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# Vital and Health Statistics

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## Plan and Operation of the NHANES I Epidemiologic Followup Study, 1987

Series 1:  
Programs and Collection Procedures  
No. 27

This report describes the plan and operation for the 1987 data collection wave of the Epidemiologic Followup to the first National Health and Nutrition Examination Survey (NHANES I). Tracing and data collection were conducted on 11,750 persons 25–74 years of age at NHANES I who were not known to be deceased in the 1982–84 and 1986 data collection waves of the NHANES I Epidemiologic Followup Study.

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**Symbols**

- Data not available
  - . . . Category not applicable
  - Quantity zero
  - 0.0 Quantity more than zero but less than 0.05
  - Z Quantity more than zero but less than 500 where numbers are rounded to thousands
  - \* Figure does not meet standard of reliability or precision
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# Plan and Operation of the NHANES I Epidemiologic Followup Study, 1987

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## Background

The NHANES I Epidemiologic Followup Study (NHEFS) is a longitudinal study that uses as its baseline those adult persons 25–74 years of age who were examined in the first National Health and Nutrition Examination Survey (NHANES I) (1–3). As shown in figure 1, NHEFS comprises a series of followup surveys, three of which have been conducted to date. The first wave of data collection, the 1982–84 NHEFS, included all persons who were 25–74 years of age at their NHANES I examination ( $n = 14,407$ ). The second data collection wave, the 1986 NHEFS, was conducted for the members of the cohort who were 55–74 years of age at their baseline examination and not known to be deceased at the time of the 1982–84 NHEFS ( $n = 3,980$ ). This series report focuses on the tracing and data collection of the third wave, the 1987 Followup. During this third data collection wave, attempts

were made to recontact the entire nondeceased NHEFS cohort ( $n = 11,750$ ). The entire nondeceased NHEFS cohort is being recontacted again in 1992.

In NHANES I, data were collected from a national probability sample of the U.S. civilian noninstitutionalized population 1–74 years of age (1–3). The survey, which included a standardized medical examination and questionnaires that covered various health-related topics, took place from 1971 through 1974 and was augmented by an additional national sample in 1974–75. NHANES I included 20,729 persons 25–74 years of age, of whom 14,407 (70 percent) completed a medical examination.

Although NHANES I provided a wealth of information on the prevalence of health conditions and risk factors, the cross-sectional nature of the original survey limits its usefulness for studying the effects of clinical, environmental, and behavioral factors and in tracing the natural history of disease. Therefore, NHEFS was designed to investigate the association between factors measured at baseline and the development of specific health conditions. Specifically, the three major objectives of NHEFS are to study the following:

- Morbidity and mortality associated with suspected risk factors
- Changes over time in participants' characteristics, such as blood pressure and weight
- The natural history of chronic disease and functional impairments

Although information in NHANES I was gathered from physical examinations, laboratory tests, and interviews, NHEFS is primarily a series of interview surveys that rely on self-reporting of medical conditions. Attempts were made, however, to supplement the followup interview information in NHEFS with health care facility medical records and death certificates.

NHEFS originated as a joint project between the National Center for Health Statistics and the National Institute on Aging. It has been funded primarily by the National Institute on Aging, with additional financial support from the following components of the National Institutes of Health and other Public Health Service agencies: the National Cancer Institute; the National

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<sup>a</sup>The 1987 data collection wave of the Epidemiologic Followup to the first National Health and Nutrition Examination Survey (NHEFS) could not have been accomplished without the valuable contribution and assistance of many individuals and groups. Space does not permit the authors to recognize all the persons who participated in the planning, development, and conduct of the 1987 data collection wave; nonetheless, they are grateful for the support they received, and apologize to those they have omitted.

Dr. Joan Cornoni-Huntley, Ph.D., M.P.H., of the National Institute on Aging, deserves special recognition for the important role she has played in the development and continuation of the study. Without her persistence as advocate for this study and her dedication in seeking financial support, NHEFS would not have been conducted. NHEFS was initiated jointly by the National Institute on Aging and the National Center for Health Statistics, and has been developed and funded by the following Federal agencies: National Center for Health Statistics; National Institute on Aging; National Cancer Institute; National Center for Chronic Disease Prevention and Health Promotion; National Heart, Lung, and Blood Institute; National Institute on Alcohol Abuse and Alcoholism; National Institute of Allergy and Infectious Diseases; National Institute of Arthritis and Musculoskeletal and Skin Diseases; National Institute of Child Health and Human Development; National Institute of Diabetes and Digestive and Kidney Diseases; National Institute of Mental Health; National Institute of Neurological Disorders and Stroke.

The 1987 survey was conducted by Westat, Inc., of Rockville, Maryland, under a contract with the U.S. Department of Health and Human Services (Contract No. 282-84-2111) and was directed by Thomas McKenna and Diane Cadell.

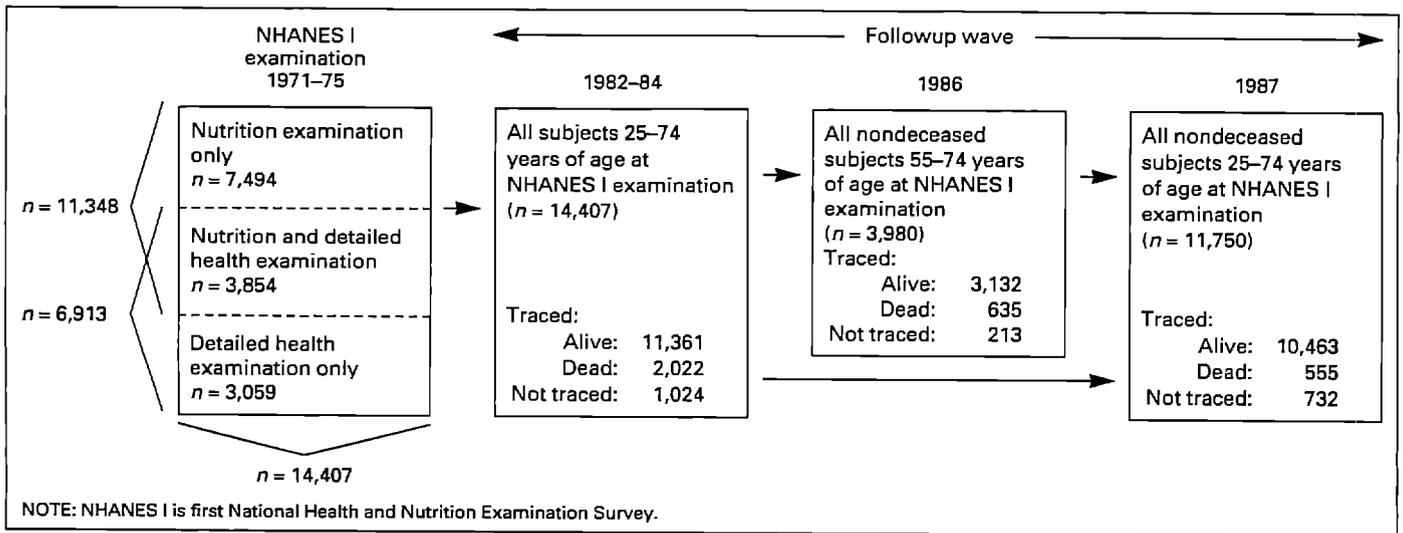


Figure 1. Followups of the NHANES I Epidemiologic Followup Study (NHEFS) cohort: 14,407 subjects 25-74 years of age at NHANES I.

Center for Chronic Disease Prevention and Health Promotion; the National Heart, Lung, and Blood Institute; the National Institute on Alcohol Abuse and Alcoholism; the National Institute of Allergy and Infectious Diseases; the National Institute of Arthritis and Musculoskeletal and Skin Diseases; the National Institute of Child Health and Human Development; the National Institute of Diabetes and Digestive and Kidney Diseases; the National Institute of Mental Health; and the National Institute of Neurological Disorders and Stroke. All of these agencies were involved in both developing topics important to their specialty areas and designing procedures to collect data that would address these issues.

The NHEFS cohort, as shown in figure 2, includes the 2,657 subjects who were deceased at the time of the 1982-84 or 1986 NHEFS and the 11,750 subjects who were

not known to be deceased at the time of the 1982-84 or 1986 NHEFS. Tracing and data collection in the 1987 Followup were undertaken only for the 11,750 subjects in the latter group, even if a proxy interview had not been conducted or collection of health care facility records had not been undertaken for the decedent in a previous survey wave. Hereinafter, they will be referred to as the "1987 Followup cohort." The 2,657 subjects who were deceased at the time of the 1982-84 or 1986 NHEFS were excluded from additional data collection in 1987 and thus were not included as part of the 1987 Followup cohort. For analytic purposes, though, information collected for this group may be used in conjunction with the information collected previously on subjects who were part of the 1987 Followup cohort.

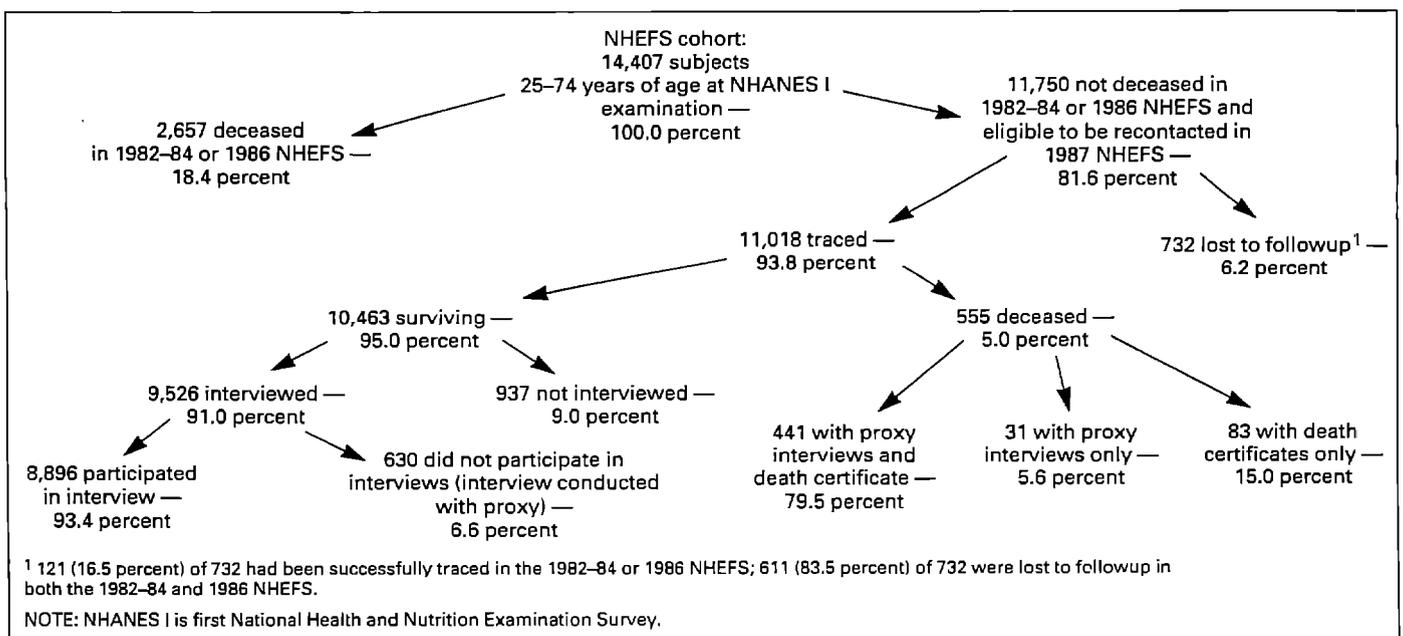


Figure 2. Summary of data collection in the NHANES I Epidemiologic Followup Survey (NHEFS), 1987

Tracing of subjects in the 1987 Followup began in June 1986. As of January 25, 1988, the end of the 1987 NHEFS survey, 11,018 (93.8 percent) of the 11,750 members of the 1987 Followup cohort had been successfully traced. Interviews were conducted for 9,998 subjects (90.7 percent of those successfully traced). In addition, 7,361 facility stay records were collected for 3,472 subjects, using information obtained from the interview, death certificate, or some other source. Death certificates were obtained for 524 (94.4 percent) of the 555 subjects who were known to have died since the last contact.

To use the 1987 Followup Study data most effectively, it is necessary to understand the study design and procedures of NHANES I and the 1982–84 and 1986 Followups of NHEFS. A brief overview of these surveys is provided below. More detailed information on these surveys is presented in other publications (1–5).

## NHANES I (1971–75)

NHANES I was designed to collect extensive demographic, medical history, nutritional, clinical, and laboratory data on a probability sample of the civilian noninstitutionalized population of the United States (1–3). The survey was a multistage, stratified probability sample of clusters of persons 1–74 years of age. It was conducted in 1971–74 and was extended in 1974–75 by an additional sample of adult persons, called the “Augmentation Survey” (3). The NHANES I survey design included oversampling of certain population subgroups, including persons living in poverty areas, women of childbearing age (25–44 years of age), and elderly persons (65 years of age and over). A subsample of 6,913 adult NHANES I participants 25–74 years of age, called the “detailed sample,” consisted of a random subsample of subjects examined in 1971–74 and all subjects in the Augmentation Survey. Persons included in the detailed sample were examined in greater depth and provided with additional questionnaire components. The Augmentation Survey did not include oversampling of any population subgroups. More information on the sampling frame and survey instruments used for the detailed sample may be found in the plan and operation series reports for the NHANES I survey (1–3).

As a result of these varied design features of NHANES I, not all of the members of the NHEFS cohort received the same questions or examinations at baseline. For example, although all 14,407 adults in the NHEFS cohort received the general medical examination, only those 11,348 adults who were not in the Augmentation Survey were administered nutrition questionnaires in NHANES I. Similarly, the 6,913 participants included in the detailed sample may have been administered supplementary questionnaires (for example, arthritis, cardiovascular, or respiratory questionnaires), depending on their responses to screening questions.

## 1982–84 Followup

The 1982–84 Followup was the first data collection wave of the NHEFS series (4). It included 14,407 persons who were 25–74 years of age when they were examined in NHANES I (1971–75). Tracing of subjects began in 1981, and data collection was conducted from 1982 to 1984. At the close of data collection in August 1984, 93 percent ( $n = 13,383$ ) of the study population had been successfully traced. The basic design of the 1982–84 NHEFS consisted of the following components:

- Tracing subjects or their proxies to a current address.
- Acquiring death certificates for deceased subjects.
- Performing in-depth interviews with subjects or with their proxies, including, for surviving subjects, taking pulse, blood pressure, and weight measurements.
- Obtaining hospital and nursing home records, including pathology reports and electrocardiograms.

No attempt had been made to recontact any of the NHANES I examinees until the inception of the 1982–84 Followup. Thus, the first step of the Followup was to trace and locate all subjects in the NHEFS cohort and determine their vital status. Tracing sources included crisscross and city directories, telephone contacts, direct mail, U.S. Post Office address information requests, National Death Index (6) checks, State department of motor vehicle listings, State vital statistics files, and field visits to neighbors at last known address. A subject in the NHEFS cohort was considered successfully traced if he or she (or another informant, if the subject was deceased or was incapacitated and thus unable to be contacted) responded correctly to a set of verification questions establishing the subject’s identity. All subjects whose vital status could not be determined were considered lost to followup. A subject’s death had to be confirmed by means of either a death certificate or proxy interview.

The information collected during tracing relating to the death of a subject was used to request a copy of the death certificate from the appropriate State vital statistics office. Death certificates were obtained for 1,935 (95.7 percent) of the 2,022 decedents by the end of the 1982–84 survey period. (An additional 33 death certificates for 1982–84 NHEFS decedents were received after the closeout of the 1982–84 data collection period. These death certificates are included on the Mortality Data Public Use Tapes for followup waves subsequent to the 1982–84 NHEFS. For more information, see the 1987 NHEFS Mortality Data Public Use Tape Documentation.) Efforts continue to locate all missing death certificates.

During tracing, efforts were made to obtain a current address for surviving subjects and to identify a knowledgeable proxy respondent for deceased subjects and for surviving subjects who were incapacitated and unable to participate in the 1982–84 NHEFS. Respondents (that is, subjects or proxies who provided followup information) who were identified and located through the tracing

procedure were then contacted and asked to participate in an interview. In a few cases ( $n = 65$ ), subjects who had been traced successfully could not be relocated for the interview. Only their vital status and the date when they were last traced in the 1982–84 survey period are available.

An attempt was made to interview all subjects (or their proxies) identified during tracing. Interviews were conducted wherever the subject resided, including nursing homes, prisons, and mental health facilities. Occasionally interviews were conducted at some other convenient location (for example, a parent's home). In most instances, however, the proxy interviews for deceased subjects were conducted over the telephone.

The interview was designed to gather information on selected aspects of the subject's health history since the time of the NHANES I examination. This information included a history of the occurrence or recurrence of selected medical conditions; an assessment of behavioral, social, nutritional, and medical risk factors believed to be associated with these conditions; and an assessment of various aspects of functional status. Whenever possible, the questionnaire was designed to retain item comparability between NHANES I and the 1982–84 NHEFS in order to measure changes over time. However, questionnaire items were modified, added, or deleted when necessary to take advantage of current improvements in questionnaire methodology. Physical measurements (blood pressure, pulse rate, and weight) were obtained from surviving subjects near the end of the interview.

Interviews with the subject or a proxy were collected for 84.8 percent ( $n = 12,220$ ) of the original NHEFS cohort, or 91.3 percent of those successfully traced. Interviews were conducted for 10,523 (92.6 percent) of the 11,361 surviving subjects; 256 of the interviews were administered to a proxy respondent because the subject was incapacitated. Proxy interviews were obtained for 1,697 (83.9 percent) of the 2,022 deceased subjects.

Information on overnight stays in hospitals and nursing homes was elicited during the interview for the period from 1970 to the time of the 1982–84 NHEFS. Interviewers recorded the full name and address of the health care facility and the approximate date of the stay. At the conclusion of the interview, respondents were asked to sign a medical authorization form that would be used to request the release of information from the subject's medical records. These authorization forms were retained on file, and a photocopy was sent to each health care facility that the respondent had identified during the interview.

The health care facility data collection took place from April 1983 through August 1984. Hospitals and nursing homes for which stays had been reported (through interviews, death certificates, and other sources) were contacted and asked to abstract information from their records for all stays occurring from January 1 of the year of the person's NHANES I examination to the date of the followup interview. The major items requested were the

dates of admission and discharge, the discharge diagnoses (if requesting from a hospital) or admitting diagnoses (if requesting from a nursing home), and information on any procedures performed.

## 1986 Followup

The 1986 Followup was the second data collection wave of the NHEFS series (5). In the 1986 NHEFS, information was collected on changes in health and functional status since the study's last contact with the older members of the NHEFS cohort. The 1986 Followup was restricted to those subjects who were 55–74 years of age at the time of their NHANES I examination ( $n = 5,677$ ). They represent almost 40 percent of the entire NHEFS cohort. Tracing and data collection in the 1986 Followup were undertaken only for the 3,980 subjects who were not known to be deceased at the time of the 1982–84 NHEFS. Tracing of subjects began in 1984, and data collection was conducted from 1985 through 1986. At the close of data collection in July 1986, 94.6 percent ( $n = 3,767$ ) of the study population had been successfully traced.

The basic design and data collection procedures of the 1986 NHEFS were similar to the ones developed in the 1982–84 study: Subjects (or their proxies) were traced, subject and proxy interviews were conducted, and health care facility abstracts and death certificates were collected. A major difference between the 1982–84 and 1986 Followups, however, was the manner in which the interviews were conducted. In the 1986 NHEFS, the interviews were administered primarily by telephone rather than through inperson interviews. In addition, because the questionnaire was not administered in person, no physical measurements were made in the 1986 NHEFS.

The first step of the 1986 Followup was to trace and locate all subjects in the 1986 NHEFS Followup cohort and determine their vital status. Different tracing strategies were employed, depending on the subject's vital status in the 1982–84 NHEFS. A subject in the NHEFS cohort was considered successfully traced if he or she (or another informant, if the subject was deceased or was incapacitated and thus unable to be contacted) responded correctly to a set of verification questions establishing the subject's identity. All subjects whose vital status could not be determined were considered lost to followup. A subject's death had to be confirmed by means of either a death certificate or proxy interview.

The information collected during tracing relating to the death of a subject was used to request a copy of the death certificate from the appropriate State vital statistics office. Death certificates were obtained for 616 of the 635 decedents by the end of the 1986 survey period. Efforts continue to locate all missing death certificates.

Subject and proxy interviews were conducted over the telephone using a computer-assisted telephone interviewing system. The interview was designed to gather information on events that had occurred since last contact regarding the subject's living arrangement, occurrence and

recurrence of chronic diseases, functional limitations, hospital and nursing home experience, and utilization of community services. To retain item comparability among NHANES I, the 1982–84 NHEFS, and the 1986 NHEFS, a majority of the questions included on the 1986 questionnaire were the same as those used in the 1982–84 NHEFS. Questions on coronary bypass surgery, pacemaker procedures, and the utilization of community services were new to the 1986 NHEFS.

Interviews with the subject or a proxy were collected for 90.7 percent ( $n = 3,608$ ) of the 1986 NHEFS cohort, or 95.8 percent of those successfully traced. Interviews were conducted for 3,027 (96.6 percent) of the 3,132 surviving subjects; 469 of these interviews were administered to a proxy respondent because the subject was incapacitated. Proxy interviews were obtained for 581 (91.5 percent) of the 635 deceased subjects.

Information on overnight stays in hospitals and nursing homes was elicited for any of the medical conditions reported in the interview. If the subject was interviewed in the 1982–84 NHEFS, the respondent in the 1986 NHEFS was asked to recall any overnight hospitalizations since

1980 for the medical conditions of interest. If the subject had not been interviewed in the 1982–84 NHEFS, the interviewer asked the respondent to recall any overnight stays since 1970. Interviewers recorded the full name and address of the health care facility and the approximate date of the stay. At the conclusion of the interview, respondents were asked to sign a medical authorization form that would be used to request the release of information from the subject's medical records. These authorization forms were retained on file, and a photocopy was sent to each health care facility that the respondent had identified during the interview.

All health care facilities for which overnight stays were reported (through interviews, death certificates, and other sources) were contacted by mail from September 1985 through June 1987 and asked to abstract information from their records for all stays occurring since the date of last NHEFS contact. Facilities were asked to abstract information on exact dates of admission and discharge and on diagnoses, and to include photocopies of selected sections of the subject's inpatient record.

# Study design and tracing activities

The 1987 Followup was conducted to extend the followup period for the entire surviving NHEFS population. The main objectives of the 1987 Followup were as follows:

- To continue monitoring changes over time in health, functional status, and utilization of hospitals and nursing homes.
- To track the incidence of various medical conditions.

The NHEFS cohort consists of the 14,407 persons 25–74 years of age at the time of their NHANES I examination. Tracing and data collection in the 1987 Followup were undertaken for only a portion of the NHEFS cohort, referred to as the 1987 Followup cohort. The 1987 Followup cohort consisted of the 11,750 subjects who were not known to be deceased in the 1982–84 or 1986 NHEFS, regardless of whether they had previously been successfully traced or interviewed in either survey period. No additional interview or health care facility stay information was collected in the 1987 NHEFS for the 2,657 subjects who were known to be deceased at the time of the 1982–84 or 1986 NHEFS, even if a proxy interview had not been conducted or collection of health care facility records had not been undertaken for the decedent in a previous survey wave.

## Study design

The design and data collection procedures adopted in the 1987 Followup were very similar to the ones developed in the previous NHEFS waves: Subjects (or their proxies) were traced, subject and proxy interviews were conducted, and health care facility abstracts and death certificates were collected. A major difference between the 1982–84 and the 1986 and 1987 NHEFS waves, however, was the manner in which the interviews were conducted. In the 1982–84 NHEFS, the 2-hour subject interview usually was conducted in person; in the 1986 and 1987 NHEFS, each interview averaged 30 minutes and was conducted primarily by telephone. In addition, because the questionnaire was not administered in person, no physical measurements were made in either the 1986 or 1987 NHEFS. Copies of all pertinent study materials for the 1987 NHEFS (tracing materials, a brochure, letters, questionnaires, authorization forms, and health facility data collection forms) can be found in appendix I.

Each survey component (tracing, interviewing, collecting hospital and nursing home records, and obtaining death certificates) conducted in the 1987 NHEFS represents a separate survey activity with its own set of procedures for data collection, processing, and reporting. However, the information gathered for any one survey component was used to direct activities in other components. Thus, data from different survey components were intended to be used together when appropriate. Figure 2 summarizes the results from the data collection procedures for the 1987 NHEFS. The flowchart shows the relationships among the data collection activities (except for the health care facility record collection) and provides information on the number of subjects in each component.

## Tracing

The tracing procedures used for the 1987 NHEFS were similar to those used in the previous surveys. Tracing began in June 1986 and was conducted on all 11,750 subjects 25–74 years at their NHANES I examination who were not known to be deceased prior to the last contact. Because the validity of longitudinal studies depends on the completeness of followup, a large variety of sources were used to trace subjects in the 1987 Followup. For example, throughout the tracing process, periodic matches were made of all nondeceased NHEFS participants to the National Death Index (6) and to the enrollee file of the Health Care Financing Administration.

Different tracing strategies were developed, depending on the survey wave in which the subject was last contacted. Of the 11,750 subjects included in the 1987 NHEFS, 3,345 were also members of the 1986 NHEFS cohort. Of this group, 3,114 persons (93 percent) were successfully traced and found to be alive in the 1986 NHEFS. This number includes only the subjects in the 1986 NHEFS who were coded “1” (“Alive”) on the 1986 NHEFS Vital and Tracing Status Public Use Data Tape. Because these 3,114 subjects had been successfully traced within the past year, the decision was made to contact them directly and attempt to conduct the 1987 interview. If subjects could not be directly contacted for interviewing, their information was reviewed and further tracing procedures were undertaken. Through these direct recontact procedures, 3,092 subjects (99.3 percent) were successfully traced again in the 1987 NHEFS.

Tracing procedures for the remaining 8,636 subjects were developed based on their tracing status in the 1982–84 and 1986 NHEFS. One set of tracing procedures was used for subjects who had last been successfully traced alive in the 1982–84 NHEFS; another set was used for subjects who had not been successfully traced in either the 1982–84 or 1986 NHEFS. The tracing procedures used for each group are discussed in the following paragraphs. Subjects and proxy respondents who were identified and located through the tracing procedure were then contacted by telephone or mail (if a telephone number was not available) and asked to participate in an interview.

### **Retracing subjects last traced successfully in the 1982–84 NHEFS**

Of the 8,636 subjects who required further tracing at the start of the 1987 NHEFS data collection period, 7,654 had last been successfully traced and found to be alive in 1982–84. They include 7,530 subjects who were under 55 years of age at the time of the NHANES I examination and coded as “1” (“Alive”) on the 1982–84 NHEFS Vital and Tracing Status Public Use Data Tape and 124 subjects eligible for inclusion in the 1986 NHEFS cohort who were last successfully traced in the 1982–84 NHEFS. Of these 7,654 subjects, 7,566 (98.8 percent) were successfully traced again in the 1987 Followup.

The first step in retracing each subject was to conduct an automated location verification procedure called Telematch, using a service that provides computerized matching with a national communication company’s service records. Subjects were considered successfully identified if the last name, mailing address, and ZIP Code recorded in their 1982–84 NHEFS tracing records matched the information provided by Telematch services. If the information provided by Telematch did not result in a conclusive match or was later found to be inaccurate, local area directory assistance was contacted. Subjects were considered successfully identified if the first and last names and either the address or telephone number recorded in their 1982–84 NHEFS tracing records matched the information provided by directory assistance. Subjects identified as a conclusive match through Telematch or directory assistance were then contacted for interview. If the attempted interview did not result in direct contact with the subject (or a proxy respondent), the subject’s information was reviewed and further tracing procedures were undertaken.

Subjects who had matching information on first and last names but who had a different address and a different telephone number were designated as “possible matches.” Information on the verification of possible matches is found later in this section.

When efforts using directory assistance failed to produce a conclusive match, other tracing sources were used. They included post office address inquiries, submission of the person’s Social Security Number to the Social Security Administration, and calls to the tracing reference provided in the 1982–84 NHEFS (typically, a person not living

in the subject’s household at the time of the 1982–84 NHEFS). In addition, persons included in the baseline or 1982–84 NHEFS household composition lists were contacted, if available, to locate the subject. All subjects identified through these additional tracing sources were considered “possible matches.”

### **Tracing subjects not traced successfully in any previous NHEFS**

Additional tracing sources were used to trace the remaining 982 subjects in the 1987 Followup cohort, who had not been successfully traced in any previous NHEFS. This group includes 875 subjects who were 25–54 years of age at the time of the NHANES I examination and were not successfully traced during the 1982–84 NHEFS and an additional 107 subjects eligible for inclusion in the 1986 NHEFS cohort who were not successfully traced during either the 1982–84 or 1986 NHEFS. These 982 subjects are assigned vital status codes of “4” (“Unknown”) or “5” (“Traced alive but lost prior to interview period”) on the 1982–84 NHEFS Vital and Tracing Status Public Use Data Tape and codes “4,” “5,” or “7” (“Traced alive but without direct subject contact”) if eligible for inclusion on the 1986 NHEFS Vital and Tracing Status Public Use Data Tape.

Of these 982 subjects, more than one-third ( $n = 360$ ) were successfully traced in the 1987 Followup using the following tracing procedures. The first step was to contact directory assistance in the area where the subject had last been known to live to determine whether he or she had returned to that area. Other tracing sources used included motor vehicle office and credit bureau checks for male relatives and spouses of female subjects who were included on the household composition listings obtained in NHANES I. Furthermore, crisscross directory searching was undertaken to locate residents living on the block where the subject was last known to have resided. When found, these persons were contacted to determine whether they were familiar with the subject and, if so, whether they knew the whereabouts of the subject. A subject identified through any of these tracing sources was considered a possible match.

### **Verification of possible matches**

Respondents for possible-matched subjects were contacted and administered a tracing questionnaire to verify the subject’s identity. A subject who was a possible match was considered successfully traced if he or she or a proxy respondent (if the subject was deceased or incapacitated and unable to be interviewed) correctly responded to a set of verification questions used to establish the subject’s identity. (If the respondent did not have a telephone, he or she was sent a mail update form to complete.) Once the name of the subject was verified, the respondent had to supply correct information for at least two of the following three items:

- *Subject’s date of birth.* Date of birth was considered verified if the subject’s month, day, and year of birth

exactly matched the information obtained in either NHANES I or the 1982–84 NHEFS, depending on whether the subject had been successfully traced in the 1982–84 NHEFS. If only the month and day matched, the birth year had to be within 2 years of the year listed in the tracing records for the date of birth to be considered verified. In some cases, a proxy respondent was administered the questions and did not know the subject's date of birth. This item, however, was considered verified if the age provided by the proxy for the subject was within 2 years of the deceased subject's age at death or of the surviving subject's current age, as determined from the subject's tracing file. If the proxy did not know the subject's age, the interviewer requested the name of another proxy respondent.

- *Subject's address at time of the last NHEFS contact.* The address was considered verified if the street name, city, and State reported at last contact matched the information on record. Street number did not need to match.
- *Household composition at last contact.* Questions on household composition were asked only if the subject's date of birth or address at the time of last contact did not match information listed in the subject's tracing records. The household composition at the time of last contact was considered verified if the respondent recalled the name and relationship of at least one household member. If the respondent reported that the subject lived alone and this information agreed with the information in the tracing records, this also was considered a match.

## Subjects lost to followup

All subjects who could not be located through the tracing procedures were considered lost to followup in the 1987 NHEFS. In five cases, even though information about the death of a subject was obtained from a former neighbor, a relative, or another tracing source, that subject was considered lost to followup because the information was not verified by means of a proxy interview or a death certificate. (A subject's death had to be confirmed by either a death certificate or proxy interview.)

Two groups of subjects were considered alive for analytic purposes in the 1987 Followup but are assigned a special 1987 Followup vital status code. The first group consists of seven subjects who were initially traced in the 1987 NHEFS and found to be alive but were lost prior to the 1987 interviewing period. Only their vital status and the date when they were last traced in the 1987 survey period are available. The second group includes 386 subjects for whom a direct confirmation of vital status was not obtained because of a failure to follow proper tracing procedures. These subjects are identified by a 1987 NHEFS vital status code of "7." The date when they were last known to be alive is the date that tracing was conducted. Analysts may want to consider these 386 subjects

lost to followup. However, the authors feel that the available data indicate that there is a high probability that these subjects were alive at the time of tracing in the 1987 NHEFS.

As of January 25, 1988, the end of the 1987 survey period, 93.8 percent ( $n = 11,018$ ) of the 11,750 subjects in the 1987 Followup cohort had been successfully traced (see figure 2). Only 22 (0.7 percent) of the 3,114 subjects who had last been traced and found to be alive in the 1986 NHEFS and 88 (1.1 percent) of the 7,654 subjects who had last been traced and found to be alive in the 1982–84 NHEFS were not successfully traced in the 1987 NHEFS. However, 622 (63.3 percent) of the 982 subjects not successfully traced in any previous NHEFS wave were again not successfully traced in the 1987 NHEFS.

The success of the tracing efforts in the 1987 Followup according to age at baseline examination, race, and sex are given in table A. (See appendix II for discussion of age, race, and sex variables.) To summarize how these demographic factors were related to tracing success, a multiple logistic model was fitted to the cross-classification of age at baseline examination, race, and sex, with the proportion of subjects who were lost to followup representing the dependent variable. The analysis was limited to black and white subjects, because there were few subjects of other races ( $n = 149$ ). Age at baseline examination was categorized into five 10-year age groups (25–34 through 65–74 years). Interaction terms were deleted from the saturated model to develop the simplest model that would fit the data. The smallest  $p$  value (probability) for a deleted term was 0.12. The final model included interactions for race and sex ( $p = 0.0045$ ) and age and sex ( $p = 0.0777$ ). Black men were almost four times as likely to be lost to followup as white men, but black women were only twice as likely to be lost as white women. Odds ratios relative to white women were 1.09, 2.20, and 4.05 for white men, black women, and black men, respectively. Rates of loss to followup were highest among subjects 25–34 years of age for both men and women. The lowest rates for men were among those 45–54 years of age, but for women, the lowest rates were among those 55–64 years of age. Rates increased again for the elderly subjects, 65–74 years of age, of both sexes.

Analysis using a multiple logistic regression was conducted to determine whether those persons lost to followup were at relatively high risk of death. The regression model included six health characteristics measured during NHANES I (in addition to age at baseline examination, race, and sex) that have been established as risk factors for mortality: high blood pressure (systolic blood pressure of 140 millimeters of mercury or higher); high cholesterol (260 milligrams per 100 milliliters or higher); self-reported history of heart attack; self-reported history of diabetes; smoking status at baseline examination (current smoker, current nonsmoker, or unknown); and overweight (for men, a body mass index greater than or equal to 27.8 kilograms per meter squared; for women, a body mass index greater than or equal to 27.3 kilograms per meter

**Table A. Number and percent distribution of subjects in the NHANES I Epidemiologic Followup Study (NHEFS) 1987 Followup cohort by status at followup, according to race, sex, and age at NHANES I**

Race, sex, and age <sup>1</sup>	Status at followup							
	All subjects	Surviving	Deceased	Lost to followup	All subjects	Surviving	Deceased	Lost to followup
	Number				Percent distribution			
All races <sup>2</sup>	11,750	10,463	555	732	100.0	89.0	4.7	6.2
Male:								
25–34 years	1,111	998	9	104	100.0	89.8	0.8	9.4
35–44 years	884	802	33	49	100.0	90.7	3.7	5.5
45–54 years	936	824	82	30	100.0	88.0	8.8	3.2
55–64 years	603	536	44	23	100.0	88.9	7.3	3.8
65–74 years	740	584	119	37	100.0	78.9	16.1	5.0
Female:								
25–34 years	2,356	2,061	15	280	100.0	87.5	0.6	11.9
35–44 years	1,959	1,806	50	103	100.0	92.2	2.6	5.3
45–54 years	1,159	1,076	43	40	100.0	92.8	3.7	3.5
55–64 years	808	758	30	20	100.0	93.8	3.7	2.5
65–74 years	1,194	1,018	130	46	100.0	85.3	10.9	3.9
White								
Both sexes	9,913	8,986	425	502	100.0	90.6	4.3	5.1
Male:								
25–34 years	951	878	5	68	100.0	92.3	0.5	7.2
35–44 years	765	703	27	35	100.0	91.9	3.5	4.6
45–54 years	807	719	66	22	100.0	89.1	8.2	2.7
55–64 years	529	475	39	15	100.0	89.8	7.4	2.8
65–74 years	611	500	94	17	100.0	81.8	15.4	2.8
Female:								
25–34 years	1,965	1,752	10	203	100.0	89.2	0.5	10.3
35–44 years	1,576	1,472	35	69	100.0	93.4	2.2	4.4
45–54 years	1,009	948	30	31	100.0	94.0	3.0	3.1
55–64 years	686	653	22	11	100.0	95.2	3.2	1.6
65–74 years	1,014	886	97	31	100.0	87.4	9.6	3.1
Black								
Both sexes	1,688	1,353	129	206	100.0	80.2	7.6	12.2
Male:								
25–34 years	141	109	3	29	100.0	77.3	2.1	20.6
35–44 years	100	81	6	13	100.0	81.0	6.0	13.0
45–54 years	119	95	16	8	100.0	79.8	13.4	6.7
55–64 years	64	52	5	7	100.0	81.3	7.8	10.9
65–74 years	123	78	25	20	100.0	63.4	20.3	16.3
Female:								
25–34 years	358	286	5	67	100.0	79.9	1.4	18.7
35–44 years	344	299	15	30	100.0	86.9	4.4	8.7
45–54 years	144	123	13	8	100.0	85.4	9.0	5.6
55–64 years	119	102	8	9	100.0	85.7	6.7	7.6
65–74 years	176	128	33	15	100.0	72.7	18.8	8.5
Other								
Both sexes	149	124	1	24	100.0	83.2	0.7	16.1
Male:								
25–34 years	19	11	1	7	100.0	57.9	5.3	36.8
35–44 years	19	18	–	1	100.0	94.7	–	5.3
45–54 years	10	10	–	–	100.0	100.0	–	–
55–64 years	10	9	–	1	100.0	90.0	–	10.0
65–74 years	6	6	–	–	100.0	100.0	–	–
Female:								
25–34 years	33	23	–	10	100.0	69.7	–	30.3
35–44 years	39	35	–	4	100.0	89.7	–	10.3
45–54 years	6	5	–	1	100.0	83.3	–	16.7
55–64 years	3	3	–	–	100.0	100.0	–	–
65–74 years	4	4	–	–	100.0	100.0	–	–

<sup>1</sup>See appendix II for a discussion of revised race, corrected sex, and recalculated age at NHANES I examination.

<sup>2</sup>Includes races other than white or black.

NOTE: NHANES I is the first National Health and Nutrition Examination Survey. The 1987 Followup cohort consists of 11,750 subjects, ages 25–74 years at NHANES I examination, who were not known to be deceased in the 1982–84 or 1986 NHEFS.

squared). (The thresholds for overweight represent the sex-specific 85th percentiles for persons 20–29 years of age (excluding pregnant women) in the 1976–80 National Health and Nutrition Examination Survey (7).)

The results of the multiple logistic regression are presented in table B. The baseline risk factors of high cholesterol, overweight, and history of heart attack or diabetes did not have a statistically significant effect on

**Table B. Odds ratios, confidence intervals, and statistical significance for selected health characteristics on loss to followup for the NHANES I Epidemiologic Followup Study (NHEFS) 1987 Followup cohort**

<i>Baseline characteristic</i>	<i>95-percent confidence interval</i>			<i>p value</i>
	<i>Odds ratio</i>	<i>Lower bound</i>	<i>Upper bound</i>	
High blood pressure . . . . .	0.80	0.64	0.99	0.0417
High cholesterol . . . . .	0.88	0.69	1.14	0.3328
Overweight . . . . .	1.07	0.89	1.29	0.4839
History of heart attack . . . . .	1.17	0.64	2.12	0.6162
Diabetes . . . . .	1.31	0.81	2.13	0.2719
Smoking . . . . .	2.16	1.69	2.78	<0.0001

NOTE: NHANES I is the first National Health and Nutrition Examination Survey. The 1987 Followup cohort consists of 11,750 subjects, ages 25–74 years at NHANES I examination, who were not known to be deceased in the 1982–84 or 1986 NHEFS. Data are based on multiple logistic regression, with race, sex, age at NHANES I examination, and race-sex and age-sex interaction terms included.

loss to followup. Of the six baseline risk factors, only high blood pressure and smoking status had a significant effect on loss to followup. High blood pressure was inversely related to loss to followup; NHANES I examinees with high blood pressure were 20 percent less likely to be lost to followup ( $p = 0.0417$ ) than subjects with normal systolic readings. Smoking status had the strongest effect on loss to followup: Smokers at baseline were more than twice as likely to be lost to followup compared with nonsmokers ( $p < 0.0001$ ). These results for smoking suggest that subjects who were lost to followup in the 1987 NHEFS may be somewhat more likely to have died compared with those who were successfully traced.

# Interview data collection

## Interview procedures

An attempt was made to obtain an interview for all subjects who were successfully traced in the 1987 NHEFS. The procedures used to obtain interviews in the 1987 NHEFS were similar to those adopted in the previous waves of the NHEFS:

- An advance letter describing the Followup Study was sent to a surviving subject or a knowledgeable proxy respondent (for a deceased subject or for a subject who was incapacitated and unable to participate in the interview), once that person was traced and located.
- The interviewer then called the subject or proxy to schedule an appointment for the interview.
- In contrast to the 1982–84 interview procedures, the 1987 and 1986 interviews were administered by telephone. (In 1982–84, the majority of the interviews were conducted in person.) When a telephone number was not available, the respondent was sent a mail questionnaire to complete. Any overnight health care facility stays reported during the interview were recorded on a hospital and health care facility chart.
- At the end of the interview, the respondent's address was confirmed. This was done for tracing purposes as well as to ensure that a medical authorization form would be sent to the proper address to be signed and returned. This form was used to request that health care facilities release information from the subject's medical records to the study. It was mailed to the respondent for his or her signature (or to a blood relative if the proxy respondent was not related to the subject) when at least one health care facility stay was reported during the interview and was listed on the subject's hospital and health care facility chart. Subjects and proxies were remunerated \$5 for agreeing to complete and return the medical authorization form.

The 1987 NHEFS interviews were conducted over the telephone using a computer-assisted telephone interviewing (CATI) system. CATI allows the telephone interviewer to enter directly into the computer the answers supplied by the respondent. Thus, editing and coding time is reduced, and keypunching from a hard-copy questionnaire is eliminated. A computer program drives the questionnaire so that the correct skip patterns are followed and the appropriate questions are displayed on the

computer monitor. The skip patterns are based on information gathered either from previous data collection waves or from responses provided during the interview. For example, the several questions on pregnancy and menstrual history in the 1987 interview were programmed to be skipped automatically if the subject was male or if the female subject had a previous interview. Edit and logic checks are incorporated into the data collection system itself, thus improving the quality of the data.

The data collection period for the 1987 Followup began in mid-May 1987 and ended in early January 1988. Fieldwork was conducted by dividing the sample into three regions, with the first region having the largest and the third region having the smallest sample size. Each region contained States from each time zone. Interviews were collected for 9,998 subjects; 9,901 (99 percent) were conducted by telephone and 97 (1 percent) were conducted by mail.

## Questionnaire types

The 1987 NHEFS questionnaire was designed to gather information on events that had occurred since last contact regarding the subject's living arrangement, occurrence and recurrence of selected chronic diseases, functional limitations, and hospital and nursing home experiences. To retain item comparability with NHANES I, the 1982–84 NHEFS, and the 1986 NHEFS, a majority of the questions included on the 1987 NHEFS questionnaire were the same as those used in the previous NHEFS waves. New questions concerning high blood cholesterol, high blood pressure, and male sterilization, as well as reworded questions on alcoholic beverage consumption and an expanded section on female hormone use, were added to the 1987 NHEFS. In addition, questions asked in the 1982–84 NHEFS concerning kidney disorders and urinary infections were again included in the 1987 NHEFS.

As in the 1982–84 and 1986 Followups, two versions of the questionnaire were used in the 1987 NHEFS: the subject questionnaire and the proxy questionnaire (see appendix I). Surviving subjects were always administered the subject questionnaire. If the subject was alive but incapacitated, a slightly modified version of the subject questionnaire was administered to a proxy respondent. A separate proxy questionnaire was used only when the subject was deceased. It consisted of a subset of the

questions from the subject questionnaire, with the addition of several questions related to the subject's death.

Note the distinction between a proxy respondent and the proxy questionnaire. A proxy respondent was the informant who answered questions when the subject was not able to participate in an interview, either because the subject was alive and incapacitated or because the subject was deceased. The proxy questionnaire, however, was the type of questionnaire administered only to the person who responded for a deceased subject. A total of 1,102 proxy respondents were interviewed in the 1987 NHEFS. Of these, 630 responded for an incapacitated subject and were administered a modified version of the subject questionnaire, and 472 responded for a deceased subject and thus were administered the proxy questionnaire.

Nearly all 9,998 interviews collected in the 1987 NHEFS were conducted by telephone. However, during the main survey, when a subject or proxy could not be contacted by telephone, the respondent was mailed an abbreviated questionnaire (see appendix I). The mail questionnaire for surviving subjects was designed to collect information on (a) tracing for future recontacts; (b) subject's current living arrangements and medical history since last contact; (c) name and address of hospitals and nursing homes in which the subject had stayed since last contact and the admission date for each stay; and (d) if the subject was female, reproductive and hormone use history. The mail questionnaire sent to the proxy respondent when the subject was deceased was designed to obtain the necessary information on (a) the subject's identity, (b) the name and address of hospitals and nursing homes in which the subject had stayed since last contact and the admission date for each stay, and (c) the locality of the subject's death.

Of the 449 questionnaires mailed to respondents in the 1987 Followup, 97 (21.6 percent) were returned. Ninety-two were collected from surviving subjects, and five were collected from proxies for deceased subjects. Unlike the 1982-84 NHEFS, a returned mail questionnaire in the 1987 (and the 1986) NHEFS constitutes an interview, and data from the mail questionnaires are included on the 1987 NHEFS Interview Tape.

### Questionnaire content

Both the subject and proxy telephone questionnaires were divided into sections according to topic area. The major topics are summarized in figure 3. Where appropriate, entire sections or specific questions in some sections were omitted from the proxy questionnaire. In addition, certain sections of the questionnaire were included or omitted depending on whether an interview had been collected for the subject in the 1982-84 or 1986 NHEFS.

Part A of the subject and proxy questionnaires included questions on the subject's household composition and marital status. The subject's race was ascertained only if the subject had not had an interview in the 1982-84 or 1986 NHEFS.

Demographic .....	Living arrangement, household composition, marital status
Medical history .....	Arthritis, gout, heart attack, stroke, diabetes, hypertension, cancer, male sterilization, bone fractures, cataracts, and other chronic conditions
Health care facility stays...	History of overnight hospital and nursing home stays since last contact
Functional status .....	Activities of daily living
Cigarette smoking .....	History of use, <sup>1</sup> current use
Alcoholic beverages.....	Use in past year
Vision and hearing .....	Corrective lenses, hearing acuity
Exercise and weight.....	Activity level, history, <sup>1</sup> current weight
Female medical history ....	Hormone use, pregnancies, <sup>2</sup> births, <sup>2</sup> breast examination and Pap smear test, female sterilization
Death information .....	Place of death
<sup>1</sup> Information collected only if the subject had not had an interview in 1982-84 or 1986 NHEFS survey period. <sup>2</sup> Information collected only if the subject had not had an interview in a previous survey period or was under age 45 at the 1982-84 NHEFS interview.	
NOTE: NHANES I is first National Health and Nutrition Examination Survey.	

Figure 3. Questionnaire topics in the NHANES I Epidemiologic Followup Study (NHEFS), 1987

Part B of the subject and proxy questionnaires contained a self-reported history of selected medical conditions. Specific questions were asked about arthritis, gout, heart attack, coronary bypass surgery, pacemaker procedures, small stroke, stroke, cancer, hypertension, diabetes, kidney disorders, urinary tract infections, hip and wrist fractures, pneumonia, flu, vasectomy, and other types of surgeries. The proxy questionnaire also included several questions in part B that pertain to the subject's place of death.

The wording of the medical condition questions in part B generally depended on whether the subject had had an interview in the 1982-84 and/or 1986 NHEFS and, if so, whether a specific medical condition had been reported for the subject during that interview. If a certain medical condition had been reported in the 1982-84 or 1986 NHEFS interview, the respondent in the 1987 interview was asked to recall any recurrences of that medical condition since the date of that interview. The respondent was asked to recall whether a doctor had ever told the subject that he or she had the medical condition in question if the condition had not been reported in a previous NHEFS interview, the condition was never asked about in a previous NHEFS interview, or an interview had not been conducted for the subject in both 1982-84 and 1986.

Respondents also were asked to provide information on any overnight health care facility stays for any of the medical conditions reported in the interview. If the subject had had an interview in the 1986 NHEFS, the respondent in the 1987 NHEFS was asked to recall all overnight hospitalizations for the medical conditions of interest since 1985. If the subject was last interviewed in the 1982–84 NHEFS, the respondent in the 1987 NHEFS was asked to recall all overnight hospitalizations for the medical conditions of interest since 1980. If the subject had not had an interview in both the 1982–84 and 1986 NHEFS, then the interviewer asked the respondent to recall all overnight hospital stays since 1970. If the respondent reported that the subject was first told about having the medical condition of interest before 1980 or 1985 and that information contradicted information stored in the CATI system obtained from the 1982–84 or 1986 NHEFS interview, he or she was asked to provide information on all overnight stays since 1970 for that condition.

The beginning of the respondent recall period was defined as 1970, 1980, or 1985 rather than the date of the subject's most recent interview (that is, baseline examination, 1982–84 NHEFS, or 1986 NHEFS) for two reasons. First, the beginning or midpoint of a decade may be an easier reference point for recalling events than the date of the subject's most recent interview. Second, given that the respondent might have difficulty recalling exact dates of facility stays, increasing the length of the recall period maximizes the probability of collecting information on health care facility stays that had occurred since the date of the subject's most recent interview.

All overnight stays in health care facilities reported during the interview were recorded on the hospital and health care facility chart. The full name and address of the health care facility, date of admission, and reason(s) for the admission were obtained from the respondent for each stay and transcribed onto the chart.

Part C of the subject questionnaire concerned functional impairment. First, several questions were asked on paralysis, amputation, and severe arthritis of the limbs. The battery of functional limitation questions consisted of a modified subset of items from the Fries Functional Disability Scale for arthritis (8), the Rosow-Breslau Scale (9), and the Katz Activities of Daily Living Scale (10). The questions were designed to measure the subject's level of difficulty in performing a set of everyday activities without the help of another person or mechanical device. Information also was collected on whether help had been received and, if so, how this help affected the subject's ability to perform the activity. Thus, this information could be used both to measure the impact of disease on functional ability and to measure the actual functional level as affected by the receipt of help or use of devices. Part C was omitted from the proxy questionnaire.

Part D consisted of questions pertaining to the subject's smoking and drinking habits. The questions were designed to obtain a brief history of the subject's lifetime cigarette smoking behavior and an overview of the

subject's smoking and alcohol consumption in the past year. Smoking history questions were asked of the respondent only when a subject interview had not been conducted in the 1982–84 and 1986 NHEFS.

Part E contained questions for surviving subjects on physical activity and current body weight. A series of questions regarding the subject's weight history also was included in Part E for those subjects not interviewed in 1982–84 or 1986. Part E was not included in the proxy questionnaire.

Part F consisted of questions designed to measure the subject's visual and auditory abilities. Part F was omitted from the proxy questionnaire.

Part G contained questions on female medical history, including pregnancy and menstrual history, use of birth control pills and postmenopausal hormones, and frequency of breast examination and Pap smear tests. The questions concerning pregnancy were asked only of female subjects (or their proxies) if the subject was under 45 years of age at the time of the 1982–84 interview or had not been previously interviewed.

Part H in the subject questionnaire contained a question to obtain the subject's Social Security Number, if it had not been obtained previously. Part H was also used to confirm, for future tracing purposes, the name and address of all persons who participated in the interview (for example, subject, proxy, or assistant). Confirmation of name and address was also done so that a medical authorization form could be sent to the proper address to be signed and returned. The form was used to request that health care facilities release information from the subject's medical records to the study. It was sent to the subject or proxy (if the proxy was related to the subject and the subject was too ill to sign the form) to obtain his or her signature when at least one health care facility stay was reported and had been listed on the subject's hospital and health care facility chart. When the proxy respondent was not related to the incapacitated subject who was unable to sign the medical authorization form, an attempt was made in Part H to identify a relative who could sign it. Part H in the proxy questionnaire included questions designed to facilitate the receipt of the subject's death certificate if it had not yet been received.

Part I was used by the interviewer to give his or her impressions regarding the quality of the interview and responses provided by the informant.

## Interview nonresponse

By the end of the 1987 NHEFS survey period (January 25, 1988), interviews had been conducted for 85.1 percent ( $n = 9,998$ ) of the 11,750 subjects aged 25–74 years at the time of NHANES I and not found to be deceased in either the 1982–84 or 1986 NHEFS (90.7 percent of those successfully traced).

As shown in figure 2, an interview was conducted for 9,526 (91.0 percent) of the 10,463 surviving subjects; 630 interviews were administered to a proxy respondent

**Table C. Number and percent of traced members of the NHANES I Epidemiologic Followup Study (NHEFS) 1987 Followup cohort without a completed interview, by vital status at 1987 NHEFS and by race, sex, and age at NHANES I**

Race, sex, and age <sup>2</sup>	Subjects without complete interview <sup>1</sup>			
	Surviving		Deceased	
	Number	Percent	Number	Percent
<b>All races<sup>3</sup></b>				
Both sexes . . . . .	937	9.0	83	15.0
Male:				
25-34 years. . . . .	104	10.4	1	11.1
35-44 years. . . . .	67	8.4	6	18.2
45-54 years. . . . .	77	9.3	7	8.5
55-64 years. . . . .	39	7.3	5	11.4
65-74 years. . . . .	81	13.9	20	16.8
Female:				
25-34 years. . . . .	171	8.3	1	6.7
35-44 years. . . . .	168	9.3	8	16.0
45-54 years. . . . .	77	7.2	8	18.6
55-64 years. . . . .	60	7.9	9	30.0
65-74 years. . . . .	93	9.1	18	13.8
<b>White</b>				
Both sexes . . . . .	737	8.2	52	12.2
Male:				
25-34 years. . . . .	82	9.3	—	—
35-44 years. . . . .	49	7.0	5	18.5
45-54 years. . . . .	64	8.9	4	6.1
55-64 years. . . . .	32	6.7	4	10.3
65-74 years. . . . .	65	13.0	11	11.7
Female:				
25-34 years. . . . .	129	7.4	—	—
35-44 years. . . . .	116	7.9	5	14.3
45-54 years. . . . .	65	6.9	4	13.3
55-64 years. . . . .	52	8.0	6	27.3
65-74 years. . . . .	83	9.4	13	13.4
<b>Black</b>				
Both sexes . . . . .	178	13.2	30	23.3
Male:				
25-34 years. . . . .	21	19.3	—	—
35-44 years. . . . .	14	17.3	1	16.7
45-54 years. . . . .	10	10.5	3	18.8
55-64 years. . . . .	7	13.5	1	20.0
65-74 years. . . . .	14	17.9	9	36.0
Female:				
25-34 years. . . . .	41	14.3	1	20.0
35-44 years. . . . .	44	14.7	3	20.0
45-54 years. . . . .	11	8.9	4	30.8
55-64 years. . . . .	8	7.8	3	37.5
65-74 years. . . . .	8	6.3	5	15.2

<sup>1</sup> Percents are based on 10,463 surviving subjects and 555 deceased subjects at the time of the 1987 NHEFS.

<sup>2</sup> See appendix II for a discussion of revised race, corrected sex, and recalculated age at NHANES I examination.

<sup>3</sup> Includes races other than white or black.

NOTE: NHANES I is the first National Health and Nutrition Examination Survey. The 1987 Followup cohort consists of 11,750 subjects, ages 25-74 years at NHANES I examination, who were not known to be deceased in the 1982-84 or 1986 NHEFS.

because the subject was incapacitated. A proxy interview was conducted for 472 (85.0 percent) of the 555 decedents identified in the 1987 NHEFS. In the 1987 NHEFS, only 9.0 percent ( $n = 937$ ) of the traced surviving subjects were not interviewed. Proxy interviews were not conducted for 15.0 percent of decedents in the 1987 NHEFS.

Table C shows the interview nonresponse rates for the 1987 Followup by age at baseline examination, race, sex, and vital status. The lower interview success rate in the 1987 Followup for decedents than for surviving subjects is apparent across almost all age-sex-race groups. This difference occurs partly because many of the decedents were located from vital statistics files and no proxy could be identified.

To summarize how demographic factors relate to interview status, multiple logistic models were fitted to the cross-classification of age at baseline examination, race, and sex, with the proportion of 1987 Followup subjects without an interview as the dependent variable. The analysis was limited to black and white respondents, because there were few subjects of other races ( $n = 149$ ). Age at baseline examination was categorized into five 10-year age groups (25-34 years through 65-74 years). The final model for surviving subjects includes interactions between age and sex ( $p = 0.0984$ ) and sex and race ( $p = 0.0187$ ). Thus, among survivors, black men were 2½ times more likely not to be interviewed than white men, and black women were slightly less than twice as likely not to have a completed subject interview than white women. Odds ratios relative to white women were 1.43 for white men, 1.93 for black women, and 3.84 for black men. Men in the youngest and oldest age groups were more likely than men 45-64 years of age not to be interviewed. Among women, noninterview rates were highest among those 25-34 and 35-44 years of age and lowest for those 55-64 years of age. When examining the overall age effect, men and women 25-34 years, as well as men 65-74 years of age, were found to be almost twice as likely not to be interviewed than women 55-64 years of age. (Odds ratios relative to women 55-64 years were 1.88, 2.04, and 1.86, respectively.)

The final model for decedents includes only the main effect terms for race ( $p < 0.0001$ ), sex ( $p = 0.4766$ ), and age at baseline examination ( $p = 0.4760$ ). The results from the multiple logistic regression indicated that black decedents were 2.2 times more likely than white decedents not to have a proxy interview.

# Health care facilities data collection process

A major objective of the 1987 NHEFS is the collection of information on all overnight stays in health care facilities for members of the 1987 Followup cohort. The 1987 Followup cohort consisted of the 11,750 subjects who were not known to be deceased in the 1982-84 or 1986 NHEFS. Followup cohort members who have either an interview or a death certificate on the 1987 NHEFS data files were eligible for the health care facility records component. The aim of this component was to develop a complete set of health care facility (that is, hospital and nursing home) records for each 1987 Followup cohort member. This was accomplished by identifying all overnight stays in health care facilities through a series of reporting mechanisms. Facilities were then contacted to obtain copies of medical records. Reports and medical records were then linked, and the 1987 NHEFS Health Care Facility Stay file was constructed. Critical time periods for the collection of

facility records in the 1987 NHEFS are illustrated in figure 4. The time line at the top of the figure identifies the events or dates used to define reference periods. Each panel below the time line defines the reference period for an individual aspect of the facility data collection. Within a panel, each line shows how that time period is defined for subjects with different interview histories.

The 1987 NHEFS Health Care Facility Stay file contains all information on overnight stays that are in scope for the 1987 NHEFS period. This in-scope period covers the time between the most recent interview prior to the 1987 NHEFS and the date of the 1987 NHEFS interview. The three possible in-scope periods are illustrated in the first panel of figure 4. The in-scope period for surviving subjects last interviewed in the 1986 NHEFS begins on the date of the 1986 interview and ends on the date of the 1987 interview. For deceased subjects last interviewed in

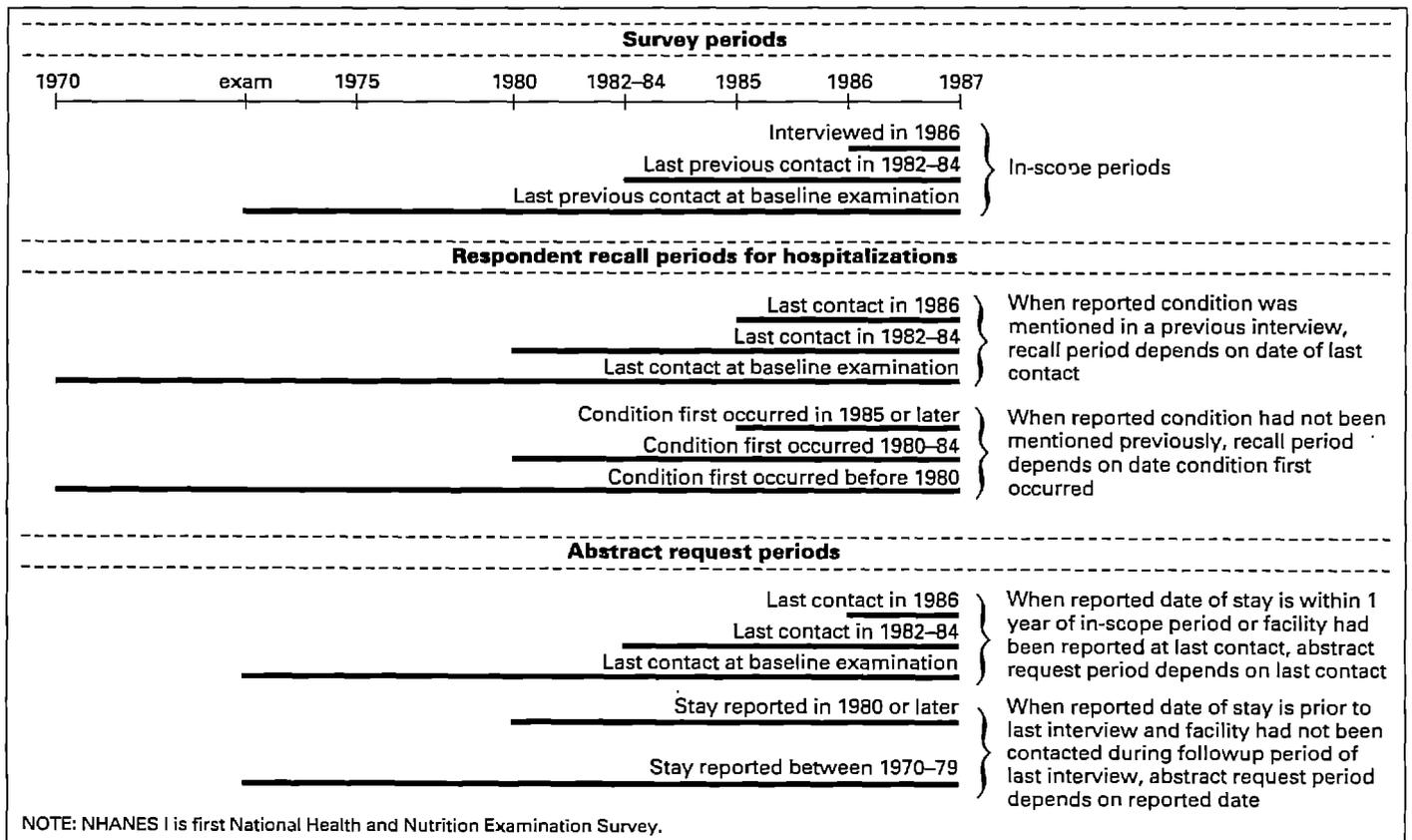


Figure 4. Survey period, respondent recall period, and facility abstract request period, by previous interview status: NHANES I Epidemiologic Followup Study (NHEFS), 1987

1986, the in-scope period runs from the date of the 1986 interview to the date of the subject's death. For subjects whose last interview was conducted during the 1982–84 Followup, the in-scope period begins on the date of the 1982–84 interview and ends on the date of the 1987 interview for survivors or on the date of death for decedents. Subjects last contacted at the time of the NHANES I examination have an in-scope period from the date of the NHANES I examination until the date of the 1987 interview or the date of death. Stays that were determined to have occurred prior to the in-scope period were defined as out of scope. When information on stays that occurred prior to the 1987 in-scope period that had not been obtained during previous waves was collected during the 1987 wave, it was placed on either the 1986 Health Care Facility Stay file, or the Revised 1982–84 Health Care Facility Stay file, as appropriate.

### Identification of stay reports

Reports of overnight hospital or nursing home facility stays were obtained from various sources. Most reports were elicited through a series of detailed questions in part B of the interview, which includes questions about specific medical conditions. If a respondent reported that the subject had experienced a given condition, questions were asked to determine whether the subject had ever been admitted to a health care facility because of the condition. If the condition had been reported in a previous interview, the respondent was asked to report all overnight facility stays for that condition that had occurred since 1985 if the subject was last interviewed in the 1986 NHEFS, since 1980 if the subject was last interviewed in the 1982–84 NHEFS, or since 1970 if the subject was last interviewed at the time of the NHANES I examination. If the condition had not been previously reported, respondents were asked to recall facility stays since 1970 if the condition first occurred prior to 1980, since 1980 if the condition first occurred from 1980 through 1985, or since 1985 if the condition first occurred after 1985. For respondents who provided inconsistent information during the 1987 interview (that is, information that contradicted the previous interview), the respondent recall period was extended to 1970.

The respondent recall periods were defined to include reports of facility stays that were technically out of scope for the 1987 NHEFS (that is, facility stays that occurred prior to the date of last NHEFS interview). This was done for two reasons. First, the years 1970, 1980, and 1985 may be more meaningful reference points for respondents than the date of the last interview. Second, to the extent that subjects misreport the dates of hospital or nursing home stays, increasing the period of reporting will maximize the probability of collecting information on all facility stays that are truly in scope for 1987. The relationship between in-scope and respondent recall periods is illustrated in figure 4. In addition to interview information, data on facility stays were gathered from other reporting sources:

death certificate, tracing sources, and other facility abstracts. At the conclusion of the interview, authorization was obtained to contact facilities.

### Facility data collection

For each stay reported during the interview, the name and address of the facility, the reported dates of the stay, and the reason for the stay were recorded on the hospital and health care facility chart. (See appendix I.) A separate log book was kept containing similar data for reports gathered from the death certificates, tracing sources, and other facility abstracts. All reports of facility stays were compiled and entered into a computerized tracking system. For each subject, the list of reported stays was checked against the list of facilities that were contacted for the subject in previous NHEFS interviews. To avoid duplication with previous NHEFS Health Care Facility Stay files, reports were deleted from the tracking system if the reported dates of admission on the 1987 NHEFS were more than 1 year prior to the previous NHEFS interview (that is, out of scope for the 1987 NHEFS), unless the facility named in the report had not been contacted during the followup corresponding to the previous interview. For example, if a respondent reported being hospitalized since the beginning of 1985 for a given condition and the reported date of admission was more than 1 year prior to the 1986 interview, the facility mentioned would not normally be asked for information about the stay. However, if the facility had not been contacted in 1986, then information about the stay would be requested from the facility.

All facilities for which stays were reported were contacted by mail during the period August 1987–January 1988 and asked to review the subject's medical records; to abstract information on exact dates of admission, discharge, and diagnoses; and to place the information on standard forms. (See appendix I for copies of the facility contact letters and the abstract forms.) Because many respondents may not have remembered correctly the dates of hospitalizations, the requests to the facilities did not specify the reported dates of admission. Rather, facilities were asked to complete abstract forms for all stays since the date of last NHEFS contact. In some cases, an out-of-scope report was obtained for a facility that had not been contacted in a previous NHEFS. When this occurred, the facility was directed either to send all abstracts since 1970 or 1980, depending on the time of the last contact with the subject. The different facility abstract request periods are illustrated in figure 4. These procedures sometimes resulted in the receipt of previously unobtained abstracts that were out of scope for the 1987 survey but in scope for other NHEFS followup periods. The revised 1982–84 NHEFS Health Care Facility Stay file or the 1986 NHEFS Health Care Facility Stay file will include these records. In addition to completing abstract forms, health care facilities were requested to submit photocopies of selected sections of the subject's inpatient

record—for example, the facesheet; the discharge summary; the third-day electrocardiogram (for myocardial infarction diagnoses, code 410 in the *International Classification of Diseases, 9th Revision, Clinical Modification* (ICD-9-CM) (11)); and pathology reports (for any admission where a new malignancy was diagnosed).

## Matching records

As the abstracts were received, they were checked against report information in the tracking system to determine whether the abstract “matched” any of the reported stays. Date of admission and diagnosis were used as matching criteria, but exact matches on date or diagnosis were not required for a stay to be considered matched. Abstracts were matched to reports if the reported date of admission was within a year before or after the actual date of admission and if one reported reason for admission involved the same body system as one of the diagnoses present on the abstract. Because the matching rules allowed for an admission date of up to 1 year before or after the reported date of admission, some abstracts are present on the file with a match record status and an out-of-scope report date. These records are identified by a type C flag in position 199 of the file. Cases that did not meet the matching criteria were reviewed by NCHS staff and matched when appropriate.

Each record on the file represents an overnight facility stay. Therefore, one or more records will exist for some 1987 Followup cohort subjects, whereas other subjects will have no records on the file. The structure of the data file reflects the system used to obtain and process stay information. The record is divided into four major sections: the report section, the record status section, the abstract section, and the related stay section. An example of the record layout is provided in figure 5.

The first section of the record is the report section, which contains information from the reporting source as well as stay identification numbers assigned by NCHS. The record status section contains a code for the result of the abstract request—that is, match or nonmatch status. The abstract section contains the information obtained from the facility records, including actual admission and discharge dates and diagnoses. The diagnoses on the abstracts were coded using the ICD-9-CM (11) according to

the medical coding specifications detailed in the 1987 NHEFS Health Care Facility Stay file documentation. Discharge diagnoses were coded for hospitals, but admitting diagnoses were coded for nursing homes. The final section of the record, the related stay section, is used to identify stays that are contained within other stays. This occurred most often when nursing home residents had a brief hospital stay but then returned to the nursing home. A detailed example of a related stay section is contained in the introduction to the Health Care Facility Stay file documentation.

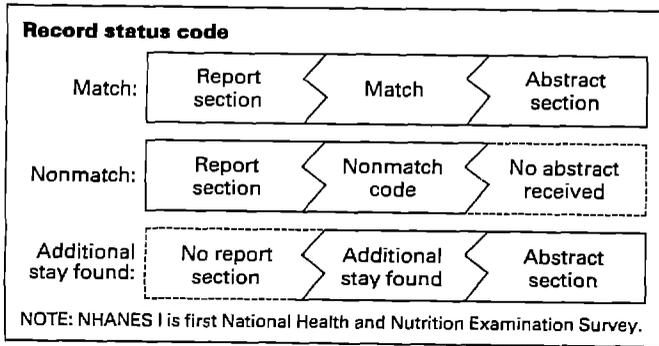
Information will be present in one section or more of the record depending on whether a report was obtained, whether an abstract was received, and how the stay relates to other stays on the file. The presence or absence of information in the first three sections results in three different record profiles. Figure 6 illustrates these three profiles. The first is the successfully matched stay record; that is, when an abstract was received that matched a report. Abstract information was added to the record for that report and the code of MAT (match) was entered into the record status section. Complete information is available for these stays. The second type occurs when an abstract was not matched to a report, and therefore no data are contained in the abstract section. The appropriate nonmatch code was entered in the record status section. The third type of record is one generated solely by the receipt of a facility abstract. This type of record resulted when the facility returned an in-scope abstract that did not match any report on the tracking system. When this occurred, the abstract was entered on the file, stay identifiers were assigned in the report section of the record, but no other information was given in the report section. A code of ASF (additional stay found) was entered in the record status section.

Because of the procedures instituted for maximizing the collection of reports of hospital or nursing home stays (that is, deliberately requesting out-of-scope report information), it was necessary to devise rules for removing the “correctly reported” out-of-scope reports from the final version of the file. This was possible only after the facilities submitted the abstract information. As was previously mentioned, reports of stays with a reported date of admission more than 1 year before the last interview were eliminated from the tracking system before contacting

Report section	Record status section	Abstract section	Related stay section
<ul style="list-style-type: none"> <li>• Facility identifiers</li> <li>• Reported date of admission</li> <li>• Reported cause of admission</li> <li>• Source of report</li> </ul>	<ul style="list-style-type: none"> <li>• Match or reason for nonmatch</li> </ul>	<ul style="list-style-type: none"> <li>• Actual dates of admission and discharge</li> <li>• Diagnoses (<i>International Classification of Diseases, 9th Revision, Clinical Modification</i>)</li> <li>• Discharge status from hospitals and nursing homes</li> </ul>	<ul style="list-style-type: none"> <li>• Codes assigned by the National Center for Health Statistics to identify stays contained within other stays</li> </ul>

NOTE: NHANES I is first National Health and Nutrition Examination Survey.

Figure 5. Health care facility record layout: NHANES I Epidemiologic Followup Study (NHEFS), 1987



**Figure 6. Examples of matching process and record status codes: NHANES I Epidemiologic Followup Study (NHEFS), 1987**

the facilities by mail if the facility had been contacted in the previous interview period. However, if the facility had not been contacted previously, the report was kept on the tracking system and flagged with a "D" in position 199. If an in-scope abstract was received from the facility, it was added to the file with a record status code of ASF, and the type D report was deleted from the final version of the file. If the facility responded to the request but no in-scope abstracts were received from the facility, the type D report was deleted from the file on the assumption that the date was correctly reported and the stay was out of scope. In some cases it was impossible to contact the facility, and these type D reports remain on the final version of the file. These records for unconfirmed reports of out-of-scope stays can be eliminated from analysis at the analyst's discretion. A type C flag was assigned in position 199 when a reported date of admission was within 1 year of the previous interview. If an in-scope abstract was returned that matched the type C report, it was assigned a record status code of MAT. (The matching rules permitted an admission date of up to 1 year before or after the reported date of admission.) If the facility responded to the request but no in-scope abstracts were received from the facility, the type C reports were removed from the file, the assumption being that the correct date was reported and that the stay was truly out of scope. When the facility could not be contacted, refused to participate, or did not respond or when the subject did not provide the necessary authorization to obtain the records, type C reports were retained on the file. These unconfirmed reports of out-of-scope stays are identified by a nonmatch status in positions 60-62 and a type C flag in position 199.

### Results of the health care facility data collection

The file contains a total of 7,361 records; 6,845 (93.0 percent) records are for hospital stays, 405

(5.5 percent) for nursing home stays, and 111 (1.5 percent) for stays in facilities of unknown types. The distribution of stays is given in table D. Of the traced Followup cohort, 31.5 percent ( $n = 3,472$ ) have at least one stay on the file; 3,298 subjects have at least one hospital stay, 375 subjects have at least one nursing home stay, and 98 subjects have at least one stay in a facility of unknown type. Among the 3,472 subjects with at least one stay on the file, 292 have a stay in more than one type of facility and 7 have at least one stay in each of the three classifications of facility.

The completeness of the data file can be assessed by examining the codes in the record status section of the file. Of the 7,361 records on the file, 4,318 (58.7 percent) are matches, 1,446 (19.6 percent) are additional stays found, and 1,597 (21.7 percent) are nonmatch codes (table E). The match rate varies little by sex, with 59.2 percent of the stays reported by men and 58.3 percent of the stays reported by women being matched to a facility abstract. Stays reported for black subjects had a lower match rate (49.6 percent), compared with a match rate of 60.3 percent for white subjects. There was no consistent trend in match rates by age group. The lowest rate was found for stays reported for persons 45-54 years old at the time of examination (55 percent). Stays reported for those under 45 years of age at examination were matched in about 58 percent of the records, and for those 55 years and over, at exam the match rate was about 63 percent. There are 1,597 records potentially missing from the file (that is, no abstract that matches a report on the tracking system was received from the facility). The most common cause of failure to obtain an abstract (70.3 percent,  $n = 1,122$ ) occurred because the facility did not return an abstract that matched the report. In these cases, the facility may have responded that the subject was never in that facility (code of XNH in positions 60-62) or may have responded to the survey but returned no abstract matching the specifically reported stay (XNS). The next most common reason was a facility's refusal to send abstracts (9.9 percent,  $n = 158$ ). These records are coded REF in positions 60-62. Other reasons for nonmatch include 6.9 percent ( $n = 110$ ) because the facility could not be contacted (designated FNC), 6.3 percent because the facility did not respond in any way to requests for abstracts ( $n = 101$ , coded ONR), and 3.6 percent ( $n = 57$ ) because the participant refused to authorize data collection (ANO). For 28 stays the facility reported that the records were lost or destroyed (XRD), and for 21 stays an administrative code of CRX was assigned to indicate a missing abstract for a stay that was in progress at the time of the last interview. (These data are not shown in the tables.)

**Table D. Number of facility stays, distribution of subjects by number of stays, mean number of stays, and percent of traced cohort with at least one stay in the NHANES I Epidemiologic Followup Study (NHEFS) 1987 Followup cohort, by race, sex, and age at NHANES I**

<i>Race, sex, and age</i> <sup>1</sup>	<i>Total stays</i>	<i>Number of subjects by number of stays</i>			<i>Percent of traced cohort with at least 1 stay</i>	<i>Mean number of stays</i>	
		<i>Total stays</i>	<i>1 stay</i>	<i>2 stays</i>			<i>3 stays or more</i>
<b>All races<sup>2</sup></b>							
Both sexes . . . . .	7,361	3,472	1,831	791	850	31.5	2.1
Male:							
25–34 years . . . . .	329	203	131	43	29	20.2	1.6
35–44 years . . . . .	546	244	122	56	66	29.2	2.2
45–54 years . . . . .	1,018	391	166	100	125	43.2	2.6
55–64 years . . . . .	301	179	115	31	33	30.9	1.7
65–74 years . . . . .	567	280	130	79	71	39.8	2.0
Female:							
25–34 years . . . . .	1,244	626	356	147	123	30.2	2.0
35–44 years . . . . .	1,206	582	330	118	134	31.3	2.1
45–54 years . . . . .	920	365	170	85	110	32.6	2.5
55–64 years . . . . .	326	173	95	38	40	22.0	1.9
65–74 years . . . . .	904	429	216	94	119	37.4	2.1
<b>White</b>							
Both sexes . . . . .	6,207	2,929	1,550	672	707	31.1	2.1
Male:							
25–34 years . . . . .	276	170	110	36	24	19.3	1.6
35–44 years . . . . .	470	210	105	47	58	28.8	2.2
45–54 years . . . . .	908	341	140	90	111	43.4	2.7
55–64 years . . . . .	253	157	104	27	26	30.5	1.6
65–74 years . . . . .	472	234	105	68	61	39.4	2.0
Female:							
25–34 years . . . . .	1,050	524	301	123	100	29.7	2.0
35–44 years . . . . .	973	468	268	96	104	31.0	2.1
45–54 years . . . . .	765	311	146	73	92	31.8	2.5
55–64 years . . . . .	281	150	86	30	34	22.2	1.9
65–74 years . . . . .	759	364	185	82	97	37.0	2.1
<b>Black</b>							
Both sexes . . . . .	1,088	510	260	115	135	34.4	2.1
Male:							
25–34 years . . . . .	49	31	20	7	4	27.7	1.6
35–44 years . . . . .	72	31	15	8	8	35.6	2.3
45–54 years . . . . .	102	46	24	9	13	41.4	2.2
55–64 years . . . . .	46	20	9	4	7	35.1	2.3
65–74 years . . . . .	93	44	23	11	10	42.7	2.1
Female:							
25–34 years . . . . .	180	94	50	23	21	32.3	1.9
35–44 years . . . . .	202	103	56	21	26	32.8	2.0
45–54 years . . . . .	154	53	23	12	18	39.0	2.9
55–64 years . . . . .	45	23	9	8	6	20.9	2.0
65–74 years . . . . .	145	65	31	12	22	40.3	2.2

<sup>1</sup>See appendix II for a discussion of revised race, corrected sex, and recalculated age at NHANES I examination.

<sup>2</sup>Includes races other than white or black.

NOTE: NHANES I is the first National Health and Nutrition Examination Survey. The 1987 Followup cohort consists of 11,750 subjects, ages 25–74 years at NHANES I examination, who were not known to be deceased in the 1982–84 or 1986 NHEFS. The traced cohort consists of 11,018 subjects who were not lost to followup at the time of the 1987 NHEFS interview.

Table E. Number and percent distribution of record status codes for the NHANES I Epidemiologic Followup Study (NHEFS) 1987 Followup cohort by type of record status code, according to race, sex, and age at NHANES I

Race, sex, and age <sup>1</sup>	Total number	Percent	Record status code					
			Match		Additional stay found		Nonmatch	
			Number	Percent	Number	Percent	Number	Percent
All races <sup>2</sup>								
Both sexes . . . . .	7,361	100.0	4,318	58.7	1,446	19.6	1,597	21.7
Male . . . . .	2,761	100.0	1,634	59.2	551	20.0	576	20.9
25-34 years . . . . .	329	100.0	213	64.7	39	11.9	77	23.4
35-44 years . . . . .	546	100.0	316	57.9	117	21.4	113	20.7
45-54 years . . . . .	1,018	100.0	551	54.1	268	26.3	199	19.5
55-64 years . . . . .	301	100.0	183	60.8	37	12.3	81	26.9
65-74 years . . . . .	567	100.0	371	65.4	90	15.9	106	18.7
Female . . . . .	4,600	100.0	2,684	58.3	895	19.5	1,021	22.2
25-34 years . . . . .	1,244	100.0	709	57.0	237	19.1	298	24.0
35-44 years . . . . .	1,206	100.0	702	58.2	237	19.7	267	22.1
45-54 years . . . . .	920	100.0	513	55.8	237	25.8	170	18.5
55-64 years . . . . .	326	100.0	206	63.2	47	14.4	73	22.4
65-74 years . . . . .	904	100.0	554	61.3	137	15.2	213	23.6
White								
Both sexes . . . . .	6,207	100.0	3,742	60.3	1,207	19.4	1,258	20.3
Male . . . . .	2,379	100.0	1,445	60.7	470	19.8	464	19.5
25-34 years . . . . .	276	100.0	180	65.2	32	11.6	64	23.2
35-44 years . . . . .	470	100.0	270	57.4	101	21.5	99	21.1
45-54 years . . . . .	908	100.0	506	55.7	239	26.3	163	18.0
55-64 years . . . . .	253	100.0	170	67.2	24	9.5	59	23.3
65-74 years . . . . .	472	100.0	319	67.6	74	15.7	79	16.7
Female . . . . .	3,828	100.0	2,297	60.0	737	19.3	794	20.7
25-34 years . . . . .	1,050	100.0	601	57.2	204	19.4	245	23.3
35-44 years . . . . .	973	100.0	589	60.5	195	20.0	189	19.4
45-54 years . . . . .	765	100.0	440	57.5	192	25.1	133	17.4
55-64 years . . . . .	281	100.0	179	63.7	40	14.2	62	22.1
65-74 years . . . . .	759	100.0	488	64.3	106	14.0	165	21.7
Black								
Both sexes . . . . .	1,088	100.0	540	49.6	225	20.7	323	29.7
Male . . . . .	362	100.0	181	50.0	78	21.5	103	28.5
25-34 years . . . . .	49	100.0	31	63.3	7	14.3	11	22.4
35-44 years . . . . .	72	100.0	44	61.1	16	22.2	12	16.7
45-54 years . . . . .	102	100.0	43	42.2	28	27.5	31	30.4
55-64 years . . . . .	46	100.0	13	28.3	11	23.9	22	47.8
65-74 years . . . . .	93	100.0	50	53.8	16	17.2	27	29.0
Female . . . . .	726	100.0	359	49.4	147	20.2	220	30.3
25-34 years . . . . .	180	100.0	98	54.4	30	16.7	52	28.9
35-44 years . . . . .	202	100.0	95	47.0	34	16.8	73	36.1
45-54 years . . . . .	154	100.0	73	47.4	45	29.2	36	23.4
55-64 years . . . . .	45	100.0	27	60.0	7	15.6	11	24.4
65-74 years . . . . .	145	100.0	66	45.5	31	21.4	48	33.1

<sup>1</sup>See appendix II for a discussion of revised race, corrected sex, and recalculated age at NHANES I examination.

<sup>2</sup>Includes races other than white or black.

NOTE: NHANES I is the first National Health and Nutrition Examination Survey. The 1987 Followup cohort consists of 11,750 subjects, 25-74 years at NHANES I examination, who were not known to be deceased in the 1982-84 or 1986 NHEFS.

# Death certificate collection

Deaths identified by the National Death Index (6), Health Care Financing Administration, or other tracing sources were verified by obtaining the death certificate from the vital statistics office of the State of death. These death certificates were coded by the National Center for Health Statistics using the *International Classification of Diseases, Ninth Revision* (ICD-9) multiple cause-of-death codes (12).

A member of the 1987 Followup cohort was considered deceased only if a death certificate was received or a proxy interview was completed to verify the death. Both a death certificate and a proxy interview are available for 441 (79.5 percent) of the 555 subjects identified as having died from the time of the last contact to the time of the 1987 NHEFS. Thirty-one (5.6 percent) of the decedents have only a proxy interview, and 83 (15.0 percent) have only a death certificate. Overall, death certificates were obtained for 524 (94.4 percent) of the decedents in the 1987 Followup cohort. Efforts to locate all missing death certificates continue.

The percent of decedents for whom a death certificate was not available according to age at baseline examination, sex, and race is shown in table F. Death certificates were obtained for a high percent of decedents among the age-sex-race groups (from 73.3 to 100.0 percent among cells with 10 or more deaths). Black decedents were three times more likely than white decedents, and women were almost twice as likely as men to be missing a death certificate.

**Table F. Number of deaths and percent of decedents without an available death certificate among the NHANES I Epidemiologic Followup Study (NHEFS), 1987 Followup cohort, by race, sex, and age at NHANES I**

Race, sex, and age <sup>1</sup>	Number of deaths	Percent without a death certificate
<b>All Races<sup>2</sup></b>		
Both sexes . . . . .	555	5.6
Male:		
25-34 years . . . . .	9	—
35-44 years . . . . .	33	—
45-54 years . . . . .	82	3.7
55-64 years . . . . .	44	9.1
65-74 years . . . . .	119	3.4
Female:		
25-34 years . . . . .	15	—
35-44 years . . . . .	50	12.0
45-54 years . . . . .	43	7.0
55-64 years . . . . .	30	—
65-74 years . . . . .	130	8.5
<b>White</b>		
Both sexes . . . . .	425	3.8
Male:		
25-34 years . . . . .	5	—
35-44 years . . . . .	27	—
45-54 years . . . . .	66	4.5
55-64 years . . . . .	39	10.3
65-74 years . . . . .	94	2.1
Female:		
25-34 years . . . . .	10	—
35-44 years . . . . .	35	5.7
45-54 years . . . . .	30	6.7
55-64 years . . . . .	22	—
65-74 years . . . . .	97	3.1
<b>Black</b>		
Both sexes . . . . .	129	11.6
Male:		
25-34 years . . . . .	3	—
35-44 years . . . . .	6	—
45-54 years . . . . .	16	—
55-64 years . . . . .	5	—
65-74 years . . . . .	25	8.0
Female:		
25-34 years . . . . .	5	—
35-44 years . . . . .	15	26.7
45-54 years . . . . .	13	7.7
55-64 years . . . . .	8	—
65-74 years . . . . .	33	24.2

<sup>1</sup>See appendix II for a discussion of revised race, corrected sex, and recalculated age at NHANES I examination.

<sup>2</sup>Includes races other than white or black.

NOTE: NHANES I is the first National Health and Nutrition Examination Survey. The 1987 Followup cohort consists of 11,750 subjects, ages 25-74 years at NHANES I examination, who were not known to be deceased in the 1982-84 or 1986 NHEFS. Percents are based on the 555 deceased subjects in the 1987 NHEFS.

# 1987 analytic cohort

This document has focused on the tracing and data collection results for those subjects 25–74 years of age at the time of NHANES I who were not known to be deceased at the time of the 1982–84 or 1986 NHEFS. In this section the discussion is expanded to examine the “1987 analytic cohort,” the entire cohort of subjects who were 25–74 years at their NHANES I examination ( $n = 14,407$ ), regardless of their previous vital status or interview status.

As shown in figure 7, definitive information on vital status at followup, obtained from the 1982–84, 1986, or 1987 NHEFS, is available for the vast majority of the 14,407 subjects in the 1987 analytic cohort. Only 4.2 percent ( $n = 611$ ) of the members of the 1987 analytic cohort were lost to followup in all three NHEFS surveys. In 1987, 259 subjects who had been lost to followup in previous NHEFS waves were successfully traced; however, an additional 121 subjects who had been traced and found to be alive in previous waves were lost in 1987. Approximately 22 percent ( $n = 3,212$ ) of the 1987 analytic cohort were deceased; 2,657 subjects were identified as deceased in the 1982–84 or 1986 NHEFS, and an additional 555 subjects were identified as deceased in the 1987 NHEFS. A death certificate is available for 3,108 (96.8 percent) of the decedents.

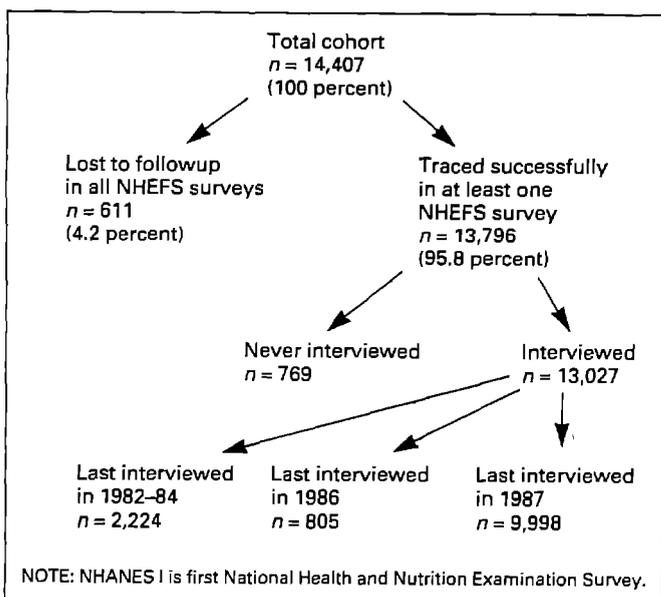


Figure 7. Tracing status of the NHANES I Epidemiologic Followup Study (NHEFS) cohort

The success of the tracing efforts for the 1987 analytic cohort according to age at baseline examination, race, and sex is shown in table G. To summarize how these demographic factors were related to tracing success, a multiple logistic model was fitted to the cross-classification of age, race, and sex, with the proportion of subjects who were lost to followup as the dependent variable. The analysis was limited to black and white subjects, because there were few subjects of other races ( $n = 172$ ). Additional analytic definitions and parameters used for this analysis of subjects lost to followup have been described previously in the section of this report entitled “Study design and tracing activities.” The final model included a main effect for age at baseline examination ( $p < 0.0001$ ) and an interaction between race and sex ( $p = 0.0016$ ). The smallest  $p$  value for a deleted term was 0.37. Black men were more than three times as likely as white men to be lost to followup, and black women were 77 percent more likely than white women to be lost. Odds ratios relative to white men, the group with the lowest rates of loss to followup, are 1.35 for white women, 3.38 for black men, and 2.39 for black women. The rate of loss to followup was dramatically higher for subjects under 35 years of age at the time of NHANES I and continued to decrease with each 10-year increase in age for all sex-race groups. Odds ratios were 8.34, 3.47, 2.28, and 1.13 relative to subjects 65–74 years of age.

Analysis using a multiple logistic regression was conducted for black and white subjects to determine whether those subjects lost to followup in the 1987 analytic cohort were at relatively high risk of death. The regression model included (in addition to age, race, sex, and the interaction term for race and sex) six health characteristics measured during NHANES I that have been established as risk factors for mortality: high blood pressure, high cholesterol, overweight, history of heart attack, history of diabetes, and smoking status. Definitions of these risk factors are described in the section of this report entitled “Study design and tracing activities.”

The results of this multiple logistic regression are presented in table H. The baseline risk factors of high cholesterol, overweight, and history of heart attack or diabetes did not have a statistically significant effect on loss to followup. Of the six baseline risk factors, only high blood pressure and smoking status had a significant effect on loss to followup. Subjects with high blood pressure

**Table G. Number and percent distribution of subjects by status in the NHANES I Epidemiologic Followup Study 1987 analytic cohort by status at followup, according to race, sex, and age at NHANES I**

Race, sex, and age <sup>1</sup>	Status at followup				Status at followup			
	All subjects	Surviving	Deceased	Lost to followup	All subjects	Surviving	Deceased	Lost to followup
		Number				Percent distribution		
All races <sup>2</sup> . . . . .	14,407	10,584	3,212	611	100.0	73.5	22.3	4.2
Male:								
25-34 years . . . . .	1,127	1,010	25	92	100.0	89.6	2.2	8.2
35-44 years . . . . .	928	809	77	42	100.0	87.2	8.3	4.5
45-54 years . . . . .	1,060	825	206	29	100.0	77.8	19.4	2.7
55-64 years . . . . .	860	547	301	12	100.0	63.6	35.0	1.4
65-74 years . . . . .	1,836	598	1,215	23	100.0	32.6	66.2	1.3
Female:								
25-34 years . . . . .	2,382	2,087	41	254	100.0	87.6	1.7	10.7
35-44 years . . . . .	2,013	1,824	104	85	100.0	90.6	5.2	4.2
45-54 years . . . . .	1,220	1,081	104	35	100.0	88.6	8.5	2.9
55-64 years . . . . .	964	765	186	13	100.0	79.4	19.3	1.3
65-74 years . . . . .	2,017	1,038	953	26	100.0	51.5	47.2	1.3
White								
Both sexes . . . . .	12,036	9,057	2,548	431	100.0	75.2	21.2	3.6
Male:								
25-34 years . . . . .	964	885	18	61	100.0	91.8	1.9	6.3
35-44 years . . . . .	802	709	64	29	100.0	88.4	8.0	3.6
45-54 years . . . . .	895	720	154	21	100.0	80.4	17.2	2.3
55-64 years . . . . .	741	482	251	8	100.0	65.0	33.9	1.1
65-74 years . . . . .	1,501	507	984	10	100.0	33.8	65.6	0.7
Female:								
25-34 years . . . . .	1,980	1,765	25	190	100.0	89.1	1.3	9.6
35-44 years . . . . .	1,609	1,483	68	58	100.0	92.2	4.2	3.6
45-54 years . . . . .	1,047	953	68	26	100.0	91.0	6.5	2.5
55-64 years . . . . .	819	655	155	9	100.0	80.0	18.9	1.1
65-74 years . . . . .	1,678	898	761	19	100.0	53.5	45.4	1.1
Black								
Both sexes . . . . .	2,199	1,400	640	159	100.0	63.7	29.1	7.2
Male:								
25-34 years . . . . .	144	114	6	24	100.0	79.2	4.2	16.7
35-44 years . . . . .	107	82	13	12	100.0	76.6	12.1	11.2
45-54 years . . . . .	154	95	51	8	100.0	61.7	33.1	5.2
55-64 years . . . . .	105	55	46	4	100.0	52.4	43.8	3.8
65-74 years . . . . .	313	85	215	13	100.0	27.2	68.7	4.2
Female:								
25-34 years . . . . .	369	298	16	55	100.0	80.8	4.3	14.9
35-44 years . . . . .	365	305	36	24	100.0	83.6	9.9	6.6
45-54 years . . . . .	167	123	36	8	100.0	73.7	21.6	4.8
55-64 years . . . . .	142	107	31	4	100.0	75.4	21.8	2.8
65-74 years . . . . .	333	136	190	7	100.0	40.8	57.1	2.1
Other								
Both sexes . . . . .	172	127	24	21	100.0	75.8	14.0	12.2
Male:								
25-34 years . . . . .	19	11	1	7	100.0	57.9	5.3	36.8
35-44 years . . . . .	19	18	-	1	100.0	94.7	-	5.3
45-54 years . . . . .	11	10	1	-	100.0	90.9	9.1	-
55-64 years . . . . .	14	10	4	-	100.0	71.4	28.6	-
65-74 years . . . . .	22	6	16	-	100.0	27.3	72.7	-
Female:								
25-34 years . . . . .	33	24	-	9	100.0	72.7	-	27.3
35-44 years . . . . .	39	36	-	3	100.0	92.3	-	7.7
45-54 years . . . . .	6	5	-	1	100.0	83.3	-	16.7
55-64 years . . . . .	3	3	-	-	100.0	100.0	-	-
65-74 years . . . . .	6	4	2	-	100.0	66.7	33.3	-

<sup>1</sup>See appendix II for a discussion of revised race, corrected sex, and recalculated age at NHANES I examination.

<sup>2</sup>Includes races other than white or black.

NOTE: NHANES I is the first National Health and Nutrition Examination Survey. The 1987 Analytic cohort consists of 14,407 subjects, 25-74 years at NHANES I examination.

were 24 percent less likely to be lost to followup ( $p = 0.0298$ ) than subjects with normal systolic readings. Current smokers were twice as likely as nonsmokers to be lost to followup ( $p < 0.0001$ ). These results for smoking suggest that subjects who were lost to followup in the

1987 NHEFS may be somewhat more likely to have died than those who were successfully traced. However, because the proportion lost to followup is relatively small compared with the proportion deceased in the 1987 analytic cohort (0.04 versus 0.22), there should be relatively

**Table H. Odds ratios, confidence intervals, and statistical significance for selected health characteristics on loss to followup for the NHANES I Epidemiologic Followup Study (NHEFS) 1987 analytic cohort**

Baseline characteristic	Odds ratio	95-percent confidence interval		p value
		Lower bound	Upper bound	
High blood pressure . . . . .	0.76	0.59	0.97	0.0298
High cholesterol . . . . .	0.88	0.66	1.16	0.3690
Overweight . . . . .	1.05	0.85	1.28	0.6707
History of heart attack . . . . .	0.71	0.33	1.52	0.3744
Diabetes . . . . .	1.17	0.68	2.00	0.5752
Smoking . . . . .	2.05	1.57	2.69	<0.0001

NOTE: NHANES I is the first National Health and Nutrition Examination Survey. The 1987 analytic cohort consists of 14,407 subjects ages 25–74 years at the NHANES I examination. Data are based on multiple logistic regression, with race, sex, race-sex interaction, and age at NHANES I examination included.

little bias in mortality findings as a result of loss to followup.

Table J gives the results for death certificate data collection for the analytic cohort by age at their NHANES I examination, race, and sex. Death certificates were obtained for a high percent of decedents among the age-sex-race groups (from 83.3 to 100.0 percent). Black decedents were 2.8 times more likely than white decedents to be missing a death certificate, and women were 53 percent more likely than men to be missing a death certificate.

**Table J. Number of deaths and percent of decedents without an available death certificate among the NHANES I Epidemiologic Followup Study 1987 (NHEFS) analytic cohort, by race, sex, and age at NHANES I**

Race, sex, and age <sup>1</sup>	Number of deaths	Percent without a death certificate
<b>All races<sup>2</sup></b>		
Both sexes . . . . .	3,212	3.2
Male:		
25–34 years . . . . .	25	4.0
35–44 years . . . . .	77	1.3
45–54 years . . . . .	206	1.5
55–64 years . . . . .	301	3.3
65–74 years . . . . .	1,215	2.7
Female:		
25–34 years . . . . .	41	—
35–44 years . . . . .	104	7.7
45–54 years . . . . .	104	5.8
55–64 years . . . . .	186	2.7
65–74 years . . . . .	953	3.9
<b>White</b>		
Both sexes . . . . .	2,548	2.4
Male:		
25–34 years . . . . .	18	—
35–44 years . . . . .	64	1.6
45–54 years . . . . .	154	1.9
55–64 years . . . . .	251	2.8
65–74 years . . . . .	984	2.0
Female:		
25–34 years . . . . .	25	—
35–44 years . . . . .	68	2.9
45–54 years . . . . .	68	4.4
55–64 years . . . . .	155	1.3
65–74 years . . . . .	761	3.2
<b>Black</b>		
Both sexes . . . . .	640	6.6
Male:		
25–34 years . . . . .	6	16.7
35–44 years . . . . .	13	—
45–54 years . . . . .	51	—
55–64 years . . . . .	46	6.5
65–74 years . . . . .	215	6.0
Female:		
25–34 years . . . . .	16	—
35–44 years . . . . .	36	16.7
45–54 years . . . . .	36	8.3
55–64 years . . . . .	31	9.7
65–74 years . . . . .	190	6.8

<sup>1</sup>See appendix II for a discussion of revised race, corrected sex, and recalculated age at NHANES I examination.

<sup>2</sup>Includes races other than white or black.

NOTE: NHANES I is the first National Health and Nutrition Examination Survey. The 1987 analytic cohort consists of all 14,407 subjects ages 25–74 years at NHANES I examination. Percents are based on the 3,212 deceased subjects in the 1987 analytic cohort.

## Ongoing activities

Four public use data tapes containing vital and tracing status, interview, health care facility stay, and mortality data from the 1987 NHEFS are available from the National Technical Information Service. The Vital and Tracing Status Data Tape contains summary information from all waves of followup for all 14,407 members of the NHEFS cohort. The Interview Data Tape contains information from 9,998 interviews (9,526 subject and 472 proxy interviews) collected during the 1987 NHEFS interview data collection period. The Health Care Facility Stay Data Tape contains 7,361 stay records. It has the same format as the 1982–84 NHEFS Revised and the 1986 NHEFS Health Care Facility Stay Data Tapes. The Mortality Data Tape includes information abstracted from the death certificates from the three NHEFS survey periods for all deceased subjects for whom a death certificate is available. Of the 3,108 death certificates on the 1987 Mortality Data File, 1,935 are for subjects who died and for whom death certificates were obtained during the 1982–84 survey period, 33 are for those who died during the 1982–84

NHEFS survey period but for whom death certificates were not obtained until after the 1982–84 NHEFS ended, 616 are for deceased subjects for whom death certificates were obtained during the 1986 NHEFS, and 524 are for subjects who died during the 1987 NHEFS survey period.

The 1987 data tapes may be used in conjunction with the data tapes from the NHANES I survey and the 1982–84 and 1986 NHEFS tapes to investigate the effects of baseline measures on subsequent health status. All these data tapes are available through the National Technical Information Service. The study identification number (the Sample Sequence Number) can be used to link the files from any of the followup surveys to all NHANES I files.

Additional information on the NHEFS cohort will be available in future years. Plans for 1992 are to recontact and reinterview the 11,195 nondeceased cohort members or their proxies, to collect health care facility data, and to collect death certificate information.

# References

1. Miller HW. Plan and operation of the Health and Nutrition Examination Survey, United States, 1971–1973. National Center for Health Statistics. *Vital Health Stat* 1(10a). 1978.
2. National Center for Health Statistics. Plan and operation of the Health and Nutrition Examination Survey, United States, 1971–1973. National Center for Health Statistics. *Vital Health Stat* 1(10b). 1977.
3. Engel A, Murphy RS, Maurer K, Collins E. Plan and operation of the NHANES I Augmentation Survey of Adults 25–74 years, United States, 1974–1975. National Center for Health Statistics. *Vital Health Stat* 1(14). 1978.
4. Cohen BB, Barbano HE, Cox CS, et al. Plan and operation of the NHANES I Epidemiologic Followup Study, 1982–84. National Center for Health Statistics. *Vital Health Stat* 1(22). 1987.
5. Finucane FF, Freid VM, Madans JH, et al. Plan and operation of the NHANES I Epidemiologic Followup Study, 1986. National Center for Health Statistics. *Vital Health Stat* 1(25). 1990.
6. National Center for Health Statistics. User's manual: The National Death Index. DHHS pub no (PHS) 81–1148. Washington: Public Health Service. 1981.
7. McDowell A, Engel A, Massey JT, Maurer K. Plan and operation of the second National Health and Nutrition Examination Survey, 1976–80. National Center for Health Statistics. *Vital Health Stat* 1(15). 1981.
8. Fries JF, Spitz P, Krains RG, et al. Measurement of patient outcome in arthritis. *Arthritis Rheum* 23:137–45. 1980.
9. Rosow I, Breslau N. A Guttman health scale for the aged. *J Gerontol* 21(4):556–9. 1966.
10. Katz S, Akpom CA. Index of ADL. *Med Care* (5th suppl):116–8. 1976.
11. Public Health Service and Health Care Financing Administration. International Classification of Diseases, 9th Revision, clinical modification. Washington: Public Health Service. 1980.
12. World Health Organization. Manual of the International Statistical Classification of Diseases, Injuries, and Causes of Death, based on the recommendations of the Ninth Revision Conference, 1975. Geneva: World Health Organization. 1977.

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5. At what address were you living in (MONTH AND YEAR OF INTERVIEW)?

ADDRESS: \_\_\_\_\_

STREET APT. #

---

CITY STATE

BOX A

INTERVIEWER REVIEW Q.2 AND Q.4 AND CIRCLE ONE:

Q.2 AND Q.4 VERIFY. . . . . 1 (SET UP INTERVIEW)

Q.2 AND Q.4 DO NOT VERIFY . . . . 2 (Thank you very much, I don't believe you are  
the person we are looking for.) (TERMINATE)

OTHER . . . . . 3 (Q.6)

6. Can you give me the names of the people you were living with in (MONTH AND YEAR OF INTERVIEW)?  
[And how was (NAME) related to you?] (PROBE FOR FULL NAME AND RELATIONSHIP.)

	NAME	RELATIONSHIP
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____

OR

LIVED ALONE . . . . . 0

Thank you very much but I am not sure whether you are the person we are looking for. I will check the information you have given me against our records and will call you back if you are the correct person. (TERMINATE)

NOTICE: - Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or establishment in accordance with Section 308(d) of the Public Health Service Act (42 USC 242m).



5. At what address were you living in (MONTH AND YEAR OF LAST CONTACT)?

ADDRESS: \_\_\_\_\_

STREET APT. #

\_\_\_\_\_

CITY STATE

BOX A

INTERVIEWER REVIEW Q.2 AND Q.4 AND CIRCLE ONE:

Q.2 AND Q.4 VERIFY. . . . . 1 (SET UP INTERVIEW)

Q.2 AND Q.4 DO NOT VERIFY . . . . . 2 (Thank you very much, I don't believe you are  
the person we are looking for.) (TERMINATE)

OTHER . . . . . 3 (Q.6)

6. Can you give me the names of the people you were living with in (MONTH AND YEAR OF EXAM)?  
[And how was (NAME) related to you?] (PROBE FOR FULL NAME AND RELATIONSHIP.)

	NAME	RELATIONSHIP
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____

OR

LIVED ALONE . . . . . 0

Thank you very much but I am not sure whether you are the person we are looking for. I will check the information you have given me against our records and will call you back if you are the correct person. (TERMINATE)

NOTICE: - Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or establishment in accordance with Section 308(d) of the Public Health Service Act (42 U.S.C. 242a).

ID #:   -    -

PROXY NAME: \_\_\_\_\_

Date \_\_\_\_\_

U.S. Department of Health and Human Services  
National Center for Health Statistics  
National Institute on Aging  
NHANES I Epidemiologic Followup Survey

Verification—proxy

VERIFICATION QUESTIONS (TO BE ASKED OF PROXIES)

1. I would like to ask a few questions to verify that I have the correct person. I want to mention that the information you give me will be kept confidential and will be used for statistical purposes only. The interview is completely voluntary and is authorized by the Public Health Service Act.

What (is/was) (SUBJECT'S) full name including middle name? (IF S CHANGED NAME, EXPLAIN)

NAME: \_\_\_\_\_

2. And (his/her) date of birth (is/was) (REPEAT BIRTHDATE). Is that correct?

- YES . . . . . 1 (Q.4)
- NO . . . . . 2 (Q.3)
- DON'T KNOW . . . . 8 (Q.3)

3. (IF INCAPACITATED) What is (his/her) (date of birth/age)?

BIRTHDATE: \_\_\_\_/\_\_\_\_/\_\_\_\_ OR AGE: \_\_\_\_\_  
                  MONTH DAY YEAR

(IF DECEASED) What was (his/her) (date of birth/age at death)? [What year did (he/she) die?]

BIRTHDATE: \_\_\_\_/\_\_\_\_/\_\_\_\_ OR AGE AT DEATH: \_\_\_\_\_  
                  MONTH DAY YEAR                   YEAR OF DEATH: \_\_\_\_\_

4. Was (SUBJECT) living at (LABEL ADDRESS) in [MONTH AND YEAR OF LAST CONTACT]?

- YES . . . . . 1 (BOX A)
- NO . . . . . 2 (Q.5)
- DON'T KNOW . . . . 8 (BOX A)

5. At what address was (he/she) living in (MONTH AND YEAR OF LAST CONTACT)?

ADDRESS: \_\_\_\_\_

STREET APT. #

---

CITY STATE ZIP CODE

BOX A

INTERVIEWER REVIEW Q.2 AND Q.4 AND CIRCLE ONE:

Q.2 AND Q.4 VERIFY. . . . . 1 (SET UP INTERVIEW; COMPLETE SUF IF APPROPRIATE)

Q.2 AND Q.4 DO NOT VERIFY . . . . 2 (Thank you very much, I don't believe we are  
talking about the same person.) (TERMINATE)

OTHER . . . . . 3 (Q56)

6. Can you remember the names of the people (he/she) was living with in (MONTH AND YEAR OF INTERVIEW/EXAM)? [And how was (NAME) related to (him/her)?] (PROBE FOR FULL NAME AND RELATIONSHIP.)

	NAME	RELATIONSHIP
1.	_____	_____
2.	_____	_____
3.	_____	_____
4.	_____	_____

OR

LIVED ALONE . . . . . 0

Thank you very much but I am not sure whether (he/she) is the person we are looking for. I will check the information you have given me against our records and will call you back if (he/she) is the correct person. (TERMINATE)

NOTICE: - Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or establishment in accordance with Section 308(d) of the Public Health Service Act (42 USC 242n).

### *Study Schedule*

- Original Survey:  
National Health and Nutrition Examination Survey (1971-75)
- Initial Followup:  
Lengthy personal interviews, Blood pressure and weight measures (1982-84).
- Continued Followup:  
Short telephone contacts of the elderly (1985-88) and of the total population (1986 and 1988).

### *Participating Agencies*

National Institute on Aging  
 National Center for Health Statistics  
 National Cancer Institute  
 National Institute of Mental Health  
 National Institute on Alcohol Abuse and Alcoholism  
 National Institute of Arthritis, Diabetes, Digestive and Kidney Diseases  
 National Heart, Lung, and Blood Institute  
 National Institute of Neurological and Communicative Disorders and Stroke  
 National Institute of Allergy and Infectious Diseases



## Epidemiologic Followup Study

## National Health & Nutrition Examination Survey

U.S. Department of Health and Human Services  
 Public Health Service  
 National Center for Health Statistics  
 National Institute on Aging

# Epidemiologic Followup Study

## ***What Is the NHANES I Epidemiologic Followup Study?***

The National Health and Nutrition Examination Survey Epidemiologic Followup Study is designed to collect information about an aging population which includes:

- Illnesses that have occurred.
- Habits and personal characteristics that may affect health, such as eating patterns and blood pressure.
- The ability to carry on routine activities of daily living such as dressing oneself or climbing stairs.

The information will allow scientists to study many of the factors that cause disease and disability. Data from this study will be used by health planners, educators, and medical experts to improve present programs and to initiate future programs for prevention and treatment of disease.

## ***Why Is the Study Important?***

Because the Followup Study provides data on a large national sample, it presents a unique opportunity for health researchers to study changes in health status and the factors that contribute to good health as well as illness.

It is the first U.S. investigation of its size and scope to follow the respondents over a period of years, and the first to have interviewers measure blood pressure on a national basis.

## ***Who Is Being Contacted?***

Persons who participated in the NHANES survey are being interviewed about their health status and hospital care since the earlier study. If the original participant cannot be interviewed because of illness or death, relatives or close friends will be contacted.

A very short interview will be conducted by telephone by specially trained interviewers who will ask questions about illness and any disability the respondent may be experiencing.

Hospitals will be contacted to obtain technical information from the hospital record. It is essential that data be collected about all participants. No other data can be substituted for the information desired.

## ***Why Is Participation Important?***

The persons who took part in the first survey made up a group that represented all types of people in all areas of the United States. The Followup Study is the first nationwide survey that will provide information on the changes in health for people from different backgrounds and regions.

Each participant represents thousands of others with similar characteristics. Although voluntary, participation is important so that the results will continue to represent a true scientific sample of the U.S. population.

## ***Confidentiality Is Guaranteed***

All information obtained in the survey will be protected by the confidentiality requirements of the U.S. Public Health Service Act and the Privacy Act of 1974.

Answers will be used only by research staff working on the survey. Each of them must sign a statement pledging to keep confidential all information provided by respondents. No information that would permit identification of an individual will be released or published. Survey results will be published only as statistical summaries.

## ***A Cooperative Effort***

The survey is a joint effort of the National Center for Health Statistics and the National Institute on Aging, agencies of the Public Health Service, U.S. Department of Health and Human Services.

All queries or correspondence should be directed to

Helen E. Barbano  
NHANES I Epidemiologic Followup Study  
National Center for Health Statistics  
3700 East-West Highway, Room 2-27  
Hyattsville, Maryland 20782  
(301) 436-5975



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

National Center for Health Statistics  
3700 East-West Highway  
Hyattsville MD 20782

Dear Participant:

As you may recall, we have been in touch with you in recent years concerning a national study that the National Center for Health Statistics is conducting. You participated in the first National Health and Nutrition Examination Survey in 1971-1975, and Followups in 1982-86. The results of those surveys have provided much needed information about the health needs and characteristics of the American people. We would like to express our appreciation to you for your part in making those surveys a success, and we would like to have your help again.

To further use the findings from the original survey, the National Center for Health Statistics is planning another brief interview of all the adults who took part in that study. We have contracted with Westat, a national research firm, to conduct the survey for us. Within the next two weeks, a Westat interviewer will call you on the telephone to conduct a very short interview. It should take approximately 30 minutes.

The interview will include questions about your health status and any hospital care you may have received since our last contact. We would appreciate it if you have this information available when the interviewer calls.

This survey is authorized by Title 42, United States Code 242k. Your participation in the survey is completely voluntary. There are no penalties for refusing to answer any question.

As in the previous survey, any information you give will be kept confidential. No information that could be used to identify you or any individual will be released or published. Results of this study will be published only as statistical summaries.

Your cooperation is vital to the success of this survey, and your cooperation will be greatly appreciated.

Sincerely yours,

A handwritten signature in cursive script that reads "M Feinleib".

Manning Feinleib, M.D., Dr.P.H.  
Director

Enclosure



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

National Center for Health Statistics  
3700 East-West Highway  
Hyattsville MD 20782

Dear Participant:

As you may recall, we have been in touch with you in recent years concerning a national study that the National Center for Health Statistics is conducting. You participated in the first National Health and Nutrition Examination Survey in 1971-1975. The results of that survey has provided much needed information about the health needs and characteristics of the American people. We would like to express our appreciation to you for your part in making that survey a success, and we would like to have your help again. Although you were not available to participate in the Followups in 1982-86, we hope you will be able to assist us at this time.

To further use the findings from the original survey, the National Center for Health Statistics is planning another brief interview of all the adults who took part in that study. We have contracted with Westat, a national research firm, to conduct the survey for us. Within the next two weeks, a Westat interviewer will call you on the telephone to conduct a very short interview. It should take approximately 30 minutes.

The interview will include questions about your health status and any hospital care you may have received since our last contact. We would appreciate it if you have this information available when the interviewer calls.

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As in the previous survey, any information you give will be kept confidential. No information that could be used to identify you or any individual will be released or published. Results of this study will be published only as statistical summaries.

Your participation is vital to the success of this survey, and your cooperation will be greatly appreciated.

Sincerely yours,

A handwritten signature in cursive script that reads "M Feinleib".

Manning Feinleib, M.D., Dr.P.H.  
Director

Enclosure



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

National Center for Health Statistics  
3700 East-West Highway  
Hyattsville MD 20782

Dear Participant:

The National Center for Health Statistics is conducting a national health study. \_\_\_\_\_ participated in the first National Health and Nutrition Examination Survey in 1971-1975, and in the followups for NHANES in 1982-86. The results of those surveys have provided much needed information about the health needs and characteristics of the American people. We would like to have your help in the NHANES I Continued Followup Survey being conducted at this time.

To further use the findings from the original survey, the National Center for Health Statistics is planning another brief interview of all the adults who took part in the study. We have contracted with Westat, a national research firm, to conduct the survey for us. Within the next two weeks, a Westat interviewer will call you on the telephone to conduct a very short interview. It should take approximately 30 minutes.

The interview will include questions about \_\_\_\_\_'s health status and any hospitalizations and nursing home stays he/she may have had as early as 1980. We would appreciate it if you have this information available when the interviewer calls.

This survey is authorized by Title 42, United States Code 242k. Your participation in the survey is completely voluntary. There are no penalties for refusing to answer any question.

As in the previous survey, any information you give will be kept confidential. No information that could be used to identify you or any individual will be released or published. Results of this study will be published only as statistical summaries.

Your cooperation is vital to the success of this study.

Sincerely yours,

A handwritten signature in cursive script that reads "M Feinleib".

Manning Feinleib, M.D., Dr.P.H.  
Director

Enclosure

Advance letter to proxy not previously interviewed



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

National Center for Health Statistics  
3700 East-West Highway  
Hyattsville MD 20782

Dear Participant:

The National Center for Health Statistics is conducting a national health study. \_\_\_\_\_ participated in the first National Health and Nutrition Examination Survey in 1971-1975. The results of that survey have provided much needed information about the health needs and characteristics of the American people. We hope you will be able to assist us at this time in the NHANES I Continued Followup Survey.

To further use the findings from the original survey, the National Center for Health Statistics is planning another brief interview of all the adults who took part in that study. We have contracted with Westat, a national research firm, to conduct the survey for us. Within the next two weeks, a Westat interviewer will call you on the telephone to conduct a very short interview. It should take approximately 30 minutes.

The interview will include questions about \_\_\_\_\_'s health status and any hospitalizations and nursing home stays he/she may have had since 1970. We would appreciate it if you have this information available when the interviewer calls.

This survey is authorized by Title 42, United States Code 242k. Your participation in the survey is completely voluntary. There are no penalties for refusing to answer any question.

As in the previous survey, any information you give will be kept confidential. No information that could be used to identify you or any individual will be released or published. Results of this study will be published only as statistical summaries.

Your cooperation is vital to the success of this study.

Sincerely yours,

A handwritten signature in cursive script that reads "M Feinleib".

Manning Feinleib, M.D., Dr.P.H.  
Director

Enclosure

Advance letter to facility administrator with request  
to interview subject



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

National Center for Health Statistics  
3700 East-West Highway  
Hyattsville MD 20782

Dear Administrator:

The National Center for Health Statistics has joined with the National Institute on Aging to conduct the National Health and Nutrition Examination Followup Survey, to study the etiology of a number of chronic diseases.

A selected sample of the United States population participated in the first National Health and Nutrition Examination Survey (NHANES I) in 1971-75 and in its Initial Followup in 1982-84. The results of that survey have provided much needed information about the health needs and characteristics of the American people.

To further use the findings from the original survey, the National Center for Health Statistics is planning another brief interview of all the adults who took part in the study. We have contracted with Westat, a national research firm, to conduct the survey for us.

Recently, we learned \_\_\_\_\_, one of the participants in the survey, is living in your facility. We will need to interview Mr./Mrs. \_\_\_\_\_ in order to obtain the followup information. Within the next two weeks, a Westat interviewer will be contacting him/her by telephone to conduct a short interview. An initial letter has already been mailed to him/her as well.

This survey is authorized by Title 42, United States Code 242k. All information given will be kept confidential. No information that could be used to identify the individual or your institution will be released or published. Results of this study will be published only as statistical summaries.

If you have any questions concerning this survey, please feel free to contact Ms. Kathleen Parkes, toll free at (800) 638-8985.

Thank you in advance for your cooperation.

Sincerely yours,

A handwritten signature in cursive script that reads "M Feinleib".

Manning Feinleib, M.D., Dr.P.H.  
Director

Advance letter to facility administrator with request  
to interview facility staff member



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

National Center for Health Statistics  
3700 East-West Highway  
Hyattsville MD 20782

Dear Administrator:

The National Center for Health Statistics has joined with the National Institute on Aging to conduct the National Health and Nutrition Examination Followup Survey, to study the etiology of a number of chronic diseases.

A selected sample of the United States population participated in the first National Health and Nutrition Examination Survey (NHANES I) in 1971-75 and in its Initial Followup in 1982-84. The results of that survey have provided much needed information about the health needs and characteristics of the American people.

To further use the findings from the original survey, the National Center for Health Statistics is planning another brief interview of all the adults who took part in the study. We have contracted with Westat, a national research firm, to conduct the survey for us.

Recently, we learned \_\_\_\_\_, one of the participants in the survey, is living in your facility. We have already interviewed \_\_\_\_\_ in order to obtain the followup information. However, there were some questions which he/she could not answer concerning \_\_\_\_\_ health and functioning ability.

We would sincerely appreciate it if a member of your staff would be willing to answer a few questions concerning this resident so that complete information can be obtained. A Westat interviewer will be calling you within the next two weeks to arrange an appointment to collect the information.

This survey is authorized by Title 42, United States Code 242k. All information given will be kept confidential. No information that could be used to identify the individual or your institution will be released or published. Results of this study will be published only as statistical summaries.

If you have any questions concerning this survey, please feel free to contact Ms. Kathleen Parkes, toll free at (800) 638-8985.

Thank you in advance for your cooperation.

Sincerely yours,

A handwritten signature in black ink that reads "Helen E. Barbano".

Helen E. Barbano  
Project Director  
NHANES I Epidemiologic Followup  
Study

SUBJECT WELL AND PROXY INCAPACITATED  
QUESTIONNAIRE

PART A: BACKGROUND INFORMATION

TIME BEGAN: \_\_\_\_\_ AM  
PM

First, I would like to ask you a few questions about (your/SUBJECT'S) household.

A-1. (Do you/Does SUBJECT) currently live in a house or apartment, a nursing home or rest home, retirement home, or (do you/does he/she) have some other arrangement?

- PRIVATE HOUSE OR APARTMENT ..... 1 (Q.A-4)
  - NURSING OR CONVALESCENT OR REST HOME ..... 2 (RPI-1)
  - RETIREMENT HOME ..... 3 (Q.A-4)
  - BOARDING HOUSE, ROOMING HOUSE OR  
RENTED ROOM ..... 4 (Q.A-4)
  - FAMILY OR FOSTER CARE HOME ..... 5 (Q.A-4)
  - ANOTHER HEALTH FACILITY ..... 6 (RPI-2)
  - OTHER ARRANGEMENT (SPECIFY) ..... 91 (Q.A-4)
- 
- OTHER INSTITUTIUON (SPECIFY) ..... 92 (Q.A-7)
  - .....

RPI-1

REFERENCE TO ECF INTERVIEW: IF IN NURSING HOME IN ECF (A-3=2) ON ECF) AND CURRENTLY IN NURSING HOME (A-1 = 2), THEN GO TO A-2. OTHERWISE GO TO A-7.

A-2. Since (MONTH/YEAR) (have you/has he/she) continuously lived in a nursing home?

- YES ..... 1
- NO ..... 2 (Q.A-7)

A-3. Is this the same nursing home (you were/he/she was) living in (MONTH/YEAR)?

- YES ..... 1 (A-10)
- NO ..... 2 (A-7)

RPI-2

SKIP TO A-7 BUT DO NOT HAVE A CONSISTENCY CHECK IN NURSING HOME SERIES (B-86).

A-4. How many people live in (your/his/her) household including (yourself/SUBJECT)?

ONE ..... 01 (Q.A-6)

NUMBER OF PEOPLE: |\_\_|\_\_|

A-5. What relationship to (you/SUBJECT) (is/are) the other person(s) who live(s) in (your/his/her) household?  
 [PROBE FOR SEX IF NOT OBVIOUS: Is (PERSON) male or female?]

PERSON #	SEX	RELATIONSHIP
1	__	__
2	__	__
3	__	__
4	__	__
5	__	__
6	__	__
7	__	__
8	__	__
9	__	__
10	__	__

SEX: 1 = MALE  
 2 = FEMALE

RELATIONSHIP: 1 = HUSBAND/WIFE  
 2 = FATHER/MOTHER  
 (INCLUDING IN-LAWS)  
 3 = GRANDPARENT  
 4 = SON/DAUGHTER  
 (INCLUDING IN-LAWS)  
 5 = GRANDCHILD  
 6 = BROTHER/SISTER  
 (INCLUDING IN-LAWS)  
 7 = AUNT/UNCLE/COUSIN  
 8 = OTHER RELATIVE  
 9 = FRIEND  
 10 = OTHER NON-RELATIVE

GO TO Q.A-10

A-6. How long (have you/has he/she) lived alone?

NUMBER OF MONTHS: |\_\_|\_\_| (Q.A-10)

OR

NUMBER OF YEARS: |\_\_|\_\_| (Q.A-10)

LESS THAN ONE MONTH ..... 95 (Q.A-10)

A-7. These next questions are about the last household in which (you/he/she) lived. How many people lived in (your/his/her) household including (yourself/SUBJECT)?

ONE ..... 01 (Q.A-9)

NUMBER OF PEOPLE: |\_\_|\_\_|

A-8. What relationship to (you/SUBJECT) (was/were) the other person(s) who lived in (your/his/her) household? [PROBE FOR SEX IF NOT OBVIOUS: Is (PERSON) male or female?]

PERSON #	SEX	RELATIONSHIP
1	__	__
2	__	__
3	__	__
4	__	__
5	__	__
6	__	__
7	__	__
8	__	__
9	__	__
10	__	__

SEX: 1 = MALE  
2 = FEMALE

RELATIONSHIP: 1 = HUSBAND/WIFE  
2 = FATHER/MOTHER (INCLUDING IN-LAWS)  
3 = GRANDPARENT  
4 = SON/DAUGHTER (INCLUDING IN-LAWS)  
5 = GRANDCHILD  
6 = BROTHER/SISTER (INCLUDING IN-LAWS)  
7 = AUNT/UNCLE/COUSIN  
8 = OTHER RELATIVE  
9 = FRIEND  
10 = OTHER NON-RELATIVE

GO TO Q.A-10

A-9. How long had (you/he/she) lived alone?

NUMBER OF MONTHS: |\_\_|\_\_|

OR

NUMBER OF YEARS: |\_\_|\_\_|

LESS THAN ONE MONTH ..... 95

A-10. [VERIFY IF ALREADY KNOWN:]

(Are you/Is he/she) currently married, widowed, divorced, separated, or (have you/has he/she) never been married?

MARRIED ..... 1  
WIDOWED ..... 2  
DIVORCED ..... 3  
SEPARATED ..... 4  
NEVER MARRIED ..... 5

RPI-3

REFERENCE TO IF/ECF INTERVIEW: FOR THOSE NEVER INTERVIEWED, ASK A-11 AND 1-12. OTHERWISE GO TO BOX A1.

A-11. Which of these categories best describes (you/SUBJECT) – Aleut, Eskimo, American Indian, Asian, Pacific Islander, Black or White?

ALEUT, ESKIMO OR AMERICAN INDIAN ..... 1  
ASIAN/PACIFIC ISLANDER ..... 2  
BLACK ..... 3  
WHITE ..... 4  
OTHER (SPECIFY) ..... 91

---

A-12. (Are you/Is he/she) of Hispanic origin?

YES ..... 1  
NO ..... 2

BOX A1

IF ELIGIBLE FOR EC<sub>F</sub> AND RETIRED OR KEEPING HOUSE  
ON IF (U21 = 2,3) GO TO RPI-5.  
OTHERWISE GO TO A13.

A-13. During the last three months what (have you/has he/she) been doing most? That is, (have you/has he/she) been working, keeping house, going to school, looking for work, or (are you/is he/she) retired?

WORKING ..... 1  
RETIRED ..... 2 (Q.A-15)  
KEEPING HOUSE ..... 3 (Q.A-15)  
GOING TO SCHOOL ..... 4 (Q.A-15)  
LOOKING FOR WORK ..... 5 (Q.A-15)  
LONG TERM ILLNESS/DISABILITY ..... 6 (Q.A-15)  
LEISURE ACTIVITIES ..... 7 (Q.A-15)  
OTHER ..... 91 (Q.A-15)

A-14. On the average, how many hours a week (do you/does he/she) work?

NUMBER OF HOURS: |\_\_|\_\_| (RPI-5)

CATI PROGRAMMER: Display phrase in brackets if A-2 = 1, 2.

A-15. [Verify if not known.] During the last three months, (have you/has he/she) worked at all at a job or business?

YES ..... 1  
NO ..... 2 (RPI-4)

A-16. On average, how many hours a week (did you/did he/she) work?

NUMBER OF HOURS: |\_\_|\_\_|

RPI-4

REFERENCE TO IF INTERVIEW: IF S WAS WORKING ON THE IF (U21 = 1) BUT IS NOT WORKING NOW (A-13 = 2-7 AND A-15 = 2), THEN GO TO A-17 AND USE IF INTERVIEW DATE FOR (MONTH/YEAR). OTHERWISE, GO TO RPI-5.

A-17. Did (you/he/she) stop working at the job (you were/he/she was) working in (MONTH/YEAR) because of reasons related to (your/his/her) health?

YES ..... 1  
NO ..... 2

RPI-5

REFERENCE TO IF INTERVIEW: IF MOTHER WAS STILL ALIVE ON IF OR NOT INTERVIEWED ON IF, GO TO A-18. OTHERWISE GO TO RPI-6.

A-18. Is (your/his/her) natural mother still living?

YES ..... 1 (RPI-6)  
NO ..... 2  
DK ..... 8 (RPI-6)

A-19. How old was she when she died?

AGE IN YEARS: |\_\_|\_\_|\_\_|  
DK ..... 998

RPI-6

REFERENCE TO IF INTERVIEW: IF FATHER WAS STILL ALIVE ON IF OR NOT INTERVIEWED ON IF, GO TO A-20. OTHERWISE GO TO PART B.

A-20. Is (your/his/her) natural father still living?

YES ..... 1 (PART B)  
NO ..... 2  
DK ..... 8 (PART B)

A-21. How old was he when he died?

AGE IN YEARS: |\_\_|\_\_|\_\_|  
DK ..... 998

TIME ENDED: \_\_\_\_\_ AM  
PM

PART B: MEDICAL CONDITIONS

TIME BEGAN: \_\_\_\_\_ AM  
PM

B-1. [IF SPEAKING TO SUBJECT, ASK:] Would you say that your health in general is excellent, very good, good, fair or poor?

- EXCELLENT ..... 1
- VERY GOOD ..... 2
- GOOD ..... 3
- FAIR ..... 4
- POOR ..... 5

B-2. Within the past year have (you/has he/she) had pain, swelling or stiffness in your joints on most days for at least one month?

- YES ..... 1
- NO ..... 2
- DK ..... 8

RPI-7

REFERENCE TO ECF INTERVIEW: IF S HAD ARTHRITIS ON ECF (Q.B-2=1 ON ECF) AND THIS IS NOT A PROXY INTERVIEW, THEN GO TO B-4. OTHERWISE GO TO B-3.

B-3. Did a doctor ever tell (you/SUBJECT) that (you have/he/she has) arthritis?

- YES ..... 1 (Q.B-4)
- NO ..... 2 (RPI-8)
- DK ..... 8 (RPI-10)

RPI-8

REFERENCE TO ECF INTERVIEW: IF S HAD ARTHRITIS ON ECF (Q.B-2=1) AND PROXY DOES NOT REPORT ANY ARTHRITIS (B-3=2), THEN CODE B-3 AS "DISCREPANCY=96."

GO TO RPI-10

**CATI PROGRAMMER**

IF R IS THE S AND REPORTED ARTHRITIS ON THE ECF (B-2=1) THEN  
 INSERT [DISCREPANCY = 96] CODE FOR B-4

B-4. Concerning (your/SUBJECT'S) arthritis, in what year (were you/was SUBJECT) first told (you/he/she) had arthritis?

YEAR:            19 |\_\_|\_\_| (RPI-9)  
 DISCREPANCY ..... 96 (RPI-10)  
 DK ..... 98 (RPI-9)

**RPI-9**

REFERENCE TO ECF INTERVIEW: IF S HAD ARTHRITIS ON ECF  
 (Q.B-2=1) GO TO RPI-10. OTHERWISE GO TO B-5.

B-5. There are different kinds of arthritis. Did a doctor ever tell (you/him/her) which kind (you have/he/she has)?

YES ..... 1  
 NO ..... 2 (Q.B-7)  
 DK ..... 8 (Q.B-7)

B-6. Concerning your arthritis, (do you/does he/she) have osteoarthritis, degenerative, rheumatoid or some other type? [PROBE WITH CATEGORIES IF NECESSARY.]?

		<u>YES</u>	<u>NO</u>	<u>DK</u>
a. OSTEO/DEGENERATIVE ARTHRITIS .....	1	1	2	8
b. RHEUMATOID .....	2	1	2	8
c. SOME OTHER TYPE (Specify) .....	8	1	2	8

B-7. (Have you/Has he/she) ever had an x-ray for (your/his/her) arthritis, that is, an x-ray of (your/his/her) joints?

YES ..... 1  
 NO ..... 2 (RPI-10)

B-8. How long ago did (you/he/she) first have an x-ray for arthritis? [PROBE WITH CATEGORIES IF NECESSARY.]

LESS THAN ONE YEAR AGO ..... 1  
 1 BUT LESS THAN 5 ..... 2  
 5 BUT LESS THAN 10 ..... 3  
 10 OR MORE YEARS AGO ..... 4  
 DK ..... 8

B-9. How long ago did (you/he/she) last have an x-ray for arthritis? [PROBE WITH CATEGORIES IF NECESSARY.]

- LESS THAN ONE YEAR AGO ..... 1
- 1 BUT LESS THAN 5 ..... 2
- 5 BUT LESS THAN 10 ..... 3
- 10 OR MORE YEARS AGO ..... 4
- ONLY ONE X-RAY EVER ..... 95
- DK ..... 8

RPI-10

REFERENCE TO ECF INTERVIEW: IF § REPORTED AN EPISODE OF GOUT ON ECF (B-8=1), THEN GO TO B-11. OTHERWISE GO TO B-10.

B-10. Did a doctor ever tell (you/him/her) that (you have/he/she has) gout?

- YES ..... 1 (Q.B-12)
- NO ..... 2 (BOX A)
- DK ..... 8 (BOX A)
- BORDERLINE ..... 95 (Q.B-12)

B-11. Since (MONTH/YEAR), (have you/had he/she) had an episode of gout?

- YES ..... 1 (BOX A)
- NO ..... 2 (BOX A)
- DK ..... 8 (BOX A)

B-12. What year (were you/was he/she) first told that (you/he/she) had gout? [DO NOT PROBE A "DON'T KNOW" RESPONSE.]

- YEAR: 19 |\_\_|\_\_| (Q.B-14)
- DK ..... 98
- REFUSED ..... (Q.B-14)

B-13. Can you remember if it was less than a year ago, between 1 and 5 years ago, between 5 and 10 years ago, or 10 or more years ago?

- LESS THAN ONE YEAR AGO ..... 1
- 1 BUT LESS THAN 5 ..... 2
- 5 BUT LESS THAN 10 ..... 3
- 10 OR MORE YEARS AGO ..... 4
- DK ..... 8

B-14. What year did (you/he/she) have (your/his/her) last episode of gout? [DO NOT PROBE A "DON'T KNOW" RESPONSE.]?

- YEAR: 19 |\_\_|\_\_| (Q.B-16)
- § HAD ONLY ONE EPISODE OF GOUT ..... 95 (Q.B-16)
- DK ..... 98
- REFUSED ..... (Q.B-16)

B-15. Can you remember if it was less than a year ago, between 1 and 5 years ago, between 5 and 10 years ago, or 10 or more years ago?

- LESS THAN ONE YEAR AGO ..... 01
- 1 BUT LESS THAN 5 ..... 02
- 5 BUT LESS THAN 10 ..... 03
- 10 OR MORE YEARS AGO ..... 04
- ONLY ONE EPISODE OF GOUT EVER ..... 95
- DK ..... 98

B-16. (Have you/Has he/she) ever had an attack of arthritis that the doctor says was caused by gout?

- YES ..... 1
- NO ..... 2
- DK ..... 8

**BOX A**

IF B-3 = 1, GO TO B-17  
 IF S REPORTED ARTHRITIS ON ECF (B-2=1) THEN GO TO B-17  
 IF B-10 = 1 OR B-11 = 1, GO TO B-17; OTHERWISE GO TO RPI-11

**HOSPITAL DATES**

FOR PERSONS THAT REPORT A YEAR OF FIRST OCCURRENCE USE:

1970 if year of first occurrence is prior to 1980.  
 1980 if year of first occurrence is between 1980 and 1985.  
 1985 if year of first occurrence is in 1985 or later.

IF NO DATE OF FIRST OCCURRENCE IS REPORTED OR PERSONS THAT HAVE NEVER BEEN INTERVIEWED, USE:

1970 if never interviewed  
 1980 if last interview was the IF.  
 1985 if last interview was the ECF.

B-17. Since (1985/1980/1970), (were you/was he/she) hospitalized for (your/his/her) (arthritis/gout/arthritis or gout)? [PROBE: (Were you/Was he/she) there for more than a day?]

- YES ..... 1 (CHART)
- NO ..... 2

**RPI-11**

REFERENCE TO IF/ECF INTERVIEW: IF S REPORTED A HEART ATTACK ON IF (G17a=1) OR ECF (B-14 = 1 OR B-15=1), GO TO B-18. OTHERWISE GO TO B-19.

B-18. Since (MONTH/YEAR) (have you/has he/she) had a heart attack, (sometimes called coronary thrombosis or myocardial infarction)?

YES ..... 1 (Q.B-22)  
NO ..... 2 (Q.B-24)  
DK ..... 8 (Q.B-24)

B-19. Did a doctor ever tell (you/him/her) that (you/he/she) had a heart attack, (sometimes called coronary thrombosis or myocardial infarction)?

YES ..... 1  
NO ..... 2 (Q.B-24)  
DK ..... 8 (Q.B-24)

B-20. In what year (were you/was he/she) first told that (you/he/she) had a heart attack, (coronary thrombosis or myocardial infarction)?

YEAR: 19 |\_\_|\_\_|  
DK ..... 98

B-21. (Have you/Has he/she) had an additional heart attack since then?

YES ..... 1  
NO ..... 2 (Q.B-23)  
DK ..... 8 (Q.B-23)

B-22. In what year was that heart attack? [PROBE: Did (you/SUBJECT) have any others since then? PROBE FOR ALL YEARS.]

YEAR: 19 |\_\_|\_\_|  
YEAR: 19 |\_\_|\_\_|  
YEAR: 19 |\_\_|\_\_|  
YEAR: 19 |\_\_|\_\_|  
DK ..... 98

B-23. Since (1985/1980/1970), (were you/was he/she) hospitalized for (your/his/her) heart attack? [PROBE: (Were you/Was he/she) there for more than a day?]

YES ..... 1 (CHART)  
NO ..... 2

B-24. Since (1985/1980/1970), (were you/was he/she) hospitalized for any type of heart condition (other than a heart attack)? [PROBE: (Were you/Was he/she) there for more than a day?]

YES ..... 1 (CHART)  
NO ..... 2

RPI-12

REFERENCE TO IF/EQF INTERVIEW: IF § REPORTED CORONARY BY-PASS ON EQF (B-20a=1) GO TO B-25. IF § REPORTED HEART ATTACK OR OTHER HEART CONDITION ON IF/EQF AND DID NOT REPORT A CORONARY BY-PASS IN EQF THEN GO TO B-26. OTHERWISE GO TO BOX B.

B-25. Since (MONTH/YEAR) have you had coronary by-pass surgery?

YES ..... 1 (B-27)  
NO ..... 2 (RPI-13)

BOX B

IF B-19 = 1 OR B-24 = 1, GO TO B-26; OTHERWISE GO TO RPI-14.

B-26. (Have you/Has he/she) ever had coronary by-pass surgery?

YES ..... 1  
NO ..... 2 (RPI-13)

B-27. Since (1985/1980/1970), (were you/was he/she) hospitalized for coronary by-pass surgery? [PROBE: (Were you/Was he/she) there for more than a day?]

YES ..... 1 (CHART)  
NO ..... 2

RPI-13

REFERENCE TO EQF INTERVIEW: IF § REPORTED PACEMAKER ON EQF (B-20c=1), GO TO B-29. OTHERWISE GO TO B-28.

B-28. Some people with heart rhythm problems have a pacemaker inserted to control the heartbeat. (Have you/Has he/she) ever had a pacemaker inserted?

YES ..... 1  
NO ..... 2 (RPI-14)

B-29. Since (1985/1980/1970), (were you/was he/she) hospitalized for pacemaker insertion, repair, or replacement? [PROBE: (Were you/Was he/she) there for more than a day?]

- YES ..... 1 (CHART)
- NO ..... 2

**RPI-14**

REFERENCE TO IF/ECF INTERVIEW: IF S REPORTED A STROKE ON ECF (B-28=1) OR IF (G22a=1), GO TO B-30. OTHERWISE GO TO B-31.

B-30. Since (MONTH/YEAR) (have you/has he/she) had a stroke (sometimes called a CVA)?

- YES ..... 1 (Q.B-34)
- NO ..... 2 (BOX C)
- VOLUNTEERS SMALL STROKE ..... 3 (Q.B-34)
- VOLUNTEERS POSSIBLE STROKE ..... 4 (Q.B-34)
- VOLUNTEERS TIA ..... 5 (Q.B-34)
- DK ..... 8 (BOX C)

B-31. Did a doctor ever tell (you/him/her) that (you/he/she) had a stroke (sometimes called a CVA)?

- YES ..... 1
- NO ..... 2 (RPI-15)
- VOLUNTEERS SMALL STROKE ..... 3
- VOLUNTEERS POSSIBLE STROKE ..... 4
- VOLUNTEERS TIA ..... 5
- DK ..... 8 (RPI-15)

**CATI PROGRAMMER**

IF B-30 = 1 OR B-31 = 1 THEN USE 'STROKE' IN B-32 - B-36.  
 IF B-30 = 3 OR B-31 = 3 THEN USE 'TIA' IN B-32 - B-36.  
 IF B-30 = 4 OR B-31 = 4 THEN USE 'SMALL STROKE' IN B-32 - B-36.  
 IF B-30 = 5 OR B-31 = 5 THEN USE 'POSSIBLE STROKE' IN B-32 - B-36.

B-32. In what year (were you/was he/she) first told that (you/he/she) had a (TIA/STROKE/SMALL STROKE/POSSIBLE STROKE)?

- YEAR: 19 |\_\_|\_\_|
- DK ..... 98

B-33. (Have you/Has he/she) had an additional (TIA/stroke/small stroke/possible stroke) since then?

YES ..... 1  
 NO ..... 2 (Q.B-35)  
 DK ..... 8 (Q.B-35)

B-34. In what year was that (stroke/TIA/small stroke/possible stroke)? [PROBE: Did (you/SUBJECT) have any others since then? PROBE FOR ALL YEARS.]

YEAR: 19 |\_\_|\_\_|  
 YEAR: '9 |\_\_|\_\_|  
 DK ..... 98

B-35. Since (1985/1980/1970), (were you/was he/she) hospitalized for a (stroke/TIA/small stroke/possible stroke)? [PROBE: (Were you/Was he/she) there for more than a day?]

YES ..... 1 (CHART)  
 NO ..... 2

BOX C

IF B-30 = 2, 8 AND THIS IS NOT A PROXY INTERVIEW, GO TO B-36.  
 IF B-30 = 1, 3-5, THEN B-36.  
 IF B-31 = 1, 3, 4, 5, THEN B-36.  
 OTHERWISE GO TO RPI-15.

CATI PROGRAMMER

IF S REPORTED A STROKE LAST TIME BUT DID NOT REPORT ONE NOW (B30=2), THEN FOR B-36 INSERT THE PHRASE IN BRACKETS AND USE "STROKE" IN (STROKES/STROKE/SMALL STROKE/POSSIBLE STROKE/TIA). IF S REPORTED A STROKE LAST TIME AND REPORTED ANOTHER ONE NOW (B30=1), THEN FOR B-36 USE "STROKES" IN (STROKES/STROKE/SMALL STROKE/POSSIBLE STROKE/TIA).

B-36. [Concerning the stroke you told us about last time we talked,] (Do you/Does SUBJECT) now have any problems as a result of (your/his/her) (STROKES/STROKE/SMALL STROKE/POSSIBLE STROKE/TIA)? That is, (do you/does he/she) have . . .

	<u>YES</u>	<u>NO</u>
Trouble with (your/his/her) arm and leg being weak or hard to use? .....	1	2
Trouble walking due to (your/his/her) stroke? .....	1	2
Trouble with speech? .....	1	2
Some other trouble as a result of (your/his/her) stroke? (SPECIFY) .....	1	2

RPI-15

REFERENCE TO IF/ECF INTERVIEW: IF REPORTED DIABETES ON ECF (B-35=1) OR IF (G-36=1), THEN GO TO B-37. OTHERWISE GO TO B-38.

B-37. (Are you/Is SUBJECT now taking medication for diabetes?)

YES ..... 1 (Q.B-40)  
NO ..... 2 (Q.B-42)  
DK ..... 8 (Q.B-42)  
DISCREPANCY ..... 96 (Q.B-42a)

B-38. Did a doctor ever tell (you/him/her) that (you/he/she) had diabetes or sugar diabetes?

YES ..... 1  
NO ..... 2 (B42-a)  
DK ..... 8 (B42-a)  
BORDERLINE ..... 95

B-39. In what year (were you/was he/she) first told that (you/he/she) had diabetes or sugar diabetes?

YEAR: 19 |\_\_|\_\_|  
DK ..... 98

B-40. (Are you/Is he/she) now taking insulin injections for (your/his/her) diabetes?

YES ..... 1 (Q.B-42)  
NO ..... 2  
DK ..... 8

B-41. (Are you/Is he/she) now taking pills for (your/his/her) diabetes?

YES ..... 1  
NO ..... 2

B-42. Since (1985/1980/1970), (were you/was he/she) hospitalized for (your/his/her) diabetes? [PROBE: (Were you/Was he/she) there for more than a day?]

YES ..... 1 (CHART)  
NO ..... 2

B42a. (Have you/Has SUBJECT ever been told by a doctor or health professional that (your/his/her) blood cholesterol is high?)

YES ..... 1  
NO ..... 2 (RPI-16)  
DK ..... 8 (RPI-16)  
BORDERLINE ..... 95

B42b. Has a doctor or other health professional ever prescribed any of the following treatments for high blood cholesterol?

	<u>YES</u>	<u>NO</u>
a. Taking prescribed medicine .....	1	2
b. Controlling (your/his/her) weight .....	1	2
c. Eating fewer high fat foods .....	1	2
d. Eating fewer high cholesterol foods .....	1	2
e. Exercising .....	1	2

**CATI PROGRAMMER**

FOR EVERY QUESTION ANSWERED YES IN B42b, ASK B42c. INSERT THE APPROPRIATE TREATMENTS FROM B42b IN THE "(TREATMENT)" SPACE PROVIDED IN B42c.

B42c. (Are you/Is he/she) currently (TREATMENT) to lower (your/his/her) blood cholesterol?

	<u>YES</u>	<u>NO</u>
a. Taking prescribed medicine .....	1	2
b. Controlling (your/his/her) weight .....	1	2
c. Eating fewer high fat foods .....	1	2
d. Eating fewer high cholesterol foods .....	1	2
e. Exercising .....	1	2

**RPI-16**

REFERENCE TO ECF INTERVIEW:

IF S REPORTED TAKING MEDICATION FOR HIGH BLOOD PRESSURE ON ECF (B-40 OR B-43 = 1), THEN GO TO B-47.

IF S DID NOT REPORT HIGH BLOOD PRESSURE ON ECF (B-41 = 2,8), THEN GO TO B-44.

IF S NOT ON ECF AND DID NOT REPORT HIGH BLOOD PRESSURE ON IE (D2 = 2,8), THEN GO TO B-44.

IF S WAS NEVER INTERVIEWED ON IE OR ECF, GO TO B-44.

IF S REPORTED HIGH BLOOD PRESSURE BUT WAS NOT TAKING MEDICATION ON ECF [(B-40 = 2,8) OR (B-41 = 1 AND B-43 = 2,8)], THEN GO TO B-43.

IF S NOT ON ECF AND REPORTED HIGH BLOOD PRESSURE ON IE (D-2 = 1) THEN GO TO B-43.

B-43. Has the doctor ever prescribed medicine for (you/SUBJECT) for high blood pressure?

YES .....	1	(Q.B-47)
NO .....	2	(Q.B-47a)
DK .....	8	(Q.B-47a)
DISCREPANCY .....	96	(RPI-17)

B-44. (Have you/Has SUBJECT) ever been told by the doctor that (you/he/she) had high blood pressure or hypertension?

YES ..... 1  
 NO ..... 2 (RPI-17)  
 DK ..... 8 (RPI-17)  
 BORDERLINE ..... 95

B-45. In what year (were you/was he/she) first told that (you/he/she) had high blood pressure or hypertension?

YEAR: 19 |\_\_|\_\_|  
 DK ..... 98

B-46. Has the doctor ever prescribed medicine for (your/his/her) high blood pressure?

YES ..... 1  
 NO ..... 2 (Q.B-47a)  
 DK ..... 8 (Q.B-47a)

B-47. (Are you/Is SUBJECT) now taking medication for high blood pressure?

YES ..... 1  
 NO ..... 2  
 DK ..... 8

B47a. (Have you/Has SUBJECT) ever been advised by a doctor or other health professional to do any of the following because of hypertension or high blood pressure?

	<u>YES</u>	<u>NO</u>
a. Control (your/his/her) weight .....	1	2
b. Cut down on salt or sodium .....	1	2
c. Increase (your/his/her) exercise .....	1	2

**CATI PROGRAMMER**

FOR EVERY QUESTION ANSWERED YES IN B47a, ASK B47b. INSERT THE APPROPRIATE ADVICE FROM B47a IN THE "(ADVICE)" SPACE PROVIDED IN B47b.

B47b. (Are you/Is he/she) currently (ADVICE) to lower (your/his/her) blood pressure?

	<u>YES</u>	<u>NO</u>
a. Controlling (your/his/her) weight .....	1	2
b. Cutting down on salt or sodium .....	1	2
c. Increasing (your/his/her) exercise .....	1	2

B-48. Since (1985/1980/1970), (were you/was he/she) hospitalized for high blood pressure? [PROBE: (Were you/Was he/she) there for more than a day?]

YES ..... 1 (CHART)  
NO ..... 2

**RPI-17**

REFERENCE TO IF/ECF INTERVIEW: IF REPORTED BREAST CANCER ON IF (D-52=1) AND NOT A PROXY, THEN GO TO B-49. IF S DID REPORT OTHER TYPES OF CANCER ON IF (D58=1 OR D-62=1) OR ON THE ECF (B-47=1), THEN GO TO B-50. IF REPORTED BREAST CANCER ON IF AND A PROXY GO TO B-50. OTHERWISE GO TO B-51.

B-49. In what year were you first told that you had breast cancer?

YEAR: 19 |\_\_|\_\_|  
DISCREPANCY ..... 96  
DK ..... 98

B-50. Since (MONTH/YEAR) (have you/has he/she) had any type of cancer diagnosed including skin cancer?

YES ..... 1 (Q.B-53)  
NO ..... 2 (Q.B-52)  
DK ..... 8 (Q.B-52)

B-51. Did a doctor ever tell (you/him/her) that (you/he/she) had cancer of any sort including skin cancer?

YES ..... 1 (Q.B-53)  
NO ..... 2 (RPI-18)  
DK ..... 8 (RPI-18)

B-52. Since (1985/1980), (have you/has he/she) been hospitalized for any cancer condition? [PROBE: (Were you/Was he/she) there for more than a day?]

YES ..... 1 (CHART. THEN GO TO RPI-18)  
NO ..... 2 (RPI-18)

**CATI PROGRAMMER**

SUBSTITUTE "SINCE (MONTH/YEAR)" IN THE PROBE FOR B-53 IF S REPORTED A CANCER ON THE IF (D52=1 OR D-58=1 OR D-62) OR ON THE ECF (B-47=1).

	1ST DIAGNOSIS	2ND DIAGNOSIS	3RD DIAGNOSIS
B-53. Where was the cancer or what type of cancer was it? [PROBE: (Have you/ Has he/she) had any other cancer diagnosed since (month/ year)?]	LUNG ..... 1	LUNG ..... 1	LUNG ..... 1
	COLON (RECTUM,BOWEL) .... 2	COLON (RECTUM,BOWEL) .... 2	COLON (RECTUM,BOWEL) .... 2
	BREAST ..... 3	BREAST ..... 3	BREAST ..... 3
	SKIN (MELANOMA) ..... 4	SKIN (MELANOMA) ..... 4	SKIN (MELANOMA) ..... 4
	SKIN (NON-MELANOMA) ..... 5	SKIN (NON-MELANOMA) ..... 5	SKIN (NON-MELANOMA) ..... 5
	(Q.B-55)	(Q.B-55)	(Q.B-55)
	SKIN (DON'T KNOW) ..... 6	SKIN (DON'T KNOW) ..... 6	SKIN (DON'T KNOW) ..... 6
	UTERUS ..... 7	UTERUS ..... 7	UTERUS ..... 7
	PROSTATE ..... 8	PROSTATE ..... 8	PROSTATE ..... 8
	STOMACH ..... 9	STOMACH ..... 9	STOMACH ..... 9
LEUKEMIA ..... 10	LEUKEMIA ..... 10	LEUKEMIA ..... 10	
OTHER (SPECIFY) ..... 91	OTHER (SPECIFY) ..... 91	OTHER (SPECIFY) ..... 91	
SITE: _____	SITE: _____	SITE: _____	
<u>OR</u>	<u>OR</u>	<u>OR</u>	
TYPE: _____	TYPE: _____	TYPE: _____	
B-54. In what year (were you/ was he/she) first told that (you/ he/she) had (CANCER)?	YEAR: 19  __ __	YEAR: 19  __ __	YEAR: 19  __ __
	DK ..... 98	DK ..... 98	DK ..... 98
B-55. Since (1985/ 1980/1970), (were you/ was he/she) hospitalized for (CANCER)? [PROBE: (Were you/ Was he/she) there for more than a day?]	YES ..... 1 (CHART)	YES ..... 1 (CHART)	YES ..... 1 (CHART)
	NO ..... 2	NO ..... 2	NO ..... 2

RPI-18

REFERENCE TO IF/ECF INTERVIEW: IF S REPORTED FRACTURED OR BROKEN HIP ON ECF (B-53=1) OR IF (E8=1 OR E90=1), GO TO B-56. OTHERWISE GO TO B-57.

B-56. Since (MONTH/YEAR) (have you/has he/she) had a broken or or fractured hip?

YES ..... 1 (Q.B-60)  
NO ..... 2 (Q.B-62)  
DK ..... 8 (Q.B-62)

B-57. (Have you/Has SUBJECT) ever been told by the doctor that (you/he/she) had a broken or fractured hip?

YES ..... 1  
NO ..... 2 (Q.B-62)  
DK ..... 8 (Q.B-62)

B-58. In what year (were you/was he/she) first told that (you/he/she) had a broken or fractured hip?

YEAR: 19 |\_\_|\_\_|  
DK ..... 98

B-59. (Have you/Has he/she) had an additional fractured hip since then?

YES ..... 1  
NO ..... 2 (Q.B-61)  
DK ..... 8 (Q.B-61)

B-60. In what year did (you/he/she) have that break or fracture of (your/his/her) hip? [PROBE: (Have you/Has he/she) had another fractured hip since then? PROBE FOR ALL YEARS.]

YEAR: 19 |\_\_|\_\_|  
YEAR: 19 |\_\_|\_\_|  
YEAR: 19 |\_\_|\_\_|  
YEAR: 19 |\_\_|\_\_|  
DK ..... 98

B-61. Since (1985/1980/1970), (were you/was he/she) hospitalized for a broken or fractured hip? [PROBE: (Were you/Was he/she) there for more than a day?]

YES ..... 1 (CHART)  
NO ..... 2

B-62. Did a doctor ever tell (you/him/her) that (you/he/she) had osteoporosis?

YES ..... 1  
NO ..... 2 (RPI-19)

B-63. In what year (were you/was he/she) first told that (you/he/she) had osteoporosis?

YEAR: 19 |\_\_|\_\_|  
DK ..... 98

RPI-19

REFERENCE TO ECF/NHANES I: IF S INTERVIEWED ON ECF, THEN GO TO B64.  
IF S WAS NOT INTERVIEWED ON ECF AND WAS AT LEAST 45 YEARS OLD AT TIME  
OF NHANES I EXAM, THEN GO TO B-65. OTHERWISE GO TO B-71.

B-64. Since (MONTH/YEAR) (have you/has SUBJECT) broken or fractured (your/his/her) wrist?

YES ..... 1  
NO ..... 2 (RPI-20)  
DK ..... 8 (RPI-20)

B-65. Since 1970, (have you/has SUBJECT) broken or fractured (your/his/her) wrist?

YES ..... 1  
NO ..... 2 (RPI-20)  
DK ..... 8 (RPI-20)

CATI PROGRAMMER

IF S WAS INTERVIEWED ON ECF THEN SUBSTITUTE  
"SINCE (MONTH/YEAR)" IN PROBE FOR B-66.  
OTHERWISE SUBSTITUTE "SINCE 1970."

B-66. In what year was that wrist broken or fractured? (PROBE: [(Since 1970/Since (MONTH/YEAR)), did (you/SUBJECT) have any other wrist breaks or fractures of your wrist?]

YEAR: 19 |\_\_|\_\_|  
YEAR: 19 |\_\_|\_\_|  
YEAR: 19 |\_\_|\_\_|  
YEAR: 19 |\_\_|\_\_|  
DK ..... 98

RPI-20

REFERENCE TO ECF INTERVIEW: IF S ELIGIBLE FOR ECF, GO TO B-67. OTHERWISE GO TO B-71.

B-67. The next few questions are about falls. I'm interested in falls where (you have/SUBJECT has) fallen and landed on the floor or ground or hit an object like a table or stair. During the past 12 months, (have you/has SUBJECT) had this kind of fall?

YES ..... 1  
 NO ..... 2 (Q.B-71)  
 DK ..... 8 (Q.B-71)

B-68. How many times (have you/has he/she) fallen like this during the past 12 months?

NUMBER OF TIMES: |\_\_|\_\_|

B-69. (Did this fall/Did any of these falls) . . .

	<u>YES</u>	<u>NO</u>
a. cause a broken bone? .....	1	2
b. cause (you/ <u>him/her</u> ) to hit or injure ( <u>your/his/her</u> ) head? .....	1	2
c. cause (you/ <u>him/her</u> ) to seek medical care? .....	1	2

B-70. During the past 12 months, (were you/was he/she) hospitalized for any of these falls? [PROBE: (Were you/was he/she) there for more than a day?]

YES ..... 1 (CHART)  
 NO ..... 2

B-71. Since (1985/1980/1970), (have you/has he/she) been hospitalized for pneumonia, bronchitis, or the flu? [PROBE: (Were you/Was he/she) there for more than a day?]

YES ..... 1 (CHART)  
 NO ..... 2

RPI-21

REFERENCE TO IF INTERVIEW: IF S REPORTED KIDNEY DISEASE OR KIDNEY STONES ON IF (G6a=1), GO TO B-72 AND USE IF INTERVIEW DATE FOR "(MONTH/YEAR)". OTHERWISE GO TO B-73a.

B-72. Since (MONTH/YEAR) (have you/has he/she) had a kidney disorder or kidney stone(s)? Please do not include kidney infections.

YES ..... 1 (Q.B-73c)  
NO ..... 2 (Q.B-73c)  
DK ..... 8 (Q.B-73c)

B-73a. (Have you/Has SUBJECT) ever been told by the doctor that (you/he/she) had a kidney disorder or kidney stone(s)? Please do not include kidney infections.

YES ..... 1  
NO ..... 2 (Q.B-73c)  
DK ..... 8 (Q.B-73c)

B-73b. What year were you first told (you/he/she) had a kidney disorder or kidney stones?

YEAR: 19 |\_\_|\_\_|  
DK ..... 98

B-73c. Have (you/he/she) ever been told by a doctor that you had a urinary tract or kidney infection more than three times?

YES ..... 1  
NO ..... 2 (BOX C1)

B-73d. What year were you first told that you had a urinary tract or kidney infection?

YEAR: 19 |\_\_|\_\_|  
DK ..... 98

BOX C1

IF R REPORTED KIDNEY DISORDER/KIDNEY STONES (B72=1 OR B73a=1) OR URINARY TRACT/KIDNEY INFECTION (B73c=1) THEN GO TO B74. OTHERWISE GO TO RPI-22.

B-74. Since (1985/1980/1970) have you been hospitalized for a kidney condition or urinary tract infection? [PROBE: (Were you/Was he/she) there for more than one day?]

YES ..... 1 (CHART)  
NO ..... 2

RPI-22

REFERENCE TO ECF INTERVIEW: IF S HAD CATARACT SURGERY ON ECF  
(BOX E= 1 OR F-3= 1) THEN GO TO B-75. OTHERWISE GO TO B-76.

B-75. Since (MONTH/YEAR) (have you/has he/she) had cataract surgery?

YES ..... 1 (Q.B-78)  
NO ..... 2 (BOX D)

B-76. Has a doctor ever told (you/SUBJECT) that (you/he/she) had cataracts?

YES ..... 1  
NO ..... 2 (BOX D)

B-77. (Have you/Has he/she) ever had surgery for (your/his/her) cataracts?

YES ..... 1  
NO ..... 2 (BOX D)

B-78. What year did (you/he/she) have (your/his/her) cataract surgery? [PROBE: Did (you/he/she) have any other cataract surgery? RECORD ALL YEARS].

YEAR: 19 |\_\_|\_\_|  
YEAR: 19 |\_\_|\_\_|  
DK ..... 98

B-79. Since (1985/1980/1970), (were you/was he/she) hospitalized for (your/his/her) cataract surgery? [PROBE: (Were you/Was he/she) there for more than a day?]

YES ..... 1 (CHART)  
NO ..... 2

BOX D

S IS MALE ..... 1 (B-80)  
S IS FEMALE ..... 2 (B-83)

B-80. (Have you/Has SUBJECT) ever had an operation in order to be sterilized, also known as a vasectomy?

YES ..... 1  
NO ..... 2 (Q.B-83)

B-81. How old (were you/was he) when (you/he) had this vasectomy?

AGE IN YEARS: |\_\_|\_\_|

B-82 NOT ASKED THIS VERSION.

B-83. [I have recorded that (you were/SUBJECT was) hospitalized (READ DATES, CONDITIONS AND FACILITY NAMES FROM CHART.)

Now, I would like you to think back over the time between (1985/1980/1970) and the present. (You/He/She) would have been about (AGE) in (1985/1980/1970). (Have you/Has he/she) stayed in a hospital for any (other) reason including surgery, tests or for observation since (you were/he/she was) (AGE)? [PROBE: (Were you/Was he/she) there for more than a day?]

YES ..... 1  
 NO ..... 2 (BOX E)

ASK B-84 AND THEN B-85 FOR EACH CONDITION	CONDITION # 1	CONDITION # 2	CONDITION # 3
B-84. For what condition was that? [PROBE: Did (you/he/she) have any other hospitalizations since (1985/1980/1970)?] [GO TO CHART AFTER CODING CONDITION.]	TESTS AND/OR OBSERVATION ..... 1 DIGESTIVE/ULCERS PROBLEMS ..... 2 RESPIRATORY/BREATHING PROBLEMS ..... 3 INFECTIONS ..... 4 SURGERY FOR OTHER CONDITIONS ..... 5 OTHER (SPECIFY) ..... 91	TESTS AND/OR OBSERVATION ..... 1 DIGESTIVE/ULCERS PROBLEMS ..... 2 RESPIRATORY/BREATHING PROBLEMS ..... 3 INFECTIONS ..... 4 SURGERY FOR OTHER CONDITIONS ..... 4 OTHER (SPECIFY) ..... 91	TESTS AND/OR OBSERVATION ..... 1 DIGESTIVE/ULCERS PROBLEMS ..... 2 RESPIRATORY/BREATHING PROBLEMS ..... 3 INFECTIONS ..... 4 SURGERY FOR OTHER CONDITIONS ..... 4 OTHER (SPECIFY) ..... 91
B-85. [INTERVIEWER FILL IN THE YEAR OF THIS ADMISSION FROM HOSPITAL CHART.]	MONTH: DAY: YEAR: SPECIFY: _____	MONTH: DAY: YEAR: SPECIFY: _____	MONTH: DAY: YEAR: SPECIFY: _____

**BOX E**

IF A-3 = 1 THEN GO TO BOX H.

B-86. Since (1985/1980/1970), (have you/has SUBJECT) ever stayed in a rest home, a nursing home, a mental health facility, or anything like that? [PROBE: (Were you/Was he/she) there for more than a day?]

YES ..... 1  
 NO ..... 2 (BOX H)

	ADMISSION# 1	ADMISSION# 2	ADMISSION# 3
B-87. To what type of place was the (most recent/this) admission?	NURSING HOME/ REST HOME ..... 1 MENTAL HEALTH FACILITY ..... 2 HEALTH CARE REHABILITATION CENTER ..... 3 OTHER (SPECIFY) ..... 91 _____	NURSING HOME/ REST HOME ..... 1 MENTAL HEALTH FACILITY ..... 2 HEALTH CARE REHABILITATION CENTER ..... 3 OTHER (SPECIFY) ..... 91 _____	NURSING HOME/ REST HOME ..... 1 MENTAL HEALTH FACILITY ..... 2 HEALTH CARE REHABILITATION CENTER ..... 3 OTHER (SPECIFY) ..... 91 _____
B-88. Did (you/he/she) enter the ( <u>TYPE OF FACILITY</u> ) directly from (your/his/her) own home, from a hospital, or from some other place?	OWN HOME ..... 01 HOSPITAL ..... 02 NURSING HOME/ REST HOME ..... 03 MENTAL HEALTH FACILITY ..... 04 HEALTH CARE REHABILITATION CENTER ..... 05 FRIEND/RELATIVE'S HOME ..... 06 OTHER (SPECIFY) ..... 91 _____	OWN HOME ..... 01 HOSPITAL ..... 02 NURSING HOME/ REST HOME ..... 03 MENTAL HEALTH FACILITY ..... 04 HEALTH CARE REHABILITATION CENTER ..... 05 FRIEND/RELATIVE'S HOME ..... 06 OTHER (SPECIFY) ..... 91 _____	OWN HOME ..... 01 HOSPITAL ..... 02 NURSING HOME/ REST HOME ..... 03 MENTAL HEALTH FACILITY ..... 04 HEALTH CARE REHABILITATION CENTER ..... 05 FRIEND/RELATIVE'S HOME ..... 06 OTHER (SPECIFY) ..... 91 _____
B-89. In what year did (you/he/she) enter the ( <u>TYPE OF FACILITY</u> )?	YEAR: 19  __ __	YEAR: 19  __ __	YEAR: 19  __ __

**BOX F**

IF B-87=2 THEN GO TO B-92.  
OTHERWISE, GO TO BOX G.

**BOX G**

THIS IS SECOND ADMISSION ..... B-90a  
OTHERWISE ..... B-90

B-90a. Was this admission for the same reasons and medical conditions as you just reported?

YES ..... 1 (B-92)  
NO ..... 2 (B-90)  
DK ..... 8 (B-90)

	ADMISSION# 1		ADMISSION# 2		ADMISSION# 3	
	<u>YES</u>	<u>NO</u>	<u>YES</u>	<u>NO</u>	<u>YES</u>	<u>NO</u>
B-90. There are many reasons why people enter a (TYPE OF FACILITY). Please tell me if (you/SUBJECT) entered the (TYPE OF FACILITY) for any of the following reasons. (CIRCLE YES OR NO FOR EACH.)	Required skilled nursing care? .....	1 2	Required skilled nursing care? .....	1 2	Required skilled nursing care? .....	1 2
	Recuperation from surgery? .....	1 2	Recuperation from surgery? .....	1 2	Recuperation from surgery? .....	1 2
	Needed help with bathing, eating, or dressing? .....	1 2	Needed help with bathing, eating, or dressing? .....	1 2	Needed help with bathing, eating, or dressing? .....	1 2
	Required special medical or physical therapy? .....	1 2	Required special medical or physical therapy? .....	1 2	Required special medical or physical therapy? .....	1 2
	Too confused to live independently? .....	1 2	Too confused to live independently? .....	1 2	Too confused to live independently? .....	1 2

	ADMISSION# 1	ADMISSION# 2	ADMISSION# 3
B-91. Please tell me the name of the disease or medical condition that (you/he/she) had at the time of admission that affected (your/his/her) ability to live independently? (CIRCLE ALL THAT APPLY)	ALZHEIMER'S DISEASE ..... 01	ALZHEIMER'S DISEASE ..... 01	ALZHEIMER'S DISEASE ..... 01
	CANCER ..... 02	CANCER ..... 02	CANCER ..... 02
	DEPRESSION ..... 03	DEPRESSION ..... 03	DEPRESSION ..... 03
	FRAIL/OLD AGE ..... 04	FRAIL/OLD AGE ..... 04	FRAIL/OLD AGE ..... 04
	HARDENING OF THE ARTERIES OR ARTERIOSCLEROSIS ..... 05	HARDENING OF THE ARTERIES OR ARTERIOSCLEROSIS ..... 05	HARDENING OF THE ARTERIES OR ARTERIOSCLEROSIS ..... 05
	INCONTINENCE ..... 06	INCONTINENCE ..... 06	INCONTINENCE ..... 06
	NO MEDICAL CONDITION ..... 07	NO MEDICAL CONDITION ..... 07	NO MEDICAL CONDITION ..... 07
	SENILITY ..... 08	SENILITY ..... 08	SENILITY ..... 08
	STROKE ..... 09	STROKE ..... 09	STROKE ..... 09
	OTHER DISEASE OR CONDITION (SPECIFY) ..... 91	OTHER DISEASE OR CONDITION (SPECIFY) ..... 91	OTHER DISEASE OR CONDITION (SPECIFY) ..... 91
	_____	_____	_____
	_____	_____	_____
	_____	_____	_____

CATI PROGRAMMER:

SPACE SHOULD BE LEFT IN B-91 FOR ALL THE MULTIPLE RESPONSE CATEGORIES USED IN ECE.

	ADMISSION# 1	ADMISSION# 2	ADMISSION# 3
B-92. How long did (you/he/she) stay? (GO TO CHART AFTER CODING LENGTH OF STAY.)	#:  __ __  OF WKS ..... 1 MOS ..... 2 YRS ..... 3 STILL THERE ..... 94 LESS THAN ONE WEEK ..... 95 (CHART)	#:  __ __  OF WKS ..... 1 MOS ..... 2 YRS ..... 3 STILL THERE ..... 94 LESS THAN ONE WEEK ..... 95 (CHART)	#:  __ __  OF WKS ..... 1 MOS ..... 2 YRS ..... 3 STILL THERE ..... 94 LESS THAN ONE WEEK ..... 95 (CHART)
B-93. Since (1985/1980/1970) were there other admissions to a rest home, a nursing home, a mental health facility, a rehabilitation center or any place like that?	YES ..... 1 (Q.B-87) NO ..... 2	YES ..... 1 (Q.B-87) NO ..... 2	YES ..... 1 (Q.B-87) NO ..... 2

BOX H

IF A-1 ≠ 2 ..... 1 (B-94)  
A-2 = 2 ..... 2 (B-95)  
OTHERWISE GO TO PART C.

B-94. What has been happening to (your/his/her) health during the past 12 months? Has it improved, remained the same, gradually worsened, or suddenly worsened?

IMPROVED ..... 1  
REMAINED THE SAME ..... 2  
GRADUALLY WORSENERD ..... 3 (PART C)  
SUDDENLY WORSENERD ..... 4  
DK ..... 98

B-95. During the month before (your/SUBJECT'S) admission to the nursing home, was there a significant change in (your/his/her) health?

YES ..... 1  
NO ..... 2

B-96. During the 12 months prior to that, what was happening to (your/his/her) health? Had it improved, remained the same, gradually worsened, or suddenly worsened?

IMPROVED ..... 1  
REMAINED THE SAME ..... 2  
GRADUALLY WORSENERD ..... 3  
SUDDENLY WORSENERD ..... 4  
DK ..... 98

TIME ENDED: \_\_\_\_\_ AM  
PM

PART C: ACTIVITIES OF DAILY LIVING

TIME BEGAN: \_\_\_\_\_ AM  
PM

NURSING HOME INSTRUCTIONS:	
RESPONDENT CAN ANSWER THIS SECTION .....	1
RESPONDENT <u>CANNOT</u> ANSWER THIS SECTION	
ASK OF NURSING HOME STAFF .....	2 (RECORD NAME, ADDRESS AND TELEPHONE NUMBER ON IS. THEN, GO TO PART D.)

These next questions ask about physical problems (you/SUBJECT) may or may not have. First . . .

C-1. (Do you/Does SUBJECT) usually have to stay in bed for most of the day?

YES ..... 1  
NO ..... 2 (Q.C-3)

C-2. How long (have you/has he/she) had to stay in bed for most of the day?

|\_\_|\_\_| NUMBER OF MONTHS ..... 1  
NUMBER OF YEARS ..... 2  
LESS THAN ONE MONTH ..... 95

C-3. (Do you/Does he/she) have any problems that prevent the use of one or more of (your/his/her) arms or legs?

YES ..... 1  
NO ..... 2 (BOX H1)

C-4. Is this due to . . .

	<u>YES</u>	<u>NO</u>
a. Paralysis? .....	1	2
b. Amputation? .....	1	2
c. Severe arthritis? .....	1	2
d. Some other reason? .....	1	2

(SPECIFY)

---

C-5. [IF YES TO Q.C-4a, ASK:]  
Which limbs are paralyzed?

	<u>YES</u>	<u>NO</u>
a. RIGHT HAND/ARM .....	1	2
b. LEFT HAND/ARM .....	1	2
c. RIGHT FOOT/LEG .....	1	2
d. LEFT FOOT/LEG .....	1	2

C-6. [IF YES TO Q.C-4b, ASK:]  
Which limbs have been amputated?

	<u>YES</u>	<u>NO</u>
a. RIGHT HAND/ARM .....	1	2
b. LEFT HAND/ARM .....	1	2
c. RIGHT FOOT/LEG .....	1	2
d. LEFT FOOT/LEG .....	1	2

C-7. [IF YES TO Q.C-4c OR C-4d, ASK:]  
Which limbs are involved?

	<u>YES</u>	<u>NO</u>
a. RIGHT HAND/ARM .....	1	2
b. LEFT HAND/ARM .....	1	2
c. RIGHT FOOT/LEG .....	1	2
d. LEFT FOOT/LEG .....	1	2

BOX H1

IF R IS NOT ELIGIBLE FOR THE ECF AND IS NOT BEDRIDDEN (C-3 = 2) THEN GO TO C-8a. OTHERWISE GO TO C-9.

C-8a. (Do you/Does he/she) usually use any special equipment to get around, bathe, walk, dress or eat such as canes, artificial limbs or grab bars?

YES ..... 1 (C-8b)  
 NO ..... 2 (RPI-23)  
 DK ..... 8 (RPI-23)

C-8b. Do you usually use:

	<u>YES</u>	<u>NO</u>
a. Special devices in the bathroom such as hand rails or grab bars .....	1	2
b. Cane .....	1	2
c. Artificial limb .....	1	2
d. Walker or crutches .....	1	2
e. Wheelchair .....	1	2
f. Devices used for dressing such as button hooks, zipper pulls, etc .....	1	2
g. Special or built-up chair or toilet .....	1	2
h. Special eating devices .....	1	2

GO TO RPI-23

C-9. (Do you/Does he/she) usually use any of the following special equipment to help (you/him/her) get around, bathe, walk, dress or eat?

	<u>YES</u>	<u>NO</u>
a. Special devices in the bathroom such as hand rails or grab bars .....	1	2
b. Cane .....	1	2
c. Artificial limb .....	1	2
d. Walker or crutches .....	1	2
e. Wheelchair .....	1	2
f. Devices used for dressing such as button hooks, zipper pulls, etc .....	1	2
g. Special or built-up chair or toilet .....	1	2
h. Special eating devices .....	1	2

RPI-23

REFERENCE TO ECF:

- IF S CANNOT USE ANY LIMBS (ALL CATEGORIES IN C-5, C-6 OR C-7 ARE CODED YES) ..... 1 (PART D)
- IF S IS BEDRIDDEN (C-1=1) ..... 2 (GO TO 10a AND ASK \* QUESTIONS ONLY)
- IF S CANNOT USE BOTH LOWER LIMBS (AT LEAST ONE "C" CATEGORY AND ONE "D" CATEGORY IS CODED YES IN C-5, C-6 OR C-7) ..... 3 (GO TO 10a AND ASK \* AND \*\* QUESTIONS ONLY)
- IF S WAS ELIGIBLE FOR THE ECF AND CAN USE AT LEAST ONE LOWER LIMB (EITHER "C" OR "D" IS NOT CODED YES IN C-5, C-6 or C-7) AND IS NOT BEDRIDDEN (C-1≠1) ..... 4 (GO TO 10a AND ASK ALL QUESTIONS)
- IF S WAS NOT ELIGIBLE FOR THE ECF AND CAN USE AT LEAST ONE LOWER LIMB (EITHER "C" OR "D" IS NOT CODED YES IN C-5, C-6 OR C-7) AND S IS NOT BEDRIDDEN (C-1≠1) AND EITHER S USES AT LEAST ONE TYPE OF SPECIAL EQUIPMENT (C-8a=1, C-8b=1, C-8c=1, C-8d=1, C-8e=1, C-8f=1, C-8g=1, C-8h=1 OR C-9=1) OR HAS ARTHRITIS (B-3=1) ..... 5 (GO TO 10a AND ASK ALL QUESTIONS)
- IF S WAS NOT ELIGIBLE FOR THE ECF AND DOES NOT HAVE ARTHRITIS (B-3= /1) ..... 6 (GO TO 10a AND ASK \*\*\* QUESTIONS ONLY)

INTERVIEWER INSTRUCTIONS: ASK Q.C-10 THROUGH Q.C-32. IF ANY RESPONSE TO b = 3 OR 4 OR ANY RESPONSE TO a = 3, ASK Q.C-10c/Q.C-10d THROUGH Q.C-32c/Q.C-32d. IF c OR d = YES (USES HELP EITHER FROM ANOTHER PERSON OR AN AID) ASK Q.C-10e THROUGH Q.C-32e WHERE INDICATED.

a.		b.			
<p>I am going to read a list of activities. Please tell me if (you have/<u>SUBJECT</u> has) any difficulty doing these things when (you are/<u>SUBJECT</u> is) by (yourself/himself/herself) and not using special equipment. [PROBE, IF NECESSARY: (Do you/Does he/she) have any difficulty when (you/he/she (<u>ACTIVITY</u>)?)]</p> <p>(ENTER ONE CODE FOR EACH ACTIVITY)            1 = YES (DIFFICULTY): ASK b            2 = NO DIFFICULTY            3 = NEVER DOES WITHOUT HELP            4 = NEVER DOES ACTIVITY            5 = INAPPROPRIATE ACTIVITY</p>		<p>[IF YES (CODE 1) IN a, ASK:]            (Do you/Does <u>SUBJECT</u>) have some difficulty, much difficulty, or (are you/is he/she) unable to do this?</p>			
		SOME DIFFI- CULTY	MUCH DIFFI- CULTY	UNABLE TO DO	DK
**	C-10. Dress (yourself/himself/herself), including tying shoes, working zippers and doing buttons? <input type="text"/>	2	3	4	8
	C-11. Stand up from an armless straight chair (such as a dining room chair)? <input type="text"/>	2	3	4	8
**	C-12. Get into and out of bed? <input type="text"/>	2	3	4	8
**	C-13. Prepare meals? <input type="text"/>	2	3	4	8
*	C-14. Cut (your/his/her) meat? <input type="text"/>	2	3	4	8
*	C-15. Lift a full cup or glass to (your/his/her) mouth? <input type="text"/>	2	3	4	8
*	C-16. Open a new milk carton? <input type="text"/>	2	3	4	8
***	C-17. Walk a quarter mile (that is, two or three blocks)? <input type="text"/> (IF CODE 2, GO TO Q.C19)	2 (Q.C19)	3	4	8
	C-18. Walk from one room to another (on the same floor)? <input type="text"/>	2	3	4	8
***	C-19. Walk up and down at least two steps? <input type="text"/>	2	3	4	8
**	C-20. Get in and out of the bathtub? <input type="text"/>	2	3	4	8
**	C-21. Wash and dry (your/his/her) whole body? <input type="text"/>	2	3	4	8
**	C-22. Get on and off the toilet? <input type="text"/>	2	3	4	8
*	C-23. Comb (your/his/her) hair? <input type="text"/>	2	3	4	8
**	C-24. Reach and get down a 5 lb. object (bag of sugar) from just above (your/his/her) head? <input type="text"/>	2	3	4	8
***	C-25. Bend down and pick up clothing from the floor? <input type="text"/>	2	4	8	
**	C-26. Open jars which have been previously opened? <input type="text"/>	2	3	4	8
*	C-27. Use a pen or pencil to write with? <input type="text"/>	2	3	4	8
**	C-28. Get in and out of a car? <input type="text"/>	2	3	4	8
***	C-29. Run errands and shop? <input type="text"/>	2	3	4	8
***	C-30. Do light chores (such as dusting or taking out the garbage)? <input type="text"/>	2	3	4	8
***	C-31. Lift and carry a full bag of groceries? <input type="text"/>	2	3	4	8
***	C-32. Do heavy chores around the house or yard (such as washing windows, walls or floors)? <input type="text"/>	2	3	4	8

**BOX J**

ANY RESPONSE IN Q.C-10 THROUGH Q.C-32a = 3 ..... 1 (Q.C-10c)  
 ANY RESPONSE IN Q.C-10 THROUGH Q.C-32b = 3 OR 4 ..... 2 (Q.C-10c)  
 ALL RESPONSES, Q.C-10 THROUGH Q.C-32b = BLANK, 2, OR 8 ..... 3 (PART D)

<p><b>(IF CODE 3 IN a, ASK:)</b>                  You said that you never <u>(ACTIVITY)</u> without help.</p> <p><b>(IF B IS SUBJECT AND CODE 3 OR 4 IN b, ASK:)</b>                  You said that you (have difficulty/are unable to) <u>(ACTIVITY)</u> by yourself.</p> <p><b>(IF B IS PROXY AND CODE 3 OR 4 IN b, ASK:)</b>                  You said that (he/she) (has difficulty/is unable to) <u>(ACTIVITY)</u> by (himself/herself).</p>		<p align="center"><b>e.</b></p> <p><b>[ASK ONLY IF HAVE HELP:]</b> With help how much difficulty (do you/does <u>SUBJECT</u>) have (doing this activity)? (Do you/Does he/she) have no difficulty, some difficulty, much difficulty, or (are you/is he/she) unable to do it?</p>							
<p><b>c.</b> (Do you/Does he/she) have help from another person?</p>		<p><b>d.</b> (Do you/Does he/she) use special equipment, such as a . . . [FOR C-10, IF C-8a = YES, THEN USE "BUTTON HOOKS," OTHERWISE, USE "ZIPPER EXTENDER." FOR C-11, 12, 17-19, 27, IF C-8b = YES, USE "WALKER," OTHERWISE USE "CANE.]"</p>				NO DIFFI- CULTY	SOME DIFFI- CUTLY	MUCH DIFFI- CUTLY	UNABLE TO DO
YES	NO	YES		NO					
C-10.	1 2	(Button hooks/ zipper extender)		1 2	1	2	3	4	
C-11.	1 2	(Walker/cane)		1 2	1	2	3	4	
C-12.	1 2	(Walker/cane)		1 2	1	2	3	4	
C-13.	1 2			1 2	1	2	3	4	
C-14.	1 2			1 2	1	2	3	4	
C-15.	1 2			1 2	1	2	3	4	
C-16.	1 2			1 2	1	2	3	4	
C-17.	1 2	(Walker/cane)		1 2	1	2	3	4	
C-18.	1 2	(Walker/cane)		1 2	1	2	3	4	
C-19.	1 2	(Walker/cane)		1 2	1	2	3	4	
C-20.	1 2	(Hand rail)		1 2	1	2	3	4	
C-21.	1 2			1 2	1	2	3	4	
C-22.	1 2	(Hand rail)		1 2	1	2	3	4	
C-23.	1 2			1 2	1	2	3	4	
C-24.	1 2	(Grabber)		1 2	1	2	3	4	
C-25.	1 2	(Grabber)		1 2	1	2	3	4	
C-26.	1 2	(Jar gripper)		1 2	1	2	3	4	
C-27.	1 2			1 2	1	2	3	4	
C-28.	1 2	(Walker/cane)		1 2	1	2	3	4	
C-29.	1 2			1 2	1	2	3	4	
C-30.	1 2			1 2	1	2	3	4	
C-31.	1 2			1 2	1	2	3	4	
C-32.	1 2			1 2	1	2	3	4	

TIME ENDED: \_\_\_\_\_ AM  
 PM

PART D: SMOKING AND ALCOHOLIC BEVERAGES

TIME BEGAN: \_\_\_\_\_ AM  
PM

RPI-24

REFERENCE TO IF/ECF INTERVIEW: IF NEVER INTERVIEWED OR S REPORTED "NEVER SMOKED" AT LAST INTERVIEW [ECF (D-1 = 2) OR IF (L-1=2)] THEN GO TO Q.D-1. OTHERWISE GO TO RPI-25.

D-1. These next few questions are about (your/SUBJECT'S) smoking and drinking habits. Did (you/SUBJECT) ever smoke at least 100 cigarettes in (your/his/her) lifetime?

YES ..... 1  
NO ..... 2 (Q.D-11)

D-2. (Do you/Does he/she) smoke cigarettes now?

YES ..... 1  
NO ..... 2 (Q.D-5)  
DK ..... 8 (Q.D-11)

D-3. About how many cigarettes a day (do you/does he/she) now smoke? [IF ANSWER IS NUMBER OF PACKS, MULTIPLY BY 20 AND VERIFY.]

NUMBER OF CIGARETTES: |\_\_|\_\_|\_\_|  
LESS THAN ONE A DAY ..... 995

D-4. For how many years (have you/has he/she) smoked cigarettes?

NUMBER OF YEARS: |\_\_|\_\_| (Q.D-11)

D-5. When did (you/he/she) stop smoking cigarettes?

MONTH: |\_\_|\_\_|  
AND  
YEAR: 19 |\_\_|\_\_|

D-6. During the years when (you were/he/she was) smoking, about how many cigarettes a day did (you/he/she) smoke? [IF ANSWER IS NUMBER OF PACKS, MULTIPLY BY 20 AND VERIFY.]

NUMBER OF CIGARETTES: |\_\_|\_\_|\_\_|  
LESS THAN ONE A DAY ..... 995

D-7. For how many years (did you/has he/she) smoke cigarettes?

NUMBER OF YEARS: |\_\_|\_\_| (D-11)

RPI-25  
IF S WAS A CURRENT OR FORMER SMOKER ON THE IF (L2a = 1, 2)  
OR WAS A CURRENT OR FORMER SMOKER ON THE ECF (D-2 = 1, 2)  
THEN GO TO Q.D-8. OTHERWISE GO TO Q.D-11.

D-8. These next few questions are about (your/SUBJECT'S) smoking and drinking habits. (Do you/Does he/she) smoke cigarettes now?

YES ..... 1  
NO ..... 2 (BOX J1)  
REFUSED ..... 8 (Q.D-11)

D-9. About how many cigarettes a day (do you/does he/she) now smoke? [IF ANSWER IS NUMBER OF PACKS, MULTIPLY BY 20 AND VERIFY.]

NUMBER OF CIGARETTES: |\_\_|\_\_|\_\_| (D-11)  
LESS THAN ONE A DAY ..... 995 (D-11)

BOX J1  
IF R IS A PROXY AND D-8 = 2 THEN GO TO D-11.

D-10. When did (you/he/she) last stop smoking cigarettes?

MONTH: |\_\_|\_\_|  
AND  
YEAR: 19 |\_\_|\_\_|  
DISCREPANCY (NEVER SMOKED) ..... 96

D-11. Now I would like to talk to you about drinking beer, or wine, or liquor. (Have you/Has SUBJECT) had at least one drink of beer, or wine, or liquor during the past year?

YES ..... 1  
NO ..... 2 (PART E)

D-12. During the past year, how often did (you/he/she) drink beer?

NUMBER OF DAYS: |\_\_|\_\_| PER: WEEK ..... 1  
MONTH ..... 2  
MORE THAN 3 BUT LESS THAN 12 TIMES PER YEAR ..... 94  
NO MORE THAN 3 TIMES PER YEAR ..... 95  
NONE ..... 00 (D-14)  
DK ..... 98 (D-13)

D-13. On the days (you/he/she) drank beer, how many cans, bottles or glasses did (you/he/she) drink?

NUMBER OF DRINKS: |\_\_|\_\_|  
LESS THAN ONE DRINK ..... 95

D-14. During the past year, how often did (you/he/she) drink wine?

NUMBER OF DAYS: |\_\_|\_\_| PER: WEEK ..... 1  
MONTH ..... 2  
MORE THAN 3 BUT LESS THAN 12 TIMES PER YEAR ..... 94  
NO MORE THAN 3 TIMES PER YEAR ..... 95  
NONE ..... 00 (D-16)  
DK ..... 98 (D-15)

D-15. On the days (you/he/she) drank wine, how many glasses did (you/he/she) drink?

NUMBER OF DRINKS: |\_\_|\_\_|  
LESS THAN ONE DRINK ..... 95

D-16. During the past year, how often did (you/he/she) drink liquor?

NUMBER OF DAYS: |\_\_|\_\_| PER: WEEK ..... 1  
MONTH ..... 2  
MORE THAN 3 BUT LESS THAN 12 TIMES PER YEAR ..... 94  
NO MORE THAN 3 TIMES PER YEAR ..... 95  
NONE ..... 00 (SECTION E)  
DK ..... 98 (D-17)

D-17. On the days (you/he/she) drank liquor, how many drinks did (you/he/she) have?

NUMBER OF DRINKS: |\_\_|\_\_|  
LESS THAN ONE DRINK ..... 95

TIME ENDED: \_\_\_\_\_ AM  
PM

PART E: EXERCISE AND WEIGHT

TIME BEGAN: \_\_\_\_\_ AM  
 \_\_\_\_\_ PM

<b>BOX I</b>	
INTERVIEWER: CHECK Q.C-1, C-5, C-6, C-7, C-18b AND CIRCLE ONE:	
Q.C-1 = YES ( <u>S</u> IS BEDRIDDEN) OR Q.C-18b = 4 (UNABLE TO DO) .....	1
Q.C-5c OR Q.C-6c OR Q.C-7c = YES AND Q.C-5d OR Q.C-6d OR Q.C-7d = YES ( <u>S</u> UNABLE TO USE LOWER LIMBS) .....	2 (RPI-28)
ALL OTHERS .....	3

The next few questions are about physical activity.

E-1. (Do you/does SUBJECT) exercise or play sports on a regular basis?

YES ..... 1  
 NO ..... 2 (RPI-27)

E-2. For how many months or years (have you/has he/she) exercised or played sports regularly?

|\_\_|\_\_| MONTHS ..... 1  
 YEARS ..... 2  
 LESS THAN 1 MONTH ..... 95

<b>RPI-27</b>	
REFERENCE TO <u>ECF</u> INTERVIEW: IF ELIGIBLE FOR <u>ECF</u> THEN GO TO Q.E-5. IF NOT ELIGIBLE FOR <u>ECF</u> GO TO E-3.	

E-3. How often (do you/does he/she) participate in active physical exercise or sports (such as aerobics, running, swimming, bicycling, etc.)?

|\_\_|\_\_| TIMES/WEEK ..... 1  
 TIMES/MONTH ..... 2  
 NEVER ..... 00 (Q.E-5)  
 LESS THAN 1 TIME/MONTH ..... 95 (Q.E-5)

E-4. When (you/SUBJECT) exercise(s) or participate(s) in an active physical sport, about how many minutes (do you/does he/she) spend each time (on average)?

- LESS THAN 15 MINUTES ..... 1
- 15 BUT LESS THAN 30 ..... 2
- 30 BUT LESS THAN 45 ..... 3
- 45 BUT LESS THAN 60 ..... 4
- 60 OR MORE ..... 5

E-5. How often (do you/does SUBJECT) participate in light physical activity (such as walking, dancing, gardening, golfing, bowling, etc.)?

- |\_\_|\_\_| TIMES/WEEK ..... 1
- TIMES/MONTH ..... 2
- NEVER ..... 00 (RPI-28)
- LESS THAN 1 TIME/MONTH ..... 95 (RPI-28)

E-6. When (you/SUBJECT) exercise or participate in light physical activity, about how many minutes (do you/does he/she) spend each time (on average)?

- LESS THAN 15 MINUTES ..... 1
- 15 BUT LESS THAN 30 ..... 2
- 30 BUT LESS THAN 45 ..... 3
- 45 BUT LESS THAN 60 ..... 4
- 60 OR MORE ..... 5

RPI-28

REFERENCE TO IF/ECF INTERVIEW:

IF S WAS INTERVIEWED ON THE ECF OR IF THEN SUBSTITUTE "WEIGHT" IN Q.E-7.  
 IF S WAS NEVER INTERVIEWED THEN SUBSTITUTE "WEIGHT AND HEIGHT" IN Q.E-7.

E-7. These next questions are about (your/SUBJECT'S) (weight/weight and height). How does (your/SUBJECT'S) weight now compare to (your/his/her) weight 12 months ago? Is it at least 10 pounds more, at least 10 pounds less, or about the same?

- AT LEAST 10 POUNDS MORE ..... 1
- AT LEAST 10 POUNDS LESS ..... 2
- ABOUT THE SAME ..... 3
- DK ..... 8

E-8. About how much (do you/does SUBJECT) weigh now?

- NUMBER OF POUNDS: |\_\_|\_\_|\_\_|
- DK ..... 998

RPI-29

§ PREVIOUSLY INTERVIEWED .....	1 (PART F)
§ NEVER INTERVIEWED AND R IS SUBJECT .....	2 (Q.E-9)
§ NEVER INTERVIEWED AND R IS PROXY .....	3 (Q.E-11)

E-9. When you were about 12 to 13 years old, compared to other (boys/girls) of the same age, were you considered to be . . .

- Skinny, ..... 1
- Somewhat slender, ..... 2
- Average, ..... 3
- Chubby, or ..... 4
- Very heavy? ..... 5
- DK ..... 8

E-10. When you were about 12 to 13 years old, compared to other (boys/girls) of the same age, were you considered to be . . .

- Very tall, ..... 1
- Somewhat taller than average, ..... 2
- About average, ..... 3
- Somewhat shorter than average, or ..... 4
- Very short? ..... 5
- DK ..... 8

E-11. What was (your/his/her) usual weight at the age of 25?

NUMBER OF POUNDS: |\_\_|\_\_|\_\_|  
DK ..... 998

E-12. [IF § IS 41 OR OLDER, ASK:] What was (your/his/her) usual weight at the age of 40?

NUMBER OF POUNDS: |\_\_|\_\_|\_\_|  
DK ..... 998

E-13. [IF § IS 66 OR OLDER, ASK:] What was (your/his/her) usual weight at the age of 65?

NUMBER OF POUNDS: |\_\_|\_\_|\_\_|  
DK ..... 998

TIME ENDED: \_\_\_\_\_ AM  
PM

PART F: VISION AND HEARING

TIME BEGAN: \_\_\_\_\_ AM  
PM

These next few questions concern (your/SUBJECT'S) vision and hearing.

F-1. (Do you/Does SUBJECT) wear eyeglasses or contact lenses? [PROBE YES RESPONSE]

- EYEGASSES ..... 1
- CONTACT LENSES ..... 2
- BOTH ..... 3
- NEITHER ..... 4
- S IS BLIND ..... 5 (F-4)

F-2. (When wearing eyeglasses/contact lenses/eyeglasses or contact lenses,) Can (you/he/she) see well enough to recognize a friend across the street?

- YES ..... 1
- NO ..... 2

F-3. (When wearing eyeglasses/contact lenses/eyeglasses or contact lenses,) Can (you/he/she) see well enough to recognize the letters in ordinary newspaper print?

- YES ..... 1
- NO ..... 2

F-4. (Have you/Has he/she) ever worn a hearing aid?

- YES ..... 1 (Q.F-6)
- NO ..... 2

F-5. Can (you/he/she) usually hear and understand what a person says if that person talks to (you/him/her) in a normal voice from across a quiet room?

- YES ..... 1 (PART G)
- NO ..... 2 (PART G)

F-6. Without a hearing aid, can (you/he/she) usually hear and understand what a person says if that person talks to (you/him/her) in a normal voice from across a quiet room?

- YES ..... 1
- NO ..... 2

TIME ENDED: \_\_\_\_\_ AM  
PM

PART G: PREGNANCY AND MENSTRUAL HISTORY

TIME BEGAN: \_\_\_\_\_ AM  
PM

<b>BOX J</b>	
INTERVIEWER: CIRCLE ONE.	
IF S IS MALE .....	1 (PART H)
IF S IS FEMALE .....	2

The next few questions are about (your/SUBJECT'S) reproductive and menstrual history.

<b>RPI-30</b>
REFERENCE TO <u>IF/ECF</u> INTERVIEW: IF 45 OR OLDER AT LAST INTERVIEW, THEN GO TO RPI-32.

<b>RPI-31</b>
REFERENCE TO <u>IE</u> INTERVIEW: IF REPORTED "NEVER" PREGNANT OR 'DON'T KNOW' ON <u>IE</u> (C-1=2,8) AND DID HAVE INTACT UTERUS OR DON'T KNOW ON <u>IE</u> (C-14=1,8), GO TO Q.G-1. IF NOT INTERVIEWED ON THE <u>IE</u> GO TO Q.G-1. IF "EVER" PREGNANT ON <u>IE</u> (C-1=1) AND HAD INTACT UTERUS OR DON'T KNOW ON <u>IE</u> (C-14=1,8), GO TO Q.G-4. OTHERWISE, GO TO RPI-32.

G-1. (Have you/Has she) ever been pregnant? Include live births, stillbirths, miscarriages or abortions.

YES ..... 1  
NO ..... 2 (RPI-32)

<b>BOX J3</b>
IF <u>S</u> IS 45 OR OVER THEN GO TO G-3.

G-2. (Are you/Is she) pregnant now?

YES ..... 1  
NO ..... 2

G-3. How old (were you/was she) when (your/her) first child was born? This means the first child born alive or stillborn.

AGE IN YEARS: ..... |\_\_|\_\_| (Q.G-6)  
HAD NO BIRTHS ..... 0 (Q.G-8)

G-4. Since (MONTH/YEAR) (have you/has she) been pregnant?

YES ..... 1  
NO ..... 2 (RPI-32)

G-5. (Are you/Is she) pregnant now?

YES ..... 1  
NO ..... 2

G-6. How old were you when (your/her) last child was born? Include stillbirths.

AGE IN YEARS: ..... |\_\_|\_\_|  
ONLY ONE BIRTH ..... 95  
HAD NO BIRTHS ..... 0 (Q.G-8)

G-7. How many live births (have you/has she) ever had?

NUMBER OF LIVE BIRTHS: ..... |\_\_|\_\_|

G-8. (Have you/Has she) ever had a miscarriage?

YES ..... 1  
NO ..... 2 (RPI-32)

G-9. How many miscarriages (have you/has she) had?

NUMBER OF MISCARRIAGES: ..... |\_\_|\_\_|

RPI-32

REFERENCE TO IE INTERVIEW: IF HAD INTACT UTERUS OR 'DON'T KNOW' ON IE (C-14=1, 8), GO TO BOX 11. IF PROXY GO TO BOX 11. IF NEVER INTERVIEWED ON IE, GO TO BOX 11. IF DID NOT HAVE INTACT UTERUS ON IE (C-14=2), GO TO Q.G-11.

**BOX 11**

IF PREGNANT NOW (G-2 = 1 OR G-5 = 1) THEN GO TO RPI-33.

G-10. (Do you/Does she) still have (your/her) womb or uterus?

- YES ..... 1 (RPI-33)
- NO ..... 2
- DK ..... 8 (RPI-33)

**CATI PROGRAMMER**

IF R IS PROXY AND G-10=1 AND S DID NOT HAVE INTACT UTERUS ON IF (C-14=2) THEN CODE G-10 AS "DISCREPANCY = 96".

G-11. How old (were you/was she) when (your/her) uterus or womb was removed?

AGE: ..... |\_\_|\_\_|  
 [DISCREPANCY ..... 96]

**CATI PROGRAMMER**

IF S DID NOT HAVE A UTERUS ON IF (C-14=2) THEN DISPLAY "DISCREPANCY . . . . . 96" in G-11.

**RPI-33**

REFERENCE TO IF INTERVIEW: IF HAD BOTH OVARIES OR 'DON'T KNOW' ON IF (C-15=1, 8) OR NOT INTERVIEWED ON IF OR IF PROXY, GO TO Q.G-12. OTHERWISE, GO TO RPI-34.

G-12. Do you still have both your ovaries?

- YES ..... 1 (RPI-35)
- NO ..... 2
- DK ..... 8 (RPI-35)

**RPI-34**

REFERENCE TO IF INTERVIEW: IF PREGNANT NOW (G-2=1 OR G-5=1) THEN GO TO G-14. IF HAD ONE OVARY OR 'DON'T KNOW' ON IF (C-16=1, 8) OR DOES NOT HAVE BOTH OVARIES NOW (G-12=2) THEN GO TO Q.G-13. IF S DID NOT HAVE ANY OVARIES ON IF (C-16=2) THEN GO TO Q.G14.

G-13. (Do you/Does she) still have one ovary?

YES ..... 1  
NO ..... 2  
DK ..... 8

**CATI PROGRAMMER**  
  
IF § DID NOT HAVE ANY OVARIES ON IF (C-16=2) THEN  
DISPLAY DISCREPANCY CODE IN G-14.

G-14. How old (were you/was she) when (your/her) (ovary/last ovary) (were/was) removed?

AGE: ..... |\_\_|\_\_|  
[DISCREPANCY ..... 96]

**RPI-35**  
  
REFERENCE TO IF/ECF INTERVIEW: IF PREGNANT NOW (G-2=1 OR G-5=1) GO TO BOX L  
IF § WAS NOT ELIGIBLE FOR THE ECF AND WAS STILL HAVING PERIODS, WAS PREGNANT  
OR DIDN'T KNOW MENSTRUAL STATUS ON IF (C-8=1,2,8), GO TO Q.G-15. IF NEVER  
INTERVIEWED ON IF AND NOT ELIGIBLE FOR ECF THEN GO TO Q.G-15. IF § WAS NOT  
HAVING PERIODS ON IF (C-8=3) OR WAS ELIGIBLE FOR THE ECF THEN GO TO RPI-36. IF §  
HAS NO UTERUS (G-10=2) OR HAS NO OVARIES (G-13=2) THEN GO TO RPI-36.

G-15. (Are you/Is she) still having periods?

YES ..... 1 (Q.G-16)  
NO ..... 2  
DK ..... 8 (RPI-36)

G-15a. At what age did (you/she) have (your/her) last period?

AGE: ..... |\_\_|\_\_| (RPI-36)  
Never Had Periods ..... 95 (RPI-36)

G-16. Are (your/her) periods regular or irregular? By regular we mean (your/her) periods come about once a month. (You/She) can usually predict when they will come and they usually last about the same number of days.

REGULAR ..... 1 (BOX I2)  
IRREGULAR ..... 2 (Q.G-17)  
DK ..... 8 (RPI-36)

**BOX I2**  
  
IF § IS 55 YEARS OR OLDER AND HAS REGULAR PERIODS (G-16=1) THEN GO  
TO G-21. OTHERWISE GO TO BOX L

G-17. Are they irregular because (you are/she is) going through the change of life or for some other reason?

CHANGE OF LIFE ..... 1  
OTHER REASON ..... 2

**RPI-36**

REFERENCE TO IF/ECF INTERVIEW: IF EVER TAKEN HORMONE PILLS ON IF (C-19=1) OR ECF (G-9=1), GO TO Q.G-18. OTHERWISE, GO TO RPI-37.

G-18. (Are you/Is she) currently taking hormone pills such as estrogen or premarin for reasons related to the menopause or change of life such as hot flashes, mood changes or bone loss?

YES ..... 1 (Q.G-20a)  
NO ..... 2  
DON'T KNOW TYPE OF PILL ..... 3 (Q.G-20a)  
DON'T KNOW ..... 8 (Q.G-20a)

**RPI-36a**

REFERENCE TO IF/ECF: IF FORMER USER ON IF (C-19=25-82,98,99) OR ECF (G-11=25-90,-8) THEN GO TO G-20a. OTHERWISE, GO TO G-19.

G-19. How old (were you/was she) when (you/she) last took hormone pills?

AGE IN YEARS: ..... |\_\_|\_\_|  
NEVER TOOK PILLS (DISCREPANCY) ..... 96 (BOX L)

G-20a. Thinking about your past use of (hormone pills/these pills), what is the longest period of time that (you have/she has) continuously taken them? That is, without stopping for at least one month.

|\_\_|\_\_| (AND |\_\_|\_\_|):  
1. Years and months  
2. Months  
3. Years  
95. Less than one month  
96. Never took pill (Discrepancy) (BOX L)

G-20b. Now thinking about the total amount of time (you have/she has) taken these pills, how many months or years (have you/has she) actually used them? Please do not include the times when (you/she) might have stopped taking the pill for at least one month.

- |\_\_|\_\_| (AND |\_\_|\_\_|):
1. Years and months
  2. Months
  3. Years
  95. Less than one month

**CATI PROGRAMMER**

DISPLAY BOTH OPTIONS WHEN SELECTING "YEARS AND MONTHS." OTHERWISE ONLY DISPLAY ONE SET OF OPTIONS.

**RPI-37**

REFERENCE TO IF/ECF INTERVIEW: IF "NEVER" USER OF HORMONE PILLS OR "DON'T KNOW" ON IE (C-17=2,8) OR ON ECF (G-9=2,8) OR NEVER INTERVIEWED, GO TO G-21. OTHERWISE, GO TO BOX K.

G-21. (Did you/Has she) ever take female hormone pills such as estrogen or premarin for reasons related to the menopause or change of life such as hot flashes, mood changes or bone loss?

- |                               |           |
|-------------------------------|-----------|
| YES .....                     | 1         |
| NO .....                      | 2 (BOX L) |
| DON'T KNOW TYPE OF PILL ..... | 3         |
| DON'T KNOW .....              | 8 (BOX L) |

G-22a. What is the longest period of time that (you have/she has) continuously taken (hormone pills/these pills)? That is, without stopping for at least one month.

- |\_\_|\_\_| (AND |\_\_|\_\_|):
1. Years and months
  2. Months
  3. Years
  95. Less than one month

G-22b. Now thinking about the total amount of time (you have/she has) taken these pills, how many months or years (have you/has she) actually used them? Please do not include the times when (you/she) might have stopped taking the pill for at least one month.

- |\_\_|\_\_| (AND |\_\_|\_\_|):
1. Years and months
  2. Months
  3. Years
  95. Less than one month

**CATI PROGRAMMER**

DISPLAY BOTH OPTIONS WHEN SELECTING "MONTHS AND YEARS." OTHERWISE ONLY DISPLAY ONE SET OF OPTIONS.

G-23. (Are you/Is she) currently taking hormone pills?

- YES ..... 1  
 NO ..... 2 (BOX L)  
 DON'T KNOW TYPE OF PILL ..... 3

**BOX K**

IF CURRENT USER OF HORMONE PILLS OR DON'T KNOW TYPE OF PILL (Q.G-18=1,3 or Q.G-23=1,3), GO TO Q.G-24. OTHERWISE, GO TO BOX L.

G-24. What is the color of the hormone pill (you are/she is) taking?

- PURPLE/BLUE ..... 1  
 YELLOW/ORANGE ..... 2  
 WHITE ..... 3  
 MAROON/BROWN/RED ..... 4  
 GREEN ..... 5  
 DON'T KNOW ..... 8

G-25. How long (have you/has she) been taking this same color pill?

- NUMBER OF MONTHS: ..... |\_\_|\_\_|  
 OR  
 NUMBER OF YEARS: ..... |\_\_|\_\_|  
 LESS THAN ONE MONTH ..... 95  
 DK ..... 98

G-26. In addition to estrogen, sometimes women also use the female hormone progestin sometimes called PROVERA at the change of life or after a hysterectomy. These pills are often taken along with an estrogen pill for only part of the month. (Have you/has she) ever taken progestin or PROVERA?

- YES ..... 1
- NO ..... 2 (BOX L)
- DON'T KNOW TYPE OF PILL ..... 3
- DK ..... 8 (BOX L)

G-27. Are you currently taking these pills?

- YES ..... 1
- NO ..... 2

**CATI PROGRAMMER**

IF S IS CURRENTLY TAKING PILLS (G-27=1) THEN USE "(HAVE YOU/HAS SHE)" IN G-28. IF S IS NOT CURRENTLY TAKING PILLS OR DOESN'T KNOW (G-27=2,8) USE "(HAD YOU/WAS SHE)" IN G-28.

G-28. How long (have you/has she)/(had you/was she) been taking these pills?

- NUMBER OF MONTHS: ..... |\_\_|\_\_|
- OR
- NUMBER OF YEARS: ..... |\_\_|\_\_|
- LESS THAN ONE MONTH ..... 95
- DK ..... 98

**BOX L**

IF PRE-MENOPAUSAL (G-2=1 or G-5=1 or G-16=1 or G-17=2), THEN GO TO RPI-38. IF NEVER INTERVIEWED THEN GO TO RPI-38. OTHERWISE, GO TO RPI-40.

**RPI-38**

REFERENCE TO IF INTERVIEW: IF CURRENT USER OF BIRTH CONTROL ON IF (C-25=1) OR FORMER USER OF BIRTH CONTROL PILLS ON IF (C-23=1) THEN GO TO BOX K1. OTHERWISE, GO TO RPI-39.

**BOX K1**

**IF PREGNANT NOW (G-2=1 OR G-5=1) THEN GO TO RPI-38a.**

G-29. (Are you/Is she) currently taking birth control pills?

YES ..... 1 (Q.G-31a)  
 NO ..... 2

**RPI-38a**

**IF S WAS A FORMER USER ON IF (C-25=12-65,98,99) THEN GO TO G-31a.  
 OTHERWISE GO TO G30.**

G-30. How old (were you/was she) when (you/she) last took birth control pills?

AGE: ..... |\_\_|\_\_|  
 DISCREPANCY ..... 96 (BOX K3)

G-31a. What is the longest period of time that (you have/she has) continuously taken birth control pills? That is, without stopping for at least one month.

|\_\_|\_\_| (AND |\_\_|\_\_|):  
 1. Years and months  
 2. Months  
 3. Years  
 95. Less than one month  
 96. Discrepancy (BOX K3)

G-31b. Now thinking about the total amount of time (you have/she has) taken these pills, how many months or years (have you/has she) actually used them? Please do not include the times when (you/she) might have stopped taking the pill for at least one month.

|\_\_|\_\_| (AND |\_\_|\_\_|):  
 1. Years and months  
 2. Months  
 3. Years  
 95. Less than one month

**CATI PROGRAMMER**

**DISPLAY BOTH OPTIONS WHEN SELECTING "MONTHS AND YEARS." OTHERWISE ONLY  
 DISPLAY ONE SET OF OPTIONS.**

RPI-39

REFERENCE TO IF INTERVIEW: IF S HAD NEVER TAKEN BIRTH CONTROL PILLS OR 'DON'T KNOW' ON IF (C-23=2,8) OR WAS NEVER INTERVIEWED ON IF, GO TO Q.G-32. OTHERWISE, GO TO RPI-40.

G-32. Did (you/she) ever take birth control pills for any reason?

YES ..... 1  
NO ..... 2 (Q.G-40)

G-33. How old (were you/was she) when (you/she) first took birth control pills?

AGE: ..... |\_\_|\_\_|

BOX K2

IF PREGNANT NOW (G-2=1 OR G-5=1) THEN GO TO G-35.  
IF S IS 55 OR OLDER THEN GO TO G-35.

G-34. Are you currently taking birth control pills?

YES ..... 1 (Q.G-36)  
NO ..... 2

G-35. How old (were you/was she) when (you/she) last took birth control pills?

AGE: ..... |\_\_|\_\_|

G-36a. What is the longest period of time that (you have/she has) continuously taken (birth control pills/these pills)? That is, without stopping for at least one month.

|\_\_|\_\_| (AND |\_\_|\_\_|):  
1. Years and months  
2. Months  
3. Years  
95. Less than one month

G-36b. Now thinking about the total amount of time (you have/she has) taken these pills, how many months or years (have you/has she) actually used them? Please do not include the times when (you/she) might have stopped taking the pill for at least one month.

|\_\_|\_\_| (AND |\_\_|\_\_|):

1. Years and months
2. Months
3. Years
95. Less than one month

**CATI PROGRAMMER**

DISPLAY BOTH OPTIONS WHEN SELECTING "MONTHS AND YEARS." OTHERWISE ONLY DISPLAY ONE SET OF OPTIONS.

**RPI-40**

REFERENCE TO IF/ECF INTERVIEW: IF HAD EVER USED BIRTH CONTROL PILLS BEFORE THE AGE OF 25 ON IF (C-24 < 25) OR ECF (G-14 < 25), GO TO Q.G-37. IF Q.G-33 < 25, GO TO Q.G-37. OTHERWISE, GO TO RPI-41.

G-37. How many months or years (did you/she) use birth control pills prior to the age of 25? Please do not include the times when (you/she) might have stopped taking the pill for at least one month.

|\_\_|\_\_| (AND |\_\_|\_\_|):

1. Years and months
2. Months
3. Years
95. Less than one month
96. Discrepancy

**RPI-41**

REFERENCE TO IF/ECF: IF HAD REPORTED EVER TAKEN BIRTH CONTROL PILLS [IF (C23=1 OR C-25=1, 12-65) OR G-32=1] AND HAD AT LEAST ONE LIVE BIRTH [IF (C-5>=1), ECF (G-4>=1) OR G-7>=1]) THEN GO TO G-38. OTHERWISE GO TO BOX K3.

G-38. Did (you/she) use birth control pills before (your/her) first child was born?

YES ..... 1  
NO ..... 2 (BOX K3)  
DISCREPANCY ..... 96

G-39. How many years or months before (your/her) first child was born did (you/she) use birth control pills?  
Please do not include the times when (you/she) might have stopped taking the pill for at least one month.

|\_\_|\_\_| (AND |\_\_|\_\_|):  
1. Years and months  
2. Months  
3. Years  
95. Less than one month

**CATI PROGRAMMER**  
  
DISPLAY BOTH OPTIONS WHEN SELECTING "YEARS AND MONTHS." OTHERWISE ONLY  
DISPLAY ONE SET OF OPTIONS.

**BOX K3**  
  
IF PREGNANT NOW (G-2=1 OR G-5=1) THEN GO TO G-42.

G-40. (Have you/Has she) ever had an operation to be sterilized also known as a tubal ligation or having your tubes tied?

YES ..... 1  
NO ..... 2 (Q.G-42)

G-41. How old (were you/was she) when (you/she) had this procedure?

AGE: ..... |\_\_|\_\_|

G-42. (Have you/Has she) ever regularly taken calcium pills or calcium rich antacids such as Tums for the purpose of calcium supplementation?

YES ..... 1  
NO ..... 2 (Q.G-44)

G-43. How long did (you/she) take calcium regularly?

NUMBER OF MONTHS: ..... |\_\_|\_\_|  
OR  
NUMBER OF YEARS: ..... |\_\_|\_\_|  
LESS THAN ONE MONTH ..... 95  
DK ..... 98

G-44. (Have you/Has she) ever had a Pap smear test? (This is a special test that a doctor or other health professional conducts as part of a pelvic exam that looks for abnormal cells.)?

YES ..... 1  
NO ..... 2 (Q.G-47)

G-45. About how long has it been since (you/she) had a Pap smear test?

NUMBER OF YEARS: ..... |\_\_|\_\_|  
LESS THAN 1 YEAR ..... 95

BOX L1  
IF G-45  $\geq$  5 YEARS THEN GO TO G-47.

G-46. On about how many occasions (have you/has she) had a Pap smear test in the past 5 years?

NUMBER OF OCCASIONS: ... |\_\_|\_\_|  
DON'T KNOW ..... 98

G-47. (Have you/Has she) ever had a breast examination by a doctor or other health professional?

YES ..... 1  
NO ..... 2 (Q.G-50)  
REFUSED ..... 97 (SECTION H)  
DK ..... 98 (Q.G-50)

G-48. On how many different occasions (have you/has she) had such a breast examination in the past 5 years?

PAST 5 YEARS: |\_\_|\_\_|

G-49. About how long has it been since (you/she) had a breast examination by a doctor or other health professional?

NUMBER OF YEARS: ..... |\_\_|\_\_|  
LESS THAN 1 YEAR ..... 95

G-50. (Do you/Does she) know how to examine (your/her) own breasts for lumps?

YES ..... 1  
NO ..... 2 (Q.G-53)

G-51. (Have you/Has she) ever examined (your/her) own breasts for lumps?

YES ..... 1  
NO ..... 2 (Q.G-53)

G-52. During the past year, how often (did you/did she) examine (your/her) own breasts for lumps?

NUMBER OF TIMES/YEAR: ... |\_\_|\_\_|  
NEVER ..... 00  
MORE THAN ONCE A WEEK BUT LESS  
THAN EVERYDAY ..... 94  
EVERY DAY OF THE YEAR (365 times) ..... 95

G-53. (Have you/Has she) ever had a mammogram? (A mammogram is when an x-ray is taken only of the breasts by a machine that presses against the breast while the picture is taken.)

YES ..... 1  
NO ..... 2 (PART H)  
DK ..... 8 (PART H)

G-54. On how many different occasions in the past 5 years (have you/has she) had a mammogram?

NUMBER OF TIMES: ..... |\_\_|\_\_|  
NONE ..... 00  
DON'T KNOW ..... 98

G-55. In what year did (you/she) have (your/her) last mammogram?

YEAR: ..... 19 |\_\_|\_\_|  
DON'T KNOW ..... 8

PART H: SOCIAL SECURITY/MEDICARE NUMBER  
AND CLOSING STATEMENTS

TIME BEGAN: \_\_\_\_\_ AM  
PM

BOX L2

IF S IS 65 OR OLDER INSERT "AND HEALTH INSURANCE STATUS" IN THE FOLLOWING INTRODUCTION.

Before finishing the interview, I have a few questions about your background [and health insurance status].

BOX M

S AT LEAST 65 YEARS OLD ..... 1 (H-1)  
S LESS THAN 65 YEARS OLD ..... 2 (RPI-42)

H-1. Medicare is a social security health insurance program for persons 65 years old or older. People who are covered by Medicare have a red, white and blue Medicare card. (Are you/Is he/she) covered by Medicare?

YES ..... 1  
NO ..... 2

RPI-42

REFERENCE TO IF/ECF: IF S SUPPLIED A SOCIAL SECURITY NUMBER ON IF/ECF AND IS ON MEDICARE (H-1=1), THEN SUBSTITUTE "MEDICARE NUMBER" IN THE FOLLOWING INTRODUCTION. IF A SOCIAL SECURITY NUMBER WAS NOT COLLECTED ON THE IF/ECF AND THE S IS ON MEDICARE, THEN SUBSTITUTE "MEDICARE NUMBER AND SOCIAL SECURITY NUMBER" IN THE FOLLOWING INTRODUCTION. IF A SOCIAL SECURITY NUMBER WAS NOT SUPPLIED ON THE IF/ECF AND THE PERSON IS NOT ON MEDICARE THEN SUBSTITUTE "SOCIAL SECURITY NUMBER" IN THE FOLLOWING INTRODUCTION. IF THE S SUPPLIED A SOCIAL SECURITY NUMBER ON THE IF/ECF AND IS NOT ON MEDICARE, THEN GO TO RPI-45.

As part of this survey, I'd like to have (your/SUBJECT'S) (Social Security number/Medicare number/Medicare and Social Security numbers). This information is voluntary and is collected under the authority of the Public Health Service Act. There will be no effect on any benefits that are being received whether or not (you/he/she) decide(s) to provide the number(s). (The Public health Service Act is title 42, United States Code, Section 242k).

RPI-43

REFERENCE TO IF/ECF INTERVIEW: IF DID NOT SUPPLY SOCIAL SECURITY NUMBER ON IF/ECF, GO TO RPI-44. OTHERWISE, GO TO BOX N.

RPI-44

IF S IS LESS THAN 65 OR IS 65+ AND NOT ON MEDICARE (H-1=2) THEN ASK FOR SOCIAL SECURITY NUMBER IN H-2. IF S IS 65+ AND IS ON MEDICARE (H-1=1) THEN ASK FOR SOCIAL SECURITY NUMBER AND MEDICARE NUMBER IN H-2.

H-2. What is (your/SUBJECT'S) social security number [and health insurance claim number on (your/SUBJECT'S) Medicare Card] [READ IF NECESSARY: I'll wait while you get your (social security number/social security number and medicare card).

Social security number: |\_|\_|\_|\_| - |\_|\_|\_| - |\_|\_|\_|\_|\_|

Medicare number: |\_|\_|\_|\_| - |\_|\_|\_| - |\_|\_|\_|\_|\_| ( ) ( ) (RPI-45)

BOX N

IF H-1 = 1 THEN GO TO H-3. OTHERWISE GO TO RPI-45.

H-3. What is the health insurance claim number on (your/SUBJECT'S) Medicare card? (READ IF NECESSARY: I'll wait while you get your Medicare card.)

Medicare number: |\_|\_|\_|\_| - |\_|\_|\_| - |\_|\_|\_|\_|\_| ( ) ( )

RPI-45

REFERENCE TO ECF/IF INTERVIEW: IF S IS FEMALE AND DID NOT SUPPLY FATHER'S LAST NAME ON ECF (I-2) OR IF (U-33) GO TO Q.H-4. OTHERWISE, GO TO BOX O.

H-4. Please tell me (your/SUBJECT'S) father's last name.

FATHER'S LAST NAME: \_\_\_\_\_

BOX O

INTERVIEWER: CIRCLE ONE:

R IS SUBJECT ..... 1  
R IS PROXY ..... 2 (Q.H-6)

BOX P

IF S SAID YES TO ANY HOSPITALIZATION QUESTIONS (B-17=1, B-23=1, B-24=1, B-27=1, B-29=1, B-35=1, B-42=1, B-48=1, B-52=1, B-55 (1st, 2nd, or 3rd diagnosis)=1, B-61=1, B-70=1, B-71=1, B-74=1, B-79=1, B-83=1, B-86=1), THEN GO TO H-5. OTHERWISE HAVE INTERVIEWER FILL IN BOX Q.

<b>BOX Q</b>		
PLEASE CHECK THE HHCF CHART. ARE THERE ANY STAYS RECORDED?		
YES .....	1	(CONDITION SECTION)
NO .....	2	(Q.H-11)

H-5. As part of this survey, I would like to send you a form that authorizes the United States Public Health Service to obtain information from hospital or nursing home records. To do this, I need to confirm your name and address. [VERIFY SPELLING.]?

NAME: \_\_\_\_\_  
FIRST
MIDDLE
LAST

ADDRESS: \_\_\_\_\_  
STREET NAME AND NUMBER
APT. NUMBER

\_\_\_\_\_

CITY

STATE

ZIP CODE

And I need to confirm your telephone number.

TELEPHONE NUMBER: ( \_\_\_\_\_ ) \_\_\_\_\_

When you receive this form please sign your name. Then return the form in the postage paid envelope. You will receive a \$5.00 check for participating in the survey about two weeks after you sign and mail back this form.

<b>BOX R</b>		
INTERVIEWER CIRCLE ONE:		
AGREES TO SIGN .....	1	(H-11)
<u>S</u> REFUSES TO SIGN .....	2	(H-11)



H-7. As part of this survey, I would like to send you a form that authorizes the United States Public Health Service to obtain information from hospital or nursing home records. To do this, I need to (confirm/have) your name, address, telephone number and relationship to (SUBJECT).

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

STREET NAME AND NUMBER

APT. NUMBER

CITY

STATE

ZIP CODE

What is your relationship to (SUBJECT)?

- HUSBAND/WIFE ..... 1
- FATHER/MOTHER ..... 2
- FATHER-IN-LAW/MOTHER-IN-LAW ..... 3
- GRANDPARENT ..... 4
- SON/DAUGHTER ..... 5
- SON-IN-LAW/DAUGHTER-IN-LAW ..... 6
- GRANDCHILD ..... 7
- BROTHER/SISTER ..... 8
- BROTHER-IN-LAW/SISTER-IN-LAW ..... 9
- AUNT/UNCLE/COUSIN ..... 10
- NIECE/NEPHEW ..... 11
- ROOMMATE/FRIEND/NEIGHBOR ..... 12
- OTHER RELATIVE [SPECIFY] ..... 91

\_\_\_\_\_  
 OTHER NON-RELATIVE [SPECIFY] ..... 92  
 \_\_\_\_\_

And I need to confirm your telephone number.

TELEPHONE NUMBER: (       ) \_\_\_\_\_

H-8. Will (SUBJECT) be able to sign this form?

YES ..... 1  
NO (EXPLAIN) ..... 2 (BOX V)

---

---

[IF YES:] When you receive the form please have (SUBJECT) sign (his/her) name. Then return the form in the postage paid envelope. You will receive a \$5.00 check for returning the form about two weeks after (SUBJECT) signs and mails back this form.

<b>BOX U</b>	
Form to Proxy .....	1 (H-11)
Form to Subject .....	2 (H-11)

<b>CATI PROGRAMMER</b>	
CREATE A FLAG THAT INDICATES WHO THE FORM SHOULD BE SENT TO, AS INDICATED IN BOX U.	

<b>BOX V</b>	
<b>INTERVIEWER: CIRCLE ONE:</b>	
<u>P</u> IS RELATIVE .....	1
<u>P</u> IS NON-RELATIVE .....	2 (Q.H-9)

When you receive the form please sign your name. Then return the form in the postage paid envelope. You will receive a \$5.00 check for returning the form about two weeks after you sign and mail back this form.

<b>BOX W</b>	
<b>INTERVIEWER CIRCLE ONE:</b>	
<u>P</u> AGREES TO SIGN .....	1 (Q.H-11)
<u>P</u> REFUSES TO SIGN .....	2 (Q.H-11)

H-9. Do you know a relative of (SUBJECT) who could sign this authorization?

- YES ..... 1
- NO ..... 2 (Q.H-10)

I need to have the name, address and relationship of a relative of (SUBJECT) who could sign this authorization. [VERIFY ALL SPELLING.]

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_  
STREET NAME AND NUMBER APT. NUMBER

\_\_\_\_\_ CITY STATE ZIP CODE

TELEPHONE NUMBER: ( ) \_\_\_\_\_

What is (RELATIVE's) relationship to (SUBJECT)?

- HUSBAND/WIFE ..... 1
- FATHER/MOTHER ..... 2
- GRANDPARENT ..... 3
- SON/DAUGHTER ..... 4
- GRANDCHILD ..... 5 (H-11)
- BROTHER/SISTER ..... 6
- AUNT/UNCLE/COUSIN ..... 7
- NIECE/NEPHEW ..... 8
- OTHER RELATIVE [SPECIFY] ..... 91

\_\_\_\_\_

H-10. Do you know someone else who has the power of attorney and could sign this authorization form?

- YES ..... 1
- NO ..... 2 (H-11)

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_  
STREET NAME AND NUMBER APT. NUMBER

\_\_\_\_\_ CITY STATE ZIP CODE

TELEPHONE NUMBER: ( ) \_\_\_\_\_

What is (ATTORNEY NAME) relationship to (SUBJECT)?

- Attorney ..... 1
- Friend ..... 2
- Other (SPECIFY) ..... 91

\_\_\_\_\_

\_\_\_\_\_

H-11. Please give me the name, address, and telephone number of a relative or friend of yours who would know how to get in touch with you in case we need to contact you again and have a hard time getting in touch with you? [DO NOT PROBE FOR APT. NUMBER AND ZIP CODE. VERIFY ALL SPELLING.]

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

STREET NAME AND NUMBER

APT. NUMBER

CITY

STATE

ZIP CODE

TELEPHONE NUMBER: ( \_\_\_\_\_ ) \_\_\_\_\_

Under what name is that telephone number likely to be listed?

- SAME AS REFERENCE NAME ..... 1
- UNLISTED ..... 2
- NEW TELEPHONE LISTING  
NAME [SPECIFY] ..... 3

How is (REFERENCE NAME) related to (SUBJECT)?

- HUSBAND/WIFE ..... 1
- FATHER/MOTHER ..... 2
- FATHER-IN-LAW/MOTHER-IN-LAW ..... 3
- GRANDPARENT ..... 4
- SON/DAUGHTER ..... 5
- SON-IN-LAW/DAUGHTER-IN-LAW ..... 6
- GRANDCHILD ..... 7
- BROTHER/SISTER ..... 8
- BROTHER-IN-LAW/SISTER-IN-LAW ..... 9
- AUNT/UNCLE/COUSIN ..... 10
- NIECE/NEPHEW ..... 11
- ROOMMATE/FRIEND/NEIGHBOR ..... 12
- OTHER RELATIVE [SPECIFY] ..... 91

OTHER NON-RELATIVE [SPECIFY] ..... 92

BOX X

PLEASE CHECK THE HHCF CHART.

ARE THERE ANY STAYS RECORDED?

- YES AND R IS SUBJECT ..... 1 (Q.H-14)
- YES AND R IS PROXY ..... 2
- NO AND R IS SUBJECT ..... 3 (Q.H-12)
- NO AND R IS PROXY ..... 4 (Q.H-13)

Thank you very much for taking the time to participate in this interview. (TERMINATE.)







PART I: OBSERVATION SHEET

(TO BE COMPLETED AT CONCLUSION OF INTERVIEW)

<p><b>BOX Y</b></p> <p>INTERVIEWER: IF <u>S</u> WITH ASSISTANCE, ANSWER Q.I-1 AND Q.I-2; IF <u>P</u>, ANSWER Q.I-2.</p>
-------------------------------------------------------------------------------------------------------------------------

I-1. IF ASSISTANCE: WHO WAS THE PRIMARY RESPONDENT?

- SUBJECT ..... 1
- ASSISTANT #1 ..... 2
- ASSISTANT #2 ..... 3
- UNCERTAIN ..... 4

I-2. IF PROXY OR ASSISTANCE: WHY WAS (PROXY/ASSISTANT) NEEDED? [CODE YES OR NO FOR EACH CATEGORY]

	<u>YES</u>	<u>NO</u>
a. HEARING PROBLEM .....	1	2
b. SPEECH PROBLEM .....	1	2
c. LANGUAGE PROBLEM (INTERPRETER) .....	1	2
d. POOR MEMORY, SENILITY, OR CONFUSION .....	1	2
e. INSTITUTIONALIZED .....	1	2
f. ALZHEIMER'S DISEASE .....	1	2
g. OTHER MENTAL CONDITION (SPECIFY) .....	1	2
_____ .....	1	2
h. OTHER PHYSICAL ILLNESS AND/OR DISABILITY (SPECIFY)		
_____ .....	1	2
i. OTHER NON-HEALTH (SPECIFY)		
_____ .....	1	2
j. OTHER (SPECIFY) _____		
_____ .....	1	2



I-8. (IF YES TO I-6b OR I-6c, OR IF NO TO I-7a, I-7b OR I-7c)  
WAS THERE A SECTION THAT SEEMED TO BE PARTICULARLY UPSETTING OR PROBLEMATIC FOR THE RESPONDENT?

YES ..... 1  
NO ..... 2 (Q.I-9)

WHICH SECTION AND WHY? \_\_\_\_\_  
\_\_\_\_\_

I-9. WAS THE (SUBJECT/PROXY) HARD OF HEARING?

YES ..... 1  
NO ..... 2

I-10. WAS THE INTERVIEW CONDUCTED IN SPANISH?

YES ..... 1  
NO ..... 2

I-11. RECORD ANY RELEVANT COMMENTS OR IMPRESSIONS YOU MAY HAVE HAD ABOUT THIS INTERVIEW.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I-12. RECORD ANY COMMENTS OR PROBLEMS YOU MAY HAVE HAD WHEN RECORDING THE RESPONSE.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I-13. Did you record the ID number [(ID NUMBER)] and the name [(SUBJECT'S NAME)] on the hospital chart?

YES ..... 1  
NO ..... 2

Proxy telephone questionnaire

November 8, 1987  
OMB: 0937-0134  
EXPIRES: June 30, 1988

NHANES I EPIDEMIOLOGIC FOLLOWUP STUDY  
CONTINUED FOLLOWUP  
PROXY - DECEASED QUESTIONNAIRE

WESTAT ID: |\_\_|\_\_|\_|-|\_\_|\_\_|\_\_|\_|-|\_\_|

Hello, may I please speak to (RESPONDENT)?

- IF RESPONDENT NOT AVAILABLE, ASK: Can you suggest a convenient time when I could reach (him/her)? TERMINATE CONTACT AND RECORD RESULTS ON CALL RECORD.
- IF RESPONDENT NOT AT THIS TELEPHONE NUMBER, VERIFY NUMBER AND REDIAL.
- IF RESPONDENT AVAILABLE, CONTINUE.

My name is (YOUR NAME) and I am calling from Washington, D.C. on behalf of the United States Public Health Service with regard to the National Health and Nutrition Examination Survey. Recently you were sent a letter from the Public Health Service explaining that someone would contact you. Did you receive our letter?

YES ..... 1  
NO ..... 2 (BOX 1)

I would like to conduct the interview now if it is convenient.

(It will take approximately 30 minutes. In order to evaluate my performance, my supervisor may monitor this interview.)

BOX 1

(IF RESPONDENT DID NOT RECEIVE LETTER, READ:)

Let me tell you what it says. In (DATE OF EXAM YEAR), (SUBJECT) participated in the National Health and Nutrition Examination Survey. At this time, we are contacting relatives (or friends) of persons who participated who are now deceased to conduct a very short interview by telephone. Questions will be asked about illnesses, disabilities and hospitalizations. This study is authorized by the Public Health Service Act. The information you give me will be kept strictly confidential and will be used for statistical purposes only. The interview is completely voluntary and there are no penalties for refusing to answer any questions. (CHECK BOX: |\_\_|)

I would like to conduct the interview now if it is convenient.

(It will take approximately 30 minutes. In order to evaluate my performance, my supervisor may monitor this interview.)

PART A: BACKGROUND INFORMATION

TIME BEGAN: \_\_\_\_\_ AM  
 \_\_\_\_\_ PM

A-0a. First, I would like to verify (SUBJECT'S) NAME. (His/Her) first name was (FIRST NAME), middle name (MIDDLE NAME), and last name was (LAST NAME).

FIRST NAME	MIDDLE NAME	LAST NAME
------------	-------------	-----------

A-0b. How were you related to (SUBJECT)?

- HUSBAND/WIFE/SPOUSE EQUIVALENT ..... 01
- FATHER/MOTHER ..... 02
- FATHER IN-LAW/MOTHER IN-LAW ..... 03
- SON/DAUGHTER ..... 04
- SON IN-LAW/DAUGHTER IN-LAW ..... 05
- BROTHER/SISTER ..... 06
- BROTHER IN-LAW/SISTER IN-LAW ..... 07
- FRIEND/NEIGHBOR/ROOMMATE ..... 08
- OTHER RELATIVE (SPECIFY) ..... 91

\_\_\_\_\_  
 OTHER RELATIVE IN-LAW (SPECIFY) ..... 92

\_\_\_\_\_  
 OTHER NON-RELATIVE (SPECIFY) ..... 93

A-1. In the year prior to (SUBJECT'S) death, where did (he/she) live most of the time – in a house or apartment, a nursing home or rest home, retirement home, or (do you/does he/she) have some other arrangement?

- HOUSE OR APARTMENT ..... 1
- NURSING OR CONVALESCENT OR REST HOME ..... 2 (A-1c)
- RETIREMENT HOME ..... 3
- BOARDING HOUSE, ROOMING HOUSE OR  
 RENTED ROOM ..... 4
- FAMILY OR FOSTER CARE HOME ..... 5
- ANOTHER HEALTH FACILITY ..... 6 (A-1c)
- OTHER ARRANGEMENT (SPECIFY) ..... 91

\_\_\_\_\_  
 OTHER INSTITUTION (SPECIFY) ..... 92 (A-1c)

A-1a. Was (SUBJECT) living in a nursing home or other health care facility at the time of (his/her) death?

YES ..... 1  
NO ..... 2

A-1b. In the year prior to (SUBJECT'S) death, did you live in the same household with (him/her)?

YES ..... 1 (RPI-1)  
NO ..... 2

A-1c. In the year prior to (SUBJECT'S) death, about how frequently did you visit or talk to (him/her)? [PROBE WITH CATEGORIES IF NECESSARY.]

EVERYDAY ..... 1  
LESS THAN DAILY BUT AT LEAST  
ONCE A WEEK ..... 2  
LESS THAN WEEKLY BUT MORE  
THAN ONCE A MONTH ..... 3  
LESS THAN ONCE A MONTH ..... 4

RPI-1

REFERENCE TO ECF INTERVIEW: IF IN NURSING HOME IN ECF (A-3=2) AND IN NURSING HOME EITHER ONE YEAR PRIOR TO DEATH (A-1=2) OR AT THE TIME OF DEATH (A1a=1) THEN GO TO A-2. IF NOT IN NURSING HOME ON THE ECF (A-3 ≠ 2) AND IN NURSING HOME EITHER ONE YEAR PRIOR TO DEATH (A-1=2) OR AT THE TIME OF DEATH (A1a=1) THEN GO TO A-7. IF DID NOT DIE IN A NURSING HOME AND WAS LIVING IN EITHER A HOUSE/APARTMENT, RETIREMENT HOME, BOARDING HOUSE, FOSTER CARE HOME OR OTHER ARRANGEMENT (A-1=1,3,4,5,91) THEN GO TO A-4. IF IN ANOTHER HEALTH FACILITY OR OTHER INSTITUTION (A-1=6, 92) ONE YEAR PRIOR TO DEATH THEN GO TO A-7.

A-2. Since (MONTH/YEAR) did (SUBJECT) continuously lived in a nursing home?

YES ..... 1  
NO ..... 2 (Q.A-7)

A-3. Is this the same nursing home (SUBJECT) was living in (MONTH/YEAR)?

YES ..... 1 (RPI-3)  
NO ..... 2 (A-7)

A-4. At the time of (his/her) death, how many people lived in (his/her) household including (SUBJECT)?

ONE ..... 01 (Q.A-6)

NUMBER OF PEOPLE: |\_\_|\_\_|

A-5. What relationship to (SUBJECT) (was/were) the other person(s) who lived in (his/her) household? [PROBE FOR SEX IF NOT OBVIOUS: Is (PERSON) male or female?]

PERSON #	SEX	RELATIONSHIP
1	__	__
2	__	__
3	__	__
4	__	__
5	__	__
6	__	__
7	__	__
8	__	__
9	__	__
10	__	__

SEX: 1 = MALE  
2 = FEMALE

RELATIONSHIP: 1 = HUSBAND/WIFE  
2 = FATHER/MOTHER  
(INCLUDING IN-LAWS)  
3 = GRANDPARENT  
4 = SON/DAUGHTER  
(INCLUDING IN-LAWS)  
5 = GRANDCHILD  
6 = BROTHER/SISTER  
(INCLUDING IN-LAWS)  
7 = AUNT/UNCLE/COUSIN  
8 = OTHER RELATIVE  
9 = FRIEND  
10 = OTHER NON-RELATIVE

RPI-3

A-6. How long had (he/she) lived alone?

NUMBER OF MONTHS: |\_\_|\_\_| (RPI-3)

OR

NUMBER OF YEARS: |\_\_|\_\_| (RPI-3)

LESS THAN ONE MONTH ..... 95 (RPI-3)

A-7. At the time (he/she) entered the (nursing home or rest home/health care facility/institution), how many people lived in (his/her) household including (SUBJECT)?

ONE ..... 01 (Q.A-9)

NUMBER OF PEOPLE: |\_\_|\_\_|

A-8. What relationship to (SUBJECT) (was/were) the other person(s) who lived in (his/her) household? [PROBE FOR SEX IF NOT OBVIOUS: Is (PERSON) male or female?]

PERSON #	SEX	RELATIONSHIP
1	__	__
2	__	__
3	__	__
4	__	__
5	__	__
6	__	__
7	__	__
8	__	__
9	__	__
10	__	__

SEX: 1 = MALE  
2 = FEMALE

RELATIONSHIP: 1 = HUSBAND/WIFE  
2 = FATHER/MOTHER (INCLUDING IN-LAWS)  
3 = GRANDPARENT  
4 = SON/DAUGHTER (INCLUDING IN-LAWS)  
5 = GRANDCHILD  
6 = BROTHER/SISTER (INCLUDING IN-LAWS)  
7 = AUNT/UNCLE/COUSIN  
8 = OTHER RELATIVE  
9 = FRIEND  
10 = OTHER NON-RELATIVE

RPI-3

A-9. How long had (he/she) lived alone?

NUMBER OF MONTHS: |\_\_|\_\_|  
OR  
NUMBER OF YEARS: |\_\_|\_\_|

LESS THAN ONE MONTH ..... 95

RPI-3

IF R IS SPOUSE OF DECEASED (A-0b=1) CODE A-10=1 AND GO TO RPI-3a.  
OTHERWISE ASK A-10.

A-10. [VERIFY IF ALREADY KNOWN:]

At the time of (SUBJECT'S) death, was (he/she) married, widowed, divorced, separated, or has (he/she) never been married?

MARRIED ..... 1  
WIDOWED ..... 2  
DIVORCED ..... 3  
SEPARATED ..... 4  
NEVER MARRIED ..... 5

RPI-3a

REFERENCE TO IF/ECF INTERVIEW: FOR THOSE NEVER INTERVIEWED,  
ASK A-11 AND A-12. OTHERWISE GO TO SECTION B.

A-11. Which of these categories best describes (SUBJECT) – Aleut, Eskimo, American Indian, Asian, Pacific Islander, Black or White?

ALEUT, ESKIMO OR AMERICAN INDIAN ..... 1  
ASIAN/PACIFIC ISLANDER ..... 2  
BLACK ..... 3  
WHITE ..... 4  
OTHER (SPECIFY) ..... 91

---

A-12. Was (SUBJECT) of Hispanic origin?

YES ..... 1  
NO ..... 2

A-13 THROUGH A-21 FROM SUBJECT/PROXY INCAPACITATED (SPI) NOT ASKED.

PART B: MEDICAL CONDITIONS

TIME BEGAN: \_\_\_\_\_ AM  
PM

B-1 AND B-2 FROM SPI NOT ASKED ON THIS VERSION.

BOX A2  
IF R IS A RELATIVE (A-0b= 1-7,91,92) GO TO B-3.  
IF R IS NOT A RELATIVE GO TO B-1a.

B-1a. Do you think you can answer questions about (his/her) medical history?

YES ..... 1  
NO ..... 2 (Q.B-93g)  
DK ..... 8

B-3. Did a doctor ever tell (SUBJECT) that (he/she) had arthritis?

YES ..... 1 (Q.B-4)  
NO ..... 2 (RPI-8)  
DK ..... 8 (RPI-11)

RPI-8  
REFER TO ECF INTERVIEW: IF S HAD ARTHRITIS ON ECF (Q.B-2=1) AND PROXY  
DOES NOT REPORT ANY ARTHRITIS (B-3=2), THEN CODE B-3 AS  
"DISCREPANCY=96."

GO TO RPI-11

B-4. Concerning (SUBJECT'S) arthritis, in what year was (SUBJECT) first told (he/she) had arthritis?

YEAR: 19 |\_\_|\_\_|  
DK ..... 98

RPI-9

REFERENCE TO ECF INTERVIEW: IF S HAD ARTHRITIS ON ECF  
(Q.B-2=1) GO TO B-17. OTHERWISE GO TO B-5.

B-5. There are different kinds of arthritis. Did a doctor ever tell (SUBJECT) which kind (he/she) had?

YES ..... 1  
 NO ..... 2 (RPI-11)  
 DK ..... 8 (RPI-11)

B-6. Concerning (his/her) arthritis, did she have oseteoarthritis, degenerative, rheumatoid or some other type?  
(PROBE WITH CATEGORIES IF NECESSARY.)

	<u>YES</u>	<u>NO</u>	<u>DK</u>
a. Osteo/Degenerative .....	1	2	8
b. Rheumatoid .....	1	2	8
c. Some other type (SPECIFY) .....	1	2	8

B-7 THROUGH B-16 ON SP NOT ASKED.

**HOSPITAL DATES:**

FOR PERSONS THAT REPORT A YEAR OF FIRST OCCURRENCE USE:

1970 IF YEAR OF FIRST OCCURRENCE IS BETWEEN 1980 AND 1985 OR  
S WAS NEVER INTERVIEWED.

1980 IF YEAR OF FIRST OCCURRENCE IS BETWEEN 1980 AND 1985 OR  
THE LAST INTERVIEW WAS THE IF.

1985 IF YEAR OF FIRST OCCURRENCE IS IN 1985 OR LATER AND THE  
LAST INTERVIEW WAS THE ECF.

FOR PERSONS THAT DO NOT REPORT A YEAR OF FIRST OCCURRENCE  
USE:

1970 IF S WAS NEVER INTERVIEWED.

1980 IF LAST INTERVIEW WAS THE IF.

1985 IF LAST INTERVIEW WAS THE ECF.

B-17. Since (1985/1980/1970), was (SUBJECT) hospitalized for (his/her) (arthritis)? [PROBE: Was (he/she) there for more than a day?]

YES ..... 1 (CHART)  
 NO ..... 2

RPI-11

REFERENCE TO IF/ECF INTERVIEW: IF S REPORTED A HEART ATTACK ON IF (G17a=1) OR ECF (B-14=1 OR B-15=1), GO TO B-18. OTHERWISE GO TO B-19.

B-18. Since (MONTH/YEAR) did (he/she) have a heart attack, (sometimes called coronary thrombosis or myocardial infarction)?

- YES ..... 1 (Q.B-22)
- NO ..... 2 (Q.B-24)
- DK ..... 8 (Q.B-24)

B-19. Did a doctor ever tell (him/her) that (he/she) had a heart attack, (sometimes called coronary thrombosis or myocardial infarction)?

- YES ..... 1
- NO ..... 2 (Q.B-24)
- DK ..... 8 (Q.B-24)

B-20. In what year was (he/she) first told that (he/she) had a heart attack, (coronary thrombosis or myocardial infarction)?

- YEAR: 19 |\_\_|\_\_|
- DK ..... 98

B-21. Did (he/she) have an additional heart attack since then?

- YES ..... 1
- NO ..... 2 (Q.B-23)
- DK ..... 8 (Q.B-23)

B-22. In what year was that heart attack? [PROBE: Did (SUBJECT) have any others since then? PROBE FOR ALL YEARS.]

- YEAR: 19 |\_\_|\_\_|
- YEAR: 19 |\_\_|\_\_|
- YEAR: 19 |\_\_|\_\_|
- YEAR: 19 |\_\_|\_\_|
- DK ..... 98

B-23. Since (1985/1980/1970), was (he/she) hospitalized for (his/her) heart attack? [PROBE: Was (he/she) there for more than a day?]

YES ..... 1 (CHART)  
NO ..... 2

B-24. Since (1985/1980/1970), was (he/she) hospitalized for any type of heart condition (other than a heart attack)? [PROBE: Was (he/she) there for more than a day?]

YES ..... 1 (CHART)  
NO ..... 2

**RPI-12**

REFERENCE TO IF ECF INTERVIEW: IF S REPORTED CORONARY BY-PASS ON ECF (B-20a=1) GO TO B-25. IF S REPORTED HEART ATTACK OR HEART CONDITION [IE (G17a=1 OR G15a=1) OR ECF (B14=1 OR B15=19)] AND DID NOT REPORT CORONARY BY-PASS SURGERY ON ECF (G-20a≠1) THEN GO TO B-26. OTHERWISE GO TO BOX B.

B-25. Since (MONTH/YEAR) did (SUBJECT) have any coronary by-pass surgery?

YES ..... 1 (B-27)  
NO ..... 2 (RPI-13)

**BOX B**

IF B-18 = 1, B-19 = 1 OR B-24 = 1, GO TO B-26; OTHERWISE GO TO RPI-14.

B-26. Did (he/she) ever have coronary by-pass surgery?

YES ..... 1  
NO ..... 2 (RPI-13)

B-27. Since (1985/1980/1970), was (he/she) hospitalized for coronary by-pass surgery? [PROBE: Was (he/she) there for more than a day?]

YES ..... 1 (CHART)  
NO ..... 2

**RPI-13**

REFERENCE TO ECF INTERVIEW: IF S REPORTED PACEMAKER ON ECF (B-20c=1), GO TO B-29. OTHERWISE GO TO B-28.

B-28. Some people with heart rhythm problems have a pacemaker inserted to control the heartbeat. Did (he/she) ever have a pacemaker inserted?

YES ..... 1  
NO ..... 2 (RPI-14)

B-29. Since (1985/1980/1970), was (he/she) hospitalized for pacemaker insertion, repair, or replacement? [PROBE: Was (he/she) there for more than a day?]

YES ..... 1 (CHART)  
NO ..... 2

RPI-14

REFERENCE TO IF/ECF INTERVIEW: IF S REPORTED A STROKE ON ECF (B-28=1) OR I (G22a=1), GO TO B-30. OTHERWISE GO TO B-31.

B-30. Since (MONTH/YEAR) did (he/she) have a stroke (sometimes called a CVA)?

YES ..... 1 (Q.B-34)  
NO ..... 2 (BOX B1)  
VOLUNTEERS SMALL STROKE ..... 3 (Q.B-34)  
VOLUNTEERS POSSIBLE STROKE ..... 4 (Q.B-34)  
VOLUNTEERS TIA ..... 5 (Q.B-34)  
DK ..... 8 (BOX B1)

B-31. Did a doctor ever tell (him/her) that (he/she) had a stroke (sometimes called a CVA)?

YES ..... 1  
NO ..... 2 (RPI-15)  
VOLUNTEERS SMALL STROKE ..... 3  
VOLUNTEERS POSSIBLE STROKE ..... 4  
VOLUNTEERS TIA ..... 5  
DK ..... 8 (RPI-15)

CATI PROGRAMMER

IF B-30 = 1 OR B-31 = 1 THEN USE 'STROKE' IN B-32 - B-35.  
IF B-30 = 3 OR B-31 = 3 THEN USE 'TIA' IN B-32 - B-35.  
IF B-30 = 4 OR B-31 = 4 THEN USE 'SMALL STROKE' IN B-32 - B-35.  
IF B-30 = 1 OR B-31 = 5 THEN USE 'POSSIBLE STROKE' IN B-32 - B-35.

B-32. In what year was (he/she) first told that (he/she) had a (TIA/STROKE/SMALL STROKE/POSSIBLE STROKE)?

YEAR: 19 |\_\_|\_\_|  
DK ..... 98

B-33. Did (he/she) have an additional (TIA/stroke/small stroke/possible stroke) since then?

YES ..... 1  
NO ..... 2 (Q.B-35)  
DK ..... 8 (Q.B-35)

B-34. In what year was that (TIA/stroke/small stroke/possible stroke)? [PROBE: Did (SUBJECT) have any others since then? PROBE FOR ALL YEARS.]

YEAR: 19 |\_\_|\_\_|  
YEAR: 19 |\_\_|\_\_|  
DK ..... 98

B-35. Since (1985/1980/1970), was (he/she) hospitalized for a (TIA/stroke/small stroke/possible stroke)? [PROBE: Was (he/she) there for more than a day?]

YES ..... 1 (CHART)  
NO ..... 2

<p>BOX B1</p> <p>CAN RESPONDENT ANSWER MORE QUESTIONS ABOUT SUBJECT'S HEALTH?</p> <p>YES ..... 1 NO ..... 2 (Q.B-93g)</p>
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B-36 FROM SPI NOT ASKED.

<p>RPI-15</p> <p>REFERENCE TO <u>IF/ECF</u> INTERVIEW: IF REPORTED DIABETES ON <u>ECF</u> (B-35=1) OR <u>IF</u> (G-36=1), THEN GO TO B-37. OTHERWISE GO TO B-38.</p>
----------------------------------------------------------------------------------------------------------------------------------------------------------------------

B-37. In the year prior to (his/her) death, was (he/she) taking medication for diabetes?

YES ..... 1 (Q.B-40)  
NO ..... 2 (Q.B-42)  
DK ..... 8 (Q.B-42)  
DISCREPANCY ..... 96 (RPI-16)

B-38. Did a doctor ever say that (he/she) had diabetes or sugar diabetes?

YES ..... 1  
NO ..... 2 (RPI-16)  
DK ..... 8 (RPI-16)  
BORDERLINE ..... 95

B-39. In what year was (he/she) first told that (he/she) had diabetes or sugar diabetes?

YEAR: 19 |\_\_|\_\_|  
DK ..... 98

B-40. In the year prior to (his/her) death, was (he/she) taking insulin injections for (his/her) diabetes?

YES ..... 1 (Q.B-42)  
NO ..... 2  
DK ..... 8

B-41. In the year prior to (his/her) death, was (he/she) taking pills for (his/her) diabetes?

YES ..... 1  
NO ..... 2

B-42. Since (1985/1980/1970), was (he/she) hospitalized for diabetes? [PROBE: Was (he/she) there for more than a day?]

YES ..... 1 (CHART)  
NO ..... 2

RPI-16

REFERENCE TO ECF INTERVIEW: IF S REPORTED TAKING MEDICATION FOR HIGH BLOOD PRESSURE ON ECF (B-40 OR B-43 = 1), THEN GO TO B-47.  
IF S DID NOT REPORT HIGH BLOOD PRESSURE ON ECF (B-41 = 2,8), THEN GO TO B-44.  
IF S NOT ON ECF AND DID NOT REPORT HIGH BLOOD PRESSURE ON IF (D2 = 2,8, THEN GO TO B-44.  
IF S WAS NEVER INTERVIEWED ON IF OR ECF, GO TO B-44.  
IF S REPORTED HIGH BLOOD PRESSURE BUT WAS NOT TAKING MEDICATION ON ECF [(B-40 = 2,8) OR (B-41 = 1 AND B-43 = 2,8)], THEN GO TO B-43.  
IF S NOT ON ECF AND REPORTED HIGH BLOOD PRESSURE ON IF (D-2 = 1) THEN GO TO B-43.

B-43. Did the doctor ever prescribe medicine for (SUBJECT) for high blood pressure?

YES ..... 1 (Q.B-47)  
NO ..... 2 (Q.B-48)  
DK ..... 8 (Q.B-48)  
DISCREPANCY ..... 96 (RPI-17)

B-44. Has (SUBJECT) ever been told by the doctor that (he/she) had high blood pressure or hypertension?

YES ..... 1  
NO ..... 2 (RPI-17)  
DK ..... 8 (RPI-17)  
BORDERLINE ..... 95

B-45. In what year was (he/she) first told that (he/she) had high blood pressure or hypertension?

YEAR: 19 |\_\_|\_\_|  
DK ..... 98

B-46. Did the doctor ever prescribe medicine for (his/her) high blood pressure?

YES ..... 1  
NO ..... 2 (Q.B-48)  
DK ..... 8 (Q.B-48)

B-47. In the year prior to (SUBJECT'S) death, was (he/she) taking medication for high blood pressure?

YES ..... 1  
NO ..... 2  
DK ..... 8

B-47a AND B-47b FROM SPI NOT ASKED THIS VERSION.

B-48. Since (1985/1980/1970), was (he/she) hospitalized for high blood pressure? [PROBE: Was (he/she) there for more than a day?]

YES ..... 1 (CHART)  
NO ..... 2

RPI-17

REFERENCE TO IF/ECF INTERVIEW: IF R REPORTED ANY TYPE OF CANCER ON IF (D-52=1, D-58=1, D-62=1) OR ECF (B-47=1), THEN GO TO B-50. OTHERWISE GO TO B-51.

B-49 ON SPI NOT ASKED.

B-50. Since (MONTH/YEAR) did (SUBJECT) have any type of cancer diagnosed, including skin cancer?

YES ..... 1 (Q.B-53)  
NO ..... 2 (Q.B-52)  
DK ..... 8 (Q.B-52)

B-51. Did a doctor ever tell (SUBJECT) that (he/she) had cancer of any sort, including skin cancer?

YES ..... 1 (Q.B-53)  
NO ..... 2 (BOX B2)  
DK ..... 8 (BOX B2)

B-52. Since (1995/1980), was (he/she) hospitalized for any cancer condition? [PROBE: Was (he/she) there for more than a day?]

YES ..... 1 (CHART. THEN GO TO BOX B2)  
NO ..... 2 (BOX B2)

**CATI PROGRAMMER**

SUBSTITUTE "SINCE (MONTH/YEAR)" IN THE PROBE FOR B-53 IF § REPORTED A CANCER ON THE IE (D52=1 OR D-58=1 OR D-62) OR ON THE ECF (B-47=1).

		1ST DIAGNOSIS	2ND DIAGNOSIS	3RD DIAGNOSIS
B-53. Where was the cancer or what type of cancer was it? [PROBE: Did (he/she) have any other cancer diagnosed since (month/year)?]	LUNG .....	1	LUNG .....	1
	COLON (RECTUM,BOWEL) ....	2	COLON (RECTUM,BOWEL) ....	2
	BREAST .....	3	BREAST .....	3
	SKIN (MELANOMA) .....	4	SKIN (MELANOMA) .....	4
	SKIN (NON-MELANOMA) .....	5	SKIN (NON-MELANOMA) .....	5
	(Q.B-55)		(Q.B-55)	
	SKIN (DON'T KNOW) .....	6	SKIN (DON'T KNOW) .....	6
	UTERUS .....	7	UTERUS .....	7
	PROSTATE .....	8	PROSTATE .....	8
	STOMACH .....	9	STOMACH .....	9
LEUKEMIA .....	10	LEUKEMIA .....	10	
OTHER (SPECIFY) .....	91	OTHER (SPECIFY) .....	91	
SITE: _____		SITE: _____		SITE: _____
OR		OR		OR
TYPE: _____		TYPE: _____		TYPE: _____
B-54. In what year was (he/she) first told that (he/she) had (CANCER)?	YEAR: 19  __ __	YEAR: 19  __ __	YEAR: 19  __ __	
	DK ..... 98	DK ..... 98	DK ..... 98	
B-55. Since (1980/1970), was (he/she) hospitalized for (CANCER)? [PROBE: Was (he/she) there for more than a day?]	YES ..... 1 (CHART)	YES ..... 1 (CHART)	YES ..... 1 (CHART)	
	NO ..... 2	NO ..... 2	NO ..... 2	

BOX B2

CAN RESPONDENT ANSWER MORE QUESTIONS ABOUT SUBJECT'S HEALTH?

YES ..... 1  
NO ..... 2 (Q.B-93g)

RPI-18

REFERENCE TO IF/ECF INTERVIEW: IF S REPORTED FRACTURED OR  
BROKEN HIP ON ECF (B-53=1) OR IF (E8 OR E90=1), GO TO B-56.  
OTHERWISE GO TO B-57.

B-56. Since (MONTH/YEAR) did (he/she) have a broken or or fractured hip?

YES ..... 1 (Q.B-60)  
NO ..... 2 (Q.B-62)  
DK ..... 8 (Q.B-62)

B-57. Was (SUBJECT) ever told by the doctor that (he/she) had a broken or fractured hip?

YES ..... 1  
NO ..... 2 (Q.B-62)  
DK ..... 8 (Q.B-62)

B-58. In what year was (he/she) first told that (he/she) had a broken or fractured hip?

YEAR: 19 |\_\_|\_\_|  
DK ..... 98

B-59. Has (he/she) had an additional fractured hip since then?

YES ..... 1  
NO ..... 2 (Q.B-61)  
DK ..... 8 (Q.B-61)

B-60. In what year did (he/she) have that break or fracture of (his/her) hip? [PROBE: Did (he/she) have another fractured hip since then? PROBE FOR ALL YEARS.]

YEAR: 19 |\_\_|\_\_|  
YEAR: 19 |\_\_|\_\_|  
YEAR: 19 |\_\_|\_\_|  
YEAR: 19 |\_\_|\_\_|  
DK ..... 98

B-61. Since (1985/1980/1970), was (he/she) hospitalized for a broken or fractured hip? [PROBE: Was (he/she) there for more than a day?]

YES ..... 1 (CHART)  
NO ..... 2

B-62. Did a doctor ever tell (him/her) that (he/she) had osteoporosis?

YES ..... 1  
NO ..... 2 (RPI-20)

B-63. In what year was (he/she) first told that (he/she) had osteoporosis?

YEAR: 19 |\_\_|\_\_|  
DK ..... 98

B-64 THROUGH B-66 ON SPI NOT ASKED.

RPI-20

REFERENCE TO ECF INTERVIEW: IF S ELIGIBLE FOR ECF, GO TO B-67.  
OTHERWISE GO TO B-71.

B-67. The next few questions are about falls. I'm interested in falls where (SUBJECT) has fallen and landed on the floor or ground or hit an object like a table or stair. In the year prior to (SUBJECTS) death, did (he/she) have this kind of fall?

YES ..... 1  
 NO ..... 2 (Q.B-71)  
 DK ..... 8 (Q.B-71)

B-68 FROM SPI NOT ASKED.

B-69. Did any of these falls . . .

	<u>YES</u>	<u>NO</u>
a. cause a broken bone? .....	1	2
b. cause (him/her) to hit or injure (his/her) head? .....	1	2
c. cause (him/her) to seek medical care? .....	1	2

B-70. In the year prior to (SUBJECTS) death, was (he/she) hospitalized for any of these falls? [PROBE: Was (he/she) there for more than a day?]

YES ..... 1 (CHART)  
 NO ..... 2

B-71. Since (1985/1980/1970), was (he/she) hospitalized for pneumonia, bronchitis, or the flu? [PROBE: Was (he/she) there for more than a day?]

YES ..... 1 (CHART)  
 NO ..... 2

RPI-21

REFERENCE TO IF INTERVIEW: IF S REPORTED KIDNEY DISEASE OR KIDNEY STONES ON IF (G6a=1), GO TO B-72 AND USE IF INTERVIEW DATE FOR \*(MONTH/YEAR)\*. OTHERWISE GO TO B-73a.

B-72. Since (MONTH/YEAR) did (he/she) have a kidney disorder or kidney stones? Please do not include kidney infections.

YES ..... 1 (Q.B-73c)  
 NO ..... 2 (Q.B-73c)  
 DK ..... 8 (Q.B-73c)

B-73a. Was (SUBJECT) ever told by the doctor that (he/she) had a kidney disorder or kidney stone(s)? Please do not include kidney infections.

YES ..... 1  
NO ..... 2 (Q.B-73c)  
DK ..... 8 (Q.B-73c)

B-73b. What year was (he/she) first told that (he/she) had a kidney disorder or kidney stones?

YEAR: 19 |\_\_|\_\_|  
DK ..... 98

B-73c. Was (he/she) ever told by a doctor that (he/she) had a urinary tract or kidney infection more than three times?

YES ..... 1  
NO ..... 2 (BOX C1)

B-73d. What year was (he/she) first told that (he/she) had a urinary tract or kidney infection?

YEAR: 19 |\_\_|\_\_|  
DK ..... 98

**BOX C1**

IF R REPORTED KIDNEY DISORDER/KIDNEY STONES  
(B-72=1 OR B-73a=1) OR URINARY TRACT/KIDNEY  
INFECTION (B-73c=1) THEN GO TO B74. OTHERWISE  
GO TO RPI-22.

B-74. Since (1985/1980/1970) was (he/she) hospitalized for a kidney condition? [PROBE: Was (he/she) there for more than one day?]

YES ..... 1 (CHART)  
NO ..... 2

REFERENCE TO ECF INTERVIEW: IF S HAD CATARACT SURGERY ON ECF  
(BOX E=1 OR F-3=1) THEN GO TO B-75. OTHERWISE GO TO B-76.

B-75. Since (MONTH/YEAR) did (he/she) have cataract surgery?

YES ..... 1 (Q.B-78)  
NO ..... 2 (Q.B-82)

B-76. Did the doctor ever tell (SUBJECT) that (he/she) had cataracts?

YES ..... 1  
NO ..... 2 (Q.B-82)

B-77. Did (he/she) ever have surgery for (his/her) cataracts?

YES ..... 1  
NO ..... 2 (Q.B-82)

B-78. What year did (he/she) have (his/her) cataract surgery? [PROBE: Did (he/she) have any other cataract surgery? RECORD ALL YEARS].

YEAR: 19 |\_\_|\_\_|  
YEAR: 19 |\_\_|\_\_|  
DK ..... 98

B-79. Since (1985/1980/1970), was (he/she) hospitalized for (his/her) cataract surgery? [PROBE: Was (he/she) there for more than a day?]

YES ..... 1 (CHART)  
NO ..... 2

B-80 THROUGH B-82 FROM SP NOT ASKED.

B-83. [I have recorded that (SUBJECT) was hospitalized (READ DATES, CONDITIONS AND FACILITY NAMES FROM CHART).]

Now, I would like you to think back over the time between (1985/1980/1970) and the time (he/she) died. (He/She) would have been about (AGE) in (1985/1980/1970). Did (he/she) stay in a hospital for any (other) reason including surgery, tests or for observation since (he/she) was (AGE)?  
 [PROBE: Was (he/she) there for more than a day?]

YES ..... 1  
 NO ..... 2 (BOX E)

ASK B-84 AND THEN B-85 FOR EACH CONDITION	CONDITION # 1	CONDITION # 2	CONDITION # 3
B-84. For what condition was that? (PROBE: Did (he/she) have any other hospitalizations since (1985/1980/1970)?) [GO TO CHART AFTER CODING CONDITION.]	TESTS AND/OR OBSERVATION ..... 1 DIGESTIVE/ULCERS PROBLEMS ..... 2 RESPIRATORY/ BREATHING PROBLEMS ..... 3 INFECTIONS ..... 4 SURGERY FOR OTHER CONDITIONS ..... 5 OTHER (SPECIFY) ..... 91  _____ _____ (CHART)	TESTS AND/OR OBSERVATION ..... 1 DIGESTIVE/ULCERS PROBLEMS ..... 2 RESPIRATORY/ BREATHING PROBLEMS ..... 3 INFECTIONS ..... 4 SURGERY FOR OTHER CONDITIONS ..... 4 OTHER (SPECIFY) ..... 91  _____ _____ (CHART)	TESTS AND/OR OBSERVATION ..... 1 DIGESTIVE/ULCERS PROBLEMS ..... 2 RESPIRATORY/ BREATHING PROBLEMS ..... 3 INFECTIONS ..... 4 SURGERY FOR OTHER CONDITIONS ..... 4 OTHER (SPECIFY) ..... 91  _____ _____ (CHART)
B-85. [INTERVIEWER FILL IN THE YEAR OF THIS ADMISSION FROM HOSPITAL CHART.]	MONTH:  DAY:  YEAR:  SPECIFY:	MONTH:  DAY:  YEAR:  SPECIFY:	MONTH:  DAY:  YEAR:  SPECIFY:

BOX E

IF A-3 = 1 THEN GO TO Q.B-93a.

B-86. Since (1985/1980/1970), had (SUBJECT) ever stayed in a rest home, a nursing home, a mental health facility, or anything like that? [PROBE: Was (he/she) there for more than a day?]

YES ..... 1  
 NO ..... 2 (Q.B-93a)

	ADMISSION# 1	ADMISSION# 2	ADMISSION# 3
B-87. To what type of place was the (most recent/this admission?	NURSING HOME/ REST HOME ..... 1 MENTAL HEALTH FACILITY ..... 2 HEALTH CARE REHABILITATION CENTER ..... 3 OTHER (SPECIFY) ..... 91	NURSING HOME/ REST HOME ..... 1 MENTAL HEALTH FACILITY ..... 2 HEALTH CARE REHABILITATION CENTER ..... 3 OTHER (SPECIFY) ..... 91	NURSING HOME/ REST HOME ..... 1 MENTAL HEALTH FACILITY ..... 2 HEALTH CARE REHABILITATION CENTER ..... 3 OTHER (SPECIFY) ..... 91
B-88. Did (he/she) enter the (TYPE OF FACILITY) directly from (his/her) own home, from a hospital, or from some other place?	OWN HOME ..... 01 HOSPITAL ..... 02 NURSING HOME/ REST HOME ..... 03 MENTAL HEALTH FACILITY ..... 04 HEALTH CARE REHABILITATION CENTER ..... 05 FRIEND/RELATIVE'S HOME ..... 06 OTHER (SPECIFY) ..... 91	OWN HOME ..... 01 HOSPITAL ..... 02 NURSING HOME/ REST HOME ..... 03 MENTAL HEALTH FACILITY ..... 04 HEALTH CARE REHABILITATION CENTER ..... 05 FRIEND/RELATIVE'S HOME ..... 06 OTHER (SPECIFY) ..... 91	OWN HOME ..... 01 HOSPITAL ..... 02 NURSING HOME/ REST HOME ..... 03 MENTAL HEALTH FACILITY ..... 04 HEALTH CARE REHABILITATION CENTER ..... 05 FRIEND/RELATIVE'S HOME ..... 06 OTHER (SPECIFY) ..... 91
B-89. In what year did (he/she) enter the (TYPE OF FACILITY)?	YEAR: 19  __ __	YEAR: 19  __ __	YEAR: 19  __ __

**BOX F**

IF B-87=2 THEN GO TO B-92.  
OTHERWISE, GO TO BOX G.

**BOX G**

THIS IS SECOND ADMISSION ..... B-90a  
OTHERWISE ..... B-90

B-90a. Was this admission for the same reasons and medical conditions as you just reported?

YES ..... 1 (B-92)  
NO ..... 2 (B-90)  
DK ..... 8 (B-90)

		ADMISSION# 1		ADMISSION# 2		ADMISSION# 3	
		YES	NO	YES	NO	YES	NO
B-90.	There are many reasons why people enter a (TYPE OF FACILITY). Please tell me if (SUBJECT) entered the (TYPE OF FACILITY) for any of the following reasons. (CIRCLE YES OR NO FOR EACH.)	Required skilled nursing care? .....	1 2	Required skilled nursing care? .....	1 2	Required skilled nursing care? .....	1 2
		Recuperation from surgery? .....	1 2	Recuperation from surgery? .....	1 2	Recuperation from surgery? .....	1 2
		Needed help with bathing, eating, or dressing? .....	1 2	Needed help with bathing, eating, or dressing? .....	1 2	Needed help with bathing, eating, or dressing? .....	1 2
		Required special medical or physical therapy? .....	1 2	Required special medical or physical therapy? .....	1 2	Required special medical or physical therapy? ....	1 2
		Too confused to live independently? .....	1 2	Too confused to live independently? .....	1 2	Too confused to live independently? .....	1 2

		ADMISSION# 1	ADMISSION# 2	ADMISSION# 3		
B-91. Please tell me the name of the disease or medical condition that (he/she) had at the time of admission that affected (his/ her) ability to live independently? (CIRCLE ALL THAT APPLY)	ALZHEIMER'S DISEASE .....	01	ALZHEIMER'S DISEASE .....	01	ALZHEIMER'S DISEASE .....	01
	CANCER .....	02	CANCER .....	02	CANCER .....	02
	DEPRESSION .....	03	DEPRESSION .....	03	DEPRESSION .....	03
	FRAIL/OLD AGE .....	04	FRAIL/OLD AGE .....	04	FRAIL/OLD AGE .....	04
	HARDENING OF THE ARTERIES OR ARTERIOSCLEROSIS .....	05	HARDENING OF THE ARTERIES OR ARTERIOSCLEROSIS .....	05	HARDENING OF THE ARTERIES OR ARTERIOSCLEROSIS .....	05
	INCONTINENCE .....	06	INCONTINENCE .....	06	INCONTINENCE .....	06
	NO MEDICAL CONDITION .....	07	NO MEDICAL CONDITION .....	07	NO MEDICAL CONDITION .....	07
	SENILITY .....	08	SENILITY .....	08	SENILITY .....	08
	STROKE .....	09	STROKE .....	09	STROKE .....	09
	OTHER DISEASE OR CONDITION (SPECIFY) .....	91	OTHER DISEASE OR CONDITION (SPECIFY) .....	91	OTHER DISEASE OR CONDITION (SPECIFY) .....	91
	_____		_____		_____	
	_____		_____		_____	
	_____		_____		_____	
	_____		_____		_____	

CATI PROGRAMMER:

SPACE SHOULD BE LEFT IN B-91 FOR ALL THE MULTIPLE RESPONSE CATEGORIES USED IN ECF.

	ADMISSION# 1	ADMISSION# 2	ADMISSION# 3
B-92. How long did (he/she) stay? (he/she) stay? GO TO CHART AFTER CODING LENGTH OF STAY.)	#:  __ __  OF WKS ..... 1 MOS ..... 2 YRS ..... 3 STILL THERE ..... 94 LESS THAN ONE WEEK ..... 95 (CHART)	#:  __ __  OF WKS ..... 1 MOS ..... 2 YRS ..... 3 STILL THERE ..... 94 LESS THAN ONE WEEK ..... 95 (CHART)	#:  __ __  OF WKS ..... 1 MOS ..... 2 YRS ..... 3 STILL THERE ..... 94 LESS THAN ONE WEEK ..... 95 (CHART)
B-93. Since (1985/1980/1970) were there other admissions to a rest home, a nursing home, a mental health facility, a rehabilitation center or any place like that?	YES ..... 1 (Q.B-87) NO ..... 2	YES ..... 1 (Q.B-87) NO ..... 2	YES ..... 1 (Q.B-87) NO ..... 2

B-93a. During the month before (his/her) death, was there significant change in (his/her) health?

YES ..... 1  
NO ..... 2

B-93b. During the 12 months prior to that, what was happening to (his/her) health? Had it improved, remained the same, gradually worsened, or suddenly worsened?

IMPROVED ..... 1  
REMAINED THE SAME ..... 2  
GRADUALLY WORSENERD ..... 3  
SUDDENLY WORSENERD ..... 4

B-93c. Did (SUBJECT) die in a hospital or nursing home?

YES ..... 1 (CHART)  
NO ..... 2

B-93d. What was the cause of (SUBJECT'S) death?

- HEART ATTACK ..... 01
- OTHER HEART CONDITION ..... 02
- STROKE, SMALL STROKE, TIA,  
POSSIBLE STROKE ..... 03
- DIABETES ..... 04
- HIGH BLOOD PRESSURE ..... 05
- CANCER ..... 06
- KIDNEY CONDITION ..... 07
- PNEUMONIA OR FLU ..... 08
- OLD AGE ..... 09
- OTHER ..... 10 (SECTION D)
- DON'T KNOW ..... 98

B-93f. Did a doctor say that (CONDITION) was the cause of death?

- YES ..... 1
- NO ..... 2 (SECTION D)
- DON'T KNOW ..... 8

CATI PROGRAMMER

PUT IN A CONSISTENCY CHECK SO THAT THE CAUSE LISTED IN B-93e IS  
CONSISTENT WITH THE APPROPRIATE "CONDITION" QUESTIONS ASKED EARLIER.

B-93g - B-93j ARE ASKED OF PEOPLE THAT COULD NOT  
COMPLETE ALL OF SECTION B.

B-93g. [I have recorded that (SUBJECT) was hospitalized (READ DATES, CONDITIONS AND FACILITY NAMES FROM CHART).] Now, I would like you to think back over the time between (1985/1980/1970) and the time (he/she) died. (He/She) would have been about (AGE) in (1985/1980/1970). Had (he/she) stayed in a hospital for any (other) reason including tests or for observation since (he/she) was (AGE)? [PROBE: Was (he/she) there for more than a day?]

- YES ..... 1 (CHART)
- NO ..... 2

B-93h. Since (1985/1980/1970), had (SUBJECT) ever stayed in a rest home, a nursing home, a mental health facility, or anything like that? [PROBE: Was (he/she) there for more than a day?]

YES ..... 1 (CHART)  
NO ..... 2

B-93i. Did (SUBJECT) die in a hospital or nursing home?

YES ..... 1 (CHART)  
NO ..... 2

B-93j. What was the cause of (SUBJECT'S) death?

HEART ATTACK ..... 01  
OTHER HEART CONDITION ..... 02  
STROKE, SMALL STROKE, TIA,  
POSSIBLE STROKE ..... 03  
DIABETES ..... 04  
HIGH BLOOD PRESSURE ..... 05  
CANCER ..... 06  
KIDNEY CONDITION ..... 07  
PNEUMONIA OR FLU ..... 08  
OLD AGE ..... 09  
OTHER ..... 10  
DON'T KNOW ..... 98

B-94 THROUGH B-96 ON SPI NOT ASKED.

TIME ENDED: \_\_\_\_\_ AM  
PM

PART C NOT ASKED THIS VERSION.

PART D: SMOKING AND ALCOHOLIC BEVERAGES

TIME BEGAN: \_\_\_\_\_ AM  
PM

These next few questions are about (SUBJECT'S) smoking and drinking habits.

BOX H1

IF S IS A RELATIVE (A-0a=1-7,91,92) THEN GO TO RPI-24.  
IF S IS NOT A RELATIVE GO TO D-0.

D-0. Do you think you can answer questions about this subject?

YES ..... 1  
NO ..... 2 (SECTION G)

RPI-24

REFERENCE TO IF/ECF INTERVIEW: IF NEVER INTERVIEWED OR S REPORTED  
"NEVER SMOKED" AT LAST INTERVIEW [ECF (D-1 = 2) OR IF (L-1=2)] THEN GO  
TO Q.D-1. OTHERWISE GO TO RPI-25.

D-1. Did (SUBJECT) ever smoke at least 100 cigarettes in (his/her) lifetime?

YES ..... 1  
NO ..... 2 (Q.D-11)

D-2. During the year prior to (his/her) death, did (he/she) smoke cigarettes?

YES ..... 1  
NO ..... 2 (Q.D-5)  
DON'T KNOW ..... 8 (Q.D-11)

D-3. About how many cigarettes a day did (he/she) smoke? [IF ANSWER IS NUMBER OF PACKS, MULTIPLY BY 20 AND VERIFY.]

NUMBER OF CIGARETTES: |\_\_|\_\_|\_\_|  
LESS THAN ONE A DAY ..... 995

D-4. For how many years did (he/she) smoke cigarettes?

NUMBER OF YEARS: |\_\_|\_\_| (Q.D-11)

D-5. When did (he/she) stop smoking cigarettes?

MONTH: |\_\_|\_\_|

AND

YEAR: 19 |\_\_|\_\_|

D-6. During the years when (he/she) was smoking, about how many cigarettes a day did (he/she) smoke? [IF ANSWER IS NUMBER OF PACKS, MULTIPLY BY 20 AND VERIFY.]

NUMBER OF CIGARETTES: |\_\_|\_\_|\_\_|  
LESS THAN ONE A DAY ..... 995

D-7. For how many years did (he/she) smoke cigarettes?

NUMBER OF YEARS: |\_\_|\_\_| (Q.D-20)

RPI-25

IF S WAS A CURRENT OR FORMER SMOKER ON THE IF (L-2a=1,2) OR WAS A CURRENT OR FORMER SMOKER ON THE ECF (D-2=1,2) THEN GO TO D-8 OTHERWISE, GO TO D-11.

D-8. During the year prior to (his/her) death, did (he/she) smoke cigarettes?

YES ..... 1  
NO ..... 2 (Q.D-11)  
REFUSED ..... 7 (Q.D-11)

D-9. About how many cigarettes a day did (he/she) smoke? [IF ANSWER IS NUMBER OF PACKS, MULTIPLY BY 20 AND VERIFY.]

NUMBER OF CIGARETTES: |\_\_|\_\_|\_\_|  
LESS THAN ONE A DAY ..... 995

D-10 ON SPI NOT ASKED.

D-11. Now I would like to talk to you about drinking beer, or wine, or liquor. Did (SUBJECT) have at least one drink of beer, wine, or liquor during year prior to (his/her) death?

YES ..... 1  
NO ..... 2 (PART E)

D-12. During the year prior to (SUBJECT) death, how often did (he/she) drink beer?

NUMBER OF DAYS: |\_\_|\_\_| PER: WEEK ..... 1  
MONTH ..... 2  
MORE THAN 3 BUT LESS THAN 12 TIMES PER YEAR ..... 94  
NO MORE THAN 3 TIMES PER YEAR ..... 95  
NONE ..... 00 (D-14)  
DK ..... 98 (D-13)

D-13. On the days (he/she) drank beer, how many cans, bottles or glasses did (he/she) drink?

NUMBER OF DRINKS: |\_\_|\_\_|  
LESS THAN ONE DRINK ..... 95

D-14. During the year prior to (SUBJECT) death, how often did (he/she) drink wine?

NUMBER OF DAYS: |\_\_|\_\_| PER: WEEK ..... 1  
MONTH ..... 2  
MORE THAN 3 BUT LESS THAN 12 TIMES PER YEAR ..... 94  
NO MORE THAN 3 TIMES PER YEAR ..... 95  
NONE ..... 00 (D-16)  
DK ..... 98 (D-15)

D-15. On the days (he/she) drank wine, how many glasses did (he/she) drink?

NUMBER OF DRINKS: |\_\_|\_\_|  
LESS THAN ONE DRINK ..... 95

D-16. During the year prior to (SUBJECT) death, how often did (he/she) drink liquor?

NUMBER OF DAYS: |\_\_|\_\_| PER: WEEK ..... 1  
MONTH ..... 2  
MORE THAN 3 BUT LESS THAN 12 TIMES PER YEAR ..... 94  
NO MORE THAN 3 TIMES PER YEAR ..... 95  
NONE ..... 00 (SECTION E)  
DK ..... 98 (D-17)

D-17. On the days (he/she) drank liquor, how many drinks did (he/she) have?

NUMBER OF DRINKS: |\_\_|\_\_|  
LESS THAN ONE DRINK ..... 95

TIME ENDED: \_\_\_\_\_ AM  
PM

PARTS E AND F NOT ASKED.

PART G: PREGNANCY AND MENSTRUAL HISTORY

TIME BEGAN: \_\_\_\_\_ AM  
PM

<b>BOX J</b>	
INTERVIEWER: CIRCLE ONE.	
IF S IS MALE .....	1 (PART H)
IF S IS FEMALE .....	2

These next few questions are about (SUBJECT'S) reproductive and menstrual history.

<b>BOX J1</b>	
IF <u>S</u> IS A RELATIVE (A-0a=1-7,91,92) THEN GO TO RPI-29a.	
IF <u>S</u> IS NOT A RELATIVE GO TO G-0.	

G-0. Do you think you can answer questions about this subject?

YES ..... 1  
NO ..... 2 (SECTION H)

<b>RPI-29a</b>	
IF <u>S</u> WAS INTERVIEWED ON EITHER THE <u>IF</u> OR <u>ECP</u> THEN GO TO G-10.	
IF <u>S</u> WAS NEVER INTERVIEWED THEN GO TO G-1.	

G-1. Was she ever pregnant? Include live births, stillbirths, miscarriages or abortions.

YES ..... 1  
NO ..... 2 (Q.G-10)

G-2 ON SPI NOT ASKED.

G-3. How old was she when her first child was born? This means the first child born alive or stillborn.

AGE IN YEARS: ..... |\_\_|\_\_| (Q.G-6)  
HAD NO BIRTHS ..... 00 (Q.G-8)

G-4 AND G-5 FROM SPI NOT ASKED.

G-6. How old was she when her last child was born? Include stillbirths.

AGE IN YEARS: ..... |\_\_|\_\_|  
ONLY ONE BIRTH ..... 95

G-7. How many live births did she have?

NUMBER OF LIVE BIRTHS: ..... |\_\_|\_\_|

G-8. Did she ever have a miscarriage?

YES ..... 1  
NO ..... 2 (Q.G-10)

G-9. How many miscarriages did she have?

NUMBER OF MISCARRIAGES: ..... |\_\_|\_\_|

G-10. At the time of her death, did she still have her womb or uterus?

YES ..... 1 (Q.G-12)  
NO ..... 2  
DK ..... 8 (Q.G-12)  
DISCREPANCY ..... 96 (Q.G-12)

CATI PROGRAMMER

IF G-10=1 AND S DID NOT HAVE INTACT UTERUS ON  
IE (C-14=2) THEN CODE G-10 AS "DISCREPANCY=96."

G-11. How old was she when her uterus or womb was removed?

AGE: ..... |\_\_|\_\_|  
DISCREPANCY ..... 96

G-12. At the time of her death, did she still have both of her ovaries?

YES ..... 1 (RPI-34a)  
NO ..... 2 (Q.G-13)  
DK ..... 8 (RPI-34a)

G-13. Did she still have one ovary?

YES ..... 1  
NO ..... 2  
DK ..... 8 (RPI-34a)

G-14. How old was she when her (ovary/last ovary) (were/was) removed?

AGE: ..... |\_\_|\_\_|  
DISCREPANCY ..... 96

<p>RPI-34a</p> <p>REFERENCE TO <u>IF/ECF</u>. IF NEVER INTERVIEWED GO TO G-21. OTHERWISE GO TO SECTION H.</p>
-------------------------------------------------------------------------------------------------------------------

G-15 THROUGH G-20 ON SPI NOT ASKED.

G-21. Did she ever take female hormone pills such as estrogen or premarin for reasons related to the menopause or change of life such as hot flashes, mood changes or bone loss?

YES ..... 1  
NO ..... 2 (Q.G-32)  
DON'T KNOW TYPE OF PILL ..... 3  
DON'T KNOW ..... 8 (G-32)

G-22a. What is the longest period of time that she continuously took (hormone pills/these pills)? That is, without stopping for at least one month.

|\_\_|\_\_| (AND |\_\_|\_\_|)  
YEARS AND MONTHS ..... 1  
MONTHS ..... 2  
YEARS ..... 3  
LESS THAN ONE MONTH ..... 95

G-22b. Now thinking about the total amount of time she had taken these pills, how many months or years had she actually used them? Please do not include the times when she might have stopped taking the pill for at least one month.

|\_\_|\_\_| (AND |\_\_|\_\_|)  
YEARS AND MONTHS ..... 1  
MONTHS ..... 2  
YEARS ..... 3  
LESS THAN ONE MONTH ..... 95

CATI PROGRAMMER

HAVE INTERVIEWER FILL IN BOTH "MONTHS" AND "YEARS" FOR G22a AND G22b.  
IF G-21 = 3 THEN FILL IN "THESE PILLS" FOR G22a.

G-23 THROUGH G-31b ON SPI NOT ASKED.

G-32. Did she ever take birth control pills for any reason?

YES ..... 1  
NO ..... 2 (Q.G-40)

G-33. How old was she when she first took birth control pills?

AGE: ..... |\_\_|\_\_|

BOX K2  
IF S WOULD HAVE BEEN 55 NOW GO TO G-35.

G-34. In the year prior to her death, was she taking birth control pills?

YES ..... 1 (Q.G-36a)  
NO ..... 2

G-35. How old was she when she last took birth control pills?

AGE: ..... |\_\_|\_\_|

G-36a. What is the longest period of time that she continuously took (birth control pills/these pills)? That is, without stopping for at least one month.

|\_\_|\_\_| (AND |\_\_|\_\_|)  
YEARS AND MONTHS ..... 1  
MONTHS ..... 2  
YEARS ..... 3  
LESS THAN ONE MONTH ..... 95

G-36b. Now thinking about the total amount of time she had taken these pills, how many months or years had she actually used them? Please do not include the periods when she might have stopped taking the pill for at least one month.

|\_\_|\_\_| (AND |\_\_|\_\_|)  
YEARS AND MONTHS ..... 1  
MONTHS ..... 2  
YEARS ..... 3  
LESS THAN ONE MONTH ..... 95

G-37 THROUGH G-39 ON SPI NOT ASKED.

G-40. Did she ever have an operation to be sterilized also known as a tubal ligation or having your tubes tied?

YES ..... 1  
NO ..... 2 (SECTION H)

G-41. How old was she when she had this procedure?

AGE: ..... |\_\_|\_\_|

G-42 THROUGH G-55 ON SPI NOT ASKED.

PART H: DEATH CERTIFICATE, SOCIAL SECURITY/MEDICARE  
NUMBER AND CLOSING STATEMENTS

TIME BEGAN: \_\_\_\_\_ AM  
PM

BOX K4	
DEATH CERTIFICATE <u>WAS</u> OBTAINED.....	BOX L2
DEATH CERTIFICATE <u>WAS NOT</u> OBTAINED BUT <u>SUF WAS</u> COMPLETED RIGHT BEFORE THIS INTERVIEW .....	BOX L2
DEATH CERTIFICATE <u>WAS NOT</u> OBTAINED AND <u>SUF WAS NOT</u> COMPLETED RIGHT BEFORE THIS INTERVIEW.....	H-0a

H-0a. As part of this survey, we are contacting vital records agencies and requesting death certificates on participants who have died. At present, we have been unable to locate (SUBJECT'S) certificate. I would like to reconfirm some information with you. When did (SUBJECT) die?

MONTH:    |\_\_|\_\_|  
DAY:        |\_\_|\_\_|  
YEAR:    19 |\_\_|\_\_|

H-0b. In what city, county, and state did (SUBJECT) die? [IF LOUISIANA, PROBE FOR PARISH.]

CITY: \_\_\_\_\_  
COUNTY/PARISH: \_\_\_\_\_  
STATE: \_\_\_\_\_

H-0c. Was (he/she) buried in the same city?

YES ..... 1  
NO ..... 2  
DK ..... 8

**BOX L2**

**IF § WOULD HAVE BEEN 65 OR OLDER INSERT "AND HEALTH INSURANCE STATUS" IN THE FOLLOWING INTRODUCTION**

Before finishing the interview, I have a few questions about (SUBJECT'S) background [and health insurance status].

**BOX M**

§ WOULD HAVE BEEN AT LEAST 65 YEARS OLD NOW ..... 1 (H-1)  
 § WOULD HAVE BEEN LESS THAN 65 YEARS OLD NOW ..... 2 (RPI-42)

H-1. Medicare is a social security health insurance program for people 65 years old or over. People who are covered by Medicare have a red, white and blue Medicare card. Was (SUBJECT) covered by Medicare?

YES ..... 1  
 NO ..... 2

**RPI-42**

REFERENCE TO IF/ECF: IF § SUPPLIED A SOCIAL SECURITY NUMBER ON IF/ECF AND IS ON MEDICARE (H-1=1), THEN SUBSTITUTE "MEDICARE NUMBER" IN THE FOLLOWING INTRODUCTION. IF A SOCIAL SECURITY NUMBER WAS NOT COLLECTED ON THE IF/ECF AND THE § IS ON MEDICARE, THEN SUBSTITUTE "MEDICARE NUMBER AND SOCIAL SECURITY NUMBER" IN THE FOLLOWING INTRODUCTION. IF A SOCIAL SECURITY NUMBER WAS NOT SUPPLIED ON THE IF/ECF AND THE PERSON IS NOT ON MEDICARE THEN SUBSTITUTE "SOCIAL SECURITY NUMBER" IN THE FOLLOWING INTRODUCTION. IF THE § SUPPLIED A SOCIAL SECURITY NUMBER ON THE IF/ECF AND IS NOT ON MEDICARE, THEN GO TO RPI-45.

As part of this survey, I'd like to have (SUBJECT'S) (Social Security number/Medicare number/Medicare and Social Security numbers). This information is voluntary and is collected under the authority of the Public Health Service Act. There will be no effect on any benefits that are being received whether or not you decide to provide the number(s). (The Public health Service Act is title 42, United States Code, Section 242k).

**RPI-43**

REFERENCE TO IF/ECF INTERVIEW: IF DID NOT SUPPLY SOCIAL SECURITY NUMBER ON IF/ECF, GO TO RPI-44. OTHERWISE, GO TO BOX N.

RPI-44

IF S IS LESS THAN 65 OR IS 65+ AND NOT ON MEDICARE (H-1=2) THEN ASK FOR SOCIAL SECURITY NUMBER IN H-2. IF S IS 65+ AND IS ON MEDICARE (H-1=1) THEN ASK FOR SOCIAL SECURITY NUMBER AND MEDICARE NUMBER IN H-2.

- H-2. What is (SUBJECT'S) social security number (and health insurance claim number on (his/her) Medicare card) [READ IF NECESSARY: I'll wait while you get your records for (his/her) (social security number/social security number and medicare card).

Social security number: |\_|\_|\_|\_| - |\_|\_| - |\_|\_|\_|\_|\_|

Medicare number: |\_|\_|\_|\_| - |\_|\_| - |\_|\_|\_|\_|\_| ( ) ( ) (RPI-45)

BOX N

IF H-1 = 1 THEN GO TO H-3. OTHERWISE GO TO RPI-45.

- H-3. What is the health insurance claim number on (SUBJECT'S) Medicare card? (READ IF NECESSARY: I'll wait while you get your records.)

Medicare number: |\_|\_|\_|\_| - |\_|\_| - |\_|\_|\_|\_|\_| ( ) ( )

RPI-45

REFERENCE TO ECF/IF INTERVIEW: IF S IS FEMALE AND DID NOT PREVIOUSLY SUPPLY FATHER'S LAST NAME GO TO Q.H-4. OTHERWISE, GO TO BOX N1.

- H-4. Please tell me (SUBJECT'S) father's last name.

FATHER'S LAST NAME: \_\_\_\_\_

BOX N1

PROXY ANSWERED ALL QUESTIONS1 ..... 1 (BOX S)  
PROXY COULD NOT ANSWER ALL QUESTIONS ..... 2

H-4a. Is there anyone else who might be able to answer some of the questions about (SUBJECT) that you were unable to answer?

YES ..... 1 (BOX S)  
NO ..... 2

I need this person's name, address, telephone number and relationship to (SUBJECT).

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

STREET NAME AND NUMBER

APT. NUMBER

CITY

STATE

ZIP CODE

TELEPHONE: ( ) \_\_\_\_\_

What was (SECOND PROXY's) relationship to (SUBJECT)?

HUSBAND/WIFE ..... 1  
FATHER/MOTHER ..... 2  
FATHER IN-LAW/MOTHER IN-LAW ..... 3  
GRANDPARENT ..... 4  
SON/DAUGHTER ..... 5  
SON IN-LAW/DAUGHTER IN-LAW ..... 6  
GRANDCHILD ..... 7  
BROTHER/SISTER ..... 8  
BROTHER IN-LAW/SISTER IN-LAW ..... 9  
AUNT/UNCLE/COUSIN ..... 10  
NIECE/NEPHEW ..... 11  
ROOMMATE/FRIEND/NEIGHBOR ..... 12  
OTHER RELATIVE (SPECIFY) ..... 91

\_\_\_\_\_  
OTHER NON-RELATIVE (SPECIFY) ..... 92  
\_\_\_\_\_

H-5 AND H-6 ON SPI NOT ASKED.

**BOX S**

IF R SAID YES TO ANY HOSPITALIZATION QUESTIONS (B-17=1, B-23=1, B-24=1, B-27=1, B-29=1, B-35=1, B-42=1, B-48=1, B-52=1, B-55 (1st, 2nd, or 3rd diagnosis)=1, B-61=1, B-70=1, B-71=1, B-74=1, B-79=1, B-83=1, B-86=1, B-93g), THEN GO TO BOX V. OTHERWISE HAVE INTERVIEWER FILL IN BOX T.

**BOX T**

ARE THERE ANY STAYS RECORDED?

YES ..... 1 (CONDITION SECTION)  
 NO ..... 2 (Q.H-13)

**BOX V**

INTERVIEWER: CIRCLE ONE:

P IS RELATIVE ..... 1  
P IS NON-RELATIVE ..... 2 (Q.H-9)

H-7. As part of this survey, I would like to send you a form that authorizes the United States Public Health Service to obtain information from hospital or nursing home records. To do this, I need to (confirm/have) your name and address.

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

STREET NAME AND NUMBER

APT. NUMBER

CITY

STATE

ZIP CODE

And I need to confirm your telephone number.

TELEPHONE: (      ) \_\_\_\_\_

H-8 ON SPI NOT ASKED.

When you receive the form please sign your name. Then return the form in the postage paid envelope. You will receive a \$5.00 check for returning the form about two weeks after you sign and mail back this form.

BOX W	
INTERVIEWER CIRCLE ONE:	
<u>P</u> AGREES TO SIGN .....	1
<u>P</u> REFUSES TO SIGN .....	2

Thank you very much for taking the time to participate in this interview. (TERMINATE)

H-9. Do you know a relative of (SUBJECT) who could sign this authorization?

- YES ..... 1
- NO ..... 2 (Q.H-10)

I need to have the name, address and relationship of a relative of (SUBJECT) who could sign this authorization. [VERIFY ALL SPELLING.]

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

STREET NAME AND NUMBER	APT. NUMBER
CITY	STATE
ZIP CODE	

TELEPHONE: (       ) \_\_\_\_\_

What is (RELATIVE's) relationship to (SUBJECT)?

- HUSBAND/WIFE ..... 1
- FATHER/MOTHER ..... 2
- GRANDPARENT ..... 3
- SON/DAUGHTER ..... 4
- GRANDCHILD ..... 5 (H-11)
- BROTHER/SISTER ..... 6
- AUNT/UNCLE/COUSIN ..... 7
- NIECE/NEPHEW ..... 8
- OTHER RELATIVE [SPECIFY] ..... 91

GO TO H-13

H-10. Do you know someone else who has the power of attorney and could sign this authorization form?

YES ..... 1  
NO ..... 2 (H-11)

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

STREET NAME AND NUMBER

APT. NUMBER

CITY

STATE

ZIP CODE

TELEPHONE: ( ) \_\_\_\_\_

What is (ATTORNEY NAME) relationship to (SUBJECT)?

Attorney ..... 1

Friend ..... 2

Other (SPECIFY) ..... 3

\_\_\_\_\_

\_\_\_\_\_

H-12 NOT ASKED.

H-13. Finally, I would like to confirm your name, address and telephone number.

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

STREET NAME AND NUMBER

APT. NUMBER

CITY

STATE

ZIP CODE

TELEPHONE: ( ) \_\_\_\_\_

Thank you very much for taking the time to participate in this interview. (TERMINATE)

H-14 NOT ASKED.

PART I: OBSERVATION SHEET

(TO BE COMPLETED AT CONCLUSION OF INTERVIEW)

I-1 AND I-2 FROM SPI NOT ASKED.

I-3. DO YOU FEEL THAT THE INFORMATION PROVIDED BY THE RESPONDENT WAS SATISFACTORY?

YES ..... 1 (Q.I-6)  
NO ..... 2

I-4. WHY NOT?

---

---

---

I-5 FROM SPI NOT ASKED.

I-6. IN REGARD TO THE QUESTIONNAIRE, DO YOU FEEL IT . . .

	<u>YES</u>	<u>NO</u>	<u>UNCERTAIN</u>
a. HELD THE RESPONDENT'S ATTENTION THROUGHOUT THE INTERVIEW? .....	1	2	3
b. WAS UPSETTING OR DEPRESSING TO THE RESPONDENT? .....	1	2	3
c. WAS BORING OR UNINTERESTING TO THE RESPONDENT? .....	1	2	3

I-7. WITH REGARD TO THE RESPONDENT, DO YOU FEEL THE . . .

	<u>YES</u>	<u>NO</u>	<u>UNCERTAIN</u>
a. RESPONDENT WAS INTELLECTUALLY CAPABLE OF RESPONDING? .....	1	2	3
b. RESPONDENT'S ANSWERS WERE REASONABLY ACCURATE? ....	1	2	3
c. RESPONDENT UNDERSTOOD THE QUESTIONS? .....	1	2	3

I-8. (IF YES TO I-6b OR I-6c, OR IF NO TO I-7a, I-7b OR I-7c.)  
WAS THERE A SECTION THAT SEEMED TO BE PARTICULARLY UPSETTING OR PROBLEMATIC FOR THE RESPONDENT?

YES ..... 1  
NO ..... 2 (Q.I-9)

WHICH SECTION AND WHY? \_\_\_\_\_  
\_\_\_\_\_

I-9. WAS THE RESPONDENT HARD OF HEARING?

YES ..... 1  
NO ..... 2

I-10. WAS THE INTERVIEW CONDUCTED IN SPANISH?

YES ..... 1  
NO ..... 2

I-11. RECORD ANY RELEVANT COMMENTS OR IMPRESSIONS YOU MAY HAVE HAD ABOUT THIS INTERVIEW.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I-12. RECORD ANY COMMENTS OR PROBLEMS YOU MAY HAVE HAD WHEN RECORDING THE RESPONSE.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

I-13. Did you record the ID number [(ID NUMBER)] and the name [(SUBJECT'S NAME)] on the hospital chart?

YES ..... 1  
NO ..... 2

**NHANES I EPIDEMIOLOGIC FOLLOWUP STUDY  
QUESTIONNAIRE A**

**PLEASE READ INSTRUCTIONS FIRST**

- A. Please complete the following questions either by placing a check (✓) in the box next to the answer that best fits your situation or by writing your answer in the space provided.
- B. Unless the instructions tell you otherwise, check only one box.
- C. Some questions have instructions next to the answer telling you to skip questions which do not apply to you. First check the box, then follow the skip as directed.
- D. Please follow all instructions carefully. Instructions are in CAPITAL letters.
- E. If you are filling out this questionnaire for a person who is too ill to answer for herself/himself, when reading the questions please substitute the participant's name for the word "your." For example, A-3 would read, "Does Mr. Jones currently live in a house or apartment, a nursing home or rest home, or does he have some other arrangement?"
- F. If the person named in A-1 is deceased, do not fill out this form. Instead fill out Questionnaire B. If you are answering questions for a female participant, please fill out the Questionnaire A supplement - Female Medical History in addition to filling out Questionnaire A.
- G. If you have any questions about how to fill out the questionnaire or if you would prefer to answer the questions over the telephone, please call our toll-free number, 800-423-6754, and ask for Lee Smith, the National HANES Followup Survey Supervisor.

**ASSURANCE OF CONFIDENTIALITY**

All information which would provide identification of the individual will be held in strict confidence, will be used only for purposes of and by persons engaged in the survey, and will not be disclosed or released to others for any purposes in accordance with Section 308(d) of the Public Health Service Act (42 USC 242m).

A. GENERAL INFORMATION

A-1. Please review the information in the box below and correct any data that is incorrect or missing.

NAME OF PARTICIPANT:	_____	FIRST	MIDDLE	LAST	
CURRENT ADDRESS:	_____				
	STREET				
	_____	CITY	STATE	ZIP	
TELEPHONE NUMBER:	( ) _____				
-----					
CORRECTIONS: (RECORD CORRECTIONS OR MISSING DATA BELOW)					
NAME OF PARTICIPANT:	_____	FIRST	MIDDLE	LAST	
CURRENT ADDRESS:	_____				
	STREET				
	_____	CITY	STATE	ZIP	
TELEPHONE NUMBER:	( ) _____				

A-2. What is your date of birth? \_\_\_\_\_  
MONTH      DAY      YEAR

A-3. Do you currently live in a house or apartment, a nursing home or rest home, or do you have some other arrangement?

- |                                                                                                                             |                                                                                                                                                                                                                    |
|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>1 <input type="checkbox"/> House or apartment</p> <p>2 <input type="checkbox"/> Nursing or convalescent or rest home</p> | <p>3 <input type="checkbox"/> Boarding house, rooming house or rented room</p> <p>4 <input type="checkbox"/> Some other arrangement? (DESCRIBE)</p> <p style="text-align: center;">↓</p> <p>_____</p> <p>_____</p> |
|-----------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

- A-4. Do you live alone?
- 1  Yes
- 2  No (SKIP TO QUESTION A-6)

A-5. How long have you lived alone?

# OF YEARS: \_\_\_\_\_ (SKIP TO QUESTION A-7)

OR # OF MONTHS: \_\_\_\_\_ (SKIP TO QUESTION A-7)

A-6. What is the sex and relationship to you of the other people who live in your household? If you do not live in a household (for example, you live in a nursing home), tell us who you lived with before you entered the nursing home.

RELATIONSHIP OF HOUSEHOLD MEMBERS (e.g., HUSBAND)	SEX (MALE OR FEMALE)
1. _____	_____
2. _____	_____
3. _____	_____
4. _____	_____
5. _____	_____
6. _____	_____
7. _____	_____
8. _____	_____

A-7. Are you currently married, widowed, divorced, separated, or have you never been married?

- 1  Married                      4  Separated  
 2  Widowed                      5  Never married  
 3  Divorced

A-8. As part of this survey, we would like to have your social security number and your health insurance claim number on your Medicare card (if you have one). Provision of these numbers is voluntary and not providing these numbers will not have any effect on your receipt of benefits from the Federal Government. These numbers will be useful in conducting future followup studies. They will be used to match against future mortality records. This information is collected under the authority of Section 306 of the Public Health Service Act. What is your social security number? What is your Medicare number?

Social Security #:          -   -

Medicare #: \_\_\_\_\_

## B. YOUR HEALTH

These next questions are about your health.

B-1. Would you say that your health in general is excellent, very good, good, fair or poor?

- 1  Excellent                      4  Fair  
 2  Very good                      5  Poor  
 3  Good

B-2. Did a doctor ever tell you that you have arthritis?

- 1  Yes  
 2  No (SKIP TO QUESTION B-5)  
 3  Don't know (SKIP TO QUESTION B-5)

B-3. What type of arthritis do you have?

- |                                           |                                                             |
|-------------------------------------------|-------------------------------------------------------------|
| 1 <input type="checkbox"/> Rheumatoid     | 5 <input type="checkbox"/> Degenerative                     |
| 2 <input type="checkbox"/> Osteoarthritis | 6 <input type="checkbox"/> Another type (DESCRIBE)<br>_____ |
| 3 <input type="checkbox"/> Lupus          |                                                             |
| 4 <input type="checkbox"/> Gout           | 8 <input type="checkbox"/> Don't know                       |

B4. In what year were you first told you had arthritis?

\_\_\_\_\_ YEAR

B-5. Since \_\_\_\_\_ has a doctor told you that you had any of the following conditions? If you have, please also tell us the years you had the condition. (CHECK ALL THAT APPLY AND RECORD YEARS HAD CONDITION.)

CONDITION	YEARS HAD CONDITION
1. <input type="checkbox"/> Heart attack	_____
2. <input type="checkbox"/> TIA	_____
3. <input type="checkbox"/> Stroke	_____
4. <input type="checkbox"/> Broken or fractured hip	_____
5. <input type="checkbox"/> Kidney stones or kidney disorder other than infections	_____

B-6. Have you ever had any of the following surgeries or procedures performed? If you have, please tell us the years that you had the surgery or procedure. (CHECK ALL THAT APPLY AND RECORD YEARS HAD SURGERY/PROCEDURE.)

SURGERY	YEARS HAD SURGERY/PROCEDURE
1. <input type="checkbox"/> Coronary by-pass	_____
2. <input type="checkbox"/> Pacemaker replacement, insertion or repair	_____
3. <input type="checkbox"/> Cataract surgery	_____
4. <input type="checkbox"/> (MALES ONLY) vasectomy (operation to be sterilized)	_____

B-7. Have you ever been told by the doctor that you had either of the following conditions? If you have, please tell us the year you were first told you had the condition. (CHECK ALL THAT APPLY AND RECORD YEAR FIRST TOLD.)

CONDITION	YEAR FIRST TOLD
1. <input type="checkbox"/> Osteoporosis	_____
2. <input type="checkbox"/> Urinary tract or kidney infection more than three times	_____

B-8. Did a doctor ever tell you you have diabetes or sugar diabetes?

1  Yes

2  No (SKIP TO QUESTION B-12)

8  Don't know (SKIP TO QUESTION B-12)

B-9. In what year were you first told that you had diabetes or sugar diabetes?

\_\_\_\_\_ YEAR

B-10. Are you now taking insulin injections for your diabetes?

1  Yes (SKIP TO QUESTION B-12)

2  No

8  Don't know

B-11. Are you now taking pills for your diabetes?

1  Yes

2  No

8  Don't know

B-12. Have you ever been told by the doctor that you had high blood pressure or hypertension?

1  Yes

2  No (SKIP TO QUESTION B-16)

8  Don't know (SKIP TO QUESTION B-16)

B-13. In what year were you first told that you had high blood pressure or hypertension?

\_\_\_\_\_ YEAR

B-14. Has the doctor ever prescribed medicine for your high blood pressure?

1  Yes

2  No (SKIP TO QUESTION B-16)

8  Don't know (SKIP TO QUESTION B-16)

B-15. Are you now taking medication for high blood pressure?

1  Yes

2  No

8  Don't know

B-16. Since \_\_\_\_\_ have you had any type of cancer diagnosed including skin cancer?

- 1  Yes  
2  No (SKIP TO QUESTION B-18)  
8  Don't know (SKIP TO QUESTION B-18)

B-17. Where was the cancer or what type of cancer was it? In what year were you first told that you had this type of cancer?

TYPE OF CANCER	YEAR FIRST TOLD
1. _____	_____
2. _____	_____
3. _____	_____

B-18. Since 1970, have you broken or fractured your wrist?

- 1  Yes  
2  No (SKIP TO QUESTION B-20)  
8  Don't know (SKIP TO QUESTION B-20)

B-19. Since 1970 in what years was your wrist broken or fractured? Please list all years.

YEARS BROKEN

1. \_\_\_\_\_  
2. \_\_\_\_\_  
3. \_\_\_\_\_

B-20. (IF YOU ARE AGE 64 OR OLDER, ANSWER B-20 - B-22. OTHERWISE SKIP TP B-23.)  
During the past 12 months, have you had a fall where you have fallen and landed on the floor or ground or hit an object like a table or stair?

- 1  Yes  
2  No (SKIP TO QUESTION B-23)  
8  Don't know (SKIP TO QUESTION B-23)

B-21. How many times have you fallen like this during the past 12 months?

# OF TIMES: \_\_\_\_\_

B-22. Did any of these falls:

- |                                                        | YES                      | NO                       |
|--------------------------------------------------------|--------------------------|--------------------------|
| 1. cause a broken bone?                                | <input type="checkbox"/> | <input type="checkbox"/> |
| 2. cause you to hit or injure your head?               | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. cause you to seek medical care?                     | <input type="checkbox"/> | <input type="checkbox"/> |
| 4. cause you to be hospitalized for more than one day? | <input type="checkbox"/> | <input type="checkbox"/> |

B-23. Since \_\_\_\_\_, have you stayed in a hospital overnight or longer for any reason? For each stay, please record the date you went to the hospital, the reason or reasons you went to the hospital and the name and address of the hospital.

1  Yes - RECORD ALL STAYS BELOW

2  No (SKIP TO QUESTION B-24)

STAY #1: DATE OF ADMISSION: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
MO DA YR

REASON FOR STAY: \_\_\_\_\_

NAME OF HOSPITAL: \_\_\_\_\_

ADDRESS OF HOSPITAL: \_\_\_\_\_  
STREET

\_\_\_\_\_

CITY STATE

OTHER COMMENTS: \_\_\_\_\_

STAY #2: DATE OF ADMISSION: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
MO DA YR

REASON FOR STAY: \_\_\_\_\_

NAME OF HOSPITAL: \_\_\_\_\_

ADDRESS OF HOSPITAL: \_\_\_\_\_  
STREET

\_\_\_\_\_

CITY STATE

OTHER COMMENTS: \_\_\_\_\_

STAY #3: DATE OF ADMISSION: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
MO DA YR

REASON FOR STAY: \_\_\_\_\_

NAME OF HOSPITAL: \_\_\_\_\_

ADDRESS OF HOSPITAL: \_\_\_\_\_  
STREET

\_\_\_\_\_

CITY STATE

OTHER COMMENTS: \_\_\_\_\_

STAY #4: DATE OF ADMISSION: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
MO DA YR

REASON FOR STAY: \_\_\_\_\_

NAME OF HOSPITAL: \_\_\_\_\_

ADDRESS OF HOSPITAL: \_\_\_\_\_  
STREET

\_\_\_\_\_

CITY STATE

OTHER COMMENTS: \_\_\_\_\_

STAY #5: DATE OF ADMISSION: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
MO DA YR

REASON FOR STAY: \_\_\_\_\_

NAME OF HOSPITAL: \_\_\_\_\_

ADDRESS OF HOSPITAL: \_\_\_\_\_  
STREET

\_\_\_\_\_

CITY STATE

OTHER COMMENTS: \_\_\_\_\_

(IF YOU HAVE STAYED IN A HOSPITAL OVERNIGHT OR LONGER FOR MORE THAN FIVE TIMES, PLEASE CONTINUE RECORDING INFORMATION ABOUT STAYS ON A SHEET OF PAPER AND INCLUDE IT IN THE RETURN ENVELOPE.)

B-24. Since \_\_\_\_\_, have you ever stayed overnight or longer in a rest home, a nursing home, a mental health facility, or anything like that? For each stay, please record the date you went into the facility, the reason or reasons you went to the facility, the type of facility (e.g., nursing home) and the name and address of the facility.

1  Yes - RECORD ALL STAYS BELOW

2  No (SKIP TO QUESTION B-25)

STAY #1: DATE OF ADMISSION: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
MO DA YR

REASON FOR STAY: \_\_\_\_\_  
TYPE OF FACILITY: \_\_\_\_\_  
NAME OF FACILITY: \_\_\_\_\_  
ADDRESS OF FACILITY: \_\_\_\_\_  
STREET  
CITY STATE

OTHER COMMENTS: \_\_\_\_\_

STAY #2: DATE OF ADMISSION: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
MO DA YR

REASON FOR STAY: \_\_\_\_\_  
TYPE OF FACILITY: \_\_\_\_\_  
NAME OF FACILITY: \_\_\_\_\_  
ADDRESS OF FACILITY: \_\_\_\_\_  
STREET  
CITY STATE

OTHER COMMENTS: \_\_\_\_\_

STAY #3: DATE OF ADMISSION: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
MO DA YR

REASON FOR STAY: \_\_\_\_\_  
TYPE OF FACILITY: \_\_\_\_\_  
NAME OF FACILITY: \_\_\_\_\_  
ADDRESS OF FACILITY: \_\_\_\_\_  
STREET  
CITY STATE

OTHER COMMENTS: \_\_\_\_\_

STAY #4: DATE OF ADMISSION: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
MO DA YR

REASON FOR STAY: \_\_\_\_\_  
TYPE OF FACILITY: \_\_\_\_\_  
NAME OF FACILITY: \_\_\_\_\_  
ADDRESS OF FACILITY: \_\_\_\_\_  
STREET  
CITY STATE

OTHER COMMENTS: \_\_\_\_\_

(IF YOU HAVE STAYED IN ANY HEALTH CARE FACILITY OVERNIGHT OR LONGER FOR MORE THAN FOUR TIMES, PLEASE CONTINUE RECORDING INFORMATION ABOUT STAYS ON A SHEET OF PAPER AND INCLUDE IT IN THE RETURN ENVELOPE.)

B-25. (IF YOU ARE CURRENTLY IN A NURSING HOME, ANSWER B-25 AND B-26; OTHERWISE, SKIP TO B-27.) During the month before your admission to the nursing home, was there a significant change in your health?

1  Yes

2  No

B-26. During the 12 months prior to that, what was happening to your health? Had it improved, remained the same, gradually worsened, or suddenly worsened?

1  Improved

3  Gradually worsened

2  Remained the same

4  Suddenly worsened

SKIP TO B-28

B-27. (IF YOU ARE NOT CURRENTLY IN A NURSING HOME, ANSWER B-27; OTHERWISE SKIP TO B-28.) What has been happening to your health during the past 12 months? Has it improved, remained the same, gradually worsened, or suddenly worsened?

1  Improved

3  Gradually worsened

2  Remained the same

4  Suddenly worsened

B-28. As part of this survey, it may be necessary to obtain additional information from hospital or nursing home records. The enclosed form entitled "Authorization to Obtain Information from Medical Records" authorizes the U.S. Public Health Service to obtain this information. Please read the form and record any other names under which hospital or in-patient health facility records could be listed. If the records would not be listed under any other name, check the box. Sign your name on the signature of subject line if you are answering the questionnaire for yourself. If you are answering the questionnaire on behalf of the participant because he/she is incapacitated, please have the participant fill out his/her name. Also, be sure to date the form.

Please return all forms in the postage-paid envelope. You will receive a \$5.00 check for returning the questionnaire and a signed form about two weeks after you mail us these forms.

B-29. Please give me the name, address, and telephone number of a relative or friend who would know how to get in touch with you in case we need to contact you again and have a hard time reaching you.

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

STREET NAME AND NUMBER

APT. NUMBER

CITY

STATE

ZIP CODE

TELEPHONE: (\_\_\_\_) \_\_\_\_\_

How is that person related to you? \_\_\_\_\_

B-30. (IF YOU ARE ANSWERING THIS QUESTIONNAIRE FOR ANOTHER PERSON):

Please record your name, address and telephone number and your relationship to the participant.

NAME: \_\_\_\_\_

ADDRESS: \_\_\_\_\_

STREET NAME AND NUMBER

APT. NUMBER

CITY

STATE

ZIP CODE

TELEPHONE: (\_\_\_\_) \_\_\_\_\_

RELATIONSHIP TO PARTICIPANT: \_\_\_\_\_

Thank you very much for taking the time to participate in this interview. Please continue with the Questionnaire A Supplement if you are answering questions about a female participant.

### NHANES I EPIDEMIOLOGIC FOLLOWUP STUDY

#### QUESTIONNAIRE A - SUPPLEMENT (TO BE ANSWERED ABOUT FEMALE PARTICIPANTS ONLY)

#### C. FEMALE MEDICAL HISTORY

C-1. Have you ever been pregnant? Include live births, stillbirths, miscarriages and abortions.

- 1  Yes  
2  No (SKIP TO QUESTION C-7)

C-2. How old were you when your first child was born? This means the first child born alive or stillborn. (IF NONE, RECORD NONE ON LINE BELOW.)

\_\_\_\_\_ AGE

C-3. How old were you when your last child was born? Include stillbirths. (IF NONE, RECORD NONE ON LINE BELOW.)

\_\_\_\_\_ AGE

C-4. How many live births have you had? (IF NONE, RECORD NONE ON LINE BELOW.)

\_\_\_\_\_ AGE

C-5. Have you ever had a miscarriage?

- 1  Yes  
2  No (SKIP TO QUESTION C-7)

C-6. How many miscarriages have you had?

\_\_\_\_\_ # OF MISCARRIAGES

C-7. Do you still have your womb or uterus?

- 1  Yes (SKIP TO QUESTION C-9)  
2  No  
8  Don't know (SKIP TO QUESTION C-9)

C-8. How old were you when your uterus or womb was removed?

\_\_\_\_\_ AGE

C-9. Do you still have both your ovaries, only one ovary or no ovaries?

- 1  Both ovaries (SKIP TO QUESTION C-11)  
2  Only one ovary  
3  No ovaries

C-10. How old were you when your ovary or ovaries were removed?

\_\_\_\_\_  
AGE  
\_\_\_\_\_  
AGE

C-11. Are you still having periods?

- 1  Yes (SKIP TO QUESTION C-13)  
2  No

C-12. At what age did you have your last period?

\_\_\_\_\_ (SKIP TO QUESTION C-15)  
AGE

C-13. Are your periods regular or irregular? By regular we mean that your periods come about once a month; you can usually predict when they will come and they usually last about the same number of days.

- 1  Regular (SKIP TO QUESTION C-15)  
2  Irregular

C-14. Are they irregular because you are going through the change of life or for some other reason?

- 1  Change of life  
2  Other reason  
8  Don't know

C-15. Did you ever take hormone pills such as estrogen or premarin for reasons related to menopause or change of life such as hot flashes, mood changes or bone loss?

- 1  Yes  
2  No (SKIP TO QUESTION C-26)  
3  Not menopausal (SKIP TO QUESTION C-26)  
8  Don't know (SKIP TO QUESTION C-26)

C-16. How old were you when you first took hormone pills?

\_\_\_\_\_  
AGE

C-17. How old were you when you last took hormone pills?

\_\_\_\_\_ **OR**  Still taking hormone pills  
AGE

C-18. What is the longest period of time that you have continuously taken hormone pills? That is, without stopping for at least one month.

\_\_\_\_\_ AND \_\_\_\_\_  
YEARS MONTHS

OR  Less than one month

C-19. Now thinking about the total amount of time you have taken these pills, for how many years and months have you actually used them? Please do not include the times when you might have stopped taking the pill for at least one month.

\_\_\_\_\_ AND \_\_\_\_\_  
YEARS MONTHS

OR  Less than one month

C-20. Are you currently taking hormone pills?

- 1  Yes  
2  No (SKIP TO QUESTION C-26)  
8  Don't know (SKIP TO QUESTION C-26)

C-21. What is the color of the hormone pill you are taking?

- 1  Purple/Blue  
2  Yellow/Orange  
3  White  
4  Maroon/Brown/Red  
5  Green  
8  Don't know

C-22. How long have you been taking this same color pill?

\_\_\_\_\_ # OF YEARS

\_\_\_\_\_ # OF MONTHS

OR  Less than one month

C-23. In addition to estrogen, sometimes women also use the female hormone progestin sometimes called PROVERA at the change of life or after a hysterectomy. These pills are often taken along with an estrogen pill for only part of the month. Have you ever taken progestin or PROVERA?

- 1  Yes  
2  No (SKIP TO QUESTION C-26)  
8  Don't know (SKIP TO QUESTION C-26)

C-24. Are you currently taking these pills?

1  Yes

2  No

C-25. How long have you taken these pills?

\_\_\_\_\_ # OF YEARS

\_\_\_\_\_ # OF MONTHS

OR  Less than one month

C-26. Did you ever take birth control pills for any reason?

1  Yes

2  No (SKIP TO QUESTION C-34)

8  Don't know (SKIP TO QUESTION C-34)

C-27. How old were you when you first took birth control pills?

\_\_\_\_\_ AGE

C-28. How old were you when you last took birth control pills?

\_\_\_\_\_ OR  Still taking birth control pills  
AGE

C-29. What is the longest period of time that you have continuously taken birth control pills? That is, without stopping for at least one month.

\_\_\_\_\_ AND \_\_\_\_\_  
YEARS MONTHS

Less than one month

C-30. Now, thinking about the total amount of time you have taken these pills, for how many years and months have you actually used them? Please do not include the times when you might have stopped taking the pill for at least one month.

\_\_\_\_\_ AND \_\_\_\_\_  
YEARS MONTHS

OR  Less than one month

C-31. How many months and years did you use birth control pills prior to the age of 25? Please do not include the times when you might have stopped taking the pill for at least one month. (IF NONE, RECORD NONE ON LINE BELOW)

\_\_\_\_\_ AND \_\_\_\_\_  
YEARS MONTHS

OR  Less than one month

C-32. Did you use birth control pills before your first child was born?

- 1  Yes  
 2  No (SKIP TO QUESTION C-34)  
 8  Don't know (SKIP TO QUESTION C-34)

C-33. How many years and months before your first child was born did you use birth control pills? Please do not include the times when you might have stopped taking the pill for at least one month.

\_\_\_\_\_ AND \_\_\_\_\_  
 YEARS MONTHS

OR  Less than one month

C-34. Have you ever had an operation to be sterilized, also known as a tubal ligation or having your tubes tied?

- 1  Yes  
 2  No (SKIP TO QUESTION C-36)  
 8  Don't know (SKIP TO QUESTION C-36)

C-35. How old were you when you had this procedure?

\_\_\_\_\_  
 AGE

C-36. Have you ever regularly taken calcium pills or calcium-rich antacids such as Tums for the purpose of calcium supplementation?

- 1  Yes  
 2  No (SKIP TO QUESTION C-38)  
 8  Don't know (SKIP TO QUESTION C-38)

C-37. How long did you take calcium regularly?

\_\_\_\_\_  
 # OF YEARS

\_\_\_\_\_  
 # OF MONTHS

OR  Less than one month

C-38. Have you ever had any of the following procedures performed? If so, please tell us how many times you had this procedure done within the past 5 years and in what month and year did you last have the procedure performed? (IF YES, RECORD # OF TIMES AND DATE LAST DONE)

Ever Had Procedure		# of Times in Past 5 Years	Last Month/Year Done
YES	NO		
1 <input type="checkbox"/>	<input type="checkbox"/>	Pap Smear test _____	_____ / _____
2 <input type="checkbox"/>	<input type="checkbox"/>	Breast examination by doctor _____	_____ / _____
3 <input type="checkbox"/>	<input type="checkbox"/>	Mammogram _____	_____ / _____

C-39. Do you know how to examine your own breasts for lumps?

1  Yes

2  No (SKIP TO END)

C-40. Have you ever examined your own breasts for lumps?

1  Yes

2  No (SKIP TO END)

C-41. During the past year, how often did you examine your own breasts for lumps? (IF NEVER, RECORD 0)

\_\_\_\_\_   
 # OF TIMES

Thank you very much for taking the time to participate in this interview.

**NHANES I EPIDEMIOLOGIC FOLLOWUP STUDY  
QUESTIONNAIRE B**

**PLEASE READ INSTRUCTIONS FIRST**

- A. Please complete the following questions only if the person named in the box below is deceased.
- B. Please complete the following questions either by placing a check (✓) in the box next to the answer that best fits the situation or by writing your answer in the space provided.
- C. Unless the instructions tell you otherwise, check only one box.
- D. Some questions have instructions next to the answer telling you to skip questions which do not apply to you. First check the box, then follow the skip as directed.
- E. Please follow all instructions carefully. Instructions are in CAPITAL letters.
- F. If you have any questions about how to fill out the questionnaire or if you would prefer to answer the questions over the telephone, please call our toll-free number, 800-423-6754, and ask for Lee Smith, the National HANES Followup Survey Supervisor.

- 1. Please review the information in the box below and correct if incorrect or missing.

NAME OF DECEASED PARTICIPANT:		FIRST	MIDDLE	LAST
DATE OF BIRTH:		MONTH	DAY	YEAR
CORRECTIONS: (RECORD CORRECTIONS OR MISSING DATA BELOW)				
NAME OF DECEASED PARTICIPANT:		FIRST	MIDDLE	LAST
DATE OF BIRTH:		MONTH	DAY	YEAR

**ASSURANCE OF CONFIDENTIALITY**

All information which would provide identification of the individual will be held in strict confidence, will be used only for purposes of and by persons engaged in the survey, and will not be disclosed or released to others for any purposes in accordance with Section 308(d) of the Public Health Service Act (42 USC 242m).

**MEDICAL HISTORY**

2. Since \_\_\_\_\_, had the participant stayed in a hospital overnight or longer for any reason? For each stay, please record the date he/she went to the hospital, the reason or reasons he/she went to the hospital and the name and address of the hospital.

1  Yes - RECORD ALL STAYS BELOW

2  No (SKIP TO QUESTION 3)

STAY #1: DATE OF ADMISSION: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
MO DA YR

REASON FOR STAY: \_\_\_\_\_

NAME OF HOSPITAL: \_\_\_\_\_

ADDRESS OF HOSPITAL: \_\_\_\_\_  
STREET

\_\_\_\_\_ CITY STATE

OTHER COMMENTS: \_\_\_\_\_

STAY #2: DATE OF ADMISSION: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
MO DA YR

REASON FOR STAY: \_\_\_\_\_

NAME OF HOSPITAL: \_\_\_\_\_

ADDRESS OF HOSPITAL: \_\_\_\_\_  
STREET

\_\_\_\_\_ CITY STATE

OTHER COMMENTS: \_\_\_\_\_

STAY #3: DATE OF ADMISSION: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
MO DA YR

REASON FOR STAY: \_\_\_\_\_

NAME OF HOSPITAL: \_\_\_\_\_

ADDRESS OF HOSPITAL: \_\_\_\_\_  
STREET

\_\_\_\_\_ CITY STATE

OTHER COMMENTS: \_\_\_\_\_

STAY #4: DATE OF ADMISSION: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
MO DA YR

REASON FOR STAY: \_\_\_\_\_

NAME OF HOSPITAL: \_\_\_\_\_

ADDRESS OF HOSPITAL: \_\_\_\_\_  
STREET

\_\_\_\_\_ CITY STATE

OTHER COMMENTS: \_\_\_\_\_

STAY #5: DATE OF ADMISSION: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
MO DA YR

REASON FOR STAY: \_\_\_\_\_

NAME OF HOSPITAL: \_\_\_\_\_

ADDRESS OF HOSPITAL: \_\_\_\_\_  
STREET

\_\_\_\_\_ CITY STATE

OTHER COMMENTS: \_\_\_\_\_

(IF HE/SHE STAYED IN A HOSPITAL OVERNIGHT OR LONGER FOR MORE THAN FIVE TIMES, PLEASE CONTINUE RECORDING INFORMATION ABOUT STAYS ON A SHEET OF PAPER AND INCLUDE IT IN THE RETURN ENVELOPE.)

3. Since \_\_\_\_\_, had the participant ever stayed overnight or longer in a rest home, a nursing home, a mental health facility, or anything like that? For each stay, please record the date he/she went into the facility, the reason or reasons he/she went to the facility, the type of facility (e.g., nursing home) and the name and address of the facility.

1  Yes - RECORD ALL STAYS BELOW

2  No (SKIP TO QUESTION 4)

STAY #1: DATE OF ADMISSION: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
MO DA YR

REASON FOR STAY: \_\_\_\_\_

TYPE OF FACILITY: \_\_\_\_\_

NAME OF FACILITY: \_\_\_\_\_

ADDRESS OF FACILITY: \_\_\_\_\_

STREET

CITY

STATE

OTHER COMMENTS: \_\_\_\_\_

STAY #2: DATE OF ADMISSION: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
MO DA YR

REASON FOR STAY: \_\_\_\_\_

TYPE OF FACILITY: \_\_\_\_\_

NAME OF FACILITY: \_\_\_\_\_

ADDRESS OF FACILITY: \_\_\_\_\_

STREET

CITY

STATE

OTHER COMMENTS: \_\_\_\_\_

STAY #3: DATE OF ADMISSION: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
MO DA YR

REASON FOR STAY: \_\_\_\_\_

TYPE OF FACILITY: \_\_\_\_\_

NAME OF FACILITY: \_\_\_\_\_

ADDRESS OF FACILITY: \_\_\_\_\_

STREET

CITY

STATE

OTHER COMMENTS: \_\_\_\_\_

STAY #4: DATE OF ADMISSION: \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
MO DA YR

REASON FOR STAY: \_\_\_\_\_

TYPE OF FACILITY: \_\_\_\_\_

NAME OF FACILITY: \_\_\_\_\_

ADDRESS OF FACILITY: \_\_\_\_\_

STREET

CITY

STATE

OTHER COMMENTS: \_\_\_\_\_

(IF HE/SHE HAD STAYED IN ANY HEALTH CARE FACILITY OVERNIGHT OR LONGER FOR MORE THAN FOUR TIMES, PLEASE CONTINUE RECORDING INFORMATION ABOUT STAYS ON A SHEET OF PAPER AND INCLUDE IT IN THE RETURN ENVELOPE.)



Verbal authorization form to obtain information from  
medical records

ID No.  -  -

OMB No. : 0937-0134  
Expires: October 1987

NHANES I EPIDEMIOLOGIC  
FOLLOWUP STUDY

Verbal Authorization to Obtain Information  
From Medical Records

SUBJECT

This is to certify that \_\_\_\_\_ has verbally consented  
to sign a medical authorization form thereby authorizing the release of  
pertinent information regarding hospitalizations, illnesses and health  
care.

\_\_\_\_\_  
INTERVIEWER'S SIGNATURE

\_\_\_\_\_  
DATE

NEXT-OF-KIN

This is to certify that \_\_\_\_\_, who is the  
RESPONDENT NAME  
of \_\_\_\_\_, has verbally  
RELATIONSHIP TO SUBJECT SUBJECT NAME  
consented to sign a medical authorization form, thereby authorizing the  
release of pertinent information regarding hospitalizations, illnesses and  
health care.

\_\_\_\_\_  
INTERVIEWER'S SIGNATURE

\_\_\_\_\_  
DATE

Authorization form to obtain information from  
medical records

Please Return to: NHANES-I  
Epidemiologic Followup Study  
1850 Research Blvd.  
Rockville, MD 20850

OMB No.: 0937-0134  
Expires: June 1988

U.S. Department of Health and Human Services  
National Center for Health Statistics  
National Institute on Aging  
NHANES I Epidemiologic Followup Survey

NOTICE - Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or establishment in accordance with Section 306(d) of the Public Health Service Act (42 USC 242m).

AUTHORIZATION TO OBTAIN INFORMATION  
FROM MEDICAL RECORDS

In connection with the health history of \_\_\_\_\_ given as part of the National Health and Nutrition Examination Followup Survey, it may be necessary to obtain additional information from records and staff of hospitals or other inpatient health facilities. I hereby authorize the release of such information as the U.S. Public Health Service may need to request from any of these sources. I understand that I may revoke this consent at any time except to the extent that action has already been taken. I also understand that this authorization expires one year from the date of signature.

I understand that all information obtained will be held strictly confidential.

My records may also be listed under the following first and last names (e.g., name change due to marriage):

\_\_\_\_\_  
\_\_\_\_\_

OR

Check box  if records would not be listed under any other name.

\_\_\_\_\_  
SIGNATURE OF NEXT-OF-KIN

\_\_\_\_\_  
SIGNATURE OF SUBJECT

\_\_\_\_\_  
DATE

\_\_\_\_\_  
DATE

\_\_\_\_\_  
RELATIONSHIP

This authorization expires one year from date of signature.

\_\_\_\_\_  
DATE OF DEATH (MO/DAY/YEAR)

\_\_\_\_\_  
COUNTY AND STATE OF DEATH





## Health care facility data collection

Letter to hospital administrator



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

National Center for Health Statistics  
3700 East-West Highway  
Hyattsville MD 20782

**Dear Administrator:**

I am writing to inform you of a request which has been made to your Medical Records department. The NHANES I Epidemiologic Followup Study: 1987 Followup is being carried out by the National Center for Health Statistics (NCHS), the National Institute on Aging, and other components of the National Institutes of Health.

A selected sample of the United States population volunteered to participate in the first National Health and Nutrition Examination Survey which NCHS conducted from 1971-1975. We have recently contacted these participants to provide new information about the etiology of chronic disease. A crucial component of the study is a very limited hospital record data collection to augment information obtained from these participants. Participants who have been hospitalized have signed authorization forms to permit the release of diagnostic information from their hospital records.

NCHS has contracted with Westat, a national survey organization, to conduct the data collection operations of this survey. Westat has, therefore, sent a packet to your Director of Medical Records on behalf of the patients in the study. This survey is authorized by Title 42, United States Code 242k. Participation in this survey is completely voluntary. There are no penalties for refusing to answer any question. All information obtained will be held strictly confidential. No information that could be used to identify your hospital or any individual will be released or published. Results of this study will be published only as statistical summaries.

The American Hospital Association has endorsed this study and urges your cooperation. Mr. Peter Kralovec of the Association may be reached at (312) 280-6523 if you have any questions concerning this endorsement. If you have any questions concerning the data collection, don't hesitate to call Rebecca Manning at 800-937-8281.

Sincerely yours,

A handwritten signature in cursive script that reads "M Feinleib".

Manning Feinleib, M.D., Dr.P.H.  
Director



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

---

National Center for Health Statistics  
3700 East-West Highway  
Hyattsville MD 20782

Director of Medical Records:

A new research study is being carried out by the National Center for Health Statistics (NCHS), National Institute on Aging and other components of the National Institutes of Health.

A selected sample of the United States population volunteered to participate in the first National Health and Nutrition Examination Survey which NCHS conducted from 1971-1975. We have recently reinterviewed these participants to provide new information about the etiology of chronic disease. A crucial component of the study is a very limited hospital record data collection to augment information obtained from these participants. Enclosed are signed authorization forms specifically permitting us to obtain diagnostic data from their medical record.

This survey is authorized by Title 42, United States Code 242k. Participation in this survey is completely voluntary. There are no penalties for refusing to answer any question. NCHS has contracted with Westat, a national survey organization, to conduct the data collection operations of this survey. All information obtained will be held strictly confidential and will be used for statistical purposes only. No information that could be used to identify the participants or your hospital will be released or published. Results of this study will be published only as statistical summaries.

The American Hospital Association (AHA) has endorsed this study and urges your cooperation. Your hospital's participation is vital to the success of this study. If you have any questions concerning this project, please feel free to call Kathleen Parkes collect at (301) 251-4351.

Sincerely yours,

Manning Feinleib, M.D., Dr.P.H.  
Director

Enclosure

Hospital record form

OMB No.: 0937-0134  
Expires: June 1988

NOTICE: - Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or establishment in accordance with Section 306(d) of the Public Health Service Act (42 USC 242m).

INFORMATION SHOWN ON LABEL AGREES WITH HOSPITAL RECORDS

OTHER (SPECIFY) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Please Return to: NHANES-I  
Epidemiologic Followup Study  
1550 Research Blvd.  
Rockville, MD 20850

U.S. Department of Health and Human Services  
National Center for Health Statistics  
National Institute on Aging  
NHANES I Epidemiologic Followup Survey

HOSPITAL RECORD FORM  
(TO BE COMPLETED BY MEDICAL RECORDS DEPARTMENT)

1. PATIENT MEDICAL RECORD NUMBER \_\_\_\_\_

2. DATE OF ADMISSION \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ DATE OF DISCHARGE \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
MONTH DAY YEAR MONTH DAY YEAR

3. WAS THE PATIENT IN: CARDIAC INTENSIVE CARE UNIT OTHER INTENSIVE CARE UNIT

Yes, \_\_\_\_\_ Days  Yes, \_\_\_\_\_ Days  
NUMBER NUMBER

No  No

4. DISPOSITION OF PATIENT (Check One)

Routine discharge/discharged home  Discharged/referred to organized home care service

Left against medical advice  Not discharged/still in hospital

Discharged/transferred to another facility or organization  Died

Not stated

5. ANY OTHER HOSPITALS/HEALTH CARE FACILITIES LISTED IN ADMISSION NOTES OR DISCHARGE SUMMARY

Name: \_\_\_\_\_ Year: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_

Name: \_\_\_\_\_ Year: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_

(PLEASE TURN THE PAGE)

6. WHAT WERE THE DIAGNOSES ESTABLISHED AT TIME OF DISCHARGE? (Principal diagnosis is the condition after study chiefly responsible for the hospital stay.) (If more space is needed for additional diagnoses, write the diagnoses and the Westat ID number on a separate sheet of paper and attach to this form.)

Principal Diagnosis:

1. \_\_\_\_\_  
 \_\_\_\_\_

Other Diagnoses:

2. \_\_\_\_\_  
 \_\_\_\_\_

3. \_\_\_\_\_  
 \_\_\_\_\_

4. \_\_\_\_\_  
 \_\_\_\_\_

5. \_\_\_\_\_  
 \_\_\_\_\_

6. \_\_\_\_\_  
 \_\_\_\_\_

7. \_\_\_\_\_  
 \_\_\_\_\_

8. \_\_\_\_\_  
 \_\_\_\_\_

9. \_\_\_\_\_  
 \_\_\_\_\_

10. \_\_\_\_\_  
 \_\_\_\_\_

OFFICE USE ONLY				
1.				
2.				
3.				
4.				
5.				
6.				
7.				
8.				
9.				
10.				

7. WHAT WERE THE SURGICAL PROCEDURES PERFORMED DURING THIS ADMISSION? (Include all biopsy and surgical procedures discussed or listed in the discharge summary.)

SURGICAL PROCEDURES:

Check if none

1. \_\_\_\_\_  
 \_\_\_\_\_

2. \_\_\_\_\_  
 \_\_\_\_\_

3. \_\_\_\_\_  
 \_\_\_\_\_

4. \_\_\_\_\_  
 \_\_\_\_\_

5. \_\_\_\_\_  
 \_\_\_\_\_

OFFICE USE ONLY				
1.				
2.				
3.				
4.				
5.				

8. PLEASE ATTACH A PHOTOCOPY OF THE THIRD DAY EKG IF MYOCARDIAL INFARCTION DIAGNOSED DURING THIS STAY. PLEASE ATTACH A PHOTOCOPY OF THE PATHOLOGY REPORT CONFIRMING THE DIAGNOSIS OF CANCER MADE DURING THIS STAY. (Write the Westat I.D. number on each photocopied page.)

Attachments

Yes No N/A

a. Third Day EKG    (Reason No/NA \_\_\_\_\_ )

b. Pathology Report    (Reason No/NA \_\_\_\_\_ )

9. PLEASE ATTACH A PHOTOCOPY OF THE FACE SHEET AND THE DISCHARGE SUMMARY FOR THIS INPATIENT STAY. (Write the Westat I.D. number on each photocopied page.)

Attachments

Yes No N/A

a. Face Sheet    (Reason No/NA \_\_\_\_\_ )

b. Discharge Summary    (Reason No/NA \_\_\_\_\_ )

COMPLETED BY \_\_\_\_\_

DATE \_\_\_\_\_



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

National Center for Health Statistics  
3700 East-West Highway  
Hyattsville MD 20782

Dear Administrator:

The National Center for Health Statistics (NCHS) is conducting a followup study of the participants in the first National Health and Nutrition Examination Survey (NHANES I) to provide new information about the etiology of chronic disease. We need your assistance.

A selected sample of the United States population volunteered to participate in the first National Health and Nutrition Examination Survey which NCHS conducted from 1971-1975. NCHS is now tracing and reinterviewing those 14,407 persons to study the relationship between physical measures (e.g., blood pressure or functional vital capacity), behavioral variables (e.g., smoking or dietary intake), and other risk factors identified in the NHANES I Survey and subsequent disease reported by the person at followup.

A crucial component of the study is a very limited nursing home record data collection. Diagnostic information from the nursing home record will be used to verify and supplement each respondent's self-reported medical history. Each person or next of kin (in cases of death or disability) has signed a form requesting the release of his/her nursing home care records to the survey researchers. (Copies of these authorizations are enclosed.) Nursing homes will be reimbursed for the cost incurred.

This survey is authorized by Title 42, United States Code 242k. Participation in this survey is completely voluntary. There are no penalties for refusing to answer any question. NCHS has contracted with Westat a national survey organization to conduct the data collection operations of this survey. All information obtained will be held strictly confidential and will be used for statistical purposes only. No information that could be used to identify the participants or your nursing home will be released or published. Results of this study will be published only as statistical summaries.

Your participation is vital to the success of this study. If you have any questions concerning this project, please feel free to call Rebecca Manning 800-937-8281.

Sincerely yours,

A handwritten signature in cursive script that reads "Manning Feinleib".

Manning Feinleib, M.D., Dr.P.H.  
Director

Enclosures

Nursing or personal care home record form

OMB No.: 0937-0134  
Expires: June 1988

NOTICE - Information contained on this form which would permit identification of any individual or establishment has been collected with a guarantee that it will be held in strict confidence, will be used only for purposes stated for this study, and will not be disclosed or released to others without the consent of the individual or establishment in accordance with Section 308(d) of the Public Health Service Act (42 USC 242m).

- INFORMATION SHOWN ON LABEL AGREES WITH NURSING HOME RECORDS
- OTHER (SPECIFY) \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

U.S. Department of Health and Human Services  
National Center for Health Statistics  
National Institute on Aging  
NHANES I Epidemiologic Followup Survey

**NURSING HOME/PERSONAL CARE HOME RECORD FORM  
(TO BE COMPLETED BY MEDICAL RECORDS DEPARTMENT)**

1. PATIENT MEDICAL RECORD NUMBER \_\_\_\_\_

2. DATE OF ADMISSION \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_ DATE OF DISCHARGE \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_  
MONTH DAY YEAR MONTH DAY YEAR

3. PATIENT ADMITTED FROM: (Check One)

- |                                                              |                                                                   |
|--------------------------------------------------------------|-------------------------------------------------------------------|
| <input type="checkbox"/> Private residence                   | <input type="checkbox"/> Chronic disease hospital (SPECIFY BELOW) |
| <input type="checkbox"/> Acute care hospital (SPECIFY BELOW) | <input type="checkbox"/> Other nursing home (SPECIFY BELOW)       |

NAME OF FACILITY: \_\_\_\_\_ CITY/STATE: \_\_\_\_\_

4. OTHER HOSPITALS PROVIDING CARE DURING NURSING HOME/PERSONAL CARE HOME STAY

Name: _____	City/State: _____	Year: _____
Name: _____	City/State: _____	Year: _____
Name: _____	City/State: _____	Year: _____

5. DISPOSITION OF PATIENT (Check One)

- |                                                                                                       |                                                                          |
|-------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|
| <input type="checkbox"/> Not discharged/still inpatient                                               | <input type="checkbox"/> Died                                            |
| <input type="checkbox"/> Discharged to private residence/<br>referral to organized home care services | <input type="checkbox"/> Discharged to private residence/<br>no referral |

Transferred to another health care facility (SPECIFY BELOW)

- |                                                                       |                                                   |
|-----------------------------------------------------------------------|---------------------------------------------------|
| <input type="checkbox"/> Acute care hospital facility or organization | <input type="checkbox"/> Chronic disease hospital |
| <input type="checkbox"/> Other nursing home                           | <input type="checkbox"/> Other (SPECIFY) _____    |

NAME OF FACILITY: \_\_\_\_\_ CITY/STATE: \_\_\_\_\_

(PLEASE TURN THE PAGE)

6. WHAT WERE THE DIAGNOSES ESTABLISHED AT ADMISSION?

Principal Diagnosis at Admission :

1. \_\_\_\_\_  
 \_\_\_\_\_

Other Major Diseases or Conditions Present  
 at Time of Admission :

2. \_\_\_\_\_  
 \_\_\_\_\_

3. \_\_\_\_\_  
 \_\_\_\_\_

4. \_\_\_\_\_  
 \_\_\_\_\_

5. \_\_\_\_\_  
 \_\_\_\_\_

6. \_\_\_\_\_  
 \_\_\_\_\_

OFFICE USE ONLY					
1.					
2.					
3.					
4.					
5.					
6.					

7. PLEASE ATTACH A PHOTOCOPY OF THE ADMISSION SHEET. (Write the Westat I.D. number on each photocopied page. If you do not have photocopying capabilities, please transcribe the information from the admission sheet onto a separate sheet, record the Westat ID Number on that sheet, and staple it to THIS form.)

Admission Sheet Included:      Yes      No  
            (Why not? \_\_\_\_\_)

\_\_\_\_\_  
 COMPLETED BY

\_\_\_\_\_  
 DATE

# Appendix II

## Corrections and revisions to the NHANES I baseline data

Three demographic data items (date of birth, sex, and race) from the NHANES I baseline data tapes were corrected for a small number of subjects based on updated information received during the 1982–84 NHANES I Epidemiologic Followup Study (NHEFS). Consequently, all subsequent NHEFS Followup Public Use Data Tapes reflect the corrections noted in this section.

### Date of birth

Initially, the date of birth for each NHANES I respondent was recorded during the household interview and subsequently coded on the NHANES I data tapes. The household interview usually was conducted with one member (or more) of the household, who provided social and demographic information for all household members. The NHANES I sample was then drawn from these household listings. On arrival at the mobile examination center (MEC), the subject was asked to supply his or her date of birth, which was entered on a record and later micro-filmed. The date of birth on the MEC record was provided by the subject but was not coded on the NHANES I data tape. Thus, the original NHANES I date of birth is the one obtained during the household interview.

During the fieldwork for the Followup Study, the MEC record (when available) was used to update the date of birth for all respondents lost to followup in the hope that it would improve tracing results. In addition, the MEC record was used to update the date of birth for decedents and incapacitated subjects who had been interviewed by proxy. Information on date of birth also was updated for all confirmed respondents who, during tracing, supplied a date of birth that differed from the date of birth provided at baseline. As a result, information on date of birth was corrected for 677 of the 14,407 subjects in the NHEFS cohort.

The age given at baseline examination was then recalculated based on these corrected dates of birth. The recalculations of age at baseline examination resulted in 224 age changes of 1 year or more. For 31 respondents, recalculation resulted in ages outside the designated age range of 25–74 years. (Two subjects were determined to be 24 years of age, 26 were 75 years of age, 1 was 76 years of age, and 2 were 77 years of age.) Nonetheless, these respondents will continue to be included in the cohort and are treated as 25 or 74 years of age in cases in which age

is categorized. A cross-tabulation of the recalculated age at baseline examination by the original age at examination is presented below.

<i>Original age at baseline examination</i>	<i>Revised age at baseline examination</i>				
	<i>25–34 years</i>	<i>35–44 years</i>	<i>45–54 years</i>	<i>55–64 years</i>	<i>65–74 years</i>
25–34 years . . . . .	3,508	4	1	-	-
35–44 years . . . . .	1	2,937	8	-	-
45–54 years . . . . .	-	-	2,268	15	-
55–64 years . . . . .	-	-	3	1,804	1
65–74 years . . . . .	-	-	-	5	3,852

Additional information on date of birth was collected if the respondent was administered the tracing questionnaire in the 1986 or 1987 NHEFS. This information, though, was not used to amend the date of birth or age at NHANES I variables that appear on the NHEFS public use data tapes. (In other words, date of birth and the age at NHANES I variables were not revised using data collected from the 1986 or 1987 NHEFS. Furthermore, these variables will never be updated from any information collected from the subsequent followups of the NHEFS.) Any new information obtained on date of birth is used solely for tracing purposes.

### Sex

The baseline sex code was changed from female to male for one subject. The original sex code was an error in the NHANES I data set.

### Race

A revised race variable was created to resolve discrepancies between the baseline interviewer-observed race and the followup respondent-reported race. These race codes are determined on a case-by-case adjudication of baseline and followup ethnicity responses and, in the case of deceased subjects, race as coded on the death certificate. Race was changed for 186 subjects. A cross-tabulation of revised race by the original baseline race variable follows. (For a number of subjects, however, although race was revised, baseline race and revised race still remain grouped in the “Other” category.)

<i>Baseline race</i>	<i>Revised race</i>		
	<i>White</i>	<i>Black</i>	<i>Other</i>
White . . . . .	11,998	25	30
Black . . . . .	11	2,174	10
Other . . . . .	27	-	132

Information on race of the subject was collected during the interview in the 1986 or 1987 NHEFS if the subject had not been previously interviewed. This information, however, was not used to amend the revised race variable that appears on the NHEFS public use data tapes.

# Vital and Health Statistics series descriptions

- SERIES 1. **Programs and Collection Procedures**—These reports describe the data collection programs of the National Center for Health Statistics. They include descriptions of the methods used to collect and process the data, definitions, and other material necessary for understanding the data.
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For answers to questions about this report or for a list of reports published in these series, contact:

Scientific and Technical Information Branch  
National Center for Health Statistics  
Centers for Disease Control  
Public Health Service  
6525 Belcrest Road, Room 1064  
Hyattsville, MD 20782  
(301) 436-8500

DEPARTMENT OF  
HEALTH & HUMAN SERVICES

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