- Go to any case list on your pentop (All Cases, H.H. List, Screener, Relations, Families, Persons, App, or Dust) by tapping **once** on the appropriate tab.
- Tap **once** on the Menu Item labeled "Tools" at the top of the screen.
- When the drop down list appears, tap **once** on "Turn on Disposition".
- You will then see an arrow next to each one of your cases. Tap **once** on this arrow to pull down a list of results.
- Tap once on the appropriate result. (Exhibit 6-11.)

However, these dispositions should only be entered after discussion with and specific direction from your SM.

Exhibit 6-4. List of Relationship Questionnaires

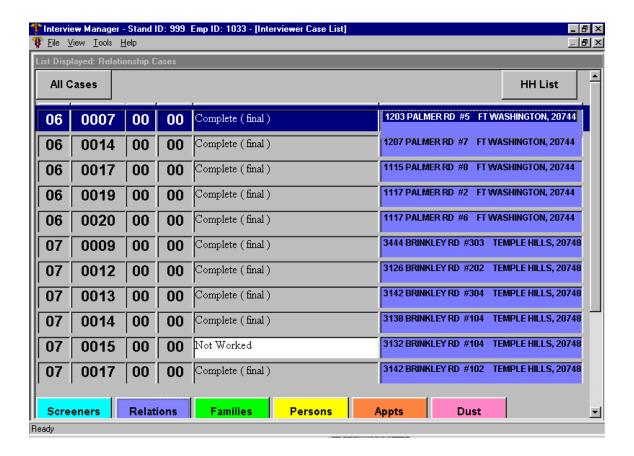


Exhibit 6-5. List of Person (SP) Questionnaires

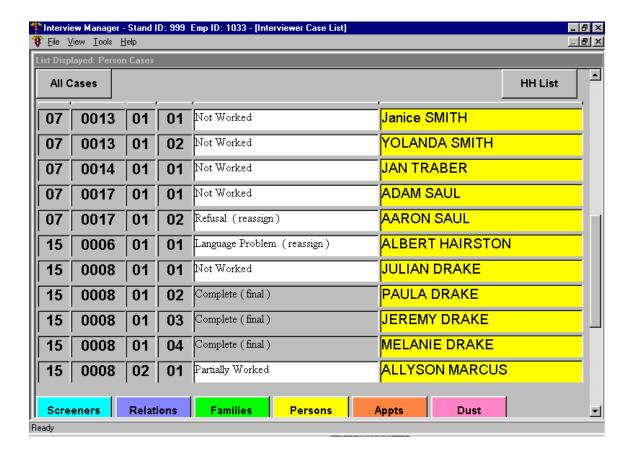


Exhibit 6-6. List of Family Questionnaires

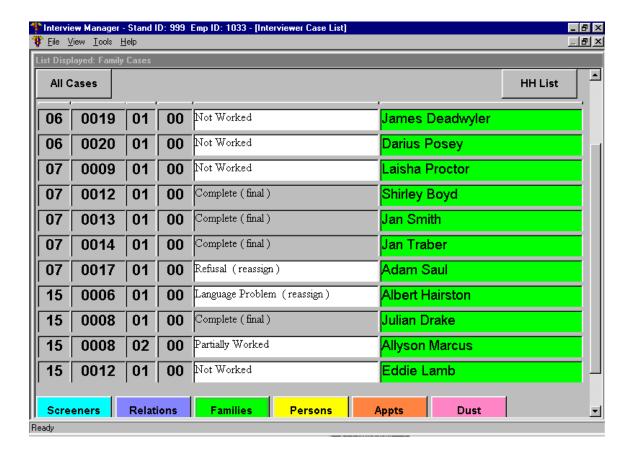


Exhibit 6-7. List of Appointment Cases

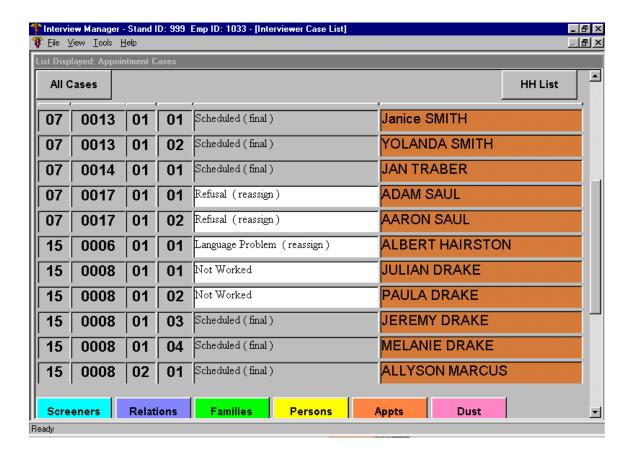


Exhibit 6-8. List of Dust Collection Questionnaires

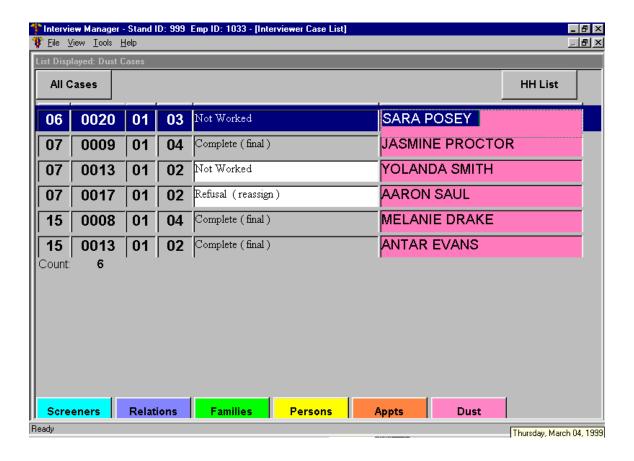


Exhibit 6-9. List of All Cases

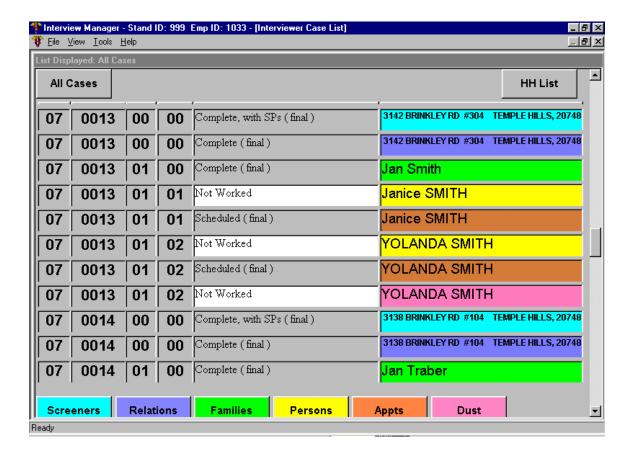


Exhibit 6-10. List of Household Level Cases

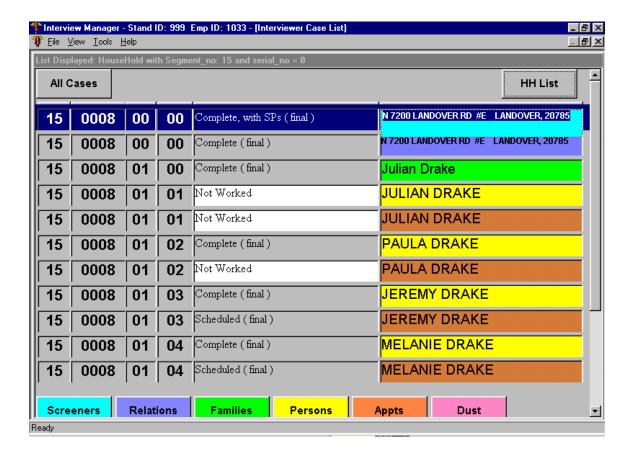
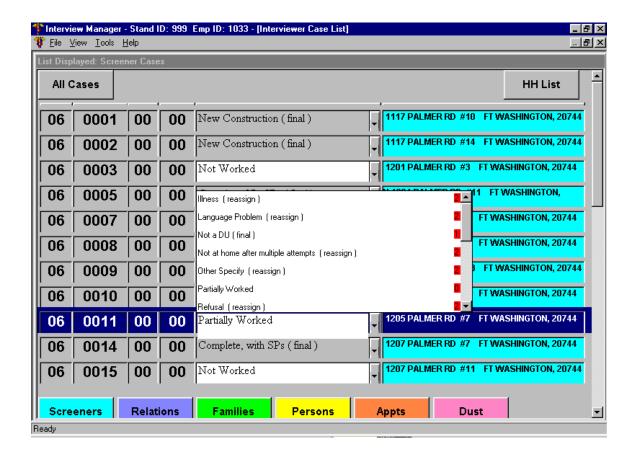


Exhibit 6-11. Example of CAPI Screen Containing List of Results



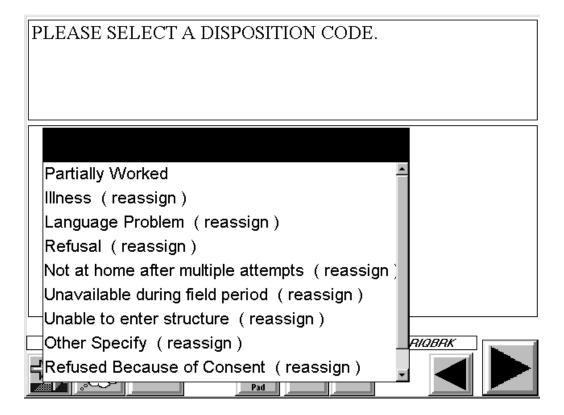
- After you are finished entering results, tap on the "Tools" menu item again and when the drop down list appears, tap **once** on "Turn Off Disposition".
- The results for each case component are identical to those listed on page 5 of the Household Folder. Note: Results on your pentop appear as text descriptions; they are not associated with a number code.
- The default result for a component is "NOT WORKED". This text will appear until you complete the component or change it to a finalized result.
- The finalized results you enter for the components of each case in your assignment will appear on your Interviewer Conference Report (see Chapter 13). Your supervisor will review each result and decide what action to take next. If the case should no longer be assigned to you, all components of the case will be removed from your pentop during the case transfer process.

# 6.6 Entering Results (Dispositions) for Cases That Have Been Started But Not Completed

Whenever you exit any of the household interviews **after they have been started** but **before** you have asked the last question, CAPI will present a screen containing a list of disposition codes prompting you to enter the **reason** you exited the interview before completing it. Exhibit 6-12 provides an example of this screen. A list of these results with definitions are provided below.

- **Partially Worked:** Started questionnaire. A questionnaire an interviewer is unable to complete but expects to complete at another time.
- Illness (reassign): An interview cannot continue because the person(s) living in the household have a serious health or physical problem that prevents them from being interviewed.
- Language Problem (reassign): An interview cannot continue because all household members speak a language other than English or Spanish and a household translator is not available.
- **Refusal (reassign):** The respondent refuses to continue with the interview.
- Not at Home After Multiple Attempts: You have already accessed the first screen in the interview, however, after visiting a DU at least four times you were unable to find an eligible Screener respondent at home. Keep in mind that this code is assigned only after four attempts have been made to find someone at home.

Exhibit 6-12. Example of CAPI Breakoff



- Unavailable During Field Period (reassign).
- Other Specify (reassign): An interview cannot be completed because of a reason other than those listed above. SPECIFY in "Remarks" column.
- Refused Because of Consent (reassign).
- Unable to Enter Structure (Screener only): It is not possible to contact the sampled household because of a security system that keeps the building locked and you have tried to enter by contacting the building management staff, etc.
- **Vacant** (**Screener only**): The unit is unoccupied at the time of contact.
- Not a Dwelling Unit (Screener only): The unit does not qualify as a dwelling unit (e.g., seasonal home, commercial, etc.). The unit has been demolished, destroyed or cannot be found.

Always use the partially work code unless instructed to do so by your SM.

#### 7. DUST COLLECTION

#### 7.1 Overview

The NHANES household interviewers will collect wipe samples of settled household dust in households where there is a child age 1 to 5. These dust samples will be collected from the floor and window sill in the room in which the sampled child spends the most time while awake. The dust results will be examined together with blood obtained from the same children in the MEC to examine the association between lead contaminated house dust and children's blood lead levels.

Lead is a known environmental toxin that has been shown to pose a serious threat to various body systems (e.g., nervous, hematopoietic, endocrine, renal and reproductive) in humans. In young children, lead exposure is a particular hazard because children more readily absorb lead than do adults, and children's developing nervous systems also make them more susceptible to the effects of lead.

Blood lead levels measured in previous NHANES programs have been the cornerstone of lead exposure surveillance in the U.S. The data have been used to document the burden of and dramatic decline of elevated blood lead levels; to promote the reduction of lead use; and to help to redefine national lead poisoning prevention guidelines, standards and abatement activities. No national data exist, however, on the prevalence of lead dust hazards in the nation's housing as measured by household dust and blood samples. NHANES will provide this key data.

This chapter describes the forms and procedures to be used in the dust collection component of the survey.

#### 7.2 Eligibility

Approximately 535 households per year will be eligible for the dust sample. Thus, the number of dust collections per stand will average around 40, although these numbers could vary considerably from stand to stand and from year to year. This means that you will only conduct a few dust collections per stand – thus, it is important that every dust collection be conducted (and conducted correctly).

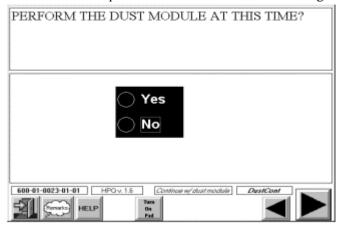
A household will be eligible for the dust collection if it contains an eligible SP age 1 to 5 years (i.e., 12 months through 71 months). The assessment of eligibility will be based on the SP age reported in the Screener, even though dust collection will be generally conducted during the home visit in which the SP questionnaire for the child is completed. **Only one** SP per household, age 1 to 5, will be randomly selected for the dust sample.

On occasion, age changes will occur that affect this component. Note the following (rare) situations:

- If the age of the SP changes during the age confirmation process conducted in the SP questionnaire and the change makes the SP ineligible for dust collection (i.e., child not age 1 to 5) but is still eligible for the study, dust collection will continue;
- If, during the same age confirmation process in the SP questionnaire, an age change occurs which makes this person a **non-SP**, all **data collection including dust collection will stop**; and
- Lastly, it is also possible that an **SP deemed ineligible for dust collection** as a result of the age reported in the Screener turns out to be eligible based on age reported in the **SP questionnaire** (i.e., SP is between ages 1 and 5). In such instances, no dust sample will be collected.

### 7.3 When to Collect the Dust Sample

Generally, the dust collection should be conducted immediately following the administration of the interview for the sampled child. At the end of the appropriate child SP questionnaire, CAPI will prompt the interviewer to collect dust samples for this household. The message below will appear:



Because the dust procedure is very brief, we expect that few respondents will postpone this task. In the rare situations when it cannot be conducted during the interview visit, try to make an appointment to return to the household when you need to complete another survey task.

# 7.4 Appropriate Respondent

Typically the proxy respondent for the SP questionnaire administered for the sampled child age 1 to 5 should be the dust respondent. However, any adult household member can respond for the dust collection component. The most important consideration is that it should be someone who is knowledgeable about where (in what rooms) the child spends most of his/her awake time.

# 7.5 Obtaining Consent

#### 7.5.1 Dust Collection Consent Form

Prior to the collection of dust samples, the respondent for this component must read and sign the Dust Collection Consent Form (Exhibit 7-1) and be given a copy of the EPA and HUD Real Estate Notification and Disclosure Rule (Exhibit 7-2).

The consent form addresses several key issues. It:

- Explains the general purpose of dust collection;
- Informs the respondent about the dust collection locations and duration;
- Discusses the risks and benefits; and
- Explains data uses and confidentiality.

### Exhibit 7-1. Dust Collection Consent Form

#2 FORM APPROVED: OMB # 0920-0237

		ED NUTRITION EXAMI ED CONSENT FOR LEAD	NATION SURVEY (NHANES) DUST STUDY	
Print name of respondent	First	Middle	Last	
Purpose: The purpose most often comes from children. Lead-based p	peeling or chipping le	ead-based paint. It c	if there is lead dust in your he an cause health problems esp lly is not a concern.	ome. Lead in dust pecially to young
Procedure: The interv The procedure will take penalties or loss of ben	e about 15 minutes. Y	ou may agree to the	loor and window sill of one r dust collection or not. That	room in your house. is your choice. No
a report on the findings	of the lead dust collect	ction, along with an	s published in Federal guidel informational pamphlet abou leal with any lead hazards for	it lead in homes. The
report on lead hazard renters at the time of exemptions include 1) is studios; 3) short-term le certified inspector and	s in your home, Fede purchase or rental, u houses built after 1977 eases of 100 days or le found free of lead-base	ral law requires yo nless your home fit 7; 2) dwellings without ess, such as vacation ed paint; and 5) hou	th the dust collection proced u to disclose this informati- is an exemption included in un bedrooms, such as lofts, e thomes; 4) housing that has be sing for the elderly and the d cribing the disclosure require	on to buyers or the law. The efficiencies and been inspected by a isabled, with no
NCHS will keep strictly	y private all health date of this survey under	a and samples that v penalty of Federal la	ne survey only for research as we collect in NHANES. Our aw: Section 308(d) of the Pul	staff is not allowed to
I have been informed risks and benefits. I a	about the purpose an gree to have dust san	nd procedure of the nples collected in n	lead dust collection, and uny home.	nderstand both the
Signature of responden	t		Date	
I do not want a repor	rt of my lead dust res	ults		
Signature of interviewe	er -		Date	
Household/Family ID				

Public reporting burden of this collection of information is estimated to average 6.6 hours per response for total participation, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection reviewing instructions, searching existing data sources, garnering and maritariting the data needed, and completing and reviewing the collection of information. An agency may not conduct or sponsor, and a person is not required to respond to collection of information unless it displays a currently valid OMB control number. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden to CDC/ATSDR Reports Clearance Officer; 1800 Clifton Road, MS D-24, Atlanta, GA 30333, ATTN: PRA (0920-0237).

#### FOR MORE INFORMATION

- For a copy of Protect Your Family from Lead in Your Home, the sample disclosure forms, or the rule, call the National Lead Information Clearinghouse (NLIC) at (800) 424-LEAD, or TDD (800) 526-5456 for the hearing impaired. You may also send your request by fax to (202) 659-1192 or by Internet E-mail to ehc@cais.com. Visit the NLIC on the Internet at http://www.nsc.org/nsc/ehc/ehc.html.
- Bulk copies of the pamphlet are available from the Government Printing Office (GPO) at (202) 512-1800. Refer to the complete title or GPO stock number 055-000-00507-9. The price is \$26.00 for a pack of 50 copies. Alternatively, persons may reproduce the pamphlet, for use or distribution, if the text and graphics are reproduced in full. Camera-ready copies of the pamphlet are available from the National Lead Information Clearinghouse.
- For specific questions about lead-based paint and lead-based paint hazards, call the National Lead Information Clearinghouse at (800) 424-LEAD, or TDD (800) 526-5456 for the hearing impaired.
- The EPA pamphlet and rule are available electronically and may be accessed through the Internet.

#### Electronic Access:

Gopher: gopher.epa.gov:70/11/Offices/

PestPreventToxic/Toxic/lead\_pm

WWW: http://www.epa.gov/docs/lead\_pm

http://www.hud.gov Dial up: (919) 558-0335

FTP: ftp.epa.gov (To login, type

"anonymous." Your password is your Internet E-mail address.)

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EPA-747-F-96-001 March 1996

United States Environmental Protection Agency Prevention, Pesticides, and Toxic Substances (7404)

# EPA and HUD Real Estate Notification and Disclosure Rule



Questions and Answers



U.S. Environmental Protection Agency



Department of Housing and Urban Development

# Exhibit 7-2. Dust Collection Pamphlet — EPA and HUD Real Estate Notification and Disclosure Rule (continued)

# The Rule

# Q: What is the purpose of this rule and who is affected?

A: To protect the public from exposure to lead from paint, dust, and soil, Congress passed the Residential Lead-Based Paint Hazard Reduction Act of 1992, also known as Title X. Section 1018 of this law directed HUD and EPA to require disclosure of information on lead-based paint and lead-based paint hazards before the sale or lease of most housing built before 1978. The rule would ensure that purchasers and renters of housing built before 1978 receive the information necessary to protect themselves and their families from lead-based paint hazards.

#### Q: When does the rule take effect?

A: The rule's effective date depends on the number of housing units owned.

- For owners of more than 4 dwelling units, the effective date is September 6, 1996.
- For owners of 4 or fewer dwelling units, the effective date is December 6, 1996.

# Affected Housing

# Q: What type of housing is affected by this rule?

A: This rule applies to all housing defined as "target housing," which includes most private housing, public housing, housing receiving Federal assistance, and Federally owned housing built before

# Q: What type of housing is not affected by this rule?

A: Housing that is not affected by this rule includes:

- "0-bedroom dwellings," such as lofts, efficiencies, and studios.
- Leases of dwelling units of 100 days or fewer, such as vacation homes or short-term rentals.

- Designated housing for the elderly and the handicapped unless children reside or are expected to reside there.
- Rental housing that has been inspected by a certified inspector and is found to be free of lead-based paint.

#### Q: How does this rule apply to housing common areas such as stairwells, lobbies, and laundry rooms?

A: Common areas are those areas in multifamily housing structures that are used or are accessible to all occupants. The rule requires that sellers and lessors disclose available lead information about common areas so that families can be informed about preventive actions.

#### Q: Why doesn't this rule affect housing built after 1978?

A: Congress did not extend the law to housing built after 1978 because the Consumer Product Safety Commission banned the use of lead-based paint to be used in housing in 1978.

# Q: Is my home unsafe if it contains lead-based paint?

A: Approximately three-quarters of the nation's housing built before 1978 contains some lead-based paint. This paint, if properly managed and maintained, poses little risk. If allowed to deteriorate, lead from paint can threaten the health of occupants, especially children under 6 years old. If families and building owners are aware of the presence of lead-based paint and the proper actions to take, most lead-based paint hazards can be managed. The EPA pamphlet Protect Your Family from Lead in Your Home provides important information for families and home owners to help them identify when lead-based paint is likely to be a hazard and how to get their home checked.

# Exhibit 7-2. Dust Collection Pamphlet — EPA and HUD Real Estate Notification and Disclosure Rule (continued)

# Seller & Lessor Responsibilities

#### Q: What if I'm selling target housing?

A: Property owners who sell target housing must:

- Disclose all known lead-based paint and leadbased paint hazards in the housing and any available reports on lead in the housing.
- Give buyers the EPA pamphlet Protect Your Family from Lead in Your Home.
- Include certain warning language in the contract as well as signed statements from all parties verifying that all requirements were completed.
- Retain signed acknowledgments for 3 years, as proof of compliance.
- Give buyers a 10-day opportunity to test the housing for lead.

#### Q: What if I'm renting target housing?

A: Property owners who rent out target housing must:

- Disclose all known lead-based paint and leadbased paint hazards in the home and any available reports on lead in the housing.
- Give renters the EPA pamphlet Protect Your Family from Lead in Your Home.
- Include certain warning language in the lease as well as signed statements from all parties verifying that all requirements were completed.
- Retain signed acknowledgments for 3 years, as proof of compliance.

#### Q: Am I required to give the EPA pamphlet Protect Your Family from Lead in Your Home to existing tenants?

A: No, but when tenants renew their leases, you must give them the pamphlet and any available reports. In other words, you must give them the same information that you are required to provide new tenants.

#### Q: What if the buyers/renters don't speak English?

A: In cases where the buyer or renter signed a purchase or lease agreement in a language other than English, the rule requires that the disclosure language be provided in the alternate language. The EPA pamphlet Protect Your Family from Lead in Your Home is printed in English and Spanish and will be made available to the public. EPA and HUD are considering publishing the pamphlet in other languages as well.

#### Q: Must I check my house for lead prior to sale?

A: No. The rule does not require that a seller conduct or finance an inspection or risk assessment. The seller, however, is required to provide the buyer a 10-day period to test for lead-based paint or lead-based paint hazards.

#### Q: Is the seller required to remove any lead-based paint that is discovered during an inspection?

A: No. Nothing in the rule requires a building owner to remove lead-based paint or lead-based paint hazards discovered during an inspection or risk assessment. In addition, the rule does not prevent the two parties from negotiating hazard reduction activities as a contingency of the purchase and sale of the housing.

# Q: What if I know there is lead-based paint in my

A: If you know there is lead-based paint in your home, you are required to disclose this information to the buyer or renter along with any other available reports on lead.

#### Q: What if the lessor knows that there is no leadbased paint in my rental housing?

A: If your rental housing has been found to be free of lead-based paint by a certified inspector, this rule does not apply. However, landlords seeking an exclusion to this rule must use state certified inspectors. If your state does not have a certification program, you may use a certified inspector from another state. In addition, EPA is developing certification requirements for individuals and firms conducting lead-based paint inspections, risk assessments, and abatements.

# Agent Responsibilities

Q: What are my responsibilities as an agent?

A: Agents must ensure that:

 Sellers and landlords are made aware of their obligations under this rule.

# Exhibit 7-2. Dust Collection Pamphlet — EPA and HUD Real Estate Notification and Disclosure Rule (continued)

- Sellers and landlords disclose the proper information to lessors, buyers, and tenants.
- Sellers give purchasers the opportunity to conduct an inspection.
- Lease and sales contracts contain the appropriate notification and disclosure language and proper signatures.

#### Q: What is the responsibility of an agent if the seller or landlord fails to comply with this rule?

A: The agent is responsible for informing the seller or lessor of his or her obligations under this rule. In addition, the agent is responsible if the seller or lessor fails to comply, however, an agent is not responsible for information withheld by the seller or lessor.

# Purchaser & Renter Rights

#### Q: As a purchaser, am I required to conduct and finance an inspection?

A: No. The rule simply ensure that you have the opportunity to test for lead before purchase.

#### Q: Can the inspection/risk assessment period be waived?

A: Yes. The inspection or risk assessment period can be lengthened, shortened, or waived by mutual written consent between the purchaser and the seller.

# Q: If I am renting, do I have the same opportunity to test for lead?

A: Under the law, the 10-day inspection period is limited to sales transactions, but nothing prevents the renter from negotiating with the lessor to allow time for an inspection before rental.

#### Q: Where can I find a qualified professional to conduct an inspection?

A: State agencies can provide helpful information for locating qualified professionals in your area. The EPA pamphlet Protect Your Family from Lead in Your Home provides the phone numbers of these state agencies. It is important to verify the qualifications of individuals and firms before hiring them.

#### Q: Must inspectors be certified?

A: Some cities and states have their own rules concerning inspector certification. These requirements, which may be administered at the state or Federal level, may not be in place for several years. Once these requirements are in place, professionals who offer to perform lead-based paint inspections must be certified. The certification requirements that EPA is developing will ensure that inspectors engaged in lead-based paint activities have completed an EPA-certified training program or an EPA-approved state program. Meanwhile, EPA and HUD recommend that people inspect the qualifications and training of individuals and firms before hiring them to conduct risk assessments, inspections, or abatements.

# Liability

#### Q: Does this rule increase my liability for future lead poisoning on my property?

A: In some cases, disclosure may actually reduce the owner's liability since occupants may be able to prevent exposure from the beginning. Under this rule, however, sellers, landlords, or agents who fail to provide the required notices and information are liable for triple the amount of damages.

#### Q: Are mortgage lenders liable under these rules if the seller or lessor fails to disclose?

A: Under the disclosure regulation, the rule does not identify mortgage lenders as liable parties. This rule does not affect other state and Federal provisions regarding the obligations and responsibilities of lenders.

#### Q: What if a seller or lessor fails to comply with these regulations?

A: A seller, lessor, or agent who fails to give the proper information can be sued for triple the amount of damages. In addition, they may be subject to civil and criminal penalties. Ensuring that disclosure information is given to home buyers and tenants helps all parties avoid misunderstandings before, during, and after sales and leasing agreements.

The goal of EPA/HUD pamphlet is to inform the public about the Residential Lead-Based Paint Hazard Reduction Act of 1992 by:

- Summarizing the notification and disclosure rule;
- Presenting the responsibility of sellers, lessees, and agents;
- Presenting the rights of purchasers and renters; and
- Documenting the liability issues involved.

To comply with the dust informed consent process, the aforementioned two items should be handed to the respondent at the same time. As you present them, do the following:

**I. CONSENT FORM** – Review the general content of the form by (1) reading the five paragraph topics (in bold) and the second sentence in the "Risks or discomforts" paragraph to the respondent; (2) asking the respondent to read the form; and (3) asking the respondent to complete the bottom portion of the form.

When completing the signature process:

- Print the full name of respondent in the space provided.
- Ask the respondent to sign his/her full name and enter the date.
- Have the respondent check the box if s/he does **not** want a report of the lead test results.
- "Witness (if required)" refers to any witness used during the consent process. For example, if a respondent cannot read, read the consent form to him/her in the presence of a witness. If a respondent cannot read or write, have a witness testify that the respondent has been read the form and consents to participate in this component. In both cases, print the full name of the witness on the appropriate line.
- Sign your name on the line entitled "Signature of interviewer" and enter the date.
- Record the eleven-digit household/family ID number.
- The interviewer should print the full name of the respondent on the last line in case the signature is not legible or complete.

The consent form is printed on three-part paper. The interviewer should keep the top two copies and give the respondent the last page for his/her records.

**II. EPA/HUD REAL ESTATE NOTIFICATION AND DISCLOSURE RULE** (Exhibit 7-2) – Review the general content of the pamphlet by (1) reading the title and the six major headings of the pamphlet to the respondent; and (2) informing the respondent that s/he should read the pamphlet.

**PAMPHLETS:** Note that there are **two** pamphlets discussed in the consent form. The first pamphlet noted is discussed in the **benefits** paragraph. It is entitled "Protect Your Family from Lead in Your Home." It is published by EPA and provides important information about lead hazards and documents simple steps families can take to protect themselves. It is sent **only** to respondents who choose to receive the lead dust results **and** are found to have elevated lead dust levels in their homes. (Not everyone gets a lead dust report.) The second pamphlet (Exhibit 7-2) is the EPA/HUD document mentioned in the **risks and discomforts** paragraph discussed above.

#### 7.5.2 Gaining Cooperation and Answering Frequently Asked Questions

To gain cooperation for dust collection, you must be prepared to address the respondent's concerns effectively. Therefore, be sure to familiarize yourself with the goals of this component (Section 7.1), the procedures in this chapter, the EPA/HUD disclosure pamphlet (Exhibit 7-2), and review the answers provided to some of the most frequently asked dust questions listed below. Since you will not be collecting dust in every home, it is especially important to review this information periodically.

# ■ Why do you need a dust sample?

By examining a small amount of dust, researchers can obtain much useful information regarding a child's lead exposure. Tests for lead will be performed on the dust. This information cannot be obtained in any other way.

#### ■ What exactly will you be testing for in the dust?

The dust will be tested by a certified laboratory to determine how much lead it contains.

#### ■ Why are you testing the dust for lead?

Young children can get the dust on their hands and toys, and thus may breathe or eat any lead that may be in the dust. Lead is harmful to young children because their bodies are developing. Lead may damage a child's brain and nervous system, causing slowed growth, lowered IQ, or behavior problems.

### ■ Why would there be lead in the dust?

There are several places lead can come from. The most common source is lead-based paint. Damaged paint can leave lead paint chips in the dust. Lead in house dust may also come from hobbies (such as stained glass or pottery making), or from workplaces (such as auto repair work or house renovation). In addition, lead may be in the soil outside the home – from the years of leaded gasoline use, industrial emissions, or naturally-occurring lead. Soil can be blown or tracked into the home and get into the dust.

#### ■ How much dust do you need?

We only need a small amount of dust. I will wipe a small (1 foot by 1 foot) area of the floor and one or two window sills in one room in the home.

#### Where will you collect the dust samples?

I will collect the dust samples in the room in which (NAME OF SAMPLED CHILD) spends the most amount of time when not sleeping.

#### ■ How long will this take?

About 10 minutes. (The consent form indicates 5 minutes but 10 minutes is more realistic.)

### ■ Why do you have to test dust in *this* house?

The study will collect dust samples in all households where a child age 1 to 5 is selected for the survey. Lead is more harmful to young children in this age range because they are in the development years.

#### ■ How do I know if my child is affected by (exposed to) lead?

A simple blood test can detect high levels of lead. We will be doing this test in the mobile examination center. If blood levels are high, we will notify you. Your doctor or health center can also do this test.

#### ■ Will I receive a report of the results?

You will receive a written report of the lead levels in the dust only if dust lead levels above Federal guidelines are found in your household, and if you ask for a report.

#### ■ When will I receive the written report?

In about 12 to 16 weeks.

### ■ Will I receive money for providing the dust samples?

No – but if the dust lead levels are above Federal guidelines, we will provide information about reducing lead levels and protecting the children in your home.

### ■ What will I have to do if you find elevated lead in the dust?

There are a number of options – depending on where the lead comes from and the condition of the home. We will provide a pamphlet with the report that explains what you can do, and where to get help.

### ■ Do I have to disclose the results of the testing?

If you choose to receive the results of the testing and you own the home, you must share the information with buyers or renters of the home. The pamphlet you received "EPA and HUD Real Estate Notification and Disclosure Rule" explains this in more detail. However, you may choose not to receive the test results and in this situation you will have nothing to provide to future buyers/renters of your home.

# What are the benefits of the dust collection to me? Why should I allow you to collect the dust?

You have a young child in the home – and young children are more susceptible to the effects of lead in dust. If dust lead levels are above Federal guidelines, you will receive a report and brochure that will help you to deal with the lead in your home. If you don't want the report, we will not send it to you. It will only take about 10 minutes for me to collect the dust.

# My house is new – there's no lead here. Why should I be in the study?

We are collecting dust in all homes with young children. By testing all homes (both those with and without lead), we can look at the extent of the lead dust problem in the country and figure out how to reduce and eliminate the problem.

Reluctant respondents should be reminded of the importance of these samples to the study. If the respondent does not agree to the dust collection, complete an SP Card (Chapter 10) recording verbatim the respondent's reasons for refusal.

Whenever you encounter a refusal or other non-response, discuss the situation with your supervisor prior to implementing any followup. As a general rule, you will always return to attempt to collect dust whenever other work in the household is pending, but will only make limited additional visits when other household work is not pending.

#### 7.6 Dust Sample Supplies

Dust sample supplies will be provided to you in kits. Each kit will contain everything you need to complete all the dust collection work in one household. Whenever you are working in the field, you should always have three kits with you. This will ensure that you are fully prepared for any situation encountered on a given day.

Inventory your dust collection supplies on a regular basis so that you always have three complete kits on hand. Remember to pick up additional supplies from your supervisor when you are running low. A list of the supplies you should have to collect dust samples is provided in Exhibit 7-3.

# Exhibit 7-3. Dust Sample Supplies

#### Each dust sample kit will contain:

- 1 kit bag;
- 1 Dust Collection Consent Form;
- 1 EPA/HUD Real Estate Notification and Disclosure Rule pamphlet;
- 1 Lead Dust Sampling Form;
- 1 page of bar code labels with 6 labels (one for the Lead Dust Sampling Form, floor sample, window sill sample, floor replicate, window replicate, and field blank). Each will be tagged with the "type" of sample and a unique dust sample ID number.
- 3 pairs of non-sterilized, non-powdered disposable gloves;
- 1 disposable measuring tape;
- Painter's tape (used to define window area to be wiped);
- 1 disposable floor template (12" x 12" 3-sided, cardboard form);
- 10 individually-wrapped, disposable wipes;
- 4 dust sample containers (50 ml plastic conical tubes with skirt base and screw cap lids);
- 1 plastic bag for sample storage; and
- 1 plastic bag for trash (do not use pockets or trash containers at residence or original kit bag to dispose of trash).

Interviewers must also remember to always have a watch with them that displays "seconds" (has a second hand).

# 7.7 Dust Sample Collection Process

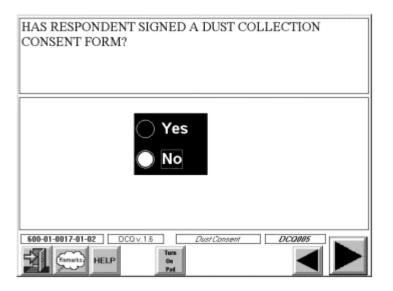
Dust samples will be collected following the completion of the SP interview for the child sampled for dust collection. You will begin the dust collection process using the CAPI Dust Collection Module on your pentop. It will prompt you to introduce the dust collection component of the survey, obtain signed consent, select the room to be used for dust collection, determine the type of samples to be collected, and collect the samples.

After completing the first two items in the CAPI Dust Collection Module, you will prepare the dust collection materials, including the Lead Dust Sampling Form (LDSF), and proceed to the room where the dust collection sample is to be obtained. Leave the pentop on and the Dust Collection Module open. After you are through completing the LDSF and collecting the various dust samples, return to the pentop and enter the information that you recorded on the LDSF into the dust module.

With the exception of the first four screens (DCQ.005 through DCQ.020 — which only exist in the module on the pentop), the specifications for the questions in the Dust Collection Module mirror those stated for the dust sample questions on the LDSF.

# 7.7.1 Beginning the Collection Process with the CAPI Dust Collection Module

The Dust Collection Module may be accessed by single tapping on the "Dust" tab on the Interview Management screen (Exhibit 7-4). Once the list of cases appears (Exhibit 7-5), double tap on the case you wish to work and the consent form verification screen below will appear.



This first screen (DCQ.005) will serve as a reminder for the informed consent process. You must have a signed consent form from the respondent prior to beginning dust collection. If you do not have a signed consent form (DCQ.005 = "NO"), CAPI will prompt you with a message that the respondent must sign a dust collection consent form before the procedure can take place.

Exhibit 7-4. Interview Management Screen

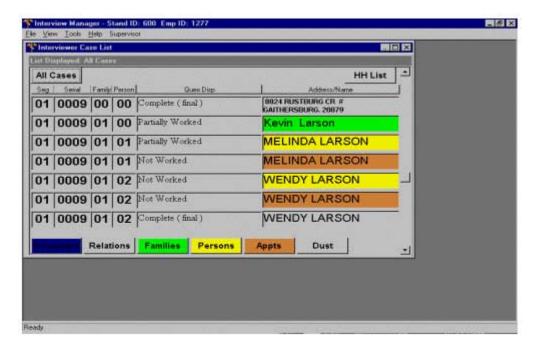
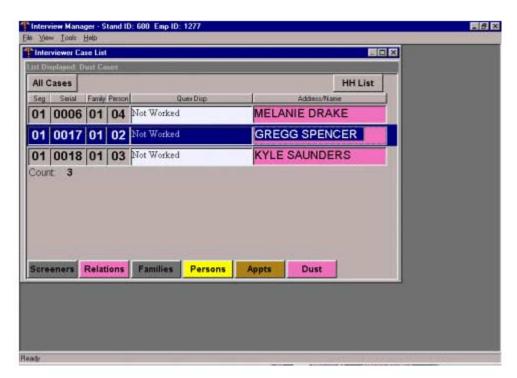
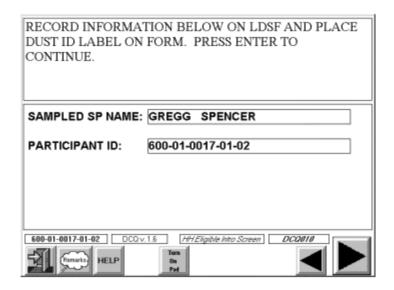
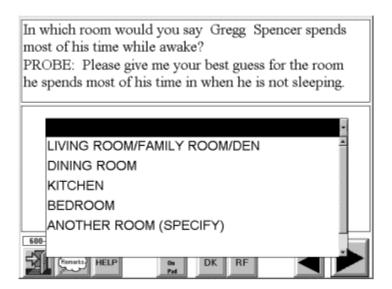


Exhibit 7-5. List of Cases Eligible for Dust Collection





The name of the child sampled for dust collection as well as his/her Participant ID will then be displayed on screen DCQ.010. Enter the SP name and Participant ID from this screen on the hardcopy LDSF (Exhibit 7-6) and place the dust ID label on the LDSF. Both the form and the label are in the Dust Supply Kit.



The question above (DCQ.015) is used to determine the room in which you will collect the dust sample. Probe for the respondent's best guess if the response is a "don't know". If the respondent identifies several rooms and will not make a "best guess", code the room the respondent states first. You may only select one room code.

# Exhibit 7-6. Lead Dust Sampling Form **LEAD DUST SAMPLING FORM**

DUST ID LABEL	CHILD SP NAME:  PARTICIPANT ID  DATE:
---------------	---------------------------------------

CHECK ALL	SAMPLES	CHECK STATUS		SPECIFY IF SAMPLE
REQUIRED		OF SAMPLES		NOT OBTAINED
FLOOR DUST SAM	(PLE	SAMPLE OBTAINED	SAMPLE NOT OBTAINED	
FLOOR DUST RE	PLICATE	SAMPLE OBTAINED	SAMPLE NOT OBTAINED	
■ WINDOW SILL DU	ST SAMPLE	SAMPLE OBTAINED	SAMPLE NOT OBTAINED	
■ WINDOW SILL DU	ST REPLICATE	SAMPLE OBTAINED	SAMPLE NOT OBTAINED	
FIELD BLANK		SAMPLE OBTAINED	SAMPLE NOT OBTAINED	

1. ENTER LOCATION OF SAMPLE (CIRCLE ONE):

SAMPLED ROOM FROM DUST COLLECTION MODULE (SPECIFY)	0
OTHER ROOM LIVING ROOM/FAMILY ROOM/DENDINING ROOM	2
KITCHEN  BEDROOM ANOTHER ROOM (SPECIFY)	3 4 5

2. FLOOR DUST SAMPLE	
SAMPLE	REPLICATE
ROOM CARPET CODE (CIRCLE ALL THAT APPLY):           Yes         No           NO CARPET	
SAMPLE SURFACE CONDITION: SMOOTH AND CLEANABLE	SAMPLE SURFACE CONDITION: SMOOTH AND CLEANABLE
CARPET PILE DEPTH: LOW PILE (less than or equal to ½ inch)	CARPET PILE DEPTH:  LOW PILE

Exhibit 7-6. Lead Dust Sampling Form (continued)

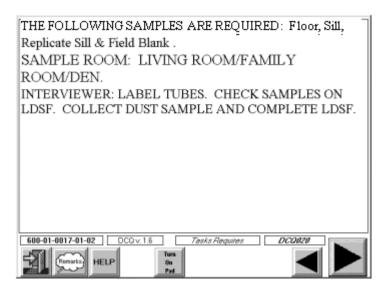
3. WINDOW SILL DUST SAMPLE		
SAMPLE	REPLICATE	
SELECT RANDOM WINDOW. RECORD INFORMATION:	SELECT RANDOM WINDOW. RECORD INFORMATION:	
WINDOW SILL FINISH: FINISHED	WINDOW SILL FINISH: FINISHED	
SAMPLE SURFACE CONDITION: SMOOTH AND CLEANABLE	SAMPLE SURFACE CONDITION: SMOOTH AND CLEANABLE	
SURFACE AREA WIPED:/8 INCHES X	SURFACE AREA WIPED:/8 INCHES X	

4. OTHER DATA REQUIRED	
ROOM CLEANLINESS  DIRTIER THAN AVERAGEAVERAGE	1 2 3
ROOM CLUTTER	
VERY CLUTTERED, NOTHING IN PLACE AVERAGE AMOUNT OF CLUTTER ORGANIZED, NOTHING OUT OF PLACE	1 2 3

INTERVIEWER: COLLECT THE REQUIRED SAMPLES AND THEN ENTER ALL DATA INTO CAPI.

Definitions for room codes are as follows:

- LIVING ROOM/FAMILY ROOM/DEN This is any common living area in the home. This room type may have a variety of names, including living room, family room, den, parlor, great room, recreational room, Florida room, etc.
- **DINING ROOM** This is the room designed for people to eat their meals. If they eat in the kitchen and this is where the child spends the most time awake, select "KITCHEN." If they eat in the living room, select "LIVING ROOM."
- **KITCHEN** This is the room in which people cook their meals. They may also eat their meals in the kitchen.
- **BEDROOM** A bedroom is the room in which any person(s) sleeps (i.e. there is usually a bed present in the room) on most nights. NOTE: Rooms that were designed as bedrooms when constructed, but are now being used for another purpose, e.g., as a guestroom, office, playroom, sewing room or storage room, are **not** included as bedrooms. Treat these rooms as the room type for which they are being used.
- ANOTHER ROOM If you select "ANOTHER ROOM," you will be prompted to specify the type of room. Code this room when the place selected is any room not listed above. This may include playroom, office, study, guestroom, library, laundry, sewing room, workshop, bathroom, etc. Do not record basement, upstairs, loft or attic (these are levels) instead record the room type based on its use, e.g. laundry, workshop, etc.



This screen (DCQ.020) presents the room selected at DCQ.015 and indicates which samples you **must** collect in the selected room. You will always be prompted to collect at least two samples in every household – a floor and a window sill dust sample. Quality control samples (floor dust replicate,

window sill dust replicate, and field blank) will only be collected in some households. The types of samples to be collected include:

■ Floor dust sample – This is a 12-inch by 12-inch wipe sample collected in the center of the largest open area of the floor space in the sampled room. An "open area" is defined as one in which no furniture is sitting and in which a person can walk. Narrow spaces between pieces of furniture and behind doors do not constitute an open area or part of an open area.

The floor dust sample is collected in the sampled room in every eligible home.

■ **Floor dust replicate** – This is a 12-inch by 12-inch wipe sample collected in the center of the *second* largest open area of the floor space in the sampled room. If there isn't a second open area, the replicate will be collected from a different area in the largest open area, but **not immediately adjacent to the original sample.** 

The purpose of the floor dust replicate sample is to determine the variation in lead content of floor dust across the room. This sample will be collected in approximately 10 percent of the homes in which dust collection is conducted.

■ Window sill dust sample – This is a wipe sample collected on a window sill in the sampled room. A window sill is the horizontal ledge protruding from the window into the sampled room. The window sill dust sample will be taken from a random window selected by the interviewer following the protocol described in Exhibit 7-7.

The window sill sample will be collected in the sampled room in every eligible home (if a window sill is present in the sampled room).

■ Window sill dust replicate – Window sill dust replicates will be collected from a different window in the sampled room (following the random window selection protocol). If there is not another accessible window in the room, then no sill replicate will be collected in that home.

The purpose of the window sill dust replicate sample is to determine the variation in lead content of dust between window sills in the same room. This sample will be collected in approximately 10 percent of the homes in which dust collection is conducted.

■ Field blank – This is a sample that is treated just like a wipe sample, but no surface is wiped. The field blank sample is used to determine whether contamination of the samples has occurred due to normal sample handling procedures. This sample will be collected in approximately 10 percent of the homes in which dust collection is conducted.

The instruction at the bottom of the CAPI screen prompts the interviewer to label the tubes, enter the screen information on the LDSF, i.e. to check off which samples are required in the household, and to proceed with dust collection.

#### Exhibit 7-7. Random Wall/Window Selection Protocol

### Selection of the random wall (and random window) for window sill sample.

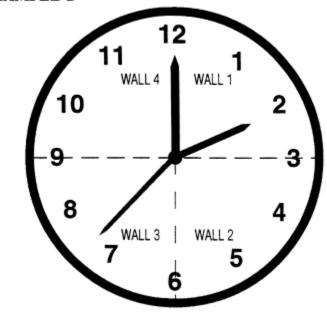
Note: When a large window area is composed of multiple individual windows, count each individual window as a distinct window. In the discussion below, sliding glass doors are not counted as windows.

- A. If there is only one window in the room, select that window for dust sampling.
- B. If there is more than one window in the room, you must select a window at random using a three step process: 1) select a random wall (C and D); then 2) select a random window (E); and finally 3) check that the window is openable (F).
- C. If there is only one wall with windows in the room, select that wall. Move to E below to select a random window.
- D. If there are windows on more than two walls, you must first select a random wall.
  - 1. Look into the room from the entry you walked into.
  - 2. The wall to your left is Wall 1. Wall 2 is the next wall in a clockwise direction, and so on around the room. Assign wall numbers to only four walls, even in odd shaped rooms.
  - 3. Look at the second hand on your watch (see Exhibit 7-8):
    - If the second hand is 1-15, select Wall 1.
    - If the second hand is 16-30, select Wall 2.
    - If the second hand is 31-45, select Wall 3.
    - If the second had is 46-00, select Wall 4.
  - 4. If there is no window on the selected wall, move clockwise around the room until you reach a wall with a window. Select that wall.
- E. If there is more than one window on the selected wall, select a random window as follows:
  - 1. Stand facing the wall.
  - 2. The window to your left is Window 1, Window 2 is the next window to the right, etc.
  - 3. Look at the second hand on your watch (see Exhibit 7-9):
    - If the second hand is 1-15, select Window 1.
    - If the second hand is 16-30, select Window 2.
    - If the second hand is 31-45, select Window 3.
    - If the second hand is 46-00, select Window 4.
- F. Once you have selected the random window, check to see if it is openable. If not, proceed clockwise around the room until you either: }
  - 1. Find an openable window sample that window.
  - 2. Find no openable window sample the initial selected random window.

Exhibit 7-8. Random Window Selection-Step 1: Random Wall Selection

# Stand in entry doorway. Look at watch second hand.



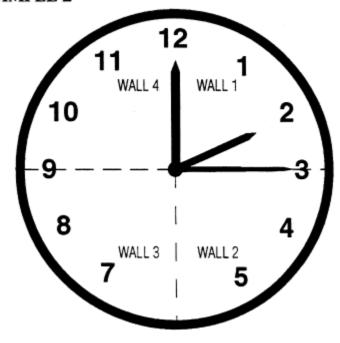


Second hand = 37 seconds

Select Wall 3

(Wall to right of entry)

# EXAMPLE 2



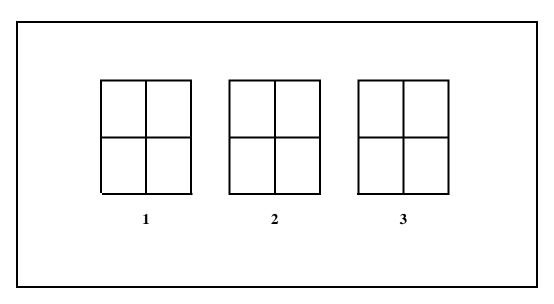
Second hand = 15 seconds

Select Wall 1

(Wall to left of entry)

Exhibit 7-9. Random Window Selection – Step 2: Random Window Selection

#### Selected Wall



# **Examples**

If second hand = 12, select Window 1\*.

If second hand = 23, select Window 2.

If second hand = 37, select Window 3.

If second hand = 52, select Window 1.

<sup>\*</sup>If Window 1 is not openable, try Window 2, etc. (moving clockwise around the room). If no window is openable, go back to the originally selected window (in this example, Window 1).

### 7.7.2 Completing the Remainder of the Lead Dust Sampling Form (LDSF)

### **Preliminary Data**

You are now ready to complete all the remaining items on the LDSF and collect the samples. [You have already recorded the sampled SP name and Participant ID (DCQ.010), placed the ID label on the form (DCQ.010), and checked the room samples to be collected (DCQ.020 on the LDSF)]. Now you should:

- Record the date and your name in the top right corner of the LDSF;
- Make sure that you have checked all the samples required as noted on screen DCQ.020. Remember that you will never have to collect all the dust samples; and
- Place the Dust ID Labels from the Dust Supply Kit on the empty sample tubes in the kit for the required samples only. There are labels for each possible type of sample if the sample is not required in the household, leave the label on the label sheet.

Item 1: Go to the room where the samples will actually be obtained and circle the location code on the form. In most cases, this is the room identified at DCQ.015. However, if the sampled room is inaccessible (e.g., someone is asleep in room), select another room. The alternative (second best) room should be the room where the child spends the second most amount of the time, while not sleeping. Probe for this when necessary by asking the respondent, "In which room does the child spend the second (third or fourth) most time, when not sleeping?" If ANOTHER ROOM is coded, specify the room type (e.g. playroom, office, laundry, etc.)

**PENTOP CARE:** Leave the pentop on and open – if it safe to do so. If there are children or pets that might interfere with the pentop while you are collecting the dust samples, unplug the pentop (do not turn it off) and carry it into the sampled room with you. Make sure you have fully charged the pentop before unplugging it.

**Item 2:** After you select the floor area for wiping (the largest open area, per section 7.7.1 above) and collect the floor sample(s) (per section 7.7.3 below), code the appropriate information about the floor dust sample and replicate floor dust sample (if necessary). This information comes from observation – not from asking the respondent.

- Room Carpet Code: Check the carpet code(s) that best describe the floor covering in the entire room. Note that you are asked to code all that apply. Thus, if there is a large Oriental rug over wall-to-wall carpeting, code 'Y' for both AREA RUG and WALL TO WALL. However, if you code 'Y' for NO CARPET, this means there is no carpeting anywhere in the room, and thus all other items must be coded NO.
- Sample Surface Condition: Circle the one sample surface condition that best describes the surface from which the lead dust sample has been collected. The choices are:
  - **Smooth and Cleanable** These are smooth floor surfaces on which wiping can easily pick up dirt and dust. Examples include floor tile or linoleum in good condition, smooth or painted concrete or wood, or finished wood floors.
  - Not Smooth and Cleanable These are rough or porous floor surfaces on which wiping cannot easily pick up dirt and dust. Examples include significantly scuffed or damaged floor tile or linoleum, rough or unpainted concrete or wood, or unfinished wood or brick floors. This does not include carpeted surfaces.
  - **Carpeted** If a carpeted surface is wiped, code CARPETED '3'.
- Carpet Pile Depth: If the dust sample is collected from a carpeted surface, visually estimate the length of a typical carpet fiber. Circle Low Pile '1' if the fiber is less than or equal to 1/2 inch. If the fiber is longer than 1/2 inch, circle High Pile '2'. If the sample surface is not carpeted, circle Not Applicable '3'.
- **Replicate Floor Dust** You do **not** have to record the Room Carpet Code for the replicate floor dust sample (it is the same as for the floor sample). However, you must record the Sample Surface Condition and Carpet Pile Depth for the replicate floor dust sample these may be different than the floor dust sample.

**Item 3:** If the sampled room has more than one window, you will need to select a random window. Exhibit 7-7 provides the protocol for this selection process. After you have wiped the selected window sill, code the appropriate information about the window sill dust sample and replicate window sill sample (if necessary). This information comes from your observation – not from asking the respondent.

- Window Sill Finish: Circle '1' if the window sill is finished (painted, shellacked, varnished, polyurethaned, etc). Circle '2' if the window sill is not finished (e.g., bare metal, wood, or vinyl).
- **Sample Surface Condition:** Circle the sample surface condition that best describes the surface from which the lead dust sample is being collected.
  - **Smooth and Cleanable** These are smooth surfaces on which wiping can easily pick up dirt and dust. Examples include smooth or intact painted or finished wood, vinyl, or metal.

- **Not Smooth and Cleanable** These are rough or porous surfaces on which wiping cannot easily pick up dirt and dust. Examples include damaged painted wood or metal, porous concrete, or unfinished rough wood.
- **Surface Area Wiped:** Record the length and width of the window sill surface wiped, in inches to the nearest 1/8 inch.

**Item 4:** Record other data about the room. This information comes from your observation – not from asking the respondent. Be especially careful in assigning the Room Cleanliness and Room Clutter codes. Guard against merely assigning 'average' levels of cleanliness and clutter. Use the descriptions below to make the assignments. Also, these assignments could offend some householders, so be discreet in recording these codes.

# **Room Cleanliness:**

- **Dirtier than average** Little to no evidence of housecleaning. Moderate to heavy dust build-up in corners and on furniture. Matted or soiled carpeting. Debris and food particles scattered about. Cobwebs visible without looking behind furniture or doors. Heavily soiled floor and door jambs.
- Average Some evidence of housecleaning. Moderate dust build-up in corners and on furniture. Slightly matted or soiled carpeting. Some debris and food particles scattered about. Some visible cobwebs. Slightly soiled floor and door jambs.
- Cleaner than average No visible dust build-up in corners and on furniture. Evidence of recent vacuuming on carpet. Small or no areas of matted or soiled carpeting. No debris or food particles scattered about. No visible cobwebs. Clean floor and door jambs.

# **Room Clutter:**

- **Very cluttered** Nothing in place. Lots of stuff (dirty dishes, newspaper, clothing, etc.) lying about.
- **Average amount of clutter** Some newspapers or clothing lying about. A few dirty dishes in the sink or on the counter.
- **Organized** Nothing out of place. No more than 1-2 dishes in the sink.

If sample not obtained – If any of the required samples are not obtained, go back to the top of the LDSF and record the reason in the space beside the sample that was not obtained.

#### INTERVIEWER: COLLECT THE REQUIRED SAMPLES AND THEN ENTER

**ALL DATA INTO CAPI** — After you have collected all the samples and completed this form, enter all the necessary information into CAPI prior to leaving the household.

#### 7.7.3 Obtaining the Dust Samples (Wipe Method)

The NHANES dust sampling procedures and materials are unlikely to harm a respondent's home. However, you will need to exercise some care when moving through the respondent's home and collecting these samples. A few **general considerations** are:

- As you move around, be careful not to knock anything over;
- When collecting window sill samples, ask for the respondent's permission to move items carefully off the sill or from in front of the window before beginning the dust sampling;
- When collecting window sill samples, do not place the tape so securely as to remove paint when pulling the tape off; and
- The wipes contain alcohol that will not hurt most fabrics or surfaces. If a rug in the wipe area looks expensive or fragile, ask the respondent if alcohol is acceptable for the surface. If not, select another room for sampling by asking "which room does the child spend the second, third, etc. most awake time in?"

Now let's review the **specific steps** in the dust collection process (wipe method). Undertake the steps in the order presented.

#### 1. Prepare a clean area for sampling supplies.

You should generally be able to work from your Dust Supply Kit, but may work from a counter or table, if permitted by the respondent. Be careful not to scratch or damage surfaces.

#### 2. Prepare to collect the samples required in the following order (mandatory):

- (1) Floor wipe;
- (2) Floor replicate wipe (if required);
- (3) Window sill wipe;
- (4) Window sill replicate (if required); and
- (5) Field blank.

# 3. Outline the wipe area.

#### Floors:

Identify the center of the largest open area in the room (or second largest open area for floor replicate). (See Exhibit 7-10 for example of location of floor sample and floor replicate area.) Try not to walk on or touch the surface to be sampled (the wipe area). Do not lay the template over two surface types (e.g. do not include both carpet plus smooth surface within the template wipe area).

Position the one square foot template over the wipe area. When putting down the template, do not touch the interior wipe area.

Tape the template in place with the painter's tape across the entire open side. Use two short pieces of tape to position the remaining two corners.

<u>Window sills</u>: Randomly select the window to be wiped in accordance with the protocol in Exhibit 7-7. Do not touch the window sill area. Remove any objects that are on the sill wipe area (wipe area described below), or items that will interfere with sampling. Objects may include vases, toys, a lamp, etc.

Carefully apply two strips of adhesive tape across the ends of the sill (see Exhibit 7-11) to define a wipe area (be careful not to touch the sill when applying the tape). In general, you will sample the entire width and length of the window sill. For odd sized window sills (i.e. very narrow or very wide), the wipe area should be between 0.1 square foot and 2 square feet in size, if possible, but never longer than 36 inches (the length of the tape measure). Below please find guidelines for acceptable wipe area sizes:

Width of Sill	Length of Wipe Area
1 to 2 inches	15 to 36 inches
3 to 4 inches	10 to 36 inches
5 to 6 inches	10 to 25 inches
8 to 10 inches	5 to 20 inches

# 4. Put gloves on.

Put a clean pair of disposable gloves on **before each type of sample collection (i.e., floor, window, field blank) and before opening the first wipe** to be used for each type of collection. Thus, you can use the same pair of gloves for the actual floor sample and the floor replicate when required. It is not necessary to wipe your hands before putting the gloves on.

Exhibit 7-10. Location of Floor Wipe Sample and Replicate

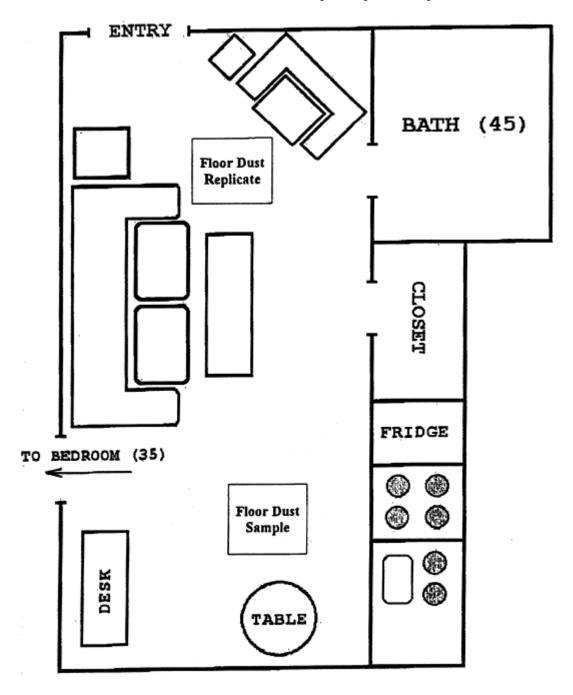
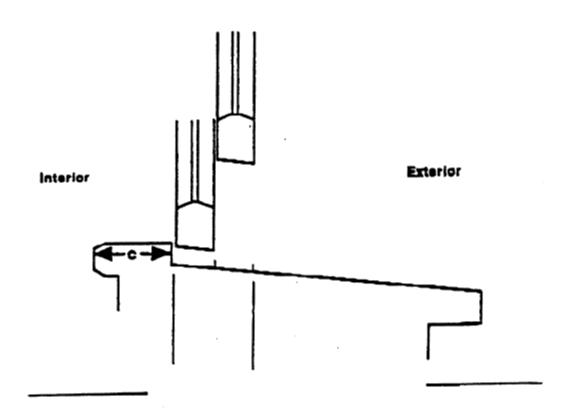


Exhibit 7-11. Window Sill Sample Location



Window Sill - Area C

# 5. Do a preliminary inspection of the disposable wipes.

As you get ready to use each wipe, open it and inspect it to determine if it is moist. If it is dried out, throw it away and use another wipe.

#### 6. Partially unscrew the sample containers.

Partially unscrew the cap on the correct, labeled sample container prior to use to be sure that it can be easily opened. When you collect the sample, always transfer the wipe directly into the sample container – do not use baggies or other containers as intermediate wipe receptacles.

# 7. Place the initial wipe.

Place the wipe at one corner of the surface to be wiped with wipe fully opened (one fold may still be in place) and flat on the surface. The wiping motion for the floor sample is shown in Exhibit 7-12 and explained below in Steps 8, 9, and 10.

# 8. Do the first wipe pass.

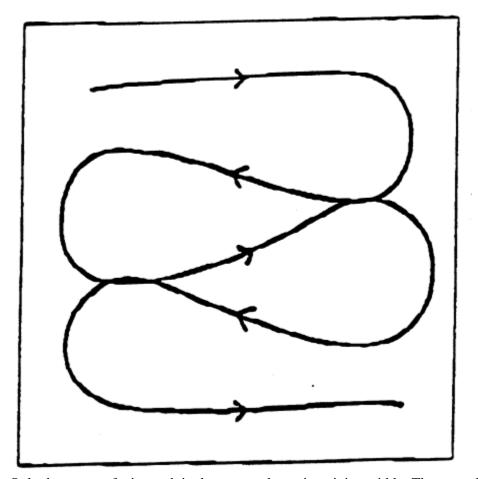
With the fingers together, place your hand over the fully open wipe. Press down firmly, but not excessively with both the palm and fingers (do not use the heel of the hand). Do not use only the fingertips to hold down the wipe, because there will not be complete contact with the surface and some dust may be missed. Note: Exerting excessive pressure on the wipe will cause the wipe to curl. Exerting too little pressure will result in poor collection of dust. It will work best if you also hold the appropriate corner at the leading edge of the wipe with the opposite hand and pull gently in the direction you are wiping (this is especially helpful for carpeted and rough surfaces).

As you wipe, do not touch the wipe area surface with the thumb. Likewise, do not allow the wipe to touch any surfaces outside of the defined wipe area.

<u>Floor (side-to-side)</u>: Proceed to wipe side-to-side with as many "S"-like motions as are necessary to completely cover the entire wipe area. Keep your open hand flat the entire time. Do not intentionally push fingertips into openings in the surface (e.g., between tiles or floor boards), but if the hand dips into the opening following the procedures described above, that is acceptable.

<u>Window Sill (straight across sill)</u>: Proceed to wipe straight across the window sill from one side to the other. Do not attempt to wipe the irregular edges presented by the contour of the window. Avoid touching other portions of the window with the wipe. If there are paint chips or gross debris in the window sill wipe area, attempt to include as much of it as possible – but only by using the technique described.

Exhibit 7-12. First Wipe Pass for the Floor Sample



Note – Only the center of wipe path is shown, not the entire wiping width. The second wipe pass is an up-and-down overlapping "S" pattern – the same wipe path as above turned  $90^{\circ}$ .

# 9. Do the second wipe pass.

Fold the wipe in half with the contaminated side facing inward. (The wipe can be straightened out by laying it on the wipe area, contaminated side up, and folding it over.) Once folded, place in the top corner of the wipe area and press down firmly with the palm and fingers.

<u>Floor (side-to-side in opposite direction)</u>: Repeat wiping the area with "S"-like motions, but on the second pass, move in a top-to-bottom direction (i.e., perpendicular, or 90 degrees, to the direction wiped on the first pass).

Window Sill (straight across in opposite direction): Proceed to wipe straight across the window sill from one side to the other – in the direction opposite from that used for the first wipe pass. Attempt to remove all visible dust. Do not touch the contaminated portion of the wipe with either hand or fingers. Do not shake the wipe in an attempt to straighten it out, since dust may be lost during shaking.

# 10. Do the third wipe pass.

Fold the wipe in half with the contaminated side facing inward (one-fourth of the total wipe).

<u>Floor (perimeter)</u>: Wipe around the perimeter attempting to pick up any dust pushed into the edges during the first and second passes.

<u>Window Sill (straight pass with emphasis in corners)</u>: Proceed to wipe straight across the window sill from one side to the other – in the same direction as used for the first wipe pass.

#### 11. Pack the wipe(s).

After wiping, fold the wipe with the contaminated side facing inward two times (total of five folds), and insert it into the sample tube with the proper label. If gross debris is present, such as paint chips from the window sill, be careful that the debris does not fall out of the wipe while folding. Place the sample tube into the sample storage bag in the kit.

#### 12. Measure the window sill area.

After collecting the window sill sample, measure the length and width of the surface area wiped to the nearest eighth of an inch using the tape measure. Measure the length along the outer edge (facing into room) of the sill. Record the exact dimensions for each area wiped on the LDSF in the nearest eighth of an inch.

Practice measuring to nearest 1/8<sup>th</sup> inch. Remember that:

 $\frac{1}{4}$  inch =  $\frac{2}{8}$  inch

 $\frac{1}{2}$  inch =  $\frac{4}{8}$  inch

 $\frac{3}{4}$  inch =  $\frac{6}{8}$  inch

# 13. Prepare the field blank (if required).

If required, prepare a field blank while still in the sampled room. The field blank is collected the same as the other wipes, but no surface is wiped. Thus, follow steps 4 (put on gloves), 5 (inspect the wipe) and 6 (unscrew the sample tube) above. Then instead of wiping a surface (steps 7-10), simply refold the wipe, and place it in the sample tube labeled for the field blank (step 11).

# 14. Decontaminate yourself.

After each sampling, remove the gloves and put them in the trash bag provided in your kit. At the end of the complete dust collection process, use a clean wet wipe to clean your hands. During sampling, do not eat, drink, smoke, or otherwise cause hand to mouth contact.

#### 15. Collect the trash.

After sampling, remove the painter's tape and template and throw them away in the kit trash bag. After all window sill sampling is complete, the used measuring tape also goes into the trash bag. Keep the trash bag separate from the Dust Collection Kit, i.e. do NOT place the trash bag into the Dust Collection Kit after sampling is completed. Also, do NOT throw away used gloves, wipes, template, tape or the trash bag inside the home.

# 16. Pack supplies.

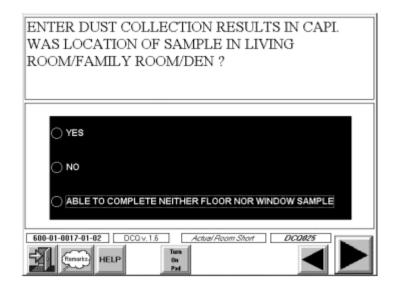
Leave unused supplies in the original kit. Place the bag of collected samples in the original kit. Return all items to the FO.

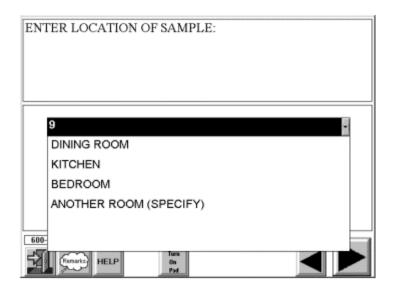
#### 17. Replace any moved household items.

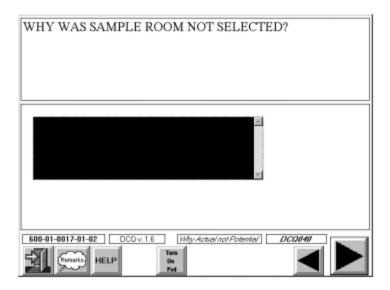
If you have moved any household items in order to sample (e.g. away from or off the window sill), relocate those items in their original position.

#### 7.7.4 Ending the Dust Collection Process with CAPI

After dust collection is complete, the interviewer will return to the pentop and enter the information from the LDSF into the CAPI Dust Module. Below you will find the screen specifications for DCQ.025 to DCQ.420 in numerical order. As always, CAPI will move you through the appropriate screen sequence depending on the samples required for the household and the responses entered.





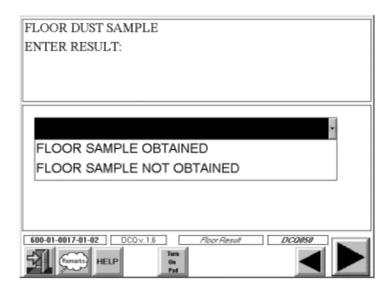


DCQ.025 prompts the interviewer to code whether the room where the samples were collected is the same room coded at DCQ.015. If you select "1", you will skip to the questions which ask for the results of the collection beginning with DCQ.050.

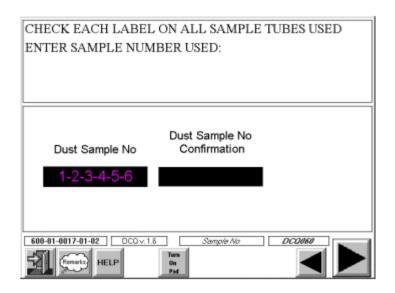
If you select "2" CAPI will display DCQ.030 so that you may enter the actual room location of the sample. (If you select 'Another Room' CAPI, you will be asked to enter the room type in the space provided.) All the room definitions in DCQ.030 will be available on line via "help" screen.

If you select "3" CAPI will skip you to DCQ.420 to record the reason that neither sample could be collected.

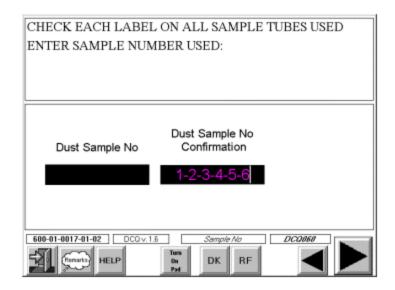
At DCQ.040 CAPI will ask you to record the reason you could not collect dust in the original room selected at DCQ.015.



DCQ.050 prompts the interviewer to record whether a floor dust sample was collected in the sampled room. If no floor sample was obtained, CAPI moves to DCQ.130.

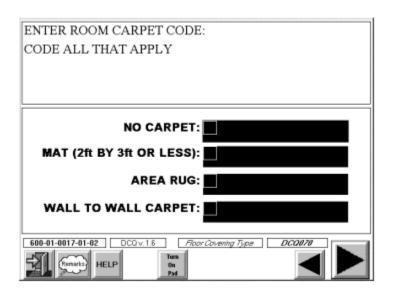


If you were able to collect a floor dust sample, DCQ.060 prompts you to enter the sample number used for all dust samples taken in the household. CAPI also prompts you to check that all sample containers are labeled with the same number. If the label is not the same for one or more of the samples, correct the situation so that all sample containers have the same number.

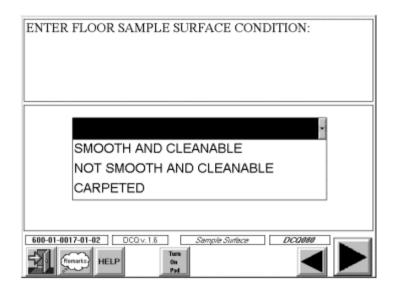


In order to check that the sample number you entered is correct, DCQ.060 will also require you to enter the sample number a second time. If the sample number does not match the number you entered previously, you will be prompted with the following message: "The sample numbers you have entered do not match. Check the number on all labels and re-enter."

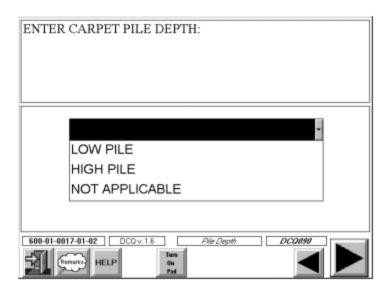
NOTE: DCQ.060 will appear after DCQ.220 if you do not collect a floor sample but do collect a window sample.



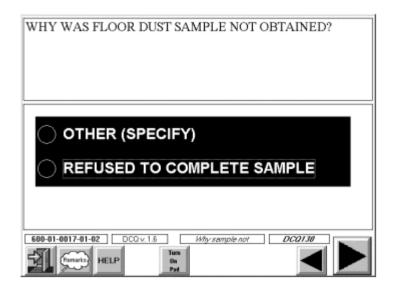
DCQ.070 prompts you to select the Room Carpet Code(s) from LDSF Item 2, "Sample." CAPI will not allow you to select both Room Carpet Code '1' (No Carpet) and any of the other codes. If you select "WALL TO WALL" CAPI will skip you to DCQ.090.



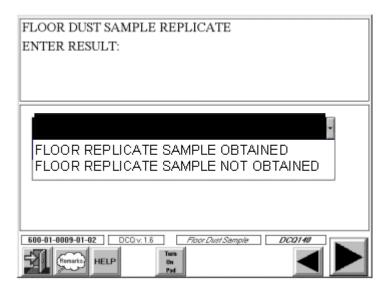
DCQ.080 prompts you to select the Sample Surface Condition Code from LDSF Item 2, "Sample." CAPI will not allow you to select more than one Sample Surface Condition Code, or to select '3' (Carpeted) if DCQ.070 (Room Carpet Code) was '1' (No Carpet).



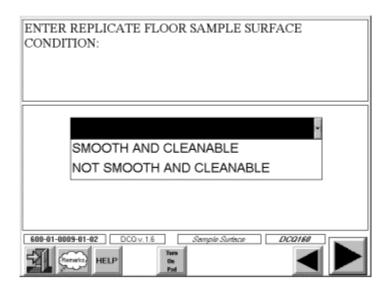
DCQ.090 prompts you to select the Carpet Pile Height Code from LDSF Item 2, "Sample." If there is no carpet where the floor dust sample is collected, select '3' (Not Applicable).



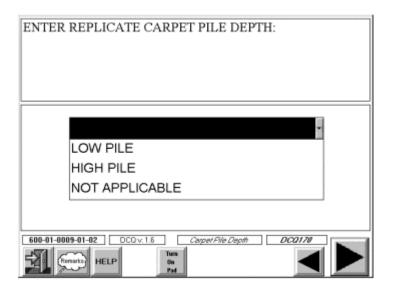
If you were **not** able to collect a floor dust sample, CAPI will skip to DCQ.130 where you will select the reason that you could not collect the sample. If the reason is 'Other', you will be asked to type the reason in the space.



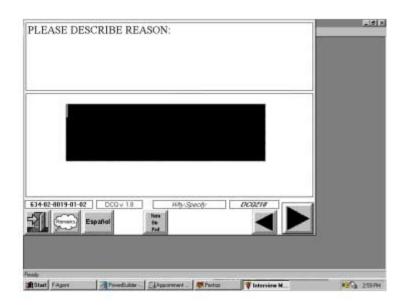
If a floor replicate sample was required in the household, DCQ.140 will prompt you to record whether the replicate sample was collected. If you did not collect a required floor replicate sample, CAPI will skip to DCQ.210 so that you can record the reason no floor replicate sample was obtained.



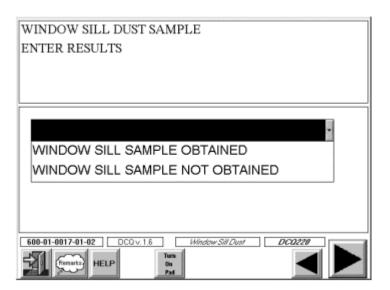
DCQ.160 prompts you to select the Sample Surface Condition Code from LDSF Item 2, "Replicate." CAPI will not allow you to select more than one Sample Surface Condition Code, or to select '3' (Carpeted) if DCQ.150 (Room Carpet Code) was '1' (No Carpet).



DCQ.170 prompts you to select the Carpet Pile Height Code from LDSF Item 2, "Replicate." If there is no carpet where the floor dust replicate was collected, select '3' (Not Applicable.)



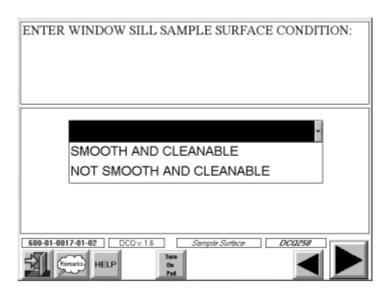
If you were **not** able to collect a required floor dust replicate, CAPI will skip to DCQ.210 where you will select the reason that you could not collect the replicate. If the reason is 'Other', you will be asked to type the reason in the space provided.



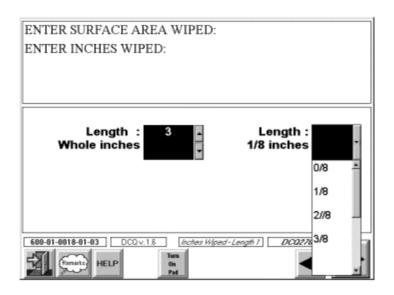
DCQ.220 prompts the interviewer to record whether a window dust sample was collected in the sampled room. If you were **not** able to collect a window sill sample, CAPI will skip to DCQ.290 where you will select the reason that you could not collect the sample.



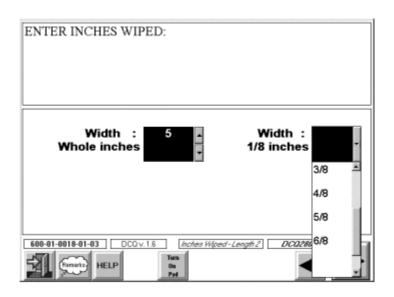
DCQ.240 prompts you to select the Window Sill Finish from LDSF Item 3, "Sample."



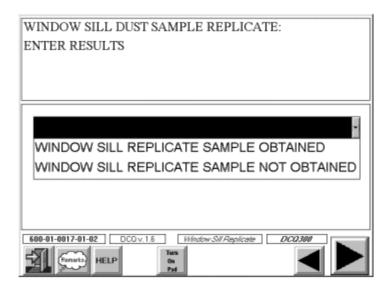
 $\,$  DCQ.250 prompts you to select the Sample Surface Condition Code from LDSF Item 3, "Sample."



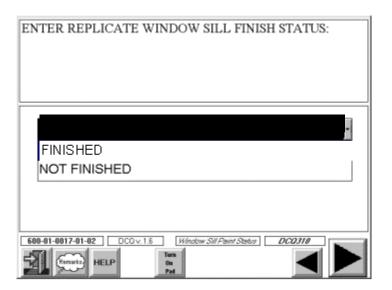
DCQ.270 prompts you to enter the length of the sill surface area wiped in inches to the nearest eighth of an inch.



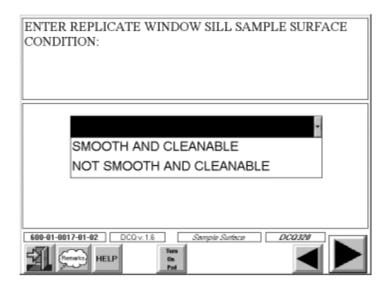
DCQ.280 prompts you to enter the width of sill surface area wiped in inches.

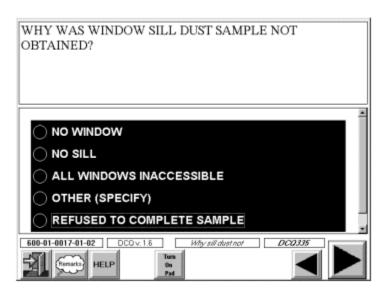


If a window sill replicate sample was required, DCQ.300 will prompt you to record whether the replicate sample was collected. If you did not collect a required window sill replicate, CAPI will skip to DCQ.360 so that you can record the reason the window sill replicate was not obtained.

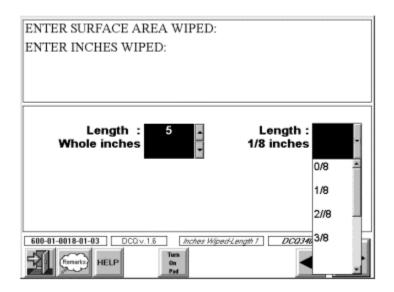


DCQ.310 prompts you to select the Replicate Window Sill Paint Finish from LDSF Item 3, "Replicate."

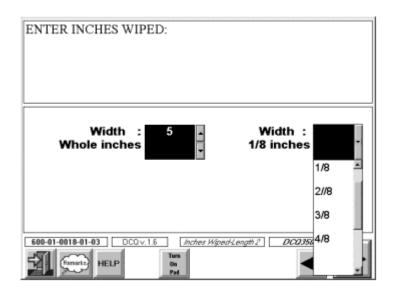




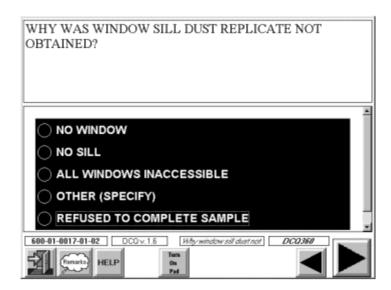
If you were **not** able to collect a window sill sample, CAPI will skip to DCQ.335 where you will select the reason that you could not collect the sample. If the reason is 'Other', you will be asked to enter the reason in the space provided.



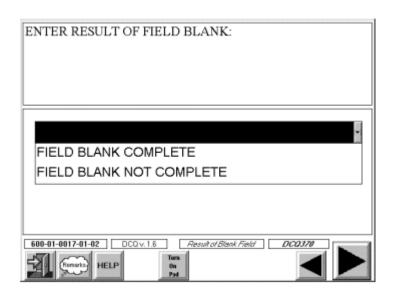
DCQ.340 prompts you to enter the length of the sill surface area wiped in inches to the nearest eighth of an inch.



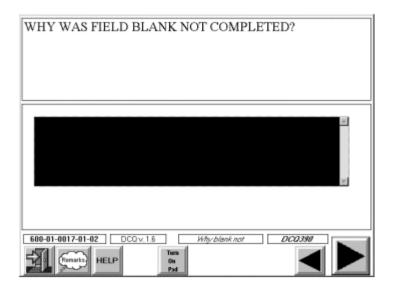
DCQ.350 prompts you to enter the width of sill surface area wiped in inches.



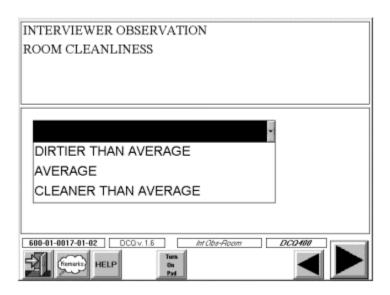
If you were **not** able to collect a replicate window sill dust sample, CAPI will skip to DCQ.360 where you will select the reason no replicate sample was collected. If the reason is 'Other', you will be asked to enter the reason in the space provided.



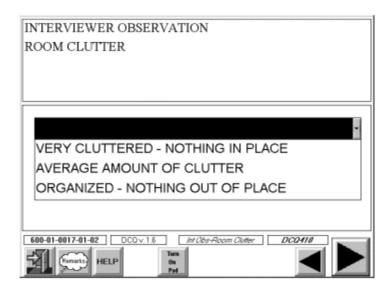
DCQ.370 will prompt you to record whether a field blank was collected (if a field blank was required.)



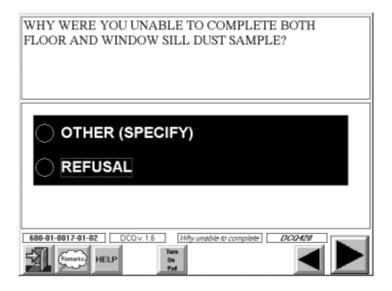
If a field blank was required but you were unable to collect it, enter the reason in DCQ.390.



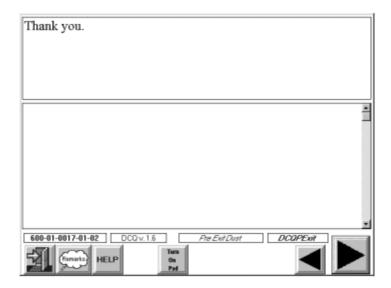
DCQ.400 will prompt you to record the room cleanliness level from LDSF Item 4.



DCQ.410 will prompt you to record the room cleanliness level from LDSF Item 4.



If you were **not** able to complete either a floor or a window sill dust sample, DCQ.420 will prompt you for the reason and CAPI will move you to the end of the module.



Prior to exiting the dust module, the screen above will appear and prompt you to thank the respondent.

# 7.8 Handling Dust Samples

No special handling of the dust samples is required. They may be kept at room temperature until you turn them into your supervisor. The FO will store the sample containers until it is time to deliver the samples to the MEC for re-labeling, tracking and shipping to the lab.

# 7.9 Dust Collection Reference Guide

To assist you in the collection of household dust samples, your Hand Cards will contain a section on dust (Exhibit 7-13) which documents the key steps in the dust collection procedure. You should always have these cards with you when you are undertaking this component of the study.

# Exhibit 7-13. Dust Collection Reference Guide (part of the interviewer's hand card set)

DUST COLLECTION REFERENCE GUIDE

#### **DUST COLLECTION – GENERAL PROCEDURES**

- 1. Prepare a clean area for sampling supplies.
- 2. Pull the sample tubes out of the kit, and label the tubes prior to beginning the wipe process.
- 3. Refer to the top of the Lead Dust Sampling Form (LDSF) to determine which samples are to be collected in the room.

You must collect the lead dust samples in each room in the following order:

- (1) Floor wipe;
- (2) Floor replicate wipe (if required);
- (3) Window sill wipe;
- (4) Window sill replicate (if required); and
- (5) Field blank (if required).
- 4. Outline the wipe area as described for floor and window sill samples on the following pages.
- 5. Put on a clean pair of disposable gloves before the collection of each sample type and before opening the wipes. It is not necessary to wipe your hands before putting on the gloves.

# FLOOR DUST SAMPLES – SPECIFIC PROCEDURES (Page 1 of 2)

**Floor dust sample:** A floor dust sample is a sample obtained by wiping a 12-inch by 12-inch area of the floor surface. These are collected in the sampled room in every eligible home.

**Floor dust sample location:** Collect the floor dust sample from the center of the largest open area of the floor space in the sampled room. An "open area" is defined as one in which no furniture is sitting and in which a person can walk. Narrow spaces between pieces of furniture and behind doors do not constitute an open area or part of an open area.

**Floor dust replicate:** A floor dust replicate is a second sample obtained by wiping a 12-inch by 12-inch area of the floor in the sampled room (same room as the floor wipe sample). Floor dust replicate samples will be collected in approximately 10 percent of the eligible homes.

**Floor dust replicate location:** Collect the floor dust replicate from the center of the *second* largest open area of the floor space in the sampled room. If there isn't a second open area, collect the replicate floor sample from a different area in the largest open area, but **not immediately adjacent to the original sample.** 

#### **Steps in Collecting Floor Dust Samples:**

- 1. Select the floor wipe area: The center of the largest open area in the room for the floor wipe; the center of the second largest open area for the floor replicate.
- 2. Outline the wipe area: Position the one square foot cardboard template over the wipe area. When putting down the template, do not touch the interior wipe area. Tape the template in place with the painter's tape across the entire open side. Use two short pieces of tape to position the remaining two corners.
- 3. Partially unscrew the cap on the appropriate sample or replicate container.
- 4. Fully unfold the wipe (one fold may still be in place). Do a preliminary inspection of the disposal wipe to determine if it is moist. If it is dried out, throw it away and use another wipe.
- 5. Place the wipe at one corner of the surface to be wiped with wipe fully opened and flat on the surface.
- 6. With the fingers together, place your hand over the wipe. Press down firmly throughout the entire wipe process, with both palm and fingers. Do not use the heel of the hand, or only the fingertips to hold down the wipe.
- 7. Do the first wipe pass (side-to-side): Proceed to wipe side-to-side with as many "S"-like motions as are necessary to completely cover the entire wipe area.
- 8. Do the second wipe pass (side-to side in opposite direction): Fold the wipe in half with the contaminated side facing inward. (The wipe can be straightened out by laying it on the wipe area, contaminated side up, and folding it over.) Once folded, place in the top corner of the wipe area Repeat wiping the entire area with "S"-like motions, but on this second pass, move in a top-to-bottom direction (i.e., perpendicular, or 90 degrees, to the direction wiped on the first pass).

# FLOOR DUST SAMPLES – SPECIFIC PROCEDURES (Page 2 of 2)

- 9. Do the third wipe pass (perimeter): Fold the wipe in half with the contaminated side facing inward (one-fourth of the total wipe). Wipe around the perimeter attempting to pick up any dust pushed into the edges during the first and second passes.
  - Attempt to remove all visible dust from the wipe area. *Note:* Exerting too much pressure will cause the wipe to curl; exerting too little pressure will result in poor dust collection. It will work best if you hold the appropriate corner of the wipe at the leading edge with the opposite hand, and pull gently in the direction you are wiping, in order to keep the wipe flat.
- 10. After wiping, fold the wipe with the contaminated side facing inward two more times (total of five folds), insert it into the sample tube with the proper label, and replace the lid. If gross debris is present, be careful that the debris does not fall out of the wipe while folding. Place the sample tube into the sample bag in the kit.

# WINDOW SILL DUST SAMPLES – SPECIFIC PROCEDURES (Page 1 of 2)

**Window sill dust sample:** A window sill dust sample is collected by wiping a window sill in the sampled room. These are collected in the sampled room in every eligible home (if a window sill is present in the sampled room).

**Window sill dust sample location:** Collect window sill dust from a randomly-selected window. Select the random window following the protocol described in Exhibit A.

**Window sill dust replicate** – A window sill dust replicate is collected by wiping the sill of a different window in the sampled room. These are collected in approximately 10 percent of the homes in which dust collection is conducted.

**Window sill dust replicate location:** Collect the window sill dust replicate from a second randomly-selected window. Select the random window following the protocol described in Exhibit A. If there is not another accessible window in the room, then no sill replicate will be collected in that home.

#### **Steps in Collecting Window Sill Dust Samples:**

- 1. Randomly select the window to be wiped in accordance with the protocol in Exhibit A. Without touching the window sill area, remove any objects that are on the sill wipe area, or items that will interfere with sampling.
- 2. Outline the wipe area: Carefully apply two strips of painter's tape across the ends of the sill to define a wipe area (be careful not to touch the sill when applying the tape). In general, you will sample the entire width and length of the window sill. (Do not sample a length longer than 36 inches.) For odd sized window sills (i.e. very narrow or very wide), guidelines for acceptable wipe area sizes are listed:

Width of Sill	Length of Wipe Area
1 to 2 inches	15 to 36 inches
3 to 4 inches	10 to 36 inches
5 to 6 inches	10 to 25 inches
8 to 10 inches	5 to 20 inches

- 3. Partially unscrew the cap on the appropriate sample or replicate container.
- 4. Fully unfold the wipe (one fold may still be in place). Do a preliminary inspection of the disposal wipe to determine if it is moist. If it is dried out, throw it away and use another wipe.
- 5. Place the wipe at one side of the sill surface to be wiped with wipe fully opened and flat on the surface.
- 6. With the fingers together, place your hand over the wipe. Press down firmly throughout the entire wipe process, with both palm and fingers. Do not use the heel of the hand, or only the fingertips to hold down the wipe.

#### WINDOW SILL DUST SAMPLES – SPECIFIC PROCEDURES (Page 2 of 2)

- 7. Do the first wipe pass (straight across sill): With the fingers together, place your hand over the fully open wipe. Proceed to wipe straight across the window sill from one side to the other.
- 8. Do the second wipe pass (straight across in the opposite direction): Fold the wipe in half with the contaminated side facing inward. Once folded, place on the opposite side of the sill area and press down firmly with the palm and fingers. Proceed to wipe straight across the window sill from one side to the other in the direction opposite from that used for the first wipe pass.
- 9. Do the third wipe pass (straight pass with emphasis in corners): Fold the wipe in half with the contaminated side facing inward (one-fourth of the total wipe). Proceed to wipe straight across the window sill from one side to the other in the same direction as used for the first wipe pass.
  - Attempt to remove all visible dust from the wipe area. *Note:* Exerting too much pressure will cause the wipe to curl; exerting too little pressure will result in poor dust collection. It will work best if you hold the appropriate corner of the wipe at the leading edge with the opposite hand, and pull gently in the direction you are wiping, in order to keep the wipe flat.
- 10. After wiping, fold the wipe with the contaminated side facing inward two more times (total of five folds), insert it into the sample tube with the proper label, and replace the lid. If gross debris is present, be careful that the debris does not fall out of the wipe while folding. Place the sample tube into the sample bag in the kit.
- 11. Measure the sill surface length and width wiped to the nearest eighth of an inch using the tape measure. Record the exact dimensions for each area wiped on the LDSF. Remember that:

 $\frac{1}{4}$  inch =  $\frac{2}{8}$  inch

 $\frac{1}{2}$  inch =  $\frac{4}{8}$  inch

 $\frac{3}{4}$  inch =  $\frac{6}{8}$  inch

#### Exhibit A. Selection of the random wall (and random window) for window sill sample

Note: When a large window area is composed of multiple individual windows, count each individual window as a distinct window. In the discussion below, sliding glass doors are not counted as windows.

- A. If there is only one window in the room, select that window for dust sampling.
- B. If there is more than one window in the room, you must select a window at random using a three step process: 1) select a random wall (C and D below), then 2) select a random window (E), and finally 3) check that the window is openable (F).
- C. If there is only one wall with windows in the room, select that wall. Move to E below to select a random window.
- D. If there are windows on more than two walls, you must first select a random wall:
  - 1. Look into the room from the entry you walked into.
  - 2. The wall to your left is Wall 1. Wall 2 is the next wall in a clockwise direction, and so on around the room. Assign wall numbers to only four walls, even in odd shaped rooms.
  - 3. Look at the second hand on your watch (Exhibit 7-8 in IM):
    - If the second hand is 1-15, select Wall 1.
    - If the second hand is 16-30, select Wall 2.
    - If the second hand is 31-45, select Wall 3.
    - If the second had is 46-00, select Wall 4.
  - 4. If there is no window on the selected wall, move clockwise around the room until you reach a wall with a window. Select that wall.
- E. If there is more than one window on the selected wall, select a random window as follows:
  - 1. Stand facing the wall.
  - 2. The window to your left is Window 1, Window 2 is the next window to the right, etc.
  - 3. Look at the second hand on your watch (Exhibit 7-9 in IM):
    - If the second hand is 1-15, select Window 1.
    - If the second hand is 16-30, select Window 2.
    - If the second hand is 31-45, select Window 3.
    - If the second hand is 46-00, select Window 4.
- F. Once you have selected the random window, check to see if it is openable. If not, proceed clockwise around the room until you either:
  - 1. Find an openable window sample that window.
  - 2. Find no openable window sample the initial selected random window.

#### FIELD BLANKS - PROCEDURES

**Field blank:** A field blank is a sample that is treated just like a wipe sample, but no surface is wiped. These will be collected in approximately 10 percent of the homes in which dust collection is conducted.

**Field blank location:** Collect the field blank while still in the sampled room.

# **Steps in Collecting the Field Blank Sample:**

- 1. Partially unscrew the cap on the appropriate container.
- 2. Fully unfold the wipe (one fold may still be in place). Do a preliminary inspection of the disposal wipe to determine if it is moist. If it is dried out, throw it away and use another wipe.
- 3. Do not wipe a surface.
- 4. Re-fold the wipe in half 5 times and place it in the sample tube with the proper label, and replace the lid. Place the sample tube into the sample bag in the kit.

#### COMPLETION OF DUST COLLECTION

**Decontamination:** After each sample type, remove the gloves and put in the trash bag. After all dust sampling is completed, use a clean wet wipe to clean your hands. During sampling, do not eat, drink, smoke, or otherwise cause hand to mouth contact.

**Trash Disposal:** Place all trash in the trash bag. Do not throw away gloves, wipes, template, tape or the trash bag inside the home. Carry the trash bag separately from the Dust Collection Kit. Do NOT place the used trash bag in the Dust Collection Kit.

**Packing supplies:** Leave unused supplies in the original kit. Place the collected samples in the zip-lock bag provided and place this in the original dust kit.

**Replace any moved items in the home:** If you have moved any items in order to sample (e.g. off the window sill), relocate those items in their original position.

**Sample handling:** No special handling of the dust samples is required. Samples should be kept at room temperature and should be protected from light until turned into the FO. Submit completed sampling kits to the FO during your next meeting with your supervisor. The FO will store the sample containers until it is time to deliver the samples to the MEC for re-labeling, tracking and shipping to the study lab for analysis.